

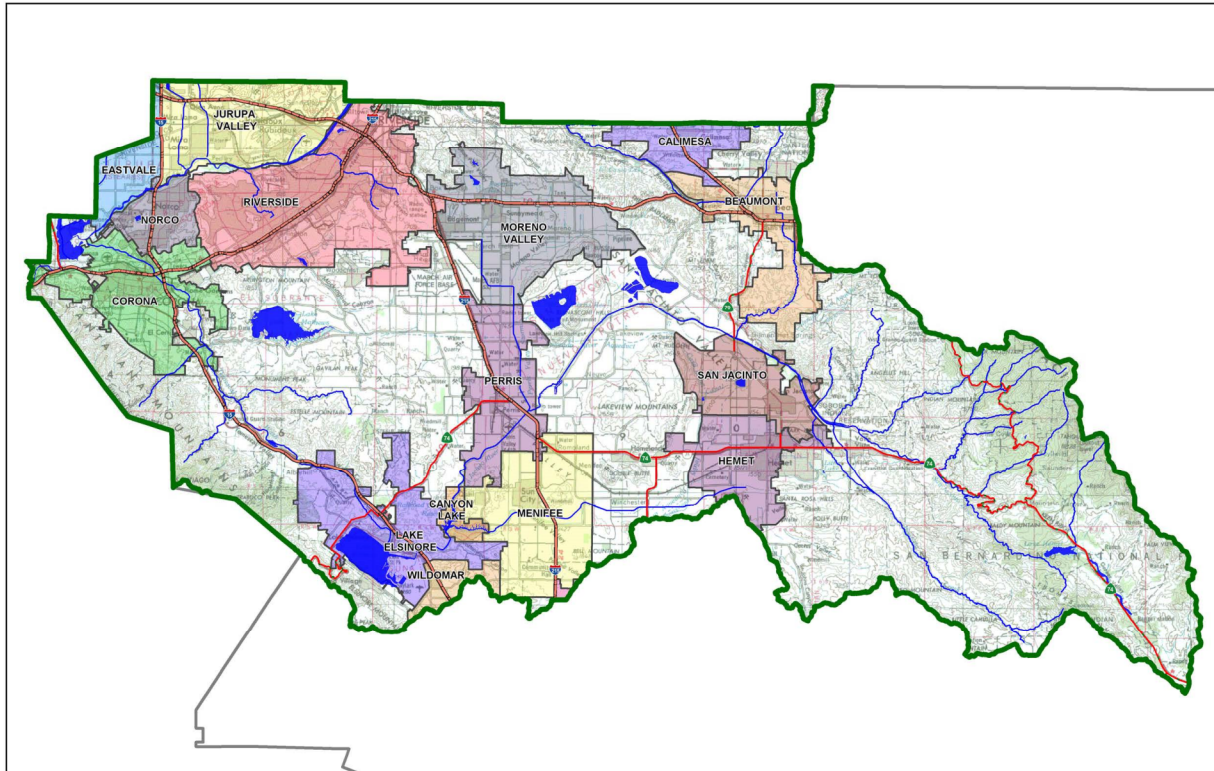
Project Specific Water Quality Management Plan

A Template for Projects located within the **Santa Ana Watershed** Region of Riverside County

Project Title: Palisade Temescal Canyon

Development No: PPT220036

Design Review/Case No:



- Preliminary
- Final

Original Date Prepared: July 7, 2022

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*Prepared for Compliance with
Regional Board Order No. **R8-2010-0033***

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OWNER'S CERTIFICATION

This Project-Specific Water Quality Management Plan (WQMP) has been prepared for 22740 Temescal Canyon Road, LLC by DRC Engineering, Inc. for the Palisade Temescal Canyon project.

This WQMP is intended to comply with the requirements of County of Riverside for Ordinance No. 754, which includes the requirement for the preparation and implementation of a Project-Specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation and funding of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. In addition, the property owner accepts responsibility for interim operation and maintenance of Stormwater BMPs until such time as this responsibility is formally transferred to a subsequent owner. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity. The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under County of Riverside Water Quality Ordinance (Municipal Code Section 13.12).

"I, the undersigned, certify under penalty of law that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

Owner's Signature

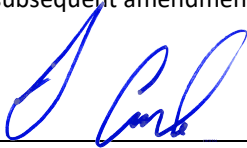
Date

Owner's Printed Name

Owner's Title/Position

PREPARER'S CERTIFICATION

"The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan meet the requirements of Regional Water Quality Control Board Order No. **R8-2010-0033** and any subsequent amendments thereto."



Preparer's Signature

1/10/2023

Date

Gregory R. Cooke

Preparer's Printed Name

Sr. Project Manager

Preparer's Title/Position

Preparer's Licensure:



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Section A: Project and Site Information

PROJECT INFORMATION	
Type of Project:	Light Industrial
Planning Area:	Temescal Canyon
Community Name:	N/A
Development Name:	N/A
PROJECT LOCATION	
Latitude & Longitude (DMS): 33°47'30.67"N and 117°29'40.81"W	
Project Watershed and Sub-Watershed: Santa Ana River Watershed; Temescal Creek	
Gross Acres: 13.07	
APN(s): 283-110-051 and 283-110-062	
Map Book and Page No.: Book 129, Pages 36-42	
PROJECT CHARACTERISTICS	
Proposed or Potential Land Use(s)	Light Industrial
Proposed or Potential SIC Code(s)	4225
Area of Impervious Project Footprint (SF)	512,425
Total Area of <u>proposed</u> Impervious Surfaces within the Project Footprint (SF)/or Replacement	365,937
Does the project consist of offsite road improvements?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Does the project propose to construct unpaved roads?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Is the project part of a larger common plan of development (phased project)?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
EXISTING SITE CHARACTERISTICS	
Total area of <u>existing</u> Impervious Surfaces within the Project limits Footprint (SF)	153,375
Is the project located within any MSHCP Criteria Cell?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
If so, identify the Cell number:	
Are there any natural hydrologic features on the project site?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Is a Geotechnical Report attached?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
If no Geotech. Report, list the NRCS soils type(s) present on the site (A, B, C and/or D)	
What is the Water Quality Design Storm Depth for the project?	0.85

A.1 Maps and Site Plans

When completing your Project-Specific WQMP, include a map of the local vicinity and existing site. In addition, include all grading, drainage, landscape/plant palette and other pertinent construction plans in Appendix 2. At a **minimum**, your WQMP Site Plan should include the following:

- Drainage Management Areas
- Proposed Structural BMPs
- Drainage Path
- Drainage Infrastructure, Inlets, Overflows
- Source Control BMPs
- Buildings, Roof Lines, Downspouts
- Impervious Surfaces
- Standard Labeling
- BMP Locations (Lat/Long)

Use your discretion on whether or not you may need to create multiple sheets or can appropriately accommodate these features on one or two sheets. Keep in mind that the Co-Permittee plan reviewer must be able to easily analyze your project utilizing this template and its associated site plans and maps.

A.2 Identify Receiving Waters

Using Table A.1 below, list in order of upstream to downstream, the receiving waters that the project site is tributary to. Continue to fill each row with the Receiving Water's 303(d) listed impairments (if any), designated beneficial uses, and proximity, if any, to a RARE beneficial use. Include a map of the receiving waters in Appendix 1.

Table A.1 Identification of Receiving Waters

Receiving Waters	EPA Approved 303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use
Temescal Creek (Reach 2)	TMDL List: Metals	INTERMITTENT - AGR, IND, GWR, REC1, REC2, LWARM, WILD	N/A
Temescal Creek (Reach 1b)	None	REC1, REC2, LWARM, WILD	N/A
Temescal Creek (Reach 1a)	None	AGR, IND, GWR, REC1, REC2, WARM, WILD, RARE, SPWN	8.5 miles
Prado Flood Control Basin	2020-2022 303(d) List: Pathogens and Nutrients TMDL list: Pesticides, Pathogens, Metals, Nutrients, and Toxic Organics	REC1, REC2, WARM, WILD, RARE	9.6 miles
Santa Ana River (Reach 2)	TMDL List: Multi-pollutant, Metals, Pathogens, and Salinity/Total Dissolved Solids/Chlorides/Sulfates	AGR, GWR, REC1, REC2, WARM, WILD, RARE	10.8 miles
Santa Ana River (Reach 1)	TMDL List: Pathogens and pH	REC1, REC2, WARM (Intermittent), WILD (intermittent)	N/A

A.3 Additional Permits/Approvals required for the Project:

Table A.2 Other Applicable Permits

Agency	Permit Required	
State Department of Fish and Game, 1602 Streambed Alteration Agreement	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
State Water Resources Control Board, Clean Water Act (CWA) Section 401 Water Quality Cert.	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
US Army Corps of Engineers, CWA Section 404 Permit	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
US Fish and Wildlife, Endangered Species Act Section 7 Biological Opinion	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Statewide Construction General Permit Coverage	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
Statewide Industrial General Permit Coverage	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Western Riverside MSHCP Consistency Approval (e.g., JPR, DBESP)	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Other (please list in the space below as required)	<input type="checkbox"/> Y	<input type="checkbox"/> N

If yes is answered to any of the questions above, the Co-Permittee may require proof of approval/coverage from those agencies as applicable including documentation of any associated requirements that may affect this Project-Specific WQMP.

Section B: Optimize Site Utilization (LID Principles)

Review of the information collected in Section 'A' will aid in identifying the principal constraints on site design and selection of LID BMPs as well as opportunities to reduce imperviousness and incorporate LID Principles into the site and landscape design. For example, **constraints** might include impermeable soils, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, high-intensity land use, heavy pedestrian or vehicular traffic, utility locations or safety concerns. **Opportunities** might include existing natural areas, low areas, oddly configured or otherwise unbuildable parcels, easements and landscape amenities including open space and buffers (which can double as locations for bioretention BMPs), and differences in elevation (which can provide hydraulic head). Prepare a brief narrative for each of the site optimization strategies described below. This narrative will help you as you proceed with your LID design and explain your design decisions to others.

The 2010 Santa Ana MS4 Permit further requires that LID Retention BMPs (Infiltration Only or Harvest and Use) be used unless it can be shown that those BMPs are infeasible. Therefore, it is important that your narrative identify and justify if there are any constraints that would prevent the use of those categories of LID BMPs. Similarly, you should also note opportunities that exist which will be utilized during project design. Upon completion of identifying Constraints and Opportunities, include these on your WQMP Site plan in Appendix 1.

Consideration of "highest and best use" of the discharge should also be considered. For example, Lake Elsinore is evaporating faster than runoff from natural precipitation can recharge it. Requiring infiltration of 85% of runoff events for projects tributary to Lake Elsinore would only exacerbate current water quality problems associated with Pollutant concentration due to lake water evaporation. In cases where rainfall events have low potential to recharge Lake Elsinore (i.e. no hydraulic connection between groundwater to Lake Elsinore, or other factors), requiring infiltration of Urban Runoff from projects is counterproductive to the overall watershed goals. Project proponents, in these cases, would be allowed to discharge Urban Runoff, provided they used equally effective filtration-based BMPs.

Site Optimization

The following questions are based upon Section 3.2 of the WQMP Guidance Document. Review of the WQMP Guidance Document will help you determine how best to optimize your site and subsequently identify opportunities and/or constraints, and document compliance.

Did you identify and preserve existing drainage patterns? If so, how? If not, why?

Existing drainage pattern is slightly altered since the location of the proposed improvements is where the existing infiltration basin is located. However, the point of discharge into offsite drainage facilities remain the same.

Did you identify and protect existing vegetation? If so, how? If not, why?

There is no existing vegetation to be protected within the area of disturbance.

Did you identify and preserve natural infiltration capacity? If so, how? If not, why?

The vacant portion of the site is overlaid with engineered fill, which is not feasible for infiltration.

Did you identify and minimize impervious area? If so, how? If not, why?

Impervious area is minimized with minimum required width of drive aisle and parking spaces.

Did you identify and disperse runoff to adjacent pervious areas? If so, how? If not, why?

No, it was not feasible due to the existing elevations surrounding the disturbed area.

Section C: Delineate Drainage Management Areas (DMAs)

Utilizing the procedure in Section 3.3 of the WQMP Guidance Document which discusses the methods of delineating and mapping your project site into individual DMAs, complete Table C.1 below to appropriately categorize the types of classification (e.g., Type A, Type B, etc.) per DMA for your project site. Upon completion of this table, this information will then be used to populate and tabulate the corresponding tables for their respective DMA classifications.

Table C.1 DMA Classifications

DMA Name or ID	Surface Type(s) ^{1,2}	Area (Sq. Ft.)	DMA Type
100	Roofs	15,276	Type 'D'
101	Roofs	22,512	Type 'D'
102	Roofs	27,616	Type 'D'
110	Concrete & Ornamental Landscaping	11,038	Type 'D'
120	Concrete & Ornamental Landscaping	102,478	Type 'D'
122	Roofs	13,920	Type 'D'
123	Roofs	16,640	Type 'D'
124	Roofs	22,080	Type 'D'
131	Asphalt & Ornamental Landscaping	5,586	Type 'D'
132	Asphalt & Ornamental Landscaping	12,539	Type 'D'
140	Asphalt & Ornamental Landscaping	22,350	Type 'D'
1410	Concrete, Asphalt & Ornamental Landscaping	11,570	Type 'D'
1420	Roofs, Concrete, Asphalt & Ornamental Landscaping	98,552	Type 'D'
142	Asphalt & Ornamental Landscaping	9,955	Type 'D'
143	Roofs	9,120	Type 'D'
150	Asphalt & Ornamental Landscaping	41,459	Type 'D'
152	Roofs	10,440	Type 'D'
153	Roofs	11,280	Type 'D'
154	Roofs	12,360	Type 'D'
155	Roofs	9,600	Type 'D'
156	Roofs	15,360	Type 'D'
157	Roofs	11,640	Type 'D'

¹Reference Table 2-1 in the WQMP Guidance Document to populate this column

²If multi-surface provide back-up

Table C.2 Type 'A', Self-Treating Areas

DMA Name or ID	Area (Sq. Ft.)	Stabilization Type	Irrigation Type (if any)
N/A			

Table C.3 Type 'B', Self-Retaining Areas

Self-Retaining Area				Type 'C' DMAs that are draining to the Self-Retaining Area		
DMA Name/ ID	Post-project surface type	Area (square feet)	Storm Depth (inches)	DMA Name / ID	[C] from Table C.4 =	Required Retention Depth (inches)
		[A]	[B]		[C]	[D]
N/A						

$$[D] = [B] + \frac{[B] \cdot [C]}{[A]}$$

Table C.4 Type 'C', Areas that Drain to Self-Retaining Areas

DMA					Receiving Self-Retaining DMA		
DMA Name/ ID	Area (square feet)	Post-project surface type	Impervious fraction	Product	DMA name / ID	Area (square feet)	Ratio
	[A]		[B]	[C] = [A] x [B]		[D]	[C]/[D]
N/A							

Table C.5 Type 'D', Areas Draining to BMPs

DMA Name or ID	BMP Name or ID
100, 101, 102, 110, 120, 122, 123, 124	MWS #1
131	MWS #2
132	MWS #3
140, 1410, 1420, 142, 143, 150, 152, 153, 154, 155, 156, 157	MWS #4

Note: More than one drainage management area can drain to a single LID BMP, however, one drainage management area may not drain to more than one BMP.

Section D: Implement LID BMPs

D.1 Infiltration Applicability

Is there an approved downstream ‘Highest and Best Use’ for stormwater runoff (see discussion in Chapter 2.4.4 of the WQMP Guidance Document for further details)? Y N

If yes has been checked, Infiltration BMPs shall not be used for the site; proceed to section D.3

If no, continue working through this section to implement your LID BMPs. It is recommended that you contact your Co-Permittee to verify whether or not your project discharges to an approved downstream ‘Highest and Best Use’ feature.

Geotechnical Report

A Geotechnical Report or Phase I Environmental Site Assessment may be required by the Copermitee to confirm present and past site characteristics that may affect the use of Infiltration BMPs. In addition, the Co-Permittee, at their discretion, may not require a geotechnical report for small projects as described in Chapter 2 of the WQMP Guidance Document. If a geotechnical report has been prepared, include it in Appendix 3. In addition, if a Phase I Environmental Site Assessment has been prepared, include it in Appendix 4.

Is this project classified as a small project consistent with the requirements of Chapter 2 of the WQMP Guidance Document? Y N

Infiltration Feasibility

Table D.1 below is meant to provide a simple means of assessing which DMAs on your site support Infiltration BMPs and is discussed in the WQMP Guidance Document in Chapter 2.4.5. Check the appropriate box for each question and then list affected DMAs as applicable. If additional space is needed, add a row below the corresponding answer.

Table D.1 Infiltration Feasibility

Does the project site...	YES	NO
...have any DMAs with a seasonal high groundwater mark shallower than 10 feet? If Yes, list affected DMAs:		X
...have any DMAs located within 100 feet of a water supply well? If Yes, list affected DMAs:		X
...have any areas identified by the geotechnical report as posing a public safety risk where infiltration of stormwater could have a negative impact? If Yes, list affected DMAs:		X
...have measured in-situ infiltration rates of less than 1.6 inches / hour? If Yes, list affected DMAs: All DMAs (100, 101, 102, 110, 120, 122, 123, 124, 131, 132, 140, 1410, 1420, 142, 143, 150, 152, 153, 154, 155, 156 and 157)	X	
...have significant cut and/or fill conditions that would preclude in-situ testing of infiltration rates at the final infiltration surface? If Yes, list affected DMAs:		X
...geotechnical report identify other site-specific factors that would preclude effective and safe infiltration? Describe here: Infiltration into the engineered fill under the disturbed area is not allowed.	X	

If you answered “Yes” to any of the questions above for any DMA, Infiltration BMPs should not be used for those DMAs and you should proceed to the assessment for Harvest and Use below.

D.2 Harvest and Use Assessment

Please check what applies:

- Reclaimed water will be used for the non-potable water demands for the project.
- Downstream water rights may be impacted by Harvest and Use as approved by the Regional Board (verify with the Copermittee).
- The Design Capture Volume will be addressed using Infiltration Only BMPs. In such a case, Harvest and Use BMPs are still encouraged, but it would not be required if the Design Capture Volume will be infiltrated or evapotranspired.

If any of the above boxes have been checked, Harvest and Use BMPs need not be assessed for the site. If none of the above criteria applies, follow the steps below to assess the feasibility of irrigation use, toilet use and other non-potable uses (e.g., industrial use).

Irrigation Use Feasibility

Complete the following steps to determine the feasibility of harvesting stormwater runoff for Irrigation Use BMPs on your site:

Step 1: Identify the total area of irrigated landscape on the site, and the type of landscaping used.

Total Area of Irrigated Landscape: 0.85 acres

Type of Landscaping (Conservation Design or Active Turf): Conservation design

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for irrigation use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: 4.59 acres

Step 3: Cross reference the Design Storm depth for the project site (see Exhibit A of the WQMP Guidance Document) with the left column of Table 2-3 in Chapter 2 to determine the minimum area of Effective Irrigated Area per Tributary Impervious Area (EIATIA).

Enter your EIATIA factor: 2.12

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum irrigated area that would be required.

Minimum required irrigated area: 9.73 acres

Step 5: Determine if harvesting stormwater runoff for irrigation use is feasible for the project by comparing the total area of irrigated landscape (Step 1) to the minimum required irrigated area (Step 4).

Minimum required irrigated area (Step 4)	Available Irrigated Landscape (Step 1)
9.73 acres	0.85 acres

Irrigation Use is NOT feasible.

Toilet Use Feasibility

Complete the following steps to determine the feasibility of harvesting stormwater runoff for toilet flushing uses on your site:

Step 1: Identify the projected total number of daily toilet users during the wet season, and account for any periodic shut downs or other lapses in occupancy:

Projected Number of Daily Toilet Users: 428

Project Type: Industrial

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for toilet use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: 4.59 acres

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-2 in Chapter 2 to determine the minimum number of toilet users per tributary impervious acre (TUTIA).

Enter your TUTIA factor: 229

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum number of toilet users that would be required.

Minimum number of toilet users: 1,051

Step 5: Determine if harvesting stormwater runoff for toilet flushing use is feasible for the project by comparing the Number of Daily Toilet Users (Step 1) to the minimum required number of toilet users (Step 4).

<u>Minimum required Toilet Users (Step 4)</u>	<u>Projected number of toilet users (Step 1)</u>
1,051	428

Toilet Use is NOT feasible.

Other Non-Potable Use Feasibility

Are there other non-potable uses for stormwater runoff on the site (e.g. industrial use)? See Chapter 2 of the Guidance for further information. If yes, describe below. If no, write N/A.

N/A

Step 1: Identify the projected average daily non-potable demand, in gallons per day, during the wet season and accounting for any periodic shut downs or other lapses in occupancy or operation.

Average Daily Demand: N/A

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for the identified non-potable use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as

a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: N/A

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-4 in Chapter 2 to determine the minimum demand for non-potable uses per tributary impervious acre.

Enter the factor from Table 2-4: N/A

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum number of gallons per day of non-potable use that would be required.

Minimum required use: N/A

Step 5: Determine if harvesting stormwater runoff for other non-potable use is feasible for the project by comparing the projected average daily use (Step 1) to the minimum required non-potable use (Step 4).

Minimum required non-potable use (Step 4)	Projected average daily use (Step 1)
N/A	N/A

If Irrigation, Toilet and Other Use feasibility anticipated demands are less than the applicable minimum values, Harvest and Use BMPs are not required and you should proceed to utilize LID Bioretention and Biotreatment per Section 3.4.2 of the WQMP Guidance Document.

D.3 Bioretention and Biotreatment Assessment

Other LID Bioretention and Biotreatment BMPs as described in Chapter 2.4.7 of the WQMP Guidance Document are feasible on nearly all development sites with sufficient advance planning.

Select one of the following:

- LID Bioretention/Biotreatment BMPs will be used for some or all DMAs of the project as noted below in Section D.4 (note the requirements of Section 3.4.2 in the WQMP Guidance Document).
- A site-specific analysis demonstrating the technical infeasibility of all LID BMPs has been performed and is included in Appendix 5. If you plan to submit an analysis demonstrating the technical infeasibility of LID BMPs, request a pre-submittal meeting with the Copermittee to discuss this option. Proceed to Section E to document your alternative compliance measures.

D.4 Feasibility Assessment Summaries

From the Infiltration, Harvest and Use, Bioretention and Biotreatment Sections above, complete Table D.2 below to summarize which LID BMPs are technically feasible, and which are not, based upon the established hierarchy.

Table D.2 LID Prioritization Summary Matrix

DMA Name/ID	LID BMP Hierarchy				No LID (Alternative Compliance)
	1. Infiltration	2. Harvest and use	3. Bioretention	4. Biotreatment	
100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
101	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
102	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
110	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
120	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
122	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
123	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
124	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
131	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
132	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
140	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1410	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1420	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
142	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
143	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
150	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
152	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
153	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
154	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
155	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
156	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
157	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

For those DMAs where LID BMPs are not feasible, provide a brief narrative below summarizing why they are not feasible, include your technical infeasibility criteria in Appendix 5, and proceed to Section E below to document Alternative Compliance measures for those DMAs. Recall that each proposed DMA must pass through the LID BMP hierarchy before alternative compliance measures may be considered.

N/A

D.5 LID BMP Sizing

Each LID BMP must be designed to ensure that the Design Capture Volume will be addressed by the selected BMPs. First, calculate the Design Capture Volume for each LID BMP using the V_{BMP} worksheet in Appendix F of the LID BMP Design Handbook. Second, design the LID BMP to meet the required V_{BMP} using a method approved by the Copermittee. Utilize the worksheets found in the LID BMP Design Handbook or consult with your Copermittee to assist you in correctly sizing your LID BMPs. Complete Table D.3 below to document the Design Capture Volume and the Proposed Volume for each LID BMP. Provide the completed design procedure sheets for each LID BMP in Appendix 6. You may add additional rows to the table below as needed.

Table D.3 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	Enter BMP Name / Identifier Here		
	[A]		[B]	[C]	[A] x [C]	MWS #1		
100	15,276	Roofs	1.00	0.89	13,626	Design Storm Depth (in)	Design Capture Volume, V_{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
101	22,512	Roofs	1.00	0.89	20,081			
102	27,616	Roofs	1.00	0.89	24,633			
110	11,038	Mixed Surface Types	0.861	0.68	7,460			
120	102,478	Mixed Surface Types	0.845	0.65	67,099			
122	13,920	Roofs	1.00	0.89	12,417			
123	16,640	Roofs	1.00	0.89	14,843			
124	22,080	Roofs	1.00	0.89	19,695			
	$A_T = \Sigma[A]$ 231,559				$\Sigma = [D]$ 179,854	[E] 0.85	$[F] = \frac{[D] \times [E]}{12}$ 12,740	[G] 15,109

[B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document

[E] is obtained from Exhibit A in the WQMP Guidance Document

[G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I _f	DMA Runoff Factor	DMA Areas x Runoff Factor	Enter BMP Name / Identifier Here		
	[A]					[B]	[C]	[A] x [C]	MWS #2
131	5,586	Mixed Surface Types	0.574	0.39	2,176	Design Storm Intensity (in/hr)	Design Flow Rate, Q _{BMP} (cfs)	Proposed Flow Rate on Plans (cfs)
	A _T = Σ[A] 5,586				Σ= [D] 2,176	[E] 0.20	[F] = $\frac{[D] \times [E]}{12 \times 3600}$ 0.01	[G] 0.052

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I _f	DMA Runoff Factor	DMA Areas x Runoff Factor	Enter BMP Name / Identifier Here		
	[A]					[B]	[C]	[A] x [C]	MWS #3
132	12,539	Mixed Surface Types	0.59	0.40	5,004	Design Storm Intensity (in/hr)	Design Flow Rate, Q _{BMP} (cfs)	Proposed Flow Rate on Plans (cfs)
	A _T = Σ[A] 12,539				Σ= [D] 5,004	[E] 0.20	[F] = $\frac{[D] \times [E]}{12 \times 3600}$ 0.02	[G] 0.052

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I _f	DMA Runoff Factor	DMA Areas x Runoff Factor	Enter BMP Name / Identifier Here		
	[A]		[B]	[C]	[A] x [C]	MWS #4		
140	22,350	Mixed Surface Types	0.892	0.72	16,064	Design Storm Depth (in)	Design Capture Volume, V _{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
1410	11,570	Mixed Surface Types	0.971	0.84	9,737			
1420	98,552	Mixed Surface Types	0.881	0.70	69,301			
142	9,955	Mixed Surface Types	0.888	0.71	7,098			
143	9,120	Roofs	1.00	0.89	8,135			
150	41,459	Mixed Surface Types	0.882	0.71	29,211			
152	10,440	Roofs	1.00	0.89	9,312			
153	11,280	Roofs	1.00	0.89	10,062			
154	12,360	Roofs	1.00	0.89	11,025			
155	9,600	Roofs	1.00	0.89	8,563			
156	15,360	Roofs	1.00	0.89	13,701			
157	11,640	Roofs	1.00	0.89	10,383			
	A _T = Σ[A] 263,685				Σ= [D] 202,593	[E] 0.85	[F] = $\frac{[D] \times [E]}{12}$ 14,351	[G] 15,109

Section E: Alternative Compliance (LID Waiver Program)

LID BMPs are expected to be feasible on virtually all projects. Where LID BMPs have been demonstrated to be infeasible as documented in Section D, other Treatment Control BMPs must be used (subject to LID waiver approval by the Copermittee). Check one of the following Boxes:

LID Principles and LID BMPs have been incorporated into the site design to fully address all Drainage Management Areas. No alternative compliance measures are required for this project and thus this Section is not required to be completed.

- Or -

The following Drainage Management Areas are unable to be addressed using LID BMPs. A site-specific analysis demonstrating technical infeasibility of LID BMPs has been approved by the Co-Permittee and included in Appendix 5. Additionally, no downstream regional and/or sub-regional LID BMPs exist or are available for use by the project. The following alternative compliance measures on the following pages are being implemented to ensure that any pollutant loads expected to be discharged by not incorporating LID BMPs, are fully mitigated.

N/A

E.1 Identify Pollutants of Concern

Utilizing Table A.1 from Section A above which noted your project's receiving waters and their associated EPA approved 303(d) listed impairments, cross reference this information with that of your selected Priority Development Project Category in Table E.1 below. If the identified General Pollutant Categories are the same as those listed for your receiving waters, then these will be your Pollutants of Concern and the appropriate box or boxes will be checked on the last row. The purpose of this is to document compliance and to help you appropriately plan for mitigating your Pollutants of Concern in lieu of implementing LID BMPs.

Table E.1 Potential Pollutants by Land Use Type

Priority Development Project Categories and/or Project Features (check those that apply)	General Pollutant Categories							
	Bacterial Indicators	Metals	Nutrients	Pesticides	Toxic Organic Compounds	Sediments	Trash & Debris	Oil & Grease
<input type="checkbox"/> Detached Residential Development	P	N	P	P	N	P	P	P
<input type="checkbox"/> Attached Residential Development	P	N	P	P	N	P	P	P ⁽²⁾
<input checked="" type="checkbox"/> Commercial/Industrial Development	P ⁽³⁾	P	P ⁽¹⁾	P ⁽¹⁾	P ⁽⁵⁾	P ⁽¹⁾	P	P
<input type="checkbox"/> Automotive Repair Shops	N	P	N	N	P ^(4, 5)	N	P	P
<input type="checkbox"/> Restaurants (>5,000 ft ²)	P	N	N	N	N	N	P	P
<input type="checkbox"/> Hillside Development (>5,000 ft ²)	P	N	P	P	N	P	P	P
<input checked="" type="checkbox"/> Parking Lots (>5,000 ft ²)	P ⁽⁶⁾	P	P ⁽¹⁾	P ⁽¹⁾	P ⁽⁴⁾	P ⁽¹⁾	P	P
<input type="checkbox"/> Retail Gasoline Outlets	N	P	N	N	P	N	P	P
Project Priority Pollutant(s) of Concern	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

P = Potential

N = Not Potential

⁽¹⁾ A potential Pollutant if non-native landscaping exists or is proposed onsite; otherwise not expected

⁽²⁾ A potential Pollutant if the project includes uncovered parking areas; otherwise not expected

⁽³⁾ A potential Pollutant is land use involving animal waste

⁽⁴⁾ Specifically petroleum hydrocarbons

⁽⁵⁾ Specifically solvents

⁽⁶⁾ Bacterial indicators are routinely detected in pavement runoff

E.2 Stormwater Credits

Projects that cannot implement LID BMPs but nevertheless implement smart growth principles are potentially eligible for Stormwater Credits. Utilize Table 3-8 within the WQMP Guidance Document to identify your Project Category and its associated Water Quality Credit. If not applicable, write N/A.

Table E.2 Water Quality Credits

Qualifying Project Categories	Credit Percentage ²
N/A	
<i>Total Credit Percentage¹</i>	

¹Cannot Exceed 50%

²Obtain corresponding data from Table 3-8 in the WQMP Guidance Document

E.3 Sizing Criteria

After you appropriately considered Stormwater Credits for your project, utilize Table E.3 below to appropriately size them to the DCV, or Design Flow Rate, as applicable. Please reference Chapter 3.5.2 of the WQMP Guidance Document for further information.

Table E.3 Treatment Control BMP Sizing

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I _r	DMA Runoff Factor	DMA Area x Runoff Factor	Enter BMP Name / Identifier Here			
	[A]		[B]	[C]	[A] x [C]				
						<i>Design Storm Depth (in)</i>	<i>Minimum Design Capture Volume or Design Flow Rate (cubic feet or cfs)</i>	<i>Total Storm Water Credit % Reduction</i>	<i>Proposed Volume or Flow on Plans (cubic feet or cfs)</i>
	$A_T = \sum[A]$			$\Sigma = [D]$	[E]	$[F] = \frac{[D] \times [E]}{[G]}$	$[F] \times (1 - [H])$	[I]	

[B], [C] is obtained as described in Section 2.3.1 from the WQMP Guidance Document

[E] is for Flow-Based Treatment Control BMPs [E] = .2, for Volume-Based Control Treatment BMPs, [E] obtained from Exhibit A in the WQMP Guidance Document

[G] is for Flow-Based Treatment Control BMPs [G] = 43,560, for Volume-Based Control Treatment BMPs, [G] = 12

[H] is from the Total Credit Percentage as Calculated from Table E.2 above

[I] as obtained from a design procedure sheet from the BMP manufacturer and should be included in Appendix 6

E.4 Treatment Control BMP Selection

Treatment Control BMPs typically provide proprietary treatment mechanisms to treat potential pollutants in runoff, but do not sustain significant biological processes. Treatment Control BMPs must have a removal efficiency of a medium or high effectiveness as quantified below:

- **High:** equal to or greater than 80% removal efficiency
- **Medium:** between 40% and 80% removal efficiency

Such removal efficiency documentation (e.g., studies, reports, etc.) as further discussed in Chapter 3.5.2 of the WQMP Guidance Document, must be included in Appendix 6. In addition, ensure that proposed Treatment Control BMPs are properly identified on the WQMP Site Plan in Appendix 1.

Table E.4 Treatment Control BMP Selection

Selected Treatment Control BMP Name or ID ¹	Priority Pollutant(s) of Concern to Mitigate ²	Removal Efficiency Percentage ³

¹ Treatment Control BMPs must not be constructed within Receiving Waters. In addition, a proposed Treatment Control BMP may be listed more than once if they possess more than one qualifying pollutant removal efficiency.

² Cross Reference Table E.1 above to populate this column.

³ As documented in a Co-Permittee Approved Study and provided in Appendix 6.

Section F: Hydromodification

F.1 Hydrologic Conditions of Concern (HCOC) Analysis

Once you have determined that the LID design is adequate to address water quality requirements, you will need to assess if the proposed LID Design may still create a HCOC. Review Chapters 2 and 3 (including Figure 3-7) of the WQMP Guidance Document to determine if your project must mitigate for Hydromodification impacts. If your project meets one of the following criteria which will be indicated by the check boxes below, you do not need to address Hydromodification at this time. However, if the project does not qualify for Exemptions 1, 2 or 3, then additional measures must be added to the design to comply with HCOC criteria. This is discussed in further detail below in Section F.2.

HCOC EXEMPTION 1: The Priority Development Project disturbs less than one acre. The Copermitttee has the discretion to require a Project-Specific WQMP to address HCOCs on projects less than one acre on a case by case basis. The disturbed area calculation should include all disturbances associated with larger common plans of development.

Does the project qualify for this HCOC Exemption? Y N

If Yes, HCOC criteria do not apply.

HCOC EXEMPTION 2: The volume and time of concentration¹ of storm water runoff for the post-development condition is not significantly different from the pre-development condition for a 2-year return frequency storm (a difference of 5% or less is considered insignificant) using one of the following methods to calculate:

- Riverside County Hydrology Manual
- Technical Release 55 (TR-55): Urban Hydrology for Small Watersheds (NRCS 1986), or derivatives thereof, such as the Santa Barbara Urban Hydrograph Method
- Other methods acceptable to the Co-Permittee

Does the project qualify for this HCOC Exemption? Y N

If Yes, report results in Table F.1 below and provide your substantiated hydrologic analysis in Appendix 7.

Table F.1 Hydrologic Conditions of Concern Summary

	2 year – 24 hour		
	Pre-condition	Post-condition	% Difference
Time of Concentration	N/A	N/A	N/A
Volume (Cubic Feet)	N/A	N/A	N/A

¹ Time of concentration is defined as the time after the beginning of the rainfall when all portions of the drainage basin are contributing to flow at the outlet.

HCOC EXEMPTION 3: All downstream conveyance channels to an adequate sump (for example, Prado Dam, Lake Elsinore, Canyon Lake, Santa Ana River, or other lake, reservoir or naturally erosion resistant feature) that will receive runoff from the project are engineered and regularly maintained to ensure design flow capacity; no sensitive stream habitat areas will be adversely affected; or are not identified on the Co-Permittees Hydromodification Susceptibility Maps.

Does the project qualify for this HCOC Exemption? Y N

If Yes, HCOC criteria do not apply and note below which adequate sump applies to this HCOC qualifier:

F.2 HCOC Mitigation

If none of the above HCOC Exemption Criteria are applicable, HCOC criteria is considered mitigated if they meet one of the following conditions:

- a. Additional LID BMPS are implemented onsite or offsite to mitigate potential erosion or habitat impacts as a result of HCOCs. This can be conducted by an evaluation of site-specific conditions utilizing accepted professional methodologies published by entities such as the California Stormwater Quality Association (CASQA), the Southern California Coastal Water Research Project (SCCRWP), or other Co-Permittee approved methodologies for site-specific HCOC analysis.
- b. The project is developed consistent with an approved Watershed Action Plan that addresses HCOC in Receiving Waters.
- c. Mimicking the pre-development hydrograph with the post-development hydrograph, for a 2-year return frequency storm. Generally, the hydrologic conditions of concern are not significant, if the post-development hydrograph is no more than 10% greater than pre-development hydrograph. In cases where excess volume cannot be infiltrated or captured and reused, discharge from the site must be limited to a flow rate no greater than 110% of the pre-development 2-year peak flow.

Be sure to include all pertinent documentation used in your analysis of the items a, b or c in Appendix 7.

Section G: Source Control BMPs

Source control BMPs include permanent, structural features that may be required in your project plans — such as roofs over and berms around trash and recycling areas — and Operational BMPs, such as regular sweeping and “housekeeping”, that must be implemented by the site’s occupant or user. The MEP standard typically requires both types of BMPs. In general, Operational BMPs cannot be substituted for a feasible and effective permanent BMP. Using the Pollutant Sources/Source Control Checklist in Appendix 8, review the following procedure to specify Source Control BMPs for your site:

1. **Identify Pollutant Sources:** Review Column 1 in the Pollutant Sources/Source Control Checklist. Check off the potential sources of Pollutants that apply to your site.
2. **Note Locations on Project-Specific WQMP Exhibit:** Note the corresponding requirements listed in Column 2 of the Pollutant Sources/Source Control Checklist. Show the location of each Pollutant source and each permanent Source Control BMP in your Project-Specific WQMP Exhibit located in Appendix 1.
3. **Prepare a Table and Narrative:** Check off the corresponding requirements listed in Column 3 in the Pollutant Sources/Source Control Checklist. In the left column of Table G.1 below, list each potential source of runoff Pollutants on your site (from those that you checked in the Pollutant Sources/Source Control Checklist). In the middle column, list the corresponding permanent, Structural Source Control BMPs (from Columns 2 and 3 of the Pollutant Sources/Source Control Checklist) used to prevent Pollutants from entering runoff. **Add additional narrative** in this column that explains any special features, materials or methods of construction that will be used to implement these permanent, Structural Source Control BMPs.
4. **Identify Operational Source Control BMPs:** To complete your table, refer once again to the Pollutant Sources/Source Control Checklist. List in the right column of your table the Operational BMPs that should be implemented as long as the anticipated activities continue at the site. Copermittee stormwater ordinances require that applicable Source Control BMPs be implemented; the same BMPs may also be required as a condition of a use permit or other revocable Discretionary Approval for use of the site.

Table G.1 Permanent and Operational Source Control Measures

Potential Sources of Runoff pollutants	Permanent Structural Source Control BMPs	Operational Source Control BMPs
A. On-site storm drain inlets	Mark all inlets with the words “Only Rain Down the Storm Drain” or similar. Catch basin markers may be available from the Riverside County Flood Control and Water Conservation District, call 951.955.1200 to verify.	<ul style="list-style-type: none"> • Maintain and periodically repaint or replace inlet markings. • Provide stormwater pollution prevention information to new site owners, lessees, or operators. • See applicable operational BMPs in Fact Sheet SC-44, “Drainage System Maintenance,” in the CASQA Stormwater Quality Handbooks at https://www.casqa.org/resources/bmp-handbooks

Potential Sources of Runoff pollutants	Permanent Structural Source Control BMPs	Operational Source Control BMPs
		<ul style="list-style-type: none"> • Include the following in lease agreement: “Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains.”
<p>D2. Landscape/Outdoor Pesticide Use</p>	<p>Final landscape plans will accomplish the following:</p> <ul style="list-style-type: none"> • Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. • Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. • Consider using pest-resistant plants, especially adjacent to hardscape. • To ensure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions. 	<ul style="list-style-type: none"> • Maintain landscaping using minimum or no pesticides. • See applicable operational BMPs in “What you should know for...Landscape and Gardening” at https://rcwatershed.org/wp-content/uploads/2020/09/Landscaping-and-Gardening-Guide.pdf • Provide Integrated Pest Management information to new owners, lessees and operators.
<p>G. Refuse areas</p>	<ul style="list-style-type: none"> • Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. • If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent runoff and show locations of berms to prevent runoff from the area. • Signs will be posted on or near dumpsters with the words “Do not dump hazardous materials here” or similar. 	<ul style="list-style-type: none"> • Provide adequate number of receptacles. • Inspect receptacles regularly; repair or replace leaky receptacles. • Keep receptacles covered. • Prohibit/prevent dumping of liquid or hazardous wastes. Post “no hazardous materials” signs. • Inspect and pick up litter daily and clean up spills immediately. • Keep spill control materials available on-site. • See Fact Sheet SC-34, “Waste Handling and Disposal” in the CASQA Stormwater Quality Handbooks at https://www.casqa.org/resources/bmp-handbooks

Potential Sources of Runoff pollutants	Permanent Structural Source Control BMPs	Operational Source Control BMPs
M. Loading docks	<ul style="list-style-type: none"> • Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. • Provide a roof overhang over the loading area or install door skirts at each bay that enclose the end of the trailer. 	<ul style="list-style-type: none"> • Move loaded and unloaded items indoors as soon as possible. • See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at https://www.casqa.org/resources/bmp-handbooks
N. Fire sprinkler test	Provide a means to drain fire sprinkler test water to the sanitary sewer.	See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at https://www.casqa.org/resources/bmp-handbooks
O. Miscellaneous Drain or Wash Water or Other Sources: Boiler drain lines Condensate drain lines Rooftop equipment Roofing, gutters, and trim	<ul style="list-style-type: none"> • Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. • Condensate drain lines may discharge to landscape area if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. • Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment. • Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff. 	None
P. Plaza, sidewalks, and parking lots	None	Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer.

Section H: Construction Plan Checklist

Populate Table H.1 below to assist the plan checker in an expeditious review of your project. The first two columns will contain information that was prepared in previous steps, while the last column will be populated with the corresponding plan sheets. This table is to be completed with the submittal of your final Project-Specific WQMP.

Table H.1 Construction Plan Cross-reference

BMP No. or ID	BMP Identifier and Description	Corresponding Plan Sheet(s)	BMP Location (Lat/Long)
MWS #1	Biotreatment BMP		
MWS #2	Biotreatment BMP		
MWS #3	Biotreatment BMP		
MWS #4	Biotreatment BMP		

Note that the updated table — or Construction Plan WQMP Checklist — is **only a reference tool** to facilitate an easy comparison of the construction plans to your Project-Specific WQMP. Co-Permittee staff can advise you regarding the process required to propose changes to the approved Project-Specific WQMP.

Section I: Operation, Maintenance and Funding

The Copermittee will periodically verify that Stormwater BMPs on your site are maintained and continue to operate as designed. To make this possible, your Copermittee will require that you include in Appendix 9 of this Project-Specific WQMP:

1. A means to finance and implement facility maintenance in perpetuity, including replacement cost.
2. Acceptance of responsibility for maintenance from the time the BMPs are constructed until responsibility for operation and maintenance is legally transferred. A warranty covering a period following construction may also be required.
3. An outline of general maintenance requirements for the Stormwater BMPs you have selected.
4. Figures delineating and designating pervious and impervious areas, location, and type of Stormwater BMP, and tables of pervious and impervious areas served by each facility. Geo-locating the BMPs using a coordinate system of latitude and longitude is recommended to help facilitate a future statewide database system.
5. A separate list and location of self-retaining areas or areas addressed by LID Principles that do not require specialized O&M or inspections but will require typical landscape maintenance as noted in Chapter 5, pages 85-86, in the WQMP Guidance. Include a brief description of typical landscape maintenance for these areas.

Your local Co-Permittee will also require that you prepare and submit a detailed Stormwater BMP Operation and Maintenance Plan that sets forth a maintenance schedule for each of the Stormwater BMPs built on your site. An agreement assigning responsibility for maintenance and providing for inspections and certification may also be required.

Details of these requirements and instructions for preparing a Stormwater BMP Operation and Maintenance Plan are in Chapter 5 of the WQMP Guidance Document.

Maintenance Mechanism: Property owner is responsible for all the BMP maintenance.

Will the proposed BMPs be maintained by a Home Owners' Association (HOA) or Property Owners Association (POA)?

Y

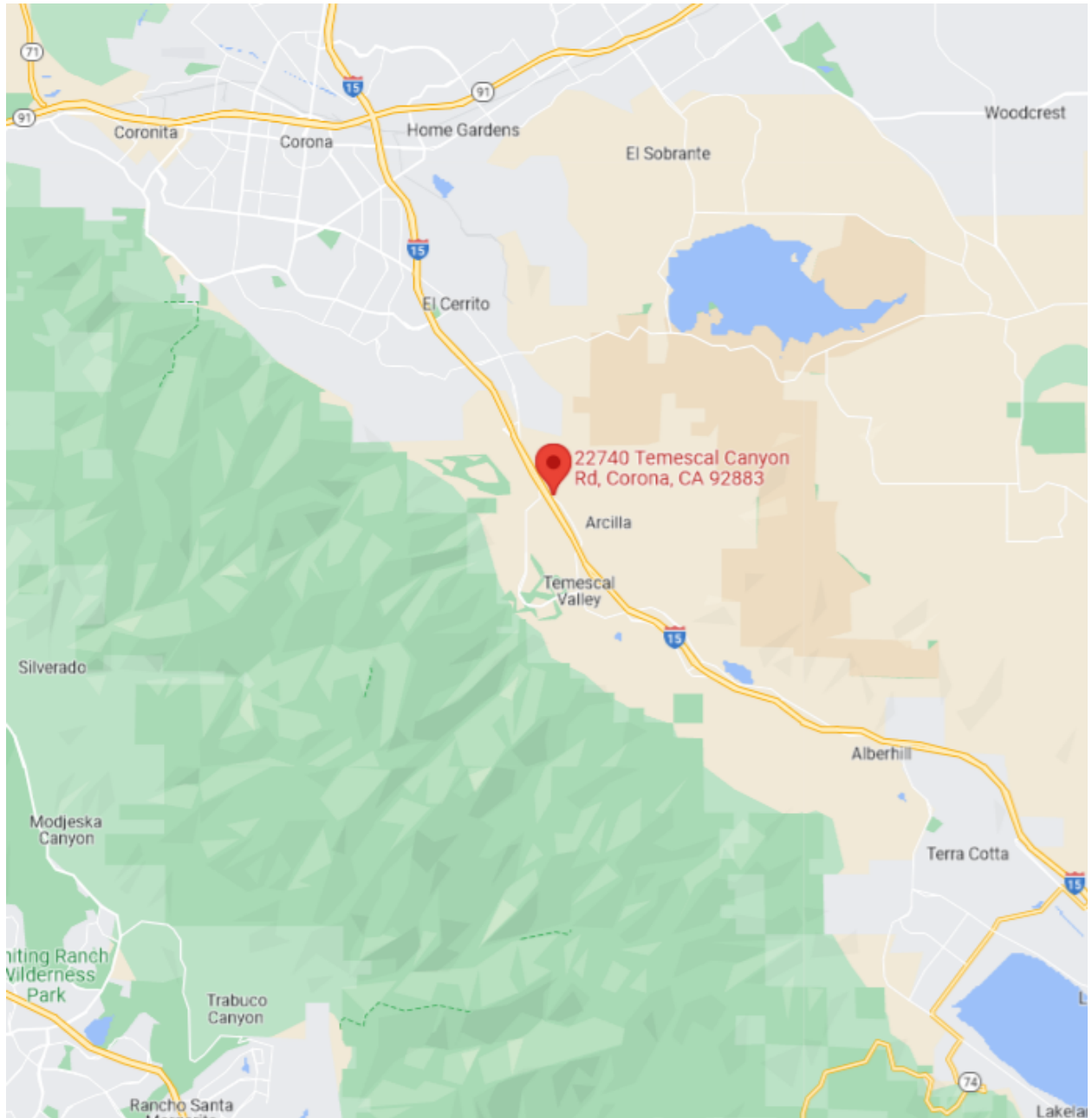
N

Include your Operation and Maintenance Plan and Maintenance Mechanism in Appendix 9. Additionally, include all pertinent forms of educational materials for those personnel that will be maintaining the proposed BMPs within this Project-Specific WQMP in Appendix 10.

Appendix 1: Maps and Site Plans

Location Map, WQMP Site Plan and Receiving Waters Map

Location Map

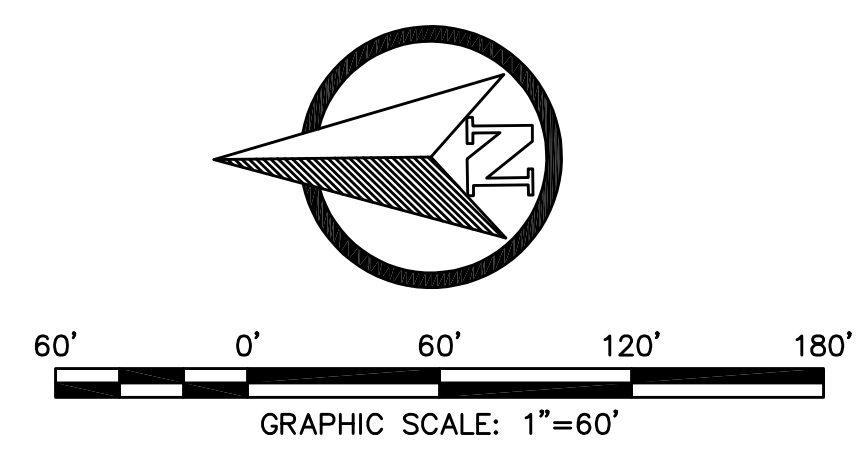
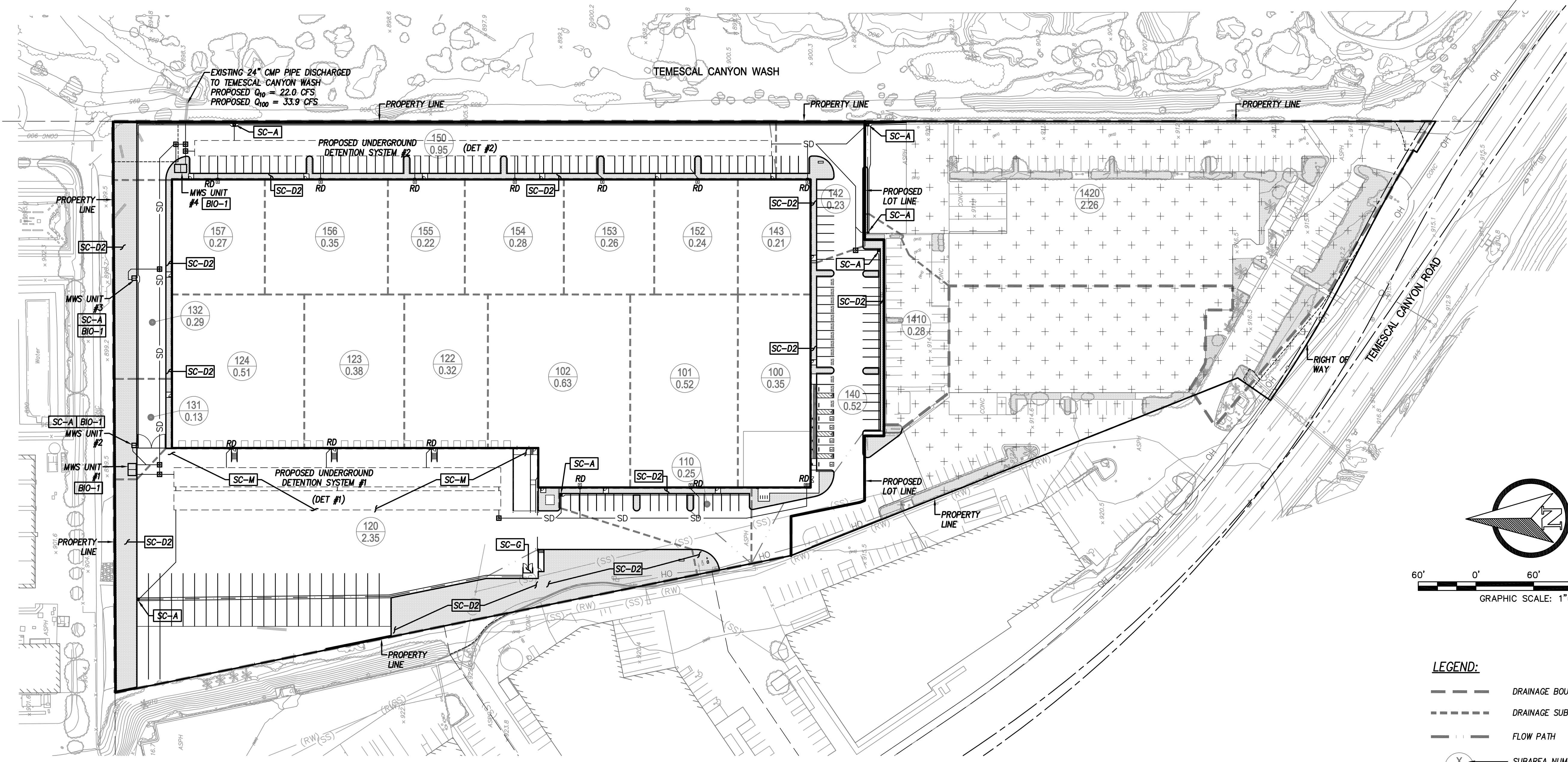


NO.	REVISION:	DATE:

**PALISADE TEMESCAL CANYON
 22740 TEMESCAL CANYON RD.
 UNINCORPORATED COUNTY OF RIVERSIDE
 WQMP SITE PLAN**

PROJECT: PALISADE TEMESCAL CANYON WQMP
 DRAWING NAME: WQMP SITE PLAN

ISSUE:	PRELIMINARY
DATE:	2023/1/10
CHECKED:	JH
DRAWN:	JH
DRAWING FILE:	21143WQMPSP
PROJECT NO.:	21-143
SHEET NUMBER:	1
OF	2 SHEETS
SCALE:	AS SHOWN



- LEGEND:**
- DRAINAGE BOUNDARY
 - DRAINAGE SUBAREA BOUNDARY
 - - - FLOW PATH
 - (X) SUBAREA NUMBER
 - (X) SUBAREA ACREAGE
 - SD— STORM DRAIN
 - PERVIOUS AREA IN PROPOSED CONDITION
 - + + SITE AREA NOT DISTURBED

- PROPOSED SOURCE CONTROL BMPS:**
- SC-A ON-SITE STORM DRAIN INLETS
 - SC-D2 LANDSCAPE/OUTDOOR PESTICIDE USE
 - SC-G REFUSE AREAS
 - SC-M LOADING DOCKS
 - SC-N FIRE SPRINKLER TEST WATER
 - SC-O MISCELLANEOUS DRAIN OR WASH WATER OR OTHER SOURCES
 - SC-P PLAZAS, SIDEWALKS, AND PARKING LOTS

- PROPOSED STRUCTURAL BMPS:**
- BIO-1 MWS UNITS (BIOTREATMENT BMP)
- UNDERGROUND DETENTION SYSTEMS (FOR HYDROMODIFICATION)

SUMMARY OF PROPOSED STRUCTURAL BMPS:

MWS UNIT #	TRIBUTARY AREA (AC)	DCV (CU-FT)	MODEL NO.
1	5.32	12,740	MWS-L-8-12-V
2	0.13	155	MWS-L-4-4-C
3	0.29	155	MWS-L-4-4-C
4	6.05	14,351	MWS-L-8-12-V

DETENTION #	TRIBUTARY AREA (AC)	REQUIRED STORAGE (CU-FT)	PROVIDED STORAGE (CU-FT)	DCV (CU-FT)	CONSPAN (FT)	CONSPAN RISE (FT)	ROW OF CONSPAN	TOTAL LENGTH OF CONSPAN (FT)
1	5.32	36,865	37,427	12,740	16	4	2	2 X 340 = 680
2	6.05	41,979	42,624	14,351	16	5	1	600

SUMMARY OF PEAK DISCHARGES FROM THE SITE:

Area (ac)	Existing Condition											
	2-year				5-year				10-year			
	24-hr	6-hr	3-hr	1-hr	24-hr	6-hr	3-hr	1-hr	24-hr	6-hr	3-hr	1-hr
11.80	0.81	3.40	4.48	8.25	1.23	6.29	7.91	12.74	3.61	10.43	12.48	18.18

Area (ac)	Mitigated Condition											
	2-year				5-year				10-year			
	24-hr	6-hr	3-hr	1-hr	24-hr	6-hr	3-hr	1-hr	24-hr	6-hr	3-hr	1-hr
11.80	0.78	0.93	0.90	1.15	1.16	1.15	1.15	1.46	3.54	1.34	1.35	1.72

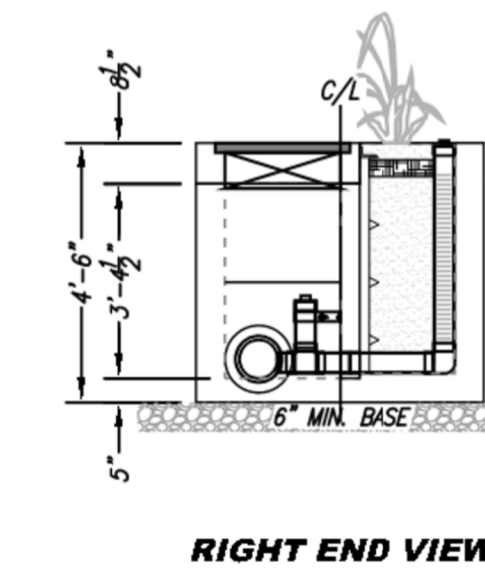
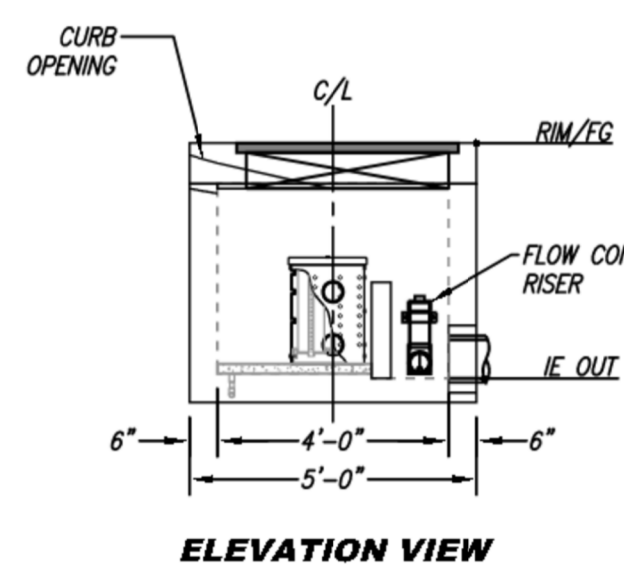
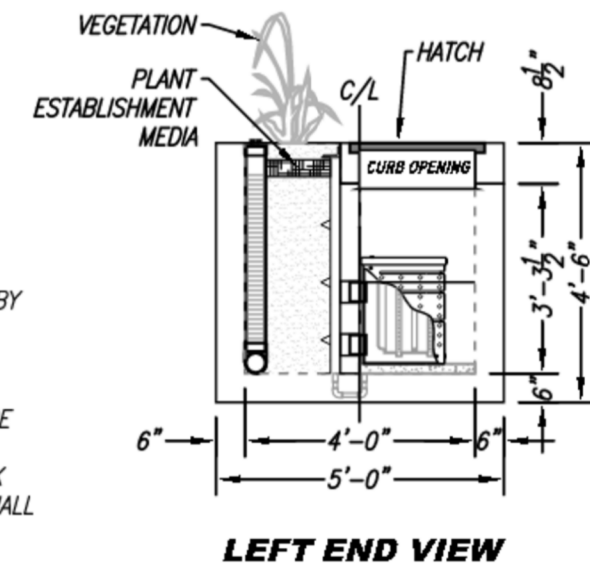
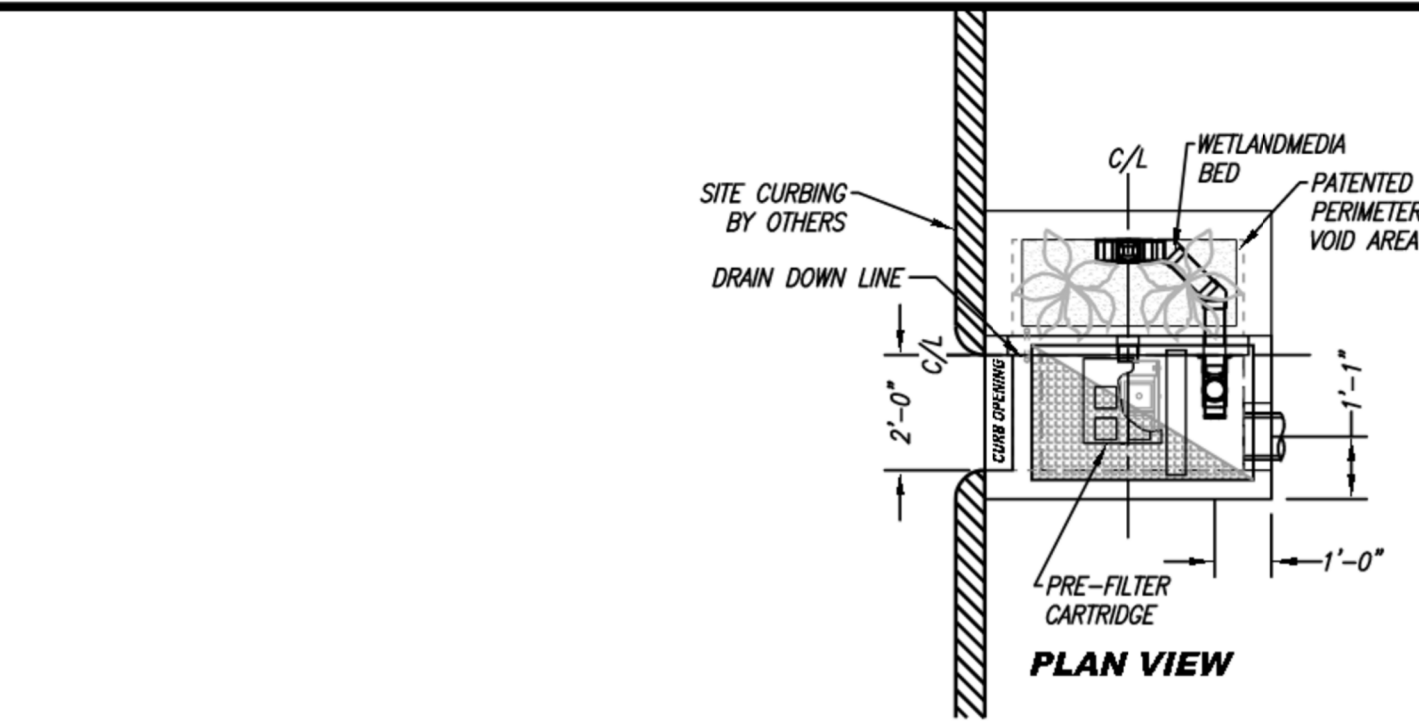
SITE SPECIFIC DATA			
PROJECT NUMBER			
ORDER NUMBER			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID			
TREATMENT REQUIRED			
VOLUME BASED (CF)	FLOW BASED (CFS)		
TREATMENT HGL AVAILABLE (FT)			
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE			
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD	PEDESTRIAN	OPEN PLANTER	PEDESTRIAN
FRAME & COVER	24" X 42"	N/A	N/A
WETLANDMEDIA VOLUME (CY)	TBD		
ORIFICE SIZE (DIA. INCHES)	TBD		
NOTES: PRELIMINARY NOT FOR CONSTRUCTION.			

INSTALLATION NOTES

- CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURERS CONTRACT.
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- ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE. (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL GAPS AROUND PIPES SHALL BE SEALED WATER TIGHT WITH A NON-SHRINK GROUT PER MANUFACTURERS STANDARD CONNECTION DETAIL AND SHALL MEET OR EXCEED REGIONAL PIPE CONNECTION STANDARDS.
- CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES.
- CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO GROUT ALL MANHOLES AND HATCHES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
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TREATMENT FLOW (CFS)	0.052
OPERATING HEAD (FT)	3.4
PRETREATMENT LOADING RATE (GPM/SF)	1.8
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

MWS-L-4-4-C
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL



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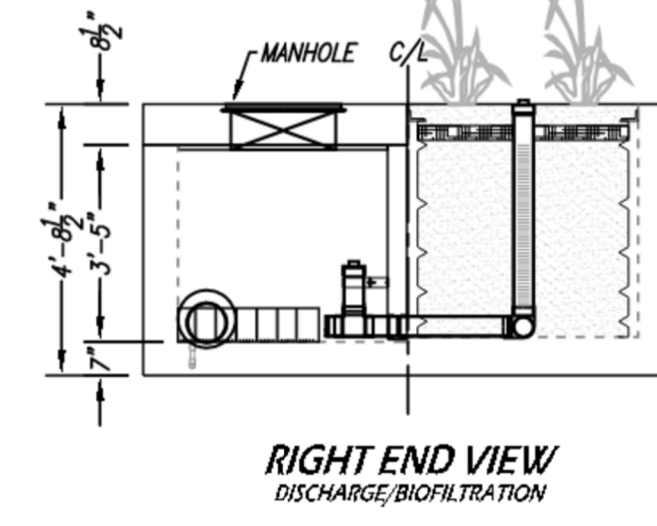
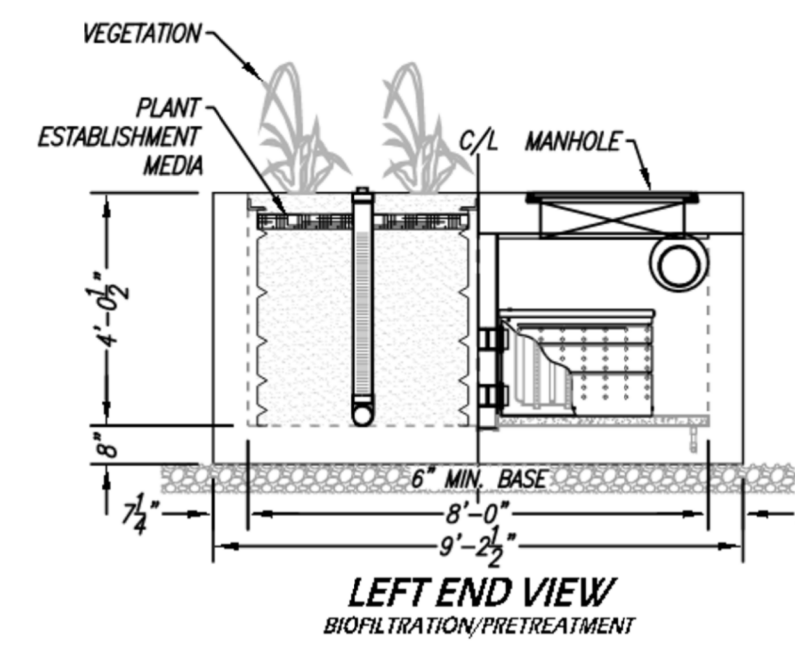
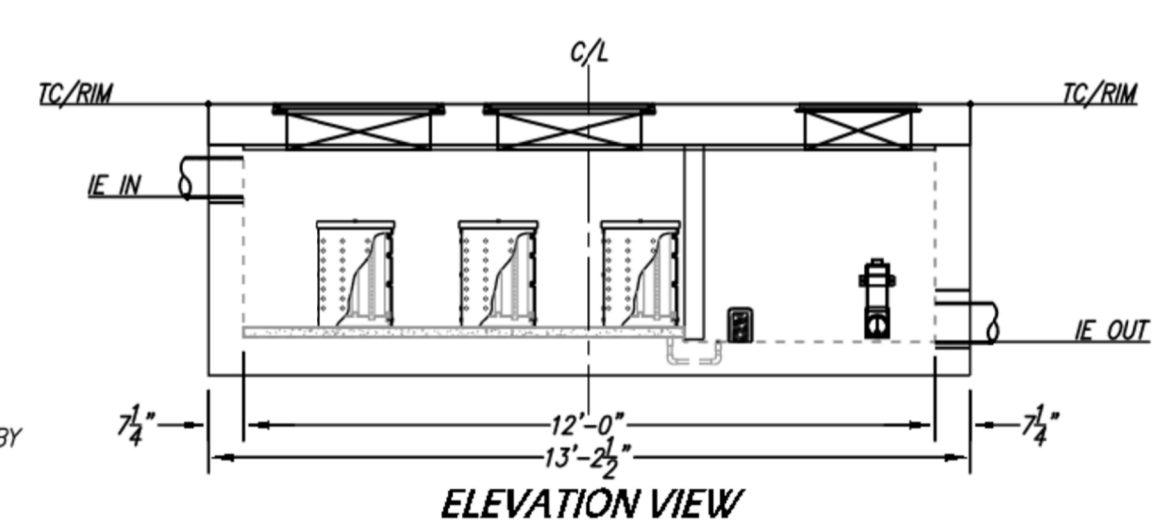
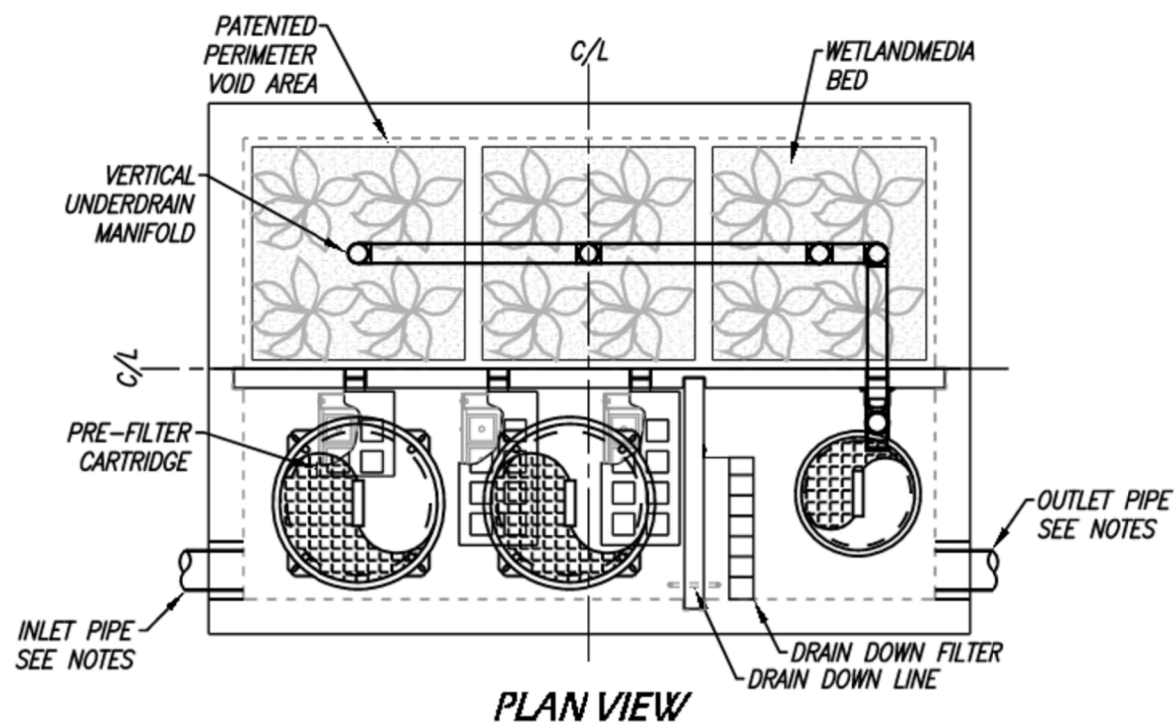
SITE SPECIFIC DATA			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID			
TREATMENT REQUIRED			
VOLUME BASED (CF)	FLOW BASED (CFS)		
TREATMENT HGL AVAILABLE (FT)			
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE			
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD	PARKWAY	OPEN PLANTER	PARKWAY
FRAME & COVER	#30"	N/A	#24"
WETLANDMEDIA VOLUME (CY)	7.26		
WETLANDMEDIA DELIVERY METHOD	TBD		
ORIFICE SIZE (DIA. INCHES)	#2.66"		
MAXIMUM PICK WEIGHT (LBS)	TBD		
NOTES:			

INSTALLATION NOTES

- CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURERS CONTRACT.
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- DRIP OR SPRAY IRRIGATION REQUIRED ON ALL UNITS WITH VEGETATION.

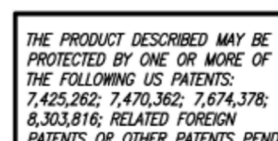
GENERAL NOTES

- MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT MANUFACTURER.



TREATMENT FLOW (CFS)	0.346
OPERATING HEAD (FT)	3.4
PRETREATMENT LOADING RATE (GPM/SF)	TBD
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

MWS-L-8-12-V
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL



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DATE

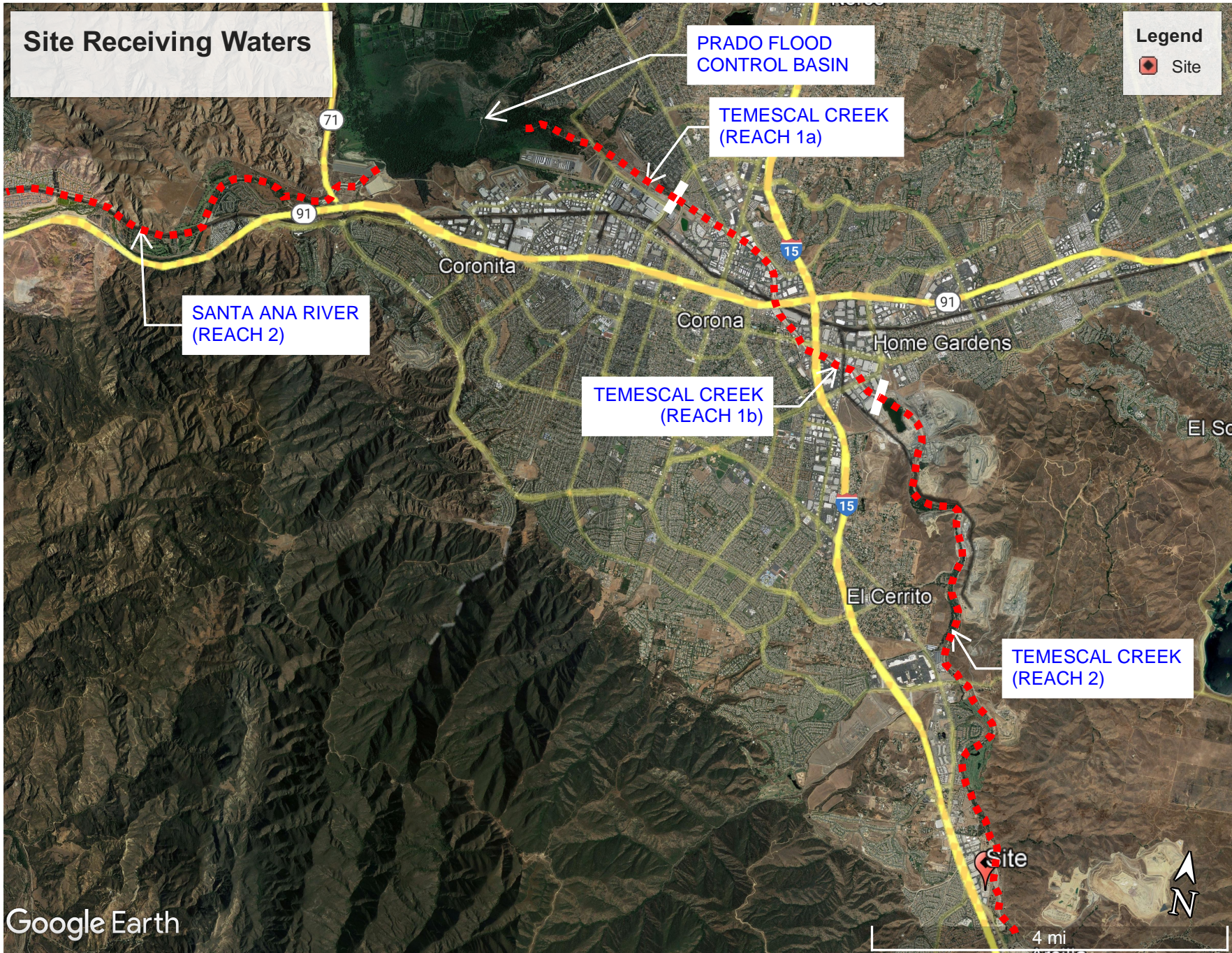
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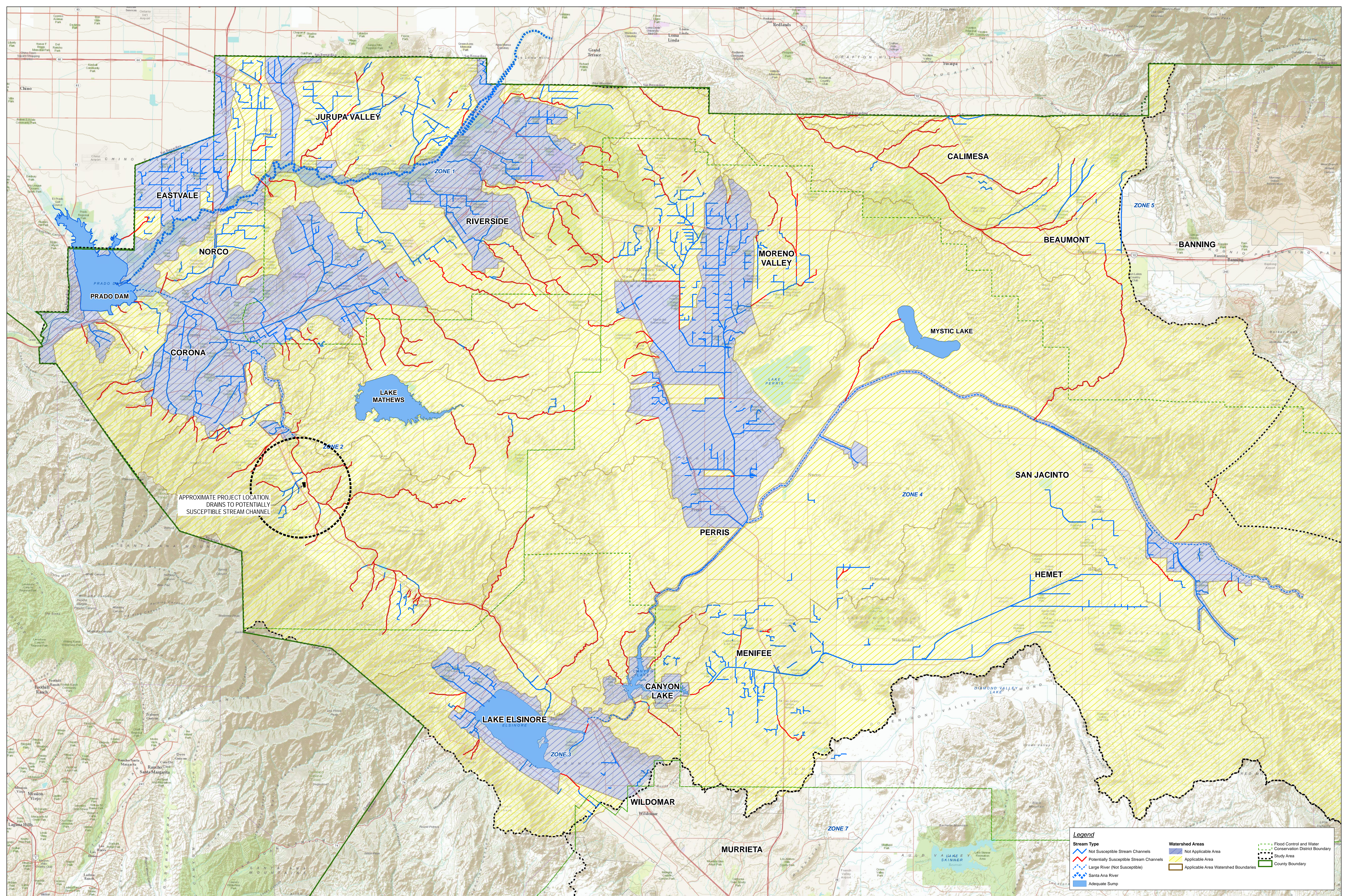
PALISADE TEMESCAL CANYON
22740 TEMESCAL CANYON RD.
UNINCORPORATED COUNTY OF RIVERSIDE

PROJECT: **WQMP SITE PLAN**

DRAWING NAME: **WQMP SITE PLAN**

ISSUE:	PRELIMINARY
DATE:	2023/1/10
CHECKED:	JH DRAWN: JH
DRAWING FILE:	21143WQMPSP
PROJECT NO.:	21-143
SHEET NUMBER:	2
OF 2 SHEETS	
SCALE:	AS SHOWN





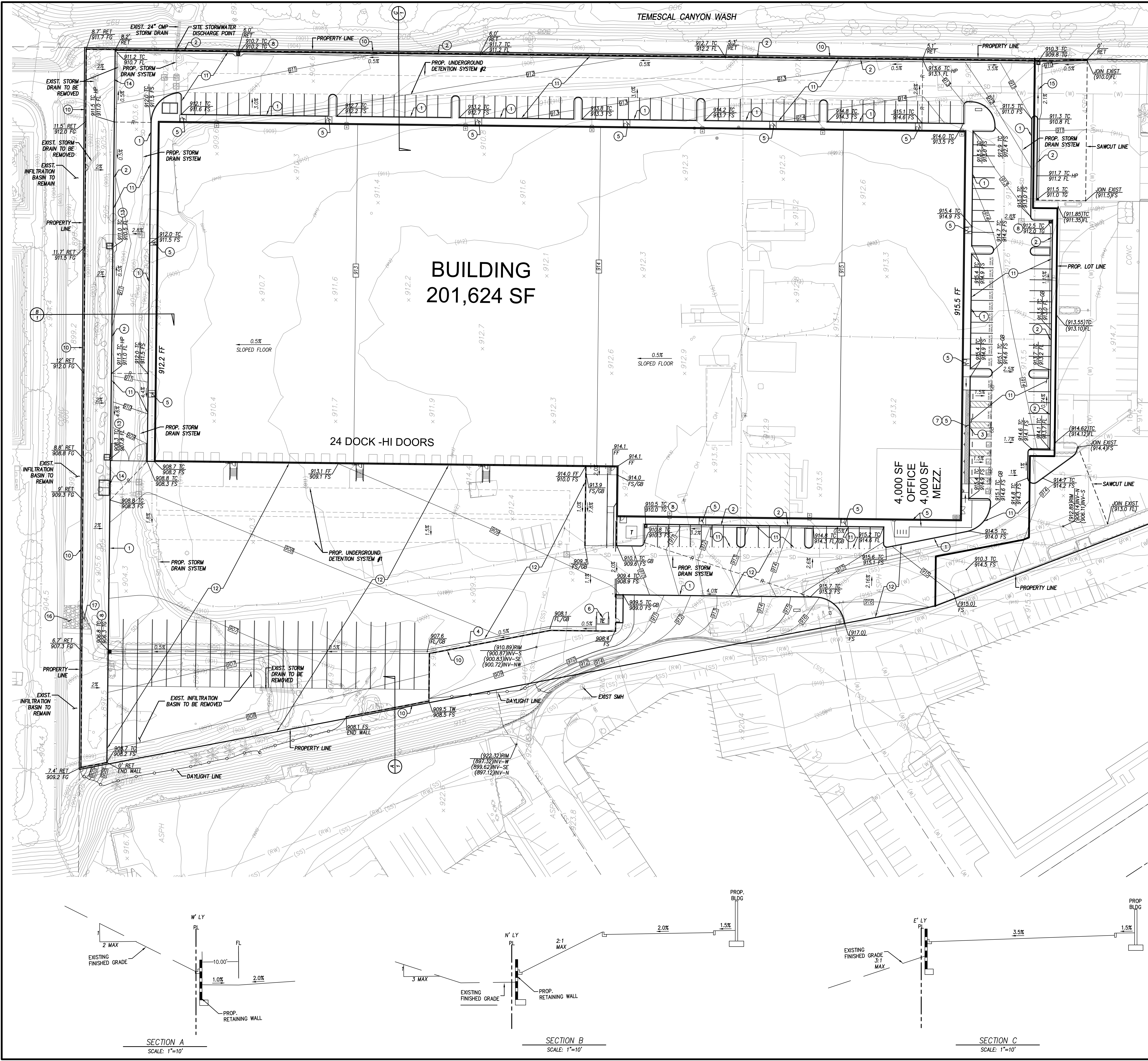
APPROXIMATE PROJECT LOCATION,
DRAINS TO POTENTIALLY
SUSCEPTIBLE STREAM CHANNEL

Legend

Stream Type	Not Applicable Area	Flood Control and Water Conservation District Boundary
Potentially Susceptible Stream Channels	Applicable Area	Study Area
Large River (Not Susceptible)	Applicable Area Watershed Boundaries	County Boundary
Santa Ana River		
Adequate Sump		

Appendix 2: Construction Plans

Grading and Drainage Plans



PRELIMINARY EARTHWORK CALCULATIONS

EARTHWORK VOLUMES	CUT (CY)	FILL (CY)
RAW	7,700	22,300
TOTAL	7,700	22,300

NET = 14,600 CY IMPORT

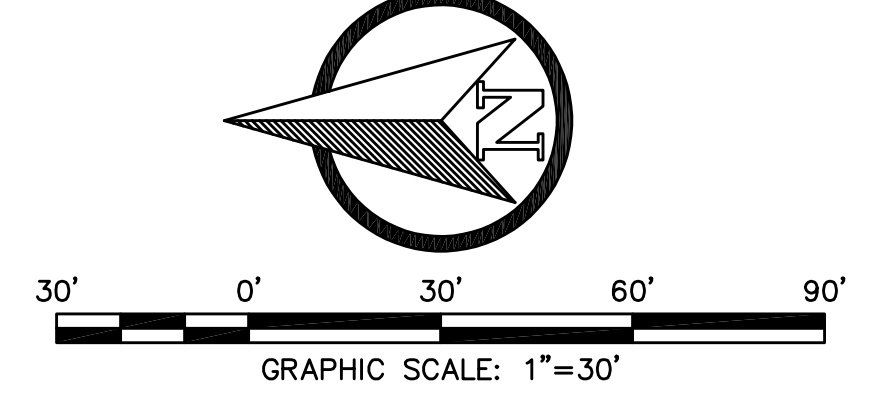
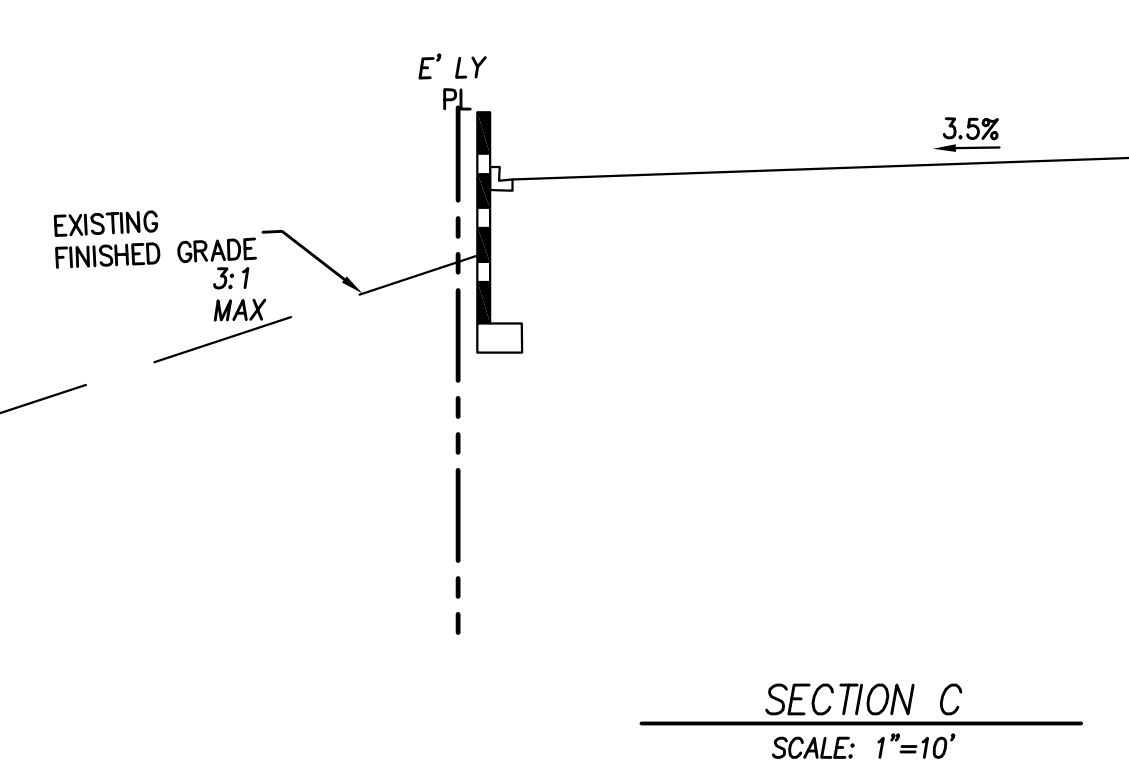
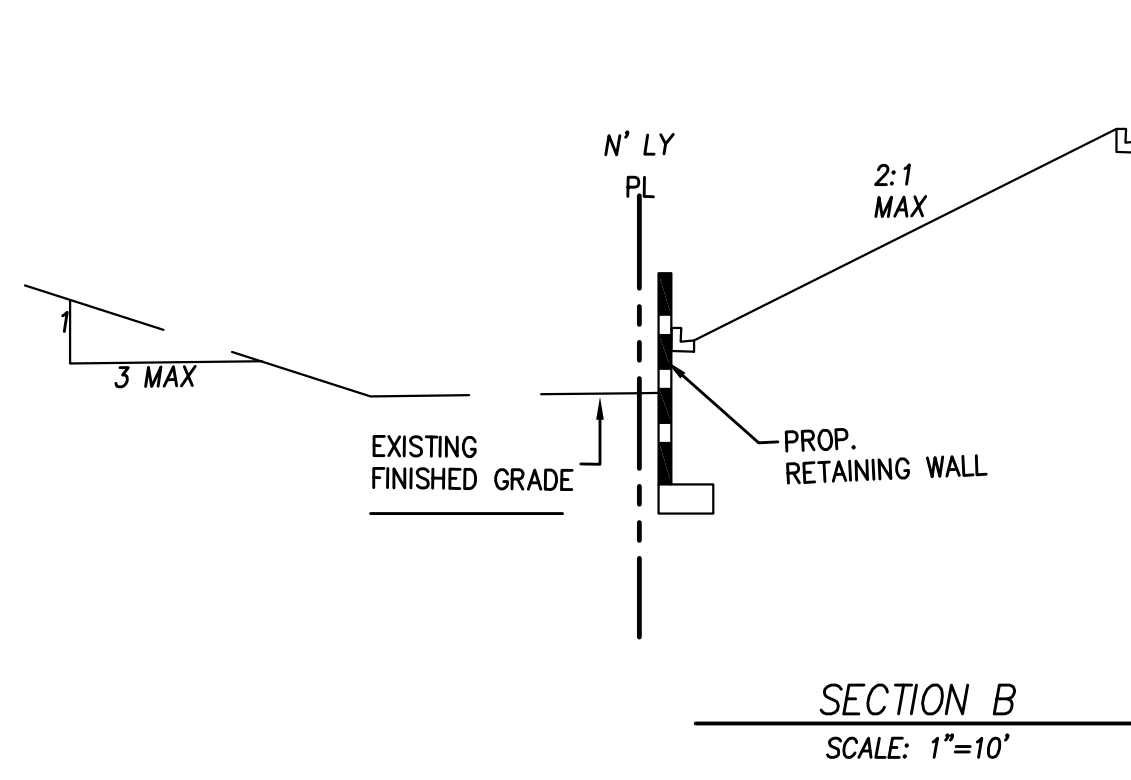
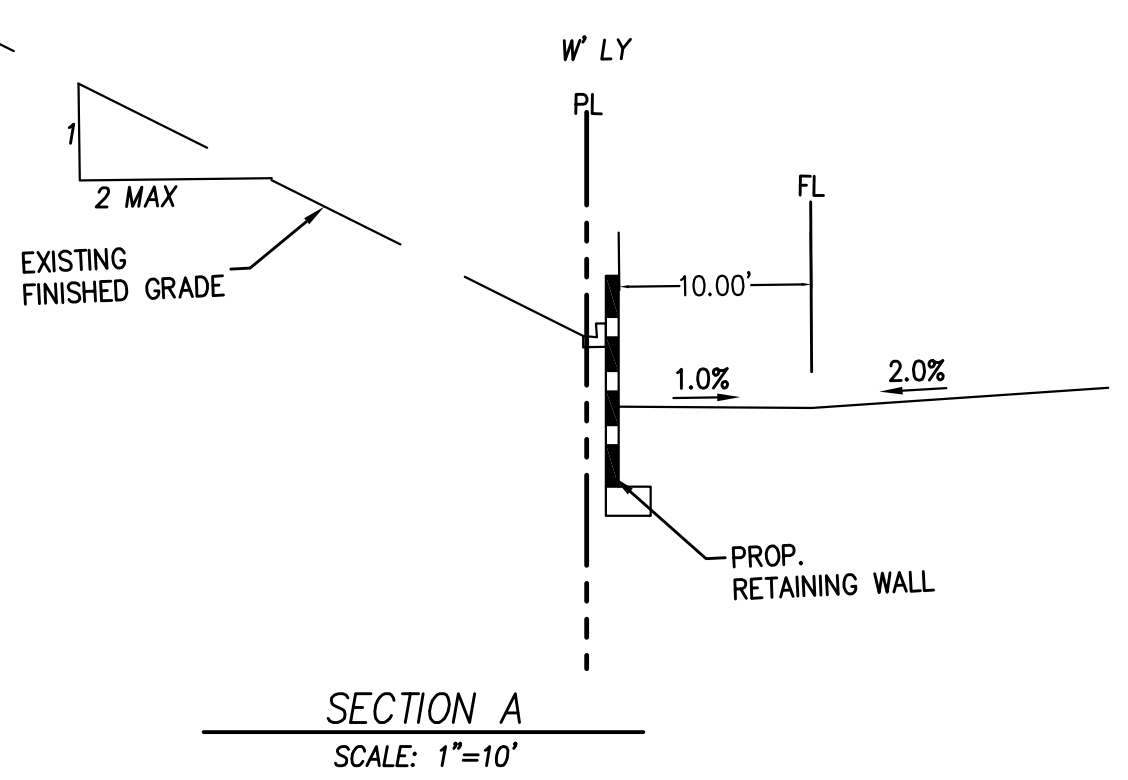
THE ABOVE QUANTITIES DO NOT REFLECT OR ANY SPECIAL CONDITIONS THAT MAY BE SPECIFIED IN THE PRELIMINARY SOILS REPORT AND ARE FOR REFERENCE AND FEE PURPOSES ONLY. SINCE THE ENGINEER CANNOT CONTROL THE EXACT METHOD OR MEANS USED BY THE CONTRACTOR DURING GRADING OPERATION, NOR CAN THE ENGINEER GUARANTEE THE EXACT SOIL CONDITION OVER THE ENTIRE SITE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR FINAL EARTHWORK QUANTITIES FOR BIDDING, CONTRACT, AND CONSTRUCTION PURPOSES. IF IT APPEARS THERE WILL BE AN EXCESS OR SHORTAGE OF MATERIAL, THE CONTRACTOR MAY NOTIFY THE ENGINEER TO DETERMINE IF POSSIBLE GRADE ADJUSTMENTS CAN BE MADE TO ALLEVIATE SAID MATERIAL EXCESS OR SHORTAGE.

- GRADING NOTES:**
- CONSTRUCT 6" PCC CURB
 - CONSTRUCT 6" PCC CURB AND GUTTER
 - CONSTRUCT 0" PCC CURB
 - CONSTRUCT 3" CONCRETE GUTTER
 - CONSTRUCT 4" THICK CONCRETE SIDEWALK
 - CONSTRUCT TRASH ENCLOSURE PER ARCHITECT'S PLANS
 - INSTALL TRUNCATED DOMES
 - INSTALL GRATE INLET
 - INSTALL CATCH BASIN
 - CONSTRUCT RETAINING WALL PER ARCHITECT'S PLANS
 - AC/AB PAVING
 - PCC/AB PAVING
 - INSTALL CURB TYPE MODULAR WETLANDS SYSTEM
 - INSTALL VAULT TYPE MODULAR WETLANDS SYSTEM
 - CONSTRUCT 6' WIDE CONCRETE GUTTER
 - PROTECT EXISTING RIP-RAP IN PLACE
 - REMOVE EXISTING RIP-RAP THAT CONFLICTS WITH PROPOSED RETAINING WALL

SITE DRAINAGE SUMMARY:

EXISTING CONDITION	Q ₁₀ (CFS)	Q ₁₀₀ (CFS)
EXISTING CONDITION	12.0	20.5
PROPOSED CONDITION	22.0	33.9

DISCHARGE FROM PROPOSED CONDITION IS MITIGATED BY UNDERGROUND DETENTION SYSTEMS AND ORIFICES CONTROLLING OUTFLOW FROM THE SITE TO BE LESS THAN OUTFLOW FROM THE EXISTING CONDITION.



PROJECT: **PALISADE TEMESCAL CANYON**
 22740 TEMESCAL CANYON RD.
 UNINCORPORATED COUNTY OF RIVERSIDE
CONCEPTUAL GRADING PLAN

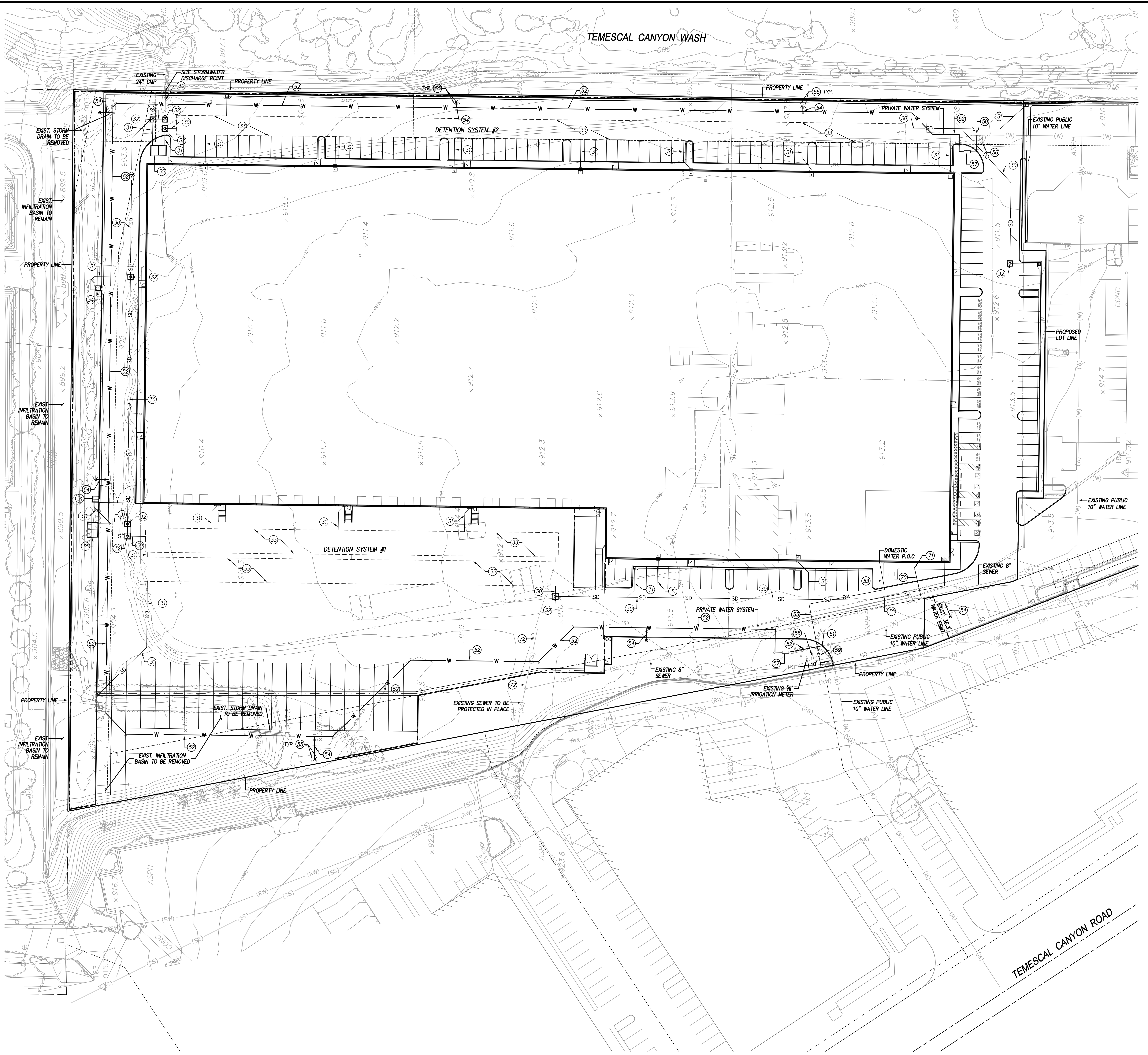
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 ISSUE: CONCEPTUAL
 DATE: 1/10/2023
 CHECKED: DRC DRAWN: DRC
 DRAWING FILE: 21143CG
 PROJECT NO.: **21-143**
 SHEET NUMBER:
 OF 3 SHEETS
 SCALE: **AS SHOWN**

ENGINEERING: **DRC Engineering, Inc.**
 Civil Engineering/Land Surveying/Land Planning
 160 S. Old Springs Road
 Suite 210
 Anaheim Hills, CA 92808
 714-685-6660

DATE:
 REVISION:

NOT FOR CONSTRUCTION

TEMESCAL CANYON WASH



- WATER CONSTRUCTION NOTES:**
- (50) REMOVE EXISTING 4" BLOWOFF AND JOIN EXISTING 10" WATER LINE
 - (51) REMOVE EXISTING PLUG AND JOIN EXISTING 10" WATER LINE
 - (52) INSTALL 10" WATER LINE
 - (53) INSTALL 2" DOMESTIC WATER SERVICE
 - (54) INSTALL FIRE HYDRANT LATERAL
 - (55) INSTALL BOLLARDS
 - (56) REMOVE EXISTING FIRE HYDRANT AND LATERAL. CAP AT MAIN.
 - (57) INSTALL 10" DCCA
 - (58) REMOVE EXISTING 5/8" DOMESTIC WATER METER, BACKFLOW DEVICE, AND CAP AT MAIN.
 - (59) INSTALL 2" DOMESTIC WATER METER AND 2" BACKFLOW DEVICE.

- SEWER CONSTRUCTION NOTES:**
- (70) INSTALL 8" SEWER LATERAL
 - (71) INSTALL SEWER CLEANOUT
 - (72) ABANDON EXISTING SEWER LATERAL

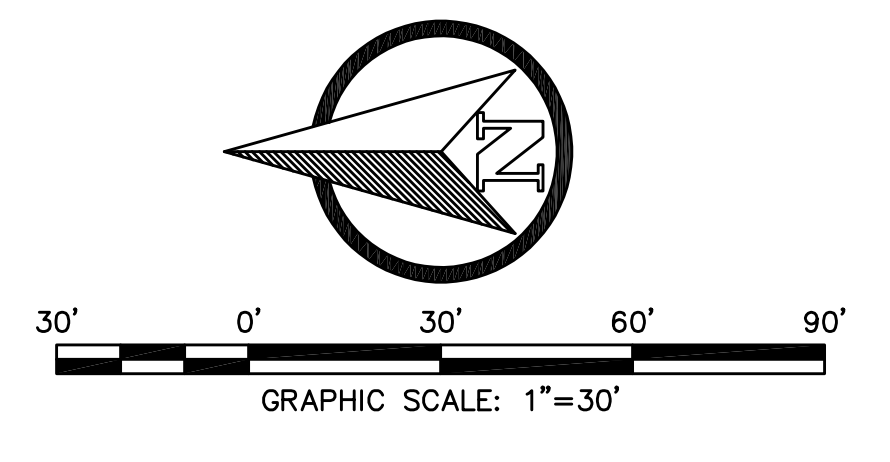
- STORM DRAIN CONSTRUCTION NOTES:**
- (30) INSTALL 18" PVC SDR35 PIPE
 - (31) INSTALL 8" STORM DRAIN LATERAL
 - (32) CONSTRUCT STORM DRAIN MANHOLE
 - (33) CONSTRUCT DETENTION SYSTEM
 - (34) INSTALL CURB INLET TYPE MODULAR WETLANDS SYSTEM UNIT
 - (35) INSTALL VAULT TYPE MODULAR WETLANDS SYSTEM UNIT

SEWER AND WATER PURVEYOR:
 TEMESCAL VALLEY WATER DISTRICT
 22646 TEMESCAL CANYON ROAD
 CORONA, CA 92883
 (951) 277-1414
 CONTACT: JEFF PACE

SITE DRAINAGE SUMMARY:

	Q ₁₀ (CFS)	Q ₁₀₀ (CFS)
EXISTING CONDITION	12.0	20.5
PROPOSED CONDITION	22.0	33.9

DISCHARGE FROM PROPOSED CONDITION IS MITIGATED BY UNDERGROUND DETENTION SYSTEMS AND ORIFICES CONTROLLING OUTFLOW FROM THE SITE TO BE LESS THAN OUTFLOW FROM THE EXISTING CONDITION.

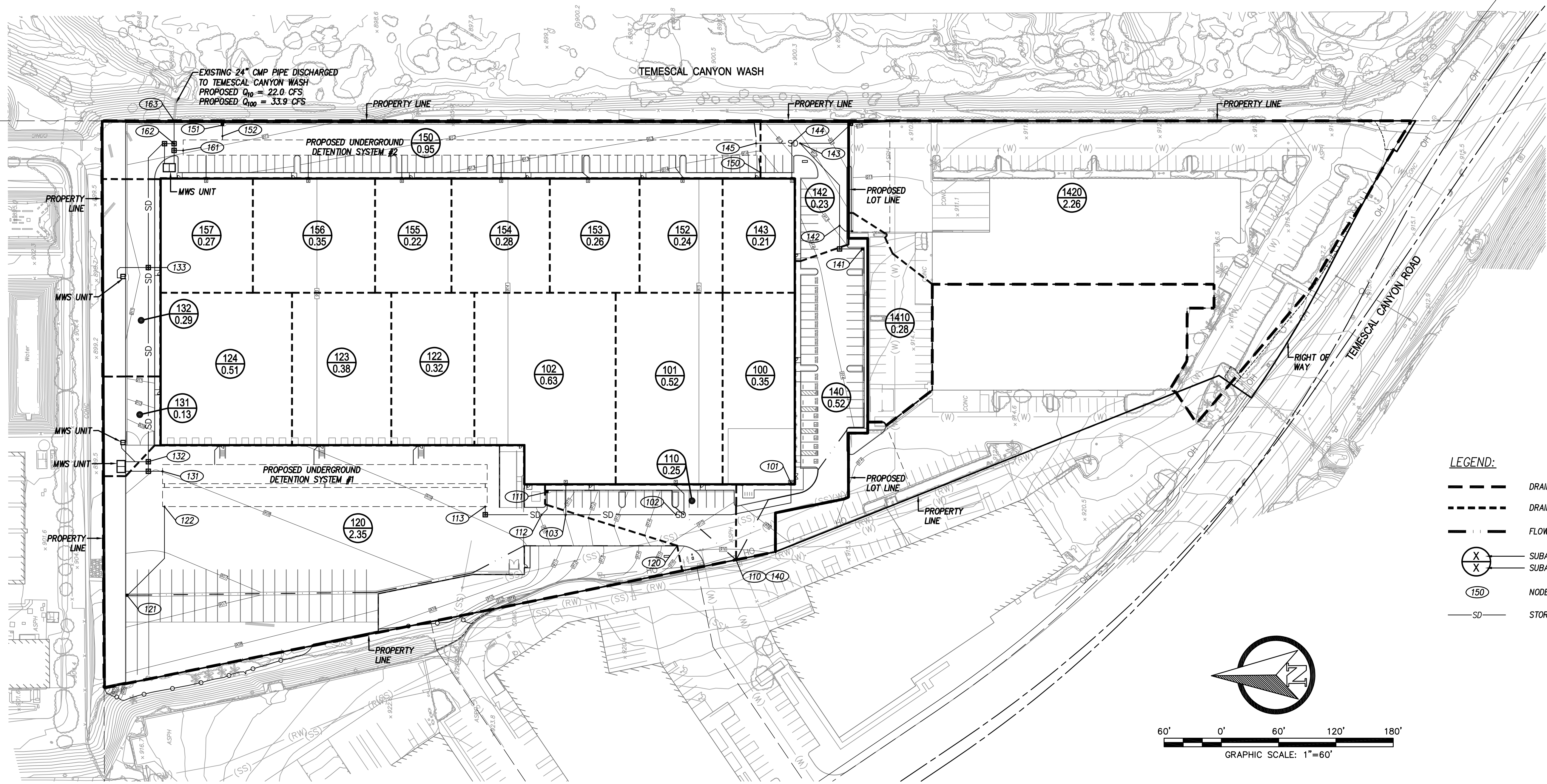


CONCEPTUAL UTILITY PLAN

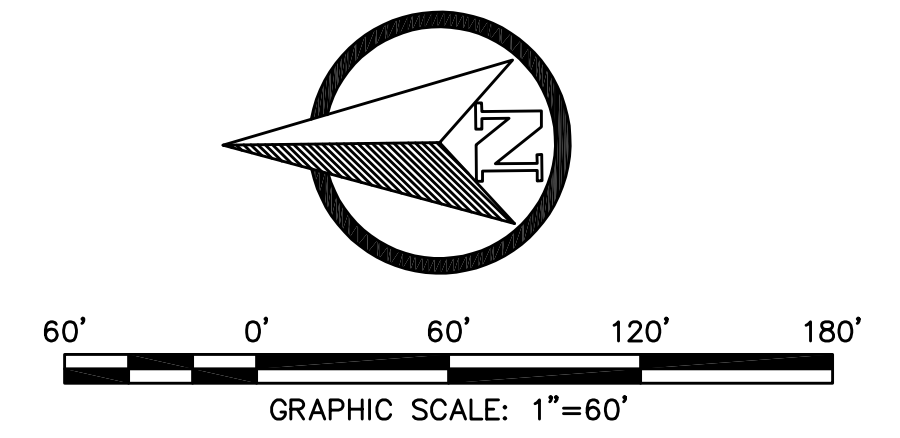
PALISADE TEMESCAL CANYON
22740 TEMESCAL CANYON RD.
CORONA, CA

PROJECT: PALISADE TEMESCAL CANYON 22740 TEMESCAL CANYON RD. CORONA, CA
 DRAWING NAME: CONCEPTUAL UTILITY PLAN
 ISSUE: CONCEPTUAL
 DATE: 1/10/2023
 CHECKED: GRC DRAWN: JH
 DRAWING FILE: 21143CU01
 PROJECT NO.: 21-143
 SHEET NUMBER:
 OF 3 SHEETS
 SCALE: AS SHOWN

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- LEGEND:**
- DRAINAGE BOUNDARY
 - - - DRAINAGE SUBAREA BOUNDARY
 - - - FLOW PATH
 - (X/X) SUBAREA NUMBER
 - (X/X) SUBAREA ACREAGE
 - (150) NODE NUMBER
 - SD— STORM DRAIN



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 Civil Engineering/Land Surveying/Land Planning
 GREGORY R. COOKE
 R.C.E. 39478
 DATE

NO.	REVISION	DATE

PALISADE TEMESCAL CANYON
22740 TEMESCAL CANYON RD.
UNINCORPORATED COUNTY OF RIVERSIDE
PROPOSE HYDROLOGY MAP

PROJECT: PALISADE TEMESCAL CANYON
 DRAWING NAME: PROPOSE HYDROLOGY MAP

ISSUE:	PRELIMINARY
DATE:	2023/1/10
CHECKED: JH	DRAWN: JH
DRAWING FILE:	21143PRHM
PROJECT NO.:	21-143
SHEET NUMBER:	1
OF	1 SHEETS
SCALE:	AS SHOWN

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Appendix 3: Soils Information

Geotechnical Study and Other Infiltration Testing Data



**GEOTECHNICAL EXPLORATION REPORT
"THE QUARRY" A PORTION OF PARCELS 1 AND 2
OF PARCEL MAP 129/136
TEMESCAL CANYON ROAD
CORONA AREA, COUNTY OF RIVERSIDE,
CALIFORNIA**

Prepared for NORTH PALISADE PARTNERS, LLC
1330 FACTORY PLACE #105
LOS ANGELES, CA 90013

Prepared by LEIGHTON CONSULTING, INC.
17781 COWAN
IRVINE, CALIFORNIA 92614

Project Number 13335.002

June 30, 2022

June 30, 2022

Project No. 13335.002

North Palisade Partners, LLC
1330 Factory Place #105
Los Angeles, CA 90013

Attention: Mr. Brian Wong, Senior Vice President

**Subject: Geotechnical Exploration Report
"The Quarry" a Portion of Parcels 1 and 2 of Parcel Map 129/136
Temescal Canyon Road
Corona Area, County of Riverside, California**

Per our April 21, 2022 proposal, authorized on April 26, 2022, Leighton Consulting, Inc. (Leighton) has prepared this geotechnical exploration report for the subject project. We understand the development concept being considered for the project includes demolition of existing buildings and site improvements to allow construction of a new one-story 201,844-square-foot concrete tilt-up warehouse. Ancillary improvements likely consist of utility infrastructure, pavement, flatwork, and landscaping.

The purpose of our geotechnical exploration was to evaluate the subsurface conditions at the site, identify potential geologic and seismic hazards that may impact the project, and provide geotechnical recommendations for design and construction of the proposed improvements as currently planned.

The project is considered feasible from a geotechnical standpoint. The results of our exploration, conclusions and recommendations are presented in this report.

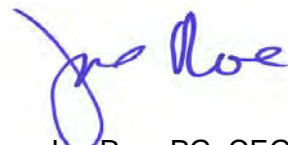
We appreciate the opportunity to be of service to you on this project. If you have any questions or if we can be of further service, please contact us at (866) LEIGHTON; or specifically at the phone extensions or e-mail addresses listed below.

Respectfully submitted,

LEIGHTON CONSULTING, INC.



Carl Kim, PE, GE 2620
Senior Principal Engineer
Ext. 1681, ckim@leightongroup.com



Joe Roe, PG, CEG 2456
Senior Principal Geologist
Ext. 4263, jroe@leightongroup.com



Distribution: (1) Addressee

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ATTACHMENTS

Important Information About Your Geotechnical Engineering Report Rear of Text

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- Figure 1 – Site Location Map
- Figure 2a – Exploration Location Map
- Figure 2b – Site Conditions October 2004
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- Figure 2d – Cross Section AA and BB
- Figure 3 – Regional Geology Map
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- Figure 5 – Seismic Hazard Map
- Figure 6 – Flood Hazard Zone Map
- Figure 7 – Dam Inundation Map
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Appendices

- Appendix A – Exploration Logs
- Appendix B – Laboratory Test Results
- Appendix C – Mass Grading Plans
- Appendix D – Settlement Analysis
- Appendix E – General Earthwork and Grading Guide Specifications

1.0 INTRODUCTION

1.1 Site Description and Proposed Development

The project site is located at 22740 Temescal Canyon Road in Corona, Riverside County, California. The site (latitude 33.79198°, longitude -117.49467°) and surrounding vicinity are shown on Figure 1, *Site Location Map*. The site is part of a larger parcel of land measuring 14 acres formerly operated by Standard Concrete (Enviroassessors, 2018) who had a permit to excavate 65 feet below the ground surface (bgs) for purposes of mining sand and gravel, see Figure 2b, *Site Conditions October 2004*. The site is located on a relatively flat parcel of land elevated approximately 10 feet from the Temescal Wash River terrace on the east side of the site. Visually, the descending slopes to the terrace appear to be inclined at approximately 2:1 (horizontal:vertical). A chain link fence borders the project area and masonry block retaining walls were observed along the west side of the parcel providing the grade differential between the Quarry site and cement plant operations to the west.

This former Quarry has now been filled in with engineered fill (Global Engineering, 2008) since mining operations ceased to support development of the site. Figure 2c, *Graded Pad November 2013* shows the graded pads and stockpiles of soil that were mass graded prior to the current site operations (Land Development Design Company LLC, 2013).

Review of the *Conceptual Site Plan NPP, 22740 Temescal Canyon Road, Corona, California*, prepared by Herdman Architecture and Design, dated October 22, 2021, indicates the planned development will consist of a one-story, 201,844-square-foot, concrete tilt-up warehouse with slab on grade construction and associated perimeter parking, drive aisles and concrete loading docks.

1.2 Purpose and Scope

The purpose of our geotechnical exploration was to evaluate the subsurface conditions at the site relative to the proposed development concept and provide geotechnical recommendations to aid in the design and construction of the project as currently planned. The scope of this geotechnical exploration included the following tasks:

- Background Review – We reviewed readily available in-house geotechnical reports, literature, aerial photographs, and maps relevant to the site. We

evaluated geological hazards and potential geotechnical issues that may significantly impact the site. The documents reviewed are listed in *References*.

- *Pre-Field Exploration Activities* – A site visit was performed by a geologist of our technical staff to mark the proposed exploration locations. Dig Alert (811) was notified to locate and mark existing underground utilities prior to our subsurface exploration.
- *Field Exploration* – Our subsurface exploration was performed on May 13 and 14, 2022, and included six (6) hollow stem auger borings (designated LB-1 through LB-6) drilled, logged, and sampled to a depths ranging from 12 to 70 feet below the existing ground surface (bgs). The approximate locations of the explorations are shown on Figure 2, *Exploration Location Map*. The boring logs are presented in Appendix A, *Exploration Logs*.

During drilling of the borings, bulk and drive samples were obtained for geotechnical laboratory testing. Driven ring samples were collected from the borings using a Modified California ring-lined sampler conducted in accordance with ASTM Test Method D 3550. Standard Penetration Tests (SPTs) were also performed within the borings in accordance with ASTM Test Method D 1586. Samples were collected at approximately 5-foot intervals throughout the depth of exploration. In both test methods, the sampler is driven below the bottom of the borehole by a 140-pound weight (hammer) free-falling 30 inches. The drilling rig was equipped with an automatic hammer to provide greater consistency in the drop height and striking frequency. The number of blows to drive the sampler the final 12 inches of the 18-inch drive interval is termed the "blowcount" or SPT N-value. The N-values provide a measure of relative density in granular (non-cohesive) soils and comparative consistency in cohesive soils. The number of blows per 6 inches of penetration was recorded on the boring logs, see Appendix A.

The borings were logged in the field by a geologist from our firm. Each soil sample collected was reviewed and described in accordance with the Unified Soil Classification System (USCS). The samples were sealed and packaged for transportation to our laboratory for testing. After completion of drilling, the borings were backfilled to the ground surface with soil cuttings.

- *Laboratory Testing* – Laboratory tests were performed on selected soil samples obtained from the borings during our field investigation. The laboratory testing

program was designed to evaluate the physical and engineering characteristics of the onsite soil. Tests performed during this investigation include:

- In-situ Moisture Content and Dry Density (ASTM D2216 and ASTM D2937);
- Direct Shear (ASTM D 3080)
- Consolidation (ASTM D 2435);
- Maximum Dry Density (ASTM D 1557);
- Expansion Index (ASTM D 4829);
- Particle Size Analysis (ASTM D 7928 and 6913);
- R-value; and
- Corrosivity Suite – pH, Sulfate, Chloride, and Resistivity (California Test Methods 417, 422, and 532/643).

Results of the in-situ moisture content and dry density testing are presented on the boring logs in Appendix A. Other laboratory test results are presented in Appendix B, *Laboratory Test Results*.

- *Engineering Analysis* – The data obtained from our background review and field exploration were evaluated and analyzed to develop recommendations for the proposed development.
- *Report Preparation* – This report presents our findings, conclusions, and recommendations for the proposed development.

1.3 **Background**

As indicated in Section 1.1, the site is part of a larger parcel of land that was formerly used as a sand quarry, which has since been filled in (Global, 2007a, 2007b, 2008) and capped with several generations of engineered fill material (Global, 2016). A preliminary feasibility study was performed by EnGEN Corporation (EnGEN, 2005), followed by recommendations and grading by Global Geo-Engineering between 2006 and 2016. The main geotechnical findings included in the referenced reports are summarized below.

1.4 **Previous Report by EnGEN Corporation**

Based on our review of the site-specific geotechnical feasibility study for this site (EnGEN, 2005), the following is a summary of the major geotechnical/geologic findings and recommendations relevant to the proposed site:

-
- The site was excavated to approximately 40 to 60 feet bgs during sand mining operations. Soil units exposed on the surface at the site were reported to include alluvium and minor amounts (on the order of approximately 2 to 3 feet thick) of undocumented artificial fill materials. Alluvium was reported to consist of dry to wet, medium dense, poorly graded, gravelly, fine- to coarse-grained sand. Groundwater was reported at 23 feet bgs in 2005.
 - Basin slopes were reportedly inclined at approximately 2:1 to 1.5:1 (horizontal:vertical) toward the center of the excavation.
 - EnGEN recommended that any fill placed below the water table (which must remain 25 or more feet below pad grade during grading) be tremmied in place with fill material consisting of clean sand with Sand Equivalent (SE) ≥ 50 . Fill placed above the water table must be compacted to a minimum of 90% relative density. Geotechnical borings should be advanced after fill placement is completed to confirm settlement and density characteristics of tremmied fill below the water table.
 - Alternatively, the basin may have water pumped out and all fill mechanically compacted. Fill materials greater than 25 feet below pad grade should achieve compaction of 95% maximum dry density.
 - EnGEN concluded that based upon the overburden stresses of the proposed maximum fill thicknesses of approximately 50 to 70 feet, liquefaction is not anticipated to negatively affect the structures. EnGEN recommended that structures be placed in the central portion of the site, no closer than 100 feet of the site perimeter to minimize potential for differential fill settlement due to differing fill thickness along the perimeter. Once site footprints were known, the plans were recommended to be reviewed by the geotechnical engineer before approval of the plan(s).
 - EnGEN recommended borings be advanced to verify fill density and evaluate liquefaction and differential fill settlement potential of alluvial material if structures are placed near the site perimeter.
 - Oversize material should not be placed within 10 feet of finish grade, 15 lateral feet from slope faces, or 2 feet of future utilities.
 - Upon completion of grading, settlement monuments should be monitored for 90 days, or until the settlement curve indicates stabilization.

- Specific foundation recommendations were recommended to be provided only after additional investigation of settlement potential was completed through invasive exploration of subsurface soil

The conclusions and earthwork recommendations provided by EnGEN as a function of their feasibility study appear reasonable and in accordance with the standard of care provided in our industry.

1.5 **Previous Reports by Global Geo-Engineering, Inc. (Global)**

Based on our review, the following is a summary of the major geotechnical/geologic findings and recommendations relevant to the proposed site provided prior to backfilling the excavation:

- At the time of the site reconnaissance (Global 2006), the site was occupied by a basin excavated during former quarry mining activities (Figure 2b) and reportedly measured approximately 1,300 feet long, 300 feet wide, and up to 65 feet deep. Groundwater was observed at approximately 30 to 35 feet below top-of-basin corresponding to Elevation (El.) +875 feet mean sea level (msl). Sidewalls reportedly sloped at inclinations of approximately 2:1 to 1.75:1 (horizontal:vertical).
- In accordance with alternate grading recommendations provided by the prior consultant (EnGEN, 2005) Global recommended groundwater be continuously pumped out of the basin and fill materials be mechanically compacted, rather than tremmied below groundwater.
- Earthwork recommendations to remove undocumented fill and unsuitable soft soils to competent alluvium prior to placement of fill were provided.
- Subgrade exposures were recommended to be evaluated by the geotechnical engineer prior to fill placement. In addition, subgrade was recommended to achieve compaction of $\geq 85\%$ relative density, and structural fills should achieve $\geq 95\%$ relative density to El. +880 feet msl and 90% for fill to finish grade.
- Wet, loose/soft silt and sand were reported observed in the bottom of the basin and were removed to competent sand/gravelly sand alluvium. Removals ranged between 1 and 12 feet, with an average 3 feet (Global, 2008).
- A 3- to 4-foot-thick rock blanket of oversize material ranging from cobble to boulder size (max dimension of 36 inches) was placed in the basin bottom, and sand with a SE ≥ 30 was jetted into and on top of the rock. A geofabric layer

(600x Mirafi) was installed on top of the rock blanket with a minimum 18-inch overlap, covered by 2 to 3 feet of clean sand ($SE \geq 30$), compacted to a minimum of 90% relative density.

- Imported fill material was placed on top of the rock-geofabric-sand section described above. Fill placed below El. +880 feet msl was compacted to $\geq 95\%$ relative density (ASTM 1557) and fill above El. +880 feet msl to $\geq 90\%$. Benching into the sidewalls of the excavation was reportedly performed as filling operations progressed.
- 671 field density tests were reported by Global (2008), however test density data was not included with the reports provided for our review.
- Three (3) infiltration tests were performed at the site via double-ring infiltrometer. Measured infiltration rates were reported as 30.2 inches per hour in P-1 at the northwest corner (proposed stormwater basin) of the site in native alluvium; 0.3 inch per hour in P-2 along the northern property line, and 0.2 inch per hour in P-3 along the southern property line all within engineered fill characterized as clayey sand with 22 to 27 percent fines (Appendix B).
- Settlement was monitored by Correia Surveying, Inc. for approximately 5½ years between 12/19/2008 and 8/26/2013. Overall settlement was reported to be insignificant, on the order of less than 0.1 inch. Location maps of monuments were not included in the data reviewed.

1.6 **Previous Report by Earth Strata, Inc.**

Based on our review of the provided interpretive report for infiltration system design for this site (Earth Strata, 2014), the following is a summary of the ground characterization interpreted and test results recorded during infiltration testing performed in the southern region of the site:

- Earth Strata advanced four (4) percolation test borings to 2 feet bgs and one exploratory boring to a depth of 15 feet bgs for the purpose of evaluating in-situ permeability rates for the proposed retention basin along the southern site boundary. The basin area was interpreted to be underlain by approximately one foot of loose to medium dense silty sand underlain by young axial channel deposits consisting of dense silty sand with gravel to a maximum depth of 15 feet.

- The infiltration rate was calculated to be 8 inches per hour using the Porchet Method.

1.7 **Mass Grading Plans by Land Development Design Company**

Review of the plan set Sheet 2 of 4 indicates four (4) graded pads with design grades ranging from approximately El. +912 feet msl to El. +914 feet msl were planned with 2:1 (horizontal:vertical) inclined slopes bordering each individual pad ranging in height from 7 to 17 feet relative to the surrounding terrain. The dirt road surface along the eastern portion of the site ranged in from El. +900 feet msl in the north to El. +908 feet msl in the south. An 18-inch CMP drain pipe is shown along the northeast side of the dirt road with reported invert elevation of 894 feet discharging to a natural slope on the east.

Included within the Mass Grading plan set are two (2) sheets titled *RipRap Launch Pad Improvement Stage 1 Project Plan 25397*, which includes plan and cross section details of rip rap placed along the eastern boundary for scour protection. Details suggest the Rip Rap Launch pad is 31 feet wide at the top and 16 feet wide along the base with a 1:1 transition from top to bottom. The top of the rip rap pad is reported from El. +901 to +906 feet msl and with bottoms at El. +894 to +898 feet msl, north to south, respectively. The Mass Grading Plans are included in Appendix C, *Mass Grade Plan*. The approximate location (plan view) and cross section detail of the RipRap Launch Pad is shown on Figure 2a, *Exploration Map*.

Grading operations were observed by Global Geo Engineering (Global, 2014) during excavation and placement of the rip rap material and engineered fill cap compacted to 90 percent relative compaction. A 12-foot-wide key was constructed to support placement of a 2:1 fill slope to support the driveway and access road extending beyond the southeastern edge of the property. The bottom of the keys and rock launch pad were reported as observed by the engineering geologist prior to placing fills (Global, 2014). Material reported as placed in the 2:1 fill slope was characterized as coarse sand with gravel with a maximum dry density ranging from 132 to 138 pcf at 6 to 8 percent moisture content. Eighty nine (89) field density tests were recorded using station numbering and elevations as attaining the required 90 to 95 percent relative density.

2.0 GEOTECHNICAL FINDINGS

2.1 Regional Geologic Setting

The site is located within a prominent natural geomorphic province in southern California known as the Peninsular Ranges. This province is characterized by steep, elongated ranges and valleys that trend northwestward. More specifically, the site is situated along the northeastern section of a fault controlled, down-dropped graben known as the Elsinore-Temecula Trough (Kennedy, 1977 and Hull, 1991). The active Wildomar and Willard Faults among others, form part of the eastern margin of the graben and both faults are part of the prominent and youthful Elsinore Fault Zone, which extends for more than 200 kilometers from Corona on the north to the border with Mexico and south (Kennedy, 1977). The right-lateral and left-stepping faults, at the surface, separate the metamorphic basement rocks of pre-Cretaceous to Cretaceous age on the west from the poorly consolidated sediments on the east within the trough, which is now filled with a thick succession of presumably late Tertiary to Quaternary age sediments.

The adjacent Santa Ana Mountains lie along the western side of the Elsinore Fault Zone, a major component of the San Andreas fault system and the Perris Block, a rectangular shaped area located between the Elsinore and San Jacinto fault zones in the northern edge of the Elsinore Trough. The Santa Ana Mountains are underlain by pre-Cretaceous metasedimentary and metavolcanic rocks and Cretaceous age plutonic rocks of the Southern California batholith which represent a wide variety of mafic to intermediate composition granitic rocks. Tertiary sediments, volcanic and Quaternary rocks flank the mountain ranges. The Tertiary and Quaternary rocks are generally comprised of non-marine sediments consisting of sandstones, mudstones, conglomerates, and localized volcanic units local and surrounding geology is shown on Figure 3, *Regional Geology Map*.

2.2 Subsurface Conditions

Based on our subsurface exploration and literature review (*References*), the site is underlain by up to 60-70 feet of engineered fill (Global, 2007a, 2007b, 2008 and 2016). Certified engineered fill (Afc) encountered in our borings at the explored locations and tested in our laboratory generally consist of yellowish brown clayey sand (SC) with fines content ranging from 22 to 27 percent, sand content at 44 to 67 percent with gravel content from 11 to 29 percent (see Appendix B). As previously indicated, we understand the existing artificial fill at the site was placed under observation and testing by Global Geo Engineering (Global, 2007a, 2007b,

2008 and 2016). Although the information contained in the available reports provided to us was not complete and density test location maps were not available, it is reasonable to assume, based on reports reviewed (*References*) and laboratory testing (Appendix B) the fill was placed with appropriate engineering control. As such, the intent of our subsurface exploration was to evaluate the suitability of the existing certified artificial fill at the site for its intended use to support the proposed development. Based on our subsurface exploration and analysis, the existing artificial fill at the site is considered suitable for structural support of the proposed development. Boring LB-2 and LB-2a encountered the rip rap launch pad material (Figure 2).

Below the artificial fill materials, very old alluvium was encountered in boring LB-1 and LB-6 (Appendix A). The alluvium generally consists of reddish brown to orange brown, dense silty sand, sand and clayey sand with gravel and cobbles.

Detailed descriptions of the subsurface materials encountered in the borings are presented on the logs included in Appendix A. Some of the engineering properties of these soils are described in the following sections. The locations of the borings are shown on Figure 2a, *Exploration Location Map*.

2.2.1 Expansive Soil Characteristics

Expansive soils contain significant amounts of clay particles that swell considerably when wetted and which shrink when dried. Foundations constructed on these soils are subject to uplifting forces caused by the swelling. Without proper mitigation measures, heaving and cracking of both building foundations and slabs-on-grade could result.

One (1) near-surface bulk soil sample obtained during our subsurface exploration was tested for expansion potential. The test results indicate an Expansion Index (EI) value of 18 ("very low" potential for expansion). The Expansion Index laboratory test results are included in Appendix B of this report.

Variance in expansion potential of onsite soil is anticipated; therefore, additional testing is recommended upon completion of site grading and excavation to confirm the expansion potential presented in this report. For purposes of this report and based upon visual characterization of fill materials at approximate foundation depth, very low expansion potential of

site materials may be considered to support design and verified upon completion of earthwork grading.

2.2.2 Soil Corrosivity

One (1) near-surface (0-5 feet) bulk soil sample from boring LB-2 obtained during our subsurface exploration was tested for corrosivity to assess corrosion potential to buried concrete. The test results indicate a soluble sulfate concentration of 95 parts per million (ppm), chloride content of 100 ppm, pH value of 7.61, and minimum resistivity value of 1,930 ohm-cm. The chemical analysis test results for the onsite soil from our geotechnical exploration are included in Appendix B of this report.

The results of the resistivity tests indicate the underlying soil is severely corrosive to buried ferrous metals per ASTM STP 1013. Based on the measured water-soluble sulfate contents from the soil samples, concrete in contact with the soil is expected to have negligible exposure to sulfate attack per ACI 318 (ACI, 2014). The samples tested for water-soluble chloride content indicate a low potential for corrosion of steel in concrete due to the chloride content of the soil. See Section 3.4 for recommendations regarding ferrous pipe in contact with site soil.

2.2.3 Soil Compressibility

Three (3) samples of the onsite certified fill soil recovered from boring LB-2 from ground surface to 10 feet below grade were subjected to consolidation testing to evaluate the compressibility of these materials under assumed loads representative of anticipated structural bearing stresses. The results of testing indicate these soils exhibit a low compressibility potential. The results of testing performed as a part of this study are presented in Appendix B.

2.2.4 Shear Strength

Evaluation of the shear strength characteristics of the soils included laboratory direct shear testing. The results of testing are included in Appendix B as well as summary graphs that provide values of angle of internal friction (ϕ) and cohesion (c) for use in geotechnical analysis.

2.2.5 Excavation Characteristics

Based on our subsurface explorations performed at the site and our experience from grading jobs in the vicinity of the site, we anticipate the onsite artificial fill can be excavated using conventional excavation equipment in good operating condition.

2.3 Groundwater Conditions

Groundwater was encountered during our subsurface investigation performed at the site in borings LB-3 and LB-4 at depths of 53.6 and 51 feet respectively. Based on these findings, groundwater is not expected to pose a constraint during or after construction. Fluctuations of the groundwater level below the site should be anticipated during and following the rainy seasons or periods of locally intense rainfall or storm water runoff.

2.3.1 Infiltration

Infiltration testing was performed at the site by past consultants (Global, 2013) and Earth Strata Inc (ESI, 2014). The results are summarized below:

Global Geo Engineering Inc – July 5, 2013: Testing was performed at the site using the double ring infiltrometer test method (ASTM D 3385). Three locations P-1, P-2 and P-3 were tested. P-1 was advanced into alluvium in the storm water basin located in the northwest corner of the site; P-2 and P-3 were advanced within the engineered fill. Results of testing indicated favorable rates for native alluvium of 30.2 inches per hour (in/hr). P-2 and P-3 recorded unfactored rates of 0.3 and 0.2 in/hr respectively. All three rates are reported as unfactored. Once safety factors are applied the results of P-2 and P-3 become unsuitable for infiltration.

Earth Strata Inc – October 21, 2014: Testing was conducted at four (4) locations using 8-inch diameter test borings from 4 to 5 feet deep. The locations were all within a few feet of each other at a planned basin in the southeast corner of the overall project site adjacent Temescal Canyon Road. Results of testing reported a percolation rate of 2 to 3 in/hr. Based on our current geologic reconnaissance and review of aerial images, a basin was not built on the project site at the location the tests were performed.

As part of the current project a proposed underground infiltration test system is planned in the northwest corner of the site partially within the footprint of the existing basin and partially within the certified fill. Boring LB-1 (see Figure 2) was advanced within the proposed chamber footprint. Soil samples were collected at 5-foot intervals and particle size analysis (sieve and hydrometer) were performed on samples at 5, 10 and 15 feet below grade with fines content ranging from 22 to 27 percent (Appendix B). Results of the testing from sample R-4 at 10 feet in depth correlated to hydraulic conductivity (k) result in a rate of $k=1.44 \times 10^{-6}$ cm/sec (Appendix B). Infiltration into the certified engineered fill is not feasible at this site.

2.4 **Surface Fault Rupture**

Our review of available literature indicates that no known active faults have been mapped across the site, and the site is **not** located within a designated Alquist-Priolo Earthquake Fault Zone (CGS, 1986 and 2018; Bryant and Hart, 2007). Therefore, the potential for surface fault rupture at the site is expected to be low and a surface fault rupture hazard evaluation is not mandated for this site.

The location of the closest active fault to the site was evaluated using the United States Geological Survey (USGS) Earthquake Hazards Program National Seismic Hazard Maps (USGS, 2008). The closest active fault to the site with the potential for surface fault rupture Elsinore Fault Zone, located approximately 1.1 miles from the site to the west. The San Andreas fault, which is the largest active fault in California, is approximately 29.1 miles northeast of the site. Major regional faults with surface expression in proximity to the site are shown on Figure 4, *Regional Fault and Historic Seismicity Map*.

2.5 **Strong Ground Shaking**

The principal seismic hazard to the site is ground shaking resulting from an earthquake occurring along any of several major active and potentially active faults in southern California (Figure 4). The intensity of ground shaking at a given location depends primarily upon the earthquake magnitude, the distance from the source, and the site response characteristics.

Accordingly, design of the project should be performed in accordance with all applicable current codes and standards utilizing the appropriate seismic design parameters to reduce seismic risk as defined by California Geological Survey (CGS) Chapter 2 of Special Publication 117A (CGS, 2008). The 2019 edition of

the California Building Code (CBC) is the current edition of the code. Through compliance with these regulatory requirements and the utilization of appropriate seismic design parameters selected by the design professionals, potential effects relating to seismic shaking can be reduced.

The following code-based seismic parameters should be considered for design under the 2019 CBC:

Table 1 – 2019 CBC Based Ground Motion Parameters (Mapped Values)

Categorization Coefficient	Parameter
Site Latitude	33.7919°
Site Longitude	-117.4946°
Site Class	D
Mapped Spectral Response Acceleration at Short Period (0.2 sec), S_s	2.332 g
Mapped Spectral Response Acceleration at Long Period (1 sec), S_1	0.93 g
Short Period (0.2 sec) Site Coefficient, F_a	1.0
Long Period (1 sec) Site Coefficient, F_v	null ¹
Adjusted Spectral Response Acceleration at Short Period (0.2 sec), S_{MS}	2.332 g
Adjusted Spectral Response Acceleration at Long Period (1 sec), S_{M1}	null ¹
Design Spectral Response Acceleration at Short Period (0.2 sec), S_{DS}	1.555 g
Design Spectral Response Acceleration at Long Period (1 sec), S_{D1}	null ¹
Site-adjusted geometric mean Peak Ground Acceleration, PGA_M	1.081 g
¹ Per Exception 2 in Section 11.4.8 of ASCE 7-16, seismic response coefficient C_s to be determined by Eq. 12.8-2 for values of $T \leq 1.5T_s$ and taken as equal to 1.5 times the value computed in accordance with either Eq. 12.8-3 for $T_L \geq T > 1.5T_s$ or Eq. 12.8-4 for $T > T_L$	

2.6 Liquefaction Potential

The term liquefaction is generally referenced to loss of strength and stiffness in soils due to build-up of pore water pressure when subject to cyclic or monotonic loading. Both sandy and clayey soils are susceptible to loss of strength and stiffness. Because of the difference in strength characteristic and methods for evaluating strength loss potential for granular and clayey soils, the term liquefaction is used for granular soils while cyclic softening is used for fine-grained soils (i.e. clays and plastic silts).

In general, adverse effects of liquefaction or cyclic softening include excessive ground settlement, loss of bearing support for structural foundations, and seismically-induced lateral ground deformations such as lateral spreading. Depending upon the relative thickness of the liquefied strata with respect to overlying non-liquefiable soils, other potentially adverse effects such as ground oscillation and ground fissuring may occur.

As shown on the *Seismic Hazard Map* the site is **not** located within a liquefaction hazard zone as mapped by the County of Riverside (Figure 5, *Seismic Hazard Map*). In addition, groundwater is expected to be greater than 50 feet bgs and the engineered fill the site (Global 2007a, 2007b, 2008 and 2016) are generally considered to have a low potential for liquefaction. Based on these findings, the potential for liquefaction at the site is considered low.

2.7 **Seismically-Induced Settlement**

Seismically-induced settlement consists of dynamic settlement of unsaturated soil (above groundwater) and liquefaction-induced settlement (below groundwater). These settlements occur primarily within low density sandy soil due to reduction in volume during and shortly after an earthquake event.

Based on our evaluation of the site soils, the total seismically-induced settlement is estimated to be on the order of ½ inch or less. The differential settlement can be taken as half the total settlement over a horizontal distance of 30 feet. The results of our analysis are presented in Appendix D, *Settlement Analysis*.

2.8 **Lateral Spreading**

Liquefaction may also cause lateral spreading. For lateral spreading to occur, the liquefiable zone must be continuous, unconstrained laterally, and free to move along gently sloping ground toward an unconfined area. Since the potential for liquefaction is low and the site is relatively flat and constrained laterally with engineered fill slopes, the potential for earthquake-induced lateral spreading is low.

2.9 **Flooding**

According to a Federal Emergency Management Agency (FEMA) flood insurance rate map (FEMA, 2008) and as shown on Figure 6, *Flood Hazard Zone Map*, the site is **not** located within a 100-year or 500-year flood hazard zone.

Earthquake-induced flooding can be caused by failure of dams or other water-retaining structures as a result of earthquakes. As shown on Figure 7, *Dam Inundation Map*, the site is mapped within a dam inundation zone.

Diamond Valley Lake, owned and operated by the Metropolitan Water District of Southern California, is approximately 27 miles upstream from the site. Construction of the dam was completed in 1999, requiring the excavation of 41,000,000 cubic yards of sand, clay and rock. Design and construction of the dam took into consideration the threat of [earthquakes](#) on the [San Jacinto Fault Zone](#), located about 4 miles (6.4 km) from the reservoir, and the [San Andreas Fault](#), located about 19 miles (31 km) from the reservoir. Diamond Valley Lake is regularly maintained by the U.S. Army Corps of Engineers to maintain operational capacity. There is no evidence, reports or documentations that indicate the dam has a high potential for failure during an earthquake. Catastrophic failure of this dam is expected to be a very unlikely event in that dam safety regulations exist and are enforced by the Division of Safety of Dams, Army Corp of Engineers, Metropolitan Water District and Department of Water Resources. Therefore, the potential for flooding or earthquake-induced flooding is considered less than significant.

3.0 GEOTECHNICAL DESIGN RECOMMENDATIONS

Based on this study, we conclude that the proposed development for the subject site is feasible from a geotechnical standpoint, provided that the recommendations presented in this report are properly incorporated in design and construction.

Based on our review of available site-specific geotechnical data and our professional experience, the earth materials on the site are suitable for support of the proposed industrial building from a geotechnical standpoint, provided they are subjected to a phase of remedial rough grading.

The proposed structure may be supported on shallow spread-type foundations established on engineered fill. The floor slab may be supported directly on grade. We recommend removal and recompaction of upper soils likely to be disturbed by planned demolition of the existing site improvements. The depth of required removal and recompaction may be assumed to be approximately the upper three (3) feet of the existing engineered fill soils. Localized areas in the unexplored portions of the site and areas determined in the field by a representative of the geotechnical engineer to be unsuitable may require deeper removals. There may be existing underground utilities that will also be impacted. Information on these utilities should be provided to Leighton for evaluation.

The recommendations below are based upon the exhibited geotechnical engineering properties of the soils and their anticipated response both during and after construction. Additional exploration and/or evaluation may be required in the future once more detailed development plans become available. The recommendations are also based upon proper field observation and testing during construction. The project geotechnical engineer should be notified of suspected variances in field conditions to determine the effect upon the recommendations subsequently presented. These recommendations are considered minimal and may be superseded by more restrictive requirements of the civil and structural engineers, the County of Riverside and other governing agencies.

Leighton should review the grading plans, foundation and retaining wall plans and project specifications as they become available to verify that the recommendations presented in this report have been incorporated into the plans for this project.

3.1 Site Grading

Earthwork will consist of removal of unsuitable soil materials, excavation, and placement of compacted fill. We recommend that earthwork on the site be performed in accordance with the recommendations presented in this report and

the project specifications as prepared by others. The *Earthwork and Grading Guide Specifications* included in Appendix E may be used for guidance in developing the project specifications. If conflict arises, the recommendations in Appendix E shall be superseded by the project specifications, recommendations contained in this report and/or the Riverside County Grading Guidelines, whichever is more stringent. All site grading should be performed in accordance with the applicable local codes and in accordance with the project specifications that are prepared by the appropriate design professional.

3.1.1 Site Preparation

Prior to construction, the site should be cleared of any existing site improvements, vegetation, trash, and/or debris within the area of proposed grading. These materials should be removed from the site. Any underground obstructions onsite should be removed, see Section 1.7 for mention of known mapped utility conveyance lines. Efforts should be made to locate any existing utility lines to be removed or rerouted where interfering with the proposed site or retaining wall construction (Appendix C). Any resulting cavities should be properly backfilled and compacted. After the site is cleared, the soils should be carefully observed for the removal of all unsuitable deposits. All man-made debris, unsuitable soils and former foundation remnants should be excavated and removed from the proposed building/structure footprint prior to fill placement.

3.1.2 Removals and Overexcavations

Based on our subsurface exploration and analysis, the existing certified artificial fill at the site below three feet is generally considered suitable for structural support of the proposed development in its current condition. Therefore, we recommend removal and recompaction of upper soils likely to be disturbed by planned demolition of site improvements. The depth of required removal and recompaction may be assumed to be approximately the upper 3 feet of the existing soils.

Removals should be performed such that all unsuitable soil is removed to expose geotechnically suitable existing fill soils and replaced as engineered fill within the areas planned for new improvements. The lateral extent of excavation beyond foundations should be equal to the depth of removals below the proposed foundations.

Deeper removals in localized areas may be recommended during grading by a representative of the geotechnical engineer depending on observed subsurface conditions.

3.1.3 Excavation Bottom Preparation

All excavation bottoms or removal bottoms should be observed by a representative of the geotechnical engineer prior to placement of fill or other improvements to determine that geotechnically suitable soil is exposed. Excavation bottoms observed to be suitable for fill placement or other improvements should be scarified to a depth of at least 8 inches, moisture-conditioned as necessary to achieve a moisture content within 2 percent of optimum moisture content, and then compacted to a minimum of 95 percent of the laboratory derived maximum density as determined by ASTM Test Method D 1557 (Modified Proctor).

3.1.4 Fill Materials

On-site soil that is free of construction debris, organics, cobbles, boulders, rubble, or rock larger than 6 inches in largest dimension is suitable to be used as fill for support of structures. Any imported fill soil should be approved by the geotechnical engineer prior to import or use onsite.

3.1.5 Fill Placement and Compaction

Fill soils should be placed in loose lifts not exceeding 8 inches, moisture-conditioned to within 2 percent of optimum moisture content and compacted to a minimum of 95 percent of the maximum dry density as determined by ASTM Test Method D 1557. Aggregate base should be compacted to a minimum of 95 percent relative compaction.

When grading is interrupted by heavy rains, fill operations should not be resumed until the moisture content and the dry density of the placed fill are satisfactory.

3.1.6 Shrinkage

The change in volume of excavated and recompacted soil varies according to soil type and location. This volume change is represented as a percentage increase (bulking) or decrease (shrinkage) in volume of fill after

removal and recompaction. Field and laboratory data used in our calculations included laboratory-measured maximum dry density for the general soil type encountered at the subject site, the measured in-place densities of near surface soils encountered and our experience.

Based upon the results of the in-place density and the moisture-density relationship exhibited by representative bulk samples of the near surface soils, recompaction of the soils is anticipated to result in volume shrinkage of ≤ 5 percent. The estimated shrinkage does not include material losses due to removal of organic material or other unsuitable bearing materials (debris, rubble, oversize material greater than 6-inches) and the actual shrinkage that occurs during grading may vary throughout the site.

3.1.7 Reuse of Concrete and Asphalt Rubble

If encountered during site clearing and/or during preparation activities, construction rubble (i.e., Portland cement concrete and asphalt concrete) may be incorporated in the proposed development. For use as structural fill, the processed material should be crushed to develop a relatively well-graded mixture with a maximum particle size of 3-inch nominal diameter. Concrete rubble should be free of rebar and processed asphalt pavement rubble may be used if mixed with the existing base course (where present). Processed material may be used as structural fill if uniformly mixed with onsite soils in proportion of 1 part processed asphalt to 3 parts soil. For use as pavement base course, rubble should be crushed to satisfy gradation requirements of Section 200-2.4 of the Standard Specifications for Public Works Construction. Such materials must be free of and segregated from any hazardous materials and/or organic material of any kind.

3.2 Foundation Design

Conventional spread footings established on newly placed or existing engineered fill may be used to support the proposed building. Footings should be embedded a minimum 18 inches below the lowest adjacent grade. An allowable soil bearing pressure of 3,000 pounds per square foot (psf) may be used for footings with a minimum width of 12 inches for continuous footings and 18 inches for isolated footings.

The ultimate bearing capacity can be taken as 9,000 psf, which does not incorporate a factor of safety. A resistance factor of 0.45 should be used for initial bearing capacity evaluation with factored loads.

The allowable bearing capacity for shallow footings is based on a total static settlement of ½ inch. Differential settlement can be taken as half the total settlement over a horizontal distance of 30 feet.

For static loading, 50 pounds per cubic inch (pci) may be assumed as the modulus of subgrade reaction (k). For seismic loading, a k value of 150 pci may be assumed.

Since settlement is a function of footing size and contact bearing pressure, differential settlement can be expected between adjacent columns or walls where a large differential loading condition exists. Once developed by the structural engineer, we should review total dead and sustained live loads for each column including plan location and span distance, to evaluate if differential settlements between dissimilarly loaded columns will be tolerable. Excessive differential settlement can be mitigated with the use of reduced bearing pressures, deeper footing embedment, possibly changing overexcavation schemes and using imported base material under spread footings, or possibly other methods.

Resistance to lateral loads will be provided by a combination of friction between the soil and structure interface and passive pressure acting against the vertical portion of the footings structures. For calculating lateral resistance, a passive pressure of 300 psf per foot of depth to a maximum of 3,000 psf and a frictional coefficient of 0.30 may be used. Note that the passive and frictional coefficients do not include a factor of safety. The frictional resistance and the passive resistance of the soils can be combined without reduction in determining the total lateral resistance.

3.3 Slabs-on-Grade

Concrete slabs may be designed using a modulus of subgrade reaction of 100 pci provided the subgrade is prepared as described in Section 3.1. From a geotechnical standpoint, we recommend slab-on-grade be a minimum 5 inches thick with No. 3 rebar placed at the center of the slab at 24 inches on center in each direction. The structural engineer should design the actual thickness and reinforcement based on anticipated loading conditions. Where moisture-sensitive floor coverings or equipment is planned, the slabs should be protected by a

minimum 10-mil-thick vapor barrier between the slab and subgrade. A coefficient of friction of 0.35 can be used between the floor slab and the vapor barrier.

Minor cracking of concrete after curing due to drying and shrinkage is normal and should be expected; however, concrete is often aggravated by a high water/cement ratio, high concrete temperature at the time of placement, small nominal aggregate size, and rapid moisture loss due to hot, dry, and/or windy weather conditions during placement and curing. Cracking due to temperature and moisture fluctuations can also be expected. The use of low-slump concrete or low water/cement ratios can reduce the potential for shrinkage cracking. Additionally, our experience indicates that the use of reinforcement in slabs and foundations can generally reduce the potential but not eliminate for concrete cracking.

To reduce the potential for excessive cracking, concrete slabs-on-grade should be provided with construction or weakened plane joints at frequent intervals. Joints should be laid out to form approximately square panels.

3.4 Cement Type and Corrosion Protection

Based on the results of laboratory testing, concrete structures in contact with the onsite soil are expected to have **negligible** exposure to water-soluble sulfates in the soil. The test results indicate a sulfate Exposure Class designation of "S0" appears to be appropriate for the project site based upon criteria presented in ACI 318. Common Type II cement may be used for concrete construction onsite and the concrete should be designed in accordance with 2019 CBC requirements. However, exterior concrete flatwork exposed to recycled water should be designed using Type V cement.

Based on our laboratory testing, the onsite soil is considered severely corrosive to ferrous metals. Ferrous pipe should be avoided by using high-density polyethylene (HDPE) or other non-ferrous pipe when possible. Ferrous pipe, if used, should be protected by polyethylene bags, tap or coatings, di-electric fittings or other means to separate the pipe from onsite soils.

3.5 Retaining Walls

Recommended lateral earth pressures are provided as equivalent fluid unit weights, in psf/ft or pcf. These values do not contain an appreciable factor of safety, so the structural engineer should apply the applicable factors of safety and/or load factors during design.

Near-surface on-site soils are likely suitable to be used as retaining wall backfill due to its very low expansion potential; however, field and laboratory verification are recommended before use. Site soils can be variable in composition, clast size and expansive characteristics. Should site soil be considered for reuse behind retaining walls, it should be tested to ensure Expansion Index (EI) is less than 20 (EI<20). Recommended lateral earth pressures for retaining walls backfilled with sandy soils with drained conditions as shown on Figure 8, *Retaining Wall Backfill and Subdrain Detail* are as follows:

Table 2 – Retaining Wall Design Earth Pressures

Retaining Wall Condition (Level Backfill)	Equivalent Fluid Pressure (pounds-per-cubic-foot)*
Active (cantilever)	35
At-Rest (braced)	60
Passive Resistance (compacted fill)	300
Seismic Increment (add to active pressure)	30

Walls that are free to rotate or deflect may be designed using active earth pressure. For basement walls or walls that are fixed against rotation, the at-rest pressure should be used. For seismic condition, the pressure should be distributed as an inverted triangular distribution and the dynamic thrust should be applied at a height of 0.6H above the base of the wall.

3.5.1 Sliding and Overturning

Total depth of retained earth for design of walls and for uplift resistance, should be measured as the vertical height of the stem below the ground surface at the wall face for stem design, or measured at the heel of the footing for overturning and sliding. A soil unit weight of 120 pcf may be assumed for calculating the actual weight of the soil over the wall footing, if drained, or 60 pcf if submerged, for properly compacted backfill.

3.5.2 Drainage

Adequate drainage may be provided by a subdrain system positioned behind the walls. Typically, this system consists of a 4-inch minimum diameter perforated pipe placed near the base of the wall (perforations placed

downward). The pipe should be bedded and backfilled with pervious backfill material described in Section 300-3.6 of the Standard Specifications for Public Works Construction (Green Book), 2021 Edition. This pervious backfill should extend at least 2 feet out from the wall and to within 2 feet of the outside finished grade. This pervious backfill and pipe should be wrapped in filter fabric, such as Mirafi 140N or equivalent, placed as described in Section 300-8.1 of the Standard Specifications for Public Works Construction (Green Book), 2021 Edition. The subdrain outlet should be connected to a free-draining outlet or sump.

Miradrain, Geotech Drainage Panels, or Enkadrain drainage geocomposites, or similar, may be used for wall drainage as an alternative to the Class 2 Permeable Material or drain rock backfill, particularly where horizontal space is limited adjacent to shoring (where walls are cast against shoring). These drainage panels should be connected to the perforated drainpipe at the base of the wall.

3.6 Paving

To provide support for paving, the subgrade soils should be prepared as recommended in the Section 3.1. Compaction of the subgrade, including trench backfills, to at least 95 percent of the maximum dry density as determined by ASTM Test Method D 1557, and achieving a firm, hard, and unyielding surface will be important for paving support. The preparation of the paving area subgrade should be performed immediately prior to placement of the base course.

Adequate drainage (both surface and subsurface) should be provided such that the subgrade soils and aggregate base materials are not allowed to become wet. Landscape areas must be separated from pavements with concrete curbs and/or edge drains. Excessive over-irrigation will have an adverse impact on adjacent pavements. Irrigation adjacent to pavements, without a deep curb or other cutoff to separate landscaping from paving, will result in premature pavement failure.

3.6.1 Asphalt Concrete

The required paving and base thicknesses will depend on the expected wheel loads and volume of traffic (Traffic Index or TI). Assuming that the paving subgrade will consist of engineered fill with an R-value of 25, compacted to at least 95 percent as recommended, the minimum recommended paving

thicknesses are presented in the following table. Results of R-value testing on a near surface sample of existing onsite soils indicate a value of 27.

Table 3 – Asphalt Concrete Pavement Sections

Traffic Index	Asphalt Concrete (inches)	Base Course (inches)
5	3	6½
6	4	7½
7	4	10½
8	5	12
9	6	13½

The asphalt paving sections were determined using the Caltrans design method. We can determine the recommended paving and base course thicknesses for other Traffic Indices if required. Careful inspection is recommended to verify that the recommended thicknesses or greater are achieved, and that proper construction procedures are followed.

3.6.2 Portland Cement Concrete Paving

We have assumed that such a subgrade will have an R-value of at least 25, which will need to be verified after the completion of site grading.

Portland cement concrete (PCC) paving sections were determined in accordance with procedures developed by the Portland Cement Association. Concrete paving sections for a range of Traffic Indices are presented in the following table. We have assumed that the Portland cement concrete will have a compressive strength of at least 4,000 pounds per square inch.

Table 4 – PCC Pavement Sections

Traffic Index	PCC (inches)	Base Course (inches)
5	6	4
6	7	4
7	7½	4
8	8	4
9	8½	4

The paving should be provided with expansion joints at regular intervals no more than 15 feet in each direction. Load transfer devices, such as dowels or keys, are recommended at joints in the paving to reduce possible offsets. The paving sections in the above table have been developed based on the strength of unreinforced concrete. Steel reinforcing may be added to the paving to reduce cracking and to prolong the life of the paving.

3.6.3 Base Course

The base course for both asphalt concrete and Portland cement concrete paving should meet the specifications for Class 2 Aggregate Base as defined in Section 26 of the latest edition of the State of California, Department of Transportation, Standard Specifications. Alternatively, the base course could meet the specifications for untreated base as defined in Section 200-2 of the latest edition of the Standard Specifications for Public Works Construction. The base course should be compacted to a minimum of 95 percent of the maximum dry density as determined by ASTM Test Method D 1557.

3.7 Temporary Excavations

All temporary excavations, including utility trenches, retaining wall excavations, and foundation excavations should be performed in accordance with project plans, specifications, and all OSHA requirements. Excavations 4 feet or deeper should be laid back or shored in accordance with OSHA requirements before personnel are allowed to enter.

No surcharge loads should be permitted within a horizontal distance equal to the height of cut or 5 feet, whichever is greater from the top of the cut, unless the cut is shored appropriately. Excavations that extend below an imaginary plane inclined at 45 degrees below the edge of any adjacent existing site foundation should be properly shored to maintain support of the adjacent structure.

Temporary excavations should be treated in accordance with the State of California version of OSHA excavation regulations, Construction Safety Orders for Excavation General Requirements, Article 6, Section 1541, effective October 1, 1995. The sides of excavations should be shored or sloped in accordance with OSHA regulations. OSHA allows the sides of unbraced excavations, up to a maximum height of 20 feet, to be cut to a $\frac{3}{4}H:1V$ (horizontal:vertical) slope for Type

A soils, 1H:1V for Type B soils, and 1½H:1V for Type C soils. Near-surface onsite soils are to be considered Type B soils.

During construction, the soil conditions should be regularly evaluated to verify that conditions are as anticipated. The contractor shall be responsible for providing the "competent person" required by OSHA standards to evaluate soil conditions. Close coordination between the competent person and the geotechnical engineer should be maintained to facilitate construction while providing safe excavations.

3.8 Trench Backfill

Utility trenches should be backfilled with compacted fill in accordance with Sections 306-1 and 306-6 of the Standard Specifications for Public Works Construction, ("Greenbook"), 2021 Edition. Utility trenches can be backfilled with onsite sandy material free of rubble, debris, organic and oversized material up to (\leq) 3-inches in largest dimension. Prior to backfilling trenches, pipes should be bedded in and covered with either:

- (1) **Sand:** A uniform, sand material that has a Sand Equivalent (SE) greater-than-or-equal-to (\geq) 30, passing the No. 4 U.S. Standard Sieve (or as specified by the pipe manufacturer), water densified in place, or
- (2) **CLSM:** Controlled Low Strength Material (CLSM) conforming to Section 201-6 of the *Standard Specifications for Public Works Construction*, ("Greenbook"), 2021 Edition. CLSM should not be jetted.

Pipe bedding should extend at least 4 inches below the pipeline invert and at least 12 inches over the top of the pipeline. Native and clean fill soils can be used as backfill over the pipe bedding zone, and should be placed in thin lifts, moisture conditioned above optimum, and mechanically compacted to at least 90 percent relative compaction, relative to the ASTM D 1557 laboratory maximum density.

3.9 Drainage and Landscaping

Building walls below grade should be waterproofed or at least damp proofed, depending upon the degree of moisture protection desired. Surface drainage should be designed to direct water away from foundations and toward approved drainage devices. Irrigation of landscaping should be controlled to maintain, as much as possible, consistent moisture content sufficient to provide healthy plant growth without overwatering.

3.10 **Additional Geotechnical Services**

Leighton should review the grading plans, foundation plans, and specifications when they are available to verify that the recommendations presented in this report have been properly interpreted and incorporated.

Geotechnical observation and testing should be provided during the following activities:

- Grading and excavation of the site;
- Subgrade Preparation;
- Compaction of all fill materials;
- Utility trench backfilling and compaction;
- Footing excavation and slab-on-grade preparation;
- Pavement subgrade and base preparation;
- Placement of asphalt concrete and/or concrete; and
- When any unusual conditions are encountered.

4.0 LIMITATIONS

This geotechnical exploration does not address the potential for encountering hazardous soil at this site. In addition, this report was necessarily based in part upon data obtained from a limited number of observances, site visits, soil samples, tests, analyses, histories of occurrences, spaced subsurface explorations and limited information on historical events and observations. Such information is, by necessity, incomplete. Please also refer GBA's *Important Information About Your Geotechnical Report* (included at the rear of the text), presenting additional information and limitations regarding geotechnical engineering studies and reports. The nature of many sites is such that differing soil or geologic conditions can be present within small distances and under varying climatic conditions. Changes in subsurface conditions can and do occur over time. Therefore, the findings, conclusions, and recommendations presented in this report are only valid if Leighton Consulting, Inc. has the opportunity to observe subsurface conditions during grading and construction, to confirm that our data are representative for the site. Leighton Consulting, Inc. should also review the construction plans and project specifications, when available, to comment on the geotechnical aspects.

This report was prepared using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical consultants practicing at this time in Riverside County. We do not make any warranty, either expressed or implied.

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Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer

will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the “Findings” Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site’s subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report’s Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals’ misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals’ plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note*

conspicuously that you’ve included the material for information purposes only. To avoid misunderstanding, you may also want to note that “informational purposes” means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled “limitations,” many of these provisions indicate where geotechnical engineers’ responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a “phase-one” or “phase-two” environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

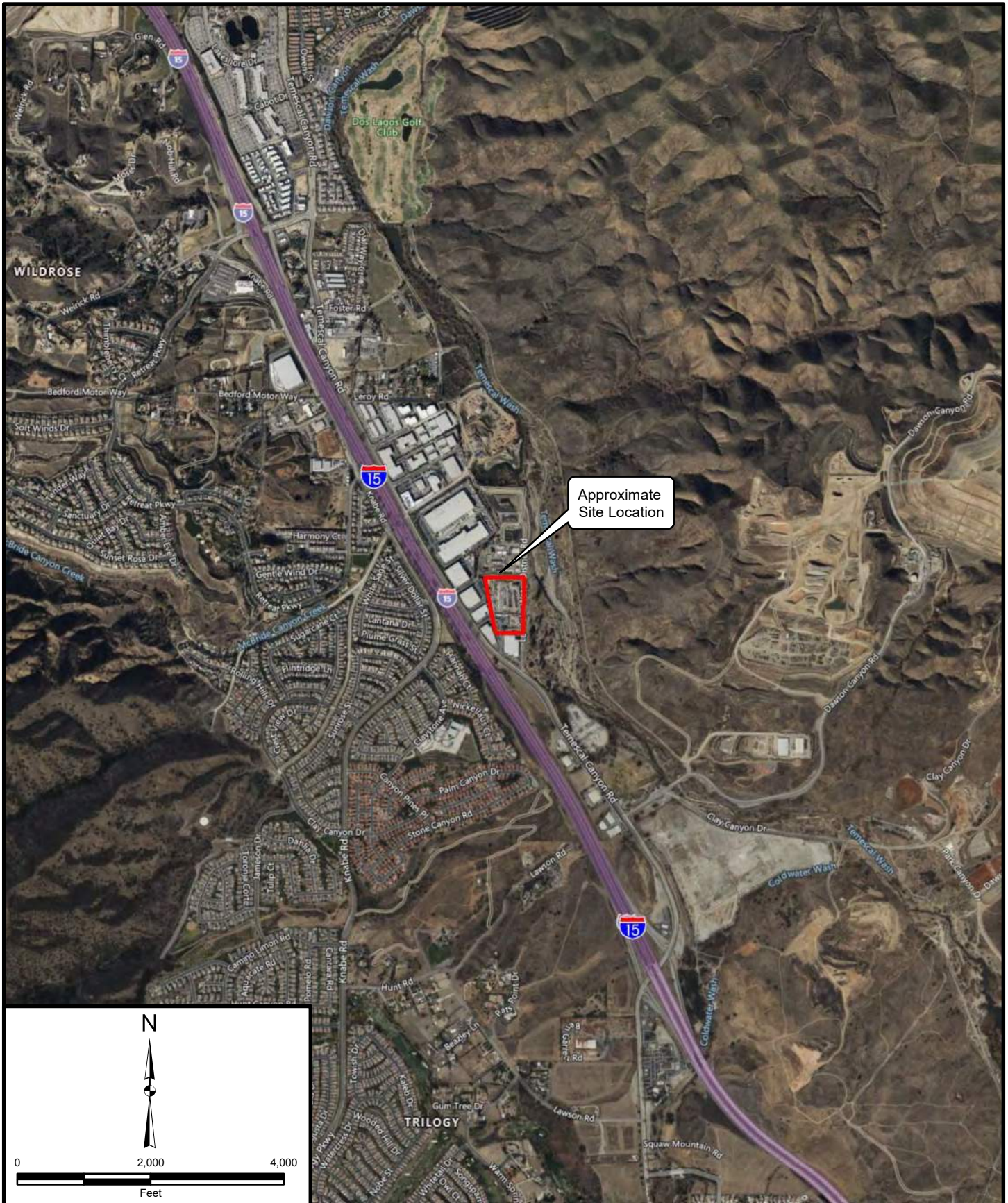
Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer’s services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer’s recommendations will not of itself be sufficient to prevent moisture infiltration.* **Confront the risk of moisture infiltration** by including building-envelope or mold specialists on the design team. **Geotechnical engineers are not building-envelope or mold specialists.**



Telephone: 301/565-2733
e-mail: info@geoprofessional.org www.geoprofessional.org

FIGURES



Project: 13335.002	Eng/Geol: JAR
Scale: 1" = 2,000'	Date: May 2022
Reference: © 2022 Microsoft Corporation © 2022 Maxar © CNES (2022) Distribution Airbus	

SITE LOCATION MAP
 The Quarry Portion of Parcels 1 and 2
 Temescal Canyon Road
 Corona Area, Riverside County, California


FIGURE 1


LEGEND

Afc Artificial Fill, Certified (Global Geo, 2007a, 2007b, 2008 and 2016). Consists of 3-4 foot rock blanket at subgrade (basin bottom) wrapped in Mirafi 600x. fill material silty to clayey Sand with gravel compacted to 95% to El.880' fill above compacted to 90% to finishgrade.

Qvof Very Old Alluvial Fan Deposits of sand and gravel

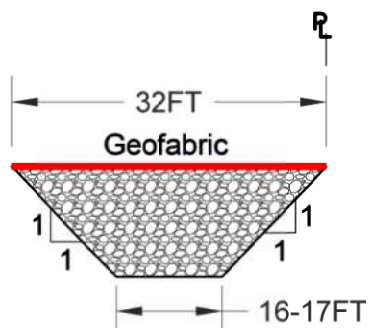
LB-6 Approximate location of hollow-stem auger boring showing total depth (T.D.) and depth to groundwater (G.W.) in feet below ground surface after stabilization in borehole. Refusal noted.

 Approximate former Sand Quarry top of slope. Based on review of historical aerial imagery, 2003-2004

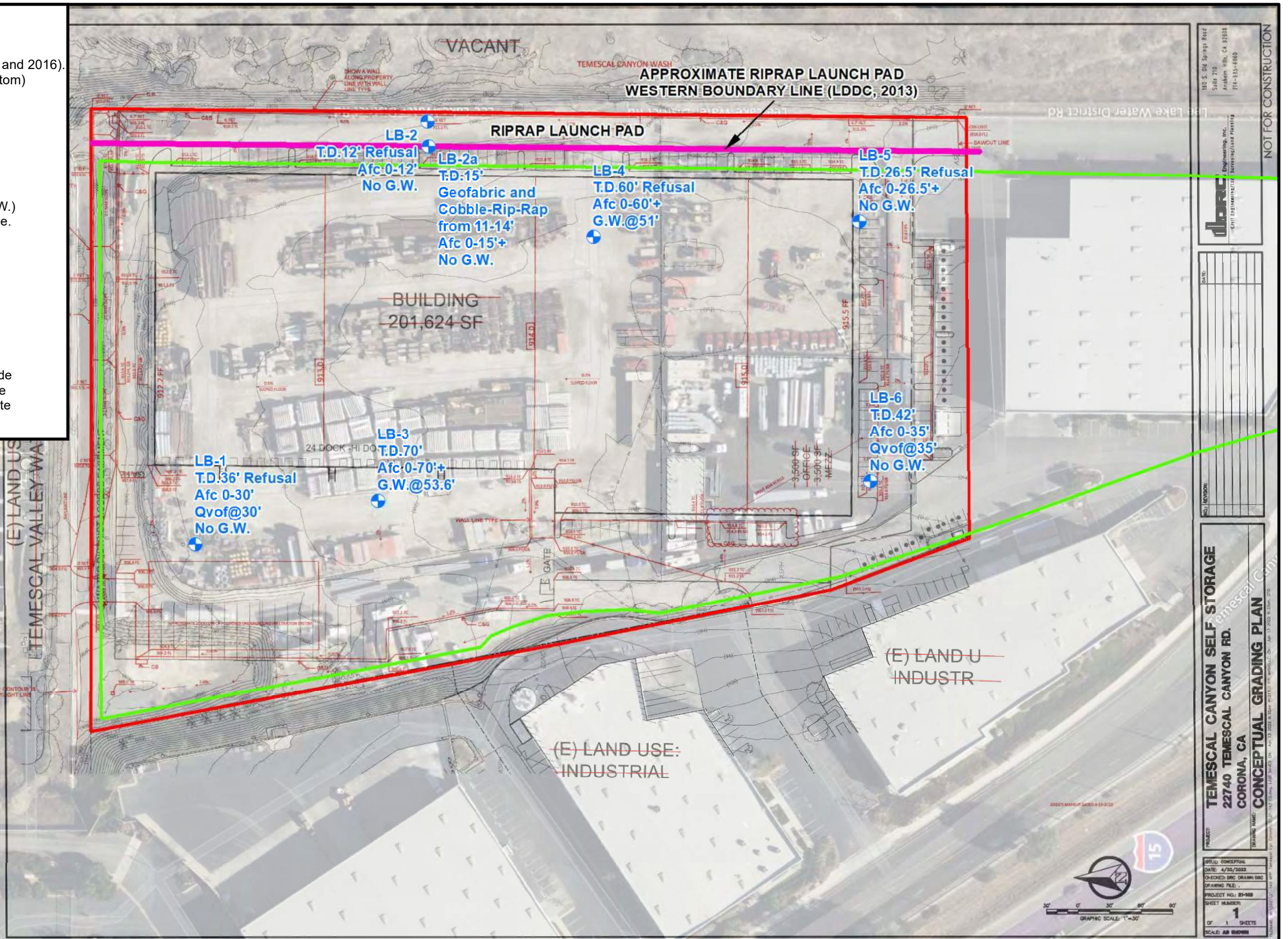
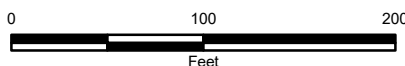
 Approximate Site Boundary

Notes

Former Quarry dimensions reported as 1,300 feet long, 300 feet wide and upto 65 feet deep. Sidewall's excavated at 2:1 and 1.75:1 Slope Ratio. Basin water levels in 2014 report ratio reported at approximate elevation 875 feet. (Global Geo Engineering Inc., November 2014)



Rip rap launch pad detail. Scale as shown from Rip Rap Launch Pad Improvements (Stage 1) Project, plot plan 25397 sheet 7 of 8, date; August 2013 by LDDC



100 S. 5th Street
Suite 210
Anaheim, CA 92808
714-835-1989

DRC Engineering, Inc.
Civil Engineering/Geotechnical Planning

DATE:	
BY:	
CHECKED:	
DATE:	
BY:	
CHECKED:	
DATE:	
BY:	

PROJECT: TEMESCAL CANYON SELF STORAGE
22740 TEMESCAL CANYON RD.
CORONA, CA
DRAWING NAME: CONCEPTUAL GRADING PLAN

DATE: 4/20/2022
CHECKED: DRC
DRAWING FILE:
PROJECT NO: 21-988
SHEET NUMBER:
1
SCALE: AS SHOWN

NOT FOR CONSTRUCTION

EXPLORATION LOCATION MAP
The Quarry Portion of Parcels 1 and 2
Temescal Canyon Road
Corona Area, Riverside County, California

FIGURE 2a





Project: 13335.002	Eng/Geol: CCK/JAR
Scale: 1" = 400'	Date: June 2022
Base Map: ESRI ArcGIS Online 2022	
Author: KVM (btran)	

SITE CONDITIONS OCTOBER 2004
 The Quarry Portion of Parcels 1 and 2 of Parcel Map 129/136
 Temescal Canyon Road
 Corona Area, Riverside County, California

FIGURE 2b




Visually, the site appears to be formed to the design mass grade represented on Sheet 2 of 4, Mass Grading Plan, prepared by Land Development Design Company LLC, dated August 21, 2013. Source material for the stockpile is unknown

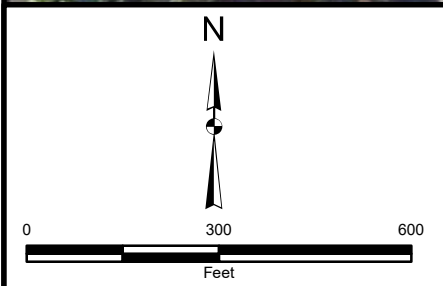
LEGEND

Afe - Artificial Fill Engineered, consists of material with San Equivalent >50; placed under observation, testing and evaluation by Global Engineering, Inc., January 24, 2008

Qya - Active young axial wash deposits (Holocene to late Pleistocene age) unconsolidated alluvium consisting of sand, gravel and silt

Qvof - Old alluvial fan deposits, (early Pleistocene age). well indurated reddish brown sand deposits containing minor gravel, Gently sloping surface to Temescal Wash

 Approximate Site Boundary



Project: 13335.002 Eng/Geol: CCK/JAR

Scale: 1" = 300' Date: June 2022

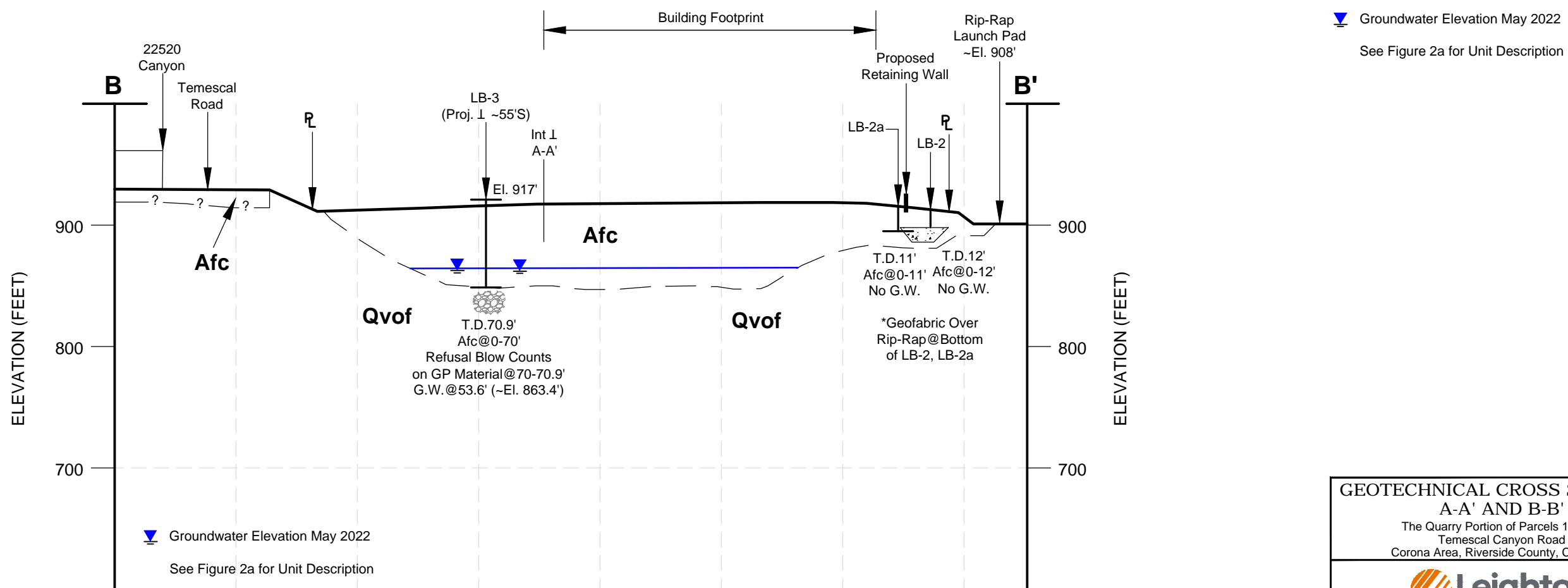
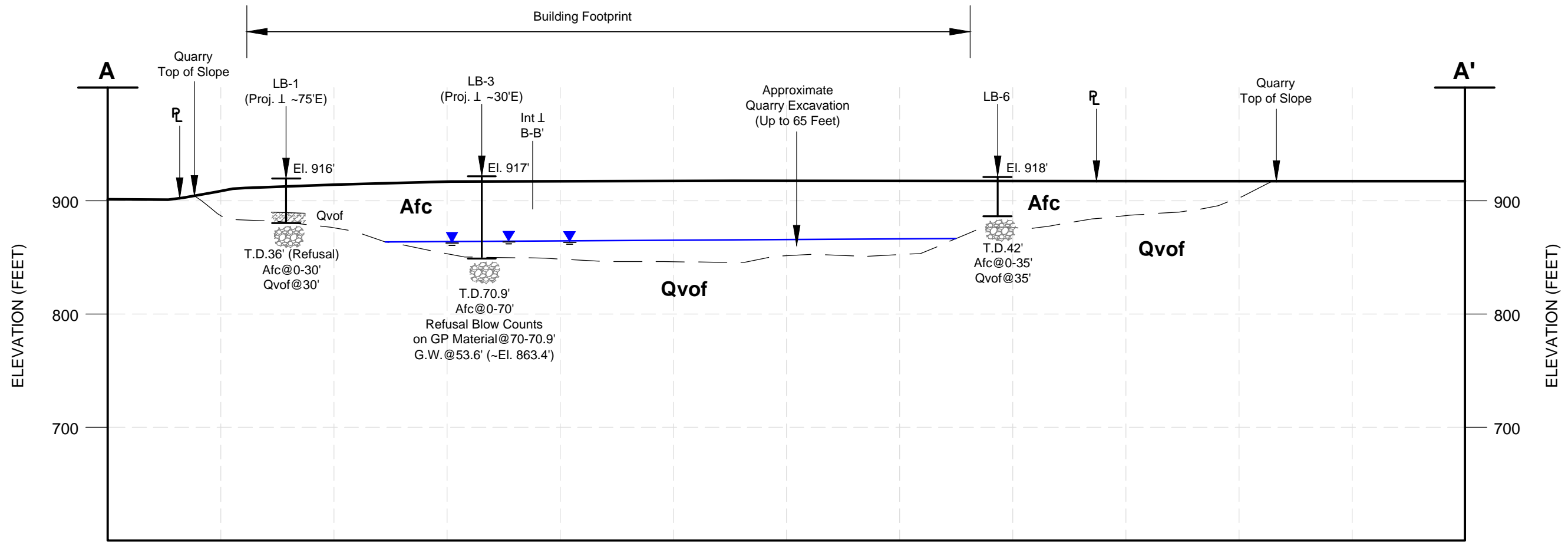
Base Map: ESRI ArcGIS Online 2022

Author: KVM (btran)

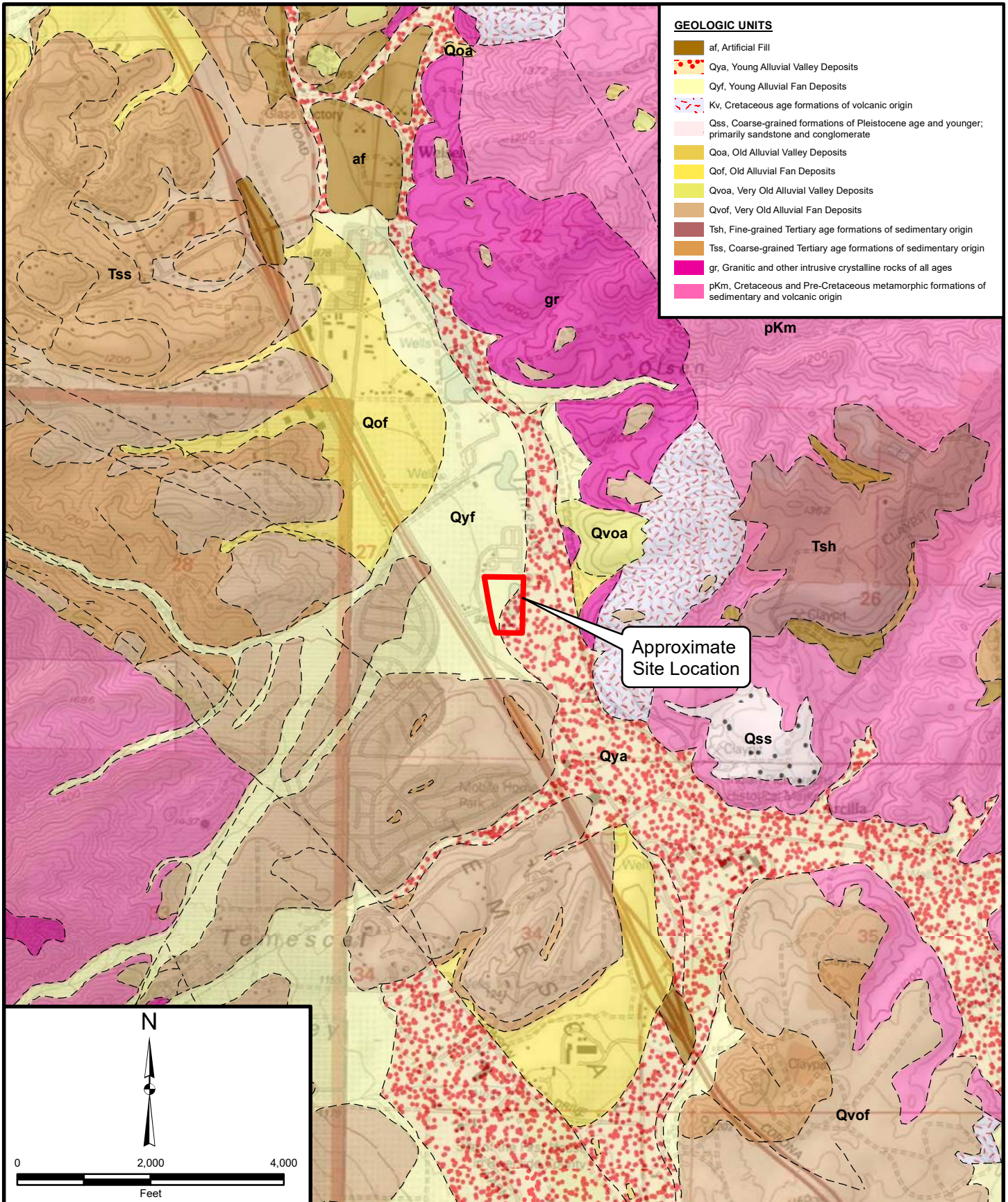
GRADED PAD NOVEMBER 2013
 The Quarry Portion of Parcels 1 and 2 of Parcel Map 129/136
 Temescal Canyon Road
 Corona Area, Riverside County, California

FIGURE 2c





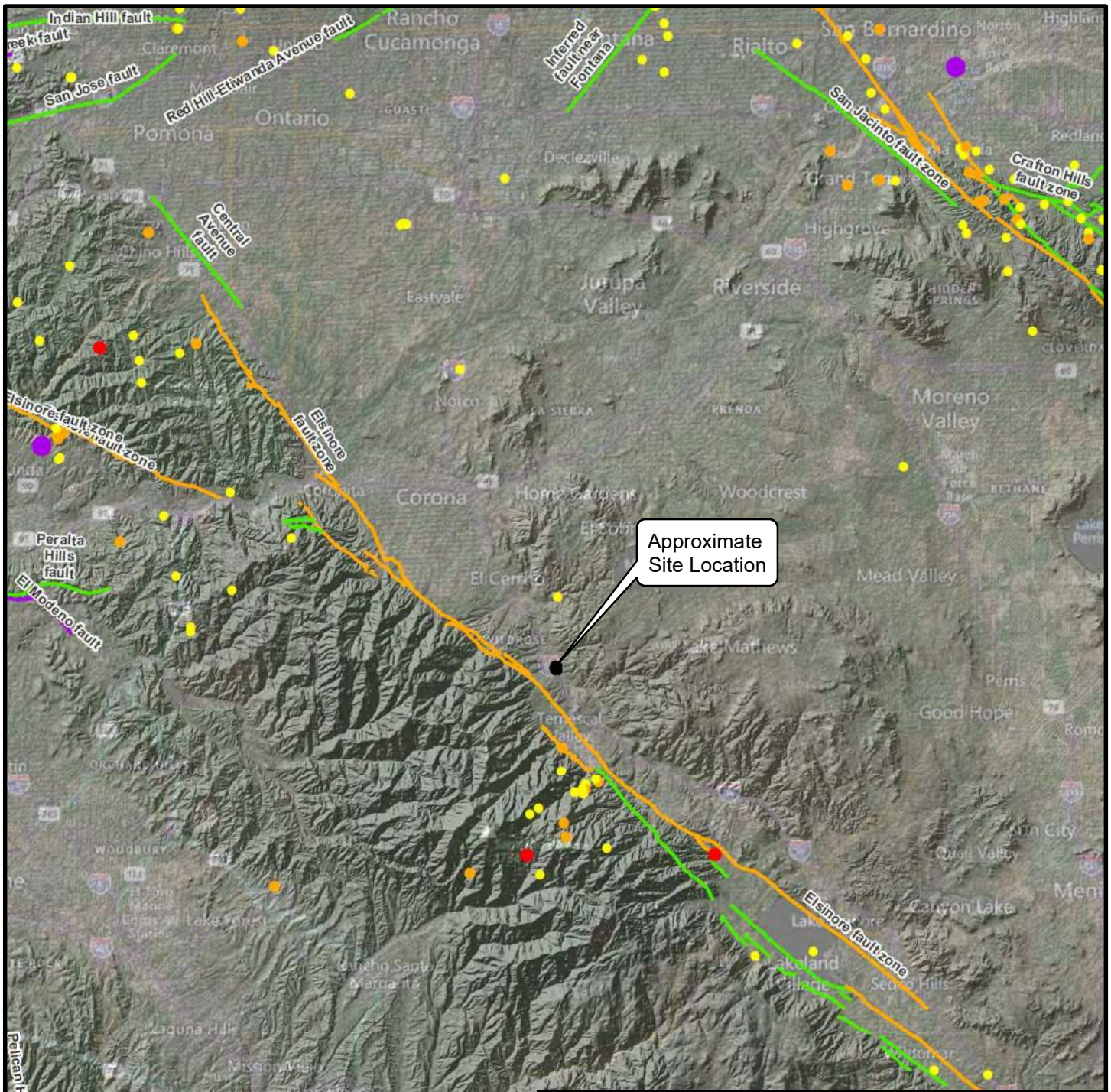
GEOTECHNICAL CROSS SECTIONS		FIGURE 2d
A-A' AND B-B'		Scale: 1"=100'
The Quarry Portion of Parcels 1 and 2 Temescal Canyon Road Corona Area, Riverside County, California		Date: June 2022
		Proj: 13335.002
		Eng/Geol: CCK/JAR



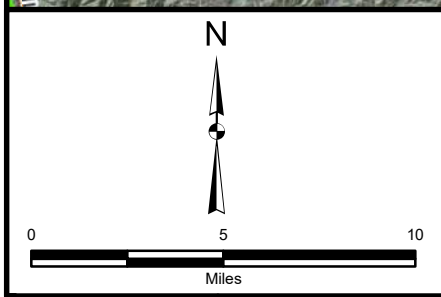
Project: 13335.002	Eng/Geol: JAR
Scale: 1" = 2,000'	Date: May 2022
Reference: Geologic Map of the San Bernardino and Santa Ana Quadrangles, compiled by Douglas M. Morton and Fred K. Miller, 2006	

REGIONAL GEOLOGY MAP
 The Quarry Portion of Parcels 1 and 2
 Temescal Canyon Road
 Corona Area, Riverside County, California

FIGURE 3



Approximate Site Location



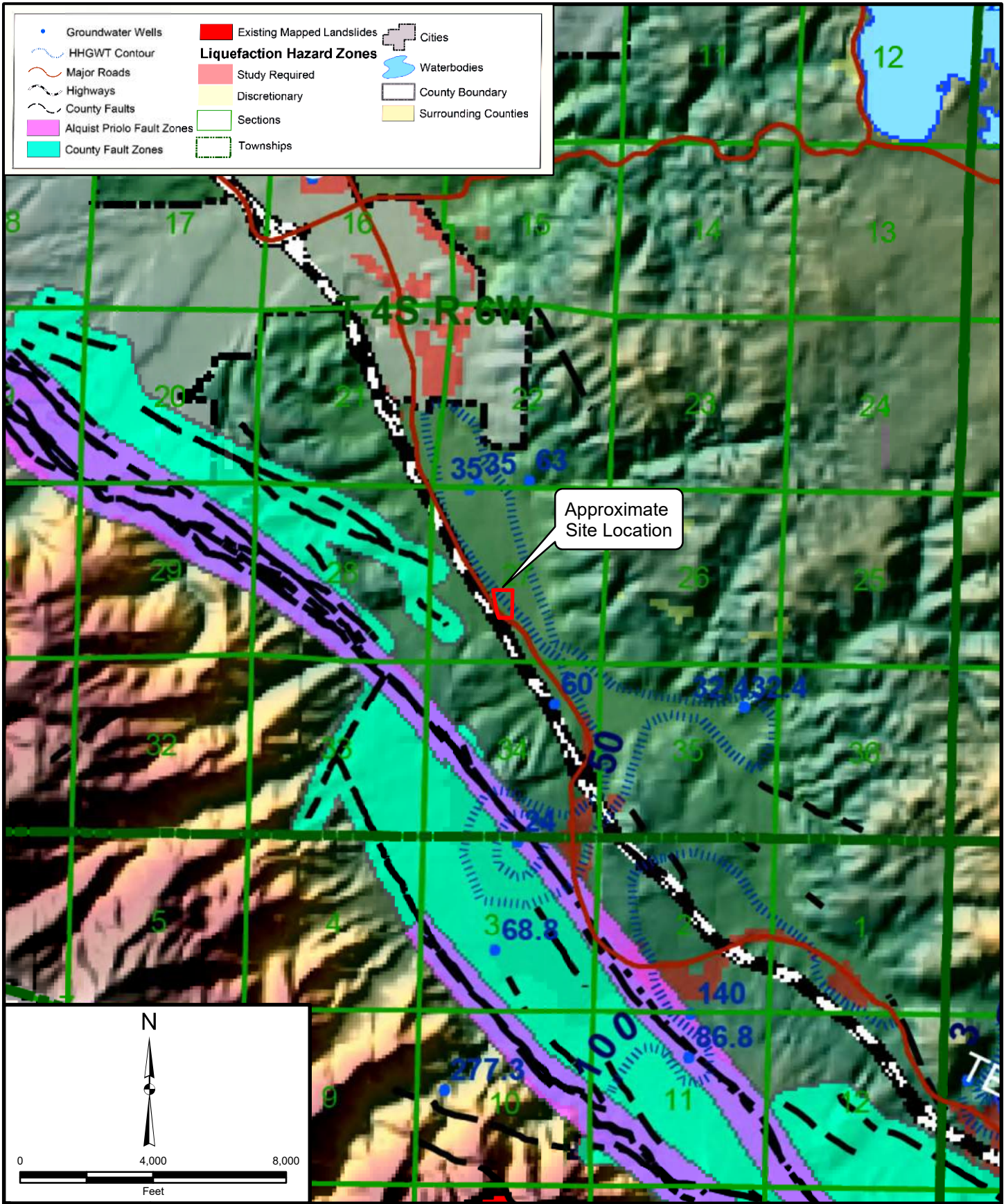
LEGEND

Fault activity	Historical Earthquakes ($\geq M3.5$)
Recency of Movement	
— Historic (<200 years)	● 3.5 - 3.99
— Holocene (<11,700 years)	● 4.0 - 4.99
— Late Quaternary (last 700,000 years)	● 5.0 - 5.99
— Quaternary (<1.6M years)	● 6.0 - 6.99

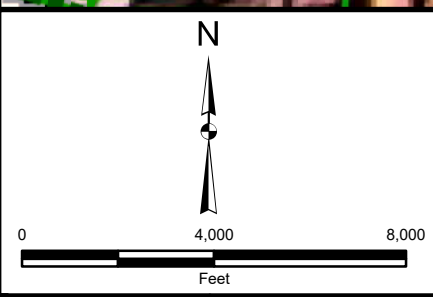
Project: 13335.002 Eng/Geol: JAR
 Scale: 1" = 5 miles Date: May 2022
 Basemap Reference: © 2022 Microsoft Corporation
 Earthstar Geographics SIO © 2022 TomTom
 Seismicity Data Reference: maps.conservation.ca.gov

REGIONAL FAULTS AND HISTORIC SEISMICITY MAP
 The Quarry Portion of Parcels 1 and 2
 Temescal Canyon Road
 Corona Area, Riverside County, California

FIGURE 4



Approximate Site Location

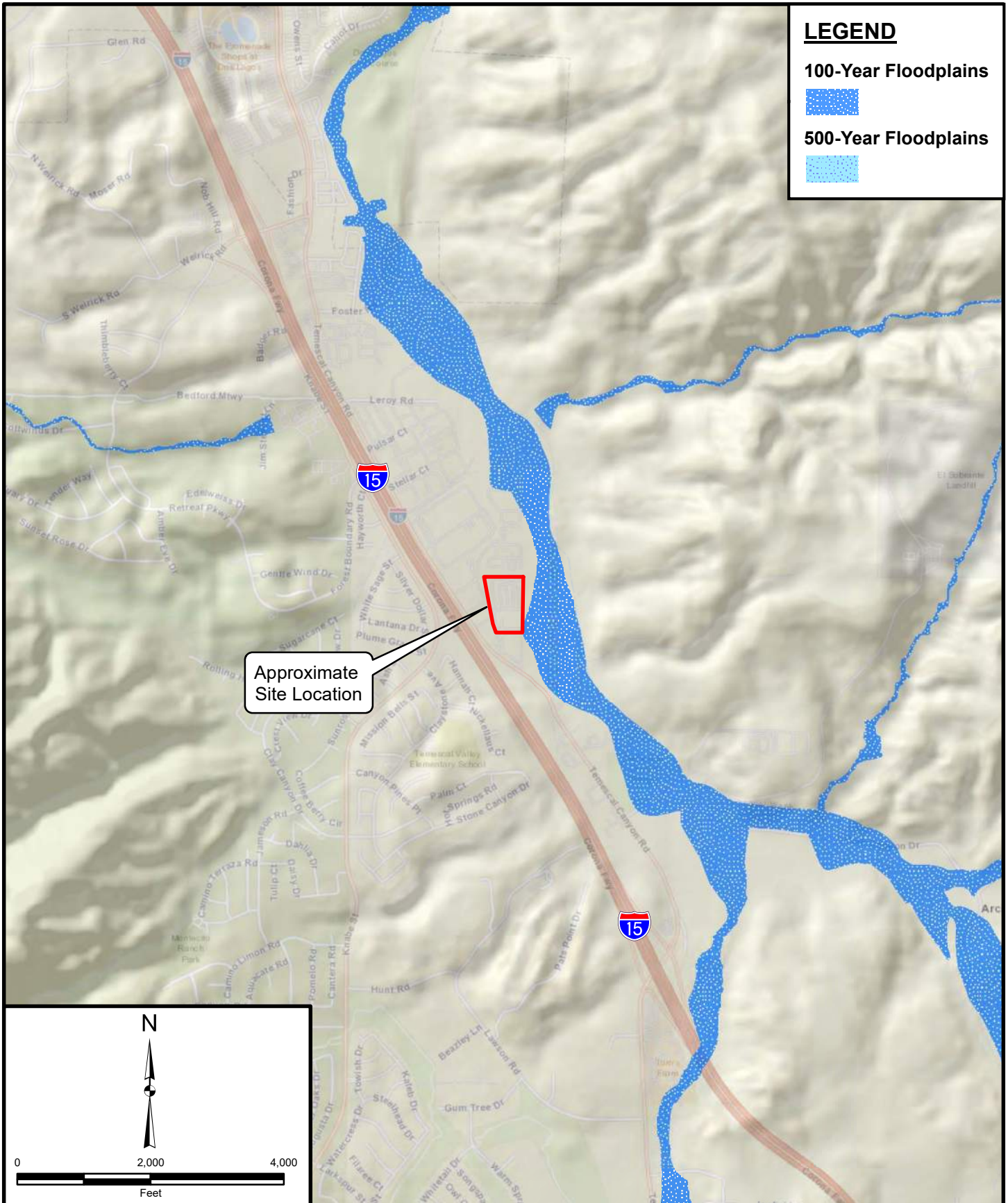


Project: 13335.002 Eng/Geol: JAR
 Scale: 1" = 4,000' Date: May 2022
 Base Map: Geologic Hazard Map, Unpublished, 2004


SEISMIC HAZARD MAP


The Quarry Portion of Parcels 1 and 2
 Temescal Canyon Road
 Corona Area, Riverside County, California

FIGURE 5

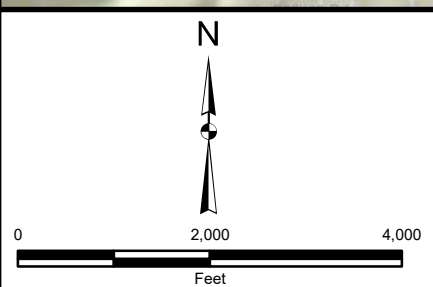


LEGEND

100-Year Floodplains


500-Year Floodplains


Approximate Site Location

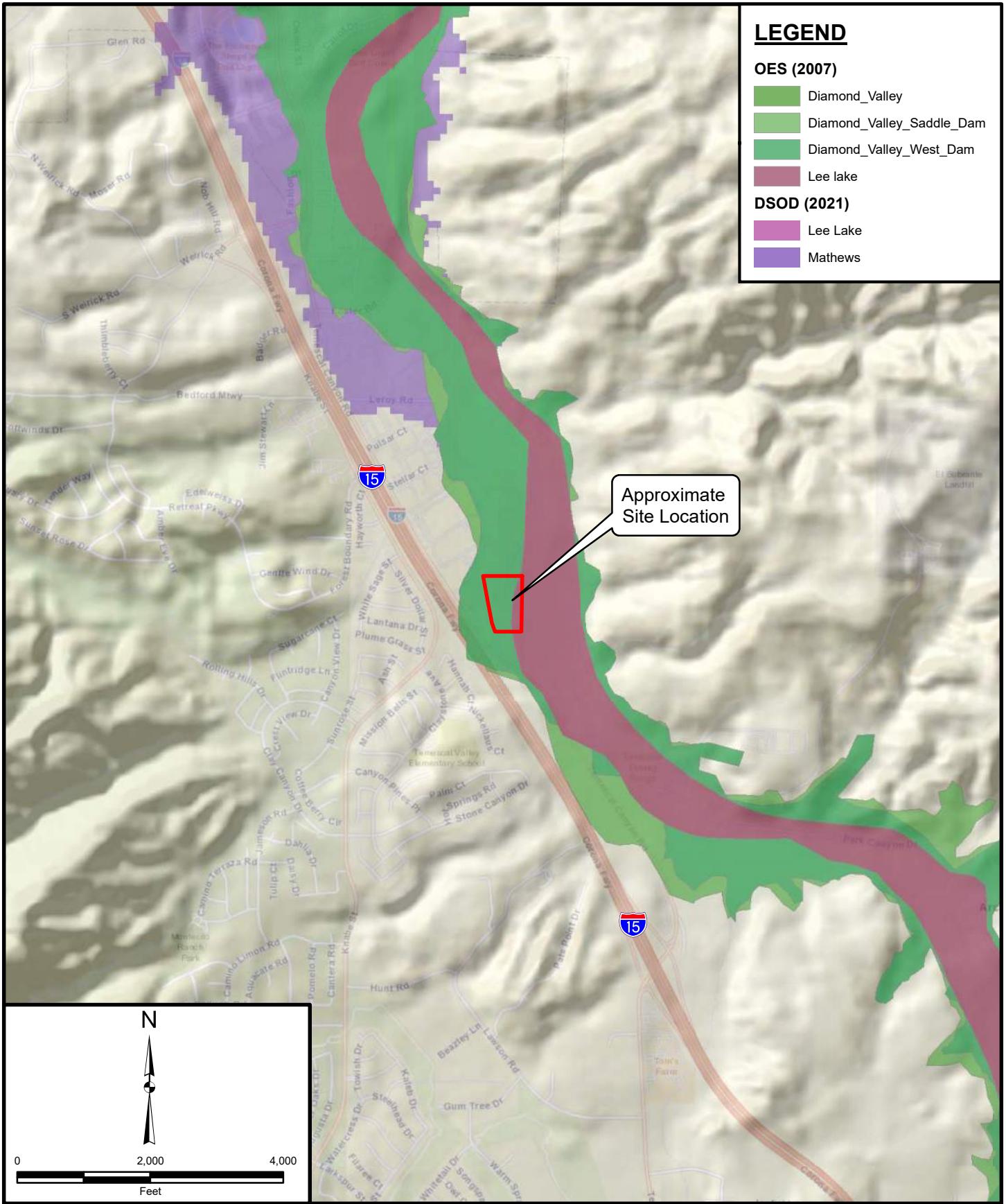


Project: 13335.002	Eng/Geol: JAR
Scale: 1" = 2,000'	Date: May 2022
<small>Reference: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community FEMA (http://www.fema.gov/index.shtm), DWR (http://www.dwr.ca.gov)</small>	

FLOOD HAZARD ZONE MAP
 The Quarry Portion of Parcels 1 and 2
 Temescal Canyon Road
 Corona Area, Riverside County, California

FIGURE 6





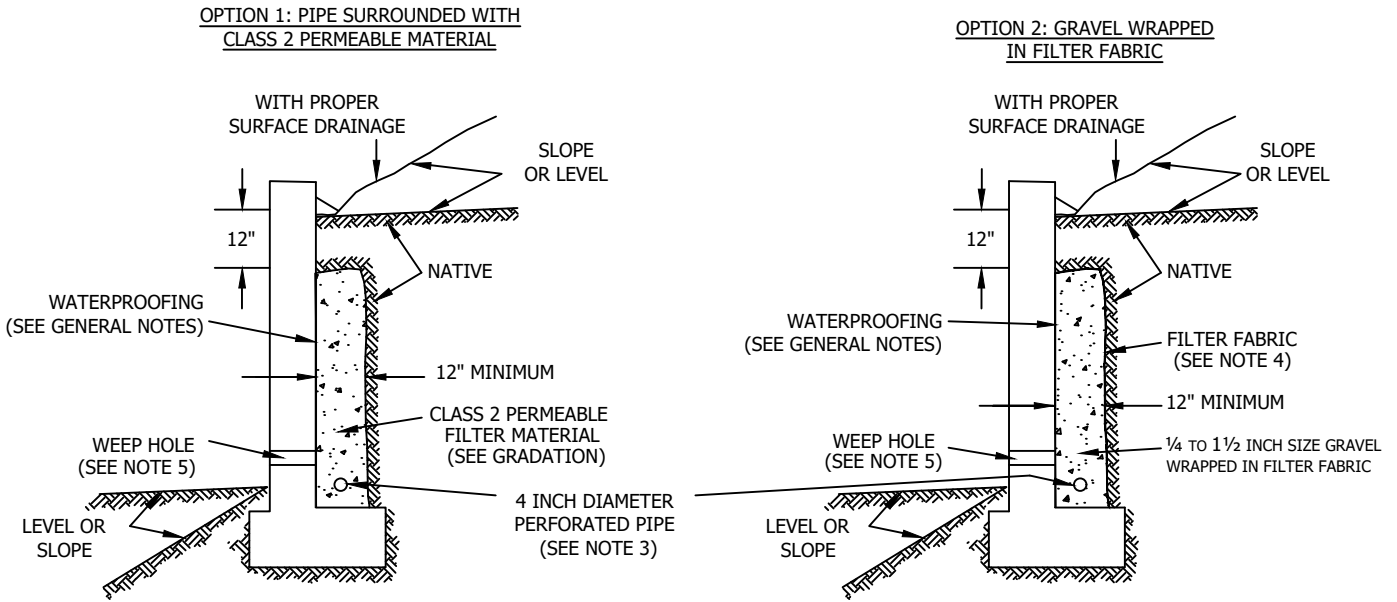
Project: 13335.002	Eng/Geol: JAR
Scale: 1" = 2,000'	Date: May 2022
<small> Basemap Reference: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China Reference: Office of Emergency Services (2007), Dept of Safety of Dams (2021) National Inventory of Dams, Army Corps of Engrs (2021) </small>	

DAM INUNDATION MAP

The Quarry Portion of Parcels 1 and 2
Temescal Canyon Road
Corona Area, Riverside County, California

FIGURE 7

SUBDRAIN OPTIONS AND BACKFILL WHEN NATIVE MATERIAL HAS EXPANSION INDEX OF ≤ 50



Class 2 Filter Permeable Material Gradation
Per Caltrans Specifications

Sieve Size	Percent Passing
1"	100
3/4"	90-100
3/8"	40-100
No. 4	25-40
No. 8	18-33
No. 30	5-15
No. 50	0-7
No. 200	0-3

GENERAL NOTES:

- * Waterproofing should be provided where moisture nuisance problem through the wall is undesirable.
- * Water proofing of the walls is not under purview of the geotechnical engineer
- * All drains should have a gradient of 1 percent minimum
- * Outlet portion of the subdrain should have a 4-inch diameter solid pipe discharged into a suitable disposal area designed by the project engineer. The subdrain pipe should be accessible for maintenance (rodding)
- * Other subdrain backfill options are subject to the review by the geotechnical engineer and modification of design parameters.

Notes:

- 1) Sand should have a sand equivalent of 30 or greater and may be densified by water jetting.
- 2) 1 Cu. ft. per ft. of 1/4- to 1 1/2-inch size gravel wrapped in filter fabric
- 3) Pipe type should be ASTM D1527 Acrylonitrile Butadiene Styrene (ABS) SDR35 or ASTM D1785 Polyvinyl Chloride plastic (PVC), Schedule 40, Armco A2000 PVC, or approved equivalent. Pipe should be installed with perforations down. Perforations should be 3/8 inch in diameter placed at the ends of a 120-degree arc in two rows at 3-inch on center (staggered)
- 4) Filter fabric should be Mirafi 140NC or approved equivalent.
- 5) Weephole should be 3-inch minimum diameter and provided at 10-foot maximum intervals. If exposure is permitted, weepholes should be located 12 inches above finished grade. If exposure is not permitted such as for a wall adjacent to a sidewalk/curb, a pipe under the sidewalk to be discharged through the curb face or equivalent should be provided. For a basement-type wall, a proper subdrain outlet system should be provided.
- 6) Retaining wall plans should be reviewed and approved by the geotechnical engineer.
- 7) Walls over six feet in height are subject to a special review by the geotechnical engineer and modifications to the above requirements.

**RETAINING WALL BACKFILL AND SUBDRAIN DETAIL
FOR WALLS 6 FEET OR LESS IN HEIGHT
WHEN NATIVE MATERIAL HAS EXPANSION INDEX OF ≤ 50**

V:\DRAFTING\TEMP\ATES\STANDARD-FIGURES\ALL-STANDARD-FIGURES.DWG (04/02/21 10:57:56AM) Plotted by: bman



APPENDIX A
EXPLORATION LOGS

GEOTECHNICAL BORING LOG LB-1

Project No. 13335.002
Project The Quarry - Corona
Drilling Co. Martini Drilling
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2a - Field Exploration Map

Date Drilled 5-13-22
Logged By ECB
Hole Diameter 8"
Ground Elevation 916'
Sampled By ECB

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
915	0	3" Base over Afc		B1				SC	@Surface: 3" Base over Afc Certified Artificial Fill (Afc) - Global Geo Engineering (2007a, 2007b, 2008, 2016)	
				R1	23 25 26	119	6		@2' Clayey SAND with gravel: reddish brown; slightly moist; dense; nonplastic; fine to medium sand; 30-40% (field estimate) coarse subrounded to subangular gravel; mottled red/brown/orange.	
910	5			R2	16 17 24	120	6	SM	@5' Silty SAND with gravel: yellowish brown; slightly moist; dense; fine to coarse sand; 50% (field estimate) fine to coarse subangular gravel.	
				R3	8 18 20	112	6	(SC)g	@7' Clayey SAND with gravel: reddish brown; moist; dense; nonplastic; fine to medium sand.	
905	10			R4	11 13 11	120	9		@10' Clayey SAND with gravel: yellowish brown; moist; medium dense; moderate plasticity; fine sand; 27% fines; coarse subrounded gravel; mottled yellow/red/brown.	SA
900	15			R5	7 8 13	114	11	SC	@15' Clayey SAND: yellowish brown; moist; medium dense; low plasticity; medium to coarse sand; 22% fines; coarse rounded to subrounded gravel; micaceous; pockets of yellow Silty Sand lenses.	SA
895	20			S1	3 3 6		12		@20' medium dense; some greenish tan sand lenses sourced from decomposing granitic gravels and cobbles.	
890	25			R6	13 18 15	115	12	GP SC GP	@25' three-inch dry grayish gravel layer over Clayey SAND: olive brown; mottled reddish brown; moist; medium dense; medium to coarse sand; 26% fines; low plasticity; some fine gravel. @27-30' AUGER HEAVILY GRINDING ON LARGE GRAVEL/COBBLE MATERIAL	SA
	30									

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-1

Project No. 13335.002
Project The Quarry - Corona
Drilling Co. Martini Drilling
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2a - Field Exploration Map

Date Drilled 5-13-22
Logged By ECB
Hole Diameter 8"
Ground Elevation 916'
Sampled By ECB

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
885	30	[Hatched Box]		S2	11 10 12		10	SC	Old alluvial fan deposits (Qvof): @30' Clayey SAND with gravel: reddish brown; moist; medium dense; low plasticity; fine to coarse sand; micaceous; mottled yellow/green/orange; fine to coarse subrounded gravel.	
880	35	[Hatched Box]		R7	50/6"	105	9		@35' very dense @36' AUGER GRINDING ON BOULDER: REFUSAL	
875	40								Total Depth: 36 feet bgs No groundwater encountered during drilling. Backfilled to surface with soil cuttings on 5/13/2022	
870	45									
865	50									
860	55									
60										

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-2

Project No. 13335.002
Project The Quarry - Corona
Drilling Co. Martini Drilling
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2a - Field Exploration Map

Date Drilled 5-13-22
Logged By ECB
Hole Diameter 8"
Ground Elevation 908'
Sampled By ECB

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
905	0			B1				SC	Boring Located 8 feet west of the eastern PL @Surface: sand, gravel, light vegetation over Afc Certified Artificial Fill (Afc) - Global Geo Engineering (2007a, 2007b, 2008, 2016) @2' Clayey SAND with gravel: reddish brown; slightly moist; dense; low plasticity; fine to coarse sand; 15-20% (field estimate) fine gravel; mottled orange/red brown.	CN, CR, DS, EI
	5			R1	19 26 19	123	6		@5' moist, medium dense, coarse gravel	CN, DS
	10			R2	6 8 14				@6' dense	
900				R3	8 17 27	114	9		@10 medium dense	CN, DS
895				R4	14 14 10				@12' Geofabric over Rip Rap (Global, 2014) material; could not advance auger further (Refusal) Total Depth: 12 feet bgs No groundwater encountered during drilling. LB-2a - Moved rig 24 feet to the west (approximately 32 feet west of the eastern PL), drilled to 11 feet bgs, encountered geofabric and difficult drilling for approximately 3"; Afc below the Rip Rap Launch Pad gravel.	
890	15									
885	20									
880	25									
875	30									

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-3

Project No. 13335.002
Project The Quarry - Corona
Drilling Co. Martini Drilling
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2a - Field Exploration Map

Date Drilled 5-13-22
Logged By ECB
Hole Diameter 8"
Ground Elevation 917'
Sampled By ECB

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
915	0			B1				SM	@Surface: 4" Base over Afc Certified Artificial Fill (Afc) - Global Geo Engineering (2007a, 2007b, 2008, 2016)	
				R1	14 23 32	120	7		@2' Silty SAND with gravel: brown; moist; dense; mottled red/brown; well-graded fine to coarse sand; 15% (field estimate) fine to coarse subrounded gravel.	
	5			R2	20 30 32	118	6	SC	@5' Clayey SAND with gravel: reddish brown; moist; very dense; low plasticity; fine to coarse sand; 10% (field estimate) fine subrounded gravel; contains 3-4" cobbles; some construction trash.	
910				R3	21 23 25	119	7		@6' Clayey SAND with gravel: reddish brown; mottled red/brown/orange/gray; slightly moist; dense; fine to coarse sand; coarse subrounded to subangular gravel; contains asphalt fragments.	
	10			R4	11 21 20	113	7		@10' Clayey SAND: reddish brown; slightly moist; dense; nonplastic; fine to coarse sand; fine subrounded gravel; 0.5" lenses of tan clean sand.	
905										
	15			S1	10 7 6		13		@15' Clayey SAND: reddish brown; moist; medium dense; nonplastic; trace fine subrounded gravel; pockets of: green well-graded SAND; reddish orange clayey SAND; and tan silty SAND.	
900										
	20			R5	7 14 18	113	10	GP	@20' Silty SAND: reddish brown; moist; medium dense; fine to coarse well-graded sand; trace fine subrounded granitic gravel; pockets of red clayey SAND and green SILT. @21-24' Larger gravel/cobble material; AUGER GRINDING	
895								SC		
	25			S2	11 8 9		10		@25' Clayey SAND: reddish brown; moist; medium dense; mottled red/gray; trace fine subrounded gravel; clay forming around decomposing gravel; mm-sized pockets of reddish brown low plasticity clay.	
890								GP	@27- 29' Large gravel/cobble material; AUGER GRINDING	
	30							SC		

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-3

Project No. 13335.002
Project The Quarry - Corona
Drilling Co. Martini Drilling
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2a - Field Exploration Map

Date Drilled 5-13-22
Logged By ECB
Hole Diameter 8"
Ground Elevation 917'
Sampled By ECB

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
30		N S							<p><i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i></p> <p>@30' Clayey SAND: olive brown; moist; very dense; low plasticity; fine to coarse sand; trace fine subangular gravel; mottled red/bluish gray/brown.</p> <p>@35' Clayey SAND: olive brown; moist; medium dense; low plasticity; fine to medium sand; mottled red/green/gray; pockets of clean tan sand; 20% coarse subangular to fractured gravel.</p> <p>@40' very dense; 20% gravel (field estimate).</p> <p>@45' Clayey SAND: bluish gray; moist; medium dense; low plasticity; slight odor; mm-sized pockets of green silt.</p> <p>@50' Clayey SAND: reddish brown with bluish gray horizontal layers; very moist; dense; fine to coarse (primarily coarse) sand; some fine subrounded to subangular gravel; moderate plasticity.</p> <p>@53.6' Final GW reading</p> <p>@55' wet; medium dense; coarse gravel</p> <p>@57-58' Large gravel/cobble material; AUGER GRINDING</p>	
885				R6	25 50/6"	101	9	SC		
	35			S3	6 6 8		14			
880										
	40			R7	16 29 34	123	8			
875										
	45			S4	5 5 7		12			
870										
	50			R8	10 19 20	122	9			
865										
	55			S5	14 11 12		15			
860								GP SM		
60										

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-3

Project No. 13335.002
Project The Quarry - Corona
Drilling Co. Martini Drilling
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2a - Field Exploration Map

Date Drilled 5-13-22
Logged By ECB
Hole Diameter 8"
Ground Elevation 917'
Sampled By ECB

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests				
This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.														
60		N S		R9	35 12 19	131	10		@60' Silty SAND: grayish bluish brown; saturated with GW; medium dense; fine to coarse sand; 15% (field estimate) fine subangular gravel; non-odorous; thin layers of red clayey sand.					
855														
65				S6	10 20 23		11	SP	@65' SAND: grayish brown; saturated; dense; primarily coarse sand; clean; little to no fines.					
850														
70					11 50/5"			GP	@70' Large gravel/cobble material					
845									Total Depth: 70.9 feet bgs Groundwater initially encountered at 60' bgs. Final groundwater reading at 53.6' bgs Backfilled to surface with soil cuttings on 5/13/2022					
75														
840														
80														
835														
85														
830														
90														
<table style="width: 100%; font-size: x-small;"> <tr> <td style="width: 33%;"> SAMPLE TYPES: B BULK SAMPLE C CORE SAMPLE G GRAB SAMPLE R RING SAMPLE S SPLIT SPOON SAMPLE T TUBE SAMPLE </td> <td style="width: 33%;"> TYPE OF TESTS: -200 % FINES PASSING AL ATTERBERG LIMITS CN CONSOLIDATION CO COLLAPSE CR CORROSION CU UNDRAINED TRIAXIAL </td> <td style="width: 33%;"> DS DIRECT SHEAR EI EXPANSION INDEX H HYDROMETER MD MAXIMUM DENSITY PP POCKET PENETROMETER RV R VALUE </td> <td style="width: 33%;"> SA SIEVE ANALYSIS SE SAND EQUIVALENT SG SPECIFIC GRAVITY UC UNCONFINED COMPRESSIVE STRENGTH </td> </tr> </table>											SAMPLE TYPES: B BULK SAMPLE C CORE SAMPLE G GRAB SAMPLE R RING SAMPLE S SPLIT SPOON SAMPLE T TUBE SAMPLE	TYPE OF TESTS: -200 % FINES PASSING AL ATTERBERG LIMITS CN CONSOLIDATION CO COLLAPSE CR CORROSION CU UNDRAINED TRIAXIAL	DS DIRECT SHEAR EI EXPANSION INDEX H HYDROMETER MD MAXIMUM DENSITY PP POCKET PENETROMETER RV R VALUE	SA SIEVE ANALYSIS SE SAND EQUIVALENT SG SPECIFIC GRAVITY UC UNCONFINED COMPRESSIVE STRENGTH
SAMPLE TYPES: B BULK SAMPLE C CORE SAMPLE G GRAB SAMPLE R RING SAMPLE S SPLIT SPOON SAMPLE T TUBE SAMPLE	TYPE OF TESTS: -200 % FINES PASSING AL ATTERBERG LIMITS CN CONSOLIDATION CO COLLAPSE CR CORROSION CU UNDRAINED TRIAXIAL	DS DIRECT SHEAR EI EXPANSION INDEX H HYDROMETER MD MAXIMUM DENSITY PP POCKET PENETROMETER RV R VALUE	SA SIEVE ANALYSIS SE SAND EQUIVALENT SG SPECIFIC GRAVITY UC UNCONFINED COMPRESSIVE STRENGTH											



GEOTECHNICAL BORING LOG LB-4

Project No. 13335.002
Project The Quarry - Corona
Drilling Co. Martini Drilling
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2a - Field Exploration Map

Date Drilled 5-12-22
Logged By ECB
Hole Diameter 8"
Ground Elevation 918'
Sampled By ECB

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
915	0	[Diagonal Hatching]		B1				SC	@Surface: 3" Base over Afc Certified Artificial Fill (Afc) - Global Geo Engineering (2007a, 2007b, 2008, 2016)	
	2			R1	12 21 36	117	7		@2' Clayey SAND with gravel: reddish brown; moist; dense; mottled red/orange/brown; fine to medium sand; moderate plasticity; 25% (field estimate) fine subangular gravel; chunks of asphalt.	
	5			R2	13 18 14	115	8		@5' Clayey SAND: medium dense; 30% (field estimate) fine gravel; trace coarse gravel; yellow pockets of fine sand.	
910	7			R3	9 12 20	113	7	SM SC	@7' Silty SAND with gravel: dark gray; slightly moist; medium dense; green sand; slight odor. @7.25' Silty clayey SAND with gravel: olive brown; moist; 30-35% (field estimate) fine subangular gravel; trace coarse gravel.	
	10			R4	14 18 16		5		@10' Clayey SAND with gravel: olive brown; moist; medium dense; mottled yellow/brown/red; low plasticity; fine to coarse (primarily coarse) sand; some fine subrounded to subangular gravel.	
905	15			R5	11 12 21	106	6	SM SC	@15' same material as 7'; 40% (field estimate) fine to coarse gravel @15.5' Silty clayey SAND with gravel: reddish brown; moist; medium dense; low plasticity; pockets of green silt; fine to coarse sand; angular gravel; micaceous; mottled red.	
900	20			S1	15 12 13		9		@20' medium dense; pockets of: green silt; tan sand; red clay.	
895	23							GP	@23' Coarse gravel and cobbles: AUGER GRINDING ON ROCK	
	25			R6	11 18 25	110	13	SM	@25' Silty SAND with gravel: reddish brown; moist; medium dense; mottled red; fine to medium sand; nonplastic; trace coarse subrounded gravel; micaceous.	
890	30									

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-4

Project No. 13335.002
Project The Quarry - Corona
Drilling Co. Martini Drilling
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2a - Field Exploration Map

Date Drilled 5-12-22
Logged By ECB
Hole Diameter 8"
Ground Elevation 918'
Sampled By ECB

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
30		N S		S2	7 8 11		16	SC	<i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i> @30' Clayey SAND with trace gravel: reddish brown; moist; medium dense; fine to coarse (primarily coarse) sand; pockets of green silt; trace fine subrounded gravel. @35' very dense @36' Dark gray; 40-50% (field estimate) fine subangular gravel; fine to medium sand. GP @38' Coarse gravel and cobbles: AUGER GRINDING ON ROCK CL @40' Sandy CLAY with gravel: gray; moist; hard; low plasticity; fine to coarse sand; some fine subrounded gravel; pockets of dark gray silt; some concrete fragments. GP @43' Coarse gravel and cobbles: AUGER GRINDING ON ROCK @45' Clayey SAND with gravel: bluish gray; very moist; dense; low plasticity; fine to coarse sand; fine to coarse gravel; trace cobbles (4" in dimension); micaceous. GP SC @47' Coarse gravel and cobbles: AUGER GRINDING ON ROCK @50' Granitic Gravel and Cobbles @50.5' Silty SAND with gravel: grayish brown; mottled red; moist; dense; nonplastic; angular gravel. @51.25' Final GW Reading GP @54' AUGER HEAVILY GRINDING ON LARGE ROCK MATERIAL: primarily gravel and pulverized rock "dust" @55-60' VERY DIFFICULT DRILLING: Spoils contain mechanically fractured gravel and cobbles	
885				R7	10 23 42	123	10			
880				S3	3 10 21		12			
875				R8	10 21 21	113	21			
870				S4	41 22 27		11			
865					50/2.5"					
860										
60										

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
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- DS DIRECT SHEAR
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- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-4

Project No. 13335.002
Project The Quarry - Corona
Drilling Co. Martini Drilling
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2a - Field Exploration Map

Date Drilled 5-12-22
Logged By ECB
Hole Diameter 8"
Ground Elevation 918'
Sampled By ECB

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests																																																																																			
		N S			Bulk Driven				<p><i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i></p>																																																																																				
60									<p>@60' NO SAMPLE RECOVERY: sampler came out wet with groundwater Total Depth: 60 feet bgs Groundwater initially encountered at 58' bgs. Final groundwater reading at 51.25' bgs Backfilled to surface with soil cuttings on 5/12/2022</p>																																																																																				
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SAMPLE TYPES:			TYPE OF TESTS:																																																																																										
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S	SPLIT SPOON SAMPLE		CR	CORROSION		PP	POCKET PENETROMETER			STRENGTH																																																																																			
T	TUBE SAMPLE		CU	UNDRAINED TRIAXIAL		RV	R VALUE																																																																																						



GEOTECHNICAL BORING LOG LB-5

Project No. 13335.002
Project The Quarry - Corona
Drilling Co. Martini Drilling
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2a - Field Exploration Map

Date Drilled 5-12-22
Logged By ECB
Hole Diameter 8"
Ground Elevation 914'
Sampled By ECB

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				<i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i>	
910	0	N S		B1					@Surface: Dry sloughy gravel/sand over Afc Certified Artificial Fill (Afc) - Global Geo Engineering (2007a, 2007b, 2008, 2016)	
	2			R1	13 22 21	124	8	SC	@2' Clayey SAND with gravel: reddish brown; moist; mottled yellow/brown/red; dense; some fine subangular gravel; low plasticity.	
	5			R2	16 23 26	121	7	SM	@5' Silty SAND with gravel: reddish brown; slightly moist; mottled red/brown; dense; 20% (field estimate) fine subrounded to subangular gravel; nonplastic; concrete fragments.	
	7			R3	7 13 13	112	12	SC	@7' Clayey SAND with trave gravel: olive brown; mottled red/brown; medium dense; medium to coarse sand; low plasticity; trave fine rounded gravel.	
	10			R4	12 19 21	116	13		@10' reddish brown, medium dense	
	15			S1	6 11 18		11		@16' AUGER GRINDING ON BOULDER - REFUSAL Sidestepped boring 5' to the east, drilled to 15 and resample Clayey SAND with gravel: reddish brown; moist; dense; medium to coarse sand; trace fine subrounded gravel; low plasticity; micaceous; pockets of red silt.	
	20			R5	19 26 39		10		@20' mottled red/green/brown; very dense	
	25			S2	9 10 11		11	SM	@25' Silty SAND with gravel olive brown; mottled red/brown; moist; dense; fine sand; some fine subangular gravel; nonplastic.	
	26.5								@26.5' AUGER GRINDING ON BOULDER - REFUSAL	
	26.5								Total Depth: 26.5 feet bgs No groundwater encountered during drilling. Backfilled to surface with soil cuttings on 5/12/2022	
	30									

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-6

Project No. 13335.002
Project The Quarry - Corona
Drilling Co. Martini Drilling
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2a - Field Exploration Map

Date Drilled 5-12-22
Logged By ECB
Hole Diameter 8"
Ground Elevation 918'
Sampled By ECB

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
915	0	[Gravel and AC chunks]		B1					@Surface: Gravel and 1-2" AC chunks over Afc Certified Artificial Fill (Afc) - Global Geo Engineering (2007a, 2007b, 2008, 2016)	
	2.5	[SAND]		R1	8 16 25	118	5	SP	@2' SAND with clay and gravel: orangish brown; slightly moist; dense; low plasticity; coarse sand; 20% (field estimate) fine subrounded gravel.	
	5	[Clayey SAND]		R2	24 26 31	120	7	SC	@5' Clayey SAND with gravel: orangish brown; dry to slightly moist; very dense; nonplastic; mottled red/orange/yellow; oxidized; fine to coarse sand; some fine to coarse subrounded gravel.	
910	7.5	[Sandy SILT]		R3	21 30 27	119	10	ML	@7' Sandy SILT with gravel: grayish brown; slightly moist; very dense; fine sand; 15-20% (field estimate) fine gravel; asphalt fragments.	
	10	[Clayey SAND]		R4	14 21 31	109	11	SC	@10' Clayey SAND with gravel: orange brown; slightly moist; dense	
905	15	[dense]		R5	13 20 27	120	9		@15' dense; mottled red/green/yellow; some fine to coarse gravel.	
900	20	[Silty SAND]		S1	6 10 9		11	SM	@20' Silty SAND with trace gravel: orange brown; moist; medium dense; fine to medium sand; mottled red/brown; trace fine subrounded gravel; micaceous-biotite.	
895	25	[SAND]		R6	10 15 15	111	10	SW	@25' SAND: orange brown; slightly moist; medium dense; fine to coarse sand; trace fines; micaceous.	
890	30	[SAND]								

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
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- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-6

Project No. 13335.002
Project The Quarry - Corona
Drilling Co. Martini Drilling
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2a - Field Exploration Map

Date Drilled 5-12-22
Logged By ECB
Hole Diameter 8"
Ground Elevation 918'
Sampled By ECB

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
30		N S		S2	14 12 12		11	SC	This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
885		N S		R7	9 10 10	114	3	SM	Old Alluvial Fan Deposits (Qvof) @35' Silty SAND with gravel: brown; moist; medium dense; fine to medium sand; nonplastic; some fine subrounded to subangular gravel.	
880		N S		S3	24 26 17		3		@40' Silty SAND with gravel: brown; dry; very dense; fine sand; 40% (field estimate) fine to coarse subrounded gravel. @41' EXTREMELY DIFFICULT DRILLING @42.5' REFUSAL	
875									Total Depth: 42.5 feet bgs No groundwater encountered during drilling. Backfilled to surface with soil cuttings on 5/12/2022	
45										
870										
50										
865										
55										
860										
60										

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
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APPENDIX B
LABORATORY TEST RESULTS



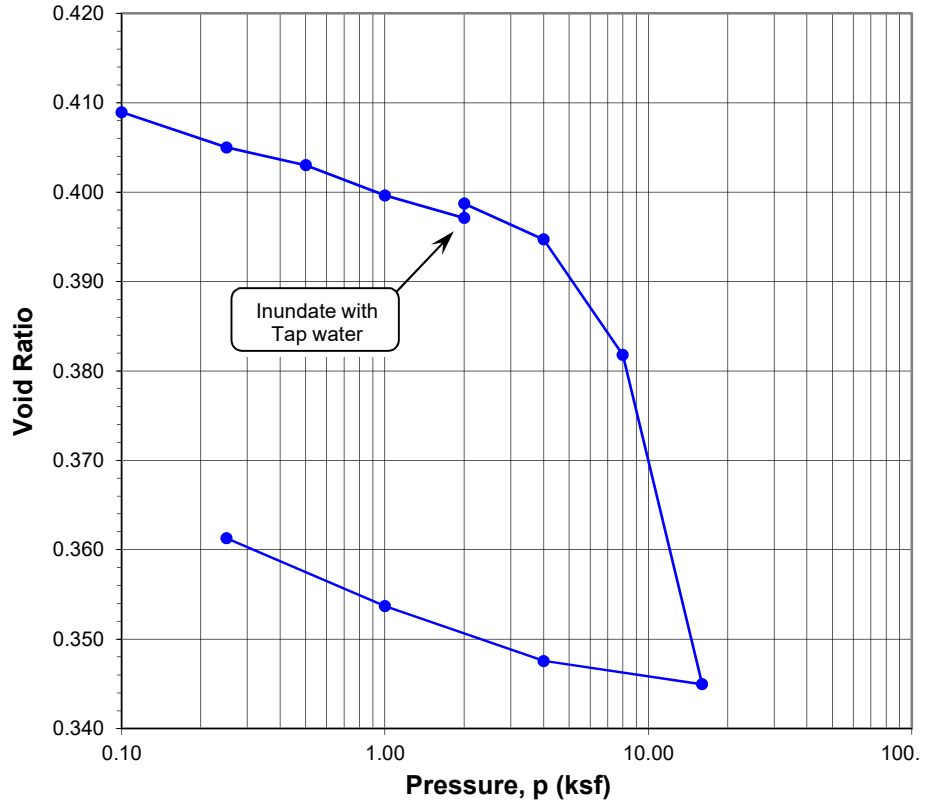
ONE-DIMENSIONAL CONSOLIDATION PROPERTIES of SOILS

ASTM D 2435

Project Name: The Quarry - Corona
 Project No.: 13335.002
 Boring No.: LB-2
 Sample No.: B-1
 Soil Identification: Yellowish brown clayey sand (SC)

Tested By: G. Bathala Date: 05/23/22
 Checked By: J. Ward Date: 06/14/22
 Depth (ft.): 0-5
 Sample Type: 90% Remold

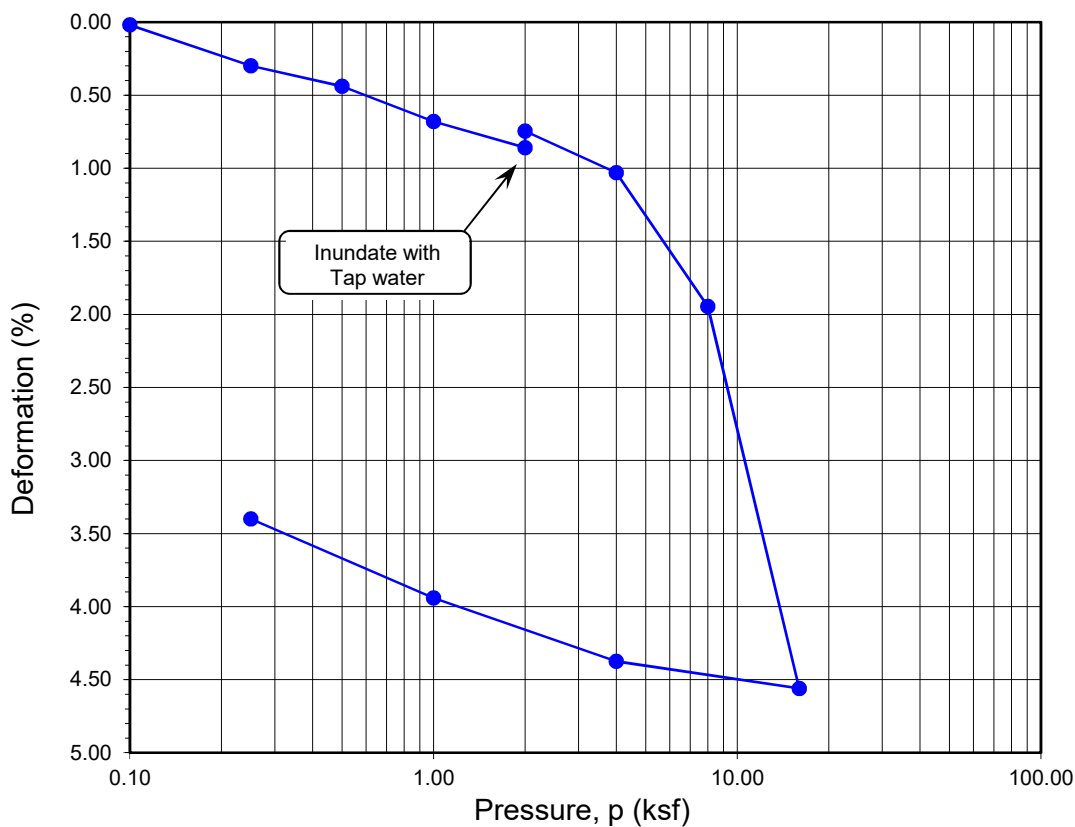
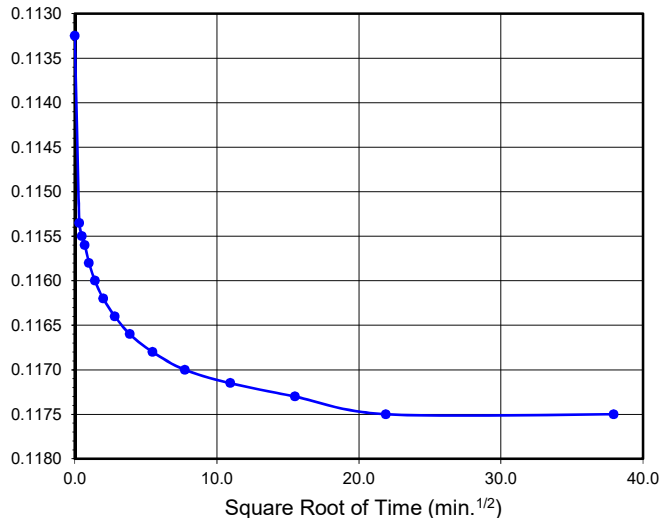
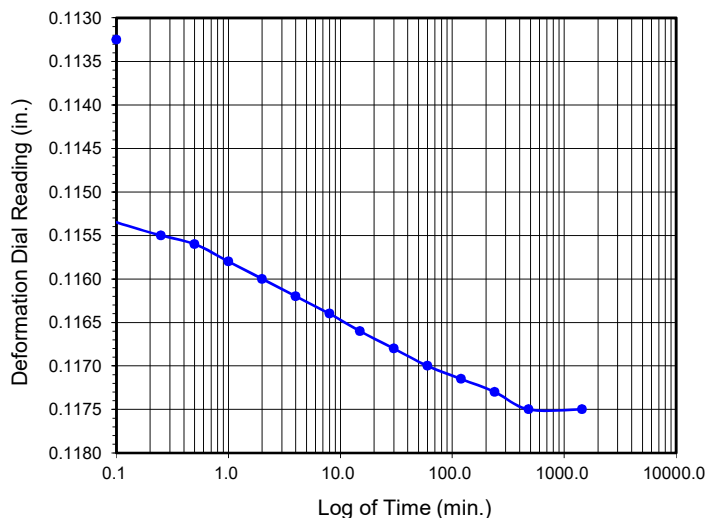
Sample Diameter (in.):	2.415
Sample Thickness (in.):	1.000
Weight of Sample + ring (g):	200.56
Weight of Ring (g):	45.29
Height after consol. (in.):	0.9660
Before Test	
Wt. of Wet Sample+Cont. (g):	190.14
Wt. of Dry Sample+Cont. (g):	180.67
Weight of Container (g):	61.67
Initial Moisture Content (%)	8.0
Initial Dry Density (pcf)	119.6
Initial Saturation (%):	53
Initial Vertical Reading (in.)	0.1024
After Test	
Wt. of Wet Sample+Cont. (g):	273.35
Wt. of Dry Sample+Cont. (g):	256.13
Weight of Container (g):	67.16
Final Moisture Content (%)	11.98
Final Dry Density (pcf):	123.7
Final Saturation (%):	89
Final Vertical Reading (in.)	0.1399
Specific Gravity (assumed):	2.70
Water Density (pcf):	62.43



Pressure (p) (ksf)	Final Reading (in.)	Apparent Thickness (in.)	Load Compliance (%)	Deformation % of Sample Thickness	Void Ratio	Corrected Deformation (%)
0.10	0.1026	0.9998	0.00	0.02	0.409	0.02
0.25	0.1059	0.9965	0.05	0.35	0.405	0.30
0.50	0.1081	0.9943	0.13	0.57	0.403	0.44
1.00	0.1114	0.9910	0.22	0.90	0.400	0.68
2.00	0.1144	0.9880	0.34	1.20	0.397	0.86
2.00	0.1133	0.9892	0.34	1.09	0.399	0.75
4.00	0.1175	0.9849	0.48	1.51	0.395	1.03
8.00	0.1283	0.9742	0.64	2.59	0.382	1.95
16.00	0.1566	0.9458	0.86	5.42	0.345	4.56
4.00	0.1523	0.9502	0.61	4.98	0.348	4.37
1.00	0.1464	0.9560	0.46	4.40	0.354	3.94
0.25	0.1399	0.9625	0.35	3.75	0.361	3.40

Time Readings @ 4 ksf				
Date	Time	Elapsed Time (min)	Square Root of Time	Dial Rdgs. (in.)
5/26/22	8:00:00	0.0	0.0	0.1133
5/26/22	8:00:06	0.1	0.3	0.1154
5/26/22	8:00:15	0.2	0.5	0.1155
5/26/22	8:00:30	0.5	0.7	0.1156
5/26/22	8:01:00	1.0	1.0	0.1158
5/26/22	8:02:00	2.0	1.4	0.1160
5/26/22	8:04:00	4.0	2.0	0.1162
5/26/22	8:08:00	8.0	2.8	0.1164
5/26/22	8:15:00	15.0	3.9	0.1166
5/26/22	8:30:00	30.0	5.5	0.1168
5/26/22	9:00:00	60.0	7.7	0.1170
5/26/22	10:00:00	120.0	11.0	0.1172
5/26/22	12:00:00	240.0	15.5	0.1173
5/26/22	16:00:00	480.0	21.9	0.1175
5/27/22	8:00:00	1440.0	37.9	0.1175

Time Readings @ 4 ksf



Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
LB-2	B-1	0-5	8.0	12.0	119.6	123.7	0.409	0.361	53	89

Soil Identification: Yellowish brown clayey sand (SC)



**ONE-DIMENSIONAL CONSOLIDATION
PROPERTIES of SOILS**
ASTM D 2435

Project No.: 13335.002

The Quarry - Corona

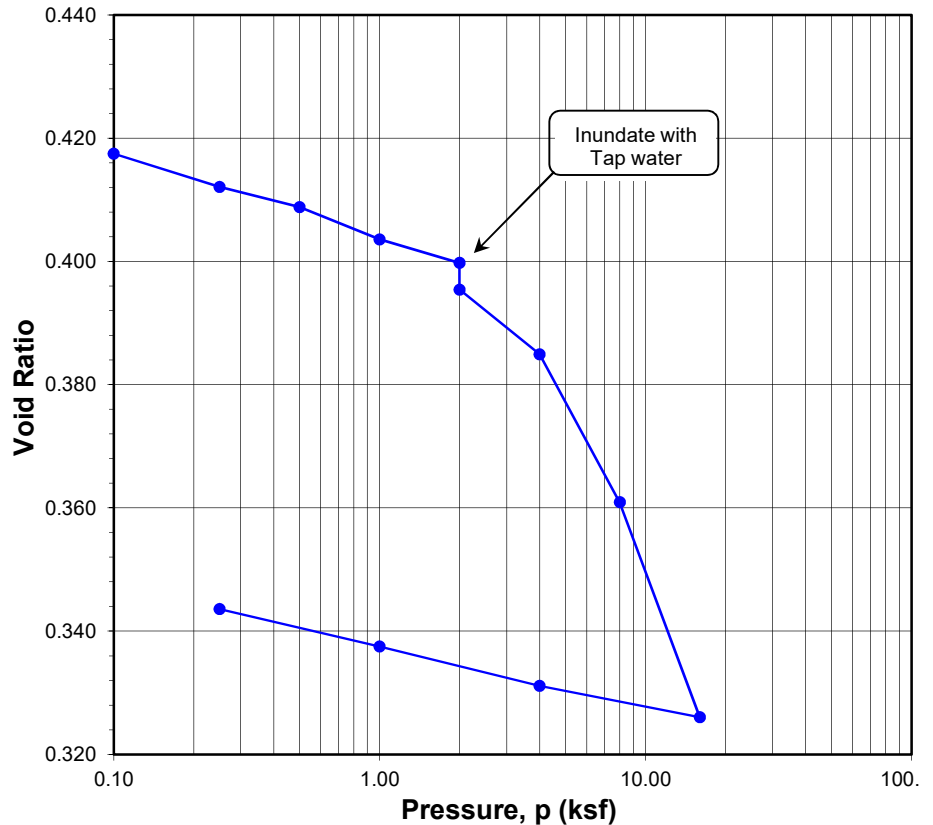


**ONE-DIMENSIONAL CONSOLIDATION
PROPERTIES of SOILS
ASTM D 2435**

Project Name: The Quarry - Corona
 Project No.: 13335.002
 Boring No.: LB-2
 Sample No.: R-2
 Soil Identification: Brown clayey sand (SC)

Tested By: G. Bathala Date: 05/18/22
 Checked By: J. Ward Date: 06/14/22
 Depth (ft.): 5.0
 Sample Type: Ring

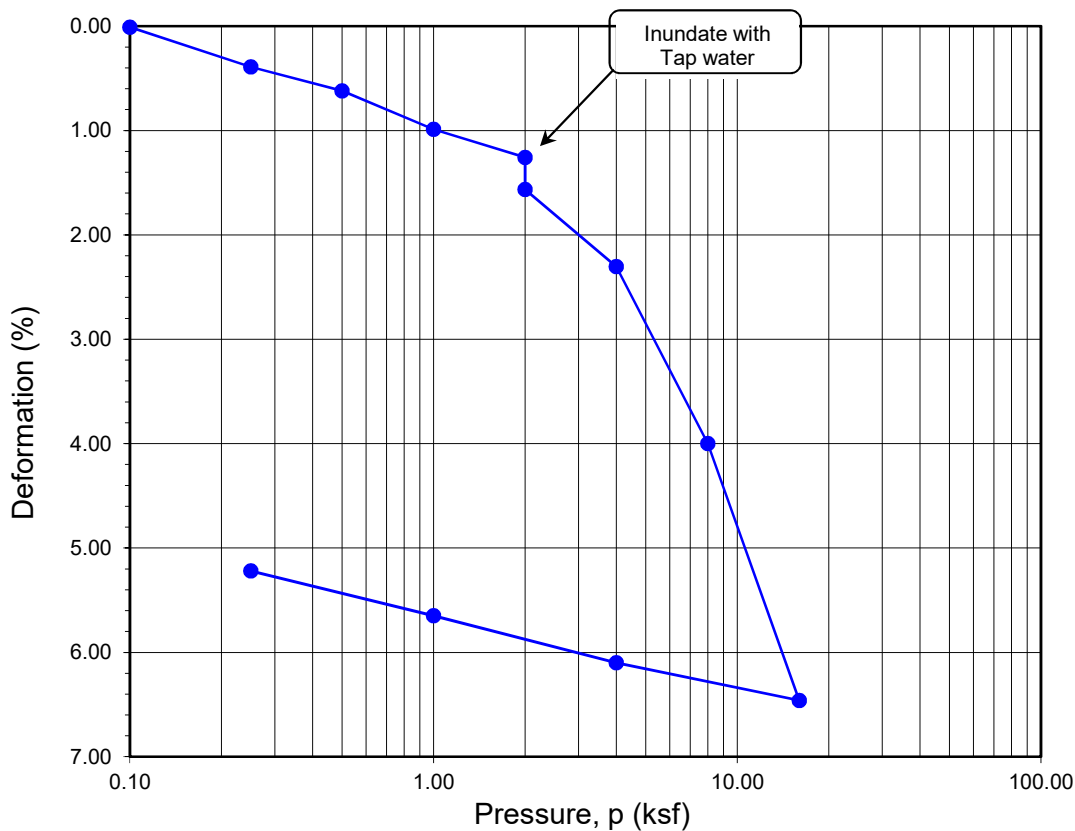
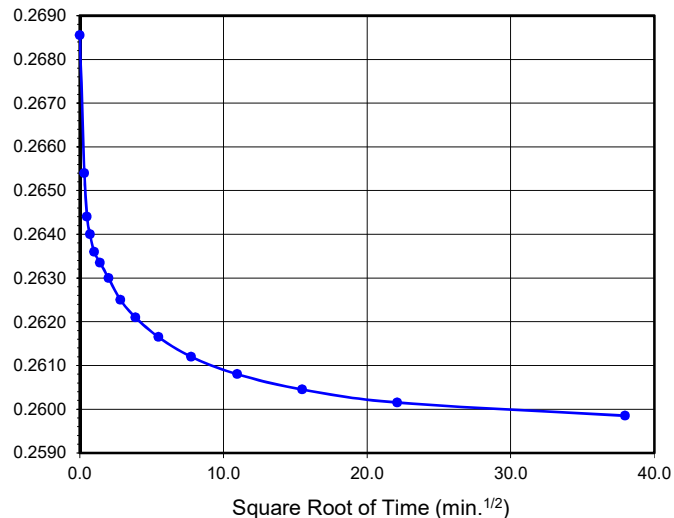
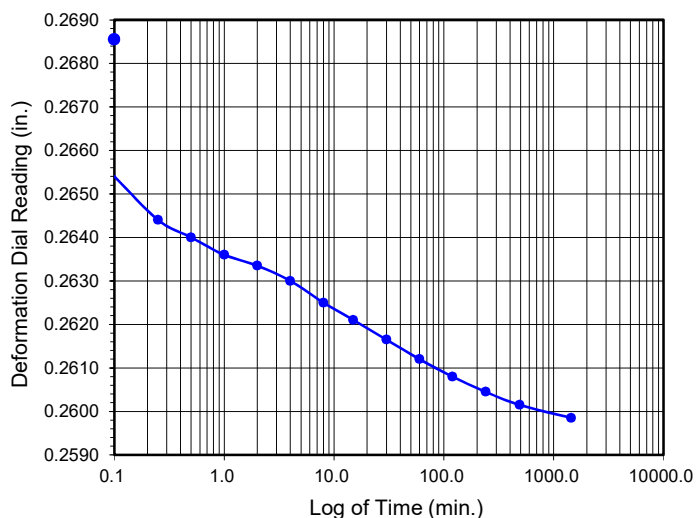
Sample Diameter (in.)	2.415
Sample Thickness (in.)	1.000
Wt. of Sample + Ring (g)	200.27
Weight of Ring (g)	45.51
Height after consol. (in.)	0.9478
Before Test	
Wt. Wet Sample+Cont. (g)	211.70
Wt. of Dry Sample+Cont. (g)	200.73
Weight of Container (g)	67.68
Initial Moisture Content (%)	8.2
Initial Dry Density (pcf)	118.9
Initial Saturation (%)	53
Initial Vertical Reading (in.)	0.2875
After Test	
Wt. of Wet Sample+Cont. (g)	264.57
Wt. of Dry Sample+Cont. (g)	247.92
Weight of Container (g)	60.89
Final Moisture Content (%)	11.77
Final Dry Density (pcf)	124.2
Final Saturation (%)	89
Final Vertical Reading (in.)	0.2316
Specific Gravity (assumed)	2.70
Water Density (pcf)	62.43



Pressure (p) (ksf)	Final Reading (in.)	Apparent Thickness (in.)	Load Compliance (%)	Deformation % of Sample Thickness	Void Ratio	Corrected Deformation (%)
0.10	0.2874	0.9999	0.00	0.01	0.417	0.01
0.25	0.2829	0.9954	0.07	0.46	0.412	0.39
0.50	0.2800	0.9925	0.13	0.75	0.409	0.62
1.00	0.2755	0.9880	0.21	1.20	0.404	0.99
2.00	0.2716	0.9841	0.33	1.59	0.400	1.26
2.00	0.2686	0.9811	0.33	1.90	0.395	1.57
4.00	0.2599	0.9724	0.46	2.77	0.385	2.31
8.00	0.2411	0.9536	0.64	4.64	0.361	4.00
16.00	0.2143	0.9268	0.86	7.32	0.326	6.46
4.00	0.2197	0.9322	0.68	6.78	0.331	6.10
1.00	0.2260	0.9385	0.50	6.15	0.338	5.65
0.25	0.2316	0.9441	0.37	5.59	0.344	5.22

Time Readings @ 4 ksf				
Date	Time	Elapsed Time (min)	Square Root of Time	Dial Rdgs. (in.)
5/23/22	8:03:00	0.0	0.0	0.2686
5/23/22	8:03:06	0.1	0.3	0.2654
5/23/22	8:03:15	0.2	0.5	0.2644
5/23/22	8:03:30	0.5	0.7	0.2640
5/23/22	8:04:00	1.0	1.0	0.2636
5/23/22	8:05:00	2.0	1.4	0.2634
5/23/22	8:07:00	4.0	2.0	0.2630
5/23/22	8:11:00	8.0	2.8	0.2625
5/23/22	8:18:00	15.0	3.9	0.2621
5/23/22	8:33:00	30.0	5.5	0.2617
5/23/22	9:03:00	60.0	7.7	0.2612
5/23/22	10:03:00	120.0	11.0	0.2608
5/23/22	12:03:00	240.0	15.5	0.2605
5/23/22	16:12:00	489.0	22.1	0.2602
5/24/22	8:05:00	1442.0	38.0	0.2599

Time Readings @ 4 ksf



Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
LB-2	R-2	5.0	8.2	11.8	118.9	124.2	0.418	0.344	53	89

Soil Identification: Brown clayey sand (SC)



**ONE-DIMENSIONAL CONSOLIDATION
PROPERTIES of SOILS**
ASTM D 2435

Project No.: 13335.002

The Quarry - Corona

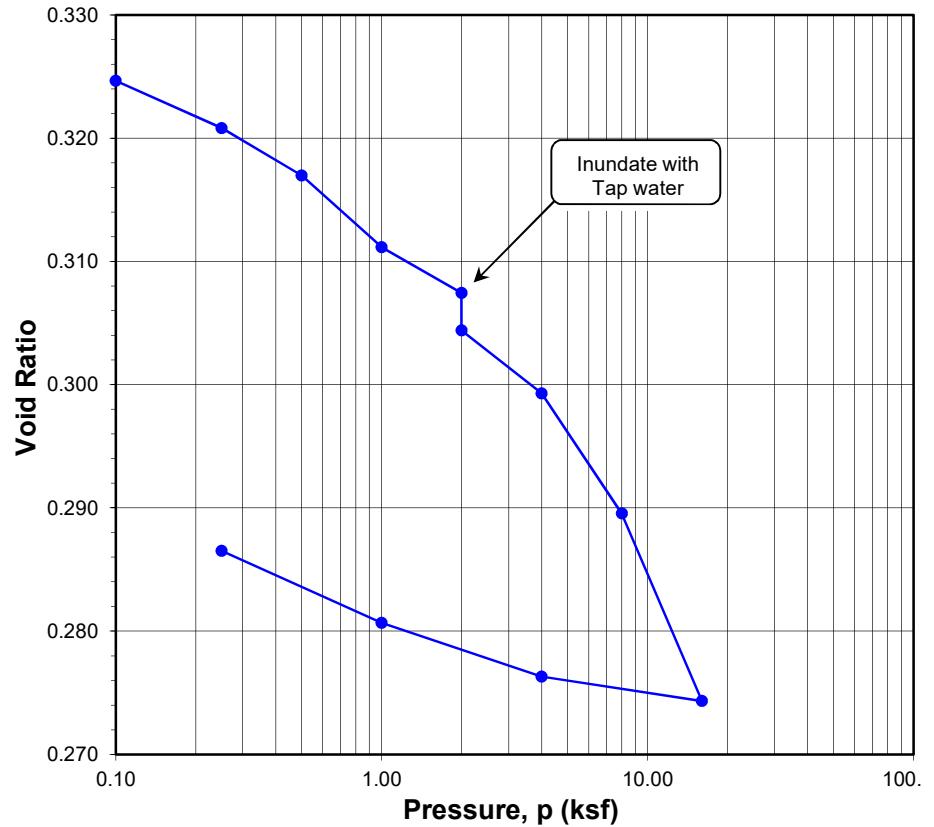


**ONE-DIMENSIONAL CONSOLIDATION
PROPERTIES of SOILS
ASTM D 2435**

Project Name: The Quarry - Corona
 Project No.: 13335.002
 Boring No.: LB-2
 Sample No.: R-4
 Soil Identification: Yellowish brown clayey sand (SC)

Tested By: G. Bathala Date: 05/18/22
 Checked By: J. Ward Date: 06/14/22
 Depth (ft.): 10.0
 Sample Type: Ring

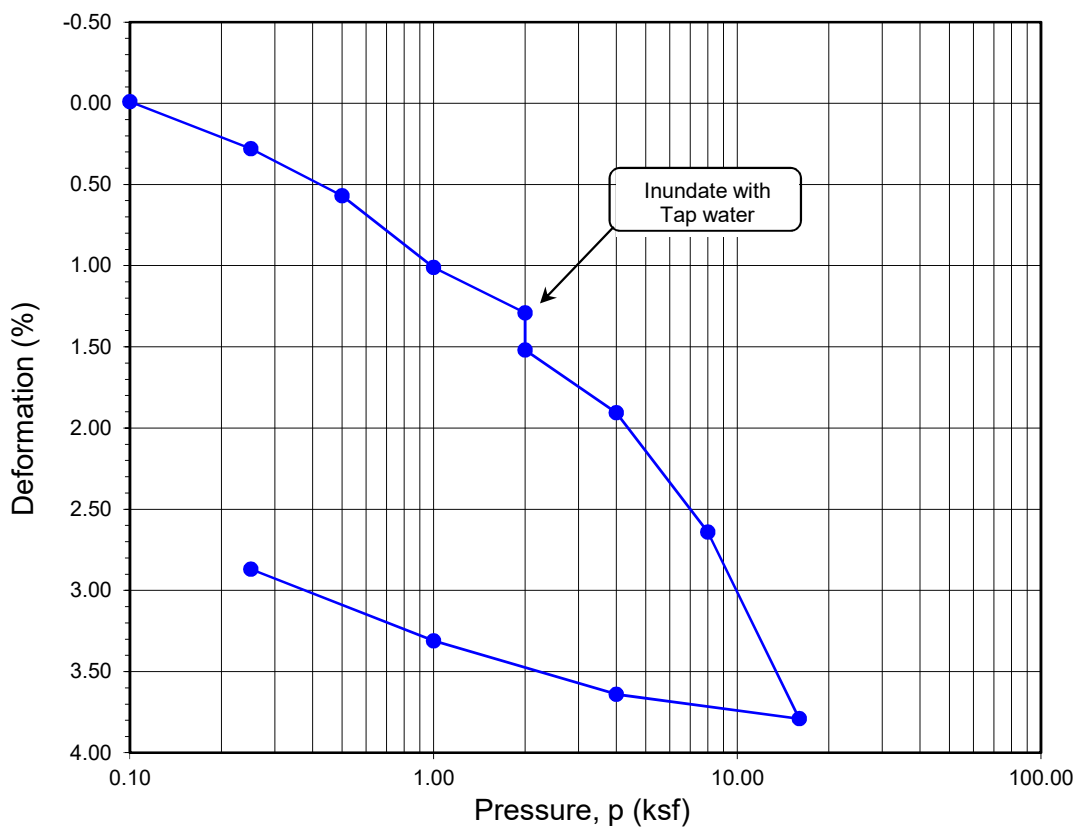
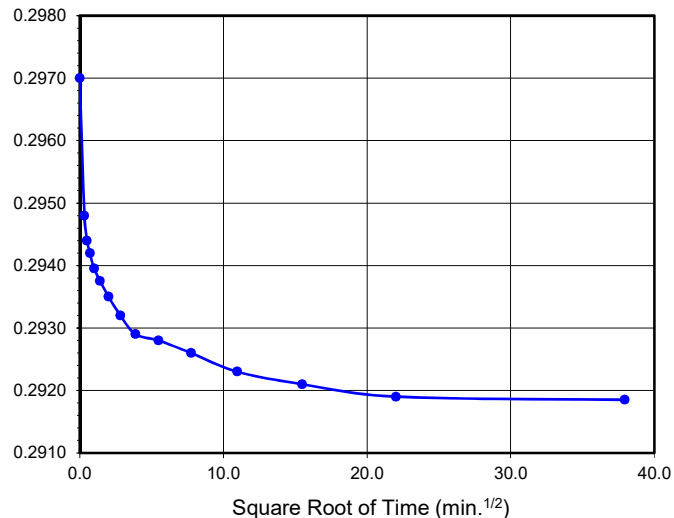
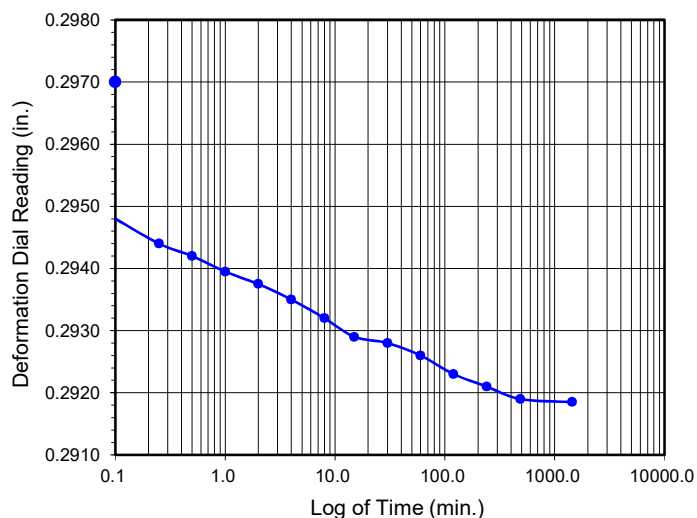
Sample Diameter (in.)	2.415
Sample Thickness (in.)	1.000
Wt. of Sample + Ring (g)	209.86
Weight of Ring (g)	45.77
Height after consol. (in.)	0.9713
Before Test	
Wt. Wet Sample+Cont. (g)	201.76
Wt. of Dry Sample+Cont. (g)	192.81
Weight of Container (g)	69.10
Initial Moisture Content (%)	7.2
Initial Dry Density (pcf)	127.3
Initial Saturation (%)	60
Initial Vertical Reading (in.)	0.3142
After Test	
Wt. of Wet Sample+Cont. (g)	268.56
Wt. of Dry Sample+Cont. (g)	253.35
Weight of Container (g)	56.65
Final Moisture Content (%)	10.08
Final Dry Density (pcf)	129.2
Final Saturation (%)	89
Final Vertical Reading (in.)	0.2822
Specific Gravity (assumed)	2.70
Water Density (pcf)	62.43



Pressure (p) (ksf)	Final Reading (in.)	Apparent Thickness (in.)	Load Compliance (%)	Deformation % of Sample Thickness	Void Ratio	Corrected Deformation (%)
0.10	0.3143	1.0001	0.00	-0.01	0.325	-0.01
0.25	0.3111	0.9969	0.03	0.31	0.321	0.28
0.50	0.3079	0.9937	0.06	0.63	0.317	0.57
1.00	0.3030	0.9888	0.11	1.12	0.311	1.01
2.00	0.2993	0.9851	0.20	1.49	0.307	1.29
2.00	0.2970	0.9828	0.20	1.72	0.304	1.52
4.00	0.2919	0.9777	0.33	2.24	0.299	1.91
8.00	0.2830	0.9688	0.48	3.12	0.290	2.64
16.00	0.2696	0.9554	0.67	4.46	0.274	3.79
4.00	0.2728	0.9586	0.50	4.14	0.276	3.64
1.00	0.2772	0.9630	0.39	3.70	0.281	3.31
0.25	0.2822	0.9680	0.33	3.20	0.287	2.87

Time Readings @ 4 ksf				
Date	Time	Elapsed Time (min)	Square Root of Time	Dial Rds. (in.)
5/23/22	8:08:00	0.0	0.0	0.2970
5/23/22	8:08:06	0.1	0.3	0.2948
5/23/22	8:08:15	0.2	0.5	0.2944
5/23/22	8:08:30	0.5	0.7	0.2942
5/23/22	8:09:00	1.0	1.0	0.2940
5/23/22	8:10:00	2.0	1.4	0.2938
5/23/22	8:12:00	4.0	2.0	0.2935
5/23/22	8:16:00	8.0	2.8	0.2932
5/23/22	8:23:00	15.0	3.9	0.2929
5/23/22	8:38:00	30.0	5.5	0.2928
5/23/22	9:08:00	60.0	7.7	0.2926
5/23/22	10:08:00	120.0	11.0	0.2923
5/23/22	12:08:00	240.0	15.5	0.2921
5/23/22	16:13:00	485.0	22.0	0.2919
5/24/22	8:08:00	1440.0	37.9	0.2919

Time Readings @ 4 ksf



Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
LB-2	R-4	10.0	7.2	10.1	127.3	129.2	0.325	0.287	60	89

Soil Identification: Yellowish brown clayey sand (SC)



**ONE-DIMENSIONAL CONSOLIDATION
PROPERTIES of SOILS**
ASTM D 2435

Project No.: 13335.002

The Quarry - Corona



**TESTS for SULFATE CONTENT
CHLORIDE CONTENT and pH of SOILS**

Project Name: The Quarry - Corona Tested By : G. Berdy Date: 06/01/22
Project No. : 13335.002 Checked By: J. Ward Date: 06/14/22

Boring No.	LB-2			
Sample No.	B-1			
Sample Depth (ft)	0-5			
Soil Identification:	Yellowish brown SC			
Wet Weight of Soil + Container (g)	0.00			
Dry Weight of Soil + Container (g)	0.00			
Weight of Container (g)	1.00			
Moisture Content (%)	0.00			
Weight of Soaked Soil (g)	100.43			

SULFATE CONTENT, DOT California Test 417, Part II

Beaker No.	15			
Crucible No.	6			
Furnace Temperature (°C)	860			
Time In / Time Out	8:45/9:30			
Duration of Combustion (min)	45			
Wt. of Crucible + Residue (g)	25.7379			
Wt. of Crucible (g)	25.7356			
Wt. of Residue (g) (A)	0.0023			
PPM of Sulfate (A) x 41150	94.64			
PPM of Sulfate, Dry Weight Basis	95			

CHLORIDE CONTENT, DOT California Test 422

ml of Extract For Titration (B)	15			
ml of AgNO ₃ Soln. Used in Titration (C)	0.7			
PPM of Chloride (C -0.2) * 100 * 30 / B	100			
PPM of Chloride, Dry Wt. Basis	100			

pH TEST, DOT California Test 643

pH Value	7.61			
Temperature °C	21.4			



SOIL RESISTIVITY TEST

DOT CA TEST 643

Project Name: The Quarry - Corona
 Project No. : 13335.002
 Boring No.: LB-2
 Sample No. : B-1

Tested By : J. Domingo Date: 06/08/22
 Checked By: J. Ward Date: 06/14/22
 Depth (ft.) : 0-5

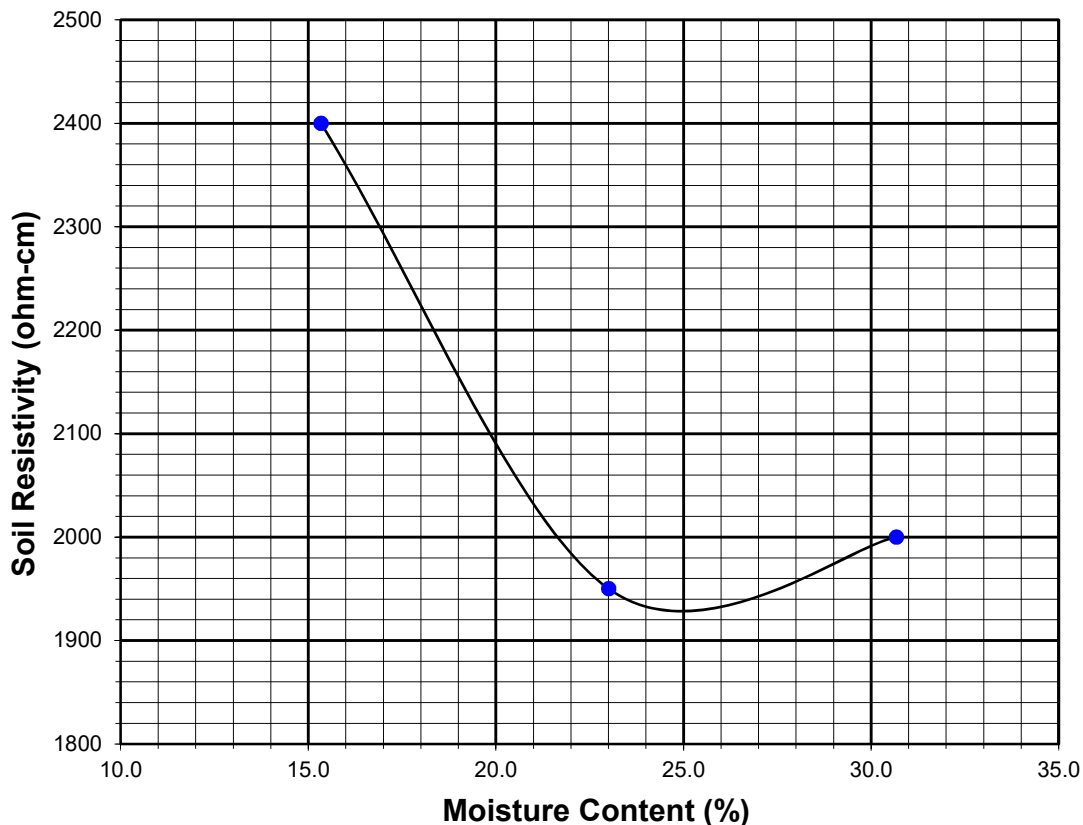
Soil Identification:* Yellowish brown SC

*California Test 643 requires soil specimens to consist only of portions of samples passing through the No. 8 US Standard Sieve before resistivity testing. Therefore, this test method may not be representative for coarser materials.

Specimen No.	Water Added (ml) (Wa)	Adjusted Moisture Content (MC)	Resistance Reading (ohm)	Soil Resistivity (ohm-cm)
1	20	15.34	2400	2400
2	30	23.01	1950	1950
3	40	30.67	2000	2000
4				
5				

Moisture Content (%) (Mci)	0.00
Wet Wt. of Soil + Cont. (g)	0.00
Dry Wt. of Soil + Cont. (g)	0.00
Wt. of Container (g)	1.00
Container No.	
Initial Soil Wt. (g) (Wt)	130.40
Box Constant	1.000
$MC = (((1 + Mci / 100) \times (Wa / Wt + 1)) - 1) \times 100$	

Min. Resistivity (ohm-cm)	Moisture Content (%)	Sulfate Content (ppm)	Chloride Content (ppm)	Soil pH	
				pH	Temp. (°C)
DOT CA Test 643		DOT CA Test 417 Part II		DOT CA Test 422	
DOT CA Test 643		DOT CA Test 643		DOT CA Test 643	
1930	25.0	95	100	7.61	21.4





DIRECT SHEAR TEST
Consolidated Drained - ASTM D 3080

Project Name: [The Quarry - Corona](#) Tested By: [G. Bathala](#) Date: [05/24/22](#)
Project No.: [13335.002](#) Checked By: [J. Ward](#) Date: [06/14/22](#)
Boring No.: [LB-2](#) Sample Type: [90% Remold](#)
Sample No.: [B-1](#) Depth (ft.): [0-5](#)
Soil Identification: [Yellowish brown clayey sand \(SC\)](#)

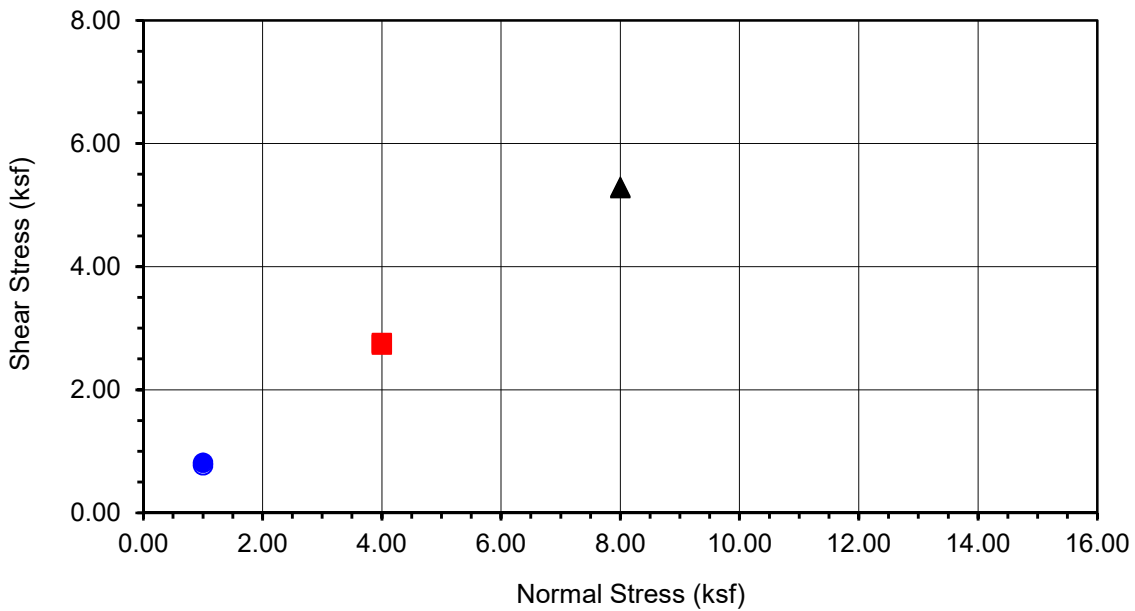
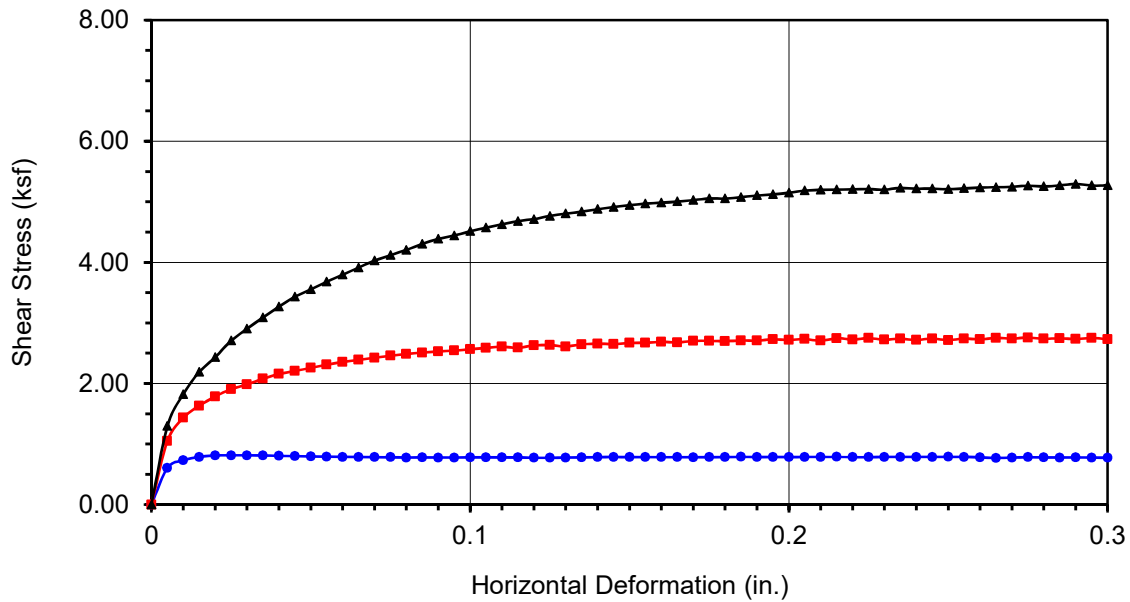
Sample Diameter(in):	2.415	2.415	2.415
Sample Thickness(in.):	1.000	1.000	1.000
Weight of Sample + ring(gm):	200.56	200.88	200.94
Weight of Ring(gm):	45.35	45.59	45.40

Before Shearing

Weight of Wet Sample+Cont.(gm):	190.14	190.14	190.14
Weight of Dry Sample+Cont.(gm):	180.67	180.67	180.67
Weight of Container(gm):	61.67	61.67	61.67
Vertical Rdg.(in): Initial	0.2578	0.2533	0.0000
Vertical Rdg.(in): Final	0.2580	0.2692	-0.0344

After Shearing

Weight of Wet Sample+Cont.(gm):	217.86	218.39	222.51
Weight of Dry Sample+Cont.(gm):	198.40	201.24	206.67
Weight of Container(gm):	56.65	60.21	65.84
Specific Gravity (Assumed):	2.70	2.70	2.70
Water Density(pcf):	62.43	62.43	62.43



Boring No.	LB-2
Sample No.	B-1
Depth (ft)	0-5
<u>Sample Type:</u>	
90% Remold	
<u>Soil Identification:</u>	
Yellowish brown clayey sand (SC)	

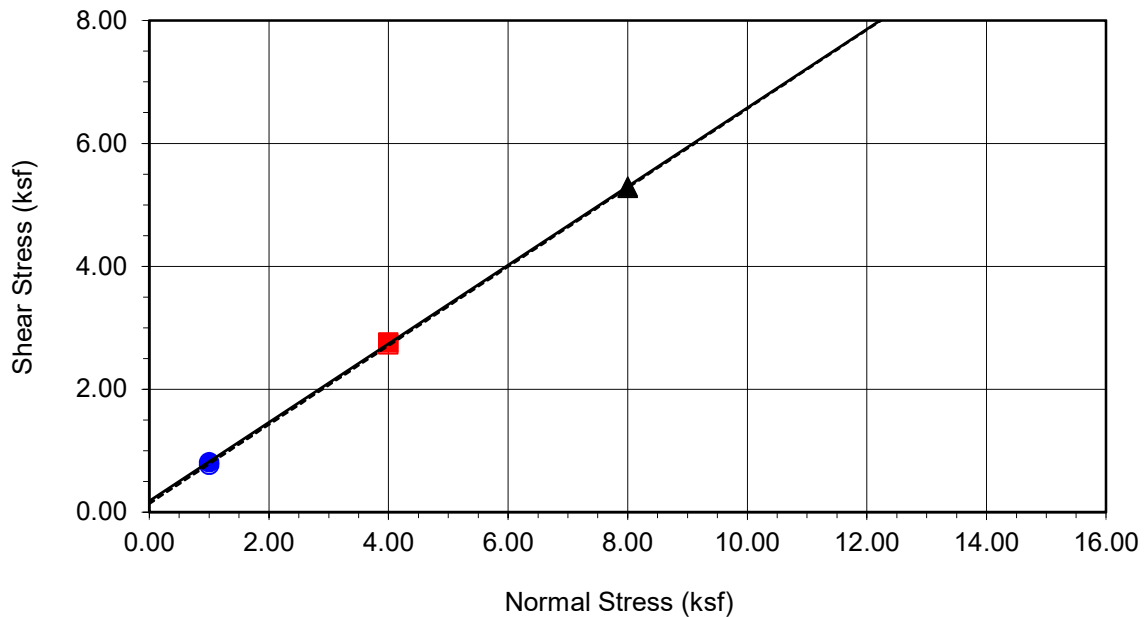
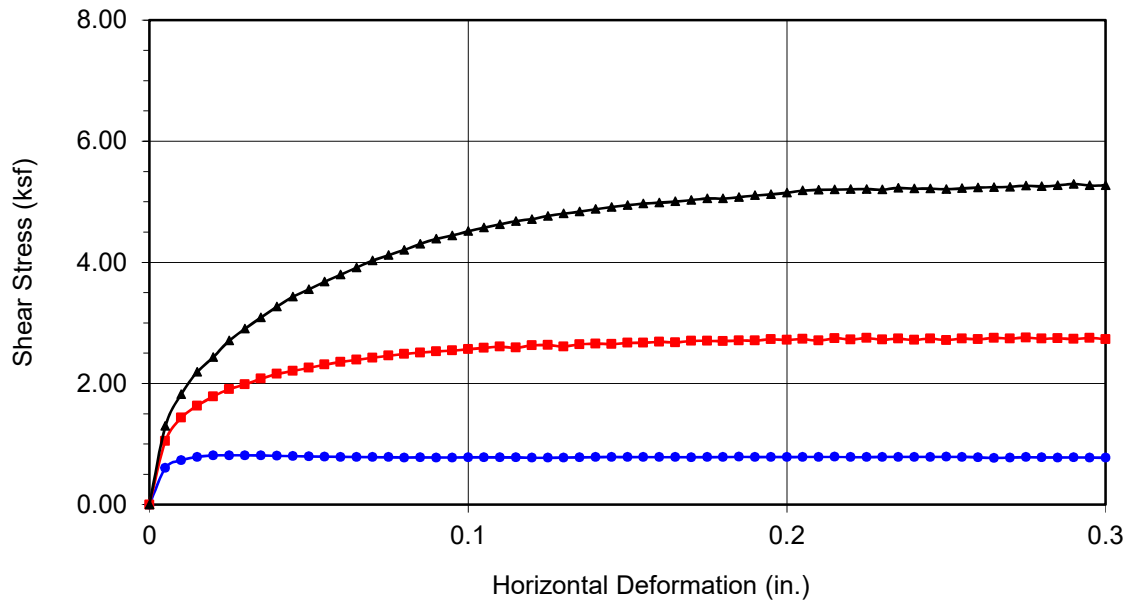
Normal Stress (kip/ft ²)	1.000	4.000	8.000
Peak Shear Stress (kip/ft ²)	● 0.814	■ 2.757	▲ 5.294
Shear Stress @ End of Test (ksf)	○ 0.773	□ 2.729	△ 5.272
Deformation Rate (in./min.)	0.0025	0.0025	0.0025
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	7.96	7.96	7.96
Dry Density (pcf)	119.6	119.6	119.8
Saturation (%)	52.4	52.5	52.8
Soil Height Before Shearing (in.)	0.9998	0.9841	0.9656
Final Moisture Content (%)	13.7	12.2	11.2



DIRECT SHEAR TEST RESULTS
Consolidated Drained - ASTM D 3080

Project No.: 13335.002

The Quarry - Corona



Boring No.	LB-2	
Sample No.	B-1	
Depth (ft)	0-5	
Sample Type: 90% Remold		
Soil Identification: Yellowish brown clayey sand (SC)		
Strength Parameters		
	C (psf)	ϕ (°)
Peak	183	33
Ultimate	141	33

Normal Stress (kip/ft ²)	1.000	4.000	8.000
Peak Shear Stress (kip/ft ²)	● 0.814	■ 2.757	▲ 5.294
Shear Stress @ End of Test (ksf)	○ 0.773	□ 2.729	△ 5.272
Deformation Rate (in./min.)	0.0025	0.0025	0.0025
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	7.96	7.96	7.96
Dry Density (pcf)	119.6	119.6	119.8
Saturation (%)	52.4	52.5	52.8
Soil Height Before Shearing (in.)	0.9998	0.9841	0.9656
Final Moisture Content (%)	13.7	12.2	11.2



DIRECT SHEAR TEST RESULTS
Consolidated Drained - ASTM D 3080

Project No.: 13335.002

The Quarry - Corona



DIRECT SHEAR TEST
Consolidated Drained - ASTM D 3080

Project Name: [The Quarry - Corona](#)

Project No.: [13335.002](#)

Boring No.: [LB-2](#)

Sample No.: [R-2](#)

Soil Identification: [Brown clayey sand \(SC\)](#)

Tested By: [G. Bathala](#)

Checked By: [J. Ward](#)

Sample Type: [Ring](#)

Depth (ft.): [5.0](#)

Date: [06/02/22](#)

Date: [06/13/22](#)

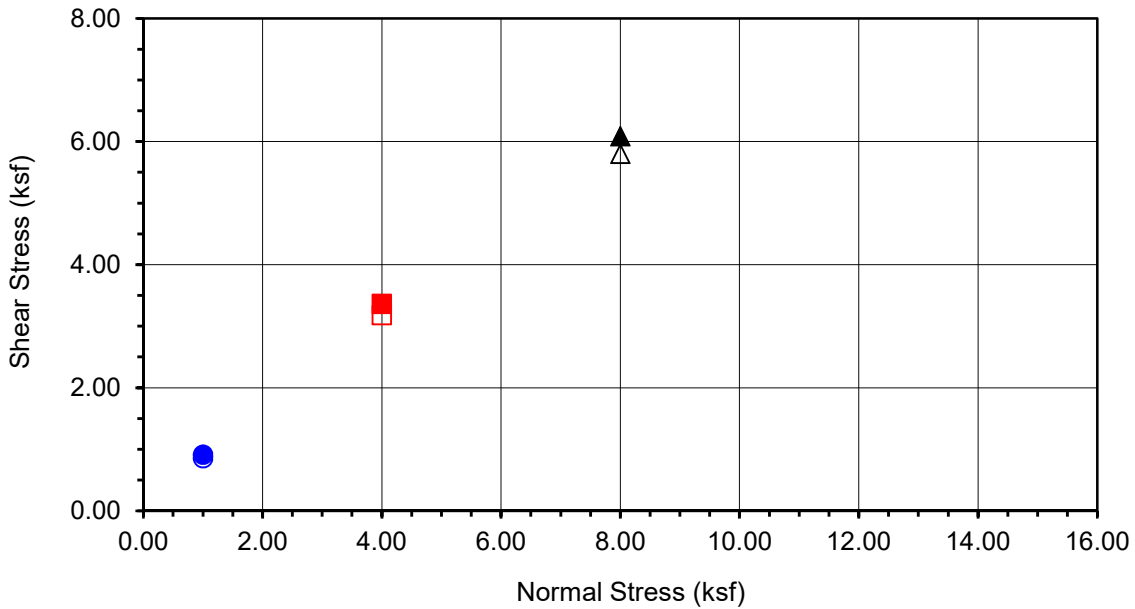
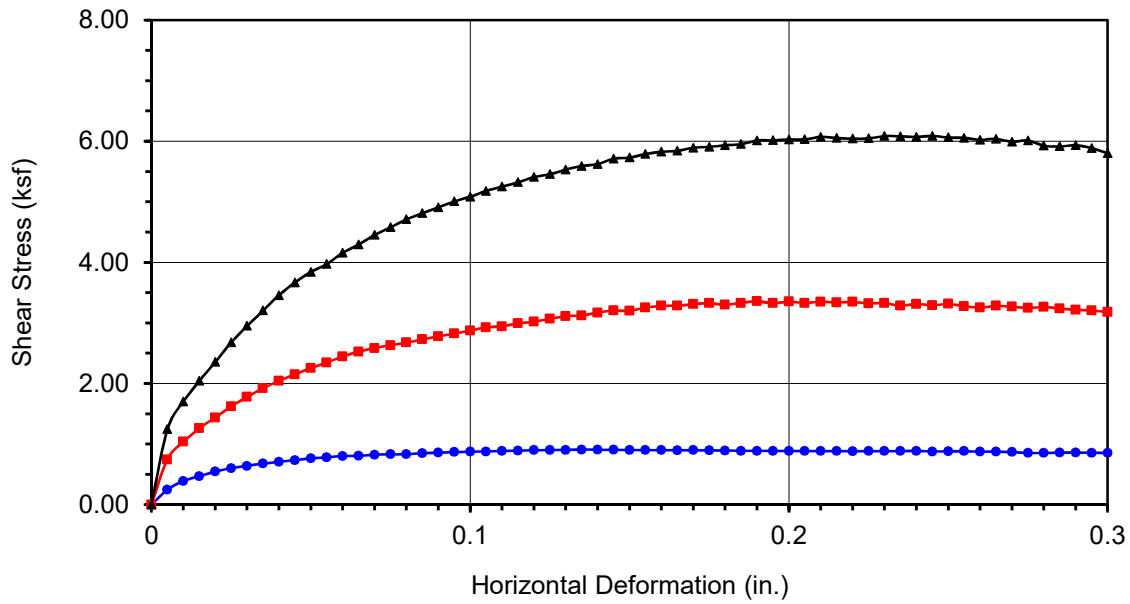
Sample Diameter(in):	2.415	2.415	2.415
Sample Thickness(in.):	1.000	1.000	1.000
Weight of Sample + ring(gm):	194.50	200.70	202.76
Weight of Ring(gm):	44.93	45.80	45.67

Before Shearing

Weight of Wet Sample+Cont.(gm):	211.70	211.70	211.70
Weight of Dry Sample+Cont.(gm):	200.73	200.73	200.73
Weight of Container(gm):	67.68	67.68	67.68
Vertical Rdg.(in): Initial	0.2478	0.2264	0.0000
Vertical Rdg.(in): Final	0.2608	0.2714	-0.0588

After Shearing

Weight of Wet Sample+Cont.(gm):	191.96	216.01	213.06
Weight of Dry Sample+Cont.(gm):	173.52	199.78	197.43
Weight of Container(gm):	39.58	61.74	57.48
Specific Gravity (Assumed):	2.70	2.70	2.70
Water Density(pcf):	62.43	62.43	62.43



Boring No.	LB-2
Sample No.	R-2
Depth (ft)	5
<u>Sample Type:</u>	
Ring	
<u>Soil Identification:</u>	
Brown clayey sand (SC)	

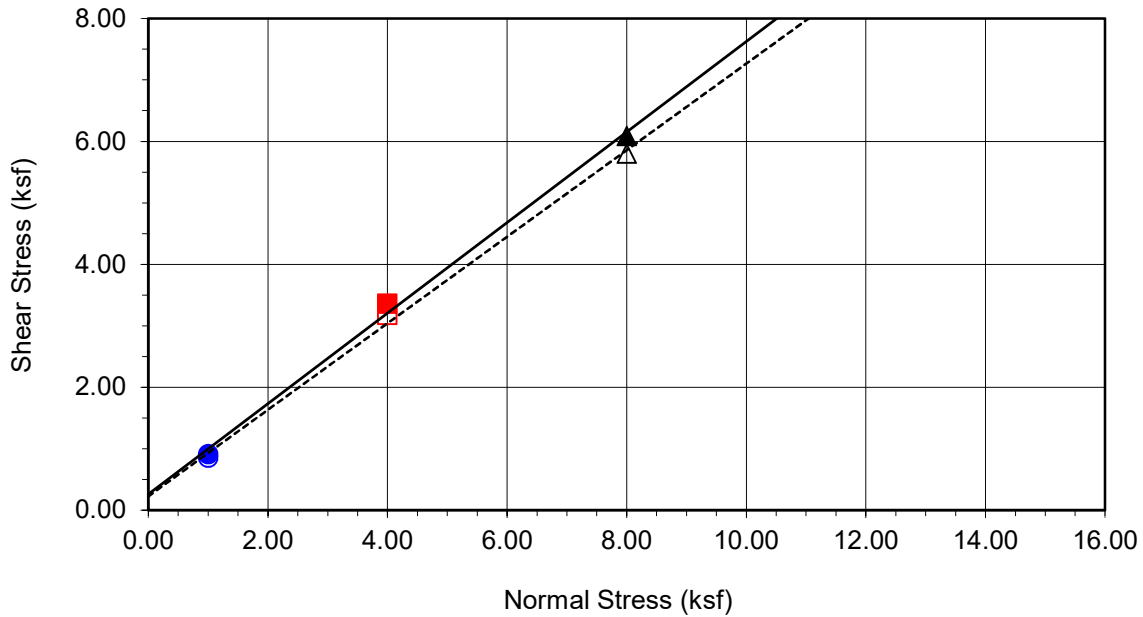
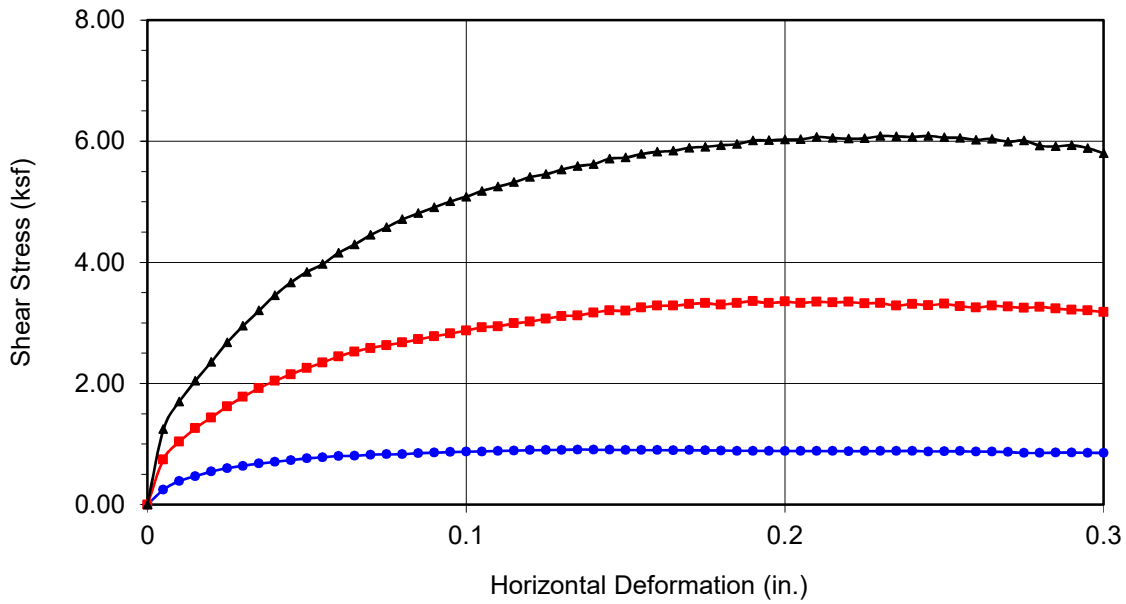
Normal Stress (kip/ft ²)	1.000	4.000	8.000
Peak Shear Stress (kip/ft ²)	● 0.909	■ 3.358	▲ 6.086
Shear Stress @ End of Test (ksf)	○ 0.852	□ 3.178	△ 5.800
Deformation Rate (in./min.)	0.0025	0.0025	0.0025
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	8.25	8.25	8.25
Dry Density (pcf)	114.9	119.0	120.7
Saturation (%)	47.7	53.5	56.1
Soil Height Before Shearing (in.)	0.9870	0.9550	0.9412
Final Moisture Content (%)	13.8	11.8	11.2



DIRECT SHEAR TEST RESULTS
Consolidated Drained - ASTM D 3080

Project No.: 13335.002

The Quarry - Corona



Boring No.	LB-2	
Sample No.	R-2	
Depth (ft)	5	
Sample Type:	Ring	
Soil Identification: Brown clayey sand (SC)		
Strength Parameters		
	C (psf)	ϕ (°)
Peak	260	36
Ultimate	226	35

Normal Stress (kip/ft ²)	1.000	4.000	8.000
Peak Shear Stress (kip/ft ²)	● 0.909	■ 3.358	▲ 6.086
Shear Stress @ End of Test (ksf)	○ 0.852	□ 3.178	△ 5.800
Deformation Rate (in./min.)	0.0025	0.0025	0.0025
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	8.25	8.25	8.25
Dry Density (pcf)	114.9	119.0	120.7
Saturation (%)	47.7	53.5	56.1
Soil Height Before Shearing (in.)	0.9870	0.9550	0.9412
Final Moisture Content (%)	13.8	11.8	11.2



DIRECT SHEAR TEST RESULTS
Consolidated Drained - ASTM D 3080

Project No.: 13335.002

The Quarry - Corona

06-22



DIRECT SHEAR TEST
Consolidated Drained - ASTM D 3080

Project Name: [The Quarry - Corona](#) Tested By: [G. Bathala](#) Date: [06/06/22](#)
Project No.: [13335.002](#) Checked By: [J. Ward](#) Date: [06/13/22](#)
Boring No.: [LB-2](#) Sample Type: [Ring](#)
Sample No.: [R-4](#) Depth (ft.): [10.0](#)
Soil Identification: [Yellowish brown clayey sand \(SC\)](#)

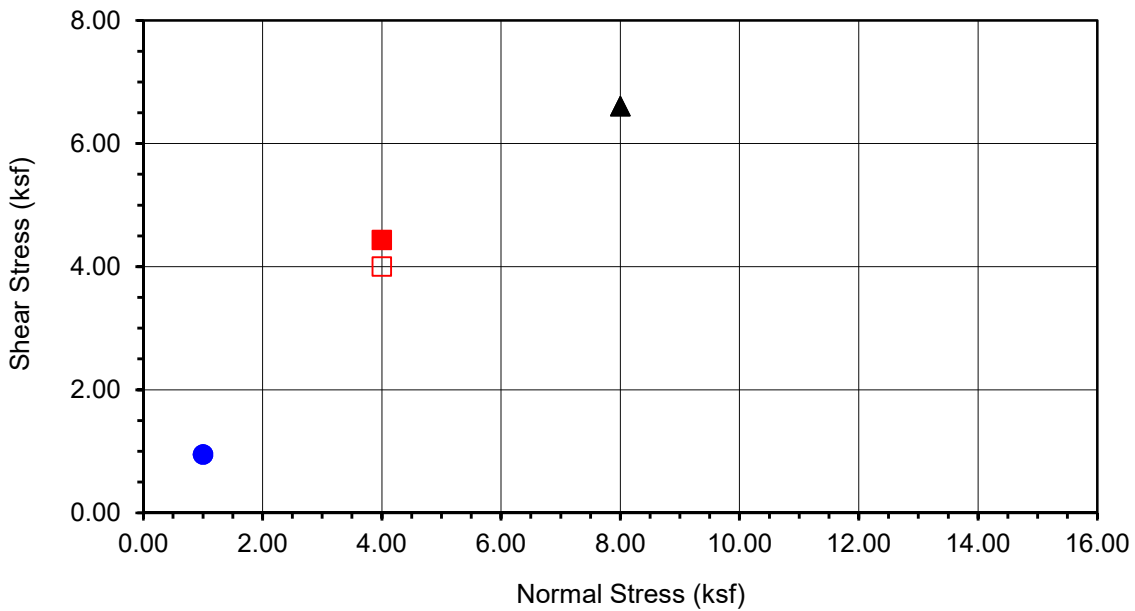
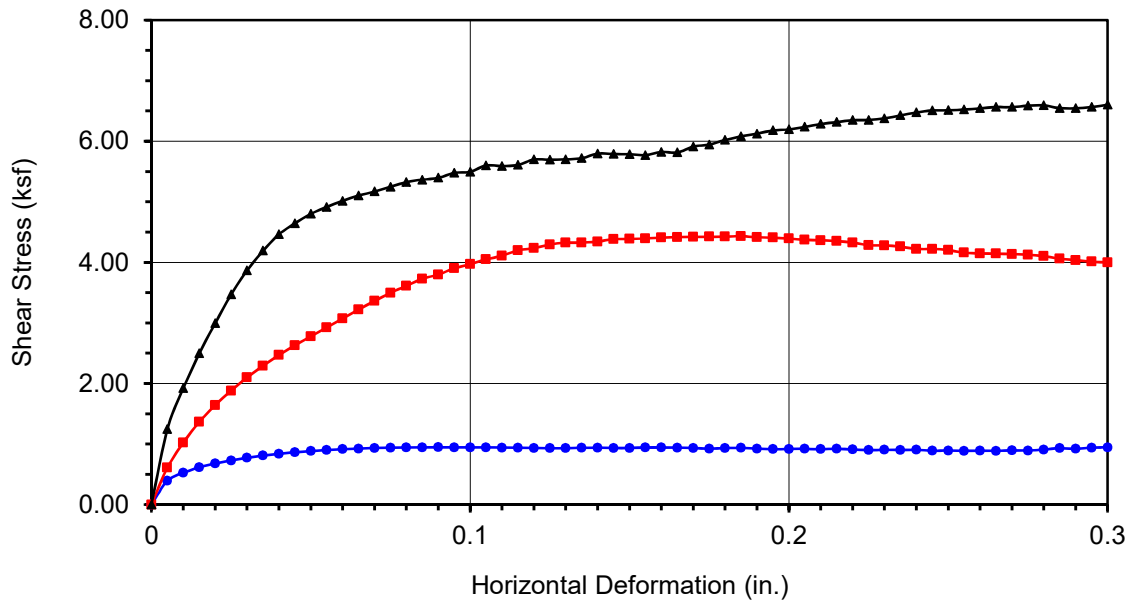
Sample Diameter(in):	2.415	2.415	2.415
Sample Thickness(in.):	1.000	1.000	1.000
Weight of Sample + ring(gm):	205.82	205.98	207.39
Weight of Ring(gm):	45.29	45.18	45.84

Before Shearing

Weight of Wet Sample+Cont.(gm):	201.76	201.76	201.76
Weight of Dry Sample+Cont.(gm):	192.81	192.81	192.81
Weight of Container(gm):	69.10	69.10	69.10
Vertical Rdg.(in): Initial	0.0000	0.2570	0.2401
Vertical Rdg.(in): Final	-0.0085	0.2818	0.2628

After Shearing

Weight of Wet Sample+Cont.(gm):	223.80	199.75	202.00
Weight of Dry Sample+Cont.(gm):	206.90	183.94	186.69
Weight of Container(gm):	60.21	38.30	39.01
Specific Gravity (Assumed):	2.70	2.70	2.70
Water Density(pcf):	62.43	62.43	62.43



Boring No.	LB-2
Sample No.	R-4
Depth (ft)	10
<u>Sample Type:</u>	
Ring	
<u>Soil Identification:</u>	
Yellowish brown clayey sand (SC)	

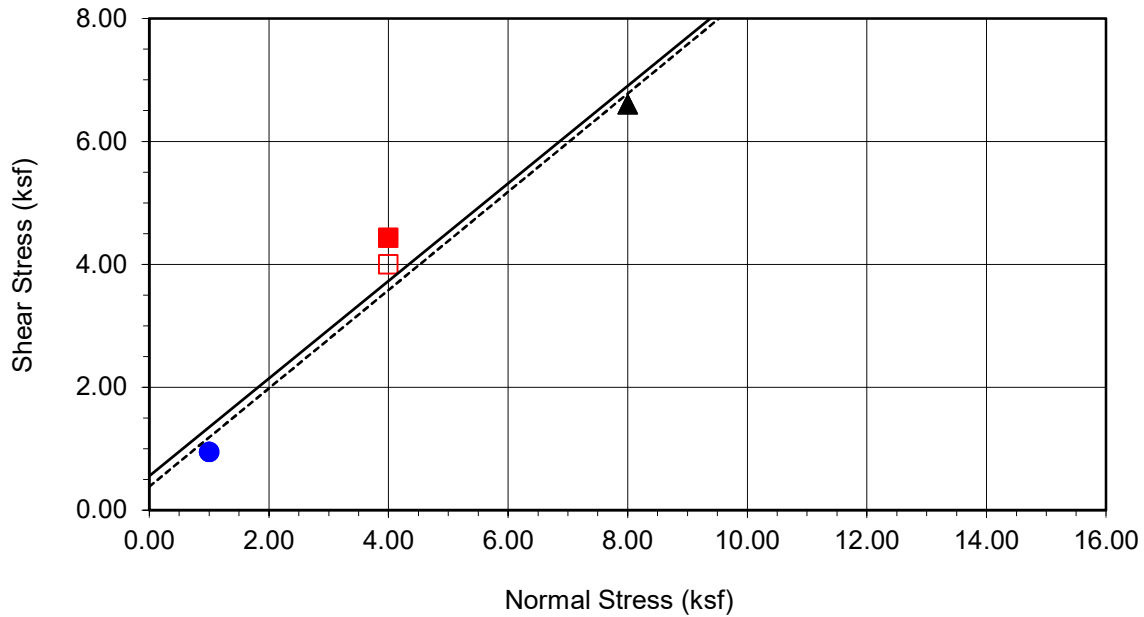
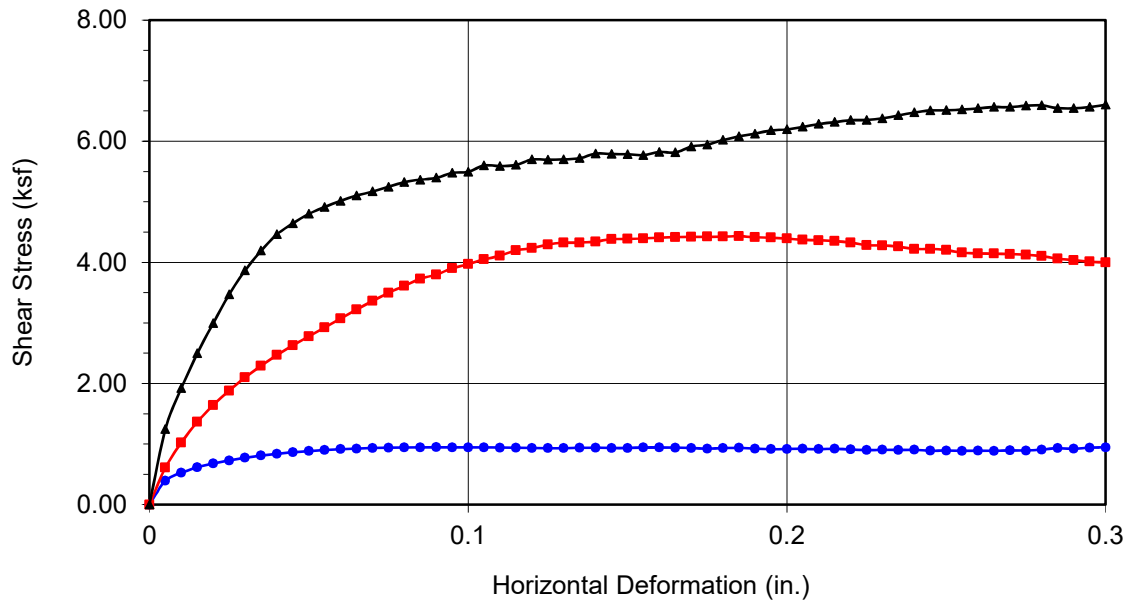
Normal Stress (kip/ft ²)	1.000	4.000	8.000
Peak Shear Stress (kip/ft ²)	● 0.949	■ 4.433	▲ 6.602
Shear Stress @ End of Test (ksf)	○ 0.946	□ 3.999	△ 6.602
Deformation Rate (in./min.)	0.0025	0.0025	0.0025
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	7.23	7.23	7.23
Dry Density (pcf)	124.5	124.7	125.3
Saturation (%)	55.2	55.6	56.6
Soil Height Before Shearing (in.)	0.9915	0.9752	0.9773
Final Moisture Content (%)	11.5	10.9	10.4



DIRECT SHEAR TEST RESULTS
Consolidated Drained - ASTM D 3080

Project No.: 13335.002

The Quarry - Corona



Boring No.	LB-2	
Sample No.	R-4	
Depth (ft)	10	
Sample Type:	Ring	
Soil Identification:		
Yellowish brown clayey sand (SC)		
Strength Parameters		
	C (psf)	ϕ (°)
Peak	557	38
Ultimate	385	39

Normal Stress (kip/ft ²)	1.000	4.000	8.000
Peak Shear Stress (kip/ft ²)	● 0.949	■ 4.433	▲ 6.602
Shear Stress @ End of Test (ksf)	○ 0.946	□ 3.999	△ 6.602
Deformation Rate (in./min.)	0.0025	0.0025	0.0025
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	7.23	7.23	7.23
Dry Density (pcf)	124.5	124.7	125.3
Saturation (%)	55.2	55.6	56.6
Soil Height Before Shearing (in.)	0.9915	0.9752	0.9773
Final Moisture Content (%)	11.5	10.9	10.4



DIRECT SHEAR TEST RESULTS
Consolidated Drained - ASTM D 3080

Project No.: 13335.002

The Quarry - Corona

06-22



EXPANSION INDEX of SOILS
ASTM D 4829

Project Name: The Quarry - Corona Tested By: G. Berdy Date: 06/01/22
 Project No.: 13335.002 Checked By: J. Ward Date: 06/14/22
 Boring No.: LB-2 Depth (ft.): 0-5
 Sample No.: B-1
 Soil Identification: Yellowish brown clayey sand (SC)

Dry Wt. of Soil + Cont.	(g)	1000.00
Wt. of Container No.	(g)	0.00
Dry Wt. of Soil	(g)	1000.00
Weight Soil Retained on #4 Sieve		0.00
Percent Passing # 4		100.00

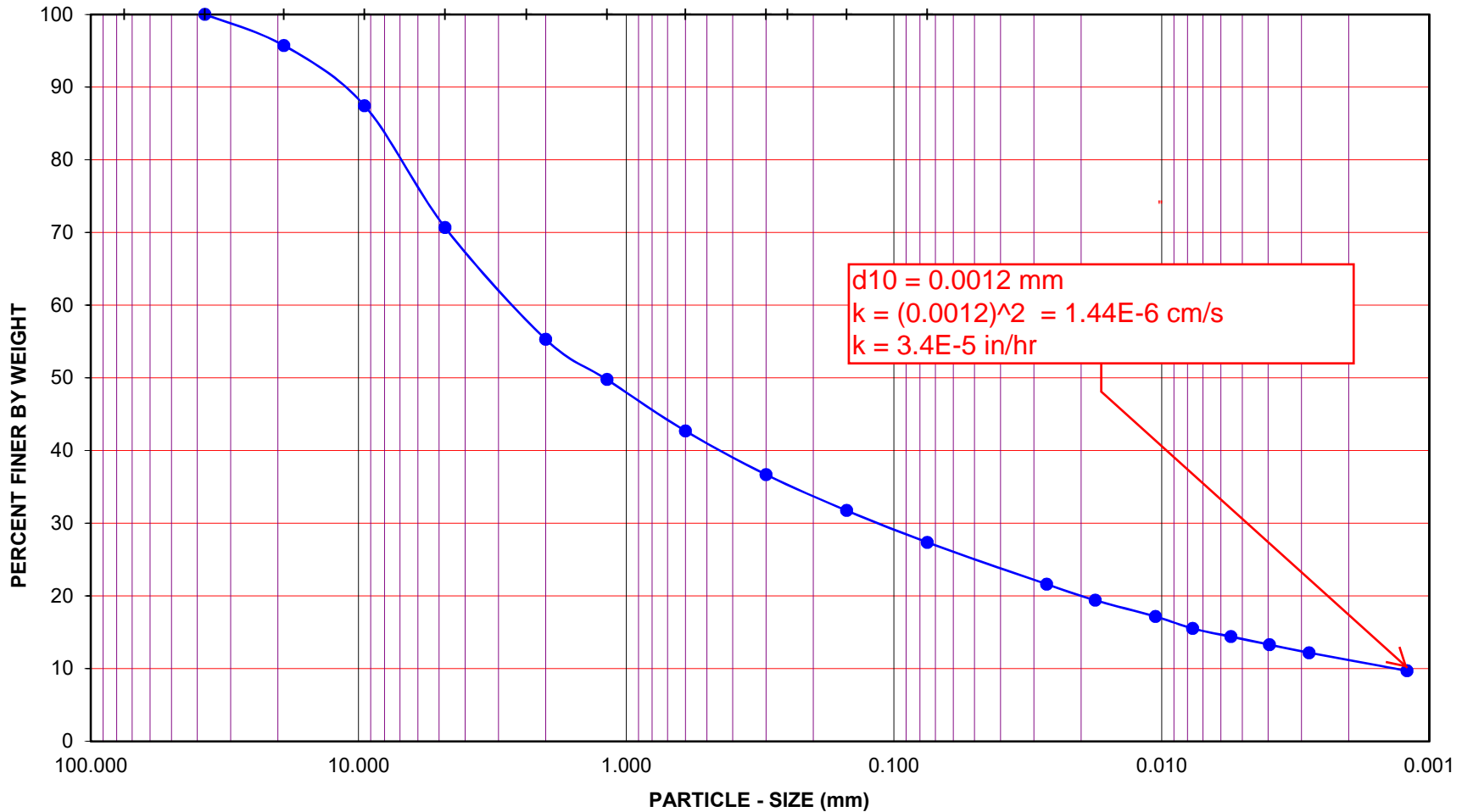
MOLDED SPECIMEN	Before Test	After Test
Specimen Diameter (in.)	4.01	4.01
Specimen Height (in.)	1.0000	1.0170
Wt. Comp. Soil + Mold (g)	614.40	460.30
Wt. of Mold (g)	180.60	0.00
Specific Gravity (Assumed)	2.70	2.70
Container No.	0	0
Wet Wt. of Soil + Cont. (g)	859.90	640.90
Dry Wt. of Soil + Cont. (g)	801.40	584.89
Wt. of Container (g)	0.00	180.60
Moisture Content (%)	7.30	13.85
Wet Density (pcf)	130.9	136.5
Dry Density (pcf)	122.0	119.9
Void Ratio	0.382	0.406
Total Porosity	0.277	0.289
Pore Volume (cc)	57.3	60.8
Degree of Saturation (%) [S _{meas}]	51.5	92.2

SPECIMEN INUNDATION in distilled water for the period of 24 h or expansion rate < 0.0002 in./h

Date	Time	Pressure (psi)	Elapsed Time (min.)	Dial Readings (in.)
06/01/22	10:10	1.0	0	0.6040
06/01/22	10:20	1.0	10	0.6035
Add Distilled Water to the Specimen				
06/01/22	11:02	1.0	42	0.6070
06/02/22	5:39	1.0	1159	0.6210
06/02/22	8:41	1.0	1341	0.6210

Expansion Index (EI _{meas}) = ((Final Rdg - Initial Rdg) / Initial Thick.) x 1000	18
---	-----------

GRAVEL				SAND				FINES				
COARSE		FINE		CRSE	MEDIUM		FINE	SILT		CLAY		
U.S. STANDARD SIEVE OPENING				U.S. STANDARD SIEVE NUMBER				HYDROMETER				
3.0"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200		



Project Name: The Quarry - Corona

Project No.: 13335.002

Boring No.: LB-1

Sample No.: R-4

Depth (feet): 10.0

Soil Type : (SC)g

Soil Identification: Yellowish brown clayey sand with gravel (SC)g

GR:SA:FI : (%) 29 : 44 : 27



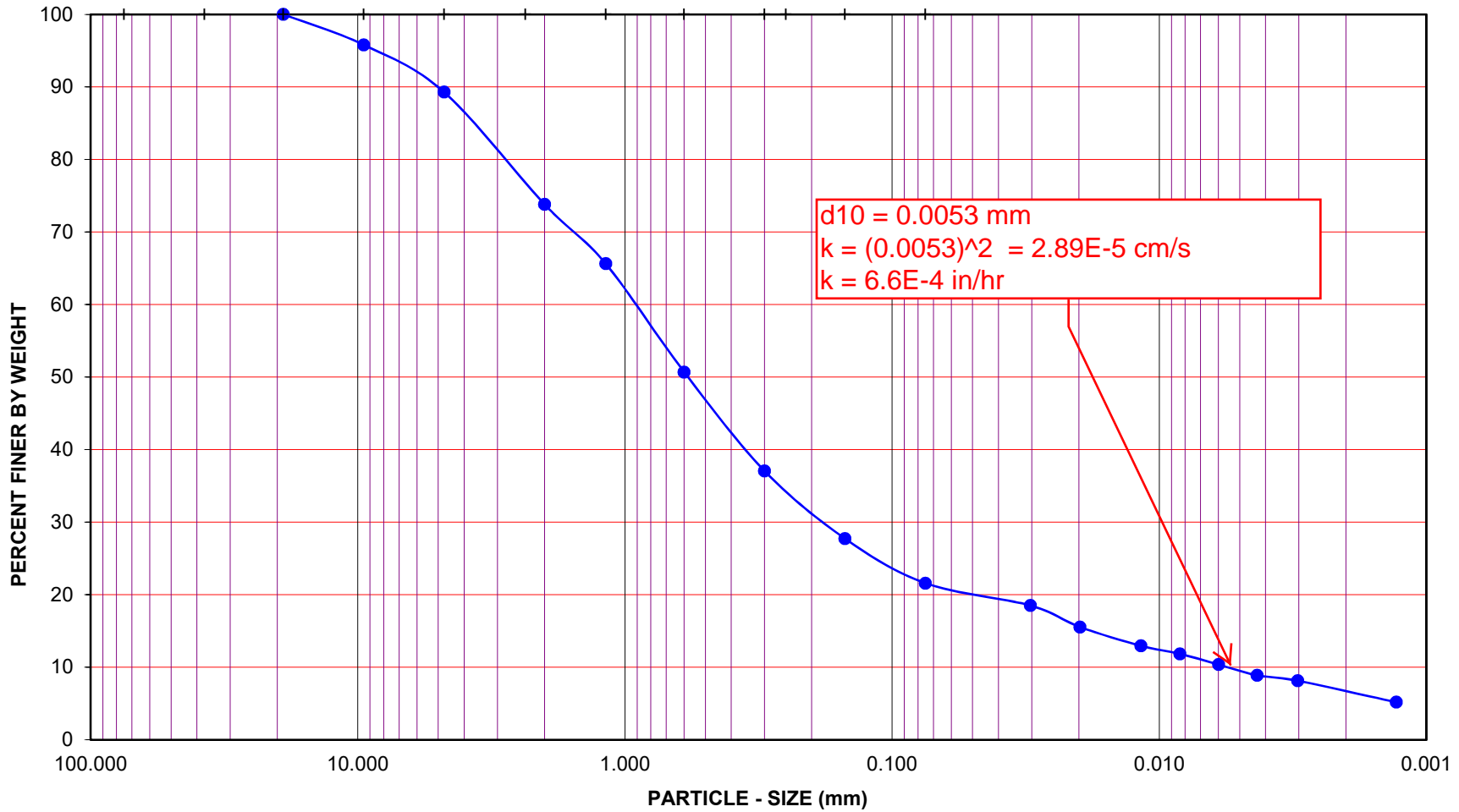
**PARTICLE - SIZE
DISTRIBUTION
ASTM D 7928 & D 6913**

Jun-22

GRAVEL				SAND				FINES			
COARSE		FINE		CRSE	MEDIUM		FINE	SILT		CLAY	

U.S. STANDARD SIEVE OPENING U.S. STANDARD SIEVE NUMBER HYDROMETER

3.0" 1 1/2" 3/4" 3/8" #4 #8 #16 #30 #50 #100 #200



Project Name: The Quarry - Corona

Project No.: 13335.002

Boring No.: LB-1

Sample No.: R-5

Depth (feet): 15.0

Soil Type : SC

Soil Identification: Yellowish brown clayey sand (SC)

GR:SA:FI : (%) 11 : 67 : 22



**PARTICLE - SIZE
DISTRIBUTION
ASTM D 7928 & D 6913**

Jun-22

GRAVEL				SAND				FINES			
COARSE		FINE		CRSE	MEDIUM		FINE	SILT		CLAY	

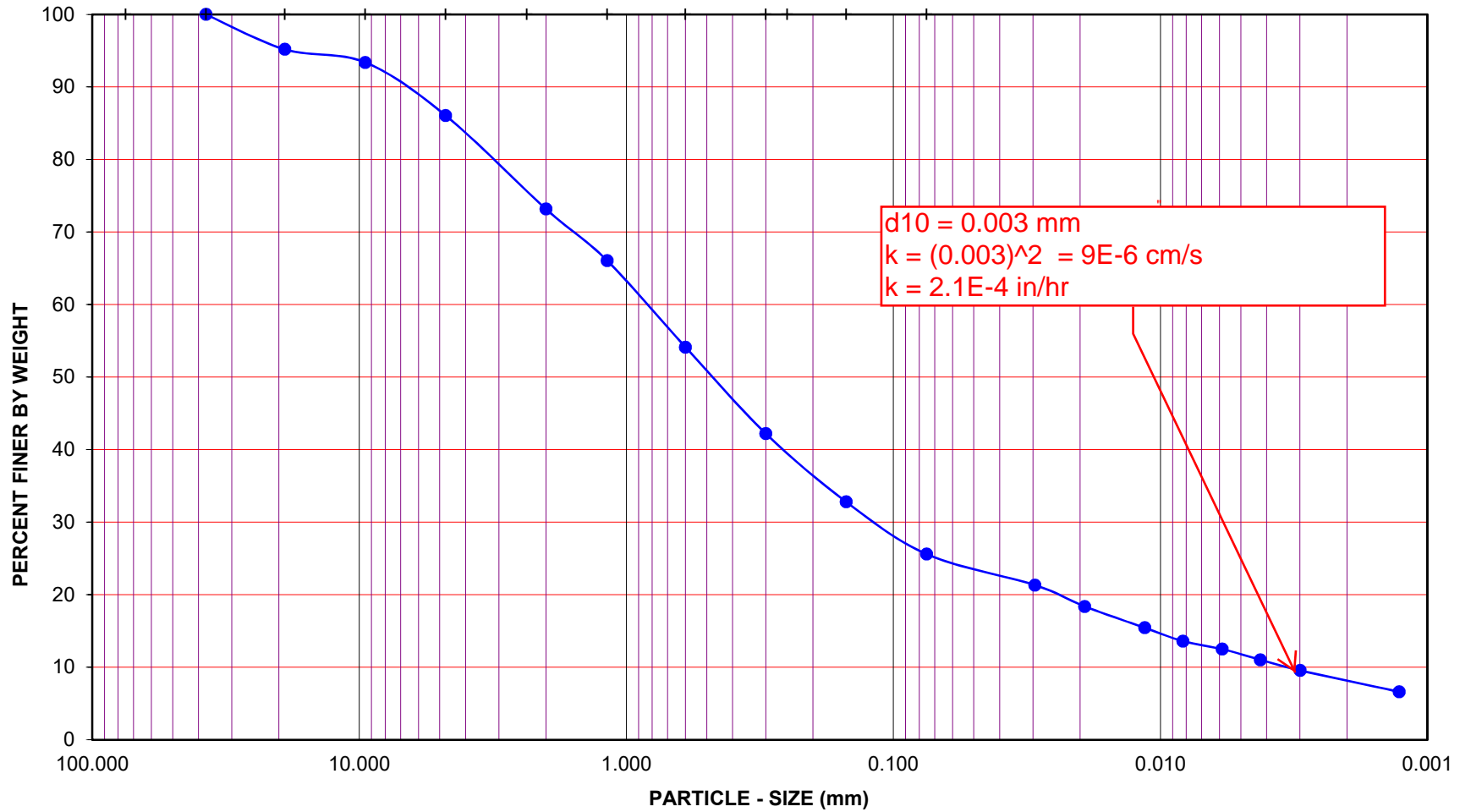
U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8"

U.S. STANDARD SIEVE NUMBER

#4 #8 #16 #30 #50 #100 #200

HYDROMETER



Project Name: The Quarry - Corona

Project No.: 13335.002

Boring No.: LB-1

Sample No.: R-6

Depth (feet): 25.0

Soil Type : SC

Soil Identification: Reddish brown clayey sand (SC)

GR:SA:FI : (%) 14 : 60 : 26



**PARTICLE - SIZE
DISTRIBUTION
ASTM D 7928 & D 6913**

Jun-22

Borehole	Depth	Liquid Limit	Plastic Limit	Plasticity Index	Maximum Size (mm)	%<#200 Sieve	Classification	Water Content (%)	Dry Density (pcf)	Saturation (%)	Void Ratio
LB-1	2.0							6.2	119.1		
LB-1	5.0							6.0	120.0		
LB-1	7.0							6.2	112.1		
LB-1	10.0							8.7	119.8		
LB-1	15.0							10.8	114.1		
LB-1	20.0							12.3			
LB-1	25.0							12.1	114.7		
LB-1	30.0							9.8			
LB-1	35.0							8.7	105.1		
LB-2	2.0							6.4	123.4		
LB-2	7.0							8.9	114.1		
LB-3	2.0							7.1	119.9		
LB-3	5.0							6.3	117.6		
LB-3	7.0							6.6	119.0		
LB-3	10.0							6.8	112.8		
LB-3	15.0							12.5			
LB-3	20.0							10.4	113.2		
LB-3	25.0							10.2			
LB-3	30.0							8.8	101.0		
LB-3	35.0							13.8			
LB-3	40.0							8.3	122.8		
LB-3	45.0							12.0			
LB-3	50.0							8.9	121.8		
LB-3	55.0							14.9			
LB-3	60.0							10.0	131.3		
LB-3	65.0							10.6			
LB-4	2.0							6.6	116.7		
LB-4	5.0							7.9	114.6		
LB-4	7.0							7.3	113.2		
LB-4	10.0							4.9			
LB-4	15.0							6.3	106.4		
LB-4	20.0							9.1			
LB-4	25.0							12.5	109.8		
LB-4	30.0							15.5			
LB-4	35.0							9.8	122.9		
LB-4	40.0							12.4			
LB-4	45.0							21.2	113.3		
LB-4	50.0							11.4			
LB-5	2.0							7.5	123.7		
LB-5	5.0							6.6	120.5		
LB-5	7.0							12.3	112.0		
LB-5	10.0							12.7	116.4		

US LAB SUMMARY 13335.002 GINT.GPJ ROCKLOG2012.GDT 6/13/22



Summary of Laboratory Results

Project Name: The Quarry - Corona
 Project Number: 13335.002
 Date: 6/13/2022 4:45:25 AM

Figure No. 1

Borehole	Depth	Liquid Limit	Plastic Limit	Plasticity Index	Maximum Size (mm)	%<#200 Sieve	Classification	Water Content (%)	Dry Density (pcf)	Saturation (%)	Void Ratio
LB-5	15.0							10.6			
LB-5	20.0							10.3			
LB-5	25.0							11.0			
LB-6	2.0							4.7	117.6		
LB-6	5.0							7.0	120.3		
LB-6	7.0							9.6	119.3		
LB-6	10.0							11.5	109.1		
LB-6	15.0							8.9	120.0		
LB-6	20.0							10.7			
LB-6	25.0							9.5	111.4		
LB-6	30.0							10.7			
LB-6	35.0							3.4	114.0		
LB-6	40.0							2.9			

US LAB SUMMARY 13335.002 GINT.GPJ ROCKLOG2012.GDT 6/13/22



Summary of Laboratory Results

Project Name: The Quarry - Corona
 Project Number: 13335.002
 Date: 6/13/2022 4:45:25 AM

Figure No. 1



MODIFIED PROCTOR COMPACTION TEST

ASTM D 1557

Project Name: The Quarry - Corona Tested By: J. Gonzalez Date: 05/20/22
 Project No.: 13335.002 Checked By: A. Santos Date: 05/23/22
 Boring No.: LB-2 Depth (ft.): 0-5
 Sample No.: B-1
 Soil Identification: Yellowish brown clayey sand (SC)

Note: Corrected dry density calculation assumes specific gravity of 2.70 and moisture content of 1.0% for oversize particles

Preparation Method:	<input checked="" type="checkbox"/>	Moist		Scalp Fraction (%)	Rammer Weight (lb.) = 10.0
		Dry		#3/4	Height of Drop (in.) = 18.0
Compaction Method:	<input checked="" type="checkbox"/>	Mechanical Ram		#3/8	
		Manual Ram		#4	Mold Volume (ft ³) = 0.03330

TEST NO.	1	2	3	4	5	6
Wt. Compacted Soil + Mold (g)	3823	3960	3931			
Weight of Mold (g)	1826	1826	1826			
Net Weight of Soil (g)	1997	2134	2105			
Wet Weight of Soil + Cont. (g)	503.2	460.5	469.5			
Dry Weight of Soil + Cont. (g)	479.9	432.1	428.8			
Weight of Container (g)	37.2	39.1	37.1			
Moisture Content (%)	5.26	7.23	10.39			
Wet Density (pcf)	132.2	141.3	139.4			
Dry Density (pcf)	125.6	131.8	126.2			

Maximum Dry Density (pcf)	132.2	Optimum Moisture Content (%)	8.0
Corrected Dry Density (pcf)	136.4	Corrected Moisture Content (%)	7.0

Procedure A
 Soil Passing No. 4 (4.75 mm) Sieve
 Mold : 4 in. (101.6 mm) diameter
 Layers : 5 (Five)
 Blows per layer : 25 (twenty-five)
 May be used if + #4 is 20% or less

Procedure B
 Soil Passing 3/8 in. (9.5 mm) Sieve
 Mold : 4 in. (101.6 mm) diameter
 Layers : 5 (Five)
 Blows per layer : 25 (twenty-five)
 Use if + #4 is >20% and +3/8 in. is 20% or less

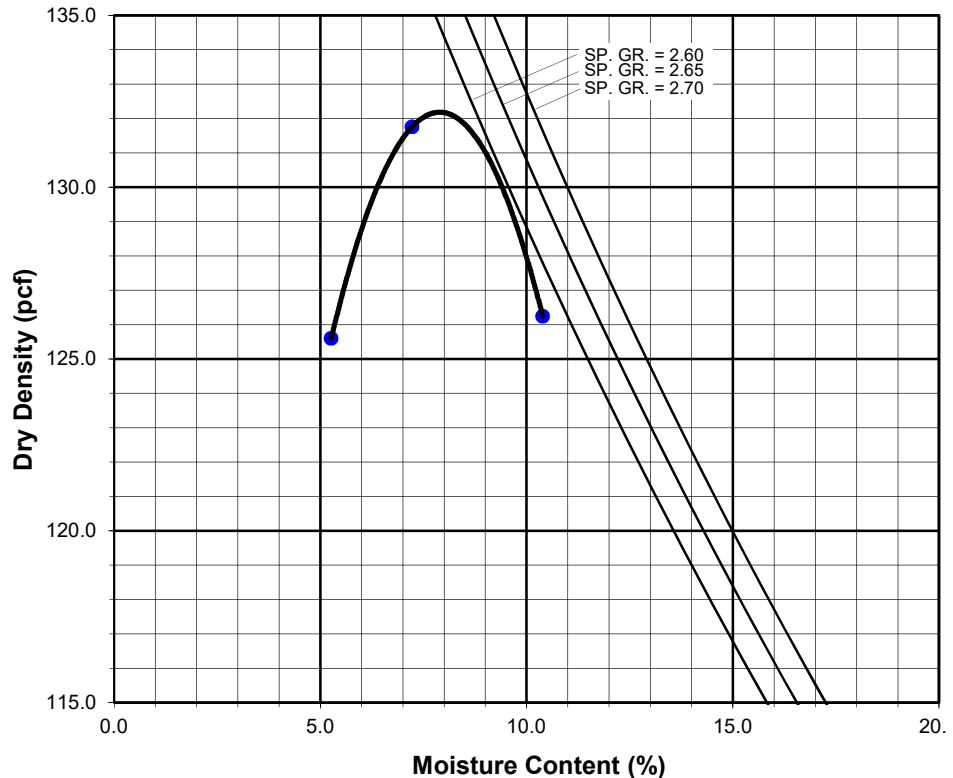
Procedure C
 Soil Passing 3/4 in. (19.0 mm) Sieve
 Mold : 6 in. (152.4 mm) diameter
 Layers : 5 (Five)
 Blows per layer : 56 (fifty-six)
 Use if +3/8 in. is >20% and +3/4 in. is <30%

Particle-Size Distribution:

GR:SA:FI

Atterberg Limits:

LL,PL,PI



Project Name: The Quarry - Corona
Project No.: 13335.002

Page 1 of 2

Summary of Pocket Penetrometer Test Results

Tested by: S. Felter Date: 05/23/22

Prepared by: J. Ward Date: 06/13/22

Boring No.	Sample No.	Depth (ft.)	Readings	Remarks
LB-1	R-1	2	>4.50	
	R-2	5	>4.50	
	R-3	7	>4.50	
	R-4	10	>4.50	
	R-5	15	>4.50	
	R-6	25	>4.50	
	R-7	35	4.50	
LB-2	R-1	2	>4.50	
	R-3	7	>4.50	
LB-3	R-1	2	>4.50	
	R-2	5	>4.50	
	R-3	7	>4.50	
	R-4	10	>4.50	
	R-5	20	>4.50	
	R-6	30	>4.50	
	R-7	40	>4.50	
	R-8	50	>4.50	
	R-9	60	>4.50	
LB-4	R-1	2	>4.50	
	R-2	5	>4.50	
	R-3	7	>4.50	
	R-5	15	>4.50	
	R-6	25	>4.50	
	R-7	35	>4.50	
	R-8	45	3.50	
	LB-5	R-1	2	>4.50
R-2		5	>4.50	
R-3		7	>4.50	
R-4		10	>4.50	

Project Name: The Quarry - Corona
Project No.: 13335.002

Page 2 of 2

Summary of Pocket Penetrometer Test Results

Tested by: S. Felter Date: 05/24/22

Prepared by: J. Ward Date: 06/13/22

Boring No.	Sample No.	Depth (ft.)	Readings	Remarks
LB-6	R-1	2	>4.50	
	R-2	5	>4.50	
	R-3	7	>4.50	
	R-4	10	>4.50	
	R-5	15	>4.50	
	R-6	25	>4.50	
	R-7	35	>4.50	

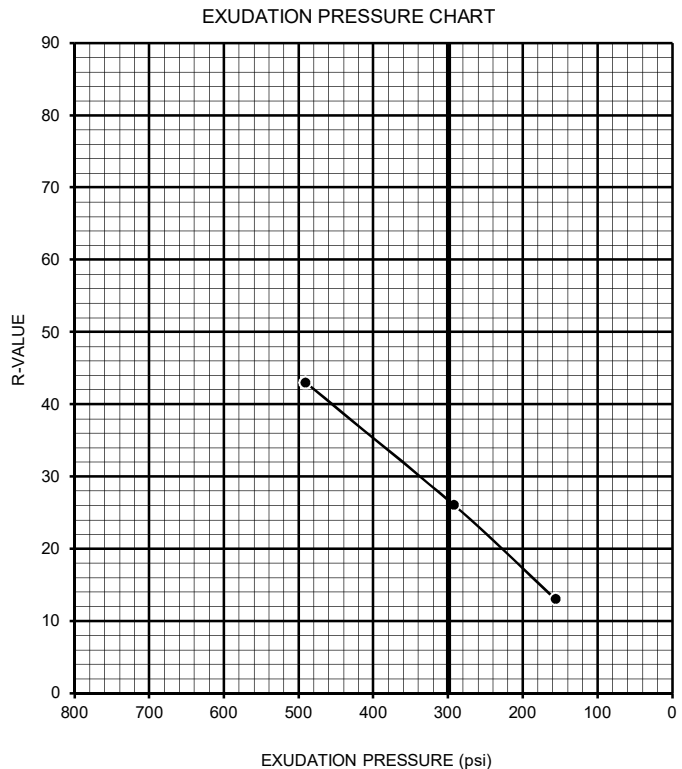
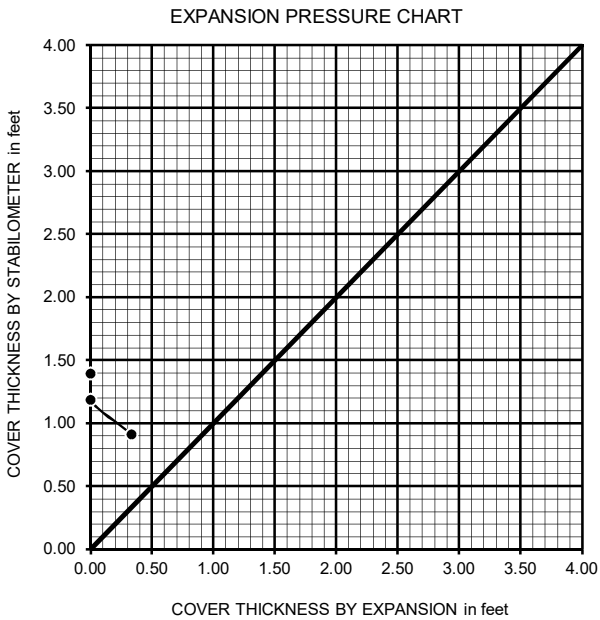


R-VALUE TEST RESULTS DOT CA Test 301

PROJECT NAME:	The Quarry - Corona	PROJECT NUMBER:	13335.002
BORING NUMBER:	LB-2	DEPTH (FT.):	0-5
SAMPLE NUMBER:	B-1	TECHNICIAN:	O. Figueroa
SAMPLE DESCRIPTION:	Yellowish brown clayey sand (SC)	DATE COMPLETED:	5/26/2022

TEST SPECIMEN	a	b	c
MOISTURE AT COMPACTION %	9.4	10.4	11.7
HEIGHT OF SAMPLE, Inches	2.41	2.49	2.50
DRY DENSITY, pcf	131.8	129.5	125.9
COMPACTOR PRESSURE, psi	150	80	50
EXUDATION PRESSURE, psi	491	292	156
EXPANSION, Inches x 10exp-4	10	0	0
STABILITY Ph 2,000 lbs (160 psi)	72	106	126
TURNS DISPLACEMENT	3.66	3.71	4.65
R-VALUE UNCORRECTED	45	26	13
R-VALUE CORRECTED	43	26	13

DESIGN CALCULATION DATA	a	b	c
GRAVEL EQUIVALENT FACTOR	1.0	1.0	1.0
TRAFFIC INDEX	5.0	5.0	5.0
STABILOMETER THICKNESS, ft.	0.91	1.18	1.39
EXPANSION PRESSURE THICKNESS, ft.	0.33	0.00	0.00



R-VALUE BY EXPANSION:	59
R-VALUE BY EXUDATION:	27
EQUILIBRIUM R-VALUE:	27



PARTICLE-SIZE ANALYSIS OF SOILS

ASTM D 7928 & D 6913

Project Name: The Quarry - Corona

Tested By: ACS/JD/GEB

Date: 05/24/22

Project No.: 13335.002

Checked By: J. Ward

Date: 06/13/22

Boring No.: LB-1

Sample No.: R-4

Depth (feet): 10.0

Soil Identification: Yellowish brown clayey sand with gravel (SC)g

% Gravel	29	Soil Type (SC)g	Moisture Content of Total Air-Dry Soil	Moisture Content of Air-Dry Soil Passing #10	After Hydrometer & Wet Sieve ret. in #200 Sieve
% Sand	44				
% Fines	27				

Specific Gravity (Assumed)	2.70	Wt. of Air-Dry Soil + Cont.(g)	0.00	122.69	
Correction for Specific Gravity	0.99	Dry Wt. of Soil + Cont. (g)	0.00	122.12	125.21
Wt. of Air-Dry Soil + Cont. (g)	624.40	Wt. of Container No. ____ (g)	1.00	66.71	74.14
Wt. of Container	103.82	Moisture Content (%)	0.00	1.03	
Dry Wt. of Soil (g)	520.58	Wt. of Dry Soil (g)			51.07

Coarse Sieve		
U.S. Sieve	Cumulative Wt. Of Dry Soil Retained (g)	% Passing
3"	0.00	100.0
1½"	0.00	100.0
¾"	22.24	95.7
⅜"	65.30	87.5
No. 4	152.53	70.7
No. 10	232.58	55.3
Pan		

Sieve after Hydrometer & Wet Sieve			
U.S. Sieve Size	Cumulative Wt. Of Dry Soil Retained (g)	% Passing	% Total Sample
No. 10	0.00	100.0	55.3
No. 16	9.93	90.0	49.8
No. 30	22.61	77.2	42.7
No. 50	33.33	66.3	36.7
No. 100	42.16	57.4	31.8
No. 200	50.00	49.5	27.4
Pan			

Hydrometer

Wt. of Air-Dry Soil (g)

100.00

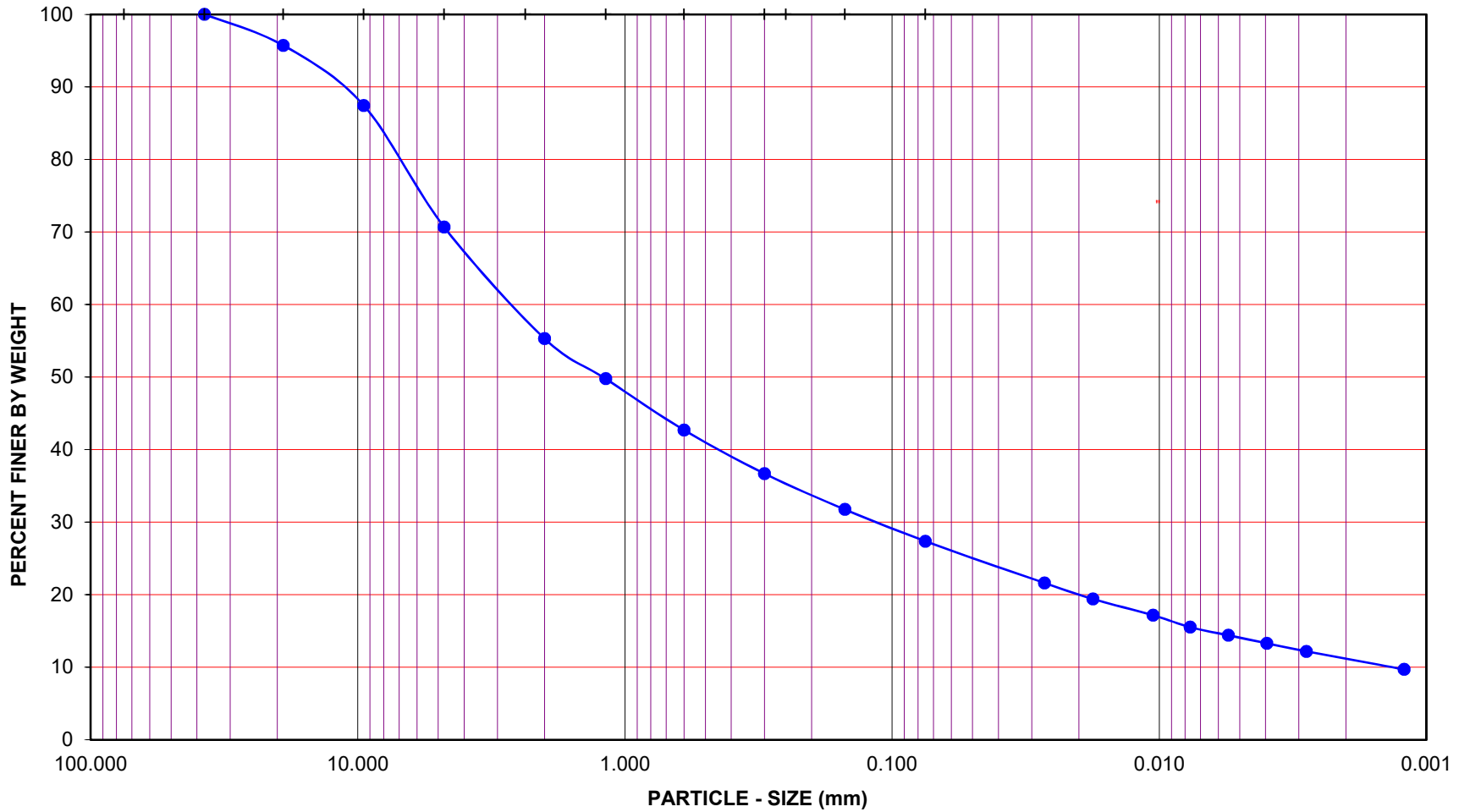
Wt. of Dry Soil (g)

98.98

Deflocculant 125 cc of 4% Solution

Date	Time	Elapsed Time (min)	Water Temperature (°C)	Composite Correction 152H	Actual Hydrometer Readings	% Total Sample (%)	Soil Particle Diameter (mm)
25-May-22	6:22	0		9.0			
	6:24	2	22.7	9.0	48.0	21.6	0.0269
	6:27	5	22.7	9.0	44.0	19.4	0.0177
	6:37	15	22.7	9.0	40.0	17.2	0.0106
	6:52	30	22.6	9.0	37.0	15.5	0.0077
	7:22	60	22.4	9.0	35.0	14.4	0.0055
	8:22	120	22.4	9.0	33.0	13.3	0.0040
	10:32	250	21.8	9.0	31.0	12.2	0.0028
26-May-22	6:22	1440	21.8	9.0	26.5	9.7	0.0012

GRAVEL				SAND				FINES				
COARSE		FINE		CRSE	MEDIUM		FINE	SILT		CLAY		
U.S. STANDARD SIEVE OPENING				U.S. STANDARD SIEVE NUMBER				HYDROMETER				
3.0"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200		



Project Name: The Quarry - Corona

Project No.: 13335.002

Boring No.: LB-1

Sample No.: R-4

Depth (feet): 10.0

Soil Type : (SC)g

Soil Identification: Yellowish brown clayey sand with gravel (SC)g

GR:SA:FI : (%) 29 : 44 : 27



**PARTICLE - SIZE
DISTRIBUTION
ASTM D 7928 & D 6913**

Jun-22



PARTICLE-SIZE ANALYSIS OF SOILS

ASTM D 7928 & D 6913

Project Name: The Quarry - Corona

Tested By: ACS/JD/GEB

Date: 05/24/22

Project No.: 13335.002

Checked By: J. Ward

Date: 06/13/22

Boring No.: LB-1

Sample No.: R-5

Depth (feet): 15.0

Soil Identification: Yellowish brown clayey sand (SC)

% Gravel	11	Soil Type SC	Moisture Content of Total Air-Dry Soil	Moisture Content of Air-Dry Soil Passing #10	After Hydrometer & Wet Sieve ret. in #200 Sieve
% Sand	67				
% Fines	22				

Specific Gravity (Assumed)	2.70	Wt. of Air-Dry Soil + Cont. (g)	0.00	86.59	
Correction for Specific Gravity	0.99	Dry Wt. of Soil + Cont. (g)	0.00	86.03	148.23
Wt. of Air-Dry Soil + Cont. (g)	620.00	Wt. of Container No. ____ (g)	1.00	57.23	76.54
Wt. of Container	96.83	Moisture Content (%)	0.00	1.94	
Dry Wt. of Soil (g)	523.17	Wt. of Dry Soil (g)			71.69

Coarse Sieve		
U.S. Sieve	Cumulative Wt. Of Dry Soil Retained (g)	% Passing
3"	0.00	100.0
1½"	0.00	100.0
¾"	0.00	100.0
⅜"	21.91	95.8
No. 4	56.04	89.3
No. 10	136.88	73.8
Pan		

Sieve after Hydrometer & Wet Sieve			
U.S. Sieve Size	Cumulative Wt. Of Dry Soil Retained (g)	% Passing	% Total Sample
No. 10	0.00	100.0	73.8
No. 16	10.98	88.9	65.6
No. 30	30.98	68.7	50.7
No. 50	49.25	50.2	37.1
No. 100	61.73	37.6	27.7
No. 200	69.95	29.3	21.6
Pan			

Hydrometer

Wt. of Air-Dry Soil (g)

100.80

Wt. of Dry Soil (g)

98.88

Deflocculant 125 cc of 4% Solution

Date	Time	Elapsed Time (min)	Water Temperature (°C)	Composite Correction 152H	Actual Hydrometer Readings	% Total Sample (%)	Soil Particle Diameter (mm)
25-May-22	6:30	0		9.0			
	6:32	2	22.8	9.0	34.0	18.5	0.0304
	6:35	5	22.8	9.0	30.0	15.6	0.0198
	6:45	15	22.8	9.0	26.5	13.0	0.0117
	7:00	30	22.7	9.0	25.0	11.9	0.0084
	7:30	60	22.5	9.0	23.0	10.4	0.0060
	8:30	120	22.4	9.0	21.0	8.9	0.0043
	10:40	250	21.9	9.0	20.0	8.1	0.0030
26-May-22	6:30	1440	21.8	9.0	16.0	5.2	0.0013

GRAVEL				SAND				FINES			
COARSE		FINE		CRSE	MEDIUM		FINE	SILT		CLAY	

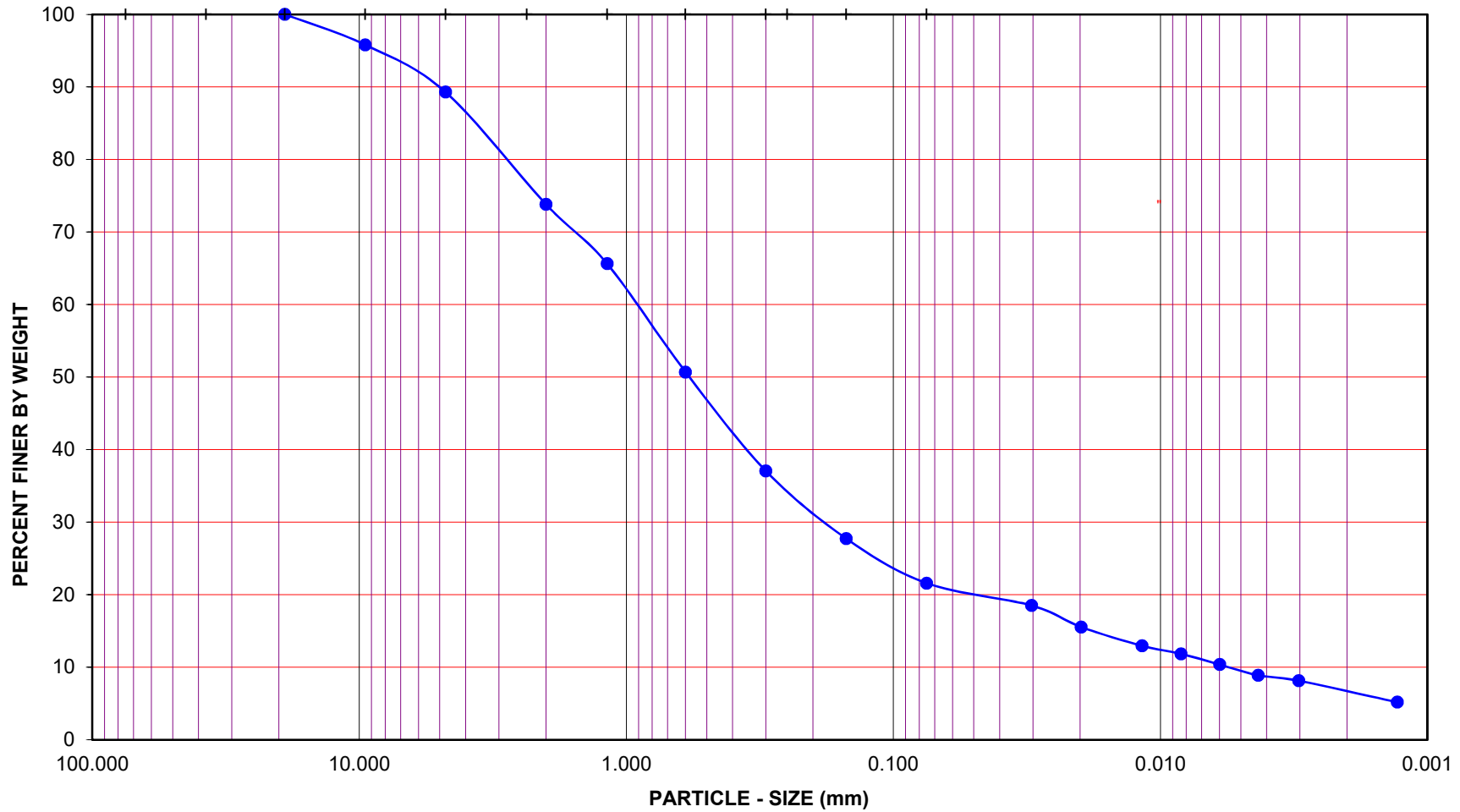
U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8"

U.S. STANDARD SIEVE NUMBER

#4 #8 #16 #30 #50 #100 #200

HYDROMETER



Project Name: The Quarry - Corona

Project No.: 13335.002

Boring No.: LB-1

Sample No.: R-5

Depth (feet): 15.0

Soil Type : SC

Soil Identification: Yellowish brown clayey sand (SC)

GR:SA:FI : (%) 11 : 67 : 22



**PARTICLE - SIZE
DISTRIBUTION
ASTM D 7928 & D 6913**

Jun-22



PARTICLE-SIZE ANALYSIS OF SOILS

ASTM D 7928 & D 6913

Project Name: The Quarry - Corona

Tested By: ACS/JD/GEB

Date: 05/24/22

Project No.: 13335.002

Checked By: J. Ward

Date: 06/13/22

Boring No.: LB-1

Sample No.: R-6

Depth (feet): 25.0

Soil Identification: Reddish brown clayey sand (SC)

% Gravel	14	Soil Type SC
% Sand	60	
% Fines	26	

Moisture Content of Total Air-Dry Soil	0.00	Moisture Content of Air-Dry Soil Passing #10	117.20	After Hydrometer & Wet Sieve ret. in #200 Sieve	
Specific Gravity (Assumed)	2.70	Wt. of Air-Dry Soil + Cont. (g)	0.00	117.20	
Correction for Specific Gravity	0.99	Dry Wt. of Soil + Cont. (g)	0.00	116.32	149.36
Wt. of Air-Dry Soil + Cont. (g)	579.20	Wt. of Container No. ____ (g)	1.00	51.50	82.51
Wt. of Container	100.19	Moisture Content (%)	0.00	1.36	
Dry Wt. of Soil (g)	479.01	Wt. of Dry Soil (g)			66.85

Coarse Sieve		
U.S. Sieve	Cumulative Wt. Of Dry Soil Retained (g)	% Passing
3"	0.00	100.0
1½"	0.00	100.0
¾"	23.06	95.2
⅜"	31.67	93.4
No. 4	66.73	86.1
No. 10	128.43	73.2
Pan		

Sieve after Hydrometer & Wet Sieve			
U.S. Sieve Size	Cumulative Wt. Of Dry Soil Retained (g)	% Passing	% Total Sample
No. 10	0.00	100.0	73.2
No. 16	9.60	90.3	66.1
No. 30	25.71	74.0	54.1
No. 50	41.79	57.7	42.2
No. 100	54.47	44.8	32.8
No. 200	64.18	35.0	25.6
Pan			

Hydrometer

Wt. of Air-Dry Soil (g)

100.04

Wt. of Dry Soil (g)

98.70

Deflocculant 125 cc of 4% Solution

Date	Time	Elapsed Time (min)	Water Temperature (°C)	Composite Correction 152H	Actual Hydrometer Readings	% Total Sample (%)	Soil Particle Diameter (mm)
25-May-22	6:26	0		9.0			
	6:28	2	22.8	9.0	38.0	21.3	0.0295
	6:31	5	22.8	9.0	34.0	18.4	0.0192
	6:41	15	22.8	9.0	30.0	15.4	0.0114
	6:56	30	22.7	9.0	27.5	13.6	0.0082
	7:26	60	22.6	9.0	26.0	12.5	0.0059
	8:26	120	22.5	9.0	24.0	11.0	0.0042
	10:36	250	21.8	9.0	22.0	9.6	0.0030
26-May-22	6:26	1440	21.8	9.0	18.0	6.6	0.0013

GRAVEL				SAND				FINES			
COARSE		FINE		CRSE	MEDIUM		FINE	SILT		CLAY	

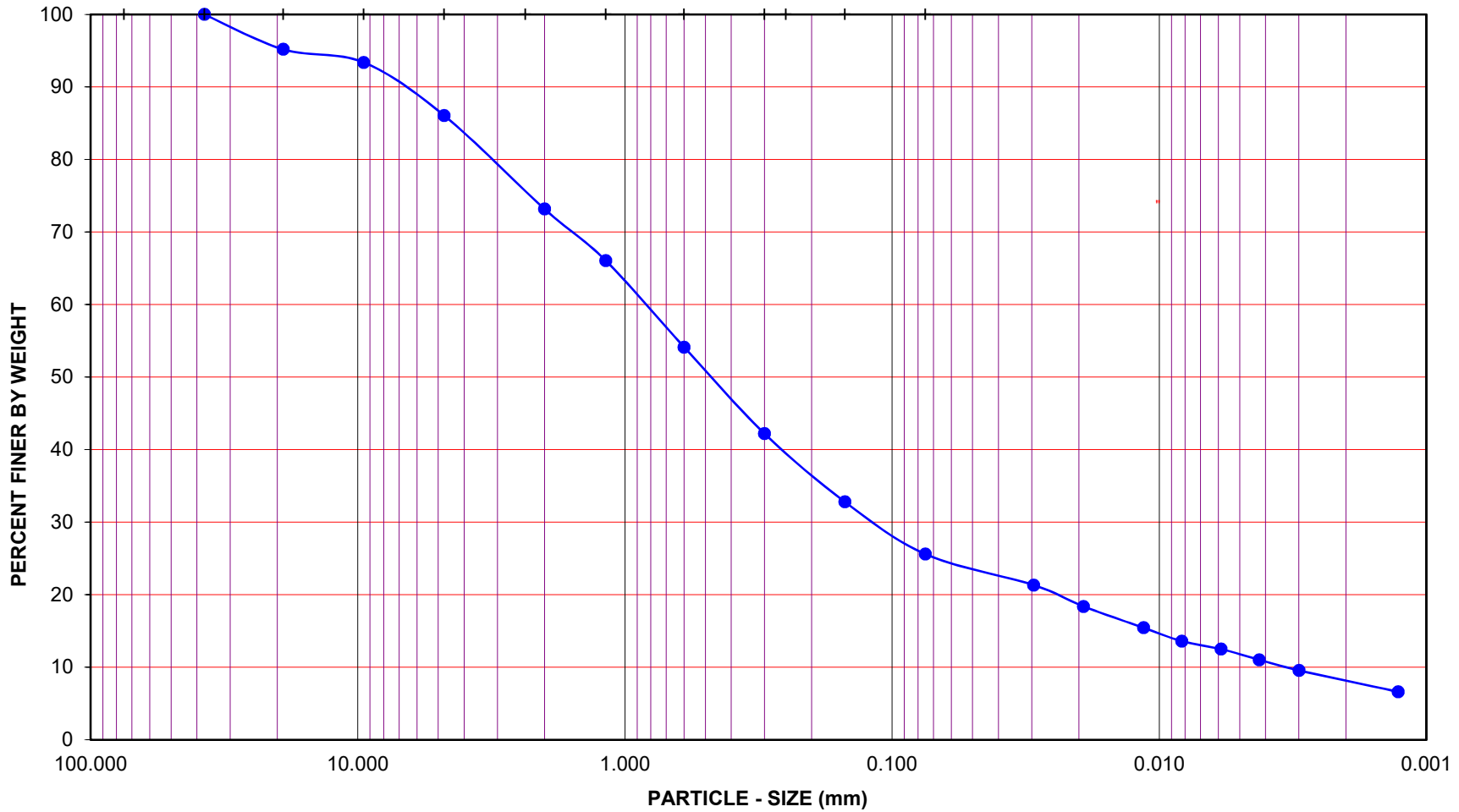
U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8"

U.S. STANDARD SIEVE NUMBER

#4 #8 #16 #30 #50 #100 #200

HYDROMETER



Project Name: The Quarry - Corona

Project No.: 13335.002

Boring No.: LB-1

Sample No.: R-6

Depth (feet): 25.0

Soil Type : SC

Soil Identification: Reddish brown clayey sand (SC)

GR:SA:FI : (%) 14 : 60 : 26



**PARTICLE - SIZE
DISTRIBUTION
ASTM D 7928 & D 6913**

Jun-22

APPENDIX C
MASS GRADING PLANS

MASS GRADING PLAN FOR TEMESCAL CANYON ROAD CORONA, CA

GENERAL NOTES

- ALL GRADING SHALL CONFORM TO THE 2010 CALIFORNIA BUILDING CODE CHAPTERS 17, 18 & APPENDIX CHAPTER-J AS AMENDED BY ORD. 457.
- ALL PROPERTY CORNERS SHALL BE CLEARLY DELINEATED IN THE FIELD PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION/GRADING.
- ALL WORK UNDER THIS GRADING PERMIT SHALL BE LIMITED TO WORK WITHIN THE PROPERTY LINES. ALL WORK WITHIN THE ROAD RIGHT-OF-WAY WILL REQUIRE SEPARATE PLANS AND A SEPARATE REVIEW/APPROVAL (PERMIT) FROM THE TRANSPORTATION DEPARTMENT.

4. GRADING SHALL BE DONE UNDER THE SUPERVISION OF A SOILS ENGINEER IN CONFORMANCE WITH RECOMMENDATIONS OF THE INTERIM GRADING REPORT BY GLOBAL GEO-ENGINEERING, INC., PROJECT# 2534-51, DATED JANUARY 24, 2008.

5. COMPACTED FILL TO SUPPORT ANY STRUCTURES SHALL COMPLY WITH SECTION 1803.5- PROJECTS WITHOUT PRELIMINARY SOILS REPORT SHALL HAVE DETAILED SPECIFICATIONS SATISFYING THE REQUIREMENTS IN SECTION 1803.5 PREPARED BY THE EOR.

6. THE CONTRACTOR SHALL NOTIFY THE BUILDING AND SAFETY DEPARTMENT AT LEAST 24 HOURS IN ADVANCE TO REQUEST FINISH LOT GRADE AND DRAINAGE INSPECTION. THIS INSPECTION MUST BE APPROVED PRIOR TO BUILDING PERMIT FINAL INSPECTION FOR EACH LOT.

7. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE DIGGING AT 1-800-422-4133.

CUT / FILL NOTES

- MAXIMUM CUT AND FILL SLOPES = 2:1.
- NO FILL SHALL BE PLACED ON EXISTING GROUND UNTIL THE GROUND HAS BEEN CLEARED OF WEEDS, DEBRIS, TOPSOIL, AND OTHER DELETERIOUS MATERIALS. FILLS SHOULD BE PLACED IN THIN LIFTS (8-INCH MAX OR AS RECOMMENDED IN SOILS REPORT), COMPACTED AND TESTED AS GRADING PROCESS UNTIL FINAL GRADES ARE ATTAINED. ALL FILLS ON SLOPES STEEPER THAN 5 TO 1 (H/V) AND A HEIGHT GREATER THAN 5 FEET SHALL BE KEYED AND BENCHED INTO FIRM NATURAL SOIL FOR FULL SUPPORT. THE BENCH UNDER THE TOE MUST BE 10 FEET WIDE MIN.
- THE SLOPE STABILITY FOR CUT AND FILL SLOPES OVER 30' IN VERTICAL HEIGHT, OR SLOPES STEEPER THAN 2:1 MUST BE VERIFIED WITH A FACTOR OF SAFETY OF AT LEAST 1.5.

11. NO ROCK OR SIMILAR IRREDUCIBLE MATERIAL WITH A MAXIMUM DIMENSION GREATER THAN 12 INCHES SHALL BE BURIED OR PLACED IN FILLS CLOSER THAN 10 FEET TO THE FINISH GRADE.

DRAINAGE & EROSION/DUST CONTROL NOTES

- DRAINAGE ACROSS THE PROPERTY LINE SHALL NOT EXCEED THAT WHICH EXISTED PRIOR TO GRADING. EXCESS OR CONCENTRATED DRAINAGE SHALL BE CONTAINED ON SITE OR DIRECTED TO AN APPROVED DRAINAGE FACILITY.
- PROVIDE A SLOPE INTERCEPTOR DRAIN ALONG THE TOP OF CUT SLOPES WHERE DRAINAGE PATH IS GREATER THAN 40 FEET TOWARDS THE CUT SLOPE.
- PROVIDE 5' WIDE BY 1' HIGH BERM ALONG THE TOP OF ALL FILL SLOPES STEEPER THAN 3:1.
- THE GROUND IMMEDIATELY ADJACENT TO THE BUILDING FOUNDATION SHALL BE SLOPED AWAY WITH 5% MIN FOR A MIN DISTANCE OF 10 HORIZONTAL FEET. SWALES WITHIN 10 FEET FROM BUILDING SHALL HAVE 2% MINIMUM SLOPE.
- NO OBSTRUCTION OF NATURAL WATER COURSES SHALL BE PERMITTED.
- DURING ROUGH GRADING OPERATIONS AND PRIOR TO CONSTRUCTION OF PERMANENT DRAINAGE STRUCTURES, TEMPORARY DRAINAGE CONTROL (BEST MANAGEMENT PRACTICES, BMPs) SHALL BE PROVIDED TO PREVENT PONDING WATER AND DAMAGE TO ADJACENT PROPERTIES.
- DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS.
- ALL EXISTING DRAINAGE COURSES ON THE PROJECT SITE MUST CONTINUE TO FUNCTION, ESPECIALLY DURING STORM CONDITIONS. PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING GRADING OPERATIONS.

20. FOR SLOPES 3 TO 1 (H/V) OR STEEPER: ALL SLOPES EQUAL TO OR GREATER THAN 3' IN VERTICAL HEIGHT, ARE REQUIRED TO BE PLANTED WITH GRASS OR ROSEA ICE PLANT (OR EQUAL) GROUND COVER AT A MAXIMUM SPACING OF 12" ON CENTER. SLOPES EXCEEDING 15' IN VERTICAL HEIGHT SHALL BE PLANTED WITH APPROVED SHRUBS NOT TO EXCEED 10' ON CENTER, OR TREES SPACED NOT TO EXCEED 20' ON CENTER OR SHRUBS NOT TO EXCEED 10', OR A COMBINATION OF SHRUBS AND TREES NOT TO EXCEED 15' IN ADDITION TO THE GRASS OR GROUND COVER. SLOPES THAT REQUIRE PLANTING SHALL BE PROVIDED WITH AN IN-GROUND IRRIGATION SYSTEM EQUIPPED WITH AN APPROPRIATE BACKFLOW DEVICE PER U.P.C., CHAPTER 10. THE SLOPE PLANTING AND IRRIGATION SYSTEM SHALL BE INSTALLED PRIOR TO PRECISE GRADING FINAL.

COMPLETION OF WORK

- A REGISTERED CIVIL ENGINEER SHALL PREPARE FINAL COMPACTION REPORT/ GRADING REPORT AND IT SHALL BE SUBMITTED FOR REVIEW AND APPROVAL. THE REPORT SHALL PROVIDE BUILDING FOUNDATION DESIGN PARAMETERS INCLUDING ALLOWABLE SOIL PRESSURES, EXPANSION INDEX AND REMEDIAL MEASURES IF EI > 20, WATER SOLUBLE SULFATE CONTENT, CORROSIVITY AND REMEDIAL MEASURES IF NECESSARY.
- EXCEPT FOR NON-TRACT SINGLE RESIDENTIAL LOT GRADING, THE COMPACTION REPORT SHALL INCLUDE THE SPECIAL INSPECTION VERIFICATIONS LISTED IN TABLE 1704.7 OF 2010 CBC.
- A REGISTERED CIVIL ENGINEER SHALL SUBMIT TO THE BUILDING AND SAFETY DEPARTMENT WRITTEN CERTIFICATION OF COMPLETION OF GRADING IN ACCORDANCE WITH THE APPROVED GRADING PLAN PRIOR TO REQUESTING INSPECTION AND ISSUANCE OF THE BUILDING PERMIT. CERTIFICATION SHALL NOT INCLUDE LINE GRADE, SURFACE DRAINAGE, ELEVATION, AND LOCATION OF PERMITTED GRADING ON THE LOT.

EXISTING UNDERGROUND STRUCTURES

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES OR CONDUITS SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK. CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS.

SPECIAL NOTE FROM PRIVATE ENGINEER TO CONTRACTOR

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

PRE-GRADING/PRE-CONSTRUCTION MEETING

A PRE-GRADING/PRE-CONSTRUCTION MEETING AND SITE INSPECTION SHALL BE ARRANGED FOR BY THE SITE DEVELOPER PRIOR TO COMMENCING GRADING OPERATIONS. THOSE PARTIES REQUIRED TO ATTEND THE PRE-CONSTRUCTION MEETING SHALL INCLUDE BUT NOT LIMITED TO THE DEVELOPER, PROJECT SUPERINTENDENT, ENGINEER OF RECORD, SOIL ENGINEER, GRADING CONTRACTOR AND THE UNDERGROUND UTILITIES CONTRACTOR. REPRESENTING THE DEPARTMENT OF BUILDING AND SAFETY SHALL BE THE GRADING PLAN-CHECKER AND/OR GRADING INSPECTOR. THE FOCUS OF THE PRE-CONSTRUCTION MEETING SHALL BE TO DISCUSS THE VARIOUS ASPECTS AND RESPONSIBILITIES OF THE GRADING PROJECT AND TO PROVIDE AN APPROXIMATE TIME-TABLE FOR THE COMPLETION OF ROUGH GRADING. ARRANGE FOR A PRE-GRADING/PRE-CONSTRUCTION MEETING BY CALLING THE DISTRICT OFFICE RESPONSIBLE FOR PROVIDING YOUR GRADING AND BUILDING INSPECTIONS.

PAVING NOTES

- MINIMUM PARKING LOT GRADE SHALL BE 1%.
- MINIMUM GRADE FOR RIBBON DRAINS SHALL BE 0.35%.
- AN APPROVED SOIL STERILIZER SHALL BE USED ON ALL SUBGRADE SURFACES PRIOR TO PLACEMENT OF PAVING.
- ASPHALTIC EMULSION (FOG SEAL) SHALL BE APPLIED NOT LESS THAN FOURTEEN DAYS FOLLOWING PLACEMENT OF THE ASPHALTIC SURFACING AND SHALL BE APPLIED AT A RATE OF 0.05 GALLONS PER SQUARE YARD. ASPHALT EMULSION SHALL CONFORM TO SECTIONS 37, 39 AND 94 OF THE STATE STANDARD SPECIFICATIONS.
- THE SUBDIVIDER OR CONTRACTOR SHALL APPLY TO THE RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT FOR AN ENCROACHMENT PERMIT FOR ALL WORK WITHIN COUNTY RIGHT-OF-WAY.
- TWO SPECIAL INSPECTIONS ARE REQUIRED BY THE BUILDING AND SAFETY DEPARTMENT. ONE INSPECTION AT THE TIME THE BASE IS PLACED AND THE SECOND WHEN THE A.C. OR CONCRETE HAS BEEN PLACED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEARING OF THE PROPOSED WORK AREA, AND RELOCATION AND COST OF ALL EXISTING UTILITIES. THE COUNTY SHALL BE INFORMED 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION.
- A COMPACTION REPORT BY A SOILS ENGINEER SHALL CERTIFY 95% COMPACTION OF BASE FOR A.C. AND 90% COMPACTION FOR CONCRETE PRIOR TO CALL FOR SECOND INSPECTION AND PLACEMENT OF ASPHALT CONCRETE AND CONCRETE PAVING.
- IF NO PRELIMINARY SOILS REPORT IS PROVIDED SPECIFYING THE PAVING SECTION, THE STRUCTURAL SECTION SHALL BE THREE INCHES ASPHALT CONCRETE AND FOUR INCHES CLASS II AGGREGATE BASES, AND FOUR INCHES ASPHALT CONCRETE AND SEVEN INCHES CLASS II AGGREGATE BASES.
QUANTITIES:
AC (TONS): N/A
BASE (CY): N/A

EARTHWORK QUANTITIES

IMPORT: 500,000 CY
THE QUANTITY SHOWN ABOVE IS FOR BONDING PURPOSES ONLY. SHRINKAGE SUBSIDENCE AND SURFACE LOSS FACTORS ARE NOT INCLUDED. CONTRACTOR IS TO BUILD THE PROJECT PER THE PLANS AND BID THEIR OWN QUANTITY "TAKE OFF". CONTRACTOR WILL DETERMINE EXPORT SITE AT THE TIME OF PERMIT.
TOTAL DISTURBED AREA = 12.81 ACRES

LEGAL DESCRIPTION:

PARCEL A:
THAT PORTION OF PARCELS 1 AND 2 A PORTION OF LOT "A" OF PARCEL MAP 19201 AS SHOWN BY MAP ON FILE IN BOOK 129 OF PARCEL MAPS, AT PAGES 36 THROUGH 42 INCLUSIVE THEREOF, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE MOST SOUTHERLY CORNER OF PARCEL 3 OF SAID PARCEL MAP 19201, ALSO BEING THE MOST WESTERLY CORNER OF SAID PARCEL 2; THENCE NORTH 53°59' 25" EAST ALONG THE NORTHWESTERLY LINE OF SAID PARCEL 2, A DISTANCE OF 1076.77 FEET TO THE POINT OF BEGINNING OF THE PARCEL OF LAND TO BE.

THENCE SOUTH 30°19' 33" EAST, A DISTANCE OF 50.79; THENCE SOUTHWESTERLY ON A NON-TANGENT CURVE CONCAVE NORTHWESTERLY HAVING A RADIUS OF 295.00 FEET, THROUGH AN ANGLE OF 28°33' 06", AN ARC LENGTH OF 147.00 FEET (THE INITIAL RADIAL LINE BEARS SOUTH 75°29' 24" E.); THENCE SOUTH 43°03' 42" WEST, A DISTANCE OF 78.77 FEET; THENCE SOUTHWESTERLY ON A CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 775.22 FEET, THROUGH AN ANGLE OF 42°38' 20", AN ARC LENGTH OF 576.91 FEET; THENCE SOUTH 89° 34' 38" EAST, A DISTANCE OF 126.03 FEET; THENCE SOUTH 10°48' 00" EAST, A DISTANCE OF 500 FEET; THENCE SOUTH 62°21'19" EAST, A DISTANCE OF 265.55 FEET; THENCE SOUTH 00°39'55" WEST, A DISTANCE OF 62.32 FEET TO THE SOUTHWESTERLY LINE OF SAID PARCEL 1; THENCE SOUTH 31°31'48" WEST, A DISTANCE OF 4.00 FEET TO THE SOUTHWESTERLY LINE ON A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 1540.00 FEET, THROUGH AN ANGLE OF 01°23'58", AN ARC LENGTH OF 37.81 FEET TO THE MOST SOUTHERLY CORNER THEREOF (THE INITIAL RADIAL LINE BEARS N31°31'48" E.); THENCE NORTH 00°39'55" EAST ALONG THE EASTERLY LINE OF SAID PARCEL 1 AND SAID LOT "A"; ALSO BEING THE NORTH-SOUTH CENTER SECTION LINE OF SECTION 27, TOWNSHIP 4 SOUTH, RANGE 6 WEST, S.B.M., A DISTANCE OF 1376.15 FEET TO THE CENTER OF SAID SECTION 27; THENCE NORTH 00°40'08" EAST CONTINUING ALONG SAID LINE ALSO BEING THE EASTERLY LINE OF PARCEL 2, A DISTANCE OF 1067.10 FEET TO THE MOST NORTHERLY CORNER OF SAID PARCEL 2; THENCE SOUTH 53°59'25" WEST, ALONG THE NORTHWESTERLY LINE OF SAID PARCEL 2, A DISTANCE OF 525.95 FEET TO THE POINT OF BEGINNING.

EXCEPT ANY PORTION LYING NORTHERLY OF THE SOUTHERLY LINE OF THAT CERTAIN PROPERTY CONVEYED TO LEE LAKE WATER DISTRICT BY GRANT DEED RECORDED AUGUST 30, 1990 AS INSTRUMENT NO. 323318 OF OFFICIAL RECORDS.

APN: 283-110-051-3

OWNER/APPLICANT:

VA DEL RIO BUSINESS PARK, LLC
CONTACT: ANU COX
41606 DATE STREET, SUITE 203A
MURRETTA, CA 925622
PHONE: (909) 731-7113

SOILS ENGINEER & GEOLOGIST:

GLOBAL GEO-ENGINEERING, INC.
3 CORPORATE PARK W 270
IRVINE, CA 92606-5164

MOHAN B. UPASANI, RGE 2301
KEVIN B. YOUNG, CGE 2253

ASSESSOR PARCEL NUMBER:

283-110-051

ENGINEER:

LAND DEVELOPMENT DESIGN COMPANY, LLC
2313 E. PHILADELPHIA STREET, UNIT 7
ONTARIO, CA 91761
TEL: (909) 930-1466
FAX: (909) 930-1468
ATTN: KEVIN J. RICHER

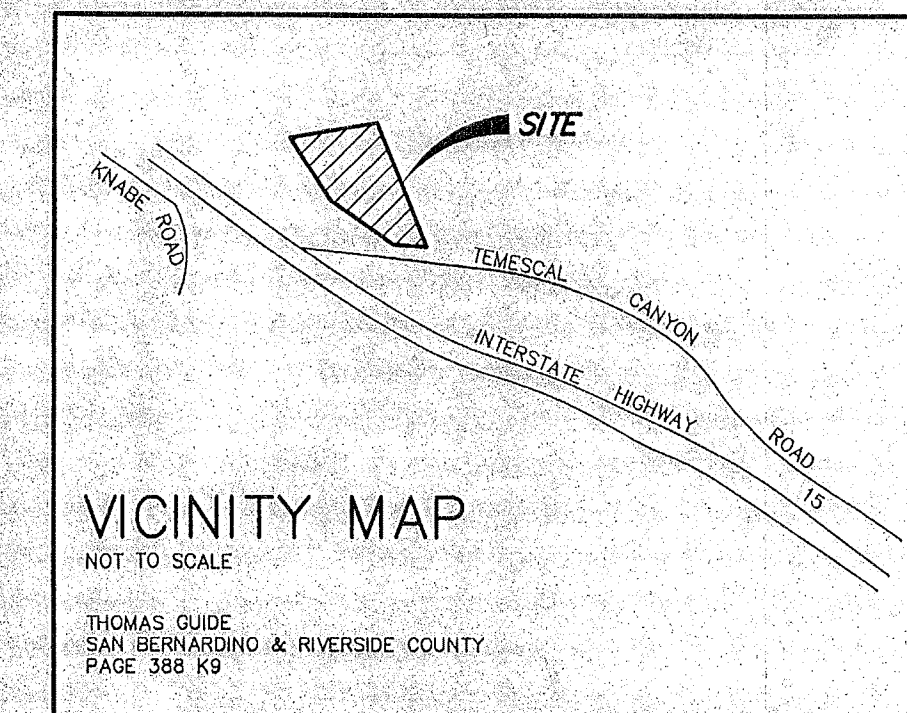
WATER QUALITY COMPLIANCE

BRYAN CLENDENY
1215 POMONA ROAD, SUITE "D"
CORONA, CA 92882
(951) 732-8866

* ALL INFORMATION ASSOCIATED WITH BUILDING (INCLUDING SETBACKS AND FF ELEVATION) IS FOR REFERENCE ONLY AND THE APPROVAL OF THIS GRADING PLANS DO NOT INCLUDE ANY PROVISIONS ASSOCIATED WITH BUILDINGS.

LEGEND

BW	BACK OF WALK
EG	EXISTING GRADE
FG	FINISH GRADE
FS	FINISH SURFACE
TC	TOP OF CURB
FL	FLOW LINE
EP	EDGE OF PAVEMENT
FF	FINISH FLOOR
PAD	PAD GRADE
TW	TOP OF WALL
TF	TOP OF FOOTING
HP	HIGH POINT
LP	LOW POINT
Y	TOP OF SLOPE
Si	RATE OF SLOPE
---	TOE OF SLOPE
---	EXISTING CONTOUR
-S-	EXISTING SEWER
-W-	EXISTING WATER
---	EXISTING FIRE HYDRANT
---	PROPOSED CURB OUTLET
---	FINISH CONTOURS
---	CONCRETE
---	FILL SLOPE



SHEET INDEX

SHEET 1	COVER SHEET
SHEET 2	PRECISE GRADING PLAN
SHEET 3	EROSION CONTROL PLAN
SHEET 4	DETAIL SHEET

RIVERSIDE COUNTY
LAND USE DIVISION
By: Deborah Hill
NOV 27 2013
PLANS ACCEPTABLE FOR
APPLICATION PURPOSES ONLY

BGR 060011
WDD# B 33C341742
FTA NO.: 2013-06

LAND DEVELOPMENT DESIGN COMPANY, LLC
2313 E. Philadelphia St., Ste. F
Ontario, CA 91761
(909) 930-1466 • FAX (909) 930-1468
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DIGALERT
DIAL TOLL FREE
811
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA



BENCHMARK
USCGS BENCH N316 1935
1.9 MILES NW OF ALBERHILL
POST OFFICE ALONG
TEMESCAL CANYON ROAD,
30' NE OF THE CL OF THE
DRIVEWAY 26' NE OF THE
CENTERLINE OF THE ROAD.
ELEVATION: 1182.819

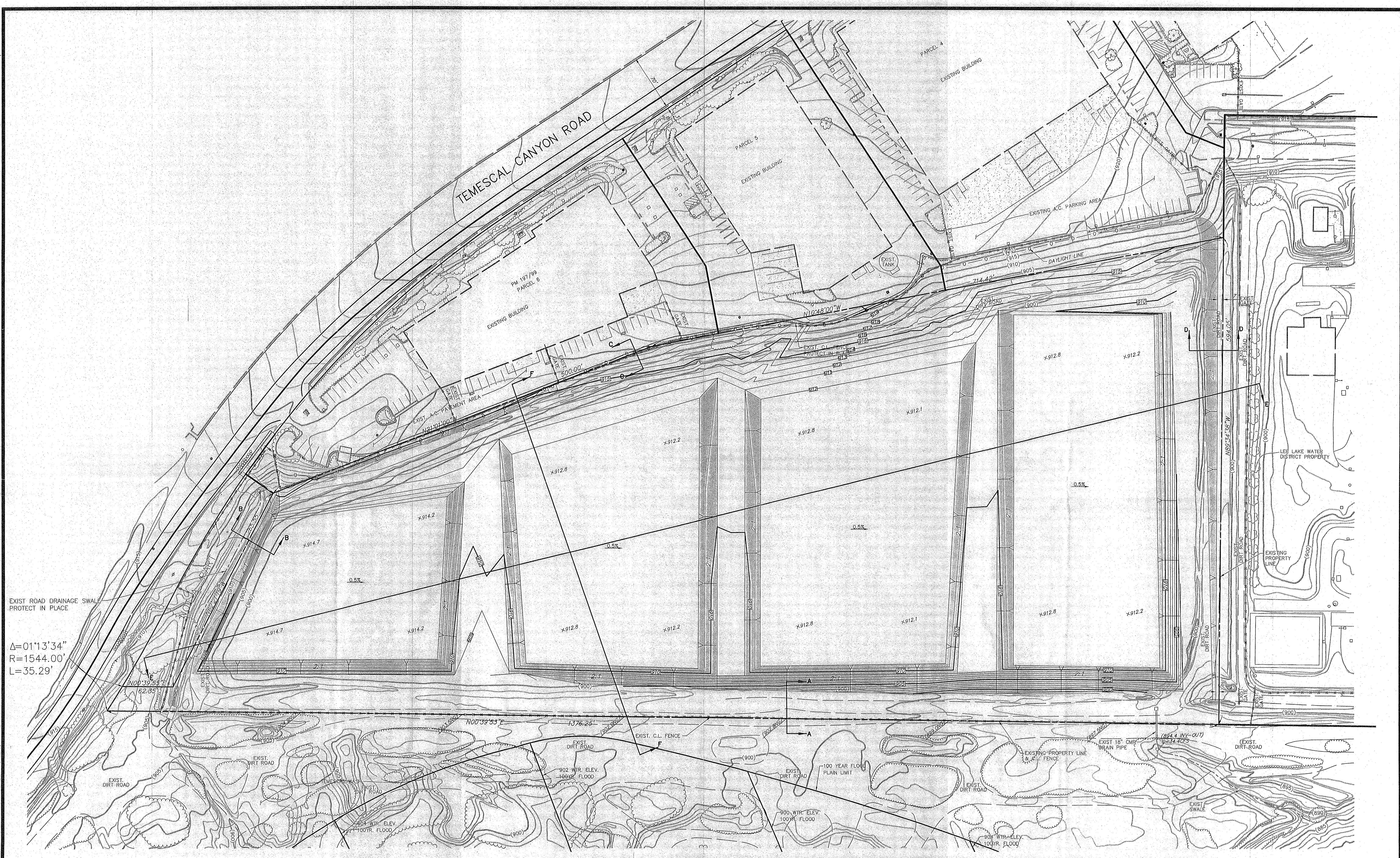
REVISIONS:	DATE

PREPARED UNDER THE SUPERVISION OF:
KEVIN J. RICHER
R.C.E. 43714 LIC. EXP. 03/31/15
DATE: 11/22/13
APPROVED BY:
DATE:

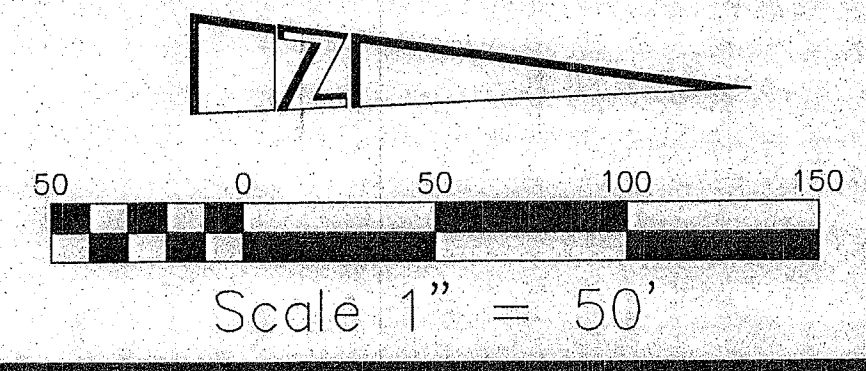
MASS GRADING PLAN
SITE:
TEMESCAL CANYON ROAD
CORONA, CA
PREPARED FOR:
VA DEL RIO BUSINESS PARK, LLC
CONTACT: ANU COX
41606 DATE STREET, SUITE 203A
MURRETTA, CA 925622
PHONE: (909) 731-7113

DATE:	08/21/13	JOB NO.:	4480
DRAWN BY:	JCO	SCALE:	1"=50'
DESIGNED BY:	KJR	SHEET	1
CHECKED BY:	KJR	OF	4 SHEETS

COMPLETE SET



$\Delta = 01^{\circ}13'34''$
 $R = 1544.00'$
 $L = 35.29'$



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 2313 E. Philadelphia St., Ste. F
 Ontario, CA 91761
 (909) 930-1466 • FAX (909) 930-1468
 PLANNING • CIVIL • SURVEYING

BENCHMARK
 USCGS DISK N316 1935,
 1.5 MILES NW OF ALBERHILL
 POST OFFICE ALONG
 TEMESCAL CANYON ROAD,
 30' NE OF THE CL OF THE
 DRIVEWAY 26' NE OF THE
 CENTERLINE OF THE ROAD.
 ELEVATION: 1182.819

REVISIONS:

PREPARED UNDER THE SUPERVISION OF:

 R.C.E. LIC. EXP. 1/22/13
 DATE
 APPROVED BY:
 DATE

MASS GRADING PLAN		DATE: 08/21/13	JOB NO. 4480
SITE: TEMESCAL CANYON ROAD CORONA CA		DRAWN BY: JCQ	SCALE: 1"=50'
PREPARED FOR: CLENDENEN DEVELOPMENT CO. CONTACT: DARRELL CLENDENEN 1215 POMONA ROAD, SUITE "D" CORONA, CA 92882 PHONE: (951) 271-0736		DESIGNED BY: KJR	SHEET 2 OF 4 SHEETS
CHECKED BY: KJR		DATE:	

BMP REQUIREMENTS

1. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEETFLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
2. STOCKPILE OR EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCE OF WIND AND WATER.
3. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
4. NON-STORM WATER RUNOFF FROM EQUIPMENT AND VEHICLE WASHING AND ANY OTHER ACTIVITY SHALL BE CONTAINED AT THE PROJECT SITE.
5. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTED ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
6. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
7. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
8. ANY SLOPE WITH DISTURBED SOILS OR DENuded OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
9. WM-1 MATERIAL DELIVERY AND STORAGE
PROVIDE A MATERIAL STORAGE AREA WITH SECONDARY CONTAINMENT AND/OR WEATHER PROTECTION. NOTE THE MAINTENANCE PRACTICES AND SCHEDULE PROPOSED FOR THIS AREA.
10. WM-2 MATERIAL USE
HAZARDOUS MATERIALS, FERTILIZERS, PESTICIDES, PLASTERS, SOLVENTS, PAINTS, AND OTHER COMPOUNDS MUST BE PROPERLY HANDLED IN ORDER TO REDUCE THE RISK OF POLLUTION OR CONTAMINATION. TRAINING AND INFORMATION ON PROCEDURES FOR THE PROPER USE OF ALL MATERIALS MUST BE AVAILABLE TO THE EMPLOYEES THAT APPLY SUCH MATERIALS.
11. WM-4 SPILL PREVENTION AND CONTROL
IDENTIFY SPILL PREVENTION AND CONTROL MEASURES THAT WILL BE TAKEN FOR ALL PROPOSED MATERIALS. IDENTIFY THE METHODS BY WHICH ACCIDENTAL SPILLS WILL BE CLEANED AND PROPERLY DISPOSED OF.
12. WM-5 SOLID WASTE MANAGEMENT
PROVIDE DESIGNATED WASTE COLLECTION AREAS AND CONTAINERS. ARRANGE FOR REGULAR DISPOSAL. PROVIDE COVERED STORAGE WITH SECONDARY CONTAINMENT. CONTAINERS ARE REQUIRED TO PROTECT WASTE FROM RAIN TO PREVENT WATER POLLUTION AND PREVENT WIND DISPERSAL.
13. WM-6 HAZARDOUS WASTE MANAGEMENT
HAZARDOUS MATERIALS MUST BE DISPOSED OF IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS. IDENTIFY THE PROPOSED METHODS OF DISPOSAL AND ANY SPECIAL HANDLING CONTRACTS THAT MAY BE APPLICABLE.
14. WM-7 CONTAMINATED SOIL MANAGEMENT
PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORMWATER FROM CONTAMINATED SOIL AND HIGHLY ACIDIC OR ALKALINE SOILS BY CONDUCTING PRE-CONSTRUCTION SURVEYS, INSPECTING EXCAVATIONS REGULARLY, AND REMEDIATING CONTAMINATED SOIL PROMPTLY.
15. WM-8 CONCRETE WASTE MANAGEMENT
STORE DRY AND WET MATERIALS UNDER COVER. AVOID ON-SITE WASHOUT EXCEPT IN DESIGNATED AREAS AWAY FROM DRAINS, DITCHES, STREETS, AND STREAMS. CONCRETE WASTE DEPOSITED ON SITE SHALL SET-UP, BE BROKEN APART, AND DISPOSED OF PROPERLY. CONTAINMENT AND PROPER DISPOSAL IS REQUIRED FOR ALL CONCRETE WASTE.
16. WM-9 SANITARY/SEPTIC WASTE MANAGEMENT
UNTREATED RAW WASTEWATER IS NOT TO BE DISCHARGED OR BURIED. SANITARY SEWER FACILITIES ON SITE ARE REQUIRED TO BE IN COMPLIANCE WITH LOCAL HEALTH AGENCY REQUIREMENTS. SANITARY OR SEPTIC WASTED MUST BE TREATED OR DISPOSED OF IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
17. TC-1 STABILIZED CONSTRUCTION ENTRANCE
A STABILIZED ENTRANCE IS REQUIRED FOR ALL CONSTRUCTION SITES TO ENSURE THAT DIRT AND DEBRIS ARE NOT TRACKED ONTO THE ROAD OR ADJACENT PROPERTY. MAINTENANCE OF SUCH A SYSTEM IS REQUIRED FOR THE DURATION OF THE PROJECT. SUCH STABILIZATION MAY BE OF ROCK OR PAVED.
18. SE-1 SILT FENCE
SE-3 SEDIMENT TRAP
SE-8 SAND BAGS
ERODED SEDIMENTS MUST BE RETAINED ON SITE AND NOT PERMITTED TO ENTER THE DRAINAGE SYSTEM. MAY BE WAIVED AT THE SOLE DISCRETION OF THE CITY INSPECTOR IF OTHER EROSION CONTROL BMPs ARE DEEMED SUFFICIENT.

SWPPP MONITORING RESPONSIBILITIES

1. THE QUALIFIED SWPPP PRACTITIONER, QSP, SHALL HAVE PRIMARY RESPONSIBILITY AND SIGNIFICANT AUTHORITY FOR THE IMPLEMENTATION, MAINTENANCE, INSPECTION AND AMENDMENTS TO THE APPROVED SWPPP. THE RESPONSIBILITIES WILL VARY DEPENDING ON THE RISK LEVEL DETERMINED BY THE NOTICE OF INTENT. THE QSP WILL BE AVAILABLE AT ALL TIMES THROUGHOUT THE DURATION OF THE PROJECT.
2. THE QSP SHALL ENSURE THE SITE COMPLIES WITH STATE WATER RESOURCES CONTROL BOARD (SWRCB) ORDER NO. 2009-0009-DWO, AS AMENDED BY ORDER NO. 2010-014-DWO, AND THE APPROPRIATE RISK REQUIREMENTS, NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT NO. CAS000002, AND WASTE DISCHARGE REQUIREMENTS (WDRS) FOR DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES.
3. THE QSP MUST PREPARE AND ELECTRONICALLY SUBMIT AN ANNUAL REPORT NO LATER THAN SEPTEMBER 1 OF EACH YEAR USING THE STORM WATER MULTI-APPLICATION REPORTING AND TRACKING SYSTEM (SMARTS). THE ANNUAL REPORT MUST INCLUDE A SUMMARY AND EVALUATION OF ALL SAMPLING AND ANALYSIS RESULTS, ORIGINAL LABORATORY REPORTS, CHAIN OF CUSTODY FORMS, A SUMMARY OF ALL CORRECTIVE ACTIONS TAKEN DURING THE COMPLIANCE YEAR, AND IDENTIFICATION OF ANY COMPLIANCE ACTIVITIES OR CORRECTIVE ACTIONS THAT WERE NOT IMPLEMENTED.

SPECIAL NOTE FROM PRIVATE ENGINEER TO CONTRACTOR:

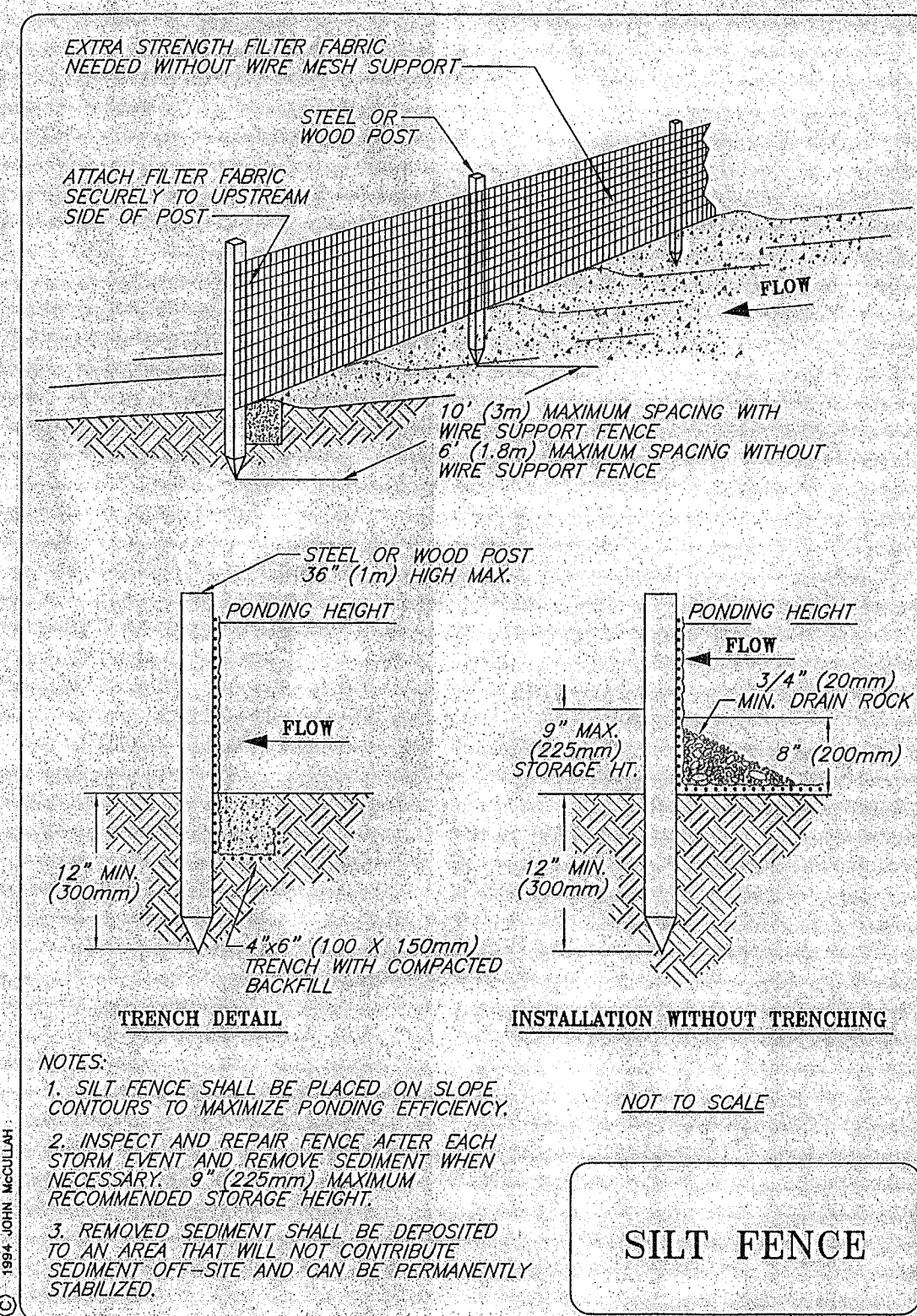
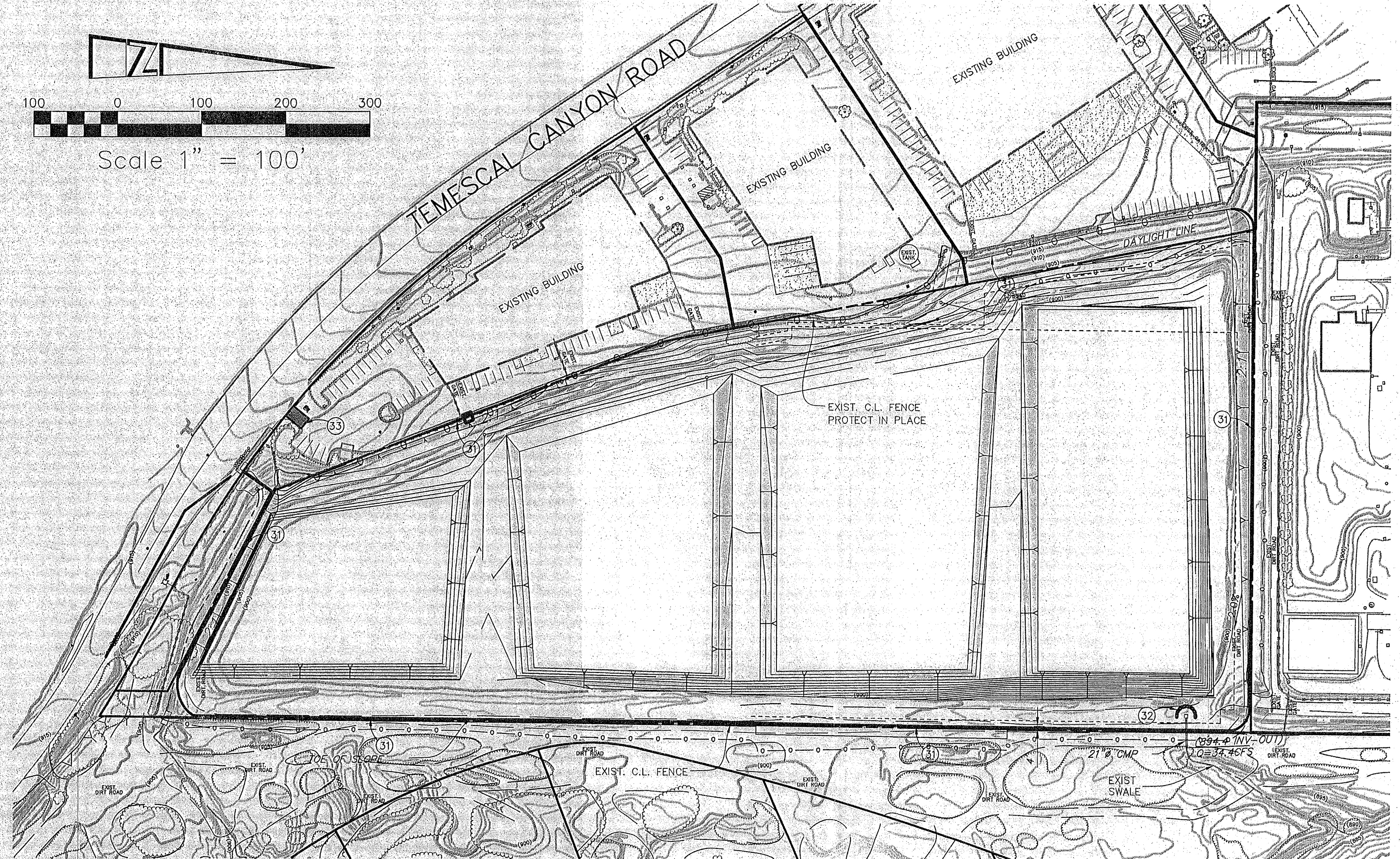
QUALIFIED SWPPP PRACTITIONER (QSP) AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, QSP WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS AND QSP FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

SPECIAL NOTE FROM PRIVATE ENGINEER TO CONTRACTOR:

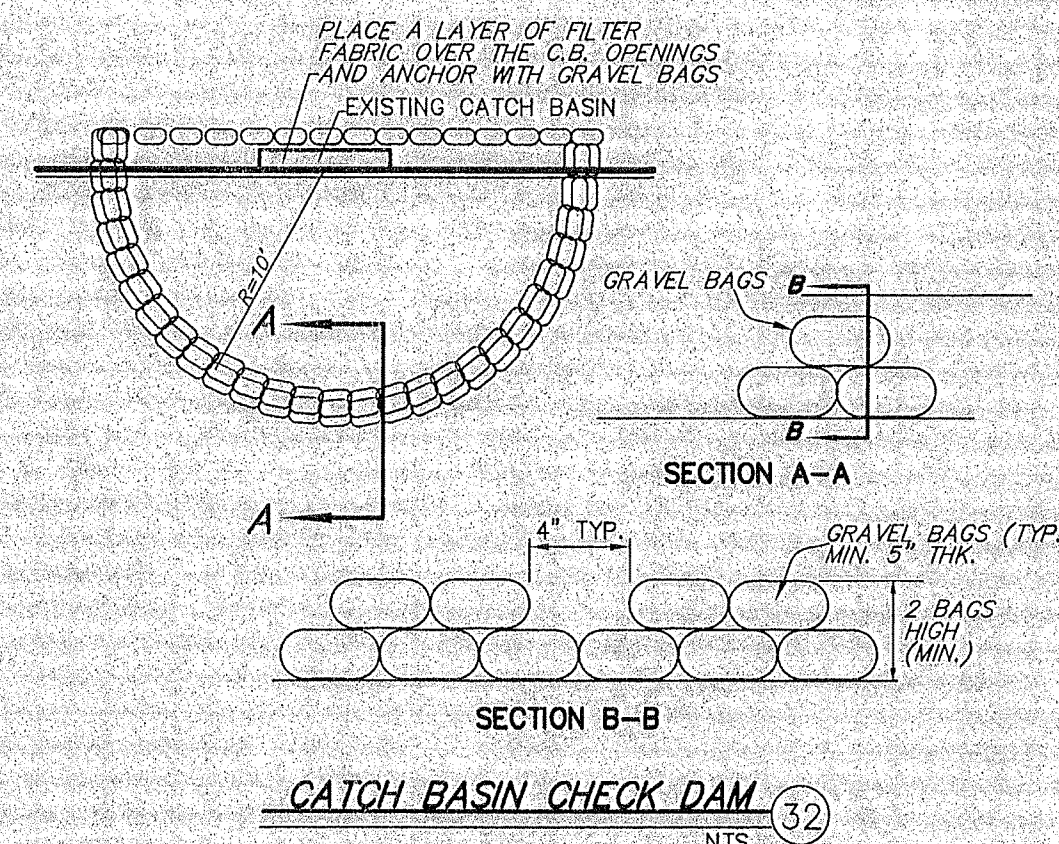
CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

EROSION CONTROL NOTES

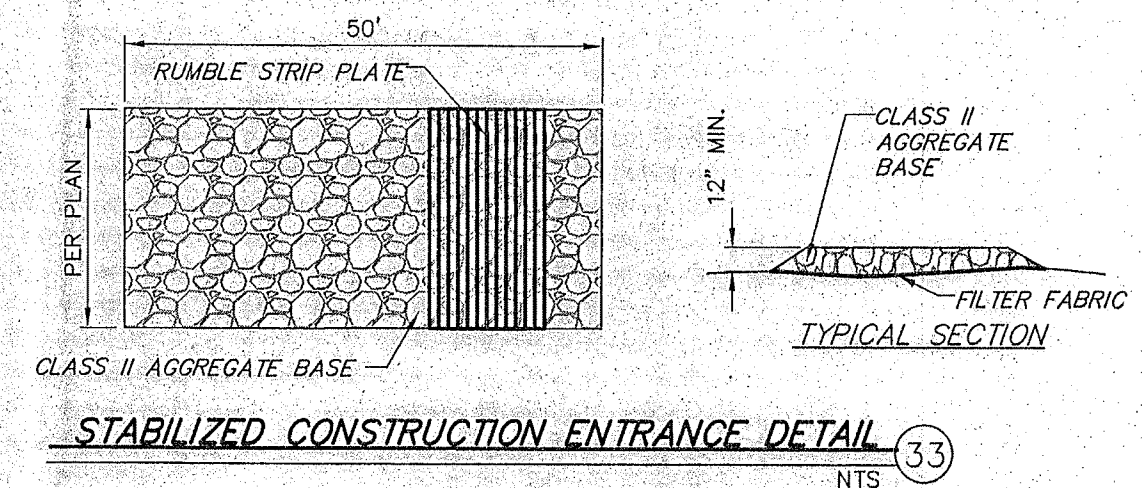
- (31) CONSTRUCT SILT FENCE PER DETAIL HEREON (SE-1).
- (32) CONSTRUCT CATCH BASIN CHECK DAM PER DETAIL HEREON (SE-4 & SE-10).
- (33) CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE PER DETAIL HEREON (TR-1).



SILT FENCE DETAIL (31)
NTS



CATCH BASIN CHECK DAM (32)
NTS



STABILIZED CONSTRUCTION ENTRANCE DETAIL (33)
NTS



LAND DEVELOPMENT DESIGN COMPANY, LLC
2313 E. Philadelphia St., Ste. F
Ontario, CA 91761
(909) 930-1466 • FAX (909) 930-1488
ELEVATION: 1182.819
PLANNING • CIVIL • SURVEYING

BENCHMARK
USCIBS DISK N316 1825
1.5 MILES NW OF ALBERHILL
POST OFFICE ALONG
TEMESCAL CANYON ROAD
30' NE OF THE C.L. OF THE
DRIVEWAY 26' NE OF THE
CENTERLINE OF THE ROAD.
ELEVATION: 1182.819

REVISIONS:

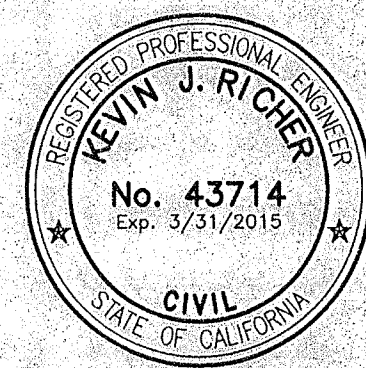
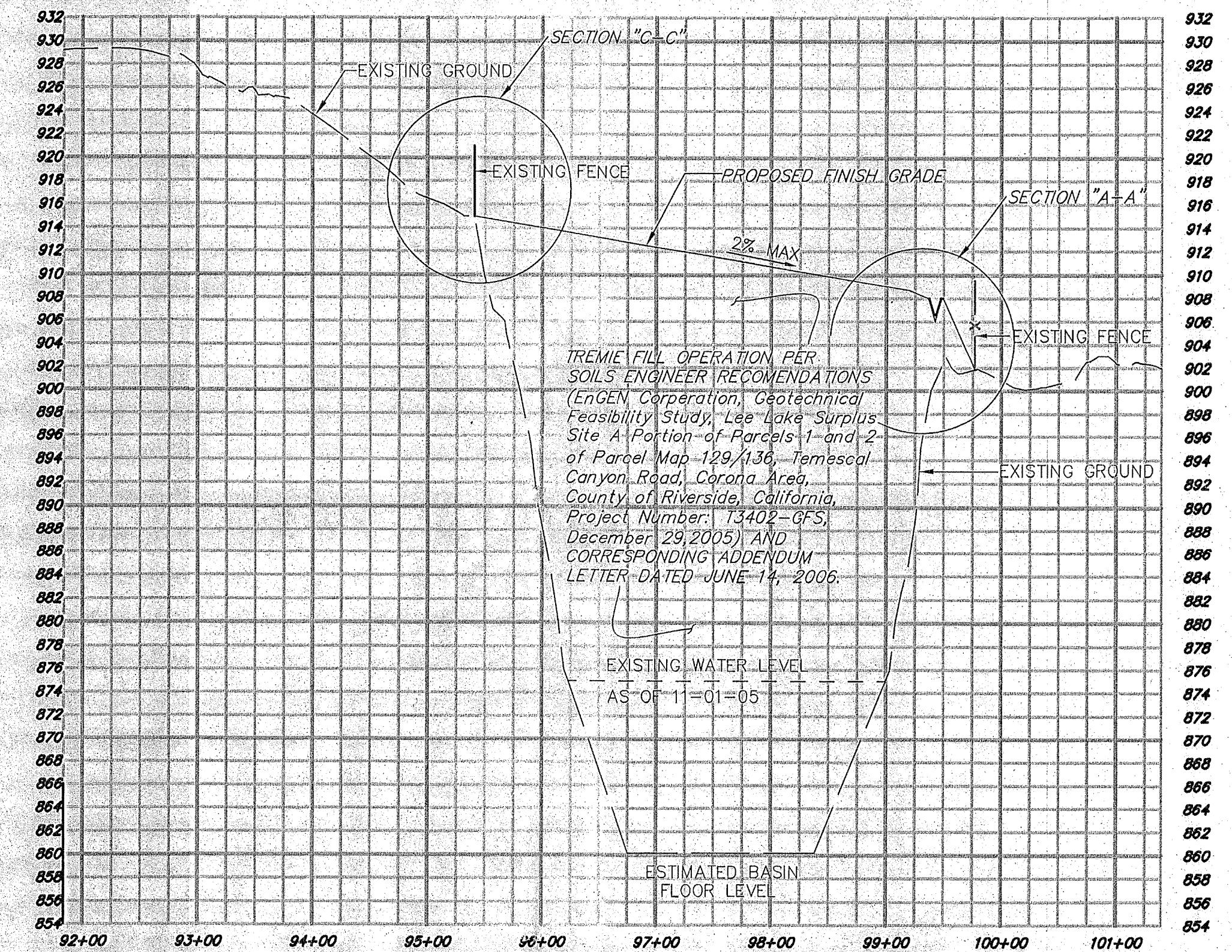
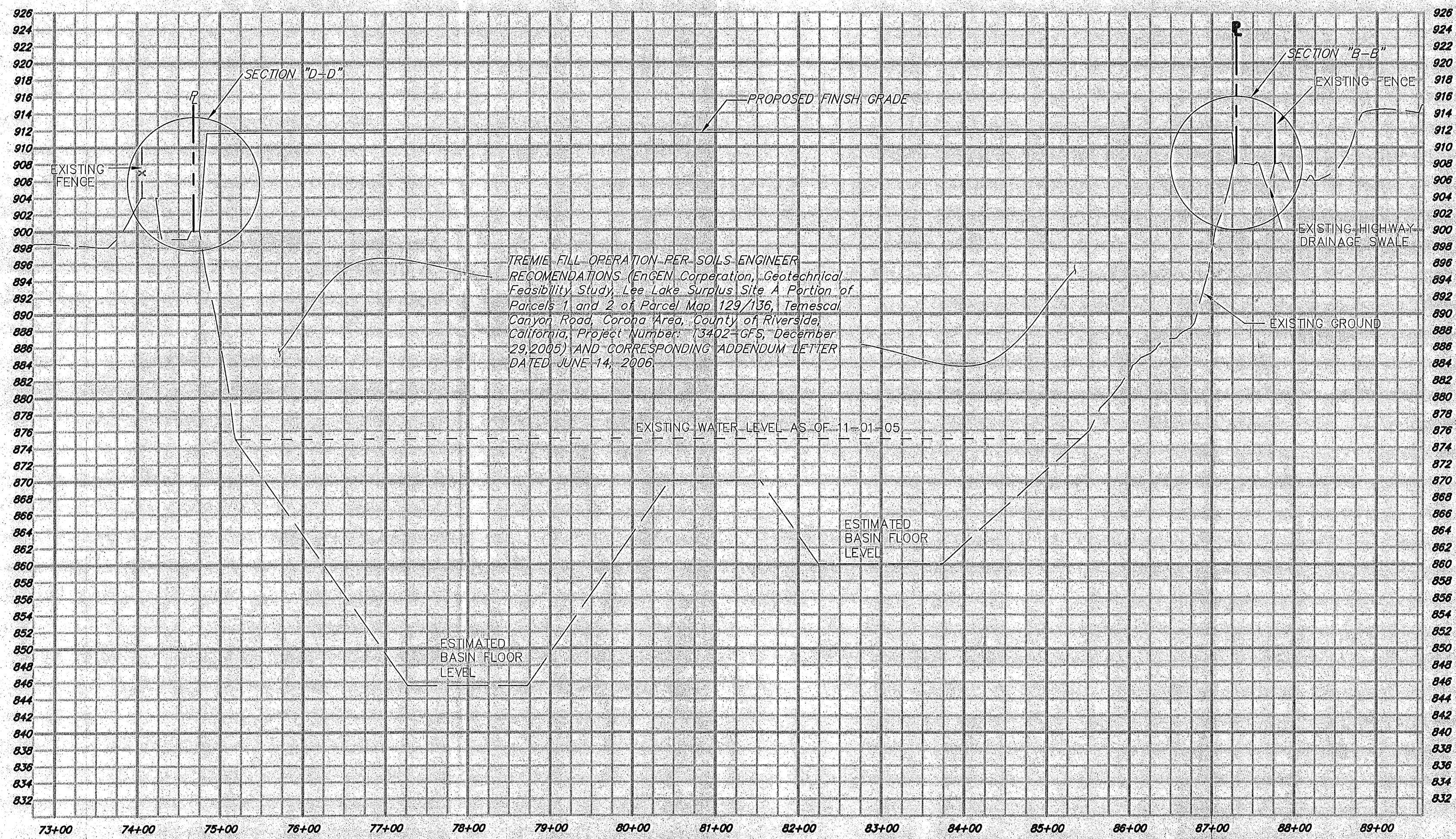
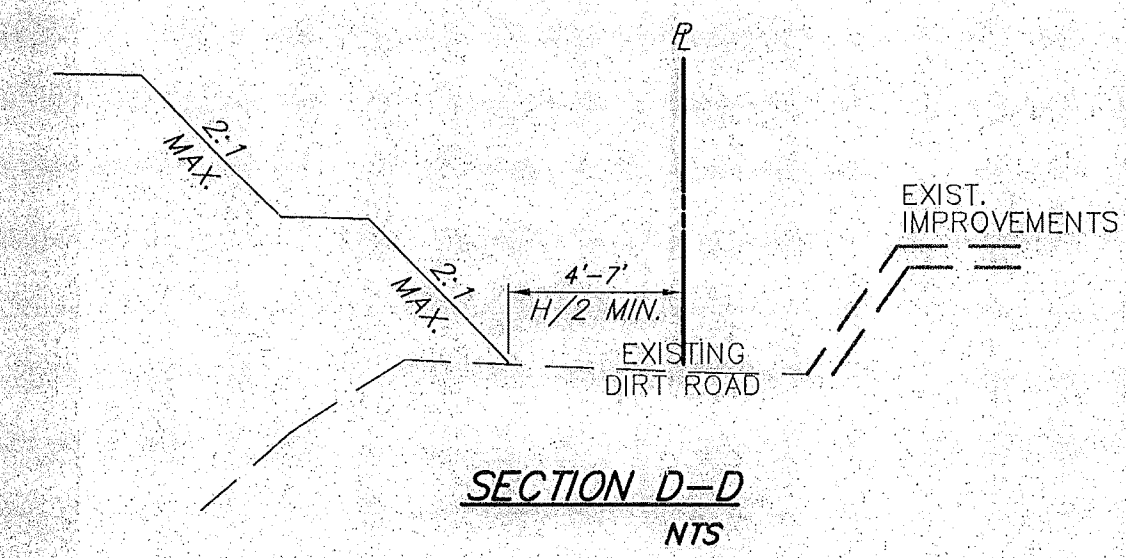
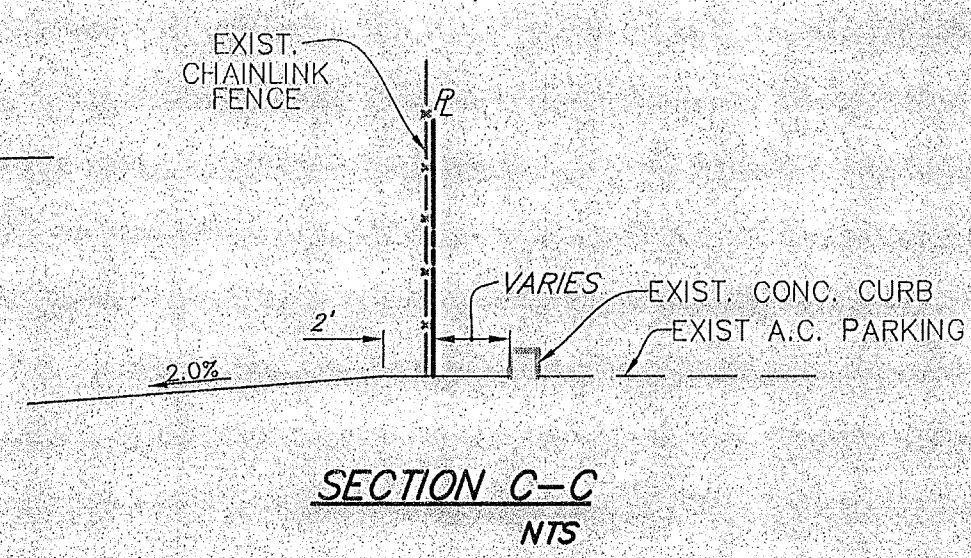
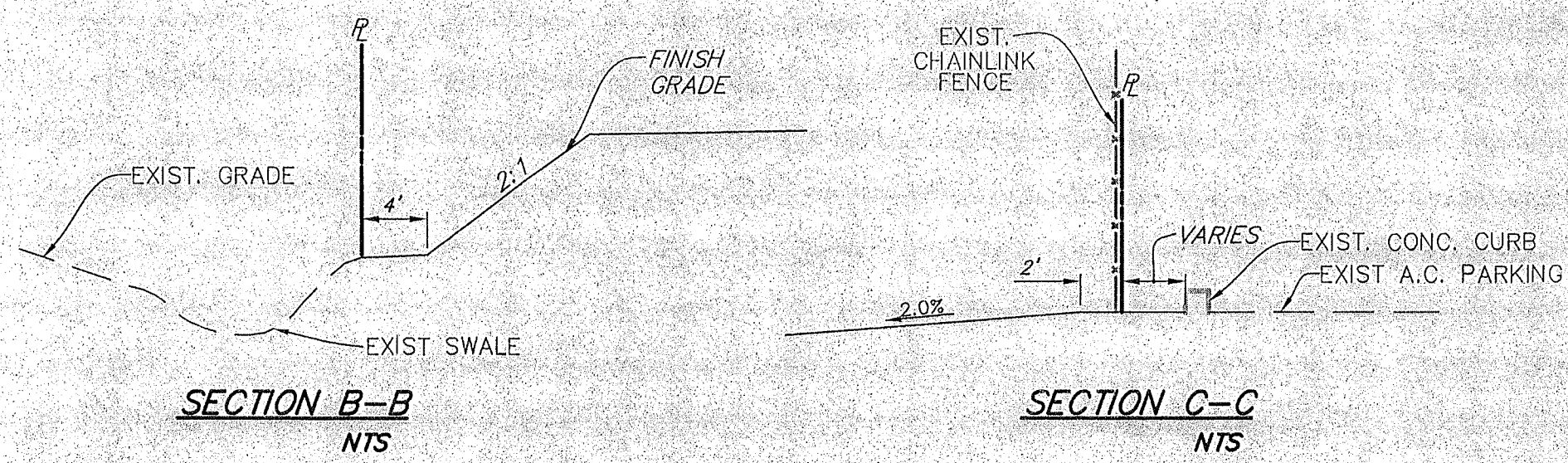
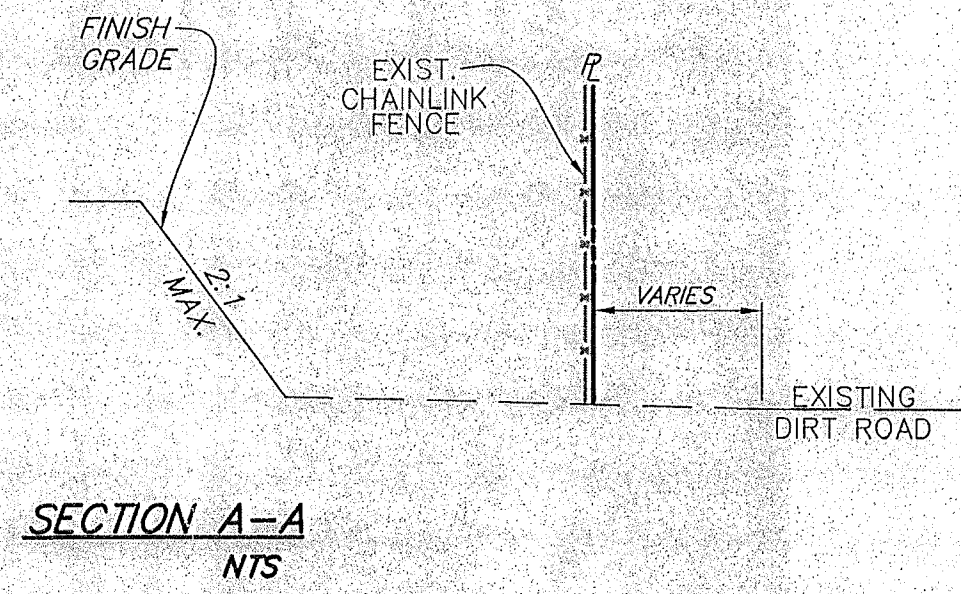
PREPARED UNDER THE SUPERVISION OF:
KEVIN J. RICHER
R.C.E. 43714 - I.C. EXP. 03/31/15
DATE: 11/22/13

EROSION CONTROL PLAN

SITE:
TEMESCAL CANYON ROAD
CORONA CA

PREPARED FOR:
CLENDEEN DEVELOPMENT CO.
CONTACT: DARRELL CLENDEEN
1215 POMONA ROAD, SUITE "D"
CORONA, CA 92882
PHONE: (951) 271-0736

DATE: 08/21/13
JOB NO.: 4480
DRAWN BY: JCO
SCALE: 1"=100'
DESIGNED BY: KJR
SHEET: 3
CHECKED BY: KJR
OF SHEETS: 4



LAND DEVELOPMENT DESIGN COMPANY, LLC
2313 E. Philadelphia St., Ste. F
Ontario, CA 91761
(909) 930-1488 • FAX (909) 930-1488
PLANNING • CIVIL • SURVEYING

BENCHMARK
USCROSS DISK N316 1235
1.5 MILES NW OF ALBERHILL
POST OFFICE ALONG
TEMESCAL CANYON ROAD,
30' NE OF THE CL OF THE
DRIVEWAY 26' NE OF THE
CENTERLINE OF THE ROAD.
ELEVATION: 1182.819

REVISIONS:

PREPARED UNDER THE SUPERVISION OF:

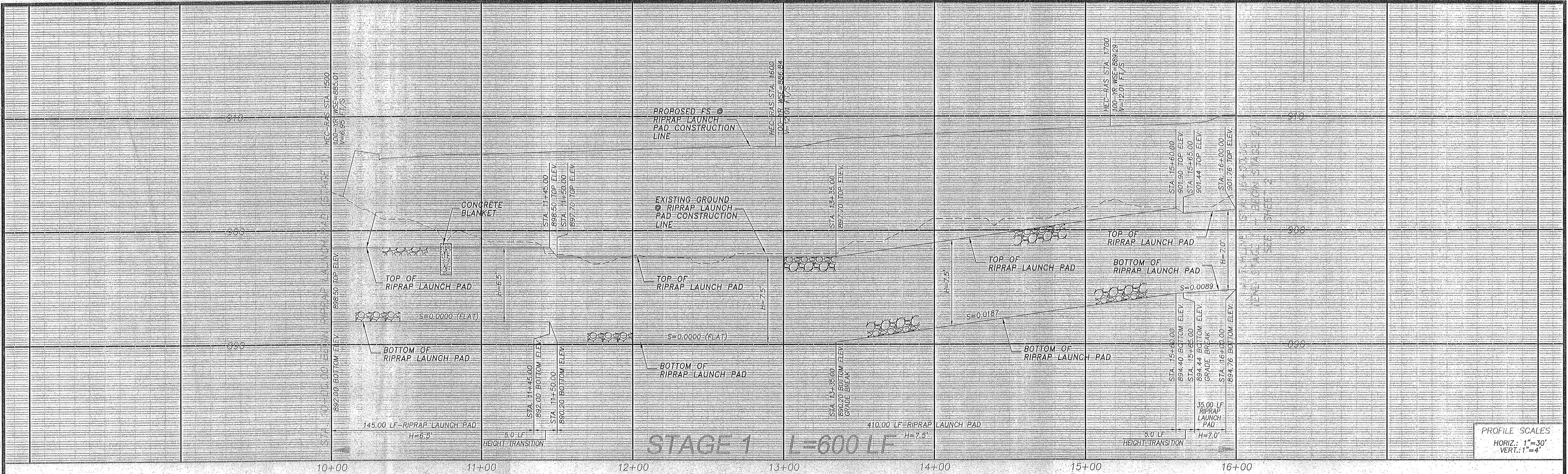
KEVIN J. RICHER
R.C.E. 43714 LIC. EXP. 03/31/15
APPROVED BY: _____ DATE: 11/22/13

MASS GRADING PLAN SECTIONS

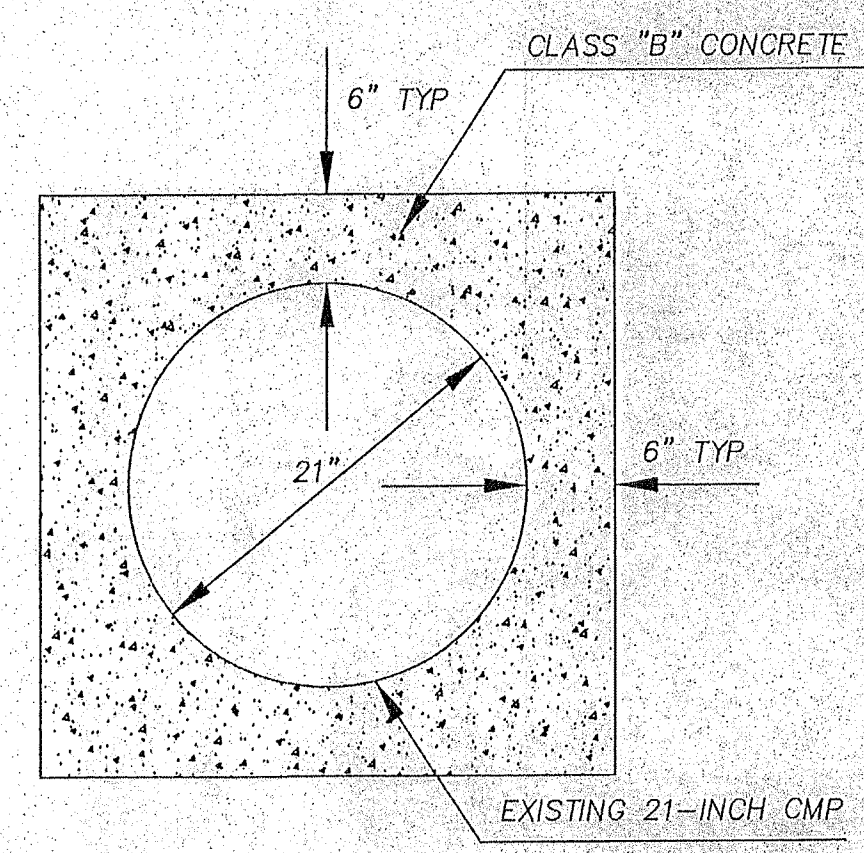
SITE:
TEMESCAL CANYON ROAD
CORONA, CA

PREPARED FOR:
CLENDEEN DEVELOPMENT CO.
CONTACT: DARRELL CLENDEEN
1215 POMONA ROAD, SUITE "D"
CORONA, CA 92882
PHONE: (951) 271-0738

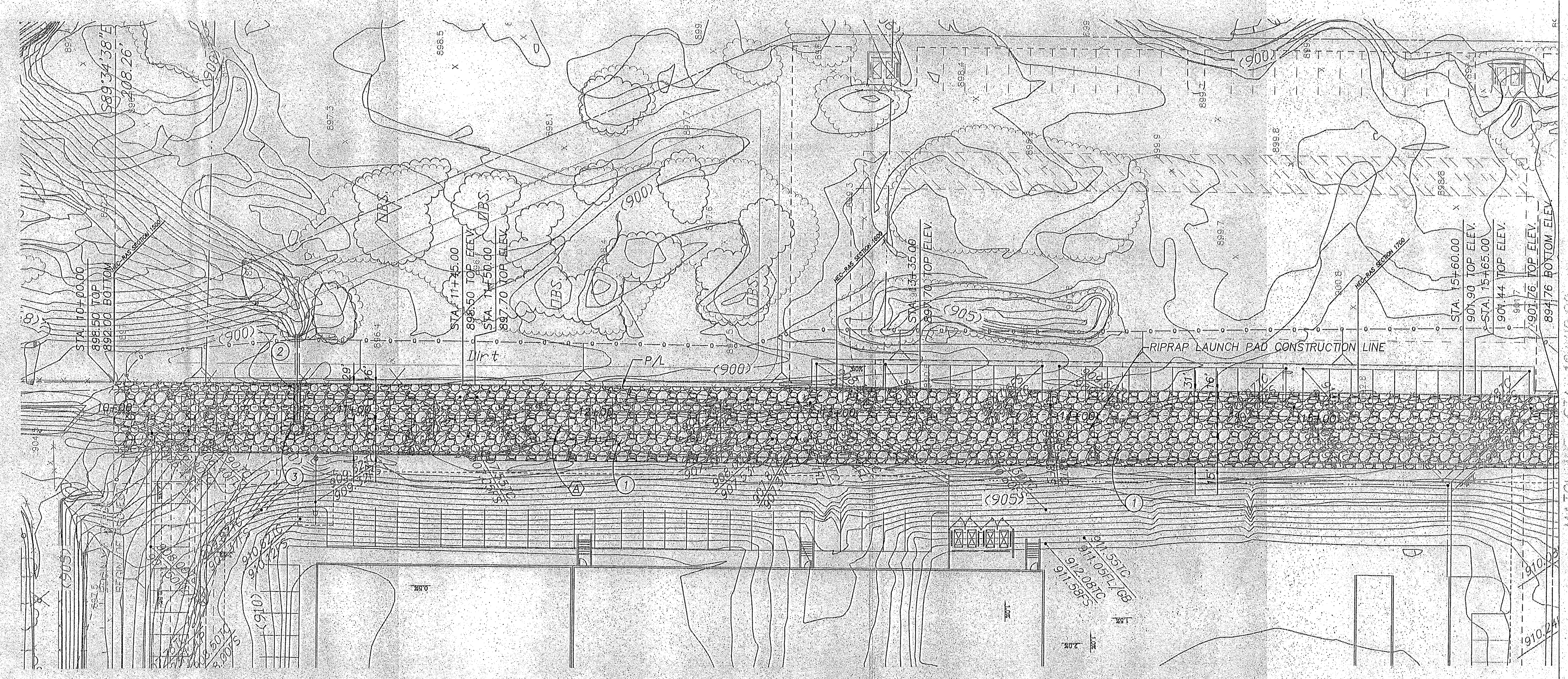
DATE: 08/21/13
JOB NO.: 4480
DRAWN BY: JCO
SCALE: AS NOTED
DESIGNED BY: KJR
CHECKED BY: KJR
SHEET 4 OF 4 SHEETS



PROFILE SCALES
 HORIZ.: 1"=30'
 VERT.: 1"=4'



DETAIL 'B'
 NTS

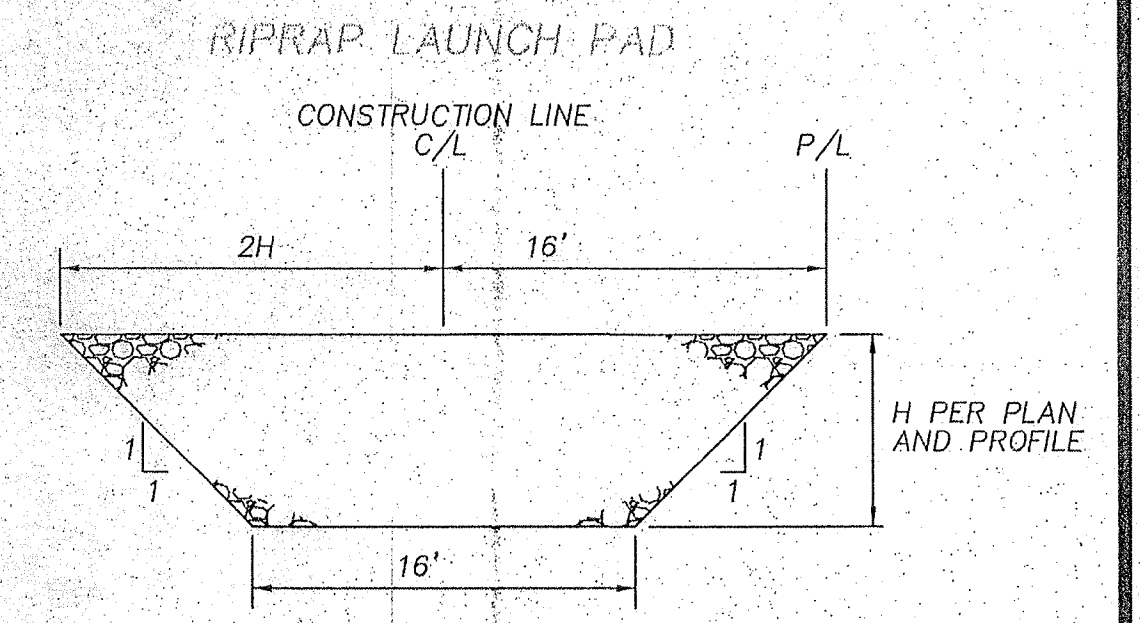


CONSTRUCTION NOTES

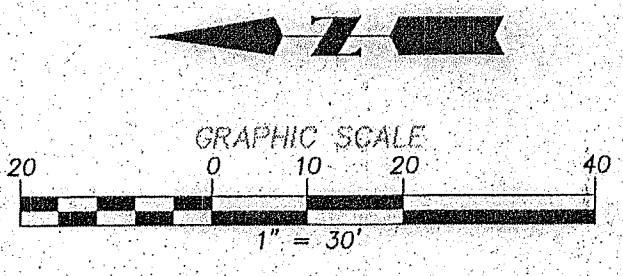
- CONSTRUCT RIPRAP LAUNCH PAD PER CALTRANS STD. SPECS. 72 AND AS SHOWN ON DETAIL "A" HEREON. RIPRAP SHALL BE PLACED AS RECOMMENDED IN THE PROJECT SOIL'S REPORT PREPARED BY "XXX" COMPANY DATED XXX.
- CONSTRUCT 6-INCH THICK CONCRETE BLANKET PER DETAIL SHOWN ON DETAIL "B" HEREON.
- REMOVE EXISTING DROP INLET AND CAP EXISTING 21-INCH CMP WITH BRICK AND MORTAR.

LINE DATA

DELTA/BEARING	LEN/DIST.
N00°39'53"E	580.00'



RIPRAP LAUNCH PAD DETAIL 'A'
 NTS



BASIS OF BEARING			DESIGNED BY: LB	DRAWN BY: CAD OPERATOR	CHECKED BY: SC/CA
BENCHMARK			PLANS PREPARED UNDER THE SUPERVISION OF: CEAZAR V. AGUILAR		
					DATE

ACI
 AGUILAR CONSULTING, INC.
 1470 COOLEY DRIVE, COLTON, CA 92324
 PH. (909) 783-0101 FAX (909) 783-0108

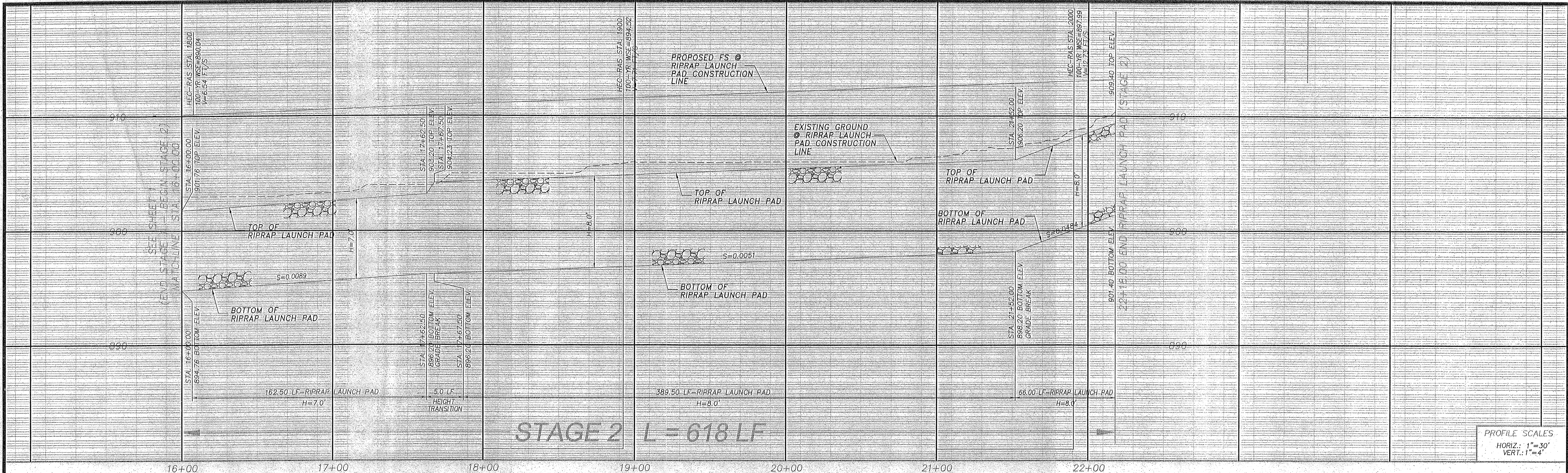
REVISIONS	DATE	INITIAL	AS SHOWN

FTA NO.: 2013-06

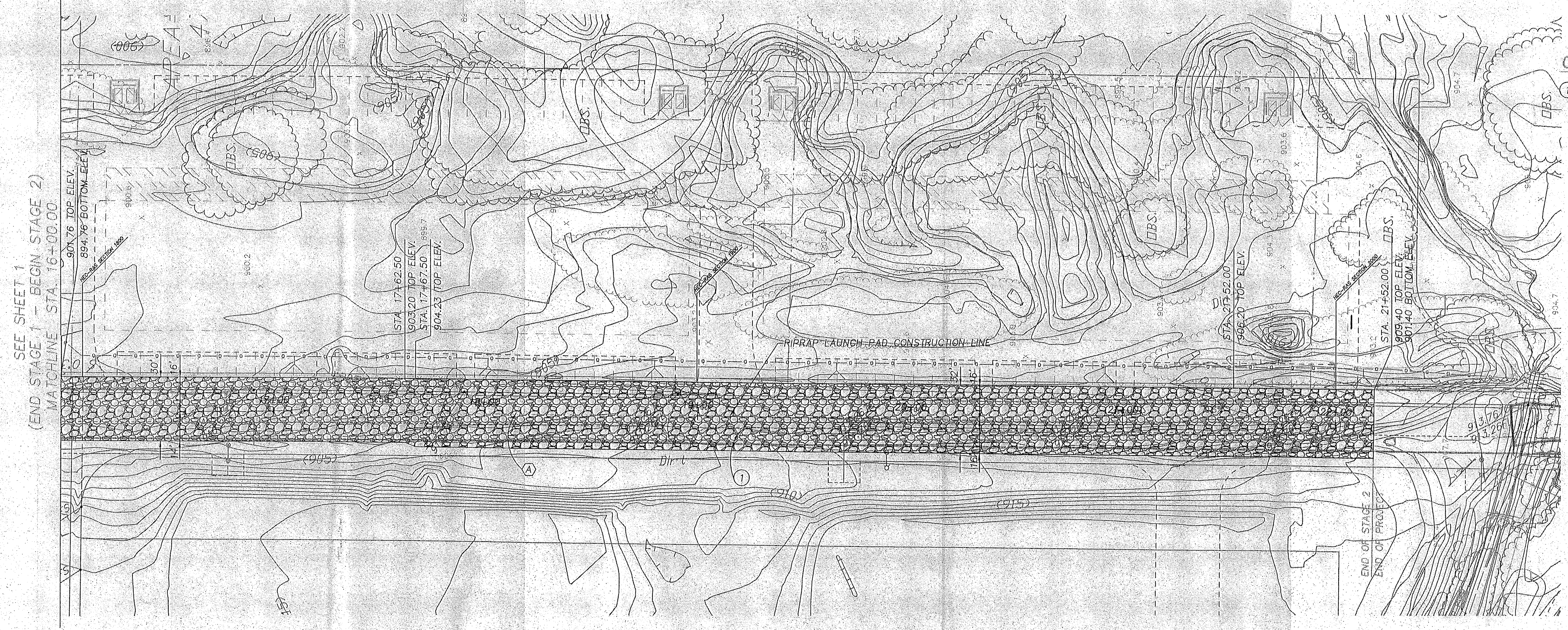
**RIPRAP LAUNCH PAD IMPROVEMENTS
 (STAGE 1) PROJECT
 PLOT PLAN 25397**

SCALE	DESIGNED: LEOVI BOYON	SHT. 6
	DRAWN: CAD OPERATOR	OF
	CHECKED: SAM CRUZ	8
	REVIEWED (CONST.): CEAZAR AGUILAR	SHTS.

Plan Number 25397



PROFILE SCALES
 HORIZ.: 1"=30'
 VERT.: 1"=4'

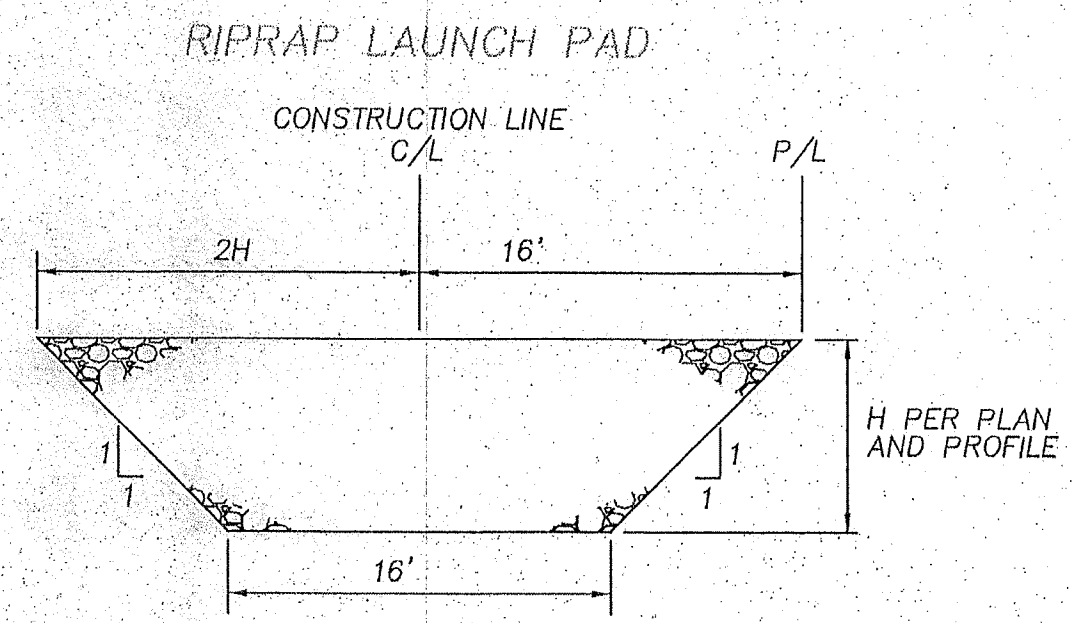


CONSTRUCTION NOTES

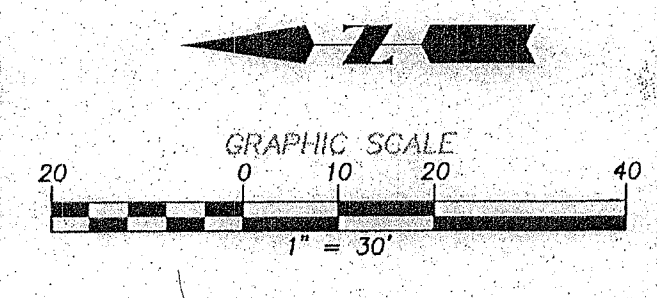
1 CONSTRUCT RIPRAP LAUNCH PAD PER CALTRANS STD. SPECS. 72 AND AS SHOWN ON DETAIL "A" HEREON. RIPRAP SHALL BE PLACED AS RECOMMENDED IN THE PROJECT SOIL'S REPORT PREPARED BY "XXX" COMPANY DATED XXX.

LINE DATA

DELTA/BEARING	LEN/DIST.
N00°37'37"E	618.00'



RIPRAP LAUNCH PAD DETAIL "A"
 NTS



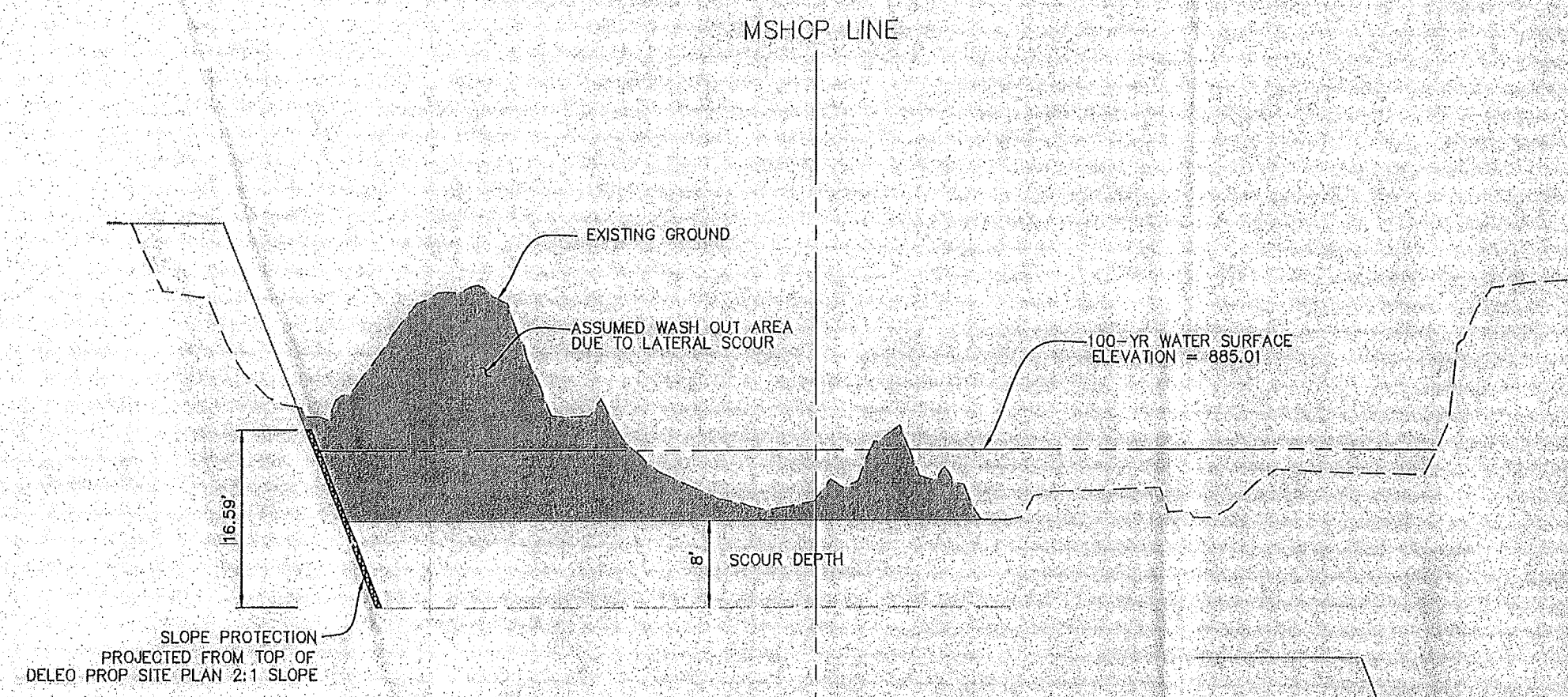
BASIS OF BEARING			DESIGNED BY: LB	DRAWN BY: CAD OPERATOR	CHECKED BY: SC/CA
BENCHMARK			PLANS PREPARED UNDER THE SUPERVISION OF: CEAZAR V. AGUILAR		
					DATE

ACI
 AGUILAR CONSULTING INC.
 1470 COOLEY DRIVE, COLTON, CA 92324
 PH. (909) 783-0101 FAX (909) 783-0108

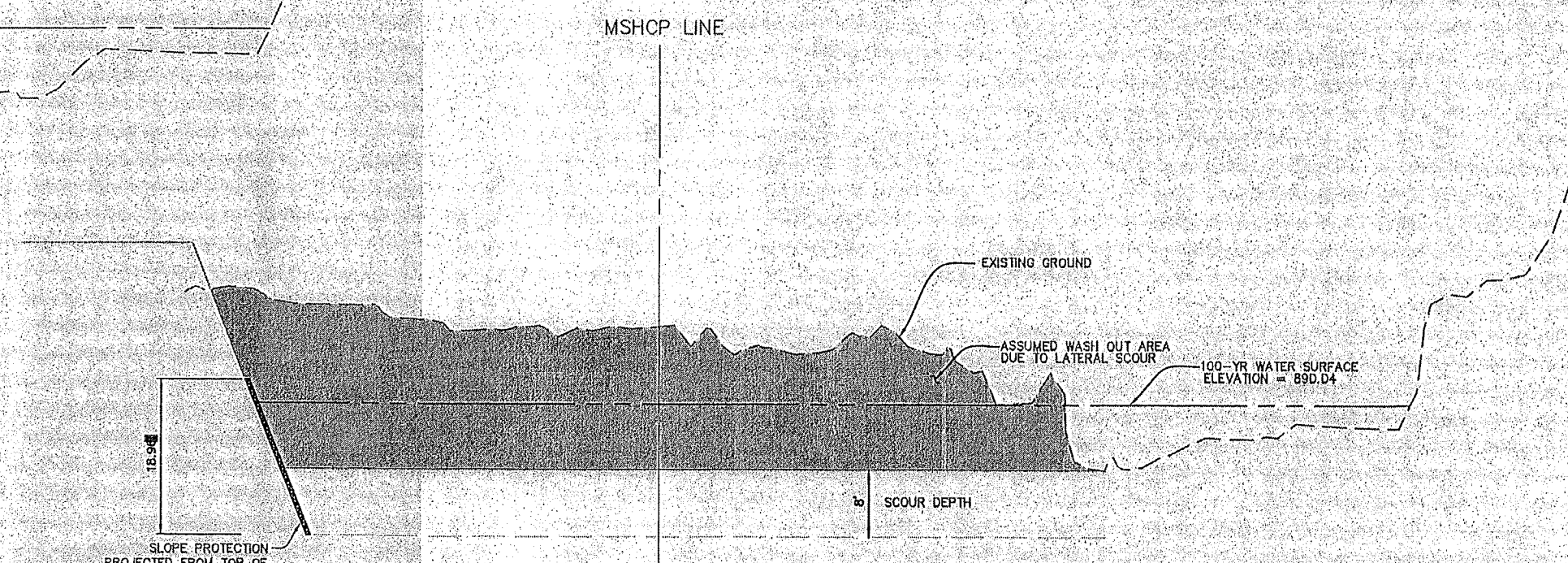
FTA NO. : 2013-06

RIPRAP LAUNCH PAD IMPROVEMENTS (STAGE 1) PROJECT PLOT PLAN 25397

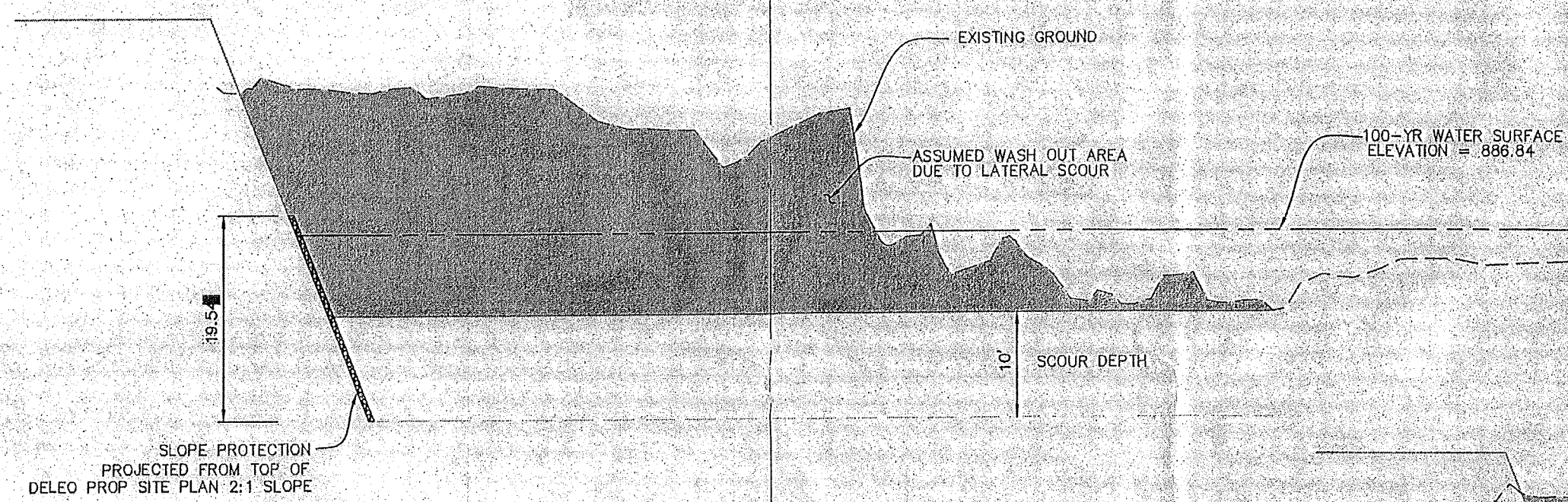
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	DRAWN: CAD OPERATOR	OF
	CHECKED: SAM CRUZ	8
	REVIEWED: CEAZAR AGUILAR	SHTS
	REVIEWED (CONST.):	



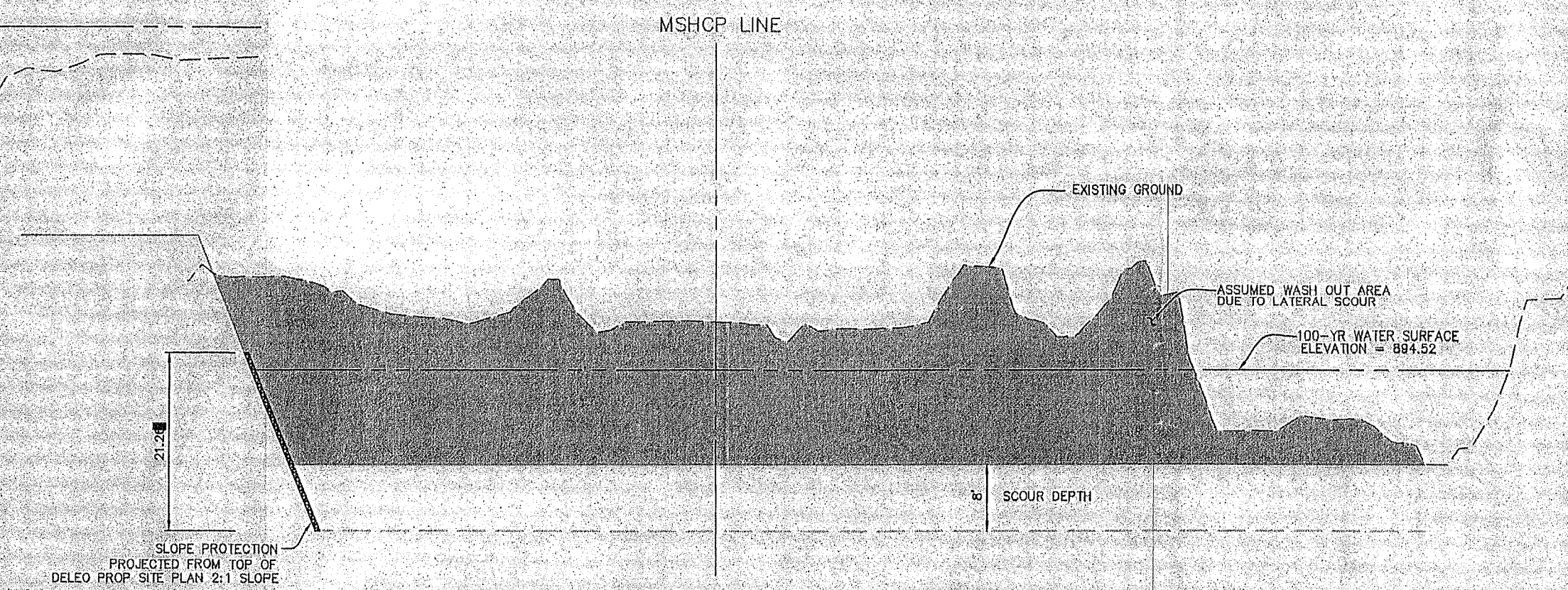
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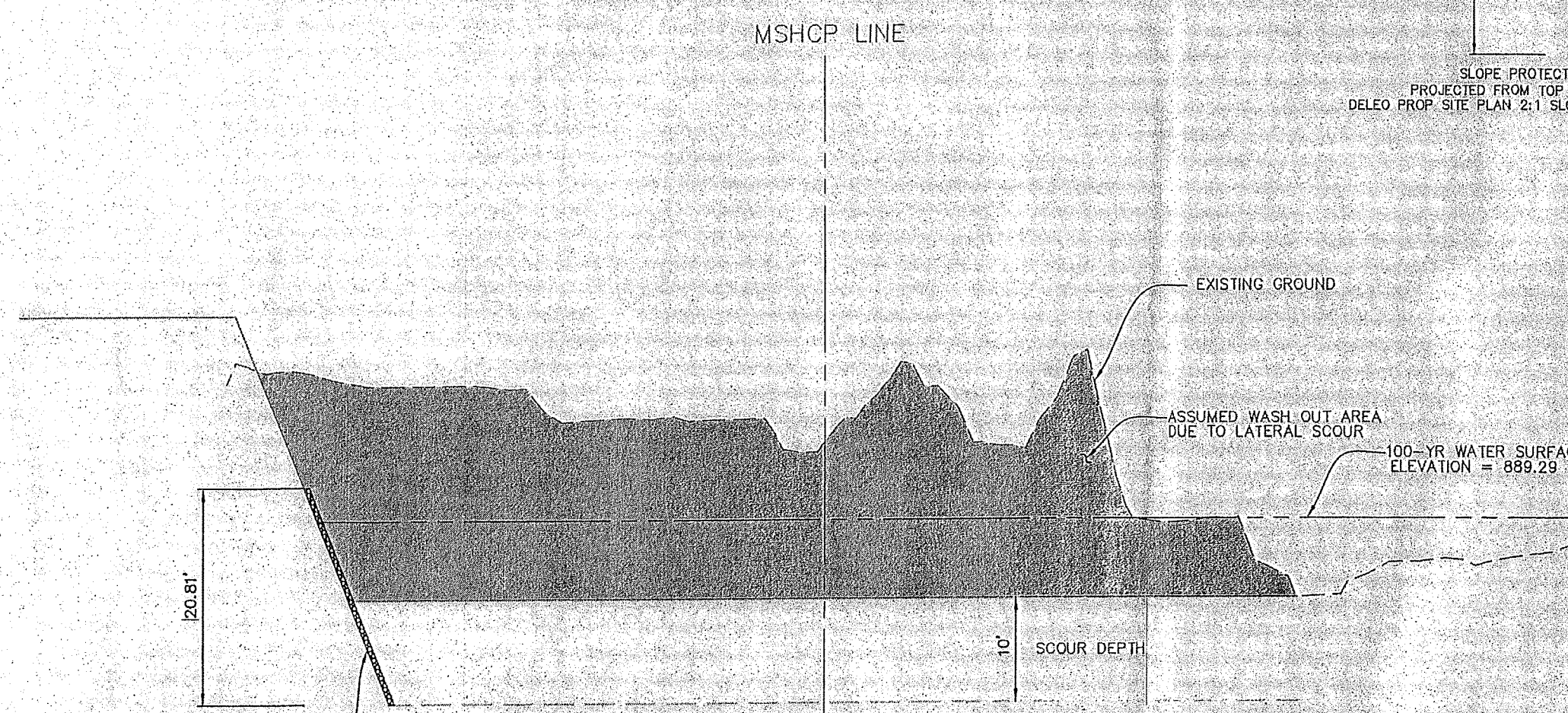
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N.T.S.



SECTION 16+00
N.T.S.

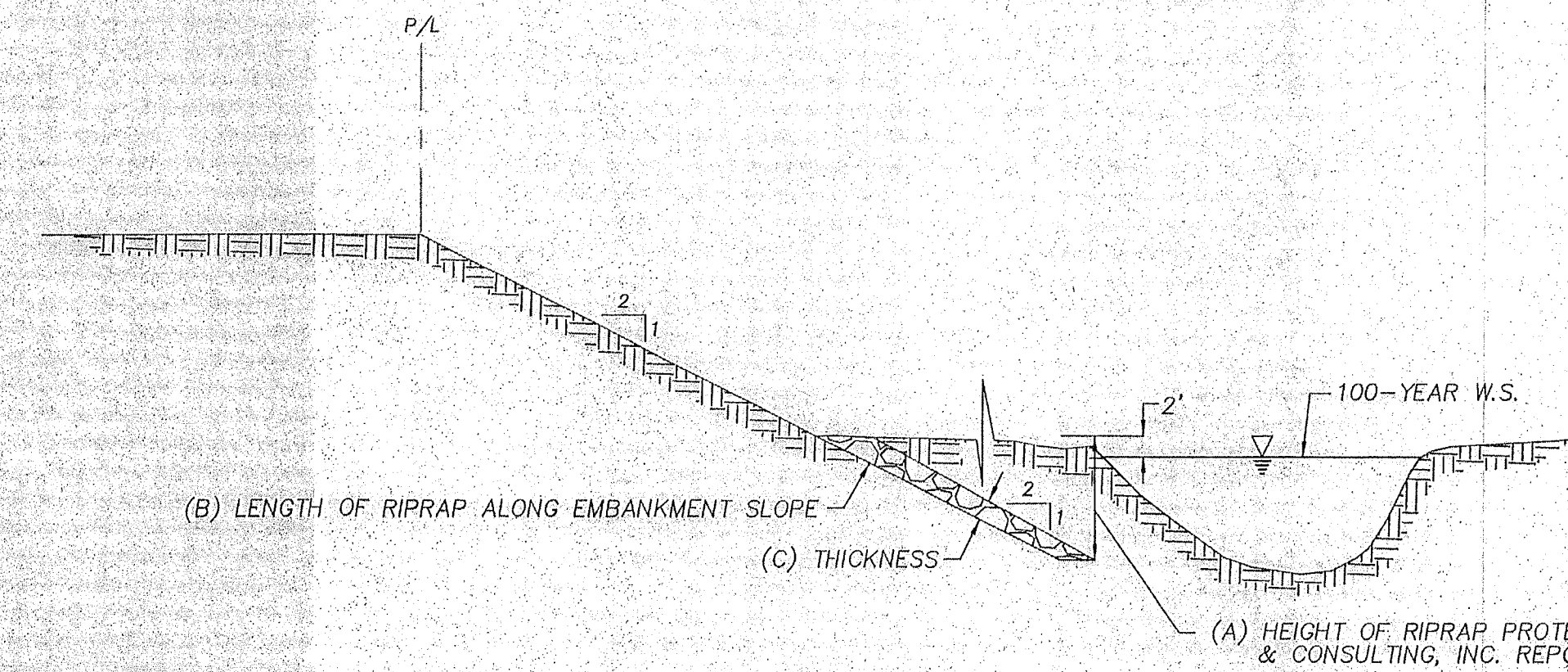


SECTION 19+00
N.T.S.



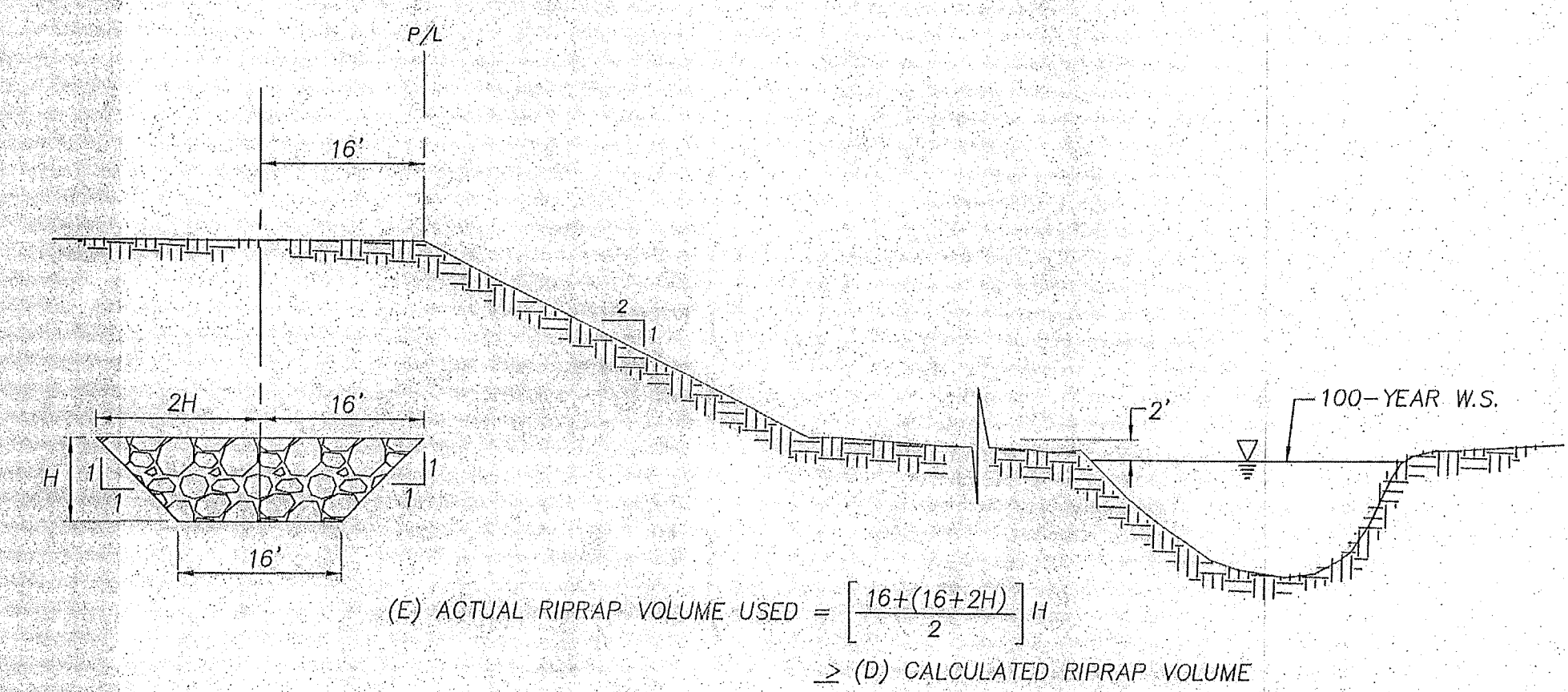
SECTION 17+00
N.T.S.

HEC-RAS SECTIONS, HYDRAULIC INFORMATION, AND HEIGHT OF SLOPE PROTECTION WERE TAKEN FROM RCFD APPROVED "FLOODPLAIN ANALYSIS FOR TEMESCAL WASH, PLOT PLAN 25397 PREPARED BY JLC ENGINEERING & CONSULTING, INC., DATED SEPTEMBER 10, 2013".



(D) CALCULATED RIPRAP VOLUME = (B) X (C) X 1.25 (25% FACTOR OF SAFETY)

STEP 1 (DETERMINING REQUIRED RIPRAP VOLUME QUANTITY)
N.T.S.

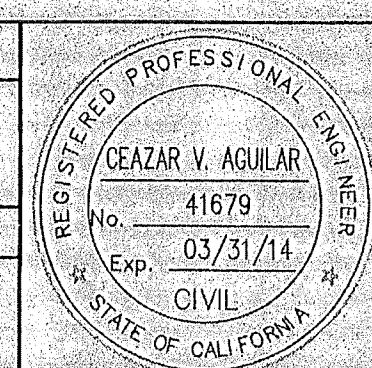


(E) ACTUAL RIPRAP VOLUME USED = $\frac{16 + (16 + 2H)}{2} H$
≥ (D) CALCULATED RIPRAP VOLUME

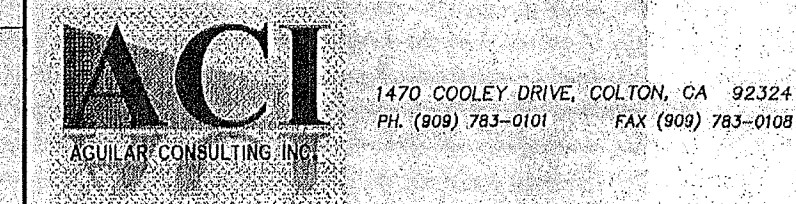
STEP 2 (DETERMINE RIPRAP LAUNCH PAD DIMENSIONS FOR ROCK LAUNCHING)
N.T.S.

HEC-RAS STATION	LIMIT	(A) HEIGHT OF RIP RAP PROTECTION (FT)	(B) LENGTH OF RIPRAP EMBANKMENT SLOPE (FT)	(C) THICKNESS (FT)	(D) CALCULATED RIPRAP VOLUME PLUS 25% (FT ³)	(E) ACTUAL RIPRAP VOLUME USED (FT ³)
1500	STATION 10+00.00 - 12+94.90	16.59	37.10	3.0	139.11	146.25
1600	STATION 12+91.90 - 15+16.49	19.54	43.69	3.0	163.85	176.25
1700	STATION 15+16.49 - 16+07.02	20.81	46.53	3.0	174.50	176.25
1800	STATION 16+08.02 - 18+92.58	18.96	42.40	3.0	158.98	161.00
1900	STATION 18+92.58 - 21+90.53	21.26	47.54	3.0	178.27	192.00

BASIS OF BEARING	
BENCHMARK	



DESIGNED BY: LB	DRAWN BY: CAD OPERATOR	CHECKED BY: SC/CA
PLANS PREPARED UNDER THE SUPERVISION OF:		
CEAZAR V. AGUILAR		DATE



REVISIONS	DATE	INITIAL

RIPRAP LAUNCH PAD-IMPROVEMENTS DETAIL PLAN PM 19201			
SCALE	DESIGNED: DRAWN: CHECKED: REVIEWED (CONST.)	LEOVI BOYON CAD OPERATOR SAM CRUZ CEAZAR AGUILAR	SHT. 8 OF 8 SHTS

FTA NO.: 2013-06

APPENDIX D
SETTLEMENT ANALYSIS

SPT BASED LIQUEFACTION ANALYSIS REPORT

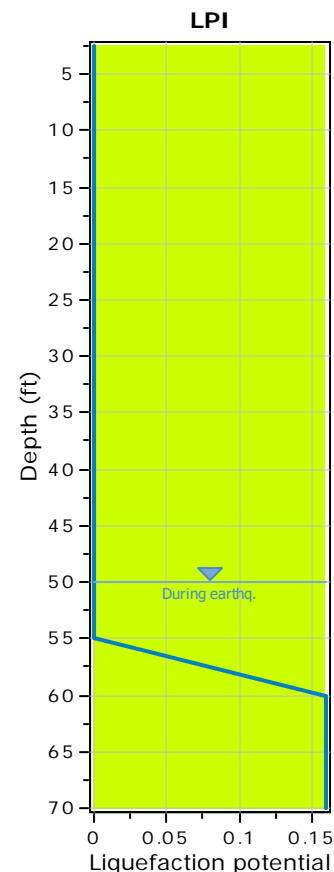
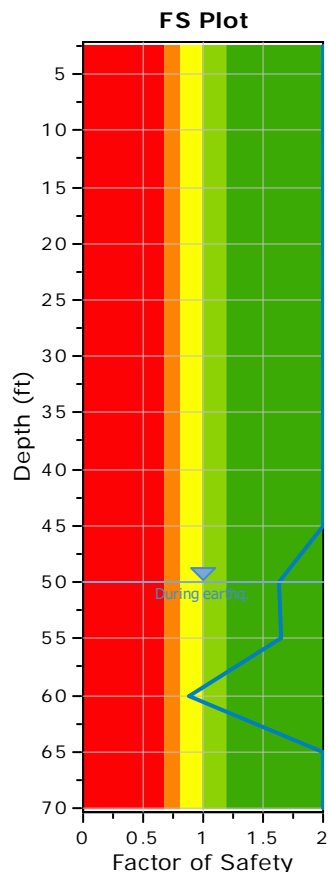
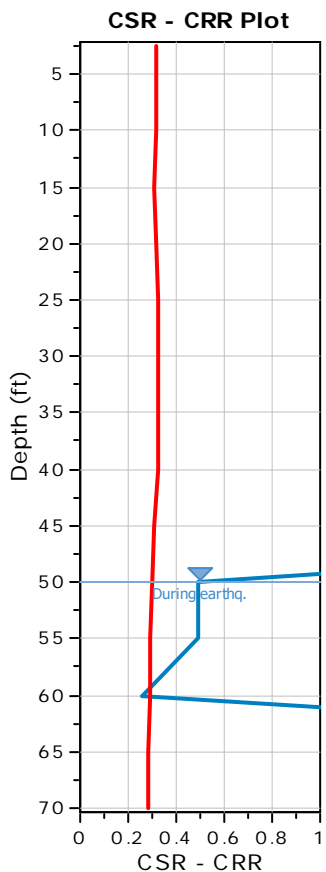
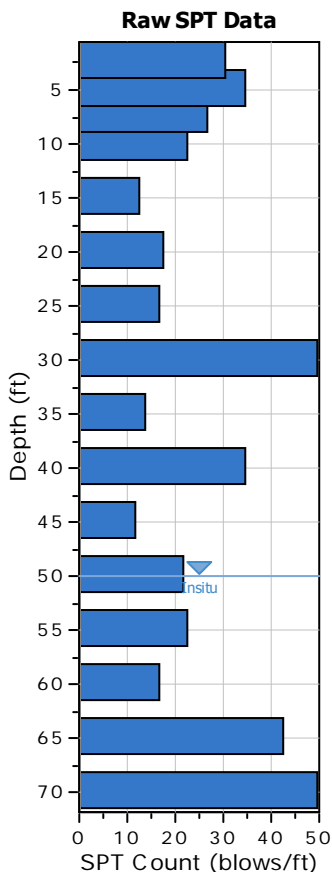
Project title : Corona Quarry

SPT Name: LB-3

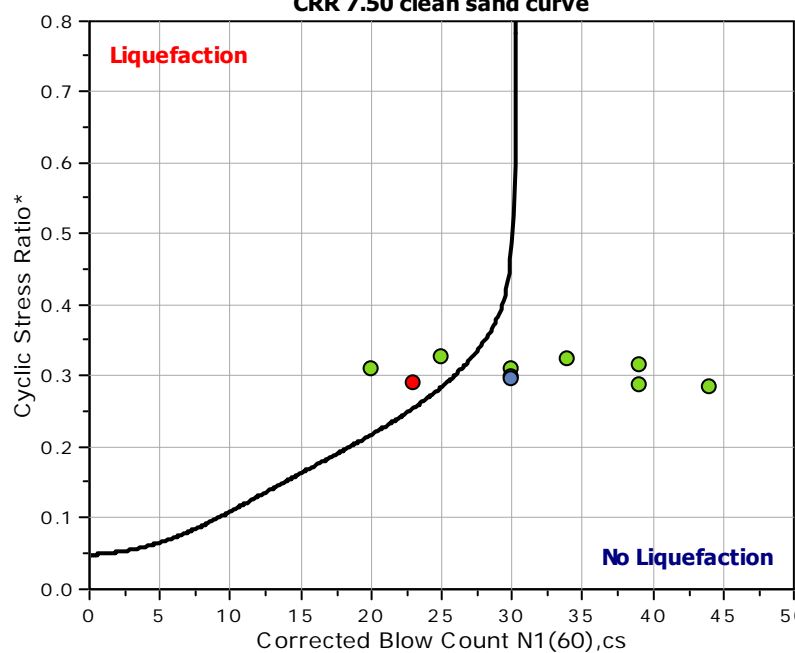
Location :

:: Input parameters and analysis properties ::

Analysis method:	NCEER 1998	G.W.T. (in-situ):	50.00 ft
Fines correction method:	NCEER 1998	G.W.T. (earthq.):	50.00 ft
Sampling method:	Sampler wo liners	Earthquake magnitude M_w :	6.47
Borehole diameter:	200mm	Peak ground acceleration:	0.72 g
Rod length:	3.30 ft	Eq. external load:	0.00 tsf
Hammer energy ratio:	1.33		



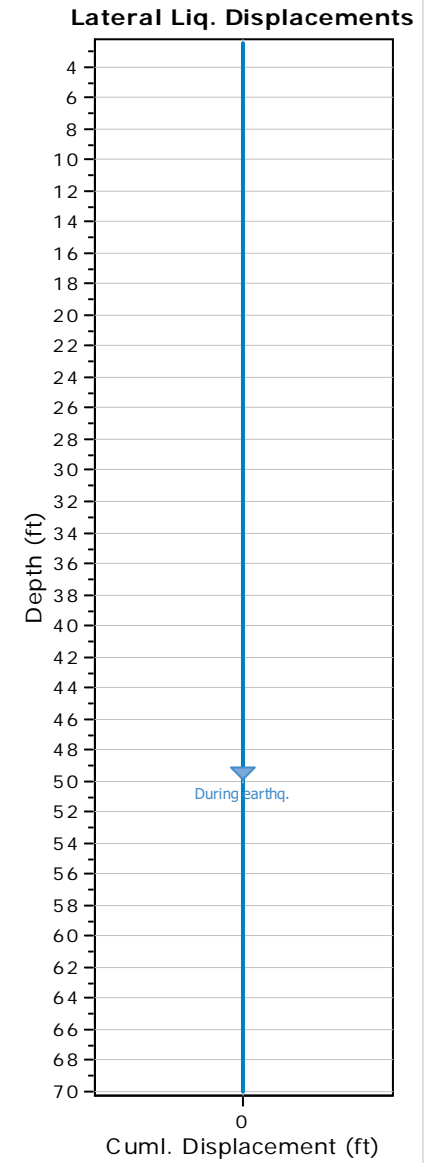
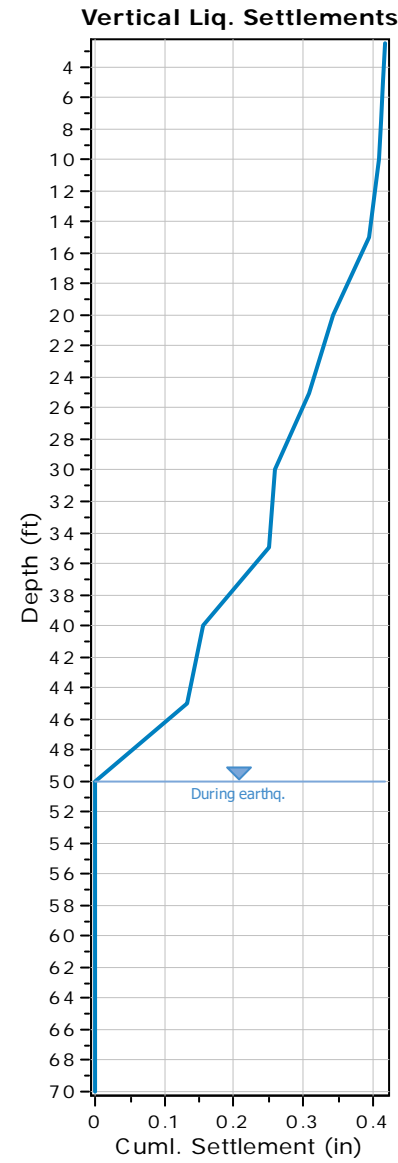
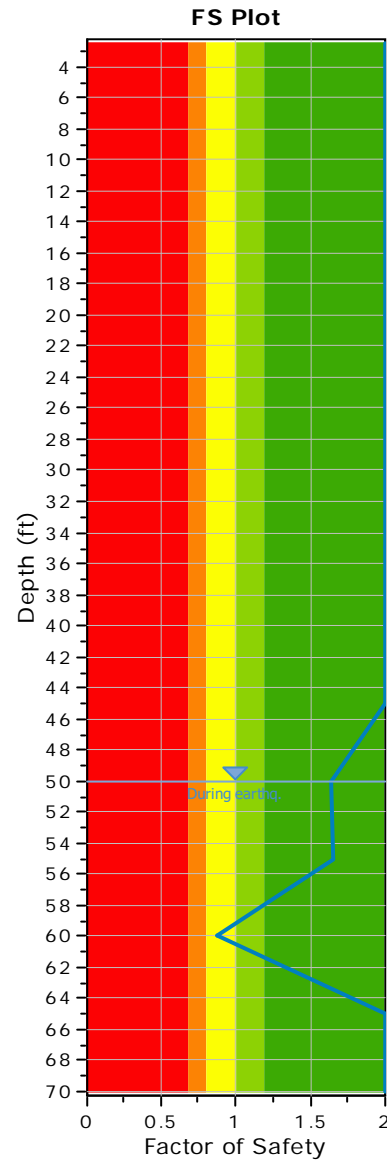
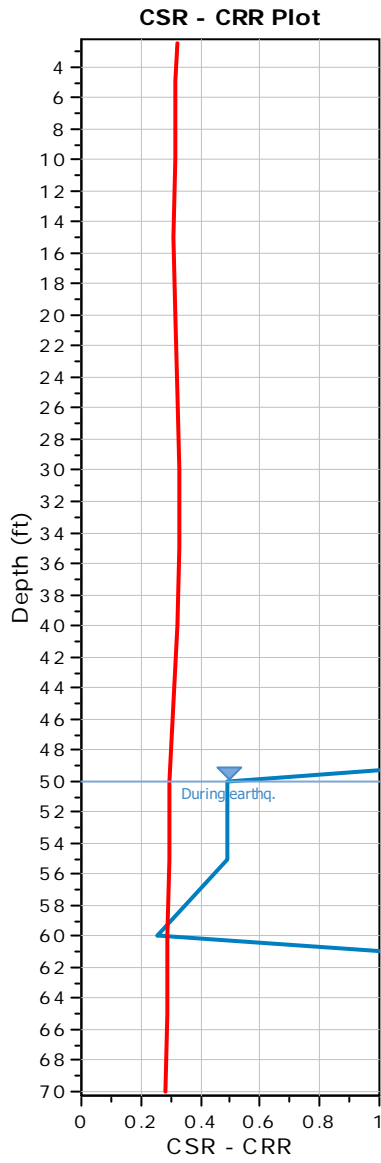
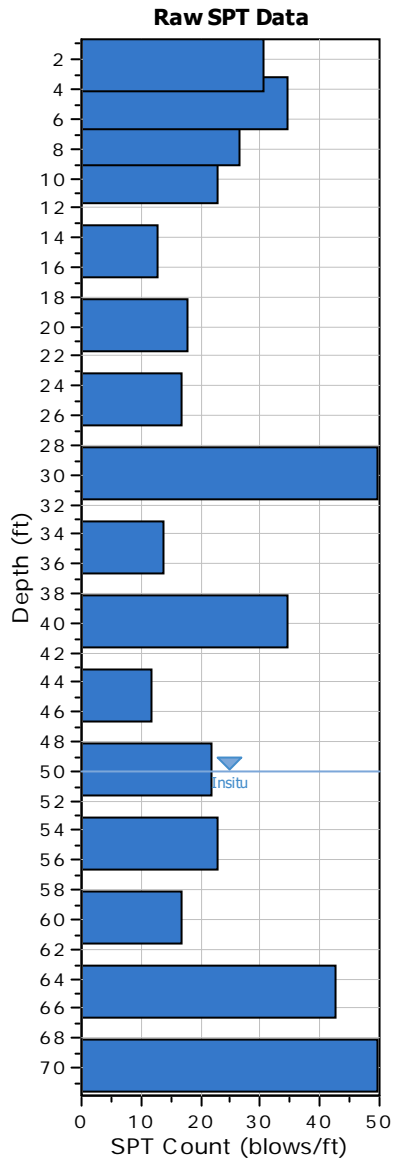
CRR 7.50 clean sand curve



- F.S. color scheme**
- Almost certain it will liquefy
 - Very likely to liquefy
 - Liquefaction and no liq. are equally likely
 - Unlike to liquefy
 - Almost certain it will not liquefy

- LPI color scheme**
- Very high risk
 - High risk
 - Low risk

:: Overall Liquefaction Assessment Analysis Plots ::



:: Field input data ::					
Test Depth (ft)	SPT Field Value (blows)	Fines Content (%)	Unit Weight (pcf)	Infl. Thickness (ft)	Can Liquefy
2.50	31	30.00	120.00	5.00	Yes
5.00	35	30.00	120.00	2.50	Yes
7.50	27	30.00	120.00	2.50	Yes
10.00	23	30.00	120.00	5.00	Yes
15.00	13	30.00	120.00	5.00	Yes
20.00	18	30.00	120.00	5.00	Yes
25.00	17	30.00	120.00	5.00	Yes
30.00	50	30.00	120.00	5.00	Yes
35.00	14	30.00	120.00	5.00	Yes
40.00	35	30.00	120.00	5.00	Yes
45.00	12	30.00	120.00	5.00	Yes
50.00	22	30.00	120.00	5.00	Yes
55.00	23	30.00	120.00	5.00	Yes
60.00	17	30.00	120.00	5.00	Yes
65.00	43	5.00	120.00	5.00	Yes
70.00	50	5.00	120.00	1.50	Yes

Abbreviations

- Depth: Depth at which test was performed (ft)
- SPT Field Value: Number of blows per foot
- Fines Content: Fines content at test depth (%)
- Unit Weight: Unit weight at test depth (pcf)
- Infl. Thickness: Thickness of the soil layer to be considered in settlements analysis (ft)
- Can Liquefy: User defined switch for excluding/including test depth from the analysis procedure

:: Cyclic Resistance Ratio (CRR) calculation data ::																
Depth (ft)	SPT Field Value	Unit Weight (pcf)	σ_v (tsf)	u_o (tsf)	σ'_{vo} (tsf)	C_N	C_E	C_B	C_R	C_S	$(N_1)_{60}$	Fines Content (%)	α	β	$(N_1)_{60cs}$	CRR _{7.5}
2.50	31	120.00	0.15	0.00	0.15	1.64	1.33	1.15	0.75	1.20	70	30.00	4.71	1.15	86	4.000
5.00	35	120.00	0.30	0.00	0.30	1.48	1.33	1.15	0.75	1.20	71	30.00	4.71	1.15	87	4.000
7.50	27	120.00	0.45	0.00	0.45	1.35	1.33	1.15	0.75	1.20	50	30.00	4.71	1.15	62	4.000
10.00	23	120.00	0.60	0.00	0.60	1.25	1.33	1.15	0.85	1.20	45	30.00	4.71	1.15	57	4.000
15.00	13	120.00	0.90	0.00	0.90	1.07	1.33	1.15	0.85	1.20	22	30.00	4.71	1.15	30	4.000
20.00	18	120.00	1.20	0.00	1.20	0.94	1.33	1.15	0.95	1.20	30	30.00	4.71	1.15	39	4.000
25.00	17	120.00	1.50	0.00	1.50	0.84	1.33	1.15	0.95	1.20	25	30.00	4.71	1.15	34	4.000
30.00	50	120.00	1.80	0.00	1.80	0.76	1.33	1.15	1.00	1.20	70	30.00	4.71	1.15	86	4.000
35.00	14	120.00	2.10	0.00	2.10	0.69	1.33	1.15	1.00	1.20	18	30.00	4.71	1.15	25	4.000
40.00	35	120.00	2.40	0.00	2.40	0.63	1.33	1.15	1.00	1.20	41	30.00	4.71	1.15	52	4.000
45.00	12	120.00	2.70	0.00	2.70	0.59	1.33	1.15	1.00	1.20	13	30.00	4.71	1.15	20	4.000
50.00	22	120.00	3.00	0.00	3.00	0.55	1.33	1.15	1.00	1.20	22	30.00	4.71	1.15	30	0.488
55.00	23	120.00	3.30	0.16	3.14	0.53	1.33	1.15	1.00	1.20	22	30.00	4.71	1.15	30	0.488
60.00	17	120.00	3.60	0.31	3.29	0.51	1.33	1.15	1.00	1.20	16	30.00	4.71	1.15	23	0.255
65.00	43	120.00	3.90	0.47	3.43	0.50	1.33	1.15	1.00	1.20	39	5.00	0.00	1.00	39	4.000
70.00	50	120.00	4.20	0.62	3.58	0.48	1.33	1.15	1.00	1.20	44	5.00	0.00	1.00	44	4.000

:: Cyclic Resistance Ratio (CRR) calculation data ::																
Depth (ft)	SPT Field Value	Unit Weight (pcf)	σ_v (tsf)	u_o (tsf)	σ'_{vo} (tsf)	C_N	C_E	C_B	C_R	C_S	$(N_1)_{60}$	Fines Content (%)	α	β	$(N_1)_{60cs}$	CRR _{7.5}

Abbreviations

- σ_v : Total stress during SPT test (tsf)
- u_o : Water pore pressure during SPT test (tsf)
- σ'_{vo} : Effective overburden pressure during SPT test (tsf)
- C_N : Overburden correction factor
- C_E : Energy correction factor
- C_B : Borehole diameter correction factor
- C_R : Rod length correction factor
- C_S : Liner correction factor
- $N_{1(60)}$: Corrected N_{SPT} to a 60% energy ratio
- α, β : Clean sand equivalent clean sand formula coefficients
- $N_{1(60)cs}$: Corrected $N_{1(60)}$ value for fines content
- CRR_{7.5}: Cyclic resistance ratio for M=7.5

:: Cyclic Stress Ratio calculation (CSR fully adjusted and normalized) ::													
Depth (ft)	Unit Weight (pcf)	$\sigma_{v,eq}$ (tsf)	$u_{o,eq}$ (tsf)	$\sigma'_{vo,eq}$ (tsf)	r_d	α	CSR	MSF	CSR _{eq,M=7.5}	K_{σ}	CSR*	FS	

2.50	120.00	0.15	0.00	0.15	1.00	1.00	0.466	1.46	0.320	1.00	0.320	2.000	●
5.00	120.00	0.30	0.00	0.30	0.99	1.00	0.463	1.46	0.318	1.00	0.318	2.000	●
7.50	120.00	0.45	0.00	0.45	0.98	1.00	0.461	1.46	0.316	1.00	0.316	2.000	●
10.00	120.00	0.60	0.00	0.60	0.98	1.00	0.458	1.46	0.314	1.00	0.314	2.000	●
15.00	120.00	0.90	0.00	0.90	0.97	1.00	0.453	1.46	0.311	1.00	0.311	2.000	●
20.00	120.00	1.20	0.00	1.20	0.96	1.00	0.448	1.46	0.307	0.98	0.315	2.000	●
25.00	120.00	1.50	0.00	1.50	0.94	1.00	0.441	1.46	0.302	0.93	0.324	2.000	●
30.00	120.00	1.80	0.00	1.80	0.92	1.00	0.431	1.46	0.295	0.90	0.328	2.000	●
35.00	120.00	2.10	0.00	2.10	0.89	1.00	0.417	1.46	0.286	0.87	0.328	2.000	●
40.00	120.00	2.40	0.00	2.40	0.85	1.00	0.398	1.46	0.273	0.85	0.322	2.000	●
45.00	120.00	2.70	0.00	2.70	0.80	1.00	0.376	1.46	0.258	0.83	0.311	2.000	●
50.00	120.00	3.00	0.00	3.00	0.75	1.00	0.352	1.46	0.241	0.81	0.297	1.641	●
55.00	120.00	3.30	0.16	3.14	0.70	1.00	0.345	1.46	0.237	0.80	0.294	1.658	●
60.00	120.00	3.60	0.31	3.29	0.66	1.00	0.338	1.46	0.232	0.80	0.290	0.878	●
65.00	120.00	3.90	0.47	3.43	0.62	1.00	0.331	1.46	0.227	0.79	0.287	2.000	●
70.00	120.00	4.20	0.62	3.58	0.59	1.00	0.325	1.46	0.223	0.78	0.284	2.000	●

Abbreviations

- $\sigma_{v,eq}$: Total overburden pressure at test point, during earthquake (tsf)
- $u_{o,eq}$: Water pressure at test point, during earthquake (tsf)
- $\sigma'_{vo,eq}$: Effective overburden pressure, during earthquake (tsf)
- r_d : Nonlinear shear mass factor
- α : Improvement factor due to stone columns
- CSR: Cyclic Stress Ratio (adjusted for improvement)
- MSF: Magnitude Scaling Factor
- CSR_{eq,M=7.5}: CSR adjusted for M=7.5
- K_{σ} : Effective overburden stress factor
- CSR*: CSR fully adjusted (user FS applied)***
- FS: Calculated factor of safety against soil liquefaction
- *** User FS: 1.00

:: Liquefaction potential according to Iwasaki ::					
Depth (ft)	FS	F	wz	Thickness (ft)	I_L

2.50	2.000	0.00	9.62	2.50	0.00
5.00	2.000	0.00	9.24	2.50	0.00

:: Liquefaction potential according to Iwasaki ::					
Depth (ft)	FS	F	wz	Thickness (ft)	I _L
7.50	2.000	0.00	8.86	2.50	0.00
10.00	2.000	0.00	8.48	2.50	0.00
15.00	2.000	0.00	7.71	5.00	0.00
20.00	2.000	0.00	6.95	5.00	0.00
25.00	2.000	0.00	6.19	5.00	0.00
30.00	2.000	0.00	5.43	5.00	0.00
35.00	2.000	0.00	4.67	5.00	0.00
40.00	2.000	0.00	3.90	5.00	0.00
45.00	2.000	0.00	3.14	5.00	0.00
50.00	1.641	0.00	2.38	5.00	0.00
55.00	1.658	0.00	1.62	5.00	0.00
60.00	0.878	0.12	0.86	5.00	0.16
65.00	2.000	0.00	0.09	5.00	0.00
70.00	2.000	0.00	0.00	0.00	0.00

Overall potential I_L : 0.16

I_L = 0.00 - No liquefaction
 I_L between 0.00 and 5 - Liquefaction not probable
 I_L between 5 and 15 - Liquefaction probable
 I_L > 15 - Liquefaction certain

:: Vertical settlements estimation for dry sands ::												
Depth (ft)	(N ₁) ₆₀	T _{av}	p	G _{max} (tsf)	a	b	γ	ε ₁₅	N _c	ε _{Nc} (%)	Δh (ft)	ΔS (in)
2.50	70	0.07	0.10	625.49	0.13	19976.77	0.00	0.00	7.11	0.00	5.00	0.003
5.00	71	0.14	0.20	888.00	0.14	13179.75	0.00	0.00	7.11	0.00	2.50	0.002
7.50	50	0.21	0.30	971.44	0.14	10333.62	0.00	0.00	7.11	0.01	2.50	0.005
10.00	45	0.27	0.40	1090.72	0.15	8695.39	0.00	0.00	7.11	0.01	5.00	0.012
15.00	22	0.41	0.60	1078.55	0.16	6817.65	0.00	0.00	7.11	0.04	5.00	0.053
20.00	30	0.54	0.80	1359.22	0.17	5736.82	0.00	0.00	7.11	0.03	5.00	0.034
25.00	25	0.66	1.00	1451.72	0.18	5017.94	0.00	0.00	7.11	0.04	5.00	0.049
30.00	70	0.78	1.21	2166.78	0.19	4497.97	0.00	0.00	7.11	0.01	5.00	0.009
35.00	18	0.88	1.41	1550.37	0.21	4100.61	0.00	0.00	7.11	0.08	5.00	0.095
40.00	41	0.96	1.61	2115.69	0.22	3784.89	0.00	0.00	7.11	0.02	5.00	0.022
45.00	13	1.02	1.81	1631.94	0.23	3526.64	0.00	0.00	7.11	0.11	5.00	0.133

Cumulative settlements: 0.418

Abbreviations

- T_{av}: Average cyclic shear stress
- p: Average stress
- G_{max}: Maximum shear modulus (tsf)
- a, b: Shear strain formula variables
- γ: Average shear strain
- ε₁₅: Volumetric strain after 15 cycles
- N_c: Number of cycles
- ε_{Nc}: Volumetric strain for number of cycles N_c (%)
- Δh: Thickness of soil layer (in)
- ΔS: Settlement of soil layer (in)

:: Vertical settlements estimation for saturated sands ::						
Depth (ft)	D₅₀ (in)	q_c/N	e_v weight factor	e_v (%)	Δh (ft)	s (in)
50.00	0.00	5.00	0.17	0.00	5.00	0.000
55.00	0.00	5.00	0.08	0.00	5.00	0.000
60.00	0.00	5.00	0.00	0.00	5.00	0.000
65.00	0.00	5.00	0.00	0.00	5.00	0.000
70.00	0.00	5.00	0.00	0.00	1.50	0.000

Cumulative settlements: 0.000

Abbreviations

- D₅₀: Median grain size (in)
- q_c/N: Ratio of cone resistance to SPT
- e_v: Post liquefaction volumetric strain (%)
- Δh: Thickness of soil layer to be considered (ft)
- s: Estimated settlement (in)

:: Lateral displacements estimation for saturated sands ::						
Depth (ft)	(N₁)₆₀	D_r (%)	γ_{max} (%)	d_z (ft)	LDI	LD (ft)
2.50	70	100.00	0.00	5.00	0.000	0.00
5.00	71	100.00	0.00	2.50	0.000	0.00
7.50	50	100.00	0.00	2.50	0.000	0.00
10.00	45	100.00	0.00	5.00	0.000	0.00
15.00	22	65.67	0.00	5.00	0.000	0.00
20.00	30	76.68	0.00	5.00	0.000	0.00
25.00	25	70.00	0.00	5.00	0.000	0.00
30.00	70	100.00	0.00	5.00	0.000	0.00
35.00	18	59.40	0.00	5.00	0.000	0.00
40.00	41	89.64	0.00	5.00	0.000	0.00
45.00	13	50.48	0.00	5.00	0.000	0.00
50.00	22	65.67	0.76	5.00	0.000	0.00
55.00	22	65.67	0.74	5.00	0.000	0.00
60.00	16	56.00	6.37	5.00	0.000	0.00
65.00	39	87.43	0.00	5.00	0.000	0.00
70.00	44	100.00	0.00	1.50	0.000	0.00

Cumulative lateral displacements: 0.00

Abbreviations

- D_r: Relative density (%)
- γ_{max}: Maximum amplitude of cyclic shear strain (%)
- d_z: Soil layer thickness (ft)
- LDI: Lateral displacement index (ft)
- LD: Actual estimated displacement (ft)

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APPENDIX E
EARTHWORK AND GRADING GUIDE SPECIFICATIONS

APPENDIX E

LEIGHTON CONSULTING, INC.
EARTHWORK AND GRADING GUIDE SPECIFICATIONS

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E - 1 . 0 G E N E R A L

E-1.1 Intent

These Earthwork and Grading Guide Specifications are for grading and earthwork shown on the current, approved grading plan(s) and/or indicated in the Leighton Consulting, Inc. geotechnical report(s). These Guide Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the project-specific recommendations in the geotechnical report shall supersede these Guide Specifications. Leighton Consulting, Inc. shall provide geotechnical observation and testing during earthwork and grading. Based on these observations and tests, Leighton Consulting, Inc. may provide new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

E-1.2 Role of Leighton Consulting, Inc.

Prior to commencement of earthwork and grading, Leighton Consulting, Inc. shall meet with the earthwork contractor to review the earthwork contractor's work plan, to schedule sufficient personnel to perform the appropriate level of observation, mapping and compaction testing. During earthwork and grading, Leighton Consulting, Inc. shall observe, map, and document subsurface exposures to verify geotechnical design assumptions. If observed conditions are found to be significantly different than the interpreted assumptions during the design phase, Leighton Consulting, Inc. shall inform the owner, recommend appropriate changes in design to accommodate these observed conditions, and notify the review agency where required. Subsurface areas to be geotechnically observed, mapped, elevations recorded, and/or tested include (1) natural ground after clearing to receiving fill but before fill is placed, (2) bottoms of all "remedial removal" areas, (3) all key bottoms, and (4) benches made on sloping ground to receive fill.

Leighton Consulting, Inc. shall observe moisture-conditioning and processing of the subgrade and fill materials, and perform relative compaction testing of fill to determine the attained relative compaction. Leighton Consulting, Inc. shall provide *Daily Field Reports* to the owner and the Contractor on a routine and frequent basis.

E-1.3 The Earthwork Contractor

The earthwork contractor (Contractor) shall be qualified, experienced and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Guide

Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing grading and backfilling in accordance with the current, approved plans and specifications.

The Contractor shall inform the owner and Leighton Consulting, Inc. of changes in work schedules at least one working day in advance of such changes so that appropriate observations and tests can be planned and accomplished. The Contractor shall not assume that Leighton Consulting, Inc. is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish earthwork and grading in accordance with the applicable grading codes and agency ordinances, these Guide Specifications, and recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of Leighton Consulting, Inc., unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, adverse weather, etc., are resulting in a quality of work less than required in these specifications, Leighton Consulting, Inc. shall reject the work and may recommend to the owner that earthwork and grading be stopped until unsatisfactory condition(s) are rectified.

E - 2 . 0 P R E P A R A T I O N O F A R E A S T O B E F I L L E D

E-2.1 Clearing and Grubbing

Vegetation, such as brush, grass, roots and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies and Leighton Consulting, Inc.. Care should be taken not to encroach upon or otherwise damage native and/or historic trees designated by the Owner or appropriate agencies to remain. Pavements, flatwork or other construction should not extend under the “drip line” of designated trees to remain.

Leighton Consulting, Inc. shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 3 percent of organic materials (by dry weight: ASTM D 2974). Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area. As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that

are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed.

E-2.2 Processing

Existing ground that has been declared satisfactory for support of fill, by Leighton Consulting, Inc., shall be scarified to a minimum depth of 6 inches (15 cm). Existing ground that is not satisfactory shall be over-excavated as specified in the following Section E-2.3. Scarification shall continue until soils are broken down and free of large clay lumps or clods and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.

E-2.3 Overexcavation

In addition to removals and over-excavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be over-excavated to competent ground as evaluated by Leighton Consulting, Inc. during grading. All undocumented fill soils under proposed structure footprints should be excavated

E-2.4 Benching

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), (>20 percent grade) the ground shall be stepped or benched. The lowest bench or key shall be a minimum of 15 feet (4.5 m) wide and at least 2 feet (0.6 m) deep, into competent material as evaluated by Leighton Consulting, Inc.. Other benches shall be excavated a minimum height of 4 feet (1.2 m) into competent material or as otherwise recommended by Leighton Consulting, Inc.. Fill placed on ground sloping flatter than 5:1 (horizontal to vertical units), (<20 percent grade) shall also be benched or otherwise over-excavated to provide a flat subgrade for the fill.

E-2.5 Evaluation/Acceptance of Fill Areas

All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by Leighton Consulting, Inc. as suitable to receive fill. The Contractor shall obtain a written acceptance (*Daily Field Report*) from Leighton Consulting, Inc. prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys and benches.

E - 3 . 0 F I L L M A T E R I A L

E-3.1 Fill Quality

Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by Leighton Consulting, Inc. prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to Leighton Consulting, Inc. or mixed with other soils to achieve satisfactory fill material.

E-3.2 Oversize

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 6 inches (15 cm), shall not be buried or placed in fill unless location, materials and placement methods are specifically accepted by Leighton Consulting, Inc.. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 feet (3 m) measured vertically from finish grade, or within 2 feet (0.61 m) of future utilities or underground construction.

E-3.3 Import

If importing of fill material is required for grading, proposed import material shall meet the requirements of Section E-3.1, and be free of hazardous materials (“contaminants”) and rock larger than 3-inches (8 cm) in largest dimension. All import soils shall have an Expansion Index (EI) of 20 or less and a sulfate content no greater than (\leq) 500 parts-per-million (ppm). A representative sample of a potential import source shall be given to Leighton Consulting, Inc. at least four full working days before importing begins, so that suitability of this import material can be determined and appropriate tests performed.

E - 4 . 0 F I L L P L A C E M E N T A N D C O M P A C T I O N

E-4.1 Fill Layers

Approved fill material shall be placed in areas prepared to receive fill, as described in Section E-2.0, above, in near-horizontal layers not exceeding 8 inches (20 cm) in loose thickness. Leighton Consulting, Inc. may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers, and only if the building officials with the appropriate jurisdiction approve. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

E-4.2 Fill Moisture Conditioning

Fill soils shall be watered, dried back, blended and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM) Test Method D 1557.

E-4.3 Compaction of Fill

After each layer has been moisture-conditioned, mixed, and evenly spread, each layer shall be uniformly compacted to not-less-than (\geq) 90 percent of the maximum dry density as determined by ASTM Test Method D 1557. In some cases, structural fill may be specified (see project-specific geotechnical report) to be uniformly compacted to at least (\geq) 95 percent of the ASTM D 1557 modified Proctor laboratory maximum dry density. For fills thicker than ($>$) 15 feet (4.5 m), the portion of fill deeper than 15 feet below proposed finish grade shall be compacted to 95 percent of the ASTM D 1557 laboratory maximum density. Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.

E-4.4 Compaction of Fill Slopes

In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by back rolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet (1 to 1.2 m) in fill elevation, or by other methods producing satisfactory results acceptable to Leighton Consulting, Inc.. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of the ASTM D 1557 laboratory maximum density.

E-4.5 Compaction Testing

Field-tests for moisture content and relative compaction of the fill soils shall be performed by Leighton Consulting, Inc.. Location and frequency of tests shall be at our field representative(s) discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

E-4.6 Compaction Test Locations

Leighton Consulting, Inc. shall document the approximate elevation and horizontal coordinates of each density test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that Leighton

Consulting, Inc. can determine the test locations with sufficient accuracy. Adequate grade stakes shall be provided.

E - 5 . 0 EXCAVATION

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by Leighton Consulting, Inc. during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by Leighton Consulting, Inc. based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, then observed and reviewed by Leighton Consulting, Inc. prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by Leighton Consulting, Inc..

E - 6 . 0 TRENCH BACKFILLS

E-6.1 **Safety**

The Contractor shall follow all OSHA and Cal/OSHA requirements for safety of trench excavations. Work should be performed in accordance with Article 6 of the *California Construction Safety Orders*, 2009 Edition or more current (see also: <http://www.dir.ca.gov/title8/sb4a6.html>).

E-6.2 **Bedding and Backfill**

All utility trench bedding and backfill shall be performed in accordance with applicable provisions of the 2018 Edition of the *Standard Specifications for Public Works Construction* (Green Book). Bedding material shall have a Sand Equivalent greater than 30 (SE>30). Bedding shall be placed to 1-foot (0.3 m) over the top of the conduit, and densified by jetting in areas of granular soils, if allowed by the permitting agency. Otherwise, the pipe-bedding zone should be backfilled with Controlled Low Strength Material (CLSM) consisting of at least one sack of Portland cement per cubic-yard of sand, and conforming to Section 201-6 of the 2018 Edition of the *Standard Specifications for Public Works Construction* (Green Book). Backfill over the bedding zone shall be placed and densified mechanically to a minimum of 90 percent of relative compaction (ASTM D 1557) from 1 foot (0.3 m) above the top of the conduit to the surface. Backfill above the pipe zone shall **not** be jetted. Jetting of the bedding around the conduits shall be observed by Leighton Consulting, Inc. and backfill above the pipe zone (bedding) shall be observed and tested by Leighton Consulting, Inc..

E-6.3 Lift Thickness

Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to Leighton Consulting, Inc. that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method, and only if the building officials with the appropriate jurisdiction approve.

Appendix 4: Historical Site Conditions

Phase I Environmental Site Assessment or Other Information on Past Site Use

Appendix 5: LID Infeasibility

LID Technical Infeasibility Analysis

LID Infiltration BMPs

In the Soils Report included in Appendix 3, the geotechnical engineer states that infiltration is not feasible because the site is on engineered fills.

Harvest and Use BMPs

Irrigation use:

In Section D.2 of this Preliminary WQMP, the minimum required irrigated area (9.73 acres) is more than the available irrigated area (0.85 acres), showing that Harvest and Use for irrigation use is infeasible.

Toilet use:

Also in Section D.2 of this Preliminary WQMP, the minimum required toilet users is 1,051 and the projected daily toilet user is estimated to be the maximum occupancy of 428. Harvest and Use for toilet use is infeasible since the minimum required toilet users is more than the projected daily toilet user.

Therefore, Harvest and Use BMPs are considered infeasible.

LID Bioretention

LID Bioretention is deemed infeasible because there is insufficient landscaped area within the disturbed area with the required geometry to provide treatment for the entire DCV.

LID Biotreatment

Modular Wetlands System (MWS) units are proposed for the project. It is a proprietary system that mimics the process of biotreatment in a smaller footprint. The DCV will be stored in the proposed underground detention systems and gradually flow into the proposed MWS units and be treated prior to being discharged offsite.

Appendix 6: BMP Design Details

BMP Sizing, Design Details and other Supporting Documentation

Santa Ana Watershed - BMP Design Flow Rate, Q_{BMP}

(Rev. 10-2011)

Legend:

Required Entries

Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name **DRC Engineering, Inc.**

Date **7/7/2022**

Designed by **JH**

Case No

Company Project Number/Name

21-143 Palisade Temescal Canyon

BMP Identification

BMP NAME / ID **MWS #2**

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

Design Rainfall Intensity

I = **0.20** in/hr

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type (use pull-down menu)	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Rainfall Intensity (in/hr)	Design Flow Rate (cfs)	Proposed Flow Rate (cfs)
131	5,586	Mixed Surface Types	0.574	0.39	2176			
5586		Total			2176	0.20	0.01	0.052

Notes:

MWS-L-4-4-C

Santa Ana Watershed - BMP Design Flow Rate, Q_{BMP}

(Rev. 10-2011)

Legend:

Required Entries

Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name **DRC Engineering, Inc.**

Date **7/7/2022**

Designed by **JH**

Case No

Company Project Number/Name

21-143 Palisade Temescal Canyon

BMP Identification

BMP NAME / ID **MWS #3**

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

Design Rainfall Intensity

I = **0.20** in/hr

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type (use pull-down menu)	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Rainfall Intensity (in/hr)	Design Flow Rate (cfs)	Proposed Flow Rate (cfs)
132	12,539	Mixed Surface Types	0.587	0.40	5004.5			
12539		Total			5004.5	0.20	0.02	0.052

Notes:

MWS-L-4-4-C

MWS Linear | *Sizing Options*



Flow Based Sizing

The MWS Linear can be used in stand alone applications to meet treatment flow requirements. Since the MWS Linear is the only biofiltration system that can accept inflow pipes several feet below the surface it can be used not only in decentralized design applications but also as a large central end-of-the-line application for maximum feasibility.

Model #	Dimensions	WetlandMEDIA Surface Area	Treatment Flow Rate (cfs)
MWS-L-4-4	4' x 4'	23 sq. ft.	0.052
MWS-L-4-6	4' x 6'	32 sq. ft.	0.073
MWS-L-4-8	4' x 8'	50 sq. ft.	0.115
MWS-L-4-13	4' x 13'	63 sq. ft.	0.144
MWS-L-4-15	4' x 15'	76 sq. ft.	0.175
MWS-L-4-17	4' x 17'	90 sq. ft.	0.206
MWS-L-4-19	4' x 19'	103 sq. ft.	0.237
MWS-L-4-21	4' x 21'	117 sq. ft.	0.268
MWS-L-6-8	7' x 9'	64 sq. ft.	0.147
MWS-L-8-8	8' x 8'	100 sq. ft.	0.230
MWS-L-8-12	8' x 12'	151 sq. ft.	0.346
MWS-L-8-16	8' x 16'	201 sq. ft.	0.462
MWS-L-8-20	9' x 21'	252 sq. ft.	0.577
MWS-L-8-24	9' x 25'	302 sq. ft.	0.693

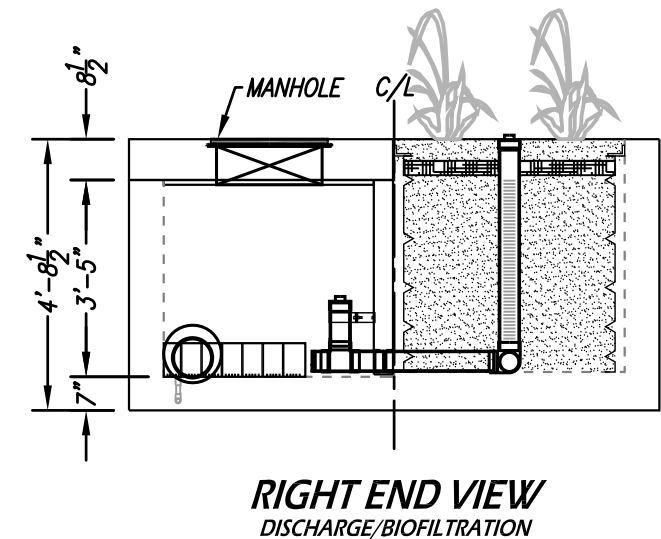
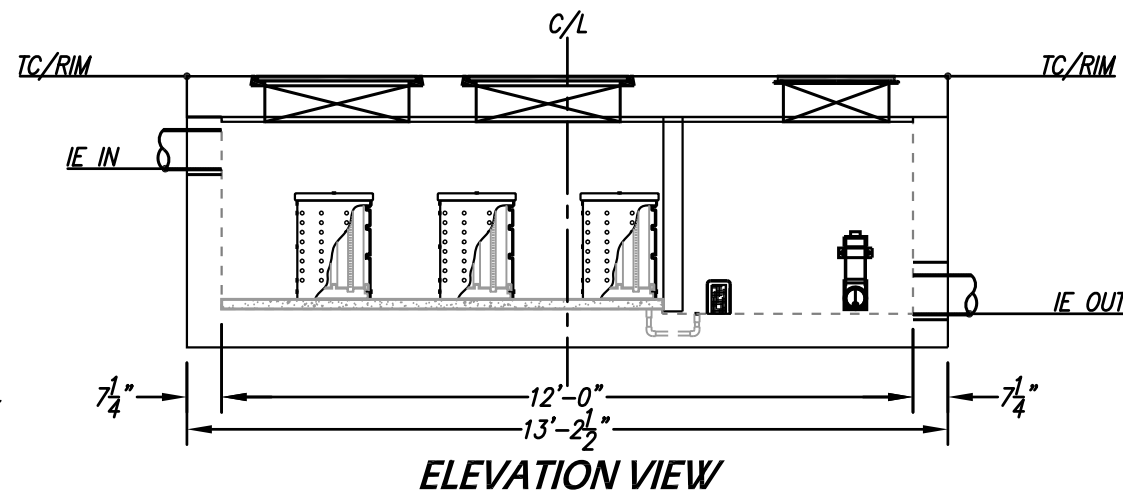
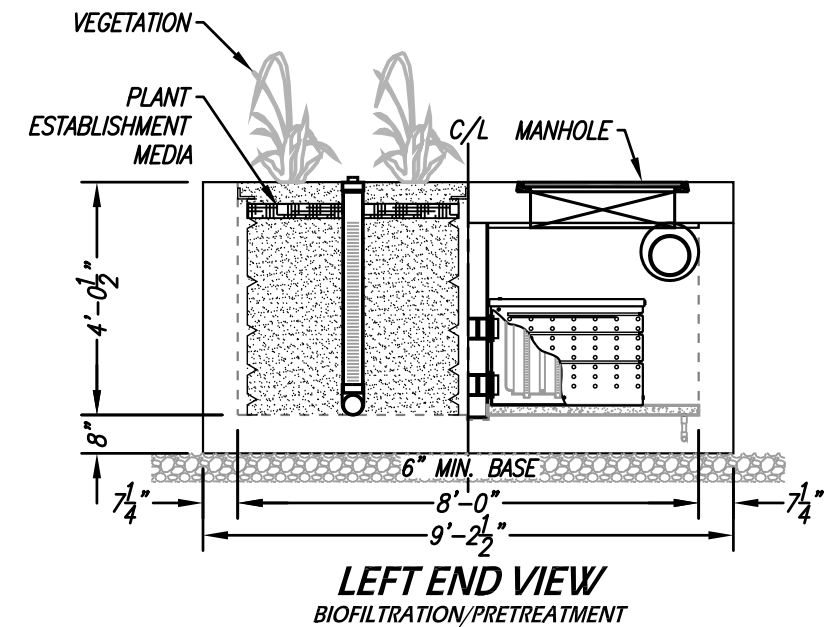
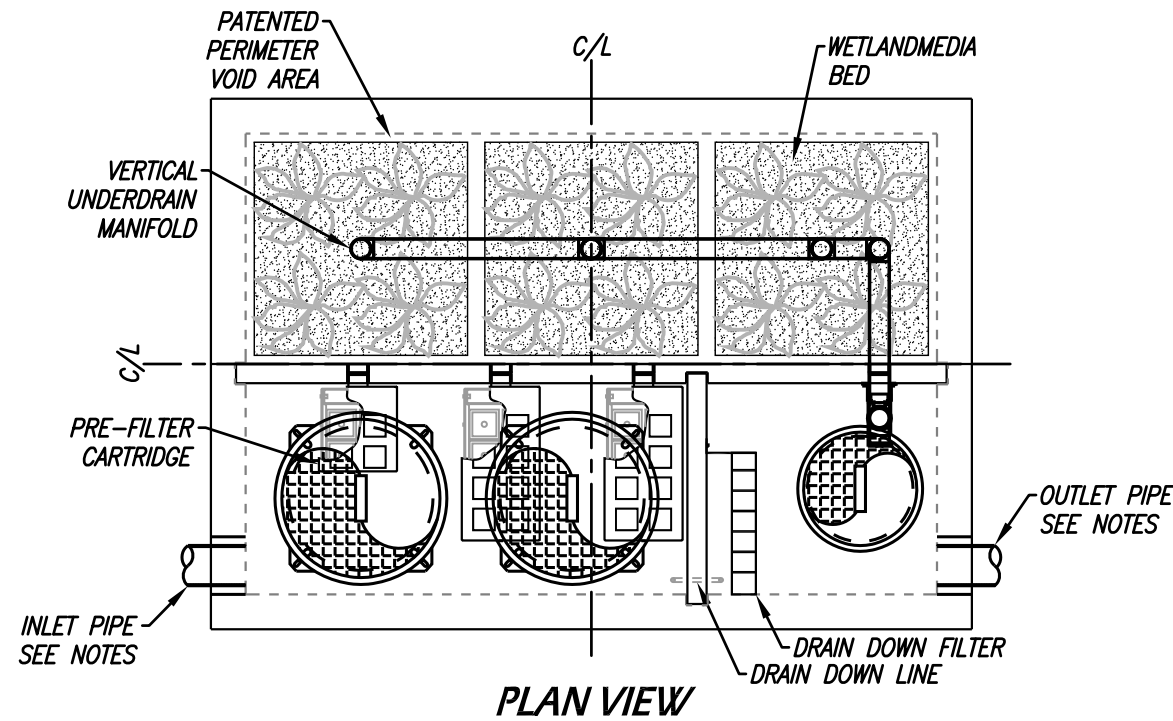


Volume Based Sizing

Many states require treatment of a water quality volume and do not offer the option of flow based design. The MWS Linear and its unique horizontal flow makes it the only biofilter that can be used in volume based design installed downstream of ponds, detention basins, and underground storage systems.

Model #	Treatment Capacity (cu. ft.) @ 24-Hour Drain Down	Treatment Capacity (cu. ft.) @ 48-Hour Drain Down
MWS-L-4-4	1140	2280
MWS-L-4-6	1600	3200
MWS-L-4-8	2518	5036
MWS-L-4-13	3131	6261
MWS-L-4-15	3811	7623
MWS-L-4-17	4492	8984
MWS-L-4-19	5172	10345
MWS-L-4-21	5853	11706
MWS-L-6-8	3191	6382
MWS-L-8-8	5036	10072
MWS-L-8-12	7554	15109
MWS-L-8-16	10073	20145
MWS-L-8-20	12560	25120
MWS-L-8-24	15108	30216

SITE SPECIFIC DATA			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID			
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
TREATMENT HGL AVAILABLE (FT)			
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE			
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD	PARKWAY	OPEN PLANTER	PARKWAY
FRAME & COVER	Ø30"	N/A	Ø24"
WETLANDMEDIA VOLUME (CY)			7.26
WETLANDMEDIA DELIVERY METHOD			TBD
ORIFICE SIZE (DIA. INCHES)			Ø2.66"
MAXIMUM PICK WEIGHT (LBS)			TBD
NOTES:			



INSTALLATION NOTES

1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURERS CONTRACT.
2. UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE TO VERIFY PROJECT ENGINEERS RECOMMENDED BASE SPECIFICATIONS.
3. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE. (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL GAPS AROUND PIPES SHALL BE SEALED WATER TIGHT WITH A NON-SHRINK GROUT PER MANUFACTURERS STANDARD CONNECTION DETAIL AND SHALL MEET OR EXCEED REGIONAL PIPE CONNECTION STANDARDS.
4. CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES.
5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO GROUT ALL MANHOLES AND HATCHES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
6. DRIP OR SPRAY IRRIGATION REQUIRED ON ALL UNITS WITH VEGETATION.

GENERAL NOTES

1. MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT MANUFACTURER.

THE PRODUCT DESCRIBED MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS: 7,425,262; 7,470,362; 7,674,378; 8,303,816; RELATED FOREIGN PATENTS OR OTHER PATENTS PENDING

PROPRIETARY AND CONFIDENTIAL:

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MODULAR WETLANDS SYSTEMS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF MODULAR WETLANDS SYSTEMS IS PROHIBITED.



TREATMENT FLOW (CFS)	0.346
OPERATING HEAD (FT)	3.4
PRETREATMENT LOADING RATE (GPM/SF)	TBD
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

MWS-L-8-12-V
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL

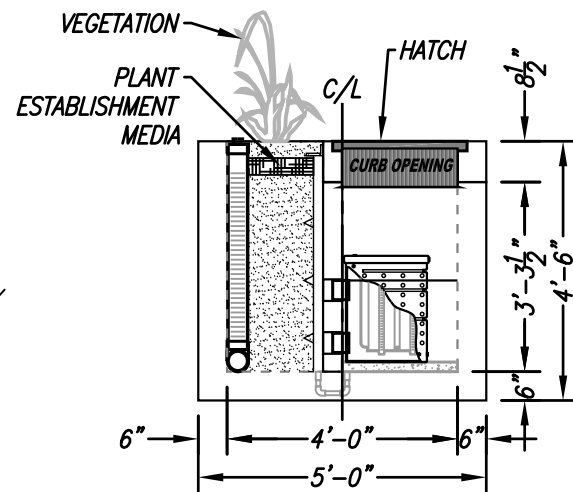
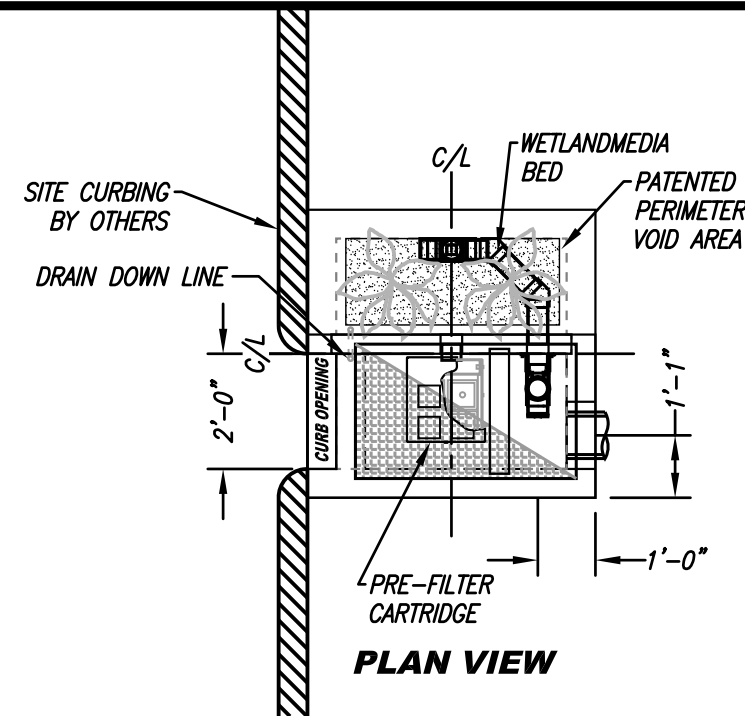
SITE SPECIFIC DATA			
PROJECT NUMBER			
ORDER NUMBER			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID			
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
TREATMENT HGL AVAILABLE (FT)			
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE			
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD	PEDESTRIAN	OPEN PLANTER	PEDESTRIAN
FRAME & COVER	24" X 42"	N/A	N/A
WETLANDMEDIA VOLUME (CY)			TBD
ORIFICE SIZE (DIA. INCHES)			TBD
NOTES: PRELIMINARY NOT FOR CONSTRUCTION.			

INSTALLATION NOTES

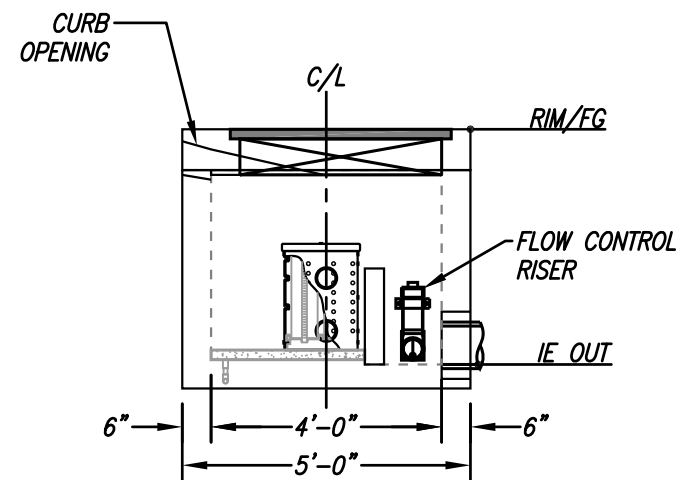
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6. DRIP OR SPRAY IRRIGATION REQUIRED ON ALL UNITS WITH VEGETATION.
7. CONTRACTOR RESPONSIBLE FOR CONTACTING MODULAR WETLANDS FOR ACTIVATION OF UNIT. MANUFACTURES WARRANTY IS VOID WITH OUT PROPER ACTIVATION BY A MODULAR WETLANDS REPRESENTATIVE.

GENERAL NOTES

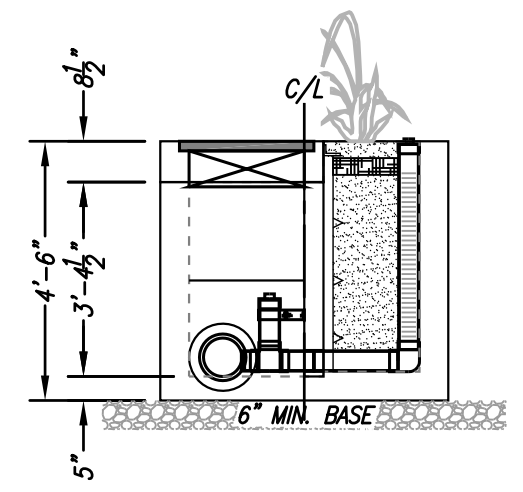
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2. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT MANUFACTURER.



LEFT END VIEW

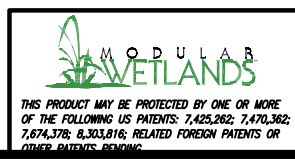


ELEVATION VIEW



RIGHT END VIEW

TREATMENT FLOW (CFS)	0.052
OPERATING HEAD (FT)	3.4
PRETREATMENT LOADING RATE (GPM/SF)	1.8
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0



PROPRIETARY AND CONFIDENTIAL:
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MWS-L-4-4-C
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL

Underground Detention System Sizing

The underground storage analysis was done in the project's Preliminary Drainage Report as follows:

For final design, Riverside County typically requires analysis of the 1-hour, 3-hour, 6-hour and 24-hour duration events for the 2-year, 5-year and 10-year return frequencies. Underground storage and outlet sizing will ensure that none of these storm events has a higher peak discharge in the proposed condition than in the existing condition.

For preliminary design purposes, sizing may be based on the difference in runoff hydrograph volume between the proposed condition and the existing condition of the 24-hour duration event for the 10-year return frequency.

Hydrographs were completed using the total drainage area of 11.80 acres for the existing and proposed condition for the 1-hour, 3-hour, 6-hour and 24-hour events for the 10-year storm frequency. The following table summarizes the volumes for the specified storm events:

Event ()	Existing Condition (ac-ft)	Proposed Condition (ac-ft)	Difference (ac-ft)
10-year 1-hour	0.58	0.77	+0.19
10-year 3-hour	0.67	1.19	+0.52
10-year 6-hour	0.66	1.35	+0.69
10-year 24-hour	0.78	2.59	+1.81

The difference in the 10-year 24-hour storm runoff volume is approximately 1.81 acre-feet. This volume has been provided in the proposed underground storage systems. Final design will include basin routing.

Required storage volume = 1.81 ac-ft = 78,874 cu-ft

The following products are proposed for each underground detention system:

System #1 – Contech Con/Span Model i1804, 18' span x 4' rise, provides waterway area of 60 s.f.

System #2 – Contech Con/Span Model i1805, 18' span x 5' rise, provides waterway area of 78 s.f.

The required storage volume is distributed between the two proposed underground detention systems based on tributary drainage area:

	Drainage Area (ac)	Req'd Storage (cu-ft)	Length of Con/Span (ft)	Provided Storage (cu-ft)	Adequate Storage?
System #1	5.32	36,865	680	37,427	YES
System #2	6.05	41,979	600	42,624	YES

Appendix 7: Hydromodification

Supporting Detail Relating to Hydrologic Conditions of Concern

Flood routing was completed for the 2-, 5-, and 10-year storm events for both existing and proposed conditions to determine the flow required to be mitigated in the proposed condition. The analyses are included in this Appendix with results summarized below.

Existing Condition

Area (ac)	2-year				5-year				10-year			
	24-hr (cfs)	6-hr (cfs)	3-hr (cfs)	1-hr (cfs)	24-hr (cfs)	6-hr (cfs)	3-hr (cfs)	1-hr (cfs)	24-hr (cfs)	6-hr (cfs)	3-hr (cfs)	1-hr (cfs)
11.80	0.81	3.40	4.48	8.25	1.23	6.29	7.91	12.74	3.61	10.43	12.48	18.18
11.80	0.81	3.40	4.48	8.25	1.23	6.29	7.91	12.74	3.61	10.43	12.48	18.18

Proposed Condition

Area (ac)	2-year				5-year				10-year			
	24-hr (cfs)	6-hr (cfs)	3-hr (cfs)	1-hr (cfs)	24-hr (cfs)	6-hr (cfs)	3-hr (cfs)	1-hr (cfs)	24-hr (cfs)	6-hr (cfs)	3-hr (cfs)	1-hr (cfs)
5.31	1.19	3.32	3.79	6.23	1.81	4.69	5.49	8.68	2.33	5.95	6.97	10.75
0.13	0.03	0.09	0.10	0.20	0.04	0.13	0.14	0.28	0.06	0.16	0.18	0.34
0.29	0.07	0.20	0.22	0.45	0.10	0.28	0.32	0.62	0.13	0.35	0.40	0.76
6.07	1.37	3.93	4.45	8.04	2.07	5.58	6.44	11.19	2.66	7.06	8.17	13.80
11.80	2.65	7.53	8.56	14.91	4.02	10.67	12.38	20.77	5.17	13.53	15.72	25.65

The underground storage systems are designed for both water quality and hydromodification. For each underground storage system, a manhole is proposed downstream with three orifices such that none of the analyzed storm events has a higher peak discharge in the proposed condition than in the existing condition: a 3" orifice discharging to the MWS unit, a 12" orifice placed above the depth that corresponds to the DCV for high flow discharging to the storm drain system downstream, and a 12" orifice placed at the elevation of the system's soffit for emergency overflow in a 10-year storm. The mitigated flow from the project site is summarized in the table below. Underground storage analysis is included in this Appendix as well.

Mitigated Condition

Area (ac)	2-year				5-year				10-year			
	24-hr (cfs)	6-hr (cfs)	3-hr (cfs)	1-hr (cfs)	24-hr (cfs)	6-hr (cfs)	3-hr (cfs)	1-hr (cfs)	24-hr (cfs)	6-hr (cfs)	3-hr (cfs)	1-hr (cfs)
5.31	0.32	0.30	0.27	0.23	0.47	0.35	0.32	0.26	1.54	0.39	0.36	0.29
0.13	0.03	0.09	0.10	0.20	0.04	0.13	0.14	0.28	0.06	0.16	0.18	0.34
0.29	0.07	0.20	0.22	0.45	0.10	0.28	0.32	0.62	0.13	0.35	0.40	0.76
6.07	0.37	0.34	0.31	0.27	0.55	0.40	0.37	0.30	1.82	0.44	0.41	0.33
11.80	0.78	0.93	0.90	1.15	1.16	1.15	1.15	1.46	3.54	1.34	1.35	1.72

Flood Hydrograph Hydrologic Analysis

Existing Condition

Unit Hydrograph Analysis

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Study date 12/28/22 File: 2216E002242.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
EXISTING CONDITION
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 11.80(Ac.) = 0.018 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 11.80(Ac.) = 0.018 Sq. Mi.
Length along longest watercourse = 1548.00(Ft.)
Length along longest watercourse measured to centroid = 500.00(Ft.)
Length along longest watercourse = 0.293 Mi.
Length along longest watercourse measured to centroid = 0.095 Mi.
Difference in elevation = 16.10(Ft.)
Slope along watercourse = 54.9147 Ft./Mi.
Average Manning's 'N' = 0.020
Lag time = 0.057 Hr.
Lag time = 3.45 Min.
25% of lag time = 0.86 Min.
40% of lag time = 1.38 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1] Rainfall (In) [2] Weighting[1*2]
11.80 2.00 23.60

100 YEAR Area rainfall data:

Area(Ac.) [1] Rainfall (In) [2] Weighting[1*2]
11.80 6.40 75.52

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
2.540 56.00 0.900
9.260 76.00 0.000
Total Area Entered = 11.80(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	0.215	0.029
76.0	58.2	0.488	0.000	0.488	0.785	0.383
Sum (F) =						0.412

Area averaged mean soil loss (F) (In/Hr) = 0.412

Minimum soil loss rate ((In/Hr)) = 0.206

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.750

Unit Hydrograph VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	145.077	31.965
2	0.167	290.154	47.363
3	0.250	435.231	11.478
4	0.333	580.308	5.035
5	0.417	725.385	2.615
6	0.500	870.462	1.544
Sum = 100.000			Sum= 11.892

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.016	(0.731)	0.012	0.004
2	0.17	0.07	0.016	(0.728)	0.012	0.004
3	0.25	0.07	0.016	(0.725)	0.012	0.004
4	0.33	0.10	0.024	(0.722)	0.018	0.006
5	0.42	0.10	0.024	(0.719)	0.018	0.006
6	0.50	0.10	0.024	(0.716)	0.018	0.006
7	0.58	0.10	0.024	(0.714)	0.018	0.006
8	0.67	0.10	0.024	(0.711)	0.018	0.006
9	0.75	0.10	0.024	(0.708)	0.018	0.006
10	0.83	0.13	0.032	(0.705)	0.024	0.008
11	0.92	0.13	0.032	(0.703)	0.024	0.008
12	1.00	0.13	0.032	(0.700)	0.024	0.008
13	1.08	0.10	0.024	(0.697)	0.018	0.006
14	1.17	0.10	0.024	(0.694)	0.018	0.006
15	1.25	0.10	0.024	(0.692)	0.018	0.006
16	1.33	0.10	0.024	(0.689)	0.018	0.006
17	1.42	0.10	0.024	(0.686)	0.018	0.006
18	1.50	0.10	0.024	(0.683)	0.018	0.006
19	1.58	0.10	0.024	(0.681)	0.018	0.006
20	1.67	0.10	0.024	(0.678)	0.018	0.006
21	1.75	0.10	0.024	(0.675)	0.018	0.006
22	1.83	0.13	0.032	(0.672)	0.024	0.008
23	1.92	0.13	0.032	(0.670)	0.024	0.008
24	2.00	0.13	0.032	(0.667)	0.024	0.008
25	2.08	0.13	0.032	(0.664)	0.024	0.008
26	2.17	0.13	0.032	(0.662)	0.024	0.008
27	2.25	0.13	0.032	(0.659)	0.024	0.008
28	2.33	0.13	0.032	(0.656)	0.024	0.008
29	2.42	0.13	0.032	(0.654)	0.024	0.008
30	2.50	0.13	0.032	(0.651)	0.024	0.008
31	2.58	0.17	0.040	(0.648)	0.030	0.010
32	2.67	0.17	0.040	(0.646)	0.030	0.010
33	2.75	0.17	0.040	(0.643)	0.030	0.010
34	2.83	0.17	0.040	(0.640)	0.030	0.010
35	2.92	0.17	0.040	(0.638)	0.030	0.010
36	3.00	0.17	0.040	(0.635)	0.030	0.010

37	3.08	0.17	0.040	(0.632)	0.030	0.010
38	3.17	0.17	0.040	(0.630)	0.030	0.010
39	3.25	0.17	0.040	(0.627)	0.030	0.010
40	3.33	0.17	0.040	(0.624)	0.030	0.010
41	3.42	0.17	0.040	(0.622)	0.030	0.010
42	3.50	0.17	0.040	(0.619)	0.030	0.010
43	3.58	0.17	0.040	(0.617)	0.030	0.010
44	3.67	0.17	0.040	(0.614)	0.030	0.010
45	3.75	0.17	0.040	(0.612)	0.030	0.010
46	3.83	0.20	0.048	(0.609)	0.036	0.012
47	3.92	0.20	0.048	(0.606)	0.036	0.012
48	4.00	0.20	0.048	(0.604)	0.036	0.012
49	4.08	0.20	0.048	(0.601)	0.036	0.012
50	4.17	0.20	0.048	(0.599)	0.036	0.012
51	4.25	0.20	0.048	(0.596)	0.036	0.012
52	4.33	0.23	0.056	(0.594)	0.042	0.014
53	4.42	0.23	0.056	(0.591)	0.042	0.014
54	4.50	0.23	0.056	(0.589)	0.042	0.014
55	4.58	0.23	0.056	(0.586)	0.042	0.014
56	4.67	0.23	0.056	(0.583)	0.042	0.014
57	4.75	0.23	0.056	(0.581)	0.042	0.014
58	4.83	0.27	0.064	(0.578)	0.048	0.016
59	4.92	0.27	0.064	(0.576)	0.048	0.016
60	5.00	0.27	0.064	(0.573)	0.048	0.016
61	5.08	0.20	0.048	(0.571)	0.036	0.012
62	5.17	0.20	0.048	(0.568)	0.036	0.012
63	5.25	0.20	0.048	(0.566)	0.036	0.012
64	5.33	0.23	0.056	(0.564)	0.042	0.014
65	5.42	0.23	0.056	(0.561)	0.042	0.014
66	5.50	0.23	0.056	(0.559)	0.042	0.014
67	5.58	0.27	0.064	(0.556)	0.048	0.016
68	5.67	0.27	0.064	(0.554)	0.048	0.016
69	5.75	0.27	0.064	(0.551)	0.048	0.016
70	5.83	0.27	0.064	(0.549)	0.048	0.016
71	5.92	0.27	0.064	(0.546)	0.048	0.016
72	6.00	0.27	0.064	(0.544)	0.048	0.016
73	6.08	0.30	0.072	(0.542)	0.054	0.018
74	6.17	0.30	0.072	(0.539)	0.054	0.018
75	6.25	0.30	0.072	(0.537)	0.054	0.018
76	6.33	0.30	0.072	(0.534)	0.054	0.018
77	6.42	0.30	0.072	(0.532)	0.054	0.018
78	6.50	0.30	0.072	(0.530)	0.054	0.018
79	6.58	0.33	0.080	(0.527)	0.060	0.020
80	6.67	0.33	0.080	(0.525)	0.060	0.020
81	6.75	0.33	0.080	(0.522)	0.060	0.020
82	6.83	0.33	0.080	(0.520)	0.060	0.020
83	6.92	0.33	0.080	(0.518)	0.060	0.020
84	7.00	0.33	0.080	(0.515)	0.060	0.020
85	7.08	0.33	0.080	(0.513)	0.060	0.020
86	7.17	0.33	0.080	(0.511)	0.060	0.020
87	7.25	0.33	0.080	(0.508)	0.060	0.020
88	7.33	0.37	0.088	(0.506)	0.066	0.022
89	7.42	0.37	0.088	(0.504)	0.066	0.022
90	7.50	0.37	0.088	(0.501)	0.066	0.022
91	7.58	0.40	0.096	(0.499)	0.072	0.024
92	7.67	0.40	0.096	(0.497)	0.072	0.024
93	7.75	0.40	0.096	(0.495)	0.072	0.024
94	7.83	0.43	0.104	(0.492)	0.078	0.026
95	7.92	0.43	0.104	(0.490)	0.078	0.026
96	8.00	0.43	0.104	(0.488)	0.078	0.026
97	8.08	0.50	0.120	(0.485)	0.090	0.030
98	8.17	0.50	0.120	(0.483)	0.090	0.030
99	8.25	0.50	0.120	(0.481)	0.090	0.030
100	8.33	0.50	0.120	(0.479)	0.090	0.030
101	8.42	0.50	0.120	(0.476)	0.090	0.030
102	8.50	0.50	0.120	(0.474)	0.090	0.030
103	8.58	0.53	0.128	(0.472)	0.096	0.032
104	8.67	0.53	0.128	(0.470)	0.096	0.032
105	8.75	0.53	0.128	(0.468)	0.096	0.032
106	8.83	0.57	0.136	(0.465)	0.102	0.034
107	8.92	0.57	0.136	(0.463)	0.102	0.034
108	9.00	0.57	0.136	(0.461)	0.102	0.034

109	9.08	0.63	0.152	(0.459)	0.114	0.038
110	9.17	0.63	0.152	(0.457)	0.114	0.038
111	9.25	0.63	0.152	(0.454)	0.114	0.038
112	9.33	0.67	0.160	(0.452)	0.120	0.040
113	9.42	0.67	0.160	(0.450)	0.120	0.040
114	9.50	0.67	0.160	(0.448)	0.120	0.040
115	9.58	0.70	0.168	(0.446)	0.126	0.042
116	9.67	0.70	0.168	(0.444)	0.126	0.042
117	9.75	0.70	0.168	(0.442)	0.126	0.042
118	9.83	0.73	0.176	(0.439)	0.132	0.044
119	9.92	0.73	0.176	(0.437)	0.132	0.044
120	10.00	0.73	0.176	(0.435)	0.132	0.044
121	10.08	0.50	0.120	(0.433)	0.090	0.030
122	10.17	0.50	0.120	(0.431)	0.090	0.030
123	10.25	0.50	0.120	(0.429)	0.090	0.030
124	10.33	0.50	0.120	(0.427)	0.090	0.030
125	10.42	0.50	0.120	(0.425)	0.090	0.030
126	10.50	0.50	0.120	(0.423)	0.090	0.030
127	10.58	0.67	0.160	(0.421)	0.120	0.040
128	10.67	0.67	0.160	(0.419)	0.120	0.040
129	10.75	0.67	0.160	(0.417)	0.120	0.040
130	10.83	0.67	0.160	(0.414)	0.120	0.040
131	10.92	0.67	0.160	(0.412)	0.120	0.040
132	11.00	0.67	0.160	(0.410)	0.120	0.040
133	11.08	0.63	0.152	(0.408)	0.114	0.038
134	11.17	0.63	0.152	(0.406)	0.114	0.038
135	11.25	0.63	0.152	(0.404)	0.114	0.038
136	11.33	0.63	0.152	(0.402)	0.114	0.038
137	11.42	0.63	0.152	(0.400)	0.114	0.038
138	11.50	0.63	0.152	(0.398)	0.114	0.038
139	11.58	0.57	0.136	(0.396)	0.102	0.034
140	11.67	0.57	0.136	(0.394)	0.102	0.034
141	11.75	0.57	0.136	(0.392)	0.102	0.034
142	11.83	0.60	0.144	(0.391)	0.108	0.036
143	11.92	0.60	0.144	(0.389)	0.108	0.036
144	12.00	0.60	0.144	(0.387)	0.108	0.036
145	12.08	0.83	0.200	(0.385)	0.150	0.050
146	12.17	0.83	0.200	(0.383)	0.150	0.050
147	12.25	0.83	0.200	(0.381)	0.150	0.050
148	12.33	0.87	0.208	(0.379)	0.156	0.052
149	12.42	0.87	0.208	(0.377)	0.156	0.052
150	12.50	0.87	0.208	(0.375)	0.156	0.052
151	12.58	0.93	0.224	(0.373)	0.168	0.056
152	12.67	0.93	0.224	(0.371)	0.168	0.056
153	12.75	0.93	0.224	(0.369)	0.168	0.056
154	12.83	0.97	0.232	(0.368)	0.174	0.058
155	12.92	0.97	0.232	(0.366)	0.174	0.058
156	13.00	0.97	0.232	(0.364)	0.174	0.058
157	13.08	1.13	0.272	(0.362)	0.204	0.068
158	13.17	1.13	0.272	(0.360)	0.204	0.068
159	13.25	1.13	0.272	(0.358)	0.204	0.068
160	13.33	1.13	0.272	(0.357)	0.204	0.068
161	13.42	1.13	0.272	(0.355)	0.204	0.068
162	13.50	1.13	0.272	(0.353)	0.204	0.068
163	13.58	0.77	0.184	(0.351)	0.138	0.046
164	13.67	0.77	0.184	(0.349)	0.138	0.046
165	13.75	0.77	0.184	(0.348)	0.138	0.046
166	13.83	0.77	0.184	(0.346)	0.138	0.046
167	13.92	0.77	0.184	(0.344)	0.138	0.046
168	14.00	0.77	0.184	(0.342)	0.138	0.046
169	14.08	0.90	0.216	(0.341)	0.162	0.054
170	14.17	0.90	0.216	(0.339)	0.162	0.054
171	14.25	0.90	0.216	(0.337)	0.162	0.054
172	14.33	0.87	0.208	(0.335)	0.156	0.052
173	14.42	0.87	0.208	(0.334)	0.156	0.052
174	14.50	0.87	0.208	(0.332)	0.156	0.052
175	14.58	0.87	0.208	(0.330)	0.156	0.052
176	14.67	0.87	0.208	(0.329)	0.156	0.052
177	14.75	0.87	0.208	(0.327)	0.156	0.052
178	14.83	0.83	0.200	(0.325)	0.150	0.050
179	14.92	0.83	0.200	(0.324)	0.150	0.050
180	15.00	0.83	0.200	(0.322)	0.150	0.050

181	15.08	0.80	0.192	(0.320)	0.144	0.048
182	15.17	0.80	0.192	(0.319)	0.144	0.048
183	15.25	0.80	0.192	(0.317)	0.144	0.048
184	15.33	0.77	0.184	(0.315)	0.138	0.046
185	15.42	0.77	0.184	(0.314)	0.138	0.046
186	15.50	0.77	0.184	(0.312)	0.138	0.046
187	15.58	0.63	0.152	(0.311)	0.114	0.038
188	15.67	0.63	0.152	(0.309)	0.114	0.038
189	15.75	0.63	0.152	(0.307)	0.114	0.038
190	15.83	0.63	0.152	(0.306)	0.114	0.038
191	15.92	0.63	0.152	(0.304)	0.114	0.038
192	16.00	0.63	0.152	(0.303)	0.114	0.038
193	16.08	0.13	0.032	(0.301)	0.024	0.008
194	16.17	0.13	0.032	(0.300)	0.024	0.008
195	16.25	0.13	0.032	(0.298)	0.024	0.008
196	16.33	0.13	0.032	(0.297)	0.024	0.008
197	16.42	0.13	0.032	(0.295)	0.024	0.008
198	16.50	0.13	0.032	(0.293)	0.024	0.008
199	16.58	0.10	0.024	(0.292)	0.018	0.006
200	16.67	0.10	0.024	(0.291)	0.018	0.006
201	16.75	0.10	0.024	(0.289)	0.018	0.006
202	16.83	0.10	0.024	(0.288)	0.018	0.006
203	16.92	0.10	0.024	(0.286)	0.018	0.006
204	17.00	0.10	0.024	(0.285)	0.018	0.006
205	17.08	0.17	0.040	(0.283)	0.030	0.010
206	17.17	0.17	0.040	(0.282)	0.030	0.010
207	17.25	0.17	0.040	(0.280)	0.030	0.010
208	17.33	0.17	0.040	(0.279)	0.030	0.010
209	17.42	0.17	0.040	(0.278)	0.030	0.010
210	17.50	0.17	0.040	(0.276)	0.030	0.010
211	17.58	0.17	0.040	(0.275)	0.030	0.010
212	17.67	0.17	0.040	(0.273)	0.030	0.010
213	17.75	0.17	0.040	(0.272)	0.030	0.010
214	17.83	0.13	0.032	(0.271)	0.024	0.008
215	17.92	0.13	0.032	(0.269)	0.024	0.008
216	18.00	0.13	0.032	(0.268)	0.024	0.008
217	18.08	0.13	0.032	(0.267)	0.024	0.008
218	18.17	0.13	0.032	(0.265)	0.024	0.008
219	18.25	0.13	0.032	(0.264)	0.024	0.008
220	18.33	0.13	0.032	(0.263)	0.024	0.008
221	18.42	0.13	0.032	(0.262)	0.024	0.008
222	18.50	0.13	0.032	(0.260)	0.024	0.008
223	18.58	0.10	0.024	(0.259)	0.018	0.006
224	18.67	0.10	0.024	(0.258)	0.018	0.006
225	18.75	0.10	0.024	(0.257)	0.018	0.006
226	18.83	0.07	0.016	(0.255)	0.012	0.004
227	18.92	0.07	0.016	(0.254)	0.012	0.004
228	19.00	0.07	0.016	(0.253)	0.012	0.004
229	19.08	0.10	0.024	(0.252)	0.018	0.006
230	19.17	0.10	0.024	(0.251)	0.018	0.006
231	19.25	0.10	0.024	(0.249)	0.018	0.006
232	19.33	0.13	0.032	(0.248)	0.024	0.008
233	19.42	0.13	0.032	(0.247)	0.024	0.008
234	19.50	0.13	0.032	(0.246)	0.024	0.008
235	19.58	0.10	0.024	(0.245)	0.018	0.006
236	19.67	0.10	0.024	(0.244)	0.018	0.006
237	19.75	0.10	0.024	(0.243)	0.018	0.006
238	19.83	0.07	0.016	(0.241)	0.012	0.004
239	19.92	0.07	0.016	(0.240)	0.012	0.004
240	20.00	0.07	0.016	(0.239)	0.012	0.004
241	20.08	0.10	0.024	(0.238)	0.018	0.006
242	20.17	0.10	0.024	(0.237)	0.018	0.006
243	20.25	0.10	0.024	(0.236)	0.018	0.006
244	20.33	0.10	0.024	(0.235)	0.018	0.006
245	20.42	0.10	0.024	(0.234)	0.018	0.006
246	20.50	0.10	0.024	(0.233)	0.018	0.006
247	20.58	0.10	0.024	(0.232)	0.018	0.006
248	20.67	0.10	0.024	(0.231)	0.018	0.006
249	20.75	0.10	0.024	(0.230)	0.018	0.006
250	20.83	0.07	0.016	(0.229)	0.012	0.004
251	20.92	0.07	0.016	(0.228)	0.012	0.004
252	21.00	0.07	0.016	(0.227)	0.012	0.004

1+20	0. 0074	0. 07	Q			
1+25	0. 0078	0. 07	Q			
1+30	0. 0083	0. 07	Q			
1+35	0. 0088	0. 07	Q			
1+40	0. 0093	0. 07	Q			
1+45	0. 0098	0. 07	Q			
1+50	0. 0104	0. 08	Q			
1+55	0. 0110	0. 09	Q			
2+ 0	0. 0116	0. 09	Q			
2+ 5	0. 0123	0. 09	Q			
2+10	0. 0129	0. 09	QV			
2+15	0. 0136	0. 10	QV			
2+20	0. 0142	0. 10	QV			
2+25	0. 0149	0. 10	QV			
2+30	0. 0155	0. 10	QV			
2+35	0. 0163	0. 10	QV			
2+40	0. 0170	0. 11	QV			
2+45	0. 0178	0. 12	QV			
2+50	0. 0187	0. 12	QV			
2+55	0. 0195	0. 12	QV			
3+ 0	0. 0203	0. 12	QV			
3+ 5	0. 0211	0. 12	QV			
3+10	0. 0219	0. 12	QV			
3+15	0. 0228	0. 12	QV			
3+20	0. 0236	0. 12	QV			
3+25	0. 0244	0. 12	QV			
3+30	0. 0252	0. 12	Q V			
3+35	0. 0260	0. 12	Q V			
3+40	0. 0268	0. 12	Q V			
3+45	0. 0277	0. 12	Q V			
3+50	0. 0285	0. 13	Q V			
3+55	0. 0295	0. 14	Q V			
4+ 0	0. 0305	0. 14	Q V			
4+ 5	0. 0314	0. 14	Q V			
4+10	0. 0324	0. 14	Q V			
4+15	0. 0334	0. 14	Q V			
4+20	0. 0344	0. 15	Q V			
4+25	0. 0355	0. 16	Q V			
4+30	0. 0367	0. 16	Q V			
4+35	0. 0378	0. 17	Q V			
4+40	0. 0390	0. 17	Q V			
4+45	0. 0401	0. 17	Q V			
4+50	0. 0413	0. 17	Q V			
4+55	0. 0426	0. 19	Q V			
5+ 0	0. 0439	0. 19	Q V			
5+ 5	0. 0451	0. 17	Q V			
5+10	0. 0461	0. 15	Q V			
5+15	0. 0471	0. 15	Q V			
5+20	0. 0482	0. 15	Q V			
5+25	0. 0493	0. 16	Q V			
5+30	0. 0504	0. 16	Q V			
5+35	0. 0516	0. 17	Q V			
5+40	0. 0529	0. 19	Q V			
5+45	0. 0542	0. 19	Q V			
5+50	0. 0555	0. 19	Q V			
5+55	0. 0568	0. 19	Q V			
6+ 0	0. 0581	0. 19	Q V			
6+ 5	0. 0595	0. 20	Q V			
6+10	0. 0609	0. 21	Q V			
6+15	0. 0624	0. 21	Q V			
6+20	0. 0639	0. 21	Q V			
6+25	0. 0653	0. 21	Q V			
6+30	0. 0668	0. 21	Q V			
6+35	0. 0683	0. 22	Q V			
6+40	0. 0699	0. 23	Q V			
6+45	0. 0716	0. 24	Q V			
6+50	0. 0732	0. 24	Q V			
6+55	0. 0748	0. 24	Q V			
7+ 0	0. 0765	0. 24	Q V			
7+ 5	0. 0781	0. 24	Q V			
7+10	0. 0798	0. 24	Q V			
7+15	0. 0814	0. 24	Q V			

19+20	0.4686	0.08	Q	V
19+25	0.4692	0.09	Q	V
19+30	0.4698	0.09	Q	V
19+35	0.4704	0.09	Q	V
19+40	0.4710	0.08	Q	V
19+45	0.4715	0.07	Q	V
19+50	0.4719	0.06	Q	V
19+55	0.4723	0.05	Q	V
20+ 0	0.4726	0.05	Q	V
20+ 5	0.4730	0.06	Q	V
20+10	0.4735	0.07	Q	V
20+15	0.4739	0.07	Q	V
20+20	0.4744	0.07	Q	V
20+25	0.4749	0.07	Q	V
20+30	0.4754	0.07	Q	V
20+35	0.4759	0.07	Q	V
20+40	0.4764	0.07	Q	V
20+45	0.4769	0.07	Q	V
20+50	0.4773	0.06	Q	V
20+55	0.4777	0.05	Q	V
21+ 0	0.4780	0.05	Q	V
21+ 5	0.4784	0.06	Q	V
21+10	0.4789	0.07	Q	V
21+15	0.4794	0.07	Q	V
21+20	0.4798	0.06	Q	V
21+25	0.4801	0.05	Q	V
21+30	0.4805	0.05	Q	V
21+35	0.4809	0.06	Q	V
21+40	0.4813	0.07	Q	V
21+45	0.4818	0.07	Q	V
21+50	0.4822	0.06	Q	V
21+55	0.4826	0.05	Q	V
22+ 0	0.4829	0.05	Q	V
22+ 5	0.4833	0.06	Q	V
22+10	0.4838	0.07	Q	V
22+15	0.4843	0.07	Q	V
22+20	0.4847	0.06	Q	V
22+25	0.4851	0.05	Q	V
22+30	0.4854	0.05	Q	V
22+35	0.4857	0.05	Q	V
22+40	0.4861	0.05	Q	V
22+45	0.4864	0.05	Q	V
22+50	0.4867	0.05	Q	V
22+55	0.4871	0.05	Q	V
23+ 0	0.4874	0.05	Q	V
23+ 5	0.4877	0.05	Q	V
23+10	0.4880	0.05	Q	V
23+15	0.4884	0.05	Q	V
23+20	0.4887	0.05	Q	V
23+25	0.4890	0.05	Q	V
23+30	0.4893	0.05	Q	V
23+35	0.4897	0.05	Q	V
23+40	0.4900	0.05	Q	V
23+45	0.4903	0.05	Q	V
23+50	0.4907	0.05	Q	V
23+55	0.4910	0.05	Q	V
24+ 0	0.4913	0.05	Q	V
24+ 5	0.4915	0.03	Q	V
24+10	0.4916	0.01	Q	V
24+15	0.4916	0.00	Q	V
24+20	0.4917	0.00	Q	V
24+25	0.4917	0.00	Q	V

Unit Hydrograph Analysis

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Study date 12/28/22 File: 2216E00262.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
EXISTING CONDITION
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 11.80(Ac.) = 0.018 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 11.80(Ac.) = 0.018 Sq. Mi.
Length along longest watercourse = 1548.00(Ft.)
Length along longest watercourse measured to centroid = 500.00(Ft.)
Length along longest watercourse = 0.293 Mi.
Length along longest watercourse measured to centroid = 0.095 Mi.
Difference in elevation = 16.10(Ft.)
Slope along watercourse = 54.9147 Ft./Mi.
Average Manning's 'N' = 0.020
Lag time = 0.057 Hr.
Lag time = 3.45 Min.
25% of lag time = 0.86 Min.
40% of lag time = 1.38 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
11.80	1.20	14.16

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
11.80	3.00	35.40

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.200(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.200(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
2.540 56.00 0.900
9.260 76.00 0.000
Total Area Entered = 11.80(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	0.215	0.029
76.0	58.2	0.488	0.000	0.488	0.785	0.383
Sum (F) =						0.412

Area averaged mean soil loss (F) (In/Hr) = 0.412

Minimum soil loss rate ((In/Hr)) = 0.206

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.750

Unit Hydrograph VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	145.077	31.965
2	0.167	290.154	47.363
3	0.250	435.231	11.478
4	0.333	580.308	5.035
5	0.417	725.385	2.615
6	0.500	870.462	1.544
Sum = 100.000			Sum= 11.892

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.072	(0.412)	0.054	0.018
2	0.17	0.60	0.086	(0.412)	0.065	0.022
3	0.25	0.60	0.086	(0.412)	0.065	0.022
4	0.33	0.60	0.086	(0.412)	0.065	0.022
5	0.42	0.60	0.086	(0.412)	0.065	0.022
6	0.50	0.70	0.101	(0.412)	0.076	0.025
7	0.58	0.70	0.101	(0.412)	0.076	0.025
8	0.67	0.70	0.101	(0.412)	0.076	0.025
9	0.75	0.70	0.101	(0.412)	0.076	0.025
10	0.83	0.70	0.101	(0.412)	0.076	0.025
11	0.92	0.70	0.101	(0.412)	0.076	0.025
12	1.00	0.80	0.115	(0.412)	0.086	0.029
13	1.08	0.80	0.115	(0.412)	0.086	0.029
14	1.17	0.80	0.115	(0.412)	0.086	0.029
15	1.25	0.80	0.115	(0.412)	0.086	0.029
16	1.33	0.80	0.115	(0.412)	0.086	0.029
17	1.42	0.80	0.115	(0.412)	0.086	0.029
18	1.50	0.80	0.115	(0.412)	0.086	0.029
19	1.58	0.80	0.115	(0.412)	0.086	0.029
20	1.67	0.80	0.115	(0.412)	0.086	0.029
21	1.75	0.80	0.115	(0.412)	0.086	0.029
22	1.83	0.80	0.115	(0.412)	0.086	0.029
23	1.92	0.80	0.115	(0.412)	0.086	0.029
24	2.00	0.90	0.130	(0.412)	0.097	0.032
25	2.08	0.80	0.115	(0.412)	0.086	0.029
26	2.17	0.90	0.130	(0.412)	0.097	0.032
27	2.25	0.90	0.130	(0.412)	0.097	0.032
28	2.33	0.90	0.130	(0.412)	0.097	0.032
29	2.42	0.90	0.130	(0.412)	0.097	0.032
30	2.50	0.90	0.130	(0.412)	0.097	0.032
31	2.58	0.90	0.130	(0.412)	0.097	0.032
32	2.67	0.90	0.130	(0.412)	0.097	0.032
33	2.75	1.00	0.144	(0.412)	0.108	0.036
34	2.83	1.00	0.144	(0.412)	0.108	0.036
35	2.92	1.00	0.144	(0.412)	0.108	0.036
36	3.00	1.00	0.144	(0.412)	0.108	0.036

1+20	0. 0303	0. 34	Q	V			
1+25	0. 0327	0. 34	Q	V			
1+30	0. 0350	0. 34	Q	V			
1+35	0. 0374	0. 34	Q	V			
1+40	0. 0397	0. 34	Q	V			
1+45	0. 0421	0. 34	Q	V			
1+50	0. 0445	0. 34	Q	V			
1+55	0. 0468	0. 34	Q	V			
2+ 0	0. 0493	0. 36	Q	V			
2+ 5	0. 0518	0. 36	Q	V			
2+10	0. 0543	0. 36	Q	V			
2+15	0. 0569	0. 38	Q	V			
2+20	0. 0595	0. 38	Q	V			
2+25	0. 0622	0. 38	Q	V			
2+30	0. 0648	0. 38	Q	V			
2+35	0. 0675	0. 39	Q	V			
2+40	0. 0701	0. 39	Q	V			
2+45	0. 0729	0. 40	Q	V			
2+50	0. 0757	0. 42	Q	V			
2+55	0. 0787	0. 42	Q	V			
3+ 0	0. 0816	0. 43	Q	V			
3+ 5	0. 0846	0. 43	Q	V			
3+10	0. 0876	0. 44	Q	V			
3+15	0. 0908	0. 46	Q	V			
3+20	0. 0940	0. 47	Q	V			
3+25	0. 0973	0. 48	Q	V			
3+30	0. 1009	0. 52	Q	V			
3+35	0. 1047	0. 56	Q	V			
3+40	0. 1088	0. 59	Q	V			
3+45	0. 1129	0. 61	Q	V			
3+50	0. 1173	0. 63	Q	V			
3+55	0. 1218	0. 65	Q	V			
4+ 0	0. 1264	0. 67	Q	V			
4+ 5	0. 1312	0. 69	Q	V			
4+10	0. 1362	0. 73	Q	V			
4+15	0. 1416	0. 77	Q	V			
4+20	0. 1472	0. 81	Q	V			
4+25	0. 1530	0. 86	Q	V			
4+30	0. 1591	0. 88	Q	V			
4+35	0. 1654	0. 91	Q	V			
4+40	0. 1719	0. 94	Q	V			
4+45	0. 1787	0. 99	Q	V			
4+50	0. 1857	1. 01	Q	V			
4+55	0. 1928	1. 04	Q	V			
5+ 0	0. 2002	1. 07	Q	V			
5+ 5	0. 2082	1. 17	Q	V			
5+10	0. 2175	1. 35	Q	V			
5+15	0. 2282	1. 55	Q	V			
5+20	0. 2410	1. 86	Q	V			
5+25	0. 2577	2. 43	Q	V			
5+30	0. 2812	3. 40	Q	V			
5+35	0. 3020	3. 03	Q	V			
5+40	0. 3109	1. 29	Q	V			
5+45	0. 3158	0. 71	Q	V			
5+50	0. 3189	0. 45	Q	V			
5+55	0. 3209	0. 29	Q	V			
6+ 0	0. 3219	0. 15	Q	V			
6+ 5	0. 3224	0. 08	Q	V			
6+10	0. 3226	0. 03	Q	V			
6+15	0. 3227	0. 01	Q	V			
6+20	0. 3227	0. 00	Q	V			
6+25	0. 3227	0. 00	Q	V			

Unit Hydrograph Analysis

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Study date 12/28/22 File: 2216E00232.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
EXISTING CONDITION
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 11.80(Ac.) = 0.018 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 11.80(Ac.) = 0.018 Sq. Mi.
Length along longest watercourse = 1548.00(Ft.)
Length along longest watercourse measured to centroid = 500.00(Ft.)
Length along longest watercourse = 0.293 Mi.
Length along longest watercourse measured to centroid = 0.095 Mi.
Difference in elevation = 16.10(Ft.)
Slope along watercourse = 54.9147 Ft./Mi.
Average Manning's 'N' = 0.020
Lag time = 0.057 Hr.
Lag time = 3.45 Min.
25% of lag time = 0.86 Min.
40% of lag time = 1.38 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
11.80	0.90	10.62

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
11.80	2.35	27.73

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 0.900(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 0.900(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
2.540 56.00 0.900
9.260 76.00 0.000
Total Area Entered = 11.80(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	0.215	0.029
76.0	58.2	0.488	0.000	0.488	0.785	0.383
Sum (F) =						0.412

Area averaged mean soil loss (F) (In/Hr) = 0.412

Minimum soil loss rate ((In/Hr)) = 0.206

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.750

Unit Hydrograph VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	145.077	31.965
2	0.167	290.154	47.363
3	0.250	435.231	11.478
4	0.333	580.308	5.035
5	0.417	725.385	2.615
6	0.500	870.462	1.544
Sum = 100.000			Sum= 11.892

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	1.30	0.140	(0.412)	0.105	0.035
2	0.17	1.30	0.140	(0.412)	0.105	0.035
3	0.25	1.10	0.119	(0.412)	0.089	0.030
4	0.33	1.50	0.162	(0.412)	0.121	0.040
5	0.42	1.50	0.162	(0.412)	0.121	0.040
6	0.50	1.80	0.194	(0.412)	0.146	0.049
7	0.58	1.50	0.162	(0.412)	0.121	0.040
8	0.67	1.80	0.194	(0.412)	0.146	0.049
9	0.75	1.80	0.194	(0.412)	0.146	0.049
10	0.83	1.50	0.162	(0.412)	0.121	0.040
11	0.92	1.60	0.173	(0.412)	0.130	0.043
12	1.00	1.80	0.194	(0.412)	0.146	0.049
13	1.08	2.20	0.238	(0.412)	0.178	0.059
14	1.17	2.20	0.238	(0.412)	0.178	0.059
15	1.25	2.20	0.238	(0.412)	0.178	0.059
16	1.33	2.00	0.216	(0.412)	0.162	0.054
17	1.42	2.60	0.281	(0.412)	0.211	0.070
18	1.50	2.70	0.292	(0.412)	0.219	0.073
19	1.58	2.40	0.259	(0.412)	0.194	0.065
20	1.67	2.70	0.292	(0.412)	0.219	0.073
21	1.75	3.30	0.356	(0.412)	0.267	0.089
22	1.83	3.10	0.335	(0.412)	0.251	0.084
23	1.92	2.90	0.313	(0.412)	0.235	0.078
24	2.00	3.00	0.324	(0.412)	0.243	0.081
25	2.08	3.10	0.335	(0.412)	0.251	0.084
26	2.17	4.20	0.454	(0.412)	0.340	0.113
27	2.25	5.00	0.540	(0.412)	0.405	0.135
28	2.33	3.50	0.378	(0.412)	0.283	0.094
29	2.42	6.80	0.734	0.412	(0.551)	0.322
30	2.50	7.30	0.788	0.412	(0.591)	0.376
31	2.58	8.20	0.886	0.412	(0.664)	0.473
32	2.67	5.90	0.637	0.412	(0.478)	0.225
33	2.75	2.00	0.216	(0.412)	0.162	0.054
34	2.83	1.80	0.194	(0.412)	0.146	0.049
35	2.92	1.80	0.194	(0.412)	0.146	0.049
36	3.00	0.60	0.065	(0.412)	0.049	0.016

(Loss Rate Not Used)

Sum = 100.0

Sum = 3.3

Flood volume = Effective rainfall 0.28(In)
 times area 11.8(Ac.) / [(In)/(Ft.)] = 0.3(Ac. Ft)
 Total soil loss = 0.62(In)
 Total soil loss = 0.612(Ac. Ft)
 Total rainfall = 0.90(In)
 Flood volume = 11906.0 Cubic Feet
 Total soil loss = 26642.6 Cubic Feet

Peak flow rate of this hydrograph = 4.480(CFS)

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3 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0009	0.13	Q				
0+10	0.0032	0.33	VQ				
0+15	0.0057	0.36	VQ				
0+20	0.0084	0.39	Q				
0+25	0.0115	0.45	Q				
0+30	0.0150	0.50	Q				
0+35	0.0186	0.52	Q				
0+40	0.0222	0.52	Q				
0+45	0.0260	0.56	Q				
0+50	0.0298	0.54	Q				
0+55	0.0333	0.51	Q				
1+ 0	0.0370	0.54	Q				
1+ 5	0.0411	0.61	Q				
1+10	0.0458	0.67	Q				
1+15	0.0505	0.69	Q				
1+20	0.0552	0.68	Q				
1+25	0.0602	0.72	Q				
1+30	0.0657	0.81	Q				
1+35	0.0714	0.81	Q				
1+40	0.0769	0.81	Q				
1+45	0.0832	0.91	Q				
1+50	0.0901	0.99	Q				
1+55	0.0968	0.97	Q				
2+ 0	0.1033	0.95	Q				
2+ 5	0.1100	0.97	Q				
2+10	0.1176	1.10	Q				
2+15	0.1269	1.36	Q				
2+20	0.1363	1.36	Q				
2+25	0.1505	2.05	Q				
2+30	0.1746	3.51	Q				
2+35	0.2055	4.48	Q				
2+40	0.2350	4.29	Q				
2+45	0.2520	2.46	Q				
2+50	0.2606	1.26	Q				
2+55	0.2667	0.88	Q				
3+ 0	0.2708	0.59	Q				
3+ 5	0.2725	0.24	Q				
3+10	0.2730	0.08	Q				
3+15	0.2732	0.03	Q				
3+20	0.2733	0.01	Q				
3+25	0.2733	0.00	Q				

Unit Hydrograph Analysis

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Study date 12/28/22 File: 2216E00212.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
EXISTING CONDITION
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 11.80(Ac.) = 0.018 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 11.80(Ac.) = 0.018 Sq. Mi.
Length along longest watercourse = 1548.00(Ft.)
Length along longest watercourse measured to centroid = 500.00(Ft.)
Length along longest watercourse = 0.293 Mi.
Length along longest watercourse measured to centroid = 0.095 Mi.
Difference in elevation = 16.10(Ft.)
Slope along watercourse = 54.9147 Ft./Mi.
Average Manning's 'N' = 0.020
Lag time = 0.057 Hr.
Lag time = 3.45 Min.
25% of lag time = 0.86 Min.
40% of lag time = 1.38 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1] Rainfall (In) [2] Weighting[1*2]
11.80 0.54 6.37

100 YEAR Area rainfall data:

Area(Ac.) [1] Rainfall (In) [2] Weighting[1*2]
11.80 1.36 16.05

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.540(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 0.540(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
2.540 56.00 0.900
9.260 76.00 0.000
Total Area Entered = 11.80(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	0.215	0.029
76.0	58.2	0.488	0.000	0.488	0.785	0.383
Sum (F) =						0.412

Area averaged mean soil loss (F) (In/Hr) = 0.412

Minimum soil loss rate ((In/Hr)) = 0.206

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.750

Slope of intensity-duration curve for a 1 hour storm = 0.4800

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	145.077	31.965
2	0.167	290.154	47.363
3	0.250	435.231	11.478
4	0.333	580.308	5.035
5	0.417	725.385	2.615
6	0.500	870.462	1.544
Sum = 100.000			Sum = 11.892

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate (In./Hr) Max	Low	Effective (In/Hr)
1	0.08	4.40	0.285	(0.412)	0.214	0.071
2	0.17	4.50	0.292	(0.412)	0.219	0.073
3	0.25	5.40	0.350	(0.412)	0.262	0.087
4	0.33	5.40	0.350	(0.412)	0.262	0.087
5	0.42	5.70	0.369	(0.412)	0.277	0.092
6	0.50	6.40	0.415	(0.412)	0.311	0.104
7	0.58	7.90	0.512	(0.412)	0.384	0.128
8	0.67	9.10	0.590	0.412	(0.442)	0.178
9	0.75	12.80	0.829	0.412	(0.622)	0.417
10	0.83	25.60	1.659	0.412	(1.244)	1.247
11	0.92	7.90	0.512	(0.412)	0.384	0.128
12	1.00	4.90	0.317	(0.412)	0.238	0.079

(Loss Rate Not Used)

Sum = 100.0

Sum = 2.7

Flood volume = Effective rainfall 0.22(In)
times area 11.8(Ac.) / [(In)/(Ft.)] = 0.2(Ac. Ft)
Total soil loss = 0.32(In)
Total soil loss = 0.310(Ac. Ft)
Total rainfall = 0.54(In)
Flood volume = 9608.2 Cubic Feet
Total soil loss = 13519.7 Cubic Feet

Peak flow rate of this hydrograph = 8.247(CFS)

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0019	0.27	VQ				

0+10	0.0065	0.68	VQ				
0+15	0.0123	0.84	VQ				
0+20	0.0190	0.97	Q				
0+25	0.0261	1.03	Q				
0+30	0.0338	1.12	Q	V			
0+35	0.0427	1.29	Q	V			
0+40	0.0540	1.64	Q	V			
0+45	0.0737	2.87		Q	V		
0+50	0.1251	7.46			V	Q	
0+55	0.1819	8.25				Q	V
1+ 0	0.2029	3.05		Q			V
1+ 5	0.2135	1.53		Q			V
1+10	0.2180	0.65	Q				V
1+15	0.2201	0.32	Q				V
1+20	0.2205	0.05	Q				V
1+25	0.2206	0.01	Q				V

Unit Hydrograph Analysis

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Study date 12/28/22 File: 2216E005245.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
EXISTING CONDITION
HYDROLOGIC ANALYSIS
5- YEAR

Drainage Area = 11.80(Ac.) = 0.018 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 11.80(Ac.) = 0.018 Sq. Mi.
Length along longest watercourse = 1548.00(Ft.)
Length along longest watercourse measured to centroid = 500.00(Ft.)
Length along longest watercourse = 0.293 Mi.
Length along longest watercourse measured to centroid = 0.095 Mi.
Difference in elevation = 16.10(Ft.)
Slope along watercourse = 54.9147 Ft./Mi.
Average Manning's 'N' = 0.020
Lag time = 0.057 Hr.
Lag time = 3.45 Min.
25% of lag time = 0.86 Min.
40% of lag time = 1.38 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
11.80	2.00	23.60

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
11.80	6.40	75.52

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 3.031(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 3.031(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
2.540 56.00 0.900
9.260 76.00 0.000
Total Area Entered = 11.80(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	0.215	0.029
76.0	58.2	0.488	0.000	0.488	0.785	0.383
Sum (F) =						0.412

Area averaged mean soil loss (F) (In/Hr) = 0.412

Minimum soil loss rate ((In/Hr)) = 0.206

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.750

Unit Hydrograph VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	145.077	31.965
2	0.167	290.154	47.363
3	0.250	435.231	11.478
4	0.333	580.308	5.035
5	0.417	725.385	2.615
6	0.500	870.462	1.544
Sum = 100.000			Sum= 11.892

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.024	(0.731)	0.018	0.006
2	0.17	0.07	0.024	(0.728)	0.018	0.006
3	0.25	0.07	0.024	(0.725)	0.018	0.006
4	0.33	0.10	0.036	(0.722)	0.027	0.009
5	0.42	0.10	0.036	(0.719)	0.027	0.009
6	0.50	0.10	0.036	(0.716)	0.027	0.009
7	0.58	0.10	0.036	(0.714)	0.027	0.009
8	0.67	0.10	0.036	(0.711)	0.027	0.009
9	0.75	0.10	0.036	(0.708)	0.027	0.009
10	0.83	0.13	0.048	(0.705)	0.036	0.012
11	0.92	0.13	0.048	(0.703)	0.036	0.012
12	1.00	0.13	0.048	(0.700)	0.036	0.012
13	1.08	0.10	0.036	(0.697)	0.027	0.009
14	1.17	0.10	0.036	(0.694)	0.027	0.009
15	1.25	0.10	0.036	(0.692)	0.027	0.009
16	1.33	0.10	0.036	(0.689)	0.027	0.009
17	1.42	0.10	0.036	(0.686)	0.027	0.009
18	1.50	0.10	0.036	(0.683)	0.027	0.009
19	1.58	0.10	0.036	(0.681)	0.027	0.009
20	1.67	0.10	0.036	(0.678)	0.027	0.009
21	1.75	0.10	0.036	(0.675)	0.027	0.009
22	1.83	0.13	0.048	(0.672)	0.036	0.012
23	1.92	0.13	0.048	(0.670)	0.036	0.012
24	2.00	0.13	0.048	(0.667)	0.036	0.012
25	2.08	0.13	0.048	(0.664)	0.036	0.012
26	2.17	0.13	0.048	(0.662)	0.036	0.012
27	2.25	0.13	0.048	(0.659)	0.036	0.012
28	2.33	0.13	0.048	(0.656)	0.036	0.012
29	2.42	0.13	0.048	(0.654)	0.036	0.012
30	2.50	0.13	0.048	(0.651)	0.036	0.012
31	2.58	0.17	0.061	(0.648)	0.045	0.015
32	2.67	0.17	0.061	(0.646)	0.045	0.015
33	2.75	0.17	0.061	(0.643)	0.045	0.015
34	2.83	0.17	0.061	(0.640)	0.045	0.015
35	2.92	0.17	0.061	(0.638)	0.045	0.015
36	3.00	0.17	0.061	(0.635)	0.045	0.015

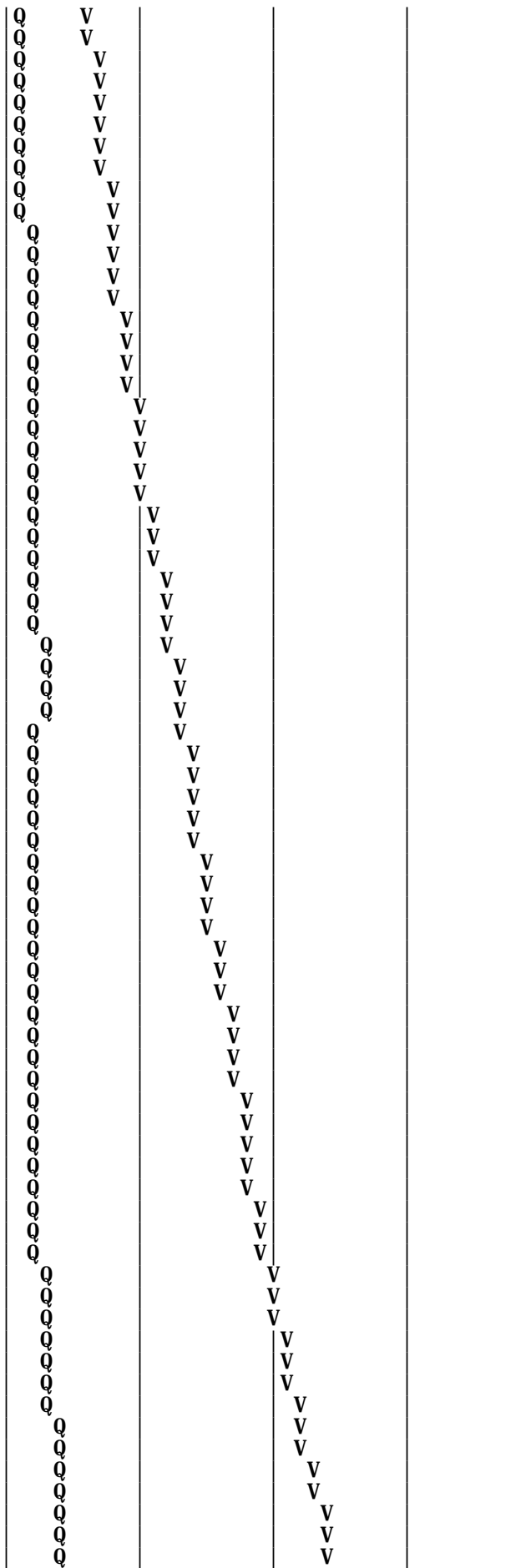
37	3.08	0.17	0.061	(0.632)	0.045	0.015
38	3.17	0.17	0.061	(0.630)	0.045	0.015
39	3.25	0.17	0.061	(0.627)	0.045	0.015
40	3.33	0.17	0.061	(0.624)	0.045	0.015
41	3.42	0.17	0.061	(0.622)	0.045	0.015
42	3.50	0.17	0.061	(0.619)	0.045	0.015
43	3.58	0.17	0.061	(0.617)	0.045	0.015
44	3.67	0.17	0.061	(0.614)	0.045	0.015
45	3.75	0.17	0.061	(0.612)	0.045	0.015
46	3.83	0.20	0.073	(0.609)	0.055	0.018
47	3.92	0.20	0.073	(0.606)	0.055	0.018
48	4.00	0.20	0.073	(0.604)	0.055	0.018
49	4.08	0.20	0.073	(0.601)	0.055	0.018
50	4.17	0.20	0.073	(0.599)	0.055	0.018
51	4.25	0.20	0.073	(0.596)	0.055	0.018
52	4.33	0.23	0.085	(0.594)	0.064	0.021
53	4.42	0.23	0.085	(0.591)	0.064	0.021
54	4.50	0.23	0.085	(0.589)	0.064	0.021
55	4.58	0.23	0.085	(0.586)	0.064	0.021
56	4.67	0.23	0.085	(0.583)	0.064	0.021
57	4.75	0.23	0.085	(0.581)	0.064	0.021
58	4.83	0.27	0.097	(0.578)	0.073	0.024
59	4.92	0.27	0.097	(0.576)	0.073	0.024
60	5.00	0.27	0.097	(0.573)	0.073	0.024
61	5.08	0.20	0.073	(0.571)	0.055	0.018
62	5.17	0.20	0.073	(0.568)	0.055	0.018
63	5.25	0.20	0.073	(0.566)	0.055	0.018
64	5.33	0.23	0.085	(0.564)	0.064	0.021
65	5.42	0.23	0.085	(0.561)	0.064	0.021
66	5.50	0.23	0.085	(0.559)	0.064	0.021
67	5.58	0.27	0.097	(0.556)	0.073	0.024
68	5.67	0.27	0.097	(0.554)	0.073	0.024
69	5.75	0.27	0.097	(0.551)	0.073	0.024
70	5.83	0.27	0.097	(0.549)	0.073	0.024
71	5.92	0.27	0.097	(0.546)	0.073	0.024
72	6.00	0.27	0.097	(0.544)	0.073	0.024
73	6.08	0.30	0.109	(0.542)	0.082	0.027
74	6.17	0.30	0.109	(0.539)	0.082	0.027
75	6.25	0.30	0.109	(0.537)	0.082	0.027
76	6.33	0.30	0.109	(0.534)	0.082	0.027
77	6.42	0.30	0.109	(0.532)	0.082	0.027
78	6.50	0.30	0.109	(0.530)	0.082	0.027
79	6.58	0.33	0.121	(0.527)	0.091	0.030
80	6.67	0.33	0.121	(0.525)	0.091	0.030
81	6.75	0.33	0.121	(0.522)	0.091	0.030
82	6.83	0.33	0.121	(0.520)	0.091	0.030
83	6.92	0.33	0.121	(0.518)	0.091	0.030
84	7.00	0.33	0.121	(0.515)	0.091	0.030
85	7.08	0.33	0.121	(0.513)	0.091	0.030
86	7.17	0.33	0.121	(0.511)	0.091	0.030
87	7.25	0.33	0.121	(0.508)	0.091	0.030
88	7.33	0.37	0.133	(0.506)	0.100	0.033
89	7.42	0.37	0.133	(0.504)	0.100	0.033
90	7.50	0.37	0.133	(0.501)	0.100	0.033
91	7.58	0.40	0.145	(0.499)	0.109	0.036
92	7.67	0.40	0.145	(0.497)	0.109	0.036
93	7.75	0.40	0.145	(0.495)	0.109	0.036
94	7.83	0.43	0.158	(0.492)	0.118	0.039
95	7.92	0.43	0.158	(0.490)	0.118	0.039
96	8.00	0.43	0.158	(0.488)	0.118	0.039
97	8.08	0.50	0.182	(0.485)	0.136	0.045
98	8.17	0.50	0.182	(0.483)	0.136	0.045
99	8.25	0.50	0.182	(0.481)	0.136	0.045
100	8.33	0.50	0.182	(0.479)	0.136	0.045
101	8.42	0.50	0.182	(0.476)	0.136	0.045
102	8.50	0.50	0.182	(0.474)	0.136	0.045
103	8.58	0.53	0.194	(0.472)	0.145	0.048
104	8.67	0.53	0.194	(0.470)	0.145	0.048
105	8.75	0.53	0.194	(0.468)	0.145	0.048
106	8.83	0.57	0.206	(0.465)	0.155	0.052
107	8.92	0.57	0.206	(0.463)	0.155	0.052
108	9.00	0.57	0.206	(0.461)	0.155	0.052

109	9.08	0.63	0.230	(0.459)	0.173	0.058
110	9.17	0.63	0.230	(0.457)	0.173	0.058
111	9.25	0.63	0.230	(0.454)	0.173	0.058
112	9.33	0.67	0.242	(0.452)	0.182	0.061
113	9.42	0.67	0.242	(0.450)	0.182	0.061
114	9.50	0.67	0.242	(0.448)	0.182	0.061
115	9.58	0.70	0.255	(0.446)	0.191	0.064
116	9.67	0.70	0.255	(0.444)	0.191	0.064
117	9.75	0.70	0.255	(0.442)	0.191	0.064
118	9.83	0.73	0.267	(0.439)	0.200	0.067
119	9.92	0.73	0.267	(0.437)	0.200	0.067
120	10.00	0.73	0.267	(0.435)	0.200	0.067
121	10.08	0.50	0.182	(0.433)	0.136	0.045
122	10.17	0.50	0.182	(0.431)	0.136	0.045
123	10.25	0.50	0.182	(0.429)	0.136	0.045
124	10.33	0.50	0.182	(0.427)	0.136	0.045
125	10.42	0.50	0.182	(0.425)	0.136	0.045
126	10.50	0.50	0.182	(0.423)	0.136	0.045
127	10.58	0.67	0.242	(0.421)	0.182	0.061
128	10.67	0.67	0.242	(0.419)	0.182	0.061
129	10.75	0.67	0.242	(0.417)	0.182	0.061
130	10.83	0.67	0.242	(0.414)	0.182	0.061
131	10.92	0.67	0.242	(0.412)	0.182	0.061
132	11.00	0.67	0.242	(0.410)	0.182	0.061
133	11.08	0.63	0.230	(0.408)	0.173	0.058
134	11.17	0.63	0.230	(0.406)	0.173	0.058
135	11.25	0.63	0.230	(0.404)	0.173	0.058
136	11.33	0.63	0.230	(0.402)	0.173	0.058
137	11.42	0.63	0.230	(0.400)	0.173	0.058
138	11.50	0.63	0.230	(0.398)	0.173	0.058
139	11.58	0.57	0.206	(0.396)	0.155	0.052
140	11.67	0.57	0.206	(0.394)	0.155	0.052
141	11.75	0.57	0.206	(0.392)	0.155	0.052
142	11.83	0.60	0.218	(0.391)	0.164	0.055
143	11.92	0.60	0.218	(0.389)	0.164	0.055
144	12.00	0.60	0.218	(0.387)	0.164	0.055
145	12.08	0.83	0.303	(0.385)	0.227	0.076
146	12.17	0.83	0.303	(0.383)	0.227	0.076
147	12.25	0.83	0.303	(0.381)	0.227	0.076
148	12.33	0.87	0.315	(0.379)	0.236	0.079
149	12.42	0.87	0.315	(0.377)	0.236	0.079
150	12.50	0.87	0.315	(0.375)	0.236	0.079
151	12.58	0.93	0.339	(0.373)	0.255	0.085
152	12.67	0.93	0.339	(0.371)	0.255	0.085
153	12.75	0.93	0.339	(0.369)	0.255	0.085
154	12.83	0.97	0.352	(0.368)	0.264	0.088
155	12.92	0.97	0.352	(0.366)	0.264	0.088
156	13.00	0.97	0.352	(0.364)	0.264	0.088
157	13.08	1.13	0.412	(0.362)	0.309	0.103
158	13.17	1.13	0.412	(0.360)	0.309	0.103
159	13.25	1.13	0.412	(0.358)	0.309	0.103
160	13.33	1.13	0.412	(0.357)	0.309	0.103
161	13.42	1.13	0.412	(0.355)	0.309	0.103
162	13.50	1.13	0.412	(0.353)	0.309	0.103
163	13.58	0.77	0.279	(0.351)	0.209	0.070
164	13.67	0.77	0.279	(0.349)	0.209	0.070
165	13.75	0.77	0.279	(0.348)	0.209	0.070
166	13.83	0.77	0.279	(0.346)	0.209	0.070
167	13.92	0.77	0.279	(0.344)	0.209	0.070
168	14.00	0.77	0.279	(0.342)	0.209	0.070
169	14.08	0.90	0.327	(0.341)	0.245	0.082
170	14.17	0.90	0.327	(0.339)	0.245	0.082
171	14.25	0.90	0.327	(0.337)	0.245	0.082
172	14.33	0.87	0.315	(0.335)	0.236	0.079
173	14.42	0.87	0.315	(0.334)	0.236	0.079
174	14.50	0.87	0.315	(0.332)	0.236	0.079
175	14.58	0.87	0.315	(0.330)	0.236	0.079
176	14.67	0.87	0.315	(0.329)	0.236	0.079
177	14.75	0.87	0.315	(0.327)	0.236	0.079
178	14.83	0.83	0.303	(0.325)	0.227	0.076
179	14.92	0.83	0.303	(0.324)	0.227	0.076
180	15.00	0.83	0.303	(0.322)	0.227	0.076

181	15.08	0.80	0.291	(0.320)	0.218	0.073
182	15.17	0.80	0.291	(0.319)	0.218	0.073
183	15.25	0.80	0.291	(0.317)	0.218	0.073
184	15.33	0.77	0.279	(0.315)	0.209	0.070
185	15.42	0.77	0.279	(0.314)	0.209	0.070
186	15.50	0.77	0.279	(0.312)	0.209	0.070
187	15.58	0.63	0.230	(0.311)	0.173	0.058
188	15.67	0.63	0.230	(0.309)	0.173	0.058
189	15.75	0.63	0.230	(0.307)	0.173	0.058
190	15.83	0.63	0.230	(0.306)	0.173	0.058
191	15.92	0.63	0.230	(0.304)	0.173	0.058
192	16.00	0.63	0.230	(0.303)	0.173	0.058
193	16.08	0.13	0.048	(0.301)	0.036	0.012
194	16.17	0.13	0.048	(0.300)	0.036	0.012
195	16.25	0.13	0.048	(0.298)	0.036	0.012
196	16.33	0.13	0.048	(0.297)	0.036	0.012
197	16.42	0.13	0.048	(0.295)	0.036	0.012
198	16.50	0.13	0.048	(0.293)	0.036	0.012
199	16.58	0.10	0.036	(0.292)	0.027	0.009
200	16.67	0.10	0.036	(0.291)	0.027	0.009
201	16.75	0.10	0.036	(0.289)	0.027	0.009
202	16.83	0.10	0.036	(0.288)	0.027	0.009
203	16.92	0.10	0.036	(0.286)	0.027	0.009
204	17.00	0.10	0.036	(0.285)	0.027	0.009
205	17.08	0.17	0.061	(0.283)	0.045	0.015
206	17.17	0.17	0.061	(0.282)	0.045	0.015
207	17.25	0.17	0.061	(0.280)	0.045	0.015
208	17.33	0.17	0.061	(0.279)	0.045	0.015
209	17.42	0.17	0.061	(0.278)	0.045	0.015
210	17.50	0.17	0.061	(0.276)	0.045	0.015
211	17.58	0.17	0.061	(0.275)	0.045	0.015
212	17.67	0.17	0.061	(0.273)	0.045	0.015
213	17.75	0.17	0.061	(0.272)	0.045	0.015
214	17.83	0.13	0.048	(0.271)	0.036	0.012
215	17.92	0.13	0.048	(0.269)	0.036	0.012
216	18.00	0.13	0.048	(0.268)	0.036	0.012
217	18.08	0.13	0.048	(0.267)	0.036	0.012
218	18.17	0.13	0.048	(0.265)	0.036	0.012
219	18.25	0.13	0.048	(0.264)	0.036	0.012
220	18.33	0.13	0.048	(0.263)	0.036	0.012
221	18.42	0.13	0.048	(0.262)	0.036	0.012
222	18.50	0.13	0.048	(0.260)	0.036	0.012
223	18.58	0.10	0.036	(0.259)	0.027	0.009
224	18.67	0.10	0.036	(0.258)	0.027	0.009
225	18.75	0.10	0.036	(0.257)	0.027	0.009
226	18.83	0.07	0.024	(0.255)	0.018	0.006
227	18.92	0.07	0.024	(0.254)	0.018	0.006
228	19.00	0.07	0.024	(0.253)	0.018	0.006
229	19.08	0.10	0.036	(0.252)	0.027	0.009
230	19.17	0.10	0.036	(0.251)	0.027	0.009
231	19.25	0.10	0.036	(0.249)	0.027	0.009
232	19.33	0.13	0.048	(0.248)	0.036	0.012
233	19.42	0.13	0.048	(0.247)	0.036	0.012
234	19.50	0.13	0.048	(0.246)	0.036	0.012
235	19.58	0.10	0.036	(0.245)	0.027	0.009
236	19.67	0.10	0.036	(0.244)	0.027	0.009
237	19.75	0.10	0.036	(0.243)	0.027	0.009
238	19.83	0.07	0.024	(0.241)	0.018	0.006
239	19.92	0.07	0.024	(0.240)	0.018	0.006
240	20.00	0.07	0.024	(0.239)	0.018	0.006
241	20.08	0.10	0.036	(0.238)	0.027	0.009
242	20.17	0.10	0.036	(0.237)	0.027	0.009
243	20.25	0.10	0.036	(0.236)	0.027	0.009
244	20.33	0.10	0.036	(0.235)	0.027	0.009
245	20.42	0.10	0.036	(0.234)	0.027	0.009
246	20.50	0.10	0.036	(0.233)	0.027	0.009
247	20.58	0.10	0.036	(0.232)	0.027	0.009
248	20.67	0.10	0.036	(0.231)	0.027	0.009
249	20.75	0.10	0.036	(0.230)	0.027	0.009
250	20.83	0.07	0.024	(0.229)	0.018	0.006
251	20.92	0.07	0.024	(0.228)	0.018	0.006
252	21.00	0.07	0.024	(0.227)	0.018	0.006

1+20	0. 0111	0. 11	Q
1+25	0. 0119	0. 11	QQ
1+30	0. 0126	0. 11	QQ
1+35	0. 0134	0. 11	QQ
1+40	0. 0141	0. 11	QQ
1+45	0. 0149	0. 11	QQ
1+50	0. 0157	0. 12	QQ
1+55	0. 0166	0. 14	Q
2+ 0	0. 0176	0. 14	QQ
2+ 5	0. 0186	0. 14	Q
2+10	0. 0196	0. 14	QV
2+15	0. 0206	0. 14	QV
2+20	0. 0216	0. 14	QV
2+25	0. 0226	0. 14	QV
2+30	0. 0236	0. 14	QV
2+35	0. 0246	0. 16	QV
2+40	0. 0258	0. 17	QV
2+45	0. 0270	0. 18	QV
2+50	0. 0283	0. 18	QV
2+55	0. 0295	0. 18	QV
3+ 0	0. 0307	0. 18	QV
3+ 5	0. 0320	0. 18	QV
3+10	0. 0332	0. 18	QV
3+15	0. 0345	0. 18	QV
3+20	0. 0357	0. 18	QV
3+25	0. 0370	0. 18	QV
3+30	0. 0382	0. 18	Q V
3+35	0. 0394	0. 18	Q V
3+40	0. 0407	0. 18	Q V
3+45	0. 0419	0. 18	Q V
3+50	0. 0432	0. 19	Q V
3+55	0. 0447	0. 21	Q V
4+ 0	0. 0462	0. 21	Q V
4+ 5	0. 0476	0. 21	Q V
4+10	0. 0491	0. 22	Q V
4+15	0. 0506	0. 22	Q V
4+20	0. 0522	0. 23	Q V
4+25	0. 0539	0. 24	Q V
4+30	0. 0556	0. 25	Q V
4+35	0. 0573	0. 25	Q V
4+40	0. 0590	0. 25	Q V
4+45	0. 0608	0. 25	Q V
4+50	0. 0626	0. 26	Q V
4+55	0. 0645	0. 28	Q V
5+ 0	0. 0665	0. 29	Q V
5+ 5	0. 0683	0. 26	Q V
5+10	0. 0699	0. 23	Q V
5+15	0. 0714	0. 22	Q V
5+20	0. 0730	0. 23	Q V
5+25	0. 0747	0. 25	Q V
5+30	0. 0764	0. 25	Q V
5+35	0. 0782	0. 26	Q V
5+40	0. 0802	0. 28	Q V
5+45	0. 0821	0. 29	Q V
5+50	0. 0841	0. 29	Q V
5+55	0. 0861	0. 29	Q V
6+ 0	0. 0881	0. 29	Q V
6+ 5	0. 0902	0. 30	Q V
6+10	0. 0923	0. 32	Q V
6+15	0. 0945	0. 32	Q V
6+20	0. 0968	0. 32	Q V
6+25	0. 0990	0. 32	Q V
6+30	0. 1012	0. 32	Q V
6+35	0. 1036	0. 34	Q V
6+40	0. 1060	0. 35	Q V
6+45	0. 1084	0. 36	Q V
6+50	0. 1109	0. 36	Q V
6+55	0. 1134	0. 36	Q V
7+ 0	0. 1159	0. 36	Q V
7+ 5	0. 1184	0. 36	Q V
7+10	0. 1208	0. 36	Q V
7+15	0. 1233	0. 36	Q V

7+20	0. 1259	0. 37
7+25	0. 1286	0. 39
7+30	0. 1313	0. 39
7+35	0. 1341	0. 41
7+40	0. 1370	0. 42
7+45	0. 1400	0. 43
7+50	0. 1430	0. 44
7+55	0. 1462	0. 46
8+ 0	0. 1494	0. 47
8+ 5	0. 1528	0. 49
8+10	0. 1564	0. 53
8+15	0. 1601	0. 53
8+20	0. 1638	0. 54
8+25	0. 1675	0. 54
8+30	0. 1712	0. 54
8+35	0. 1750	0. 55
8+40	0. 1789	0. 57
8+45	0. 1829	0. 57
8+50	0. 1869	0. 59
8+55	0. 1911	0. 60
9+ 0	0. 1953	0. 61
9+ 5	0. 1997	0. 63
9+10	0. 2043	0. 67
9+15	0. 2090	0. 68
9+20	0. 2137	0. 69
9+25	0. 2186	0. 71
9+30	0. 2236	0. 72
9+35	0. 2286	0. 73
9+40	0. 2338	0. 75
9+45	0. 2390	0. 75
9+50	0. 2443	0. 77
9+55	0. 2497	0. 79
10+ 0	0. 2551	0. 79
10+ 5	0. 2600	0. 71
10+10	0. 2641	0. 59
10+15	0. 2680	0. 56
10+20	0. 2718	0. 55
10+25	0. 2755	0. 54
10+30	0. 2792	0. 54
10+35	0. 2834	0. 60
10+40	0. 2881	0. 68
10+45	0. 2929	0. 70
10+50	0. 2978	0. 71
10+55	0. 3028	0. 72
11+ 0	0. 3078	0. 72
11+ 5	0. 3126	0. 71
11+10	0. 3174	0. 69
11+15	0. 3222	0. 69
11+20	0. 3269	0. 69
11+25	0. 3316	0. 69
11+30	0. 3363	0. 69
11+35	0. 3409	0. 66
11+40	0. 3452	0. 63
11+45	0. 3495	0. 62
11+50	0. 3538	0. 63
11+55	0. 3582	0. 64
12+ 0	0. 3627	0. 65
12+ 5	0. 3677	0. 73
12+10	0. 3735	0. 85
12+15	0. 3796	0. 88
12+20	0. 3858	0. 90
12+25	0. 3922	0. 93
12+30	0. 3986	0. 93
12+35	0. 4052	0. 96
12+40	0. 4121	0. 99
12+45	0. 4190	1. 00
12+50	0. 4260	1. 02
12+55	0. 4331	1. 04
13+ 0	0. 4403	1. 04
13+ 5	0. 4479	1. 10
13+10	0. 4561	1. 19
13+15	0. 4644	1. 21



19+20	0. 7100	0. 12	Q	V
19+25	0. 7110	0. 14	Q	V
19+30	0. 7120	0. 14	Q	V
19+35	0. 7129	0. 13	Q	V
19+40	0. 7136	0. 12	Q	V
19+45	0. 7144	0. 11	Q	V
19+50	0. 7151	0. 10	Q	V
19+55	0. 7156	0. 08	Q	V
20+ 0	0. 7162	0. 08	Q	V
20+ 5	0. 7167	0. 09	Q	V
20+10	0. 7174	0. 10	Q	V
20+15	0. 7182	0. 10	Q	V
20+20	0. 7189	0. 11	Q	V
20+25	0. 7196	0. 11	Q	V
20+30	0. 7204	0. 11	Q	V
20+35	0. 7211	0. 11	Q	V
20+40	0. 7219	0. 11	Q	V
20+45	0. 7226	0. 11	Q	V
20+50	0. 7233	0. 10	Q	V
20+55	0. 7238	0. 08	Q	V
21+ 0	0. 7244	0. 08	Q	V
21+ 5	0. 7249	0. 09	Q	V
21+10	0. 7256	0. 10	Q	V
21+15	0. 7264	0. 10	Q	V
21+20	0. 7270	0. 10	Q	V
21+25	0. 7276	0. 08	Q	V
21+30	0. 7281	0. 08	Q	V
21+35	0. 7287	0. 09	Q	V
21+40	0. 7294	0. 10	Q	V
21+45	0. 7301	0. 10	Q	V
21+50	0. 7307	0. 10	Q	V
21+55	0. 7313	0. 08	Q	V
22+ 0	0. 7318	0. 08	Q	V
22+ 5	0. 7324	0. 09	Q	V
22+10	0. 7331	0. 10	Q	V
22+15	0. 7338	0. 10	Q	V
22+20	0. 7345	0. 10	Q	V
22+25	0. 7350	0. 08	Q	V
22+30	0. 7355	0. 08	Q	V
22+35	0. 7360	0. 07	Q	V
22+40	0. 7365	0. 07	Q	V
22+45	0. 7370	0. 07	Q	V
22+50	0. 7375	0. 07	Q	V
22+55	0. 7380	0. 07	Q	V
23+ 0	0. 7385	0. 07	Q	V
23+ 5	0. 7390	0. 07	Q	V
23+10	0. 7395	0. 07	Q	V
23+15	0. 7400	0. 07	Q	V
23+20	0. 7405	0. 07	Q	V
23+25	0. 7410	0. 07	Q	V
23+30	0. 7415	0. 07	Q	V
23+35	0. 7420	0. 07	Q	V
23+40	0. 7425	0. 07	Q	V
23+45	0. 7430	0. 07	Q	V
23+50	0. 7435	0. 07	Q	V
23+55	0. 7440	0. 07	Q	V
24+ 0	0. 7445	0. 07	Q	V
24+ 5	0. 7448	0. 05	Q	V
24+10	0. 7449	0. 01	Q	V
24+15	0. 7450	0. 01	Q	V
24+20	0. 7450	0. 00	Q	V
24+25	0. 7450	0. 00	Q	V

Unit Hydrograph Analysis

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Study date 12/28/22 File: 2216E00565.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
EXISTING CONDITION
HYDROLOGIC ANALYSIS
5- YEAR

Drainage Area = 11.80(Ac.) = 0.018 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 11.80(Ac.) = 0.018 Sq. Mi.
Length along longest watercourse = 1548.00(Ft.)
Length along longest watercourse measured to centroid = 500.00(Ft.)
Length along longest watercourse = 0.293 Mi.
Length along longest watercourse measured to centroid = 0.095 Mi.
Difference in elevation = 16.10(Ft.)
Slope along watercourse = 54.9147 Ft./Mi.
Average Manning's 'N' = 0.020
Lag time = 0.057 Hr.
Lag time = 3.45 Min.
25% of lag time = 0.86 Min.
40% of lag time = 1.38 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
11.80	1.20	14.16

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
11.80	3.00	35.40

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.622(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.622(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
2.540 56.00 0.900
9.260 76.00 0.000
Total Area Entered = 11.80(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	0.215	0.029
76.0	58.2	0.488	0.000	0.488	0.785	0.383
Sum (F) =						0.412

Area averaged mean soil loss (F) (In/Hr) = 0.412

Minimum soil loss rate ((In/Hr)) = 0.206

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.750

Unit Hydrograph VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	145.077	31.965
2	0.167	290.154	47.363
3	0.250	435.231	11.478
4	0.333	580.308	5.035
5	0.417	725.385	2.615
6	0.500	870.462	1.544
Sum = 100.000			Sum= 11.892

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.097	(0.412)	0.073	0.024
2	0.17	0.60	0.117	(0.412)	0.088	0.029
3	0.25	0.60	0.117	(0.412)	0.088	0.029
4	0.33	0.60	0.117	(0.412)	0.088	0.029
5	0.42	0.60	0.117	(0.412)	0.088	0.029
6	0.50	0.70	0.136	(0.412)	0.102	0.034
7	0.58	0.70	0.136	(0.412)	0.102	0.034
8	0.67	0.70	0.136	(0.412)	0.102	0.034
9	0.75	0.70	0.136	(0.412)	0.102	0.034
10	0.83	0.70	0.136	(0.412)	0.102	0.034
11	0.92	0.70	0.136	(0.412)	0.102	0.034
12	1.00	0.80	0.156	(0.412)	0.117	0.039
13	1.08	0.80	0.156	(0.412)	0.117	0.039
14	1.17	0.80	0.156	(0.412)	0.117	0.039
15	1.25	0.80	0.156	(0.412)	0.117	0.039
16	1.33	0.80	0.156	(0.412)	0.117	0.039
17	1.42	0.80	0.156	(0.412)	0.117	0.039
18	1.50	0.80	0.156	(0.412)	0.117	0.039
19	1.58	0.80	0.156	(0.412)	0.117	0.039
20	1.67	0.80	0.156	(0.412)	0.117	0.039
21	1.75	0.80	0.156	(0.412)	0.117	0.039
22	1.83	0.80	0.156	(0.412)	0.117	0.039
23	1.92	0.80	0.156	(0.412)	0.117	0.039
24	2.00	0.90	0.175	(0.412)	0.131	0.044
25	2.08	0.80	0.156	(0.412)	0.117	0.039
26	2.17	0.90	0.175	(0.412)	0.131	0.044
27	2.25	0.90	0.175	(0.412)	0.131	0.044
28	2.33	0.90	0.175	(0.412)	0.131	0.044
29	2.42	0.90	0.175	(0.412)	0.131	0.044
30	2.50	0.90	0.175	(0.412)	0.131	0.044
31	2.58	0.90	0.175	(0.412)	0.131	0.044
32	2.67	0.90	0.175	(0.412)	0.131	0.044
33	2.75	1.00	0.195	(0.412)	0.146	0.049
34	2.83	1.00	0.195	(0.412)	0.146	0.049
35	2.92	1.00	0.195	(0.412)	0.146	0.049
36	3.00	1.00	0.195	(0.412)	0.146	0.049

1+20	0.0409	0.46	Q	V			
1+25	0.0441	0.46	Q	V			
1+30	0.0473	0.46	Q	V			
1+35	0.0505	0.46	Q	V			
1+40	0.0537	0.46	Q	V			
1+45	0.0569	0.46	Q	V			
1+50	0.0601	0.46	Q	V			
1+55	0.0633	0.46	Q	V			
2+ 0	0.0666	0.48	Q	V			
2+ 5	0.0700	0.49	Q	V			
2+10	0.0733	0.49	Q	V			
2+15	0.0768	0.51	Q	V			
2+20	0.0804	0.52	Q	V			
2+25	0.0840	0.52	Q	V			
2+30	0.0876	0.52	Q	V			
2+35	0.0912	0.52	Q	V			
2+40	0.0947	0.52	Q	V			
2+45	0.0985	0.54	Q	V			
2+50	0.1024	0.57	Q	V			
2+55	0.1063	0.57	Q	V			
3+ 0	0.1103	0.58	Q	V			
3+ 5	0.1143	0.58	Q	V			
3+10	0.1184	0.60	Q	V			
3+15	0.1227	0.62	Q	V			
3+20	0.1270	0.63	Q	V			
3+25	0.1315	0.65	Q	V			
3+30	0.1363	0.70	Q	V			
3+35	0.1415	0.75	Q	V			
3+40	0.1470	0.79	Q	V			
3+45	0.1526	0.82	Q	V			
3+50	0.1585	0.85	Q	V			
3+55	0.1646	0.88	Q	V			
4+ 0	0.1708	0.91	Q	V			
4+ 5	0.1773	0.94	Q	V			
4+10	0.1841	0.99	Q	V			
4+15	0.1913	1.04	Q	V			
4+20	0.1989	1.10	Q	V			
4+25	0.2068	1.16	Q	V			
4+30	0.2150	1.19	Q	V			
4+35	0.2235	1.23	Q	V			
4+40	0.2323	1.28	Q	V			
4+45	0.2414	1.33	Q	V			
4+50	0.2509	1.37	Q	V			
4+55	0.2605	1.40	Q	V			
5+ 0	0.2705	1.45	Q	V			
5+ 5	0.2824	1.73	Q	V			
5+10	0.2995	2.48	Q	V			
5+15	0.3225	3.34	Q	V			
5+20	0.3505	4.07	Q	V			
5+25	0.3844	4.92	Q	V			
5+30	0.4277	6.29	Q	V			
5+35	0.4640	5.26	Q	V			
5+40	0.4785	2.10	Q	V			
5+45	0.4862	1.12	Q	V			
5+50	0.4908	0.68	Q	V			
5+55	0.4937	0.41	Q	V			
6+ 0	0.4950	0.20	Q	V			
6+ 5	0.4958	0.11	Q	V			
6+10	0.4960	0.03	Q	V			
6+15	0.4961	0.01	Q	V			
6+20	0.4962	0.01	Q	V			
6+25	0.4962	0.00	Q	V			

Unit Hydrograph Analysis

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Study date 12/28/22 File: 2216E00535.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
EXISTING CONDITION
HYDROLOGIC ANALYSIS
5- YEAR

Drainage Area = 11.80(Ac.) = 0.018 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 11.80(Ac.) = 0.018 Sq. Mi.
Length along longest watercourse = 1548.00(Ft.)
Length along longest watercourse measured to centroid = 500.00(Ft.)
Length along longest watercourse = 0.293 Mi.
Length along longest watercourse measured to centroid = 0.095 Mi.
Difference in elevation = 16.10(Ft.)
Slope along watercourse = 54.9147 Ft./Mi.
Average Manning's 'N' = 0.020
Lag time = 0.057 Hr.
Lag time = 3.45 Min.
25% of lag time = 0.86 Min.
40% of lag time = 1.38 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
11.80	0.90	10.62

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
11.80	2.35	27.73

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 1.240(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 1.240(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
2.540 56.00 0.900
9.260 76.00 0.000
Total Area Entered = 11.80(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	0.215	0.029
76.0	58.2	0.488	0.000	0.488	0.785	0.383
Sum (F) =						0.412

Area averaged mean soil loss (F) (In/Hr) = 0.412

Minimum soil loss rate ((In/Hr)) = 0.206

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.750

Unit Hydrograph VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	145.077	31.965
2	0.167	290.154	47.363
3	0.250	435.231	11.478
4	0.333	580.308	5.035
5	0.417	725.385	2.615
6	0.500	870.462	1.544
Sum = 100.000			Sum= 11.892

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	1.30	0.193	(0.412)	0.145	0.048
2	0.17	1.30	0.193	(0.412)	0.145	0.048
3	0.25	1.10	0.164	(0.412)	0.123	0.041
4	0.33	1.50	0.223	(0.412)	0.167	0.056
5	0.42	1.50	0.223	(0.412)	0.167	0.056
6	0.50	1.80	0.268	(0.412)	0.201	0.067
7	0.58	1.50	0.223	(0.412)	0.167	0.056
8	0.67	1.80	0.268	(0.412)	0.201	0.067
9	0.75	1.80	0.268	(0.412)	0.201	0.067
10	0.83	1.50	0.223	(0.412)	0.167	0.056
11	0.92	1.60	0.238	(0.412)	0.178	0.059
12	1.00	1.80	0.268	(0.412)	0.201	0.067
13	1.08	2.20	0.327	(0.412)	0.245	0.082
14	1.17	2.20	0.327	(0.412)	0.245	0.082
15	1.25	2.20	0.327	(0.412)	0.245	0.082
16	1.33	2.00	0.297	(0.412)	0.223	0.074
17	1.42	2.60	0.387	(0.412)	0.290	0.097
18	1.50	2.70	0.402	(0.412)	0.301	0.100
19	1.58	2.40	0.357	(0.412)	0.268	0.089
20	1.67	2.70	0.402	(0.412)	0.301	0.100
21	1.75	3.30	0.491	(0.412)	0.368	0.123
22	1.83	3.10	0.461	(0.412)	0.346	0.115
23	1.92	2.90	0.431	(0.412)	0.324	0.108
24	2.00	3.00	0.446	(0.412)	0.335	0.112
25	2.08	3.10	0.461	(0.412)	0.346	0.115
26	2.17	4.20	0.625	(0.412)	(0.469)	0.213
27	2.25	5.00	0.744	(0.412)	(0.558)	0.332
28	2.33	3.50	0.521	(0.412)	0.390	0.130
29	2.42	6.80	1.011	(0.412)	(0.759)	0.599
30	2.50	7.30	1.086	(0.412)	(0.814)	0.674
31	2.58	8.20	1.220	(0.412)	(0.915)	0.808
32	2.67	5.90	0.878	(0.412)	(0.658)	0.465
33	2.75	2.00	0.297	(0.412)	0.223	0.074
34	2.83	1.80	0.268	(0.412)	0.201	0.067
35	2.92	1.80	0.268	(0.412)	0.201	0.067
36	3.00	0.60	0.089	(0.412)	0.067	0.022

(Loss Rate Not Used)

Sum = 100.0

Sum = 5.4

Flood volume = Effective rainfall 0.45(In)
times area 11.8(Ac.) / [(In)/(Ft.)] = 0.4(Ac. Ft)
Total soil loss = 0.79(In)
Total soil loss = 0.775(Ac. Ft)
Total rainfall = 1.24(In)
Flood volume = 19340.9 Cubic Feet
Total soil loss = 33754.5 Cubic Feet

Peak flow rate of this hydrograph = 7.907(CFS)

3 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0013	0.18	Q				
0+10	0.0044	0.46	VQ				
0+15	0.0078	0.49	VQ				
0+20	0.0115	0.54	VQ				
0+25	0.0158	0.63	VQ				
0+30	0.0206	0.69	VQ				
0+35	0.0256	0.72	Q				
0+40	0.0305	0.72	Q				
0+45	0.0359	0.78	Q				
0+50	0.0410	0.75	QV				
0+55	0.0458	0.70	Q V				
1+ 0	0.0509	0.74	Q V				
1+ 5	0.0567	0.84	Q V				
1+10	0.0631	0.93	Q V				
1+15	0.0696	0.95	Q V				
1+20	0.0761	0.94	Q V				
1+25	0.0829	0.99	Q V				
1+30	0.0906	1.12	Q V				
1+35	0.0983	1.12	Q V				
1+40	0.1060	1.12	Q V				
1+45	0.1146	1.26	Q V				
1+50	0.1241	1.37	Q V				
1+55	0.1333	1.33	Q V				
2+ 0	0.1423	1.31	Q V				
2+ 5	0.1515	1.34	Q V				
2+10	0.1635	1.73	Q				
2+15	0.1823	2.74	Q				
2+20	0.2015	2.78	Q				
2+25	0.2266	3.65	Q				
2+30	0.2707	6.40	Q				
2+35	0.3252	7.91	Q				
2+40	0.3782	7.70	Q				
2+45	0.4100	4.62	Q				
2+50	0.4246	2.11	Q				
2+55	0.4341	1.39	Q				
3+ 0	0.4403	0.89	Q				
3+ 5	0.4428	0.37	Q				
3+10	0.4435	0.11	Q				
3+15	0.4438	0.05	Q				
3+20	0.4440	0.02	Q				
3+25	0.4440	0.00	Q				

Unit Hydrograph Analysis

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Study date 12/28/22 File: 2216E00515.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
EXISTING CONDITION
HYDROLOGIC ANALYSIS
5- YEAR

Drainage Area = 11.80(Ac.) = 0.018 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 11.80(Ac.) = 0.018 Sq. Mi.
Length along longest watercourse = 1548.00(Ft.)
Length along longest watercourse measured to centroid = 500.00(Ft.)
Length along longest watercourse = 0.293 Mi.
Length along longest watercourse measured to centroid = 0.095 Mi.
Difference in elevation = 16.10(Ft.)
Slope along watercourse = 54.9147 Ft./Mi.
Average Manning's 'N' = 0.020
Lag time = 0.057 Hr.
Lag time = 3.45 Min.
25% of lag time = 0.86 Min.
40% of lag time = 1.38 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
11.80	0.54	6.37

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
11.80	1.36	16.05

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.732(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 0.732(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
2.540 56.00 0.900
9.260 76.00 0.000
Total Area Entered = 11.80(Ac.)

0+10	0.0089	0.92	Q			
0+15	0.0167	1.14	VQ			
0+20	0.0258	1.31	Q			
0+25	0.0354	1.40	Q V			
0+30	0.0461	1.56	Q V			
0+35	0.0613	2.21	Q V			
0+40	0.0848	3.40	Q V			
0+45	0.1221	5.43	Q	V		
0+50	0.2032	11.77		Q	V	
0+55	0.2909	12.74			VQ	Q
1+ 0	0.3261	5.10		Q		V
1+ 5	0.3425	2.38	Q			V
1+10	0.3495	1.02	Q			V
1+15	0.3529	0.49	Q			V
1+20	0.3535	0.09	Q			V
1+25	0.3536	0.02	Q			V

Unit Hydrograph Analysis

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Study date 12/28/22 File: 2216E0102410.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
EXISTING CONDITION
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 11.80(Ac.) = 0.018 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 11.80(Ac.) = 0.018 Sq. Mi.
Length along longest watercourse = 1548.00(Ft.)
Length along longest watercourse measured to centroid = 500.00(Ft.)
Length along longest watercourse = 0.293 Mi.
Length along longest watercourse measured to centroid = 0.095 Mi.
Difference in elevation = 16.10(Ft.)
Slope along watercourse = 54.9147 Ft./Mi.
Average Manning's 'N' = 0.020
Lag time = 0.057 Hr.
Lag time = 3.45 Min.
25% of lag time = 0.86 Min.
40% of lag time = 1.38 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1] Rainfall (In) [2] Weighting[1*2]
11.80 2.00 23.60

100 YEAR Area rainfall data:

Area(Ac.) [1] Rainfall (In) [2] Weighting[1*2]
11.80 6.40 75.52

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 3.810(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 3.810(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
2.540 56.00 0.900
9.260 76.00 0.000
Total Area Entered = 11.80(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	0.215	0.021
76.0	76.0	0.291	0.000	0.291	0.785	0.229
Sum (F) =						0.249

Area averaged mean soil loss (F) (In/Hr) = 0.249

Minimum soil loss rate ((In/Hr)) = 0.125

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.750

Unit Hydrograph VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	145.077	31.965
2	0.167	290.154	47.363
3	0.250	435.231	11.478
4	0.333	580.308	5.035
5	0.417	725.385	2.615
6	0.500	870.462	1.544
Sum = 100.000			Sum= 11.892

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.030	(0.442)	0.023	0.008
2	0.17	0.07	0.030	(0.440)	0.023	0.008
3	0.25	0.07	0.030	(0.439)	0.023	0.008
4	0.33	0.10	0.046	(0.437)	0.034	0.011
5	0.42	0.10	0.046	(0.435)	0.034	0.011
6	0.50	0.10	0.046	(0.434)	0.034	0.011
7	0.58	0.10	0.046	(0.432)	0.034	0.011
8	0.67	0.10	0.046	(0.430)	0.034	0.011
9	0.75	0.10	0.046	(0.429)	0.034	0.011
10	0.83	0.13	0.061	(0.427)	0.046	0.015
11	0.92	0.13	0.061	(0.425)	0.046	0.015
12	1.00	0.13	0.061	(0.424)	0.046	0.015
13	1.08	0.10	0.046	(0.422)	0.034	0.011
14	1.17	0.10	0.046	(0.420)	0.034	0.011
15	1.25	0.10	0.046	(0.418)	0.034	0.011
16	1.33	0.10	0.046	(0.417)	0.034	0.011
17	1.42	0.10	0.046	(0.415)	0.034	0.011
18	1.50	0.10	0.046	(0.414)	0.034	0.011
19	1.58	0.10	0.046	(0.412)	0.034	0.011
20	1.67	0.10	0.046	(0.410)	0.034	0.011
21	1.75	0.10	0.046	(0.409)	0.034	0.011
22	1.83	0.13	0.061	(0.407)	0.046	0.015
23	1.92	0.13	0.061	(0.405)	0.046	0.015
24	2.00	0.13	0.061	(0.404)	0.046	0.015
25	2.08	0.13	0.061	(0.402)	0.046	0.015
26	2.17	0.13	0.061	(0.400)	0.046	0.015
27	2.25	0.13	0.061	(0.399)	0.046	0.015
28	2.33	0.13	0.061	(0.397)	0.046	0.015
29	2.42	0.13	0.061	(0.396)	0.046	0.015
30	2.50	0.13	0.061	(0.394)	0.046	0.015
31	2.58	0.17	0.076	(0.392)	0.057	0.019
32	2.67	0.17	0.076	(0.391)	0.057	0.019
33	2.75	0.17	0.076	(0.389)	0.057	0.019
34	2.83	0.17	0.076	(0.387)	0.057	0.019
35	2.92	0.17	0.076	(0.386)	0.057	0.019
36	3.00	0.17	0.076	(0.384)	0.057	0.019

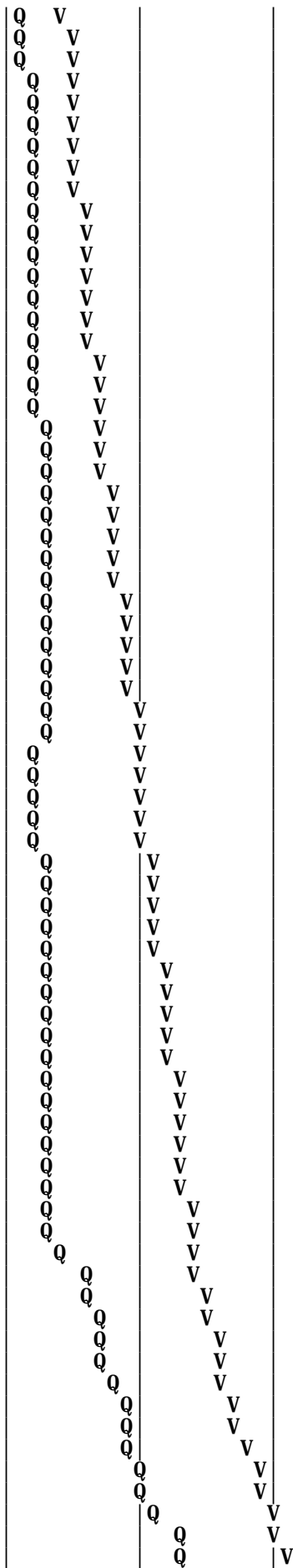
37	3.08	0.17	0.076	(0.383)	0.057	0.019
38	3.17	0.17	0.076	(0.381)	0.057	0.019
39	3.25	0.17	0.076	(0.380)	0.057	0.019
40	3.33	0.17	0.076	(0.378)	0.057	0.019
41	3.42	0.17	0.076	(0.376)	0.057	0.019
42	3.50	0.17	0.076	(0.375)	0.057	0.019
43	3.58	0.17	0.076	(0.373)	0.057	0.019
44	3.67	0.17	0.076	(0.372)	0.057	0.019
45	3.75	0.17	0.076	(0.370)	0.057	0.019
46	3.83	0.20	0.091	(0.369)	0.069	0.023
47	3.92	0.20	0.091	(0.367)	0.069	0.023
48	4.00	0.20	0.091	(0.365)	0.069	0.023
49	4.08	0.20	0.091	(0.364)	0.069	0.023
50	4.17	0.20	0.091	(0.362)	0.069	0.023
51	4.25	0.20	0.091	(0.361)	0.069	0.023
52	4.33	0.23	0.107	(0.359)	0.080	0.027
53	4.42	0.23	0.107	(0.358)	0.080	0.027
54	4.50	0.23	0.107	(0.356)	0.080	0.027
55	4.58	0.23	0.107	(0.355)	0.080	0.027
56	4.67	0.23	0.107	(0.353)	0.080	0.027
57	4.75	0.23	0.107	(0.352)	0.080	0.027
58	4.83	0.27	0.122	(0.350)	0.091	0.030
59	4.92	0.27	0.122	(0.349)	0.091	0.030
60	5.00	0.27	0.122	(0.347)	0.091	0.030
61	5.08	0.20	0.091	(0.346)	0.069	0.023
62	5.17	0.20	0.091	(0.344)	0.069	0.023
63	5.25	0.20	0.091	(0.343)	0.069	0.023
64	5.33	0.23	0.107	(0.341)	0.080	0.027
65	5.42	0.23	0.107	(0.340)	0.080	0.027
66	5.50	0.23	0.107	(0.338)	0.080	0.027
67	5.58	0.27	0.122	(0.337)	0.091	0.030
68	5.67	0.27	0.122	(0.335)	0.091	0.030
69	5.75	0.27	0.122	(0.334)	0.091	0.030
70	5.83	0.27	0.122	(0.332)	0.091	0.030
71	5.92	0.27	0.122	(0.331)	0.091	0.030
72	6.00	0.27	0.122	(0.329)	0.091	0.030
73	6.08	0.30	0.137	(0.328)	0.103	0.034
74	6.17	0.30	0.137	(0.326)	0.103	0.034
75	6.25	0.30	0.137	(0.325)	0.103	0.034
76	6.33	0.30	0.137	(0.323)	0.103	0.034
77	6.42	0.30	0.137	(0.322)	0.103	0.034
78	6.50	0.30	0.137	(0.320)	0.103	0.034
79	6.58	0.33	0.152	(0.319)	0.114	0.038
80	6.67	0.33	0.152	(0.318)	0.114	0.038
81	6.75	0.33	0.152	(0.316)	0.114	0.038
82	6.83	0.33	0.152	(0.315)	0.114	0.038
83	6.92	0.33	0.152	(0.313)	0.114	0.038
84	7.00	0.33	0.152	(0.312)	0.114	0.038
85	7.08	0.33	0.152	(0.310)	0.114	0.038
86	7.17	0.33	0.152	(0.309)	0.114	0.038
87	7.25	0.33	0.152	(0.308)	0.114	0.038
88	7.33	0.37	0.168	(0.306)	0.126	0.042
89	7.42	0.37	0.168	(0.305)	0.126	0.042
90	7.50	0.37	0.168	(0.303)	0.126	0.042
91	7.58	0.40	0.183	(0.302)	0.137	0.046
92	7.67	0.40	0.183	(0.301)	0.137	0.046
93	7.75	0.40	0.183	(0.299)	0.137	0.046
94	7.83	0.43	0.198	(0.298)	0.149	0.050
95	7.92	0.43	0.198	(0.297)	0.149	0.050
96	8.00	0.43	0.198	(0.295)	0.149	0.050
97	8.08	0.50	0.229	(0.294)	0.171	0.057
98	8.17	0.50	0.229	(0.292)	0.171	0.057
99	8.25	0.50	0.229	(0.291)	0.171	0.057
100	8.33	0.50	0.229	(0.290)	0.171	0.057
101	8.42	0.50	0.229	(0.288)	0.171	0.057
102	8.50	0.50	0.229	(0.287)	0.171	0.057
103	8.58	0.53	0.244	(0.286)	0.183	0.061
104	8.67	0.53	0.244	(0.284)	0.183	0.061
105	8.75	0.53	0.244	(0.283)	0.183	0.061
106	8.83	0.57	0.259	(0.282)	0.194	0.065
107	8.92	0.57	0.259	(0.280)	0.194	0.065
108	9.00	0.57	0.259	(0.279)	0.194	0.065

109	9.08	0.63	0.290	(0.278)	0.217	0.072
110	9.17	0.63	0.290	(0.276)	0.217	0.072
111	9.25	0.63	0.290	(0.275)	0.217	0.072
112	9.33	0.67	0.305	(0.274)	0.229	0.076
113	9.42	0.67	0.305	(0.272)	0.229	0.076
114	9.50	0.67	0.305	(0.271)	0.229	0.076
115	9.58	0.70	0.320	(0.270)	0.240	0.080
116	9.67	0.70	0.320	(0.269)	0.240	0.080
117	9.75	0.70	0.320	(0.267)	0.240	0.080
118	9.83	0.73	0.335	(0.266)	0.251	0.084
119	9.92	0.73	0.335	(0.265)	0.251	0.084
120	10.00	0.73	0.335	(0.263)	0.251	0.084
121	10.08	0.50	0.229	(0.262)	0.171	0.057
122	10.17	0.50	0.229	(0.261)	0.171	0.057
123	10.25	0.50	0.229	(0.260)	0.171	0.057
124	10.33	0.50	0.229	(0.258)	0.171	0.057
125	10.42	0.50	0.229	(0.257)	0.171	0.057
126	10.50	0.50	0.229	(0.256)	0.171	0.057
127	10.58	0.67	0.305	(0.255)	0.229	0.076
128	10.67	0.67	0.305	(0.253)	0.229	0.076
129	10.75	0.67	0.305	(0.252)	0.229	0.076
130	10.83	0.67	0.305	(0.251)	0.229	0.076
131	10.92	0.67	0.305	(0.250)	0.229	0.076
132	11.00	0.67	0.305	(0.248)	0.229	0.076
133	11.08	0.63	0.290	(0.247)	0.217	0.072
134	11.17	0.63	0.290	(0.246)	0.217	0.072
135	11.25	0.63	0.290	(0.245)	0.217	0.072
136	11.33	0.63	0.290	(0.244)	0.217	0.072
137	11.42	0.63	0.290	(0.242)	0.217	0.072
138	11.50	0.63	0.290	(0.241)	0.217	0.072
139	11.58	0.57	0.259	(0.240)	0.194	0.065
140	11.67	0.57	0.259	(0.239)	0.194	0.065
141	11.75	0.57	0.259	(0.238)	0.194	0.065
142	11.83	0.60	0.274	(0.236)	0.206	0.069
143	11.92	0.60	0.274	(0.235)	0.206	0.069
144	12.00	0.60	0.274	(0.234)	0.206	0.069
145	12.08	0.83	0.381	0.233	(0.286)	0.148
146	12.17	0.83	0.381	0.232	(0.286)	0.149
147	12.25	0.83	0.381	0.230	(0.286)	0.151
148	12.33	0.87	0.396	0.229	(0.297)	0.167
149	12.42	0.87	0.396	0.228	(0.297)	0.168
150	12.50	0.87	0.396	0.227	(0.297)	0.169
151	12.58	0.93	0.427	0.226	(0.320)	0.201
152	12.67	0.93	0.427	0.225	(0.320)	0.202
153	12.75	0.93	0.427	0.224	(0.320)	0.203
154	12.83	0.97	0.442	0.222	(0.331)	0.219
155	12.92	0.97	0.442	0.221	(0.331)	0.221
156	13.00	0.97	0.442	0.220	(0.331)	0.222
157	13.08	1.13	0.518	0.219	(0.389)	0.299
158	13.17	1.13	0.518	0.218	(0.389)	0.300
159	13.25	1.13	0.518	0.217	(0.389)	0.301
160	13.33	1.13	0.518	0.216	(0.389)	0.302
161	13.42	1.13	0.518	0.215	(0.389)	0.303
162	13.50	1.13	0.518	0.214	(0.389)	0.305
163	13.58	0.77	0.351	0.213	(0.263)	0.138
164	13.67	0.77	0.351	0.211	(0.263)	0.139
165	13.75	0.77	0.351	0.210	(0.263)	0.140
166	13.83	0.77	0.351	0.209	(0.263)	0.141
167	13.92	0.77	0.351	0.208	(0.263)	0.142
168	14.00	0.77	0.351	0.207	(0.263)	0.143
169	14.08	0.90	0.411	0.206	(0.309)	0.205
170	14.17	0.90	0.411	0.205	(0.309)	0.206
171	14.25	0.90	0.411	0.204	(0.309)	0.207
172	14.33	0.87	0.396	0.203	(0.297)	0.193
173	14.42	0.87	0.396	0.202	(0.297)	0.194
174	14.50	0.87	0.396	0.201	(0.297)	0.195
175	14.58	0.87	0.396	0.200	(0.297)	0.196
176	14.67	0.87	0.396	0.199	(0.297)	0.197
177	14.75	0.87	0.396	0.198	(0.297)	0.198
178	14.83	0.83	0.381	0.197	(0.286)	0.184
179	14.92	0.83	0.381	0.196	(0.286)	0.185
180	15.00	0.83	0.381	0.195	(0.286)	0.186

181	15.08	0.80	0.366	0.194	(0.274)	0.172
182	15.17	0.80	0.366	0.193	(0.274)	0.173
183	15.25	0.80	0.366	0.192	(0.274)	0.174
184	15.33	0.77	0.351	0.191	(0.263)	0.160
185	15.42	0.77	0.351	0.190	(0.263)	0.161
186	15.50	0.77	0.351	0.189	(0.263)	0.162
187	15.58	0.63	0.290	0.188	(0.217)	0.102
188	15.67	0.63	0.290	0.187	(0.217)	0.103
189	15.75	0.63	0.290	0.186	(0.217)	0.104
190	15.83	0.63	0.290	0.185	(0.217)	0.105
191	15.92	0.63	0.290	0.184	(0.217)	0.105
192	16.00	0.63	0.290	0.183	(0.217)	0.106
193	16.08	0.13	0.061	(0.182)	0.046	0.015
194	16.17	0.13	0.061	(0.181)	0.046	0.015
195	16.25	0.13	0.061	(0.180)	0.046	0.015
196	16.33	0.13	0.061	(0.179)	0.046	0.015
197	16.42	0.13	0.061	(0.179)	0.046	0.015
198	16.50	0.13	0.061	(0.178)	0.046	0.015
199	16.58	0.10	0.046	(0.177)	0.034	0.011
200	16.67	0.10	0.046	(0.176)	0.034	0.011
201	16.75	0.10	0.046	(0.175)	0.034	0.011
202	16.83	0.10	0.046	(0.174)	0.034	0.011
203	16.92	0.10	0.046	(0.173)	0.034	0.011
204	17.00	0.10	0.046	(0.172)	0.034	0.011
205	17.08	0.17	0.076	(0.171)	0.057	0.019
206	17.17	0.17	0.076	(0.171)	0.057	0.019
207	17.25	0.17	0.076	(0.170)	0.057	0.019
208	17.33	0.17	0.076	(0.169)	0.057	0.019
209	17.42	0.17	0.076	(0.168)	0.057	0.019
210	17.50	0.17	0.076	(0.167)	0.057	0.019
211	17.58	0.17	0.076	(0.166)	0.057	0.019
212	17.67	0.17	0.076	(0.165)	0.057	0.019
213	17.75	0.17	0.076	(0.165)	0.057	0.019
214	17.83	0.13	0.061	(0.164)	0.046	0.015
215	17.92	0.13	0.061	(0.163)	0.046	0.015
216	18.00	0.13	0.061	(0.162)	0.046	0.015
217	18.08	0.13	0.061	(0.161)	0.046	0.015
218	18.17	0.13	0.061	(0.161)	0.046	0.015
219	18.25	0.13	0.061	(0.160)	0.046	0.015
220	18.33	0.13	0.061	(0.159)	0.046	0.015
221	18.42	0.13	0.061	(0.158)	0.046	0.015
222	18.50	0.13	0.061	(0.158)	0.046	0.015
223	18.58	0.10	0.046	(0.157)	0.034	0.011
224	18.67	0.10	0.046	(0.156)	0.034	0.011
225	18.75	0.10	0.046	(0.155)	0.034	0.011
226	18.83	0.07	0.030	(0.155)	0.023	0.008
227	18.92	0.07	0.030	(0.154)	0.023	0.008
228	19.00	0.07	0.030	(0.153)	0.023	0.008
229	19.08	0.10	0.046	(0.152)	0.034	0.011
230	19.17	0.10	0.046	(0.152)	0.034	0.011
231	19.25	0.10	0.046	(0.151)	0.034	0.011
232	19.33	0.13	0.061	(0.150)	0.046	0.015
233	19.42	0.13	0.061	(0.150)	0.046	0.015
234	19.50	0.13	0.061	(0.149)	0.046	0.015
235	19.58	0.10	0.046	(0.148)	0.034	0.011
236	19.67	0.10	0.046	(0.147)	0.034	0.011
237	19.75	0.10	0.046	(0.147)	0.034	0.011
238	19.83	0.07	0.030	(0.146)	0.023	0.008
239	19.92	0.07	0.030	(0.145)	0.023	0.008
240	20.00	0.07	0.030	(0.145)	0.023	0.008
241	20.08	0.10	0.046	(0.144)	0.034	0.011
242	20.17	0.10	0.046	(0.144)	0.034	0.011
243	20.25	0.10	0.046	(0.143)	0.034	0.011
244	20.33	0.10	0.046	(0.142)	0.034	0.011
245	20.42	0.10	0.046	(0.142)	0.034	0.011
246	20.50	0.10	0.046	(0.141)	0.034	0.011
247	20.58	0.10	0.046	(0.141)	0.034	0.011
248	20.67	0.10	0.046	(0.140)	0.034	0.011
249	20.75	0.10	0.046	(0.139)	0.034	0.011
250	20.83	0.07	0.030	(0.139)	0.023	0.008
251	20.92	0.07	0.030	(0.138)	0.023	0.008
252	21.00	0.07	0.030	(0.138)	0.023	0.008

1+20	0. 0140	0. 14	Q
1+25	0. 0150	0. 14	Q
1+30	0. 0159	0. 14	Q
1+35	0. 0168	0. 14	Q
1+40	0. 0178	0. 14	Q
1+45	0. 0187	0. 14	Q
1+50	0. 0197	0. 15	Q
1+55	0. 0209	0. 17	Q
2+ 0	0. 0221	0. 18	Q
2+ 5	0. 0234	0. 18	Q
2+10	0. 0246	0. 18	Q
2+15	0. 0259	0. 18	Q
2+20	0. 0271	0. 18	Q
2+25	0. 0284	0. 18	Q
2+30	0. 0296	0. 18	Q
2+35	0. 0310	0. 20	Q
2+40	0. 0325	0. 22	QV
2+45	0. 0340	0. 22	QV
2+50	0. 0355	0. 22	QV
2+55	0. 0371	0. 23	QV
3+ 0	0. 0387	0. 23	QV
3+ 5	0. 0402	0. 23	QV
3+10	0. 0418	0. 23	QV
3+15	0. 0433	0. 23	QV
3+20	0. 0449	0. 23	QV
3+25	0. 0465	0. 23	QV
3+30	0. 0480	0. 23	QV
3+35	0. 0496	0. 23	QV
3+40	0. 0511	0. 23	QV
3+45	0. 0527	0. 23	QV
3+50	0. 0544	0. 24	QV
3+55	0. 0562	0. 26	Q
4+ 0	0. 0580	0. 27	Q
4+ 5	0. 0599	0. 27	Q
4+10	0. 0618	0. 27	Q
4+15	0. 0636	0. 27	Q
4+20	0. 0656	0. 29	QV
4+25	0. 0677	0. 31	QV
4+30	0. 0699	0. 31	QV
4+35	0. 0720	0. 32	QV
4+40	0. 0742	0. 32	QV
4+45	0. 0764	0. 32	QV
4+50	0. 0787	0. 33	QV
4+55	0. 0811	0. 35	QV
5+ 0	0. 0836	0. 36	QV
5+ 5	0. 0859	0. 33	QV
5+10	0. 0879	0. 29	QV
5+15	0. 0898	0. 28	QV
5+20	0. 0918	0. 29	QV
5+25	0. 0939	0. 31	QV
5+30	0. 0961	0. 31	Q V
5+35	0. 0984	0. 33	Q V
5+40	0. 1008	0. 35	Q V
5+45	0. 1033	0. 36	Q V
5+50	0. 1058	0. 36	Q V
5+55	0. 1082	0. 36	Q V
6+ 0	0. 1107	0. 36	Q V
6+ 5	0. 1133	0. 38	Q V
6+10	0. 1161	0. 40	Q V
6+15	0. 1189	0. 40	Q V
6+20	0. 1217	0. 41	Q V
6+25	0. 1245	0. 41	Q V
6+30	0. 1273	0. 41	Q V
6+35	0. 1302	0. 42	Q V
6+40	0. 1333	0. 44	Q V
6+45	0. 1363	0. 45	Q V
6+50	0. 1395	0. 45	Q V
6+55	0. 1426	0. 45	Q V
7+ 0	0. 1457	0. 45	Q V
7+ 5	0. 1488	0. 45	Q V
7+10	0. 1519	0. 45	Q V
7+15	0. 1551	0. 45	Q V

7+20	0. 1583	0. 47
7+25	0. 1617	0. 49
7+30	0. 1651	0. 49
7+35	0. 1686	0. 51
7+40	0. 1723	0. 53
7+45	0. 1760	0. 54
7+50	0. 1798	0. 56
7+55	0. 1838	0. 58
8+ 0	0. 1878	0. 59
8+ 5	0. 1921	0. 62
8+10	0. 1966	0. 66
8+15	0. 2012	0. 67
8+20	0. 2059	0. 68
8+25	0. 2106	0. 68
8+30	0. 2153	0. 68
8+35	0. 2200	0. 69
8+40	0. 2250	0. 72
8+45	0. 2299	0. 72
8+50	0. 2350	0. 74
8+55	0. 2403	0. 76
9+ 0	0. 2455	0. 77
9+ 5	0. 2510	0. 80
9+10	0. 2568	0. 84
9+15	0. 2627	0. 85
9+20	0. 2687	0. 87
9+25	0. 2749	0. 90
9+30	0. 2811	0. 90
9+35	0. 2874	0. 92
9+40	0. 2939	0. 94
9+45	0. 3004	0. 95
9+50	0. 3071	0. 96
9+55	0. 3139	0. 99
10+ 0	0. 3207	0. 99
10+ 5	0. 3269	0. 89
10+10	0. 3320	0. 74
10+15	0. 3369	0. 71
10+20	0. 3417	0. 69
10+25	0. 3464	0. 68
10+30	0. 3511	0. 68
10+35	0. 3563	0. 75
10+40	0. 3622	0. 86
10+45	0. 3683	0. 89
10+50	0. 3745	0. 90
10+55	0. 3807	0. 90
11+ 0	0. 3869	0. 91
11+ 5	0. 3931	0. 89
11+10	0. 3991	0. 87
11+15	0. 4050	0. 87
11+20	0. 4110	0. 86
11+25	0. 4169	0. 86
11+30	0. 4228	0. 86
11+35	0. 4286	0. 83
11+40	0. 4340	0. 79
11+45	0. 4394	0. 78
11+50	0. 4448	0. 79
11+55	0. 4504	0. 81
12+ 0	0. 4560	0. 81
12+ 5	0. 4637	1. 12
12+10	0. 4745	1. 57
12+15	0. 4861	1. 69
12+20	0. 4986	1. 81
12+25	0. 5119	1. 93
12+30	0. 5256	1. 98
12+35	0. 5402	2. 12
12+40	0. 5561	2. 31
12+45	0. 5724	2. 37
12+50	0. 5893	2. 46
12+55	0. 6070	2. 57
13+ 0	0. 6250	2. 61
13+ 5	0. 6451	2. 92
13+10	0. 6683	3. 37
13+15	0. 6923	3. 49



13+20	0. 7167	3. 55			
13+25	0. 7414	3. 58			
13+30	0. 7663	3. 61			
13+35	0. 7868	2. 99			
13+40	0. 8010	2. 05			
13+45	0. 8136	1. 84			
13+50	0. 8257	1. 75			
13+55	0. 8375	1. 71			
14+ 0	0. 8491	1. 69			
14+ 5	0. 8625	1. 94			
14+10	0. 8783	2. 29			
14+15	0. 8947	2. 39			
14+20	0. 9111	2. 38			
14+25	0. 9271	2. 33			
14+30	0. 9432	2. 33			
14+35	0. 9592	2. 33			
14+40	0. 9753	2. 34			
14+45	0. 9915	2. 35			
14+50	1. 0074	2. 30			
14+55	1. 0227	2. 23			
15+ 0	1. 0380	2. 22			
15+ 5	1. 0529	2. 16			
15+10	1. 0673	2. 09			
15+15	1. 0815	2. 07			
15+20	1. 0955	2. 02			
15+25	1. 1088	1. 94			
15+30	1. 1221	1. 93			
15+35	1. 1338	1. 70			
15+40	1. 1432	1. 36			
15+45	1. 1520	1. 29			
15+50	1. 1607	1. 26			
15+55	1. 1694	1. 25			
16+ 0	1. 1780	1. 25			
16+ 5	1. 1843	0. 92			
16+10	1. 1871	0. 40			
16+15	1. 1890	0. 28			
16+20	1. 1906	0. 23			
16+25	1. 1919	0. 20			
16+30	1. 1932	0. 18			
16+35	1. 1943	0. 17			
16+40	1. 1953	0. 15			
16+45	1. 1963	0. 14			
16+50	1. 1973	0. 14			
16+55	1. 1982	0. 14			
17+ 0	1. 1991	0. 14			
17+ 5	1. 2003	0. 16			
17+10	1. 2017	0. 21			
17+15	1. 2032	0. 22			
17+20	1. 2047	0. 22			
17+25	1. 2063	0. 23			
17+30	1. 2079	0. 23			
17+35	1. 2094	0. 23			
17+40	1. 2110	0. 23			
17+45	1. 2125	0. 23			
17+50	1. 2140	0. 21			
17+55	1. 2153	0. 19			
18+ 0	1. 2166	0. 19			
18+ 5	1. 2179	0. 18			
18+10	1. 2191	0. 18			
18+15	1. 2204	0. 18			
18+20	1. 2216	0. 18			
18+25	1. 2229	0. 18			
18+30	1. 2241	0. 18			
18+35	1. 2253	0. 17			
18+40	1. 2263	0. 15			
18+45	1. 2272	0. 14			
18+50	1. 2281	0. 12			
18+55	1. 2288	0. 10			
19+ 0	1. 2294	0. 09			
19+ 5	1. 2302	0. 11			
19+10	1. 2310	0. 13			
19+15	1. 2319	0. 13			

19+20	1. 2330	0. 15	Q	V
19+25	1. 2341	0. 17	Q	V
19+30	1. 2354	0. 18	Q	V
19+35	1. 2365	0. 16	Q	V
19+40	1. 2375	0. 14	Q	V
19+45	1. 2385	0. 14	Q	V
19+50	1. 2393	0. 12	Q	V
19+55	1. 2400	0. 10	Q	V
20+ 0	1. 2407	0. 09	Q	V
20+ 5	1. 2414	0. 11	Q	V
20+10	1. 2423	0. 13	Q	V
20+15	1. 2432	0. 13	Q	V
20+20	1. 2441	0. 13	Q	V
20+25	1. 2450	0. 14	Q	V
20+30	1. 2460	0. 14	Q	V
20+35	1. 2469	0. 14	Q	V
20+40	1. 2478	0. 14	Q	V
20+45	1. 2488	0. 14	Q	V
20+50	1. 2496	0. 12	Q	V
20+55	1. 2503	0. 10	Q	V
21+ 0	1. 2510	0. 09	Q	V
21+ 5	1. 2517	0. 11	Q	V
21+10	1. 2526	0. 13	Q	V
21+15	1. 2535	0. 13	Q	V
21+20	1. 2543	0. 12	Q	V
21+25	1. 2550	0. 10	Q	V
21+30	1. 2556	0. 09	Q	V
21+35	1. 2564	0. 11	Q	V
21+40	1. 2573	0. 13	Q	V
21+45	1. 2582	0. 13	Q	V
21+50	1. 2590	0. 12	Q	V
21+55	1. 2597	0. 10	Q	V
22+ 0	1. 2603	0. 09	Q	V
22+ 5	1. 2611	0. 11	Q	V
22+10	1. 2619	0. 13	Q	V
22+15	1. 2628	0. 13	Q	V
22+20	1. 2637	0. 12	Q	V
22+25	1. 2644	0. 10	Q	V
22+30	1. 2650	0. 09	Q	V
22+35	1. 2656	0. 09	Q	V
22+40	1. 2663	0. 09	Q	V
22+45	1. 2669	0. 09	Q	V
22+50	1. 2675	0. 09	Q	V
22+55	1. 2681	0. 09	Q	V
23+ 0	1. 2688	0. 09	Q	V
23+ 5	1. 2694	0. 09	Q	V
23+10	1. 2700	0. 09	Q	V
23+15	1. 2706	0. 09	Q	V
23+20	1. 2713	0. 09	Q	V
23+25	1. 2719	0. 09	Q	V
23+30	1. 2725	0. 09	Q	V
23+35	1. 2731	0. 09	Q	V
23+40	1. 2738	0. 09	Q	V
23+45	1. 2744	0. 09	Q	V
23+50	1. 2750	0. 09	Q	V
23+55	1. 2756	0. 09	Q	V
24+ 0	1. 2763	0. 09	Q	V
24+ 5	1. 2767	0. 06	Q	V
24+10	1. 2768	0. 02	Q	V
24+15	1. 2769	0. 01	Q	V
24+20	1. 2769	0. 00	Q	V
24+25	1. 2769	0. 00	Q	V

Unit Hydrograph Analysis

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Study date 12/28/22 File: 2216E010610.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
EXISTING CONDITION
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 11.80(Ac.) = 0.018 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 11.80(Ac.) = 0.018 Sq. Mi.
Length along longest watercourse = 1548.00(Ft.)
Length along longest watercourse measured to centroid = 500.00(Ft.)
Length along longest watercourse = 0.293 Mi.
Length along longest watercourse measured to centroid = 0.095 Mi.
Difference in elevation = 16.10(Ft.)
Slope along watercourse = 54.9147 Ft./Mi.
Average Manning's 'N' = 0.020
Lag time = 0.057 Hr.
Lag time = 3.45 Min.
25% of lag time = 0.86 Min.
40% of lag time = 1.38 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
11.80	1.20	14.16

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
11.80	3.00	35.40

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.941(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.940(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
2.540 56.00 0.900
9.260 76.00 0.000
Total Area Entered = 11.80(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	0.215	0.021
76.0	76.0	0.291	0.000	0.291	0.785	0.229
Sum (F) =						0.249

Area averaged mean soil loss (F) (In/Hr) = 0.249

Minimum soil loss rate ((In/Hr)) = 0.125

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.750

Unit Hydrograph VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	145.077	31.965
2	0.167	290.154	47.363
3	0.250	435.231	11.478
4	0.333	580.308	5.035
5	0.417	725.385	2.615
6	0.500	870.462	1.544
Sum = 100.000			Sum= 11.892

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.116	(0.249)	0.087	0.029
2	0.17	0.60	0.140	(0.249)	0.105	0.035
3	0.25	0.60	0.140	(0.249)	0.105	0.035
4	0.33	0.60	0.140	(0.249)	0.105	0.035
5	0.42	0.60	0.140	(0.249)	0.105	0.035
6	0.50	0.70	0.163	(0.249)	0.122	0.041
7	0.58	0.70	0.163	(0.249)	0.122	0.041
8	0.67	0.70	0.163	(0.249)	0.122	0.041
9	0.75	0.70	0.163	(0.249)	0.122	0.041
10	0.83	0.70	0.163	(0.249)	0.122	0.041
11	0.92	0.70	0.163	(0.249)	0.122	0.041
12	1.00	0.80	0.186	(0.249)	0.140	0.047
13	1.08	0.80	0.186	(0.249)	0.140	0.047
14	1.17	0.80	0.186	(0.249)	0.140	0.047
15	1.25	0.80	0.186	(0.249)	0.140	0.047
16	1.33	0.80	0.186	(0.249)	0.140	0.047
17	1.42	0.80	0.186	(0.249)	0.140	0.047
18	1.50	0.80	0.186	(0.249)	0.140	0.047
19	1.58	0.80	0.186	(0.249)	0.140	0.047
20	1.67	0.80	0.186	(0.249)	0.140	0.047
21	1.75	0.80	0.186	(0.249)	0.140	0.047
22	1.83	0.80	0.186	(0.249)	0.140	0.047
23	1.92	0.80	0.186	(0.249)	0.140	0.047
24	2.00	0.90	0.210	(0.249)	0.157	0.052
25	2.08	0.80	0.186	(0.249)	0.140	0.047
26	2.17	0.90	0.210	(0.249)	0.157	0.052
27	2.25	0.90	0.210	(0.249)	0.157	0.052
28	2.33	0.90	0.210	(0.249)	0.157	0.052
29	2.42	0.90	0.210	(0.249)	0.157	0.052
30	2.50	0.90	0.210	(0.249)	0.157	0.052
31	2.58	0.90	0.210	(0.249)	0.157	0.052
32	2.67	0.90	0.210	(0.249)	0.157	0.052
33	2.75	1.00	0.233	(0.249)	0.175	0.058
34	2.83	1.00	0.233	(0.249)	0.175	0.058
35	2.92	1.00	0.233	(0.249)	0.175	0.058
36	3.00	1.00	0.233	(0.249)	0.175	0.058

1+20	0.0490	0.55	QV
1+25	0.0528	0.55	QV
1+30	0.0566	0.55	QV
1+35	0.0604	0.55	QV
1+40	0.0643	0.55	Q V
1+45	0.0681	0.55	Q V V
1+50	0.0719	0.55	Q Q V
1+55	0.0757	0.55	Q Q V V
2+ 0	0.0797	0.58	Q Q V V
2+ 5	0.0837	0.59	Q Q V
2+10	0.0877	0.58	Q Q V V
2+15	0.0920	0.61	Q Q V V V
2+20	0.0962	0.62	Q Q V V V V
2+25	0.1005	0.62	Q Q V V V V
2+30	0.1048	0.62	Q Q V V V V
2+35	0.1091	0.62	Q Q V V V V V
2+40	0.1134	0.62	Q Q V V V V V
2+45	0.1178	0.65	Q Q V V V V V
2+50	0.1225	0.68	Q Q V V V V V
2+55	0.1272	0.69	Q Q V V V V V
3+ 0	0.1320	0.69	Q Q V V V V V
3+ 5	0.1367	0.69	Q Q V V V V V
3+10	0.1417	0.71	Q Q V V V V V
3+15	0.1468	0.75	Q Q V V V V V
3+20	0.1520	0.76	Q Q V V V V V
3+25	0.1574	0.78	Q Q V V V V V
3+30	0.1632	0.84	Q Q V V V V V
3+35	0.1694	0.90	Q Q V V V V V
3+40	0.1759	0.95	Q Q V V V V V
3+45	0.1830	1.03	Q Q V V V V V
3+50	0.1908	1.14	Q Q V V V V V
3+55	0.1995	1.26	Q Q V V V V V
4+ 0	0.2091	1.40	Q Q V V V V V
4+ 5	0.2196	1.53	Q Q V V V V V
4+10	0.2317	1.76	Q Q V V V V V
4+15	0.2457	2.02	Q Q V V V V V
4+20	0.2614	2.29	Q Q V V V V V
4+25	0.2791	2.56	Q Q V V V V V
4+30	0.2981	2.75	Q Q V V V V V
4+35	0.3180	2.90	Q Q V V V V V
4+40	0.3397	3.14	Q Q V V V V V
4+45	0.3631	3.41	Q Q V V V V V
4+50	0.3878	3.59	Q Q V V V V V
4+55	0.4135	3.73	Q Q V V V V V
5+ 0	0.4409	3.97	Q Q V V V V V
5+ 5	0.4725	4.59	Q Q V V V V V
5+10	0.5120	5.74	Q Q V V V V V
5+15	0.5592	6.84	Q Q V V V V V
5+20	0.6125	7.74	Q Q V V V V V
5+25	0.6730	8.78	Q Q V V V V V
5+30	0.7448	10.43	Q Q V V V V V
5+35	0.8039	8.58	Q Q V V V V V
5+40	0.8286	3.58	Q Q V V V V V
5+45	0.8404	1.72	Q Q V V V V V
5+50	0.8472	0.98	Q Q V V V V V
5+55	0.8511	0.56	Q Q V V V V V
6+ 0	0.8528	0.26	Q Q V V V V V
6+ 5	0.8537	0.13	Q Q V V V V V
6+10	0.8540	0.04	Q Q V V V V V
6+15	0.8541	0.02	Q Q V V V V V
6+20	0.8542	0.01	Q Q V V V V V
6+25	0.8542	0.00	Q Q V V V V V

Unit Hydrograph Analysis

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Study date 12/28/22 File: 2216E010310.out

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Riverside County Synthetic Unit Hydrology Method
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Program License Serial Number 6310

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Average Manning's 'N' = 0.020
Lag time = 0.057 Hr.
Lag time = 3.45 Min.
25% of lag time = 0.86 Min.
40% of lag time = 1.38 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1] Rainfall (In) [2] Weighting [1*2]
11.80 0.90 10.62

100 YEAR Area rainfall data:

Area(Ac.) [1] Rainfall (In) [2] Weighting [1*2]
11.80 2.35 27.73

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 1.497(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 1.496(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
2.540 56.00 0.900
9.260 76.00 0.000
Total Area Entered = 11.80(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	0.215	0.021
76.0	76.0	0.291	0.000	0.291	0.785	0.229
Sum (F) =						0.249

Area averaged mean soil loss (F) (In/Hr) = 0.249

Minimum soil loss rate ((In/Hr)) = 0.125

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.750

Unit Hydrograph VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	145.077	31.965
2	0.167	290.154	47.363
3	0.250	435.231	11.478
4	0.333	580.308	5.035
5	0.417	725.385	2.615
6	0.500	870.462	1.544
Sum = 100.000			Sum= 11.892

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	1.30	0.233	(0.249)	0.175	0.058
2	0.17	1.30	0.233	(0.249)	0.175	0.058
3	0.25	1.10	0.198	(0.249)	0.148	0.049
4	0.33	1.50	0.269	(0.249)	0.202	0.067
5	0.42	1.50	0.269	(0.249)	0.202	0.067
6	0.50	1.80	0.323	(0.249)	0.242	0.081
7	0.58	1.50	0.269	(0.249)	0.202	0.067
8	0.67	1.80	0.323	(0.249)	0.242	0.081
9	0.75	1.80	0.323	(0.249)	0.242	0.081
10	0.83	1.50	0.269	(0.249)	0.202	0.067
11	0.92	1.60	0.287	(0.249)	0.215	0.072
12	1.00	1.80	0.323	(0.249)	0.242	0.081
13	1.08	2.20	0.395	0.249	(0.296)	0.146
14	1.17	2.20	0.395	0.249	(0.296)	0.146
15	1.25	2.20	0.395	0.249	(0.296)	0.146
16	1.33	2.00	0.359	0.249	(0.269)	0.110
17	1.42	2.60	0.467	0.249	(0.350)	0.217
18	1.50	2.70	0.485	0.249	(0.364)	0.235
19	1.58	2.40	0.431	0.249	(0.323)	0.182
20	1.67	2.70	0.485	0.249	(0.364)	0.235
21	1.75	3.30	0.593	0.249	(0.444)	0.343
22	1.83	3.10	0.557	0.249	(0.418)	0.307
23	1.92	2.90	0.521	0.249	(0.391)	0.271
24	2.00	3.00	0.539	0.249	(0.404)	0.289
25	2.08	3.10	0.557	0.249	(0.418)	0.307
26	2.17	4.20	0.754	0.249	(0.566)	0.505
27	2.25	5.00	0.898	0.249	(0.673)	0.648
28	2.33	3.50	0.629	0.249	(0.471)	0.379
29	2.42	6.80	1.221	0.249	(0.916)	0.972
30	2.50	7.30	1.311	0.249	(0.983)	1.061
31	2.58	8.20	1.473	0.249	(1.104)	1.223
32	2.67	5.90	1.059	0.249	(0.795)	0.810
33	2.75	2.00	0.359	0.249	(0.269)	0.110
34	2.83	1.80	0.323	(0.249)	0.242	0.081
35	2.92	1.80	0.323	(0.249)	0.242	0.081
36	3.00	0.60	0.108	(0.249)	0.081	0.027

(Loss Rate Not Used)

Sum = 100.0

Sum = 9.7

Flood volume = Effective rainfall 0.81(In)

times area 11.8(Ac.) / [(In)/(Ft.)] = 0.8(Ac. Ft)

Total soil loss = 0.69(In)

Total soil loss = 0.680(Ac. Ft)

Total rainfall = 1.50(In)

Flood volume = 34491.0 Cubic Feet

Total soil loss = 29608.5 Cubic Feet

Peak flow rate of this hydrograph = 12.482(CFS)

3 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0015	0.22	Q				
0+10	0.0053	0.55	VQ				
0+15	0.0094	0.60	VQ				
0+20	0.0139	0.65	VQ				
0+25	0.0191	0.76	VQ				
0+30	0.0249	0.84	Q				
0+35	0.0309	0.87	Q				
0+40	0.0368	0.87	Q				
0+45	0.0433	0.94	QV				
0+50	0.0495	0.90	QV				
0+55	0.0553	0.85	QV				
1+ 0	0.0615	0.89	Q V				
1+ 5	0.0696	1.19	QV				
1+10	0.0804	1.56	QV				
1+15	0.0918	1.66	QV				
1+20	0.1026	1.56	Q V				
1+25	0.1149	1.79	Q V				
1+30	0.1317	2.43	Q V				
1+35	0.1485	2.45	Q V				
1+40	0.1653	2.43	Q V				
1+45	0.1867	3.11	Q V				
1+50	0.2118	3.65	Q V				
1+55	0.2357	3.47	Q V				
2+ 0	0.2589	3.36	Q V				
2+ 5	0.2830	3.50	Q V				
2+10	0.3131	4.37	Q V				
2+15	0.3547	6.04	Q V				
2+20	0.3968	6.11	Q V				
2+25	0.4462	7.17	Q V				
2+30	0.5194	10.63	Q V				
2+35	0.6054	12.48	Q V				
2+40	0.6897	12.24	Q V				
2+45	0.7425	7.66	Q V				
2+50	0.7650	3.27	Q V				
2+55	0.7786	1.97	Q V				
3+ 0	0.7869	1.21	Q V				
3+ 5	0.7903	0.49	Q V				
3+10	0.7912	0.13	Q V				
3+15	0.7916	0.06	Q V				
3+20	0.7918	0.02	Q V				
3+25	0.7918	0.00	Q V				

Unit Hydrograph Analysis

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Study date 12/28/22 File: 2216E010110.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
EXISTING CONDITION
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 11.80(Ac.) = 0.018 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 11.80(Ac.) = 0.018 Sq. Mi.
Length along longest watercourse = 1548.00(Ft.)
Length along longest watercourse measured to centroid = 500.00(Ft.)
Length along longest watercourse = 0.293 Mi.
Length along longest watercourse measured to centroid = 0.095 Mi.
Difference in elevation = 16.10(Ft.)
Slope along watercourse = 54.9147 Ft./Mi.
Average Manning's 'N' = 0.020
Lag time = 0.057 Hr.
Lag time = 3.45 Min.
25% of lag time = 0.86 Min.
40% of lag time = 1.38 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
11.80	0.54	6.37

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
11.80	1.36	16.05

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.877(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 0.877(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
2.540	56.00	0.900
9.260	76.00	0.000
Total Area Entered =	11.80(Ac.)	

0+10	0.0198	2.06	V	Q			
0+15	0.0388	2.77	V	V	Q		
0+20	0.0626	3.45		V	Q		
0+25	0.0885	3.77		V	Q		
0+30	0.1183	4.33			VQ		
0+35	0.1556	5.42					
0+40	0.2033	6.92			Q		
0+45	0.2679	9.39				VQ	
0+50	0.3850	17.00					V
0+55	0.5102	18.18					
1+ 0	0.5696	8.62					V
1+ 5	0.5988	4.23			Q		Q
1+10	0.6103	1.68		Q			V
1+15	0.6157	0.79		Q			V
1+20	0.6171	0.19	Q				V
1+25	0.6174	0.05	Q				V

Flood Hydrograph Hydrologic Analysis

Proposed Condition

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PA02242.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 100-131
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 5.31(Ac.) = 0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 5.31(Ac.) = 0.008 Sq. Mi.
Length along longest watercourse = 699.00(Ft.)
Length along longest watercourse measured to centroid = 450.00(Ft.)
Length along longest watercourse = 0.132 Mi.
Length along longest watercourse measured to centroid = 0.085 Mi.
Difference in elevation = 14.70(Ft.)
Slope along watercourse = 111.0386 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.027 Hr.
Lag time = 1.61 Min.
25% of lag time = 0.40 Min.
40% of lag time = 0.64 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	2.00	10.62

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	6.40	33.98

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
5.310 56.00 0.900
Total Area Entered = 5.31(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134

Minimum soil loss rate ((In/Hr)) = 0.067

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	311.341	57.815
2	0.167	622.682	36.513
3	0.250	934.022	5.672
Sum = 100.000			Sum= 5.351

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.016	(0.238)	0.003	0.013
2	0.17	0.07	0.016	(0.237)	0.003	0.013
3	0.25	0.07	0.016	(0.236)	0.003	0.013
4	0.33	0.10	0.024	(0.235)	0.004	0.020
5	0.42	0.10	0.024	(0.234)	0.004	0.020
6	0.50	0.10	0.024	(0.233)	0.004	0.020
7	0.58	0.10	0.024	(0.232)	0.004	0.020
8	0.67	0.10	0.024	(0.231)	0.004	0.020
9	0.75	0.10	0.024	(0.230)	0.004	0.020
10	0.83	0.13	0.032	(0.230)	0.006	0.026
11	0.92	0.13	0.032	(0.229)	0.006	0.026
12	1.00	0.13	0.032	(0.228)	0.006	0.026
13	1.08	0.10	0.024	(0.227)	0.004	0.020
14	1.17	0.10	0.024	(0.226)	0.004	0.020
15	1.25	0.10	0.024	(0.225)	0.004	0.020
16	1.33	0.10	0.024	(0.224)	0.004	0.020
17	1.42	0.10	0.024	(0.223)	0.004	0.020
18	1.50	0.10	0.024	(0.222)	0.004	0.020
19	1.58	0.10	0.024	(0.222)	0.004	0.020
20	1.67	0.10	0.024	(0.221)	0.004	0.020
21	1.75	0.10	0.024	(0.220)	0.004	0.020
22	1.83	0.13	0.032	(0.219)	0.006	0.026
23	1.92	0.13	0.032	(0.218)	0.006	0.026
24	2.00	0.13	0.032	(0.217)	0.006	0.026
25	2.08	0.13	0.032	(0.216)	0.006	0.026
26	2.17	0.13	0.032	(0.215)	0.006	0.026
27	2.25	0.13	0.032	(0.214)	0.006	0.026
28	2.33	0.13	0.032	(0.214)	0.006	0.026
29	2.42	0.13	0.032	(0.213)	0.006	0.026
30	2.50	0.13	0.032	(0.212)	0.006	0.026
31	2.58	0.17	0.040	(0.211)	0.007	0.033
32	2.67	0.17	0.040	(0.210)	0.007	0.033
33	2.75	0.17	0.040	(0.209)	0.007	0.033
34	2.83	0.17	0.040	(0.208)	0.007	0.033
35	2.92	0.17	0.040	(0.208)	0.007	0.033
36	3.00	0.17	0.040	(0.207)	0.007	0.033
37	3.08	0.17	0.040	(0.206)	0.007	0.033
38	3.17	0.17	0.040	(0.205)	0.007	0.033
39	3.25	0.17	0.040	(0.204)	0.007	0.033
40	3.33	0.17	0.040	(0.203)	0.007	0.033
41	3.42	0.17	0.040	(0.202)	0.007	0.033

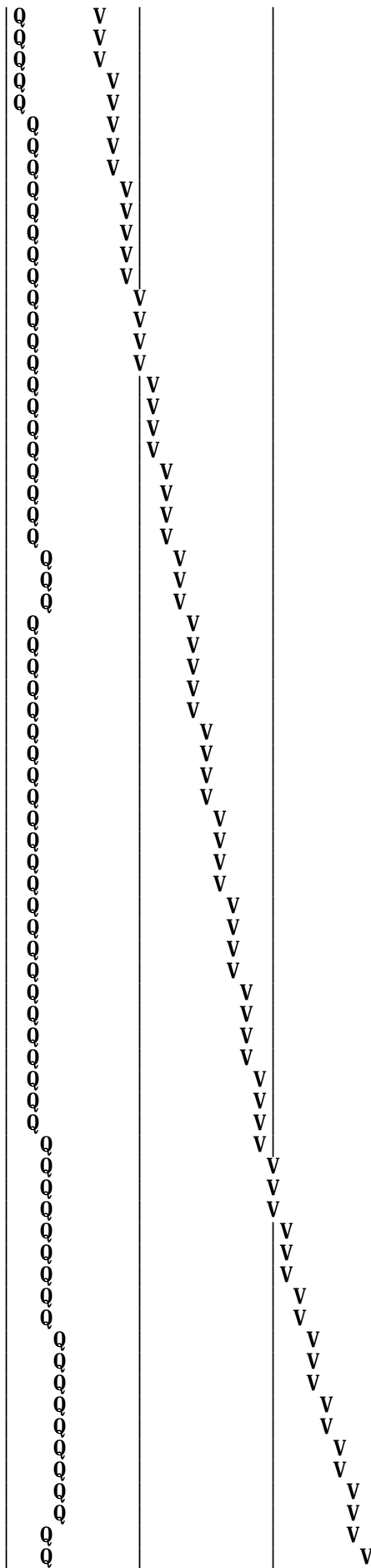
42	3.50	0.17	0.040	(0.202)	0.007	0.033
43	3.58	0.17	0.040	(0.201)	0.007	0.033
44	3.67	0.17	0.040	(0.200)	0.007	0.033
45	3.75	0.17	0.040	(0.199)	0.007	0.033
46	3.83	0.20	0.048	(0.198)	0.009	0.039
47	3.92	0.20	0.048	(0.197)	0.009	0.039
48	4.00	0.20	0.048	(0.197)	0.009	0.039
49	4.08	0.20	0.048	(0.196)	0.009	0.039
50	4.17	0.20	0.048	(0.195)	0.009	0.039
51	4.25	0.20	0.048	(0.194)	0.009	0.039
52	4.33	0.23	0.056	(0.193)	0.010	0.046
53	4.42	0.23	0.056	(0.192)	0.010	0.046
54	4.50	0.23	0.056	(0.192)	0.010	0.046
55	4.58	0.23	0.056	(0.191)	0.010	0.046
56	4.67	0.23	0.056	(0.190)	0.010	0.046
57	4.75	0.23	0.056	(0.189)	0.010	0.046
58	4.83	0.27	0.064	(0.188)	0.012	0.052
59	4.92	0.27	0.064	(0.187)	0.012	0.052
60	5.00	0.27	0.064	(0.187)	0.012	0.052
61	5.08	0.20	0.048	(0.186)	0.009	0.039
62	5.17	0.20	0.048	(0.185)	0.009	0.039
63	5.25	0.20	0.048	(0.184)	0.009	0.039
64	5.33	0.23	0.056	(0.183)	0.010	0.046
65	5.42	0.23	0.056	(0.183)	0.010	0.046
66	5.50	0.23	0.056	(0.182)	0.010	0.046
67	5.58	0.27	0.064	(0.181)	0.012	0.052
68	5.67	0.27	0.064	(0.180)	0.012	0.052
69	5.75	0.27	0.064	(0.179)	0.012	0.052
70	5.83	0.27	0.064	(0.179)	0.012	0.052
71	5.92	0.27	0.064	(0.178)	0.012	0.052
72	6.00	0.27	0.064	(0.177)	0.012	0.052
73	6.08	0.30	0.072	(0.176)	0.013	0.059
74	6.17	0.30	0.072	(0.175)	0.013	0.059
75	6.25	0.30	0.072	(0.175)	0.013	0.059
76	6.33	0.30	0.072	(0.174)	0.013	0.059
77	6.42	0.30	0.072	(0.173)	0.013	0.059
78	6.50	0.30	0.072	(0.172)	0.013	0.059
79	6.58	0.33	0.080	(0.172)	0.014	0.066
80	6.67	0.33	0.080	(0.171)	0.014	0.066
81	6.75	0.33	0.080	(0.170)	0.014	0.066
82	6.83	0.33	0.080	(0.169)	0.014	0.066
83	6.92	0.33	0.080	(0.169)	0.014	0.066
84	7.00	0.33	0.080	(0.168)	0.014	0.066
85	7.08	0.33	0.080	(0.167)	0.014	0.066
86	7.17	0.33	0.080	(0.166)	0.014	0.066
87	7.25	0.33	0.080	(0.165)	0.014	0.066
88	7.33	0.37	0.088	(0.165)	0.016	0.072
89	7.42	0.37	0.088	(0.164)	0.016	0.072
90	7.50	0.37	0.088	(0.163)	0.016	0.072
91	7.58	0.40	0.096	(0.162)	0.017	0.079
92	7.67	0.40	0.096	(0.162)	0.017	0.079
93	7.75	0.40	0.096	(0.161)	0.017	0.079
94	7.83	0.43	0.104	(0.160)	0.019	0.085
95	7.92	0.43	0.104	(0.159)	0.019	0.085
96	8.00	0.43	0.104	(0.159)	0.019	0.085
97	8.08	0.50	0.120	(0.158)	0.022	0.098
98	8.17	0.50	0.120	(0.157)	0.022	0.098
99	8.25	0.50	0.120	(0.157)	0.022	0.098
100	8.33	0.50	0.120	(0.156)	0.022	0.098
101	8.42	0.50	0.120	(0.155)	0.022	0.098
102	8.50	0.50	0.120	(0.154)	0.022	0.098
103	8.58	0.53	0.128	(0.154)	0.023	0.105
104	8.67	0.53	0.128	(0.153)	0.023	0.105
105	8.75	0.53	0.128	(0.152)	0.023	0.105
106	8.83	0.57	0.136	(0.151)	0.024	0.112
107	8.92	0.57	0.136	(0.151)	0.024	0.112
108	9.00	0.57	0.136	(0.150)	0.024	0.112
109	9.08	0.63	0.152	(0.149)	0.027	0.125
110	9.17	0.63	0.152	(0.149)	0.027	0.125
111	9.25	0.63	0.152	(0.148)	0.027	0.125
112	9.33	0.67	0.160	(0.147)	0.029	0.131
113	9.42	0.67	0.160	(0.147)	0.029	0.131

114	9.50	0.67	0.160	(0.146)	0.029	0.131
115	9.58	0.70	0.168	(0.145)	0.030	0.138
116	9.67	0.70	0.168	(0.144)	0.030	0.138
117	9.75	0.70	0.168	(0.144)	0.030	0.138
118	9.83	0.73	0.176	(0.143)	0.032	0.144
119	9.92	0.73	0.176	(0.142)	0.032	0.144
120	10.00	0.73	0.176	(0.142)	0.032	0.144
121	10.08	0.50	0.120	(0.141)	0.022	0.098
122	10.17	0.50	0.120	(0.140)	0.022	0.098
123	10.25	0.50	0.120	(0.140)	0.022	0.098
124	10.33	0.50	0.120	(0.139)	0.022	0.098
125	10.42	0.50	0.120	(0.138)	0.022	0.098
126	10.50	0.50	0.120	(0.138)	0.022	0.098
127	10.58	0.67	0.160	(0.137)	0.029	0.131
128	10.67	0.67	0.160	(0.136)	0.029	0.131
129	10.75	0.67	0.160	(0.136)	0.029	0.131
130	10.83	0.67	0.160	(0.135)	0.029	0.131
131	10.92	0.67	0.160	(0.134)	0.029	0.131
132	11.00	0.67	0.160	(0.134)	0.029	0.131
133	11.08	0.63	0.152	(0.133)	0.027	0.125
134	11.17	0.63	0.152	(0.132)	0.027	0.125
135	11.25	0.63	0.152	(0.132)	0.027	0.125
136	11.33	0.63	0.152	(0.131)	0.027	0.125
137	11.42	0.63	0.152	(0.130)	0.027	0.125
138	11.50	0.63	0.152	(0.130)	0.027	0.125
139	11.58	0.57	0.136	(0.129)	0.024	0.112
140	11.67	0.57	0.136	(0.128)	0.024	0.112
141	11.75	0.57	0.136	(0.128)	0.024	0.112
142	11.83	0.60	0.144	(0.127)	0.026	0.118
143	11.92	0.60	0.144	(0.126)	0.026	0.118
144	12.00	0.60	0.144	(0.126)	0.026	0.118
145	12.08	0.83	0.200	(0.125)	0.036	0.164
146	12.17	0.83	0.200	(0.125)	0.036	0.164
147	12.25	0.83	0.200	(0.124)	0.036	0.164
148	12.33	0.87	0.208	(0.123)	0.037	0.171
149	12.42	0.87	0.208	(0.123)	0.037	0.171
150	12.50	0.87	0.208	(0.122)	0.037	0.171
151	12.58	0.93	0.224	(0.121)	0.040	0.184
152	12.67	0.93	0.224	(0.121)	0.040	0.184
153	12.75	0.93	0.224	(0.120)	0.040	0.184
154	12.83	0.97	0.232	(0.120)	0.042	0.190
155	12.92	0.97	0.232	(0.119)	0.042	0.190
156	13.00	0.97	0.232	(0.118)	0.042	0.190
157	13.08	1.13	0.272	(0.118)	0.049	0.223
158	13.17	1.13	0.272	(0.117)	0.049	0.223
159	13.25	1.13	0.272	(0.117)	0.049	0.223
160	13.33	1.13	0.272	(0.116)	0.049	0.223
161	13.42	1.13	0.272	(0.115)	0.049	0.223
162	13.50	1.13	0.272	(0.115)	0.049	0.223
163	13.58	0.77	0.184	(0.114)	0.033	0.151
164	13.67	0.77	0.184	(0.114)	0.033	0.151
165	13.75	0.77	0.184	(0.113)	0.033	0.151
166	13.83	0.77	0.184	(0.113)	0.033	0.151
167	13.92	0.77	0.184	(0.112)	0.033	0.151
168	14.00	0.77	0.184	(0.111)	0.033	0.151
169	14.08	0.90	0.216	(0.111)	0.039	0.177
170	14.17	0.90	0.216	(0.110)	0.039	0.177
171	14.25	0.90	0.216	(0.110)	0.039	0.177
172	14.33	0.87	0.208	(0.109)	0.037	0.171
173	14.42	0.87	0.208	(0.109)	0.037	0.171
174	14.50	0.87	0.208	(0.108)	0.037	0.171
175	14.58	0.87	0.208	(0.107)	0.037	0.171
176	14.67	0.87	0.208	(0.107)	0.037	0.171
177	14.75	0.87	0.208	(0.106)	0.037	0.171
178	14.83	0.83	0.200	(0.106)	0.036	0.164
179	14.92	0.83	0.200	(0.105)	0.036	0.164
180	15.00	0.83	0.200	(0.105)	0.036	0.164
181	15.08	0.80	0.192	(0.104)	0.035	0.157
182	15.17	0.80	0.192	(0.104)	0.035	0.157
183	15.25	0.80	0.192	(0.103)	0.035	0.157
184	15.33	0.77	0.184	(0.103)	0.033	0.151
185	15.42	0.77	0.184	(0.102)	0.033	0.151

186	15.50	0.77	0.184	(0.102)	0.033	0.151
187	15.58	0.63	0.152	(0.101)	0.027	0.125
188	15.67	0.63	0.152	(0.101)	0.027	0.125
189	15.75	0.63	0.152	(0.100)	0.027	0.125
190	15.83	0.63	0.152	(0.100)	0.027	0.125
191	15.92	0.63	0.152	(0.099)	0.027	0.125
192	16.00	0.63	0.152	(0.099)	0.027	0.125
193	16.08	0.13	0.032	(0.098)	0.006	0.026
194	16.17	0.13	0.032	(0.098)	0.006	0.026
195	16.25	0.13	0.032	(0.097)	0.006	0.026
196	16.33	0.13	0.032	(0.097)	0.006	0.026
197	16.42	0.13	0.032	(0.096)	0.006	0.026
198	16.50	0.13	0.032	(0.096)	0.006	0.026
199	16.58	0.10	0.024	(0.095)	0.004	0.020
200	16.67	0.10	0.024	(0.095)	0.004	0.020
201	16.75	0.10	0.024	(0.094)	0.004	0.020
202	16.83	0.10	0.024	(0.094)	0.004	0.020
203	16.92	0.10	0.024	(0.093)	0.004	0.020
204	17.00	0.10	0.024	(0.093)	0.004	0.020
205	17.08	0.17	0.040	(0.092)	0.007	0.033
206	17.17	0.17	0.040	(0.092)	0.007	0.033
207	17.25	0.17	0.040	(0.091)	0.007	0.033
208	17.33	0.17	0.040	(0.091)	0.007	0.033
209	17.42	0.17	0.040	(0.090)	0.007	0.033
210	17.50	0.17	0.040	(0.090)	0.007	0.033
211	17.58	0.17	0.040	(0.089)	0.007	0.033
212	17.67	0.17	0.040	(0.089)	0.007	0.033
213	17.75	0.17	0.040	(0.089)	0.007	0.033
214	17.83	0.13	0.032	(0.088)	0.006	0.026
215	17.92	0.13	0.032	(0.088)	0.006	0.026
216	18.00	0.13	0.032	(0.087)	0.006	0.026
217	18.08	0.13	0.032	(0.087)	0.006	0.026
218	18.17	0.13	0.032	(0.086)	0.006	0.026
219	18.25	0.13	0.032	(0.086)	0.006	0.026
220	18.33	0.13	0.032	(0.086)	0.006	0.026
221	18.42	0.13	0.032	(0.085)	0.006	0.026
222	18.50	0.13	0.032	(0.085)	0.006	0.026
223	18.58	0.10	0.024	(0.084)	0.004	0.020
224	18.67	0.10	0.024	(0.084)	0.004	0.020
225	18.75	0.10	0.024	(0.084)	0.004	0.020
226	18.83	0.07	0.016	(0.083)	0.003	0.013
227	18.92	0.07	0.016	(0.083)	0.003	0.013
228	19.00	0.07	0.016	(0.082)	0.003	0.013
229	19.08	0.10	0.024	(0.082)	0.004	0.020
230	19.17	0.10	0.024	(0.082)	0.004	0.020
231	19.25	0.10	0.024	(0.081)	0.004	0.020
232	19.33	0.13	0.032	(0.081)	0.006	0.026
233	19.42	0.13	0.032	(0.080)	0.006	0.026
234	19.50	0.13	0.032	(0.080)	0.006	0.026
235	19.58	0.10	0.024	(0.080)	0.004	0.020
236	19.67	0.10	0.024	(0.079)	0.004	0.020
237	19.75	0.10	0.024	(0.079)	0.004	0.020
238	19.83	0.07	0.016	(0.079)	0.003	0.013
239	19.92	0.07	0.016	(0.078)	0.003	0.013
240	20.00	0.07	0.016	(0.078)	0.003	0.013
241	20.08	0.10	0.024	(0.078)	0.004	0.020
242	20.17	0.10	0.024	(0.077)	0.004	0.020
243	20.25	0.10	0.024	(0.077)	0.004	0.020
244	20.33	0.10	0.024	(0.077)	0.004	0.020
245	20.42	0.10	0.024	(0.076)	0.004	0.020
246	20.50	0.10	0.024	(0.076)	0.004	0.020
247	20.58	0.10	0.024	(0.076)	0.004	0.020
248	20.67	0.10	0.024	(0.075)	0.004	0.020
249	20.75	0.10	0.024	(0.075)	0.004	0.020
250	20.83	0.07	0.016	(0.075)	0.003	0.013
251	20.92	0.07	0.016	(0.074)	0.003	0.013
252	21.00	0.07	0.016	(0.074)	0.003	0.013
253	21.08	0.10	0.024	(0.074)	0.004	0.020
254	21.17	0.10	0.024	(0.073)	0.004	0.020
255	21.25	0.10	0.024	(0.073)	0.004	0.020
256	21.33	0.07	0.016	(0.073)	0.003	0.013
257	21.42	0.07	0.016	(0.073)	0.003	0.013

1+45	0. 0149	0. 11	Q
1+50	0. 0158	0. 13	Q
1+55	0. 0167	0. 14	Q
2+ 0	0. 0177	0. 14	Q
2+ 5	0. 0186	0. 14	QV
2+10	0. 0196	0. 14	QV
2+15	0. 0206	0. 14	QV
2+20	0. 0215	0. 14	QV
2+25	0. 0225	0. 14	QV
2+30	0. 0235	0. 14	QV
2+35	0. 0246	0. 16	QV
2+40	0. 0258	0. 17	QV
2+45	0. 0270	0. 18	QV
2+50	0. 0282	0. 18	QV
2+55	0. 0294	0. 18	QV
3+ 0	0. 0306	0. 18	QV
3+ 5	0. 0318	0. 18	QV
3+10	0. 0330	0. 18	QV
3+15	0. 0343	0. 18	QV
3+20	0. 0355	0. 18	QV
3+25	0. 0367	0. 18	Q V
3+30	0. 0379	0. 18	Q V
3+35	0. 0391	0. 18	Q V
3+40	0. 0403	0. 18	Q V
3+45	0. 0415	0. 18	Q V
3+50	0. 0429	0. 20	Q V
3+55	0. 0443	0. 21	Q V
4+ 0	0. 0457	0. 21	Q V
4+ 5	0. 0472	0. 21	Q V
4+10	0. 0487	0. 21	Q V
4+15	0. 0501	0. 21	Q V
4+20	0. 0517	0. 23	Q V
4+25	0. 0534	0. 24	Q V
4+30	0. 0551	0. 25	Q V
4+35	0. 0568	0. 25	Q V
4+40	0. 0585	0. 25	Q V
4+45	0. 0601	0. 25	Q V
4+50	0. 0620	0. 27	Q V
4+55	0. 0639	0. 28	Q V
5+ 0	0. 0658	0. 28	Q V
5+ 5	0. 0675	0. 24	Q V
5+10	0. 0690	0. 21	Q V
5+15	0. 0704	0. 21	Q V
5+20	0. 0720	0. 23	Q V
5+25	0. 0737	0. 24	Q V
5+30	0. 0754	0. 25	Q V
5+35	0. 0772	0. 27	Q V
5+40	0. 0791	0. 28	Q V
5+45	0. 0811	0. 28	Q V
5+50	0. 0830	0. 28	Q V
5+55	0. 0849	0. 28	Q V
6+ 0	0. 0869	0. 28	Q V
6+ 5	0. 0890	0. 30	Q V
6+10	0. 0911	0. 31	Q V
6+15	0. 0933	0. 32	Q V
6+20	0. 0955	0. 32	Q V
6+25	0. 0977	0. 32	Q V
6+30	0. 0998	0. 32	Q V
6+35	0. 1021	0. 34	Q V
6+40	0. 1046	0. 35	Q V
6+45	0. 1070	0. 35	Q V
6+50	0. 1094	0. 35	Q V
6+55	0. 1118	0. 35	Q V
7+ 0	0. 1142	0. 35	Q V
7+ 5	0. 1166	0. 35	Q V
7+10	0. 1191	0. 35	Q V
7+15	0. 1215	0. 35	Q V
7+20	0. 1240	0. 37	Q V
7+25	0. 1267	0. 38	Q V
7+30	0. 1294	0. 39	Q V
7+35	0. 1322	0. 41	Q V
7+40	0. 1350	0. 42	Q V

7+45	0. 1379	0. 42
7+50	0. 1410	0. 44
7+55	0. 1441	0. 45
8+ 0	0. 1473	0. 46
8+ 5	0. 1507	0. 50
8+10	0. 1543	0. 52
8+15	0. 1579	0. 53
8+20	0. 1615	0. 53
8+25	0. 1652	0. 53
8+30	0. 1688	0. 53
8+35	0. 1726	0. 55
8+40	0. 1764	0. 56
8+45	0. 1803	0. 56
8+50	0. 1843	0. 58
8+55	0. 1884	0. 60
9+ 0	0. 1925	0. 60
9+ 5	0. 1969	0. 64
9+10	0. 2015	0. 66
9+15	0. 2061	0. 67
9+20	0. 2108	0. 69
9+25	0. 2156	0. 70
9+30	0. 2205	0. 70
9+35	0. 2255	0. 72
9+40	0. 2305	0. 74
9+45	0. 2356	0. 74
9+50	0. 2408	0. 76
9+55	0. 2461	0. 77
10+ 0	0. 2514	0. 77
10+ 5	0. 2558	0. 63
10+10	0. 2595	0. 54
10+15	0. 2631	0. 53
10+20	0. 2668	0. 53
10+25	0. 2704	0. 53
10+30	0. 2740	0. 53
10+35	0. 2784	0. 63
10+40	0. 2831	0. 69
10+45	0. 2880	0. 70
10+50	0. 2928	0. 70
10+55	0. 2976	0. 70
11+ 0	0. 3025	0. 70
11+ 5	0. 3072	0. 68
11+10	0. 3118	0. 67
11+15	0. 3164	0. 67
11+20	0. 3210	0. 67
11+25	0. 3256	0. 67
11+30	0. 3302	0. 67
11+35	0. 3345	0. 63
11+40	0. 3386	0. 60
11+45	0. 3427	0. 60
11+50	0. 3470	0. 62
11+55	0. 3513	0. 63
12+ 0	0. 3557	0. 63
12+ 5	0. 3610	0. 77
12+10	0. 3670	0. 86
12+15	0. 3730	0. 88
12+20	0. 3792	0. 90
12+25	0. 3855	0. 91
12+30	0. 3918	0. 91
12+35	0. 3983	0. 95
12+40	0. 4051	0. 98
12+45	0. 4119	0. 98
12+50	0. 4188	1. 00
12+55	0. 4258	1. 02
13+ 0	0. 4328	1. 02
13+ 5	0. 4405	1. 12
13+10	0. 4487	1. 18
13+15	0. 4569	1. 19
13+20	0. 4651	1. 19
13+25	0. 4733	1. 19
13+30	0. 4816	1. 19
13+35	0. 4882	0. 97
13+40	0. 4940	0. 83



19+45	0. 6963	0. 11	Q	V
19+50	0. 6969	0. 09	Q	V
19+55	0. 6974	0. 07	Q	V
20+ 0	0. 6979	0. 07	Q	V
20+ 5	0. 6985	0. 09	Q	V
20+10	0. 6992	0. 10	Q	V
20+15	0. 6999	0. 11	Q	V
20+20	0. 7007	0. 11	Q	V
20+25	0. 7014	0. 11	Q	V
20+30	0. 7021	0. 11	Q	V
20+35	0. 7028	0. 11	Q	V
20+40	0. 7036	0. 11	Q	V
20+45	0. 7043	0. 11	Q	V
20+50	0. 7049	0. 09	Q	V
20+55	0. 7054	0. 07	Q	V
21+ 0	0. 7059	0. 07	Q	V
21+ 5	0. 7065	0. 09	Q	V
21+10	0. 7072	0. 10	Q	V
21+15	0. 7079	0. 11	Q	V
21+20	0. 7085	0. 09	Q	V
21+25	0. 7090	0. 07	Q	V
21+30	0. 7095	0. 07	Q	V
21+35	0. 7101	0. 09	Q	V
21+40	0. 7108	0. 10	Q	V
21+45	0. 7116	0. 11	Q	V
21+50	0. 7121	0. 09	Q	V
21+55	0. 7126	0. 07	Q	V
22+ 0	0. 7131	0. 07	Q	V
22+ 5	0. 7137	0. 09	Q	V
22+10	0. 7145	0. 10	Q	V
22+15	0. 7152	0. 11	Q	V
22+20	0. 7158	0. 09	Q	V
22+25	0. 7163	0. 07	Q	V
22+30	0. 7168	0. 07	Q	V
22+35	0. 7172	0. 07	Q	V
22+40	0. 7177	0. 07	Q	V
22+45	0. 7182	0. 07	Q	V
22+50	0. 7187	0. 07	Q	V
22+55	0. 7192	0. 07	Q	V
23+ 0	0. 7197	0. 07	Q	V
23+ 5	0. 7201	0. 07	Q	V
23+10	0. 7206	0. 07	Q	V
23+15	0. 7211	0. 07	Q	V
23+20	0. 7216	0. 07	Q	V
23+25	0. 7221	0. 07	Q	V
23+30	0. 7226	0. 07	Q	V
23+35	0. 7230	0. 07	Q	V
23+40	0. 7235	0. 07	Q	V
23+45	0. 7240	0. 07	Q	V
23+50	0. 7245	0. 07	Q	V
23+55	0. 7250	0. 07	Q	V
24+ 0	0. 7255	0. 07	Q	V
24+ 5	0. 7257	0. 03	Q	V
24+10	0. 7257	0. 00	Q	V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PA0262.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 100-131
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 5.31(Ac.) = 0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 5.31(Ac.) = 0.008 Sq. Mi.
Length along longest watercourse = 699.00(Ft.)
Length along longest watercourse measured to centroid = 450.00(Ft.)
Length along longest watercourse = 0.132 Mi.
Length along longest watercourse measured to centroid = 0.085 Mi.
Difference in elevation = 14.70(Ft.)
Slope along watercourse = 111.0386 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.027 Hr.
Lag time = 1.61 Min.
25% of lag time = 0.40 Min.
40% of lag time = 0.64 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	1.20	6.37

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	3.00	15.93

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.200(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.200(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
5.310 56.00 0.900
Total Area Entered = 5.31(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	311.341	57.815
2	0.167	622.682	36.513
3	0.250	934.022	5.672
Sum = 100.000			Sum = 5.351

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.072	(0.134)	0.013	0.059
2	0.17	0.60	0.086	(0.134)	0.016	0.071
3	0.25	0.60	0.086	(0.134)	0.016	0.071
4	0.33	0.60	0.086	(0.134)	0.016	0.071
5	0.42	0.60	0.086	(0.134)	0.016	0.071
6	0.50	0.70	0.101	(0.134)	0.018	0.083
7	0.58	0.70	0.101	(0.134)	0.018	0.083
8	0.67	0.70	0.101	(0.134)	0.018	0.083
9	0.75	0.70	0.101	(0.134)	0.018	0.083
10	0.83	0.70	0.101	(0.134)	0.018	0.083
11	0.92	0.70	0.101	(0.134)	0.018	0.083
12	1.00	0.80	0.115	(0.134)	0.021	0.094
13	1.08	0.80	0.115	(0.134)	0.021	0.094
14	1.17	0.80	0.115	(0.134)	0.021	0.094
15	1.25	0.80	0.115	(0.134)	0.021	0.094
16	1.33	0.80	0.115	(0.134)	0.021	0.094
17	1.42	0.80	0.115	(0.134)	0.021	0.094
18	1.50	0.80	0.115	(0.134)	0.021	0.094
19	1.58	0.80	0.115	(0.134)	0.021	0.094
20	1.67	0.80	0.115	(0.134)	0.021	0.094
21	1.75	0.80	0.115	(0.134)	0.021	0.094
22	1.83	0.80	0.115	(0.134)	0.021	0.094
23	1.92	0.80	0.115	(0.134)	0.021	0.094
24	2.00	0.90	0.130	(0.134)	0.023	0.106
25	2.08	0.80	0.115	(0.134)	0.021	0.094
26	2.17	0.90	0.130	(0.134)	0.023	0.106
27	2.25	0.90	0.130	(0.134)	0.023	0.106
28	2.33	0.90	0.130	(0.134)	0.023	0.106
29	2.42	0.90	0.130	(0.134)	0.023	0.106
30	2.50	0.90	0.130	(0.134)	0.023	0.106
31	2.58	0.90	0.130	(0.134)	0.023	0.106
32	2.67	0.90	0.130	(0.134)	0.023	0.106
33	2.75	1.00	0.144	(0.134)	0.026	0.118
34	2.83	1.00	0.144	(0.134)	0.026	0.118
35	2.92	1.00	0.144	(0.134)	0.026	0.118
36	3.00	1.00	0.144	(0.134)	0.026	0.118
37	3.08	1.00	0.144	(0.134)	0.026	0.118
38	3.17	1.10	0.158	(0.134)	0.029	0.130
39	3.25	1.10	0.158	(0.134)	0.029	0.130
40	3.33	1.10	0.158	(0.134)	0.029	0.130
41	3.42	1.20	0.173	(0.134)	0.031	0.142

1+45	0.0641	0.51	Q	V			
1+50	0.0676	0.51	Q	V			
1+55	0.0710	0.51	Q	V			
2+ 0	0.0748	0.54	Q	V			
2+ 5	0.0784	0.53	Q	V			
2+10	0.0822	0.55	Q	V			
2+15	0.0861	0.57	Q	V			
2+20	0.0900	0.57	Q	V			
2+25	0.0939	0.57	Q	V			
2+30	0.0978	0.57	Q	V			
2+35	0.1018	0.57	Q	V			
2+40	0.1057	0.57	Q	V			
2+45	0.1098	0.61	Q	V			
2+50	0.1142	0.63	Q	V			
2+55	0.1185	0.63	Q	V			
3+ 0	0.1229	0.63	Q	V			
3+ 5	0.1272	0.63	Q	V			
3+10	0.1318	0.67	Q	V			
3+15	0.1366	0.69	Q	V			
3+20	0.1414	0.70	Q	V			
3+25	0.1464	0.73	Q	V			
3+30	0.1519	0.79	Q	V			
3+35	0.1578	0.85	Q	V			
3+40	0.1638	0.88	Q	V			
3+45	0.1702	0.92	Q	V			
3+50	0.1767	0.94	Q	V			
3+55	0.1835	0.98	Q	V			
4+ 0	0.1904	1.01	Q	V			
4+ 5	0.1976	1.05	Q	V			
4+10	0.2053	1.11	Q	V			
4+15	0.2133	1.17	Q	V			
4+20	0.2218	1.23	Q	V			
4+25	0.2308	1.30	Q	V			
4+30	0.2399	1.32	Q	V			
4+35	0.2493	1.36	Q	V			
4+40	0.2591	1.42	Q	V			
4+45	0.2693	1.49	Q	V			
4+50	0.2798	1.51	Q	V			
4+55	0.2905	1.55	Q	V			
5+ 0	0.3016	1.61	Q	V			
5+ 5	0.3141	1.82	Q	V			
5+10	0.3288	2.12	Q	V			
5+15	0.3451	2.37	Q	V			
5+20	0.3627	2.56	Q	V			
5+25	0.3822	2.83	Q	V			
5+30	0.4050	3.32	Q	V			
5+35	0.4200	2.18	Q	V			
5+40	0.4267	0.97	Q	V			
5+45	0.4301	0.50	Q	V			
5+50	0.4326	0.35	Q	V			
5+55	0.4343	0.25	Q	V			
6+ 0	0.4354	0.16	Q	V			
6+ 5	0.4358	0.06	Q	V			
6+10	0.4358	0.01	Q	V			

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PA0232.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 100-131
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 5.31(Ac.) = 0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 5.31(Ac.) = 0.008 Sq. Mi.
Length along longest watercourse = 699.00(Ft.)
Length along longest watercourse measured to centroid = 450.00(Ft.)
Length along longest watercourse = 0.132 Mi.
Length along longest watercourse measured to centroid = 0.085 Mi.
Difference in elevation = 14.70(Ft.)
Slope along watercourse = 111.0386 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.027 Hr.
Lag time = 1.61 Min.
25% of lag time = 0.40 Min.
40% of lag time = 0.64 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
5.31	0.90	4.78

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
5.31	2.35	12.48

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 0.900(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 0.900(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
5.310 56.00 0.900
Total Area Entered = 5.31(Ac.)

Total soil loss = 0.070(Ac. Ft)
 Total rainfall = 0.90(In)
 Flood volume = 14277.9 Cubic Feet
 Total soil loss = 3069.5 Cubic Feet

 Peak flow rate of this hydrograph = 3.788(CFS)

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3 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

 Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0025	0.36	VQ				
0+10	0.0065	0.58	V Q				
0+15	0.0103	0.56	VQ				
0+20	0.0147	0.64	VQ				
0+25	0.0195	0.70	Q				
0+30	0.0250	0.79	Q				
0+35	0.0303	0.76	Q				
0+40	0.0358	0.80	Q				
0+45	0.0416	0.85	Q	V			
0+50	0.0469	0.77	Q	V			
0+55	0.0521	0.75	Q	V			
1+ 0	0.0576	0.81	Q	V			
1+ 5	0.0642	0.96	Q	V			
1+10	0.0713	1.03	Q	V			
1+15	0.0785	1.04	Q	V			
1+20	0.0853	0.99	Q	V			
1+25	0.0930	1.12	Q	V			
1+30	0.1016	1.24	Q	V			
1+35	0.1098	1.20	Q	V			
1+40	0.1183	1.23	Q	V			
1+45	0.1282	1.44	Q	V			
1+50	0.1385	1.49	Q	V			
1+55	0.1483	1.42	Q	V			
2+ 0	0.1580	1.41	Q	V			
2+ 5	0.1679	1.45	Q	V			
2+10	0.1801	1.77	Q	Q			
2+15	0.1951	2.18	Q	Q			
2+20	0.2085	1.94	Q	Q			
2+25	0.2264	2.60	Q	Q			
2+30	0.2491	3.30	Q	Q			
2+35	0.2752	3.79	Q	Q			
2+40	0.2978	3.29	Q	Q			
2+45	0.3102	1.80	Q	Q			
2+50	0.3171	1.00	Q	Q			
2+55	0.3230	0.86	Q	Q			
3+ 0	0.3266	0.52	Q	Q			
3+ 5	0.3277	0.15	Q	Q			
3+10	0.3278	0.02	Q	Q			

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PA0212.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 100-131
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 5.31(Ac.) = 0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 5.31(Ac.) = 0.008 Sq. Mi.
Length along longest watercourse = 699.00(Ft.)
Length along longest watercourse measured to centroid = 450.00(Ft.)
Length along longest watercourse = 0.132 Mi.
Length along longest watercourse measured to centroid = 0.085 Mi.
Difference in elevation = 14.70(Ft.)
Slope along watercourse = 111.0386 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.027 Hr.
Lag time = 1.61 Min.
25% of lag time = 0.40 Min.
40% of lag time = 0.64 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	0.54	2.87

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	1.36	7.22

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.540(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 0.540(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
5.310 56.00 0.900
Total Area Entered = 5.31(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Slope of intensity-duration curve for a 1 hour storm = 0.4800

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	311.341	57.815
2	0.167	622.682	36.513
3	0.250	934.022	5.672
Sum = 100.000			Sum = 5.351

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	4.40	0.285	(0.134)	0.051	0.234
2	0.17	4.50	0.292	(0.134)	0.052	0.239
3	0.25	5.40	0.350	(0.134)	0.063	0.287
4	0.33	5.40	0.350	(0.134)	0.063	0.287
5	0.42	5.70	0.369	(0.134)	0.066	0.303
6	0.50	6.40	0.415	(0.134)	0.075	0.340
7	0.58	7.90	0.512	(0.134)	0.092	0.420
8	0.67	9.10	0.590	(0.134)	0.106	0.484
9	0.75	12.80	0.829	0.134	(0.149)	0.695
10	0.83	25.60	1.659	0.134	(0.299)	1.525
11	0.92	7.90	0.512	(0.134)	0.092	0.420
12	1.00	4.90	0.318	(0.134)	0.057	0.260

Sum = 100.0 (Loss Rate Not Used) Sum = 5.5

Flood volume = Effective rainfall 0.46(In)
 times area 5.3(Ac.) / [(In)/(Ft.)] = 0.2(Ac. Ft)
 Total soil loss = 0.08(In)
 Total soil loss = 0.036(Ac. Ft)
 Total rainfall = 0.54(In)
 Flood volume = 8823.2 Cubic Feet
 Total soil loss = 1585.0 Cubic Feet

Peak flow rate of this hydrograph = 6.226(CFS)

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0050	0.72	V	Q			
0+10	0.0132	1.20	V	Q			
0+15	0.0231	1.43	V	Q			
0+20	0.0335	1.52	V	Q			
0+25	0.0445	1.59	V	Q	V		
0+30	0.0564	1.73	V	Q	V		

0+35	0.0705	2.06		Q	V				
0+40	0.0872	2.42		Q		V			
0+45	0.1094	3.22			Q		V		
0+50	0.1523	6.23					Q	V	
0+55	0.1832	4.49				Q			V
1+ 0	0.1976	2.09		Q					V
1+ 5	0.2020	0.64	Q						V
1+10	0.2026	0.08	Q						V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PA05245.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 100-131
HYDROLOGIC ANALYSIS
5-YEAR

Drainage Area = 5.31(Ac.) = 0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 5.31(Ac.) = 0.008 Sq. Mi.
Length along longest watercourse = 699.00(Ft.)
Length along longest watercourse measured to centroid = 450.00(Ft.)
Length along longest watercourse = 0.132 Mi.
Length along longest watercourse measured to centroid = 0.085 Mi.
Difference in elevation = 14.70(Ft.)
Slope along watercourse = 111.0386 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.027 Hr.
Lag time = 1.61 Min.
25% of lag time = 0.40 Min.
40% of lag time = 0.64 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	2.00	10.62

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	6.40	33.98

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 3.031(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 3.031(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
5.310 56.00 0.900
Total Area Entered = 5.31(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134

Minimum soil loss rate ((In/Hr)) = 0.067

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	311.341	57.815
2	0.167	622.682	36.513
3	0.250	934.022	5.672
Sum = 100.000			Sum= 5.351

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.024	(0.238)	0.004	0.020
2	0.17	0.07	0.024	(0.237)	0.004	0.020
3	0.25	0.07	0.024	(0.236)	0.004	0.020
4	0.33	0.10	0.036	(0.235)	0.007	0.030
5	0.42	0.10	0.036	(0.234)	0.007	0.030
6	0.50	0.10	0.036	(0.233)	0.007	0.030
7	0.58	0.10	0.036	(0.232)	0.007	0.030
8	0.67	0.10	0.036	(0.231)	0.007	0.030
9	0.75	0.10	0.036	(0.230)	0.007	0.030
10	0.83	0.13	0.048	(0.230)	0.009	0.040
11	0.92	0.13	0.048	(0.229)	0.009	0.040
12	1.00	0.13	0.048	(0.228)	0.009	0.040
13	1.08	0.10	0.036	(0.227)	0.007	0.030
14	1.17	0.10	0.036	(0.226)	0.007	0.030
15	1.25	0.10	0.036	(0.225)	0.007	0.030
16	1.33	0.10	0.036	(0.224)	0.007	0.030
17	1.42	0.10	0.036	(0.223)	0.007	0.030
18	1.50	0.10	0.036	(0.222)	0.007	0.030
19	1.58	0.10	0.036	(0.222)	0.007	0.030
20	1.67	0.10	0.036	(0.221)	0.007	0.030
21	1.75	0.10	0.036	(0.220)	0.007	0.030
22	1.83	0.13	0.048	(0.219)	0.009	0.040
23	1.92	0.13	0.048	(0.218)	0.009	0.040
24	2.00	0.13	0.048	(0.217)	0.009	0.040
25	2.08	0.13	0.048	(0.216)	0.009	0.040
26	2.17	0.13	0.048	(0.215)	0.009	0.040
27	2.25	0.13	0.048	(0.214)	0.009	0.040
28	2.33	0.13	0.048	(0.214)	0.009	0.040
29	2.42	0.13	0.048	(0.213)	0.009	0.040
30	2.50	0.13	0.048	(0.212)	0.009	0.040
31	2.58	0.17	0.061	(0.211)	0.011	0.050
32	2.67	0.17	0.061	(0.210)	0.011	0.050
33	2.75	0.17	0.061	(0.209)	0.011	0.050
34	2.83	0.17	0.061	(0.208)	0.011	0.050
35	2.92	0.17	0.061	(0.208)	0.011	0.050
36	3.00	0.17	0.061	(0.207)	0.011	0.050
37	3.08	0.17	0.061	(0.206)	0.011	0.050
38	3.17	0.17	0.061	(0.205)	0.011	0.050
39	3.25	0.17	0.061	(0.204)	0.011	0.050
40	3.33	0.17	0.061	(0.203)	0.011	0.050
41	3.42	0.17	0.061	(0.202)	0.011	0.050

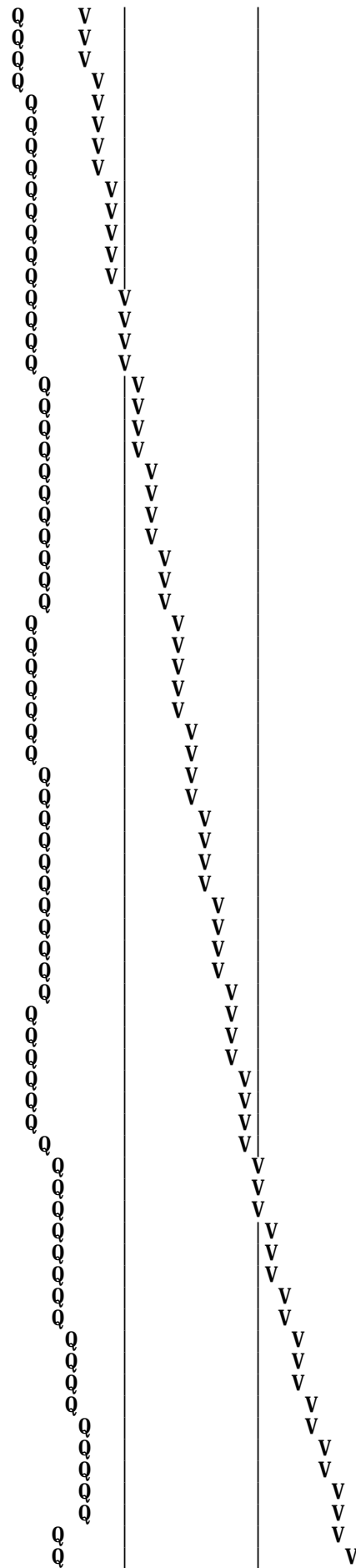
42	3.50	0.17	0.061	(0.202)	0.011	0.050
43	3.58	0.17	0.061	(0.201)	0.011	0.050
44	3.67	0.17	0.061	(0.200)	0.011	0.050
45	3.75	0.17	0.061	(0.199)	0.011	0.050
46	3.83	0.20	0.073	(0.198)	0.013	0.060
47	3.92	0.20	0.073	(0.197)	0.013	0.060
48	4.00	0.20	0.073	(0.197)	0.013	0.060
49	4.08	0.20	0.073	(0.196)	0.013	0.060
50	4.17	0.20	0.073	(0.195)	0.013	0.060
51	4.25	0.20	0.073	(0.194)	0.013	0.060
52	4.33	0.23	0.085	(0.193)	0.015	0.070
53	4.42	0.23	0.085	(0.192)	0.015	0.070
54	4.50	0.23	0.085	(0.192)	0.015	0.070
55	4.58	0.23	0.085	(0.191)	0.015	0.070
56	4.67	0.23	0.085	(0.190)	0.015	0.070
57	4.75	0.23	0.085	(0.189)	0.015	0.070
58	4.83	0.27	0.097	(0.188)	0.017	0.080
59	4.92	0.27	0.097	(0.187)	0.017	0.080
60	5.00	0.27	0.097	(0.187)	0.017	0.080
61	5.08	0.20	0.073	(0.186)	0.013	0.060
62	5.17	0.20	0.073	(0.185)	0.013	0.060
63	5.25	0.20	0.073	(0.184)	0.013	0.060
64	5.33	0.23	0.085	(0.183)	0.015	0.070
65	5.42	0.23	0.085	(0.183)	0.015	0.070
66	5.50	0.23	0.085	(0.182)	0.015	0.070
67	5.58	0.27	0.097	(0.181)	0.017	0.080
68	5.67	0.27	0.097	(0.180)	0.017	0.080
69	5.75	0.27	0.097	(0.179)	0.017	0.080
70	5.83	0.27	0.097	(0.179)	0.017	0.080
71	5.92	0.27	0.097	(0.178)	0.017	0.080
72	6.00	0.27	0.097	(0.177)	0.017	0.080
73	6.08	0.30	0.109	(0.176)	0.020	0.089
74	6.17	0.30	0.109	(0.175)	0.020	0.089
75	6.25	0.30	0.109	(0.175)	0.020	0.089
76	6.33	0.30	0.109	(0.174)	0.020	0.089
77	6.42	0.30	0.109	(0.173)	0.020	0.089
78	6.50	0.30	0.109	(0.172)	0.020	0.089
79	6.58	0.33	0.121	(0.172)	0.022	0.099
80	6.67	0.33	0.121	(0.171)	0.022	0.099
81	6.75	0.33	0.121	(0.170)	0.022	0.099
82	6.83	0.33	0.121	(0.169)	0.022	0.099
83	6.92	0.33	0.121	(0.169)	0.022	0.099
84	7.00	0.33	0.121	(0.168)	0.022	0.099
85	7.08	0.33	0.121	(0.167)	0.022	0.099
86	7.17	0.33	0.121	(0.166)	0.022	0.099
87	7.25	0.33	0.121	(0.165)	0.022	0.099
88	7.33	0.37	0.133	(0.165)	0.024	0.109
89	7.42	0.37	0.133	(0.164)	0.024	0.109
90	7.50	0.37	0.133	(0.163)	0.024	0.109
91	7.58	0.40	0.145	(0.162)	0.026	0.119
92	7.67	0.40	0.145	(0.162)	0.026	0.119
93	7.75	0.40	0.145	(0.161)	0.026	0.119
94	7.83	0.43	0.158	(0.160)	0.028	0.129
95	7.92	0.43	0.158	(0.159)	0.028	0.129
96	8.00	0.43	0.158	(0.159)	0.028	0.129
97	8.08	0.50	0.182	(0.158)	0.033	0.149
98	8.17	0.50	0.182	(0.157)	0.033	0.149
99	8.25	0.50	0.182	(0.157)	0.033	0.149
100	8.33	0.50	0.182	(0.156)	0.033	0.149
101	8.42	0.50	0.182	(0.155)	0.033	0.149
102	8.50	0.50	0.182	(0.154)	0.033	0.149
103	8.58	0.53	0.194	(0.154)	0.035	0.159
104	8.67	0.53	0.194	(0.153)	0.035	0.159
105	8.75	0.53	0.194	(0.152)	0.035	0.159
106	8.83	0.57	0.206	(0.151)	0.037	0.169
107	8.92	0.57	0.206	(0.151)	0.037	0.169
108	9.00	0.57	0.206	(0.150)	0.037	0.169
109	9.08	0.63	0.230	(0.149)	0.041	0.189
110	9.17	0.63	0.230	(0.149)	0.041	0.189
111	9.25	0.63	0.230	(0.148)	0.041	0.189
112	9.33	0.67	0.242	(0.147)	0.044	0.199
113	9.42	0.67	0.242	(0.147)	0.044	0.199

114	9.50	0.67	0.242	(0.146)	0.044	0.199
115	9.58	0.70	0.255	(0.145)	0.046	0.209
116	9.67	0.70	0.255	(0.144)	0.046	0.209
117	9.75	0.70	0.255	(0.144)	0.046	0.209
118	9.83	0.73	0.267	(0.143)	0.048	0.219
119	9.92	0.73	0.267	(0.142)	0.048	0.219
120	10.00	0.73	0.267	(0.142)	0.048	0.219
121	10.08	0.50	0.182	(0.141)	0.033	0.149
122	10.17	0.50	0.182	(0.140)	0.033	0.149
123	10.25	0.50	0.182	(0.140)	0.033	0.149
124	10.33	0.50	0.182	(0.139)	0.033	0.149
125	10.42	0.50	0.182	(0.138)	0.033	0.149
126	10.50	0.50	0.182	(0.138)	0.033	0.149
127	10.58	0.67	0.242	(0.137)	0.044	0.199
128	10.67	0.67	0.242	(0.136)	0.044	0.199
129	10.75	0.67	0.242	(0.136)	0.044	0.199
130	10.83	0.67	0.242	(0.135)	0.044	0.199
131	10.92	0.67	0.242	(0.134)	0.044	0.199
132	11.00	0.67	0.242	(0.134)	0.044	0.199
133	11.08	0.63	0.230	(0.133)	0.041	0.189
134	11.17	0.63	0.230	(0.132)	0.041	0.189
135	11.25	0.63	0.230	(0.132)	0.041	0.189
136	11.33	0.63	0.230	(0.131)	0.041	0.189
137	11.42	0.63	0.230	(0.130)	0.041	0.189
138	11.50	0.63	0.230	(0.130)	0.041	0.189
139	11.58	0.57	0.206	(0.129)	0.037	0.169
140	11.67	0.57	0.206	(0.128)	0.037	0.169
141	11.75	0.57	0.206	(0.128)	0.037	0.169
142	11.83	0.60	0.218	(0.127)	0.039	0.179
143	11.92	0.60	0.218	(0.126)	0.039	0.179
144	12.00	0.60	0.218	(0.126)	0.039	0.179
145	12.08	0.83	0.303	(0.125)	0.055	0.249
146	12.17	0.83	0.303	(0.125)	0.055	0.249
147	12.25	0.83	0.303	(0.124)	0.055	0.249
148	12.33	0.87	0.315	(0.123)	0.057	0.258
149	12.42	0.87	0.315	(0.123)	0.057	0.258
150	12.50	0.87	0.315	(0.122)	0.057	0.258
151	12.58	0.93	0.339	(0.121)	0.061	0.278
152	12.67	0.93	0.339	(0.121)	0.061	0.278
153	12.75	0.93	0.339	(0.120)	0.061	0.278
154	12.83	0.97	0.352	(0.120)	0.063	0.288
155	12.92	0.97	0.352	(0.119)	0.063	0.288
156	13.00	0.97	0.352	(0.118)	0.063	0.288
157	13.08	1.13	0.412	(0.118)	0.074	0.338
158	13.17	1.13	0.412	(0.117)	0.074	0.338
159	13.25	1.13	0.412	(0.117)	0.074	0.338
160	13.33	1.13	0.412	(0.116)	0.074	0.338
161	13.42	1.13	0.412	(0.115)	0.074	0.338
162	13.50	1.13	0.412	(0.115)	0.074	0.338
163	13.58	0.77	0.279	(0.114)	0.050	0.229
164	13.67	0.77	0.279	(0.114)	0.050	0.229
165	13.75	0.77	0.279	(0.113)	0.050	0.229
166	13.83	0.77	0.279	(0.113)	0.050	0.229
167	13.92	0.77	0.279	(0.112)	0.050	0.229
168	14.00	0.77	0.279	(0.111)	0.050	0.229
169	14.08	0.90	0.327	(0.111)	0.059	0.268
170	14.17	0.90	0.327	(0.110)	0.059	0.268
171	14.25	0.90	0.327	(0.110)	0.059	0.268
172	14.33	0.87	0.315	(0.109)	0.057	0.258
173	14.42	0.87	0.315	(0.109)	0.057	0.258
174	14.50	0.87	0.315	(0.108)	0.057	0.258
175	14.58	0.87	0.315	(0.107)	0.057	0.258
176	14.67	0.87	0.315	(0.107)	0.057	0.258
177	14.75	0.87	0.315	(0.106)	0.057	0.258
178	14.83	0.83	0.303	(0.106)	0.055	0.249
179	14.92	0.83	0.303	(0.105)	0.055	0.249
180	15.00	0.83	0.303	(0.105)	0.055	0.249
181	15.08	0.80	0.291	(0.104)	0.052	0.239
182	15.17	0.80	0.291	(0.104)	0.052	0.239
183	15.25	0.80	0.291	(0.103)	0.052	0.239
184	15.33	0.77	0.279	(0.103)	0.050	0.229
185	15.42	0.77	0.279	(0.102)	0.050	0.229

186	15.50	0.77	0.279	(0.102)	0.050	0.229
187	15.58	0.63	0.230	(0.101)	0.041	0.189
188	15.67	0.63	0.230	(0.101)	0.041	0.189
189	15.75	0.63	0.230	(0.100)	0.041	0.189
190	15.83	0.63	0.230	(0.100)	0.041	0.189
191	15.92	0.63	0.230	(0.099)	0.041	0.189
192	16.00	0.63	0.230	(0.099)	0.041	0.189
193	16.08	0.13	0.048	(0.098)	0.009	0.040
194	16.17	0.13	0.048	(0.098)	0.009	0.040
195	16.25	0.13	0.048	(0.097)	0.009	0.040
196	16.33	0.13	0.048	(0.097)	0.009	0.040
197	16.42	0.13	0.048	(0.096)	0.009	0.040
198	16.50	0.13	0.048	(0.096)	0.009	0.040
199	16.58	0.10	0.036	(0.095)	0.007	0.030
200	16.67	0.10	0.036	(0.095)	0.007	0.030
201	16.75	0.10	0.036	(0.094)	0.007	0.030
202	16.83	0.10	0.036	(0.094)	0.007	0.030
203	16.92	0.10	0.036	(0.093)	0.007	0.030
204	17.00	0.10	0.036	(0.093)	0.007	0.030
205	17.08	0.17	0.061	(0.092)	0.011	0.050
206	17.17	0.17	0.061	(0.092)	0.011	0.050
207	17.25	0.17	0.061	(0.091)	0.011	0.050
208	17.33	0.17	0.061	(0.091)	0.011	0.050
209	17.42	0.17	0.061	(0.090)	0.011	0.050
210	17.50	0.17	0.061	(0.090)	0.011	0.050
211	17.58	0.17	0.061	(0.089)	0.011	0.050
212	17.67	0.17	0.061	(0.089)	0.011	0.050
213	17.75	0.17	0.061	(0.089)	0.011	0.050
214	17.83	0.13	0.048	(0.088)	0.009	0.040
215	17.92	0.13	0.048	(0.088)	0.009	0.040
216	18.00	0.13	0.048	(0.087)	0.009	0.040
217	18.08	0.13	0.048	(0.087)	0.009	0.040
218	18.17	0.13	0.048	(0.086)	0.009	0.040
219	18.25	0.13	0.048	(0.086)	0.009	0.040
220	18.33	0.13	0.048	(0.086)	0.009	0.040
221	18.42	0.13	0.048	(0.085)	0.009	0.040
222	18.50	0.13	0.048	(0.085)	0.009	0.040
223	18.58	0.10	0.036	(0.084)	0.007	0.030
224	18.67	0.10	0.036	(0.084)	0.007	0.030
225	18.75	0.10	0.036	(0.084)	0.007	0.030
226	18.83	0.07	0.024	(0.083)	0.004	0.020
227	18.92	0.07	0.024	(0.083)	0.004	0.020
228	19.00	0.07	0.024	(0.082)	0.004	0.020
229	19.08	0.10	0.036	(0.082)	0.007	0.030
230	19.17	0.10	0.036	(0.082)	0.007	0.030
231	19.25	0.10	0.036	(0.081)	0.007	0.030
232	19.33	0.13	0.048	(0.081)	0.009	0.040
233	19.42	0.13	0.048	(0.080)	0.009	0.040
234	19.50	0.13	0.048	(0.080)	0.009	0.040
235	19.58	0.10	0.036	(0.080)	0.007	0.030
236	19.67	0.10	0.036	(0.079)	0.007	0.030
237	19.75	0.10	0.036	(0.079)	0.007	0.030
238	19.83	0.07	0.024	(0.079)	0.004	0.020
239	19.92	0.07	0.024	(0.078)	0.004	0.020
240	20.00	0.07	0.024	(0.078)	0.004	0.020
241	20.08	0.10	0.036	(0.078)	0.007	0.030
242	20.17	0.10	0.036	(0.077)	0.007	0.030
243	20.25	0.10	0.036	(0.077)	0.007	0.030
244	20.33	0.10	0.036	(0.077)	0.007	0.030
245	20.42	0.10	0.036	(0.076)	0.007	0.030
246	20.50	0.10	0.036	(0.076)	0.007	0.030
247	20.58	0.10	0.036	(0.076)	0.007	0.030
248	20.67	0.10	0.036	(0.075)	0.007	0.030
249	20.75	0.10	0.036	(0.075)	0.007	0.030
250	20.83	0.07	0.024	(0.075)	0.004	0.020
251	20.92	0.07	0.024	(0.074)	0.004	0.020
252	21.00	0.07	0.024	(0.074)	0.004	0.020
253	21.08	0.10	0.036	(0.074)	0.007	0.030
254	21.17	0.10	0.036	(0.073)	0.007	0.030
255	21.25	0.10	0.036	(0.073)	0.007	0.030
256	21.33	0.07	0.024	(0.073)	0.004	0.020
257	21.42	0.07	0.024	(0.073)	0.004	0.020

1+45	0. 0226	0. 16	Q
1+50	0. 0239	0. 19	Q
1+55	0. 0253	0. 21	Q
2+ 0	0. 0268	0. 21	Q
2+ 5	0. 0283	0. 21	QV
2+10	0. 0297	0. 21	QV
2+15	0. 0312	0. 21	QV
2+20	0. 0327	0. 21	QV
2+25	0. 0341	0. 21	QV
2+30	0. 0356	0. 21	QV
2+35	0. 0373	0. 24	QV
2+40	0. 0391	0. 26	Q
2+45	0. 0409	0. 27	Q
2+50	0. 0427	0. 27	Q
2+55	0. 0446	0. 27	Q
3+ 0	0. 0464	0. 27	Q
3+ 5	0. 0482	0. 27	Q
3+10	0. 0501	0. 27	Q
3+15	0. 0519	0. 27	Q
3+20	0. 0537	0. 27	Q
3+25	0. 0556	0. 27	QV
3+30	0. 0574	0. 27	QV
3+35	0. 0592	0. 27	QV
3+40	0. 0611	0. 27	QV
3+45	0. 0629	0. 27	QV
3+50	0. 0649	0. 30	QV
3+55	0. 0671	0. 32	QV
4+ 0	0. 0693	0. 32	QV
4+ 5	0. 0715	0. 32	QV
4+10	0. 0737	0. 32	QV
4+15	0. 0759	0. 32	QV
4+20	0. 0783	0. 35	QV
4+25	0. 0809	0. 37	QV
4+30	0. 0834	0. 37	Q V
4+35	0. 0860	0. 37	Q V
4+40	0. 0886	0. 37	Q V
4+45	0. 0911	0. 37	Q V
4+50	0. 0939	0. 40	Q V
4+55	0. 0968	0. 42	Q V
5+ 0	0. 0998	0. 43	Q V
5+ 5	0. 1023	0. 36	Q V
5+10	0. 1045	0. 33	Q V
5+15	0. 1067	0. 32	Q V
5+20	0. 1091	0. 35	Q V
5+25	0. 1117	0. 37	Q V
5+30	0. 1142	0. 37	Q V
5+35	0. 1170	0. 40	Q V
5+40	0. 1199	0. 42	Q V
5+45	0. 1229	0. 43	Q V
5+50	0. 1258	0. 43	Q V
5+55	0. 1287	0. 43	Q V
6+ 0	0. 1317	0. 43	Q V
6+ 5	0. 1348	0. 46	Q V
6+10	0. 1381	0. 48	Q V
6+15	0. 1414	0. 48	Q V
6+20	0. 1447	0. 48	Q V
6+25	0. 1480	0. 48	Q V
6+30	0. 1513	0. 48	Q V
6+35	0. 1548	0. 51	Q V
6+40	0. 1584	0. 53	Q V
6+45	0. 1621	0. 53	Q V
6+50	0. 1658	0. 53	Q V
6+55	0. 1694	0. 53	Q V
7+ 0	0. 1731	0. 53	Q V
7+ 5	0. 1768	0. 53	Q V
7+10	0. 1804	0. 53	Q V
7+15	0. 1841	0. 53	Q V
7+20	0. 1880	0. 56	Q V
7+25	0. 1920	0. 58	Q V
7+30	0. 1960	0. 59	Q V
7+35	0. 2002	0. 62	Q V
7+40	0. 2046	0. 64	Q V

7+45	0. 2090	0. 64
7+50	0. 2136	0. 67
7+55	0. 2184	0. 69
8+ 0	0. 2231	0. 69
8+ 5	0. 2283	0. 75
8+10	0. 2338	0. 79
8+15	0. 2393	0. 80
8+20	0. 2448	0. 80
8+25	0. 2503	0. 80
8+30	0. 2558	0. 80
8+35	0. 2615	0. 83
8+40	0. 2673	0. 85
8+45	0. 2732	0. 85
8+50	0. 2793	0. 88
8+55	0. 2855	0. 90
9+ 0	0. 2917	0. 90
9+ 5	0. 2984	0. 97
9+10	0. 3053	1. 01
9+15	0. 3123	1. 01
9+20	0. 3194	1. 04
9+25	0. 3267	1. 06
9+30	0. 3341	1. 06
9+35	0. 3416	1. 10
9+40	0. 3493	1. 11
9+45	0. 3570	1. 12
9+50	0. 3649	1. 15
9+55	0. 3729	1. 17
10+ 0	0. 3810	1. 17
10+ 5	0. 3876	0. 96
10+10	0. 3932	0. 82
10+15	0. 3987	0. 80
10+20	0. 4042	0. 80
10+25	0. 4097	0. 80
10+30	0. 4152	0. 80
10+35	0. 4218	0. 95
10+40	0. 4290	1. 05
10+45	0. 4363	1. 06
10+50	0. 4437	1. 06
10+55	0. 4510	1. 06
11+ 0	0. 4583	1. 06
11+ 5	0. 4655	1. 03
11+10	0. 4724	1. 01
11+15	0. 4794	1. 01
11+20	0. 4864	1. 01
11+25	0. 4933	1. 01
11+30	0. 5003	1. 01
11+35	0. 5068	0. 95
11+40	0. 5131	0. 91
11+45	0. 5193	0. 90
11+50	0. 5258	0. 94
11+55	0. 5324	0. 95
12+ 0	0. 5390	0. 96
12+ 5	0. 5470	1. 17
12+10	0. 5561	1. 31
12+15	0. 5652	1. 33
12+20	0. 5746	1. 36
12+25	0. 5841	1. 38
12+30	0. 5936	1. 38
12+35	0. 6036	1. 45
12+40	0. 6138	1. 48
12+45	0. 6241	1. 49
12+50	0. 6346	1. 52
12+55	0. 6452	1. 54
13+ 0	0. 6558	1. 54
13+ 5	0. 6675	1. 70
13+10	0. 6798	1. 79
13+15	0. 6923	1. 81
13+20	0. 7048	1. 81
13+25	0. 7172	1. 81
13+30	0. 7297	1. 81
13+35	0. 7398	1. 47
13+40	0. 7485	1. 26



19+45	1. 0551	0. 16	Q	V
19+50	1. 0560	0. 13	Q	V
19+55	1. 0568	0. 11	Q	V
20+ 0	1. 0575	0. 11	Q	V
20+ 5	1. 0584	0. 14	Q	V
20+10	1. 0595	0. 16	Q	V
20+15	1. 0606	0. 16	Q	V
20+20	1. 0617	0. 16	Q	V
20+25	1. 0628	0. 16	Q	V
20+30	1. 0639	0. 16	Q	V
20+35	1. 0650	0. 16	Q	V
20+40	1. 0661	0. 16	Q	V
20+45	1. 0672	0. 16	Q	V
20+50	1. 0681	0. 13	Q	V
20+55	1. 0689	0. 11	Q	V
21+ 0	1. 0696	0. 11	Q	V
21+ 5	1. 0705	0. 14	Q	V
21+10	1. 0716	0. 16	Q	V
21+15	1. 0727	0. 16	Q	V
21+20	1. 0736	0. 13	Q	V
21+25	1. 0744	0. 11	Q	V
21+30	1. 0751	0. 11	Q	V
21+35	1. 0760	0. 14	Q	V
21+40	1. 0771	0. 16	Q	V
21+45	1. 0782	0. 16	Q	V
21+50	1. 0791	0. 13	Q	V
21+55	1. 0799	0. 11	Q	V
22+ 0	1. 0806	0. 11	Q	V
22+ 5	1. 0815	0. 14	Q	V
22+10	1. 0826	0. 16	Q	V
22+15	1. 0837	0. 16	Q	V
22+20	1. 0846	0. 13	Q	V
22+25	1. 0854	0. 11	Q	V
22+30	1. 0861	0. 11	Q	V
22+35	1. 0868	0. 11	Q	V
22+40	1. 0876	0. 11	Q	V
22+45	1. 0883	0. 11	Q	V
22+50	1. 0890	0. 11	Q	V
22+55	1. 0898	0. 11	Q	V
23+ 0	1. 0905	0. 11	Q	V
23+ 5	1. 0912	0. 11	Q	V
23+10	1. 0920	0. 11	Q	V
23+15	1. 0927	0. 11	Q	V
23+20	1. 0934	0. 11	Q	V
23+25	1. 0942	0. 11	Q	V
23+30	1. 0949	0. 11	Q	V
23+35	1. 0956	0. 11	Q	V
23+40	1. 0964	0. 11	Q	V
23+45	1. 0971	0. 11	Q	V
23+50	1. 0978	0. 11	Q	V
23+55	1. 0986	0. 11	Q	V
24+ 0	1. 0993	0. 11	Q	V
24+ 5	1. 0996	0. 04	Q	V
24+10	1. 0996	0. 01	Q	V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PA0565.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 100-131
HYDROLOGIC ANALYSIS
5-YEAR

Drainage Area = 5.31(Ac.) = 0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 5.31(Ac.) = 0.008 Sq. Mi.
Length along longest watercourse = 699.00(Ft.)
Length along longest watercourse measured to centroid = 450.00(Ft.)
Length along longest watercourse = 0.132 Mi.
Length along longest watercourse measured to centroid = 0.085 Mi.
Difference in elevation = 14.70(Ft.)
Slope along watercourse = 111.0386 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.027 Hr.
Lag time = 1.61 Min.
25% of lag time = 0.40 Min.
40% of lag time = 0.64 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	1.20	6.37

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	3.00	15.93

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.622(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.622(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
5.310 56.00 0.900
Total Area Entered = 5.31(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134

Minimum soil loss rate ((In/Hr)) = 0.067

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	311.341	57.815
2	0.167	622.682	36.513
3	0.250	934.022	5.672
Sum = 100.000			Sum= 5.351

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.097	(0.134)	0.018	0.080
2	0.17	0.60	0.117	(0.134)	0.021	0.096
3	0.25	0.60	0.117	(0.134)	0.021	0.096
4	0.33	0.60	0.117	(0.134)	0.021	0.096
5	0.42	0.60	0.117	(0.134)	0.021	0.096
6	0.50	0.70	0.136	(0.134)	0.025	0.112
7	0.58	0.70	0.136	(0.134)	0.025	0.112
8	0.67	0.70	0.136	(0.134)	0.025	0.112
9	0.75	0.70	0.136	(0.134)	0.025	0.112
10	0.83	0.70	0.136	(0.134)	0.025	0.112
11	0.92	0.70	0.136	(0.134)	0.025	0.112
12	1.00	0.80	0.156	(0.134)	0.028	0.128
13	1.08	0.80	0.156	(0.134)	0.028	0.128
14	1.17	0.80	0.156	(0.134)	0.028	0.128
15	1.25	0.80	0.156	(0.134)	0.028	0.128
16	1.33	0.80	0.156	(0.134)	0.028	0.128
17	1.42	0.80	0.156	(0.134)	0.028	0.128
18	1.50	0.80	0.156	(0.134)	0.028	0.128
19	1.58	0.80	0.156	(0.134)	0.028	0.128
20	1.67	0.80	0.156	(0.134)	0.028	0.128
21	1.75	0.80	0.156	(0.134)	0.028	0.128
22	1.83	0.80	0.156	(0.134)	0.028	0.128
23	1.92	0.80	0.156	(0.134)	0.028	0.128
24	2.00	0.90	0.175	(0.134)	0.032	0.144
25	2.08	0.80	0.156	(0.134)	0.028	0.128
26	2.17	0.90	0.175	(0.134)	0.032	0.144
27	2.25	0.90	0.175	(0.134)	0.032	0.144
28	2.33	0.90	0.175	(0.134)	0.032	0.144
29	2.42	0.90	0.175	(0.134)	0.032	0.144
30	2.50	0.90	0.175	(0.134)	0.032	0.144
31	2.58	0.90	0.175	(0.134)	0.032	0.144
32	2.67	0.90	0.175	(0.134)	0.032	0.144
33	2.75	1.00	0.195	(0.134)	0.035	0.160
34	2.83	1.00	0.195	(0.134)	0.035	0.160
35	2.92	1.00	0.195	(0.134)	0.035	0.160
36	3.00	1.00	0.195	(0.134)	0.035	0.160
37	3.08	1.00	0.195	(0.134)	0.035	0.160
38	3.17	1.10	0.214	(0.134)	0.039	0.176
39	3.25	1.10	0.214	(0.134)	0.039	0.176
40	3.33	1.10	0.214	(0.134)	0.039	0.176
41	3.42	1.20	0.234	(0.134)	0.042	0.191

1+45	0.0866	0.68	Q	V			
1+50	0.0913	0.68	Q	V			
1+55	0.0960	0.68	Q	V			
2+ 0	0.1011	0.73	Q	V			
2+ 5	0.1060	0.71	Q	V			
2+10	0.1111	0.74	Q	V			
2+15	0.1163	0.76	Q	V			
2+20	0.1216	0.77	Q	V			
2+25	0.1269	0.77	Q	V			
2+30	0.1322	0.77	Q	V			
2+35	0.1375	0.77	Q	V			
2+40	0.1428	0.77	Q	V			
2+45	0.1484	0.82	Q	V			
2+50	0.1543	0.85	Q	V			
2+55	0.1602	0.85	Q	V			
3+ 0	0.1661	0.85	Q	V			
3+ 5	0.1719	0.85	Q	V			
3+10	0.1782	0.90	Q	V			
3+15	0.1846	0.93	Q	V			
3+20	0.1911	0.94	Q	V			
3+25	0.1979	0.99	Q	V			
3+30	0.2053	1.07	Q	V			
3+35	0.2132	1.16	Q	V			
3+40	0.2214	1.19	Q	V			
3+45	0.2300	1.25	Q	V			
3+50	0.2388	1.28	Q	V			
3+55	0.2479	1.33	Q	V			
4+ 0	0.2573	1.36	Q	V			
4+ 5	0.2671	1.42	Q	V			
4+10	0.2774	1.50	Q	V			
4+15	0.2883	1.58	Q	V			
4+20	0.2998	1.67	Q	V			
4+25	0.3118	1.75	Q	V			
4+30	0.3242	1.79	Q	V			
4+35	0.3369	1.84	Q	V			
4+40	0.3501	1.92	Q	V			
4+45	0.3640	2.01	Q	V			
4+50	0.3780	2.05	Q	V			
4+55	0.3925	2.10	Q	V			
5+ 0	0.4075	2.18	Q	V			
5+ 5	0.4245	2.46	Q	V			
5+10	0.4443	2.87	Q	V			
5+15	0.4664	3.21	Q	V			
5+20	0.4905	3.51	Q	V			
5+25	0.5177	3.94	Q	V			
5+30	0.5500	4.69	Q	V			
5+35	0.5709	3.04	Q	V			
5+40	0.5801	1.33	Q	V			
5+45	0.5847	0.67	Q	V			
5+50	0.5880	0.48	Q	V			
5+55	0.5903	0.33	Q	V			
6+ 0	0.5918	0.22	Q	V			
6+ 5	0.5923	0.08	Q	V			
6+10	0.5924	0.01	Q	V			

Unit Hydrograph Analysis

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 100-131
HYDROLOGIC ANALYSIS
5-YEAR

Drainage Area = 5.31(Ac.) = 0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 5.31(Ac.) = 0.008 Sq. Mi.
Length along longest watercourse = 699.00(Ft.)
Length along longest watercourse measured to centroid = 450.00(Ft.)
Length along longest watercourse = 0.132 Mi.
Length along longest watercourse measured to centroid = 0.085 Mi.
Difference in elevation = 14.70(Ft.)
Slope along watercourse = 111.0386 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.027 Hr.
Lag time = 1.61 Min.
25% of lag time = 0.40 Min.
40% of lag time = 0.64 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	0.90	4.78

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	2.35	12.48

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 1.240(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.240(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
5.310 56.00 0.900
Total Area Entered = 5.31(Ac.)

Total soil loss = 0.091(Ac. Ft)
 Total rainfall = 1.24(In)
 Flood volume = 19943.7 Cubic Feet
 Total soil loss = 3949.9 Cubic Feet

 Peak flow rate of this hydrograph = 5.488(CFS)

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3 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

 Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0034	0.49	VQ				
0+10	0.0089	0.80	V Q				
0+15	0.0142	0.77	V Q Q				
0+20	0.0203	0.88	V Q Q				
0+25	0.0269	0.96	VQ Q				
0+30	0.0344	1.09	VQ Q				
0+35	0.0417	1.05	VQ Q				
0+40	0.0493	1.10	Q				
0+45	0.0573	1.16	QV				
0+50	0.0646	1.06	QV				
0+55	0.0717	1.03	Q V				
1+ 0	0.0794	1.12	Q V				
1+ 5	0.0885	1.32	Q Q V				
1+10	0.0983	1.42	Q Q V V				
1+15	0.1082	1.44	Q Q V V				
1+20	0.1175	1.36	Q Q V V				
1+25	0.1281	1.54	Q Q V V				
1+30	0.1399	1.71	Q Q V V				
1+35	0.1513	1.65	Q Q V V				
1+40	0.1629	1.69	Q Q V V				
1+45	0.1766	1.98	Q Q V V				
1+50	0.1907	2.06	Q Q V V				
1+55	0.2042	1.96	Q Q V V				
2+ 0	0.2176	1.94	Q Q V V				
2+ 5	0.2313	1.99	Q Q V V				
2+10	0.2481	2.44	Q Q V V				
2+15	0.2688	3.00	Q Q V V				
2+20	0.2871	2.67	Q Q V V				
2+25	0.3129	3.74	Q Q V V				
2+30	0.3459	4.79	Q Q V V				
2+35	0.3837	5.49	Q Q V V				
2+40	0.4161	4.71	Q Q V V				
2+45	0.4336	2.54	Q Q V V				
2+50	0.4431	1.38	Q Q V V				
2+55	0.4513	1.18	Q Q V V				
3+ 0	0.4562	0.72	Q Q V V				
3+ 5	0.4577	0.21	Q Q V V				
3+10	0.4578	0.02	Q Q V V				

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PA0515.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 100-131
HYDROLOGIC ANALYSIS
5-YEAR

Drainage Area = 5.31(Ac.) = 0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 5.31(Ac.) = 0.008 Sq. Mi.
Length along longest watercourse = 699.00(Ft.)
Length along longest watercourse measured to centroid = 450.00(Ft.)
Length along longest watercourse = 0.132 Mi.
Length along longest watercourse measured to centroid = 0.085 Mi.
Difference in elevation = 14.70(Ft.)
Slope along watercourse = 111.0386 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.027 Hr.
Lag time = 1.61 Min.
25% of lag time = 0.40 Min.
40% of lag time = 0.64 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	0.54	2.87

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	1.36	7.22

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.732(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 0.732(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
5.310 56.00 0.900
Total Area Entered = 5.31(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Slope of intensity-duration curve for a 1 hour storm = 0.4800

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	311.341	57.815
2	0.167	622.682	36.513
3	0.250	934.022	5.672
Sum = 100.000			Sum = 5.351

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate (In./Hr) Max	Loss rate (In./Hr) Low	Effective (In/Hr)
1	0.08	4.40	0.387	(0.134)	0.070
2	0.17	4.50	0.395	(0.134)	0.071
3	0.25	5.40	0.474	(0.134)	0.085
4	0.33	5.40	0.474	(0.134)	0.085
5	0.42	5.70	0.501	(0.134)	0.090
6	0.50	6.40	0.562	(0.134)	0.101
7	0.58	7.90	0.694	(0.134)	0.125
8	0.67	9.10	0.799	0.134	(0.144)
9	0.75	12.80	1.124	0.134	(0.202)
10	0.83	25.60	2.249	0.134	(0.405)
11	0.92	7.90	0.694	(0.134)	0.125
12	1.00	4.90	0.430	(0.134)	0.077
Sum =	100.0				Sum = 7.6

(Loss Rate Not Used)
 Flood volume = Effective rainfall 0.63(In) times area 5.3(Ac.) / [(In)/(Ft.)] = 0.3(Ac. Ft)
 Total soil loss = 0.10(In)
 Total soil loss = 0.045(Ac. Ft)
 Total rainfall = 0.73(In)
 Flood volume = 12130.3 Cubic Feet
 Total soil loss = 1979.8 Cubic Feet

Peak flow rate of this hydrograph = 8.684(CFS)

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0068	0.98	V	Q			
0+10	0.0179	1.62	V	V	Q		
0+15	0.0313	1.93	V	V	Q		
0+20	0.0455	2.06	V	V	Q		
0+25	0.0603	2.15	V	V	Q		
0+30	0.0764	2.35	V	V	Q		

0+35	0.0956	2.79		Q	V			
0+40	0.1184	3.31			Q	V		
0+45	0.1497	4.54				V		
0+50	0.2095	8.68					V	
0+55	0.2522	6.20						Q
1+ 0	0.2718	2.85		Q				
1+ 5	0.2777	0.86	Q					
1+10	0.2785	0.11	Q					V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PA102410.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 100-131
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 5.31(Ac.) = 0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 5.31(Ac.) = 0.008 Sq. Mi.
Length along longest watercourse = 699.00(Ft.)
Length along longest watercourse measured to centroid = 450.00(Ft.)
Length along longest watercourse = 0.132 Mi.
Length along longest watercourse measured to centroid = 0.085 Mi.
Difference in elevation = 14.70(Ft.)
Slope along watercourse = 111.0386 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.027 Hr.
Lag time = 1.61 Min.
25% of lag time = 0.40 Min.
40% of lag time = 0.64 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	2.00	10.62

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	6.40	33.98

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 3.810(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 3.810(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
5.310 56.00 0.900
Total Area Entered = 5.31(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097

Minimum soil loss rate ((In/Hr)) = 0.049

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	311.341	57.815
2	0.167	622.682	36.513
3	0.250	934.022	5.672
Sum = 100.000			Sum= 5.351

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.030	(0.172)	0.005	0.025
2	0.17	0.07	0.030	(0.171)	0.005	0.025
3	0.25	0.07	0.030	(0.171)	0.005	0.025
4	0.33	0.10	0.046	(0.170)	0.008	0.037
5	0.42	0.10	0.046	(0.169)	0.008	0.037
6	0.50	0.10	0.046	(0.169)	0.008	0.037
7	0.58	0.10	0.046	(0.168)	0.008	0.037
8	0.67	0.10	0.046	(0.167)	0.008	0.037
9	0.75	0.10	0.046	(0.167)	0.008	0.037
10	0.83	0.13	0.061	(0.166)	0.011	0.050
11	0.92	0.13	0.061	(0.165)	0.011	0.050
12	1.00	0.13	0.061	(0.165)	0.011	0.050
13	1.08	0.10	0.046	(0.164)	0.008	0.037
14	1.17	0.10	0.046	(0.163)	0.008	0.037
15	1.25	0.10	0.046	(0.163)	0.008	0.037
16	1.33	0.10	0.046	(0.162)	0.008	0.037
17	1.42	0.10	0.046	(0.162)	0.008	0.037
18	1.50	0.10	0.046	(0.161)	0.008	0.037
19	1.58	0.10	0.046	(0.160)	0.008	0.037
20	1.67	0.10	0.046	(0.160)	0.008	0.037
21	1.75	0.10	0.046	(0.159)	0.008	0.037
22	1.83	0.13	0.061	(0.158)	0.011	0.050
23	1.92	0.13	0.061	(0.158)	0.011	0.050
24	2.00	0.13	0.061	(0.157)	0.011	0.050
25	2.08	0.13	0.061	(0.156)	0.011	0.050
26	2.17	0.13	0.061	(0.156)	0.011	0.050
27	2.25	0.13	0.061	(0.155)	0.011	0.050
28	2.33	0.13	0.061	(0.155)	0.011	0.050
29	2.42	0.13	0.061	(0.154)	0.011	0.050
30	2.50	0.13	0.061	(0.153)	0.011	0.050
31	2.58	0.17	0.076	(0.153)	0.014	0.062
32	2.67	0.17	0.076	(0.152)	0.014	0.062
33	2.75	0.17	0.076	(0.151)	0.014	0.062
34	2.83	0.17	0.076	(0.151)	0.014	0.062
35	2.92	0.17	0.076	(0.150)	0.014	0.062
36	3.00	0.17	0.076	(0.150)	0.014	0.062
37	3.08	0.17	0.076	(0.149)	0.014	0.062
38	3.17	0.17	0.076	(0.148)	0.014	0.062
39	3.25	0.17	0.076	(0.148)	0.014	0.062
40	3.33	0.17	0.076	(0.147)	0.014	0.062
41	3.42	0.17	0.076	(0.146)	0.014	0.062

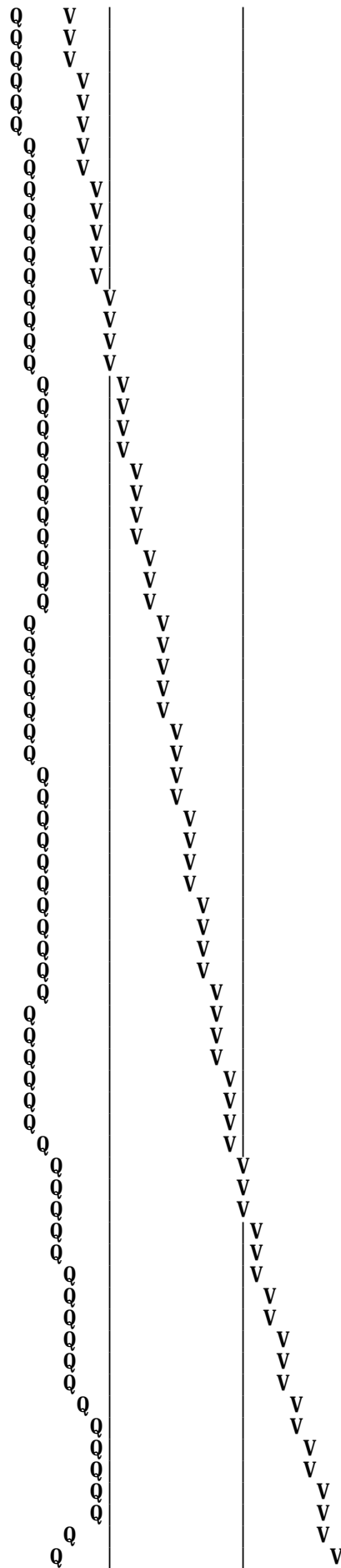
42	3.50	0.17	0.076	(0.146)	0.014	0.062
43	3.58	0.17	0.076	(0.145)	0.014	0.062
44	3.67	0.17	0.076	(0.145)	0.014	0.062
45	3.75	0.17	0.076	(0.144)	0.014	0.062
46	3.83	0.20	0.091	(0.143)	0.016	0.075
47	3.92	0.20	0.091	(0.143)	0.016	0.075
48	4.00	0.20	0.091	(0.142)	0.016	0.075
49	4.08	0.20	0.091	(0.142)	0.016	0.075
50	4.17	0.20	0.091	(0.141)	0.016	0.075
51	4.25	0.20	0.091	(0.140)	0.016	0.075
52	4.33	0.23	0.107	(0.140)	0.019	0.087
53	4.42	0.23	0.107	(0.139)	0.019	0.087
54	4.50	0.23	0.107	(0.139)	0.019	0.087
55	4.58	0.23	0.107	(0.138)	0.019	0.087
56	4.67	0.23	0.107	(0.137)	0.019	0.087
57	4.75	0.23	0.107	(0.137)	0.019	0.087
58	4.83	0.27	0.122	(0.136)	0.022	0.100
59	4.92	0.27	0.122	(0.136)	0.022	0.100
60	5.00	0.27	0.122	(0.135)	0.022	0.100
61	5.08	0.20	0.091	(0.134)	0.016	0.075
62	5.17	0.20	0.091	(0.134)	0.016	0.075
63	5.25	0.20	0.091	(0.133)	0.016	0.075
64	5.33	0.23	0.107	(0.133)	0.019	0.087
65	5.42	0.23	0.107	(0.132)	0.019	0.087
66	5.50	0.23	0.107	(0.132)	0.019	0.087
67	5.58	0.27	0.122	(0.131)	0.022	0.100
68	5.67	0.27	0.122	(0.130)	0.022	0.100
69	5.75	0.27	0.122	(0.130)	0.022	0.100
70	5.83	0.27	0.122	(0.129)	0.022	0.100
71	5.92	0.27	0.122	(0.129)	0.022	0.100
72	6.00	0.27	0.122	(0.128)	0.022	0.100
73	6.08	0.30	0.137	(0.128)	0.025	0.112
74	6.17	0.30	0.137	(0.127)	0.025	0.112
75	6.25	0.30	0.137	(0.126)	0.025	0.112
76	6.33	0.30	0.137	(0.126)	0.025	0.112
77	6.42	0.30	0.137	(0.125)	0.025	0.112
78	6.50	0.30	0.137	(0.125)	0.025	0.112
79	6.58	0.33	0.152	(0.124)	0.027	0.125
80	6.67	0.33	0.152	(0.124)	0.027	0.125
81	6.75	0.33	0.152	(0.123)	0.027	0.125
82	6.83	0.33	0.152	(0.122)	0.027	0.125
83	6.92	0.33	0.152	(0.122)	0.027	0.125
84	7.00	0.33	0.152	(0.121)	0.027	0.125
85	7.08	0.33	0.152	(0.121)	0.027	0.125
86	7.17	0.33	0.152	(0.120)	0.027	0.125
87	7.25	0.33	0.152	(0.120)	0.027	0.125
88	7.33	0.37	0.168	(0.119)	0.030	0.137
89	7.42	0.37	0.168	(0.119)	0.030	0.137
90	7.50	0.37	0.168	(0.118)	0.030	0.137
91	7.58	0.40	0.183	(0.118)	0.033	0.150
92	7.67	0.40	0.183	(0.117)	0.033	0.150
93	7.75	0.40	0.183	(0.116)	0.033	0.150
94	7.83	0.43	0.198	(0.116)	0.036	0.162
95	7.92	0.43	0.198	(0.115)	0.036	0.162
96	8.00	0.43	0.198	(0.115)	0.036	0.162
97	8.08	0.50	0.229	(0.114)	0.041	0.187
98	8.17	0.50	0.229	(0.114)	0.041	0.187
99	8.25	0.50	0.229	(0.113)	0.041	0.187
100	8.33	0.50	0.229	(0.113)	0.041	0.187
101	8.42	0.50	0.229	(0.112)	0.041	0.187
102	8.50	0.50	0.229	(0.112)	0.041	0.187
103	8.58	0.53	0.244	(0.111)	0.044	0.200
104	8.67	0.53	0.244	(0.111)	0.044	0.200
105	8.75	0.53	0.244	(0.110)	0.044	0.200
106	8.83	0.57	0.259	(0.110)	0.047	0.212
107	8.92	0.57	0.259	(0.109)	0.047	0.212
108	9.00	0.57	0.259	(0.109)	0.047	0.212
109	9.08	0.63	0.290	(0.108)	0.052	0.237
110	9.17	0.63	0.290	(0.108)	0.052	0.237
111	9.25	0.63	0.290	(0.107)	0.052	0.237
112	9.33	0.67	0.305	(0.107)	0.055	0.250
113	9.42	0.67	0.305	(0.106)	0.055	0.250

114	9.50	0.67	0.305	(0.105)	0.055	0.250
115	9.58	0.70	0.320	(0.105)	0.058	0.262
116	9.67	0.70	0.320	(0.104)	0.058	0.262
117	9.75	0.70	0.320	(0.104)	0.058	0.262
118	9.83	0.73	0.335	(0.103)	0.060	0.275
119	9.92	0.73	0.335	(0.103)	0.060	0.275
120	10.00	0.73	0.335	(0.102)	0.060	0.275
121	10.08	0.50	0.229	(0.102)	0.041	0.187
122	10.17	0.50	0.229	(0.101)	0.041	0.187
123	10.25	0.50	0.229	(0.101)	0.041	0.187
124	10.33	0.50	0.229	(0.101)	0.041	0.187
125	10.42	0.50	0.229	(0.100)	0.041	0.187
126	10.50	0.50	0.229	(0.100)	0.041	0.187
127	10.58	0.67	0.305	(0.099)	0.055	0.250
128	10.67	0.67	0.305	(0.099)	0.055	0.250
129	10.75	0.67	0.305	(0.098)	0.055	0.250
130	10.83	0.67	0.305	(0.098)	0.055	0.250
131	10.92	0.67	0.305	(0.097)	0.055	0.250
132	11.00	0.67	0.305	(0.097)	0.055	0.250
133	11.08	0.63	0.290	(0.096)	0.052	0.237
134	11.17	0.63	0.290	(0.096)	0.052	0.237
135	11.25	0.63	0.290	(0.095)	0.052	0.237
136	11.33	0.63	0.290	(0.095)	0.052	0.237
137	11.42	0.63	0.290	(0.094)	0.052	0.237
138	11.50	0.63	0.290	(0.094)	0.052	0.237
139	11.58	0.57	0.259	(0.093)	0.047	0.212
140	11.67	0.57	0.259	(0.093)	0.047	0.212
141	11.75	0.57	0.259	(0.092)	0.047	0.212
142	11.83	0.60	0.274	(0.092)	0.049	0.225
143	11.92	0.60	0.274	(0.092)	0.049	0.225
144	12.00	0.60	0.274	(0.091)	0.049	0.225
145	12.08	0.83	0.381	(0.091)	0.069	0.312
146	12.17	0.83	0.381	(0.090)	0.069	0.312
147	12.25	0.83	0.381	(0.090)	0.069	0.312
148	12.33	0.87	0.396	(0.089)	0.071	0.325
149	12.42	0.87	0.396	(0.089)	0.071	0.325
150	12.50	0.87	0.396	(0.088)	0.071	0.325
151	12.58	0.93	0.427	(0.088)	0.077	0.350
152	12.67	0.93	0.427	(0.087)	0.077	0.350
153	12.75	0.93	0.427	(0.087)	0.077	0.350
154	12.83	0.97	0.442	(0.087)	0.080	0.362
155	12.92	0.97	0.442	(0.086)	0.080	0.362
156	13.00	0.97	0.442	(0.086)	0.080	0.362
157	13.08	1.13	0.518	0.085 (0.093)		0.433
158	13.17	1.13	0.518	0.085 (0.093)		0.433
159	13.25	1.13	0.518	0.084 (0.093)		0.434
160	13.33	1.13	0.518	0.084 (0.093)		0.434
161	13.42	1.13	0.518	0.084 (0.093)		0.435
162	13.50	1.13	0.518	0.083 (0.093)		0.435
163	13.58	0.77	0.351	(0.083)	0.063	0.287
164	13.67	0.77	0.351	(0.082)	0.063	0.287
165	13.75	0.77	0.351	(0.082)	0.063	0.287
166	13.83	0.77	0.351	(0.081)	0.063	0.287
167	13.92	0.77	0.351	(0.081)	0.063	0.287
168	14.00	0.77	0.351	(0.081)	0.063	0.287
169	14.08	0.90	0.411	(0.080)	0.074	0.337
170	14.17	0.90	0.411	(0.080)	0.074	0.337
171	14.25	0.90	0.411	(0.079)	0.074	0.337
172	14.33	0.87	0.396	(0.079)	0.071	0.325
173	14.42	0.87	0.396	(0.079)	0.071	0.325
174	14.50	0.87	0.396	(0.078)	0.071	0.325
175	14.58	0.87	0.396	(0.078)	0.071	0.325
176	14.67	0.87	0.396	(0.077)	0.071	0.325
177	14.75	0.87	0.396	(0.077)	0.071	0.325
178	14.83	0.83	0.381	(0.077)	0.069	0.312
179	14.92	0.83	0.381	(0.076)	0.069	0.312
180	15.00	0.83	0.381	(0.076)	0.069	0.312
181	15.08	0.80	0.366	(0.075)	0.066	0.300
182	15.17	0.80	0.366	(0.075)	0.066	0.300
183	15.25	0.80	0.366	(0.075)	0.066	0.300
184	15.33	0.77	0.351	(0.074)	0.063	0.287
185	15.42	0.77	0.351	(0.074)	0.063	0.287

186	15.50	0.77	0.351	(0.073)	0.063	0.287
187	15.58	0.63	0.290	(0.073)	0.052	0.237
188	15.67	0.63	0.290	(0.073)	0.052	0.237
189	15.75	0.63	0.290	(0.072)	0.052	0.237
190	15.83	0.63	0.290	(0.072)	0.052	0.237
191	15.92	0.63	0.290	(0.072)	0.052	0.237
192	16.00	0.63	0.290	(0.071)	0.052	0.237
193	16.08	0.13	0.061	(0.071)	0.011	0.050
194	16.17	0.13	0.061	(0.071)	0.011	0.050
195	16.25	0.13	0.061	(0.070)	0.011	0.050
196	16.33	0.13	0.061	(0.070)	0.011	0.050
197	16.42	0.13	0.061	(0.069)	0.011	0.050
198	16.50	0.13	0.061	(0.069)	0.011	0.050
199	16.58	0.10	0.046	(0.069)	0.008	0.037
200	16.67	0.10	0.046	(0.068)	0.008	0.037
201	16.75	0.10	0.046	(0.068)	0.008	0.037
202	16.83	0.10	0.046	(0.068)	0.008	0.037
203	16.92	0.10	0.046	(0.067)	0.008	0.037
204	17.00	0.10	0.046	(0.067)	0.008	0.037
205	17.08	0.17	0.076	(0.067)	0.014	0.062
206	17.17	0.17	0.076	(0.066)	0.014	0.062
207	17.25	0.17	0.076	(0.066)	0.014	0.062
208	17.33	0.17	0.076	(0.066)	0.014	0.062
209	17.42	0.17	0.076	(0.065)	0.014	0.062
210	17.50	0.17	0.076	(0.065)	0.014	0.062
211	17.58	0.17	0.076	(0.065)	0.014	0.062
212	17.67	0.17	0.076	(0.064)	0.014	0.062
213	17.75	0.17	0.076	(0.064)	0.014	0.062
214	17.83	0.13	0.061	(0.064)	0.011	0.050
215	17.92	0.13	0.061	(0.063)	0.011	0.050
216	18.00	0.13	0.061	(0.063)	0.011	0.050
217	18.08	0.13	0.061	(0.063)	0.011	0.050
218	18.17	0.13	0.061	(0.063)	0.011	0.050
219	18.25	0.13	0.061	(0.062)	0.011	0.050
220	18.33	0.13	0.061	(0.062)	0.011	0.050
221	18.42	0.13	0.061	(0.062)	0.011	0.050
222	18.50	0.13	0.061	(0.061)	0.011	0.050
223	18.58	0.10	0.046	(0.061)	0.008	0.037
224	18.67	0.10	0.046	(0.061)	0.008	0.037
225	18.75	0.10	0.046	(0.060)	0.008	0.037
226	18.83	0.07	0.030	(0.060)	0.005	0.025
227	18.92	0.07	0.030	(0.060)	0.005	0.025
228	19.00	0.07	0.030	(0.060)	0.005	0.025
229	19.08	0.10	0.046	(0.059)	0.008	0.037
230	19.17	0.10	0.046	(0.059)	0.008	0.037
231	19.25	0.10	0.046	(0.059)	0.008	0.037
232	19.33	0.13	0.061	(0.058)	0.011	0.050
233	19.42	0.13	0.061	(0.058)	0.011	0.050
234	19.50	0.13	0.061	(0.058)	0.011	0.050
235	19.58	0.10	0.046	(0.058)	0.008	0.037
236	19.67	0.10	0.046	(0.057)	0.008	0.037
237	19.75	0.10	0.046	(0.057)	0.008	0.037
238	19.83	0.07	0.030	(0.057)	0.005	0.025
239	19.92	0.07	0.030	(0.057)	0.005	0.025
240	20.00	0.07	0.030	(0.056)	0.005	0.025
241	20.08	0.10	0.046	(0.056)	0.008	0.037
242	20.17	0.10	0.046	(0.056)	0.008	0.037
243	20.25	0.10	0.046	(0.056)	0.008	0.037
244	20.33	0.10	0.046	(0.055)	0.008	0.037
245	20.42	0.10	0.046	(0.055)	0.008	0.037
246	20.50	0.10	0.046	(0.055)	0.008	0.037
247	20.58	0.10	0.046	(0.055)	0.008	0.037
248	20.67	0.10	0.046	(0.054)	0.008	0.037
249	20.75	0.10	0.046	(0.054)	0.008	0.037
250	20.83	0.07	0.030	(0.054)	0.005	0.025
251	20.92	0.07	0.030	(0.054)	0.005	0.025
252	21.00	0.07	0.030	(0.054)	0.005	0.025
253	21.08	0.10	0.046	(0.053)	0.008	0.037
254	21.17	0.10	0.046	(0.053)	0.008	0.037
255	21.25	0.10	0.046	(0.053)	0.008	0.037
256	21.33	0.07	0.030	(0.053)	0.005	0.025
257	21.42	0.07	0.030	(0.053)	0.005	0.025

1+45	0. 0284	0. 20	Q
1+50	0. 0300	0. 24	Q
1+55	0. 0318	0. 26	VQ
2+ 0	0. 0337	0. 27	VQ
2+ 5	0. 0355	0. 27	Q
2+10	0. 0374	0. 27	Q
2+15	0. 0392	0. 27	Q
2+20	0. 0411	0. 27	Q
2+25	0. 0429	0. 27	Q
2+30	0. 0447	0. 27	Q
2+35	0. 0469	0. 31	Q
2+40	0. 0491	0. 33	Q
2+45	0. 0514	0. 33	Q
2+50	0. 0537	0. 33	Q
2+55	0. 0560	0. 33	Q
3+ 0	0. 0583	0. 33	Q
3+ 5	0. 0606	0. 33	Q
3+10	0. 0630	0. 33	Q
3+15	0. 0653	0. 33	Q
3+20	0. 0676	0. 33	Q
3+25	0. 0699	0. 33	QV
3+30	0. 0722	0. 33	QV
3+35	0. 0745	0. 33	QV
3+40	0. 0768	0. 33	QV
3+45	0. 0791	0. 33	QV
3+50	0. 0817	0. 37	QV
3+55	0. 0844	0. 40	QV
4+ 0	0. 0872	0. 40	QV
4+ 5	0. 0899	0. 40	QV
4+10	0. 0927	0. 40	QV
4+15	0. 0955	0. 40	QV
4+20	0. 0985	0. 44	QV
4+25	0. 1017	0. 46	QV
4+30	0. 1049	0. 47	Q V
4+35	0. 1081	0. 47	Q V
4+40	0. 1114	0. 47	Q V
4+45	0. 1146	0. 47	Q V
4+50	0. 1181	0. 51	QV
4+55	0. 1217	0. 53	QV
5+ 0	0. 1254	0. 54	QV
5+ 5	0. 1286	0. 46	Q V
5+10	0. 1314	0. 41	Q V
5+15	0. 1342	0. 40	Q V
5+20	0. 1372	0. 44	Q V
5+25	0. 1404	0. 46	Q V
5+30	0. 1436	0. 47	Q V
5+35	0. 1471	0. 51	Q V
5+40	0. 1508	0. 53	Q V
5+45	0. 1545	0. 54	Q V
5+50	0. 1581	0. 54	Q V
5+55	0. 1618	0. 54	Q V
6+ 0	0. 1655	0. 54	Q V
6+ 5	0. 1695	0. 57	Q V
6+10	0. 1736	0. 60	Q V
6+15	0. 1777	0. 60	Q V
6+20	0. 1819	0. 60	Q V
6+25	0. 1860	0. 60	Q V
6+30	0. 1902	0. 60	Q V
6+35	0. 1946	0. 64	Q V
6+40	0. 1992	0. 67	Q V
6+45	0. 2038	0. 67	Q V
6+50	0. 2084	0. 67	Q V
6+55	0. 2130	0. 67	Q V
7+ 0	0. 2176	0. 67	Q V
7+ 5	0. 2222	0. 67	Q V
7+10	0. 2268	0. 67	Q V
7+15	0. 2314	0. 67	Q V
7+20	0. 2363	0. 71	Q V
7+25	0. 2414	0. 73	Q V
7+30	0. 2464	0. 74	Q V
7+35	0. 2518	0. 77	Q V
7+40	0. 2573	0. 80	Q V

7+45	0. 2628	0. 80
7+50	0. 2686	0. 84
7+55	0. 2746	0. 87
8+ 0	0. 2805	0. 87
8+ 5	0. 2871	0. 95
8+10	0. 2939	1. 00
8+15	0. 3008	1. 00
8+20	0. 3078	1. 00
8+25	0. 3147	1. 00
8+30	0. 3216	1. 00
8+35	0. 3288	1. 04
8+40	0. 3361	1. 07
8+45	0. 3435	1. 07
8+50	0. 3511	1. 11
8+55	0. 3589	1. 13
9+ 0	0. 3668	1. 14
9+ 5	0. 3751	1. 21
9+10	0. 3838	1. 26
9+15	0. 3926	1. 27
9+20	0. 4016	1. 31
9+25	0. 4108	1. 33
9+30	0. 4200	1. 34
9+35	0. 4295	1. 38
9+40	0. 4392	1. 40
9+45	0. 4488	1. 41
9+50	0. 4588	1. 44
9+55	0. 4689	1. 47
10+ 0	0. 4790	1. 47
10+ 5	0. 4873	1. 20
10+10	0. 4944	1. 03
10+15	0. 5013	1. 00
10+20	0. 5082	1. 00
10+25	0. 5151	1. 00
10+30	0. 5220	1. 00
10+35	0. 5303	1. 20
10+40	0. 5394	1. 32
10+45	0. 5486	1. 34
10+50	0. 5578	1. 34
10+55	0. 5670	1. 34
11+ 0	0. 5762	1. 34
11+ 5	0. 5852	1. 30
11+10	0. 5940	1. 28
11+15	0. 6027	1. 27
11+20	0. 6115	1. 27
11+25	0. 6202	1. 27
11+30	0. 6290	1. 27
11+35	0. 6372	1. 19
11+40	0. 6451	1. 15
11+45	0. 6529	1. 14
11+50	0. 6610	1. 18
11+55	0. 6693	1. 20
12+ 0	0. 6776	1. 20
12+ 5	0. 6878	1. 48
12+10	0. 6991	1. 65
12+15	0. 7106	1. 67
12+20	0. 7224	1. 71
12+25	0. 7344	1. 74
12+30	0. 7464	1. 74
12+35	0. 7589	1. 82
12+40	0. 7717	1. 87
12+45	0. 7846	1. 87
12+50	0. 7978	1. 91
12+55	0. 8111	1. 94
13+ 0	0. 8245	1. 94
13+ 5	0. 8394	2. 16
13+10	0. 8552	2. 30
13+15	0. 8712	2. 32
13+20	0. 8872	2. 32
13+25	0. 9032	2. 33
13+30	0. 9192	2. 33
13+35	0. 9321	1. 87
13+40	0. 9430	1. 58



19+45	1. 3286	0. 20	Q	V
19+50	1. 3297	0. 16	Q	V
19+55	1. 3306	0. 14	Q	V
20+ 0	1. 3315	0. 13	Q	V
20+ 5	1. 3327	0. 17	Q	V
20+10	1. 3341	0. 20	Q	V
20+15	1. 3355	0. 20	Q	V
20+20	1. 3369	0. 20	Q	V
20+25	1. 3382	0. 20	Q	V
20+30	1. 3396	0. 20	Q	V
20+35	1. 3410	0. 20	Q	V
20+40	1. 3424	0. 20	Q	V
20+45	1. 3438	0. 20	Q	V
20+50	1. 3449	0. 16	Q	V
20+55	1. 3458	0. 14	Q	V
21+ 0	1. 3468	0. 13	Q	V
21+ 5	1. 3479	0. 17	Q	V
21+10	1. 3493	0. 20	Q	V
21+15	1. 3507	0. 20	Q	V
21+20	1. 3518	0. 16	Q	V
21+25	1. 3527	0. 14	Q	V
21+30	1. 3537	0. 13	Q	V
21+35	1. 3549	0. 17	Q	V
21+40	1. 3562	0. 20	Q	V
21+45	1. 3576	0. 20	Q	V
21+50	1. 3587	0. 16	Q	V
21+55	1. 3597	0. 14	Q	V
22+ 0	1. 3606	0. 13	Q	V
22+ 5	1. 3618	0. 17	Q	V
22+10	1. 3631	0. 20	Q	V
22+15	1. 3645	0. 20	Q	V
22+20	1. 3656	0. 16	Q	V
22+25	1. 3666	0. 14	Q	V
22+30	1. 3675	0. 13	Q	V
22+35	1. 3684	0. 13	Q	V
22+40	1. 3693	0. 13	Q	V
22+45	1. 3703	0. 13	Q	V
22+50	1. 3712	0. 13	Q	V
22+55	1. 3721	0. 13	Q	V
23+ 0	1. 3730	0. 13	Q	V
23+ 5	1. 3739	0. 13	Q	V
23+10	1. 3749	0. 13	Q	V
23+15	1. 3758	0. 13	Q	V
23+20	1. 3767	0. 13	Q	V
23+25	1. 3776	0. 13	Q	V
23+30	1. 3786	0. 13	Q	V
23+35	1. 3795	0. 13	Q	V
23+40	1. 3804	0. 13	Q	V
23+45	1. 3813	0. 13	Q	V
23+50	1. 3822	0. 13	Q	V
23+55	1. 3832	0. 13	Q	V
24+ 0	1. 3841	0. 13	Q	V
24+ 5	1. 3845	0. 06	Q	V
24+10	1. 3845	0. 01	Q	V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PA10610.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 100-131
HYDROLOGIC ANALYSIS
10-YEAR

Drainage Area = 5.31(Ac.) = 0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 5.31(Ac.) = 0.008 Sq. Mi.
Length along longest watercourse = 699.00(Ft.)
Length along longest watercourse measured to centroid = 450.00(Ft.)
Length along longest watercourse = 0.132 Mi.
Length along longest watercourse measured to centroid = 0.085 Mi.
Difference in elevation = 14.70(Ft.)
Slope along watercourse = 111.0386 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.027 Hr.
Lag time = 1.61 Min.
25% of lag time = 0.40 Min.
40% of lag time = 0.64 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	1.20	6.37

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	3.00	15.93

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.941(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.940(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
5.310 56.00 0.900
Total Area Entered = 5.31(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097

Minimum soil loss rate ((In/Hr)) = 0.049

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	311.341	57.815
2	0.167	622.682	36.513
3	0.250	934.022	5.672
Sum = 100.000			Sum= 5.351

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.116	(0.097)	0.021	0.095
2	0.17	0.60	0.140	(0.097)	0.025	0.115
3	0.25	0.60	0.140	(0.097)	0.025	0.115
4	0.33	0.60	0.140	(0.097)	0.025	0.115
5	0.42	0.60	0.140	(0.097)	0.025	0.115
6	0.50	0.70	0.163	(0.097)	0.029	0.134
7	0.58	0.70	0.163	(0.097)	0.029	0.134
8	0.67	0.70	0.163	(0.097)	0.029	0.134
9	0.75	0.70	0.163	(0.097)	0.029	0.134
10	0.83	0.70	0.163	(0.097)	0.029	0.134
11	0.92	0.70	0.163	(0.097)	0.029	0.134
12	1.00	0.80	0.186	(0.097)	0.034	0.153
13	1.08	0.80	0.186	(0.097)	0.034	0.153
14	1.17	0.80	0.186	(0.097)	0.034	0.153
15	1.25	0.80	0.186	(0.097)	0.034	0.153
16	1.33	0.80	0.186	(0.097)	0.034	0.153
17	1.42	0.80	0.186	(0.097)	0.034	0.153
18	1.50	0.80	0.186	(0.097)	0.034	0.153
19	1.58	0.80	0.186	(0.097)	0.034	0.153
20	1.67	0.80	0.186	(0.097)	0.034	0.153
21	1.75	0.80	0.186	(0.097)	0.034	0.153
22	1.83	0.80	0.186	(0.097)	0.034	0.153
23	1.92	0.80	0.186	(0.097)	0.034	0.153
24	2.00	0.90	0.210	(0.097)	0.038	0.172
25	2.08	0.80	0.186	(0.097)	0.034	0.153
26	2.17	0.90	0.210	(0.097)	0.038	0.172
27	2.25	0.90	0.210	(0.097)	0.038	0.172
28	2.33	0.90	0.210	(0.097)	0.038	0.172
29	2.42	0.90	0.210	(0.097)	0.038	0.172
30	2.50	0.90	0.210	(0.097)	0.038	0.172
31	2.58	0.90	0.210	(0.097)	0.038	0.172
32	2.67	0.90	0.210	(0.097)	0.038	0.172
33	2.75	1.00	0.233	(0.097)	0.042	0.191
34	2.83	1.00	0.233	(0.097)	0.042	0.191
35	2.92	1.00	0.233	(0.097)	0.042	0.191
36	3.00	1.00	0.233	(0.097)	0.042	0.191
37	3.08	1.00	0.233	(0.097)	0.042	0.191
38	3.17	1.10	0.256	(0.097)	0.046	0.210
39	3.25	1.10	0.256	(0.097)	0.046	0.210
40	3.33	1.10	0.256	(0.097)	0.046	0.210
41	3.42	1.20	0.279	(0.097)	0.050	0.229

1+45	0. 1036	0. 82	Q	V			
1+50	0. 1093	0. 82	Q	V			
1+55	0. 1149	0. 82	Q	V			
2+ 0	0. 1209	0. 88	Q	V			
2+ 5	0. 1268	0. 86	Q	V			
2+10	0. 1329	0. 88	Q	V			
2+15	0. 1392	0. 91	Q	V			
2+20	0. 1455	0. 92	Q	V			
2+25	0. 1519	0. 92	Q	V			
2+30	0. 1582	0. 92	Q	V			
2+35	0. 1645	0. 92	Q	V			
2+40	0. 1709	0. 92	Q	V			
2+45	0. 1776	0. 98	Q	V			
2+50	0. 1846	1. 02	Q	V			
2+55	0. 1917	1. 02	Q	V			
3+ 0	0. 1987	1. 02	Q	V			
3+ 5	0. 2058	1. 02	Q	V			
3+10	0. 2132	1. 08	Q	V			
3+15	0. 2209	1. 12	Q	V			
3+20	0. 2286	1. 12	Q	V			
3+25	0. 2368	1. 18	Q	V			
3+30	0. 2456	1. 28	Q	V			
3+35	0. 2551	1. 38	Q	V			
3+40	0. 2650	1. 43	Q	V			
3+45	0. 2752	1. 49	Q	V			
3+50	0. 2857	1. 53	Q	V			
3+55	0. 2967	1. 59	Q	V			
4+ 0	0. 3079	1. 63	Q	V			
4+ 5	0. 3196	1. 69	Q	V			
4+10	0. 3319	1. 79	Q	V			
4+15	0. 3450	1. 89	Q	V			
4+20	0. 3587	2. 00	Q	V			
4+25	0. 3732	2. 10	Q	V			
4+30	0. 3879	2. 14	Q	V			
4+35	0. 4031	2. 21	Q	V			
4+40	0. 4190	2. 30	Q	V			
4+45	0. 4356	2. 42	Q	V			
4+50	0. 4526	2. 47	Q	V			
4+55	0. 4701	2. 54	Q	V			
5+ 0	0. 4885	2. 66	Q	V			
5+ 5	0. 5096	3. 08	Q	V			
5+10	0. 5349	3. 67	Q	V			
5+15	0. 5635	4. 15	Q	V			
5+20	0. 5948	4. 54	Q	V			
5+25	0. 6296	5. 06	Q	V			
5+30	0. 6706	5. 95	Q	V			
5+35	0. 6966	3. 79	Q	V			
5+40	0. 7077	1. 61	Q	V			
5+45	0. 7132	0. 80	Q	V			
5+50	0. 7172	0. 57	Q	V			
5+55	0. 7199	0. 40	Q	V			
6+ 0	0. 7217	0. 26	Q	V			
6+ 5	0. 7223	0. 09	Q	V			
6+10	0. 7224	0. 01	Q	V			

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PA10310.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 100-131
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 5.31(Ac.) = 0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 5.31(Ac.) = 0.008 Sq. Mi.
Length along longest watercourse = 699.00(Ft.)
Length along longest watercourse measured to centroid = 450.00(Ft.)
Length along longest watercourse = 0.132 Mi.
Length along longest watercourse measured to centroid = 0.085 Mi.
Difference in elevation = 14.70(Ft.)
Slope along watercourse = 111.0386 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.027 Hr.
Lag time = 1.61 Min.
25% of lag time = 0.40 Min.
40% of lag time = 0.64 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	0.90	4.78

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	2.35	12.48

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 1.497(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.497(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
5.310 56.00 0.900
Total Area Entered = 5.31(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097

Minimum soil loss rate ((In/Hr)) = 0.049

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	311.341	57.815
2	0.167	622.682	36.513
3	0.250	934.022	5.672
Sum = 100.000			Sum = 5.351

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max | Low	Effective (In/Hr)
1	0.08	1.30	(0.097) | 0.042	0.191
2	0.17	1.30	(0.097) | 0.042	0.191
3	0.25	1.10	(0.097) | 0.036	0.162
4	0.33	1.50	(0.097) | 0.048	0.221
5	0.42	1.50	(0.097) | 0.048	0.221
6	0.50	1.80	(0.097) | 0.058	0.265
7	0.58	1.50	(0.097) | 0.048	0.221
8	0.67	1.80	(0.097) | 0.058	0.265
9	0.75	1.80	(0.097) | 0.058	0.265
10	0.83	1.50	(0.097) | 0.048	0.221
11	0.92	1.60	(0.097) | 0.052	0.236
12	1.00	1.80	(0.097) | 0.058	0.265
13	1.08	2.20	(0.097) | 0.071	0.324
14	1.17	2.20	(0.097) | 0.071	0.324
15	1.25	2.20	(0.097) | 0.071	0.324
16	1.33	2.00	(0.097) | 0.065	0.295
17	1.42	2.60	(0.097) | 0.084	0.383
18	1.50	2.70	(0.097) | 0.087	0.398
19	1.58	2.40	(0.097) | 0.078	0.353
20	1.67	2.70	(0.097) | 0.087	0.398
21	1.75	3.30	(0.097) | ( 0.107)	0.496
22	1.83	3.10	(0.097) | ( 0.100)	0.460
23	1.92	2.90	(0.097) | 0.094	0.427
24	2.00	3.00	(0.097) | 0.097	0.442
25	2.08	3.10	(0.097) | ( 0.100)	0.460
26	2.17	4.20	(0.097) | ( 0.136)	0.657
27	2.25	5.00	(0.097) | ( 0.162)	0.801
28	2.33	3.50	(0.097) | ( 0.113)	0.531
29	2.42	6.80	(0.097) | ( 0.220)	1.124
30	2.50	7.30	(0.097) | ( 0.236)	1.214
31	2.58	8.20	(0.097) | ( 0.265)	1.376
32	2.67	5.90	(0.097) | ( 0.191)	0.962
33	2.75	2.00	(0.097) | 0.065	0.295
34	2.83	1.80	(0.097) | 0.058	0.265
35	2.92	1.80	(0.097) | 0.058	0.265
36	3.00	0.60	(0.097) | 0.019	0.088

(Loss Rate Not Used)

Sum = 100.0

Sum = 15.4

Flood volume = Effective rainfall 1.28(In)

times area 5.3(Ac.) / [(In)/(Ft.)] = 0.6(Ac. Ft)

Total soil loss = 0.21(In)

Total soil loss = 0.095(Ac. Ft)
 Total rainfall = 1.50(In)
 Flood volume = 24711.4 Cubic Feet
 Total soil loss = 4134.3 Cubic Feet

 Peak flow rate of this hydrograph = 6.973(CFS)

+++++
 3 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0041	0.59	V Q				
0+10	0.0107	0.97	V Q				
0+15	0.0172	0.93	V Q				
0+20	0.0245	1.06	V Q				
0+25	0.0325	1.16	V Q				
0+30	0.0416	1.32	V Q				
0+35	0.0503	1.27	V Q				
0+40	0.0595	1.33	V Q				
0+45	0.0692	1.41	V Q				
0+50	0.0780	1.28	V Q				
0+55	0.0866	1.24	Q V				
1+ 0	0.0958	1.35	Q V				
1+ 5	0.1068	1.59	Q V				
1+10	0.1186	1.72	Q V				
1+15	0.1306	1.73	Q V				
1+20	0.1419	1.64	Q V				
1+25	0.1547	1.86	Q V				
1+30	0.1689	2.07	Q V				
1+35	0.1826	1.99	Q V				
1+40	0.1967	2.04	Q V				
1+45	0.2134	2.42	Q V				
1+50	0.2307	2.51	Q V				
1+55	0.2470	2.37	Q V				
2+ 0	0.2631	2.34	Q V				
2+ 5	0.2798	2.42	Q V				
2+10	0.3009	3.07	Q V				
2+15	0.3278	3.90	Q V				
2+20	0.3513	3.41	Q V				
2+25	0.3841	4.76	Q V				
2+30	0.4262	6.12	Q V				
2+35	0.4742	6.97	Q V				
2+40	0.5158	6.04	Q V				
2+45	0.5379	3.21	Q V				
2+50	0.5495	1.69	Q V				
2+55	0.5594	1.43	Q V				
3+ 0	0.5654	0.87	Q V				
3+ 5	0.5671	0.25	Q V				
3+10	0.5673	0.03	Q V				

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PA10110.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 100-131
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 5.31(Ac.) = 0.008 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 5.31(Ac.) = 0.008 Sq. Mi.
Length along longest watercourse = 699.00(Ft.)
Length along longest watercourse measured to centroid = 450.00(Ft.)
Length along longest watercourse = 0.132 Mi.
Length along longest watercourse measured to centroid = 0.085 Mi.
Difference in elevation = 14.70(Ft.)
Slope along watercourse = 111.0386 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.027 Hr.
Lag time = 1.61 Min.
25% of lag time = 0.40 Min.
40% of lag time = 0.64 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	0.54	2.87

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
5.31	1.36	7.22

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.877(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 0.877(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
5.310 56.00 0.900
Total Area Entered = 5.31(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097
 Minimum soil loss rate ((In/Hr)) = 0.049
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Slope of intensity-duration curve for a 1 hour storm = 0.4800

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	311.341	57.815
2	0.167	622.682	36.513
3	0.250	934.022	5.672
Sum = 100.000			Sum = 5.351

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate (In./Hr) Max	Loss rate (In./Hr) Low	Effective (In/Hr)
1	0.08	4.40	0.463	(0.097)	0.083
2	0.17	4.50	0.474	(0.097)	0.085
3	0.25	5.40	0.568	0.097	(0.102)
4	0.33	5.40	0.568	0.097	(0.102)
5	0.42	5.70	0.600	0.097	(0.108)
6	0.50	6.40	0.674	0.097	(0.121)
7	0.58	7.90	0.832	0.097	(0.150)
8	0.67	9.10	0.958	0.097	(0.172)
9	0.75	12.80	1.348	0.097	(0.243)
10	0.83	25.60	2.695	0.097	(0.485)
11	0.92	7.90	0.832	0.097	(0.150)
12	1.00	4.90	0.516	(0.097)	0.093
Sum =	100.0				Sum = 9.4

(Loss Rate Not Used)
 Flood volume = Effective rainfall 0.78(In) times area 5.3(Ac.) / [(In)/(Ft.)] = 0.3(Ac. Ft)
 Total soil loss = 0.09(In)
 Total soil loss = 0.042(Ac. Ft)
 Total rainfall = 0.88(In)
 Flood volume = 15087.4 Cubic Feet
 Total soil loss = 1823.1 Cubic Feet

Peak flow rate of this hydrograph = 10.749(CFS)

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0081	1.18	V	Q			
0+10	0.0215	1.95	V	Q			
0+15	0.0376	2.33		Q			
0+20	0.0548	2.50		Q	V		
0+25	0.0728	2.62		Q	V		
0+30	0.0929	2.91		Q	V		

0+35	0. 1174	3. 55		Q	V			
0+40	0. 1468	4. 28		Q		V		
0+45	0. 1866	5. 78			Q		V	
0+50	0. 2606	10. 75				Q	V	
0+55	0. 3139	7. 73						V
1+ 0	0. 3382	3. 53		Q				V
1+ 5	0. 3455	1. 05	Q					V
1+10	0. 3464	0. 13	Q					V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PB02242.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 132
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 0.13(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.13(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 81.00(Ft.)
Length along longest watercourse measured to centroid = 30.00(Ft.)
Length along longest watercourse = 0.015 Mi.
Length along longest watercourse measured to centroid = 0.006 Mi.
Difference in elevation = 3.70(Ft.)
Slope along watercourse = 241.1852 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.004 Hr.
Lag time = 0.22 Min.
25% of lag time = 0.05 Min.
40% of lag time = 0.09 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	2.00	0.26

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	6.40	0.83

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.130 56.00 0.900
Total Area Entered = 0.13(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Unit Hydrograph
 VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	2289.994	100.000
		Sum = 100.000	Sum = 0.131

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.016	(0.238)	0.003	0.013
2	0.17	0.07	0.016	(0.237)	0.003	0.013
3	0.25	0.07	0.016	(0.236)	0.003	0.013
4	0.33	0.10	0.024	(0.235)	0.004	0.020
5	0.42	0.10	0.024	(0.234)	0.004	0.020
6	0.50	0.10	0.024	(0.233)	0.004	0.020
7	0.58	0.10	0.024	(0.232)	0.004	0.020
8	0.67	0.10	0.024	(0.231)	0.004	0.020
9	0.75	0.10	0.024	(0.230)	0.004	0.020
10	0.83	0.13	0.032	(0.230)	0.006	0.026
11	0.92	0.13	0.032	(0.229)	0.006	0.026
12	1.00	0.13	0.032	(0.228)	0.006	0.026
13	1.08	0.10	0.024	(0.227)	0.004	0.020
14	1.17	0.10	0.024	(0.226)	0.004	0.020
15	1.25	0.10	0.024	(0.225)	0.004	0.020
16	1.33	0.10	0.024	(0.224)	0.004	0.020
17	1.42	0.10	0.024	(0.223)	0.004	0.020
18	1.50	0.10	0.024	(0.222)	0.004	0.020
19	1.58	0.10	0.024	(0.222)	0.004	0.020
20	1.67	0.10	0.024	(0.221)	0.004	0.020
21	1.75	0.10	0.024	(0.220)	0.004	0.020
22	1.83	0.13	0.032	(0.219)	0.006	0.026
23	1.92	0.13	0.032	(0.218)	0.006	0.026
24	2.00	0.13	0.032	(0.217)	0.006	0.026
25	2.08	0.13	0.032	(0.216)	0.006	0.026
26	2.17	0.13	0.032	(0.215)	0.006	0.026
27	2.25	0.13	0.032	(0.214)	0.006	0.026
28	2.33	0.13	0.032	(0.214)	0.006	0.026
29	2.42	0.13	0.032	(0.213)	0.006	0.026
30	2.50	0.13	0.032	(0.212)	0.006	0.026
31	2.58	0.17	0.040	(0.211)	0.007	0.033
32	2.67	0.17	0.040	(0.210)	0.007	0.033
33	2.75	0.17	0.040	(0.209)	0.007	0.033
34	2.83	0.17	0.040	(0.208)	0.007	0.033
35	2.92	0.17	0.040	(0.208)	0.007	0.033
36	3.00	0.17	0.040	(0.207)	0.007	0.033
37	3.08	0.17	0.040	(0.206)	0.007	0.033
38	3.17	0.17	0.040	(0.205)	0.007	0.033
39	3.25	0.17	0.040	(0.204)	0.007	0.033
40	3.33	0.17	0.040	(0.203)	0.007	0.033
41	3.42	0.17	0.040	(0.202)	0.007	0.033
42	3.50	0.17	0.040	(0.202)	0.007	0.033
43	3.58	0.17	0.040	(0.201)	0.007	0.033

44	3.67	0.17	0.040	(0.200)	0.007	0.033
45	3.75	0.17	0.040	(0.199)	0.007	0.033
46	3.83	0.20	0.048	(0.198)	0.009	0.039
47	3.92	0.20	0.048	(0.197)	0.009	0.039
48	4.00	0.20	0.048	(0.197)	0.009	0.039
49	4.08	0.20	0.048	(0.196)	0.009	0.039
50	4.17	0.20	0.048	(0.195)	0.009	0.039
51	4.25	0.20	0.048	(0.194)	0.009	0.039
52	4.33	0.23	0.056	(0.193)	0.010	0.046
53	4.42	0.23	0.056	(0.192)	0.010	0.046
54	4.50	0.23	0.056	(0.192)	0.010	0.046
55	4.58	0.23	0.056	(0.191)	0.010	0.046
56	4.67	0.23	0.056	(0.190)	0.010	0.046
57	4.75	0.23	0.056	(0.189)	0.010	0.046
58	4.83	0.27	0.064	(0.188)	0.012	0.052
59	4.92	0.27	0.064	(0.187)	0.012	0.052
60	5.00	0.27	0.064	(0.187)	0.012	0.052
61	5.08	0.20	0.048	(0.186)	0.009	0.039
62	5.17	0.20	0.048	(0.185)	0.009	0.039
63	5.25	0.20	0.048	(0.184)	0.009	0.039
64	5.33	0.23	0.056	(0.183)	0.010	0.046
65	5.42	0.23	0.056	(0.183)	0.010	0.046
66	5.50	0.23	0.056	(0.182)	0.010	0.046
67	5.58	0.27	0.064	(0.181)	0.012	0.052
68	5.67	0.27	0.064	(0.180)	0.012	0.052
69	5.75	0.27	0.064	(0.179)	0.012	0.052
70	5.83	0.27	0.064	(0.179)	0.012	0.052
71	5.92	0.27	0.064	(0.178)	0.012	0.052
72	6.00	0.27	0.064	(0.177)	0.012	0.052
73	6.08	0.30	0.072	(0.176)	0.013	0.059
74	6.17	0.30	0.072	(0.175)	0.013	0.059
75	6.25	0.30	0.072	(0.175)	0.013	0.059
76	6.33	0.30	0.072	(0.174)	0.013	0.059
77	6.42	0.30	0.072	(0.173)	0.013	0.059
78	6.50	0.30	0.072	(0.172)	0.013	0.059
79	6.58	0.33	0.080	(0.172)	0.014	0.066
80	6.67	0.33	0.080	(0.171)	0.014	0.066
81	6.75	0.33	0.080	(0.170)	0.014	0.066
82	6.83	0.33	0.080	(0.169)	0.014	0.066
83	6.92	0.33	0.080	(0.169)	0.014	0.066
84	7.00	0.33	0.080	(0.168)	0.014	0.066
85	7.08	0.33	0.080	(0.167)	0.014	0.066
86	7.17	0.33	0.080	(0.166)	0.014	0.066
87	7.25	0.33	0.080	(0.165)	0.014	0.066
88	7.33	0.37	0.088	(0.165)	0.016	0.072
89	7.42	0.37	0.088	(0.164)	0.016	0.072
90	7.50	0.37	0.088	(0.163)	0.016	0.072
91	7.58	0.40	0.096	(0.162)	0.017	0.079
92	7.67	0.40	0.096	(0.162)	0.017	0.079
93	7.75	0.40	0.096	(0.161)	0.017	0.079
94	7.83	0.43	0.104	(0.160)	0.019	0.085
95	7.92	0.43	0.104	(0.159)	0.019	0.085
96	8.00	0.43	0.104	(0.159)	0.019	0.085
97	8.08	0.50	0.120	(0.158)	0.022	0.098
98	8.17	0.50	0.120	(0.157)	0.022	0.098
99	8.25	0.50	0.120	(0.157)	0.022	0.098
100	8.33	0.50	0.120	(0.156)	0.022	0.098
101	8.42	0.50	0.120	(0.155)	0.022	0.098
102	8.50	0.50	0.120	(0.154)	0.022	0.098
103	8.58	0.53	0.128	(0.154)	0.023	0.105
104	8.67	0.53	0.128	(0.153)	0.023	0.105
105	8.75	0.53	0.128	(0.152)	0.023	0.105
106	8.83	0.57	0.136	(0.151)	0.024	0.112
107	8.92	0.57	0.136	(0.151)	0.024	0.112
108	9.00	0.57	0.136	(0.150)	0.024	0.112
109	9.08	0.63	0.152	(0.149)	0.027	0.125
110	9.17	0.63	0.152	(0.149)	0.027	0.125
111	9.25	0.63	0.152	(0.148)	0.027	0.125
112	9.33	0.67	0.160	(0.147)	0.029	0.131
113	9.42	0.67	0.160	(0.147)	0.029	0.131
114	9.50	0.67	0.160	(0.146)	0.029	0.131
115	9.58	0.70	0.168	(0.145)	0.030	0.138

116	9.67	0.70	0.168	(0.144)	0.030	0.138
117	9.75	0.70	0.168	(0.144)	0.030	0.138
118	9.83	0.73	0.176	(0.143)	0.032	0.144
119	9.92	0.73	0.176	(0.142)	0.032	0.144
120	10.00	0.73	0.176	(0.142)	0.032	0.144
121	10.08	0.50	0.120	(0.141)	0.022	0.098
122	10.17	0.50	0.120	(0.140)	0.022	0.098
123	10.25	0.50	0.120	(0.140)	0.022	0.098
124	10.33	0.50	0.120	(0.139)	0.022	0.098
125	10.42	0.50	0.120	(0.138)	0.022	0.098
126	10.50	0.50	0.120	(0.138)	0.022	0.098
127	10.58	0.67	0.160	(0.137)	0.029	0.131
128	10.67	0.67	0.160	(0.136)	0.029	0.131
129	10.75	0.67	0.160	(0.136)	0.029	0.131
130	10.83	0.67	0.160	(0.135)	0.029	0.131
131	10.92	0.67	0.160	(0.134)	0.029	0.131
132	11.00	0.67	0.160	(0.134)	0.029	0.131
133	11.08	0.63	0.152	(0.133)	0.027	0.125
134	11.17	0.63	0.152	(0.132)	0.027	0.125
135	11.25	0.63	0.152	(0.132)	0.027	0.125
136	11.33	0.63	0.152	(0.131)	0.027	0.125
137	11.42	0.63	0.152	(0.130)	0.027	0.125
138	11.50	0.63	0.152	(0.130)	0.027	0.125
139	11.58	0.57	0.136	(0.129)	0.024	0.112
140	11.67	0.57	0.136	(0.128)	0.024	0.112
141	11.75	0.57	0.136	(0.128)	0.024	0.112
142	11.83	0.60	0.144	(0.127)	0.026	0.118
143	11.92	0.60	0.144	(0.126)	0.026	0.118
144	12.00	0.60	0.144	(0.126)	0.026	0.118
145	12.08	0.83	0.200	(0.125)	0.036	0.164
146	12.17	0.83	0.200	(0.125)	0.036	0.164
147	12.25	0.83	0.200	(0.124)	0.036	0.164
148	12.33	0.87	0.208	(0.123)	0.037	0.171
149	12.42	0.87	0.208	(0.123)	0.037	0.171
150	12.50	0.87	0.208	(0.122)	0.037	0.171
151	12.58	0.93	0.224	(0.121)	0.040	0.184
152	12.67	0.93	0.224	(0.121)	0.040	0.184
153	12.75	0.93	0.224	(0.120)	0.040	0.184
154	12.83	0.97	0.232	(0.120)	0.042	0.190
155	12.92	0.97	0.232	(0.119)	0.042	0.190
156	13.00	0.97	0.232	(0.118)	0.042	0.190
157	13.08	1.13	0.272	(0.118)	0.049	0.223
158	13.17	1.13	0.272	(0.117)	0.049	0.223
159	13.25	1.13	0.272	(0.117)	0.049	0.223
160	13.33	1.13	0.272	(0.116)	0.049	0.223
161	13.42	1.13	0.272	(0.115)	0.049	0.223
162	13.50	1.13	0.272	(0.115)	0.049	0.223
163	13.58	0.77	0.184	(0.114)	0.033	0.151
164	13.67	0.77	0.184	(0.114)	0.033	0.151
165	13.75	0.77	0.184	(0.113)	0.033	0.151
166	13.83	0.77	0.184	(0.113)	0.033	0.151
167	13.92	0.77	0.184	(0.112)	0.033	0.151
168	14.00	0.77	0.184	(0.111)	0.033	0.151
169	14.08	0.90	0.216	(0.111)	0.039	0.177
170	14.17	0.90	0.216	(0.110)	0.039	0.177
171	14.25	0.90	0.216	(0.110)	0.039	0.177
172	14.33	0.87	0.208	(0.109)	0.037	0.171
173	14.42	0.87	0.208	(0.109)	0.037	0.171
174	14.50	0.87	0.208	(0.108)	0.037	0.171
175	14.58	0.87	0.208	(0.107)	0.037	0.171
176	14.67	0.87	0.208	(0.107)	0.037	0.171
177	14.75	0.87	0.208	(0.106)	0.037	0.171
178	14.83	0.83	0.200	(0.106)	0.036	0.164
179	14.92	0.83	0.200	(0.105)	0.036	0.164
180	15.00	0.83	0.200	(0.105)	0.036	0.164
181	15.08	0.80	0.192	(0.104)	0.035	0.157
182	15.17	0.80	0.192	(0.104)	0.035	0.157
183	15.25	0.80	0.192	(0.103)	0.035	0.157
184	15.33	0.77	0.184	(0.103)	0.033	0.151
185	15.42	0.77	0.184	(0.102)	0.033	0.151
186	15.50	0.77	0.184	(0.102)	0.033	0.151
187	15.58	0.63	0.152	(0.101)	0.027	0.125

188	15.67	0.63	0.152	(0.101)	0.027	0.125
189	15.75	0.63	0.152	(0.100)	0.027	0.125
190	15.83	0.63	0.152	(0.100)	0.027	0.125
191	15.92	0.63	0.152	(0.099)	0.027	0.125
192	16.00	0.63	0.152	(0.099)	0.027	0.125
193	16.08	0.13	0.032	(0.098)	0.006	0.026
194	16.17	0.13	0.032	(0.098)	0.006	0.026
195	16.25	0.13	0.032	(0.097)	0.006	0.026
196	16.33	0.13	0.032	(0.097)	0.006	0.026
197	16.42	0.13	0.032	(0.096)	0.006	0.026
198	16.50	0.13	0.032	(0.096)	0.006	0.026
199	16.58	0.10	0.024	(0.095)	0.004	0.020
200	16.67	0.10	0.024	(0.095)	0.004	0.020
201	16.75	0.10	0.024	(0.094)	0.004	0.020
202	16.83	0.10	0.024	(0.094)	0.004	0.020
203	16.92	0.10	0.024	(0.093)	0.004	0.020
204	17.00	0.10	0.024	(0.093)	0.004	0.020
205	17.08	0.17	0.040	(0.092)	0.007	0.033
206	17.17	0.17	0.040	(0.092)	0.007	0.033
207	17.25	0.17	0.040	(0.091)	0.007	0.033
208	17.33	0.17	0.040	(0.091)	0.007	0.033
209	17.42	0.17	0.040	(0.090)	0.007	0.033
210	17.50	0.17	0.040	(0.090)	0.007	0.033
211	17.58	0.17	0.040	(0.089)	0.007	0.033
212	17.67	0.17	0.040	(0.089)	0.007	0.033
213	17.75	0.17	0.040	(0.089)	0.007	0.033
214	17.83	0.13	0.032	(0.088)	0.006	0.026
215	17.92	0.13	0.032	(0.088)	0.006	0.026
216	18.00	0.13	0.032	(0.087)	0.006	0.026
217	18.08	0.13	0.032	(0.087)	0.006	0.026
218	18.17	0.13	0.032	(0.086)	0.006	0.026
219	18.25	0.13	0.032	(0.086)	0.006	0.026
220	18.33	0.13	0.032	(0.086)	0.006	0.026
221	18.42	0.13	0.032	(0.085)	0.006	0.026
222	18.50	0.13	0.032	(0.085)	0.006	0.026
223	18.58	0.10	0.024	(0.084)	0.004	0.020
224	18.67	0.10	0.024	(0.084)	0.004	0.020
225	18.75	0.10	0.024	(0.084)	0.004	0.020
226	18.83	0.07	0.016	(0.083)	0.003	0.013
227	18.92	0.07	0.016	(0.083)	0.003	0.013
228	19.00	0.07	0.016	(0.082)	0.003	0.013
229	19.08	0.10	0.024	(0.082)	0.004	0.020
230	19.17	0.10	0.024	(0.082)	0.004	0.020
231	19.25	0.10	0.024	(0.081)	0.004	0.020
232	19.33	0.13	0.032	(0.081)	0.006	0.026
233	19.42	0.13	0.032	(0.080)	0.006	0.026
234	19.50	0.13	0.032	(0.080)	0.006	0.026
235	19.58	0.10	0.024	(0.080)	0.004	0.020
236	19.67	0.10	0.024	(0.079)	0.004	0.020
237	19.75	0.10	0.024	(0.079)	0.004	0.020
238	19.83	0.07	0.016	(0.079)	0.003	0.013
239	19.92	0.07	0.016	(0.078)	0.003	0.013
240	20.00	0.07	0.016	(0.078)	0.003	0.013
241	20.08	0.10	0.024	(0.078)	0.004	0.020
242	20.17	0.10	0.024	(0.077)	0.004	0.020
243	20.25	0.10	0.024	(0.077)	0.004	0.020
244	20.33	0.10	0.024	(0.077)	0.004	0.020
245	20.42	0.10	0.024	(0.076)	0.004	0.020
246	20.50	0.10	0.024	(0.076)	0.004	0.020
247	20.58	0.10	0.024	(0.076)	0.004	0.020
248	20.67	0.10	0.024	(0.075)	0.004	0.020
249	20.75	0.10	0.024	(0.075)	0.004	0.020
250	20.83	0.07	0.016	(0.075)	0.003	0.013
251	20.92	0.07	0.016	(0.074)	0.003	0.013
252	21.00	0.07	0.016	(0.074)	0.003	0.013
253	21.08	0.10	0.024	(0.074)	0.004	0.020
254	21.17	0.10	0.024	(0.073)	0.004	0.020
255	21.25	0.10	0.024	(0.073)	0.004	0.020
256	21.33	0.07	0.016	(0.073)	0.003	0.013
257	21.42	0.07	0.016	(0.073)	0.003	0.013
258	21.50	0.07	0.016	(0.072)	0.003	0.013
259	21.58	0.10	0.024	(0.072)	0.004	0.020

1+55	0.0004	0.00	Q			
2+ 0	0.0004	0.00	QV			
2+ 5	0.0005	0.00	QV			
2+10	0.0005	0.00	QV			
2+15	0.0005	0.00	QV			
2+20	0.0005	0.00	QV			
2+25	0.0006	0.00	QV			
2+30	0.0006	0.00	QV			
2+35	0.0006	0.00	QV			
2+40	0.0006	0.00	QV			
2+45	0.0007	0.00	QV			
2+50	0.0007	0.00	QV			
2+55	0.0007	0.00	QV			
3+ 0	0.0008	0.00	QV			
3+ 5	0.0008	0.00	QV			
3+10	0.0008	0.00	QV			
3+15	0.0009	0.00	QV			
3+20	0.0009	0.00	QV			
3+25	0.0009	0.00	Q V			
3+30	0.0009	0.00	Q V			
3+35	0.0010	0.00	Q V			
3+40	0.0010	0.00	Q V			
3+45	0.0010	0.00	Q V			
3+50	0.0011	0.01	Q V			
3+55	0.0011	0.01	Q V			
4+ 0	0.0011	0.01	Q V			
4+ 5	0.0012	0.01	Q V			
4+10	0.0012	0.01	Q V			
4+15	0.0012	0.01	Q V			
4+20	0.0013	0.01	Q V			
4+25	0.0013	0.01	Q V			
4+30	0.0014	0.01	Q V			
4+35	0.0014	0.01	Q V			
4+40	0.0015	0.01	Q V			
4+45	0.0015	0.01	Q V			
4+50	0.0015	0.01	Q V			
4+55	0.0016	0.01	Q V			
5+ 0	0.0016	0.01	Q V			
5+ 5	0.0017	0.01	Q V			
5+10	0.0017	0.01	Q V			
5+15	0.0017	0.01	Q V			
5+20	0.0018	0.01	Q V			
5+25	0.0018	0.01	Q V			
5+30	0.0019	0.01	Q V			
5+35	0.0019	0.01	Q V			
5+40	0.0020	0.01	Q V			
5+45	0.0020	0.01	Q V			
5+50	0.0021	0.01	Q V			
5+55	0.0021	0.01	Q V			
6+ 0	0.0021	0.01	Q V			
6+ 5	0.0022	0.01	Q V			
6+10	0.0023	0.01	Q V			
6+15	0.0023	0.01	Q V			
6+20	0.0024	0.01	Q V			
6+25	0.0024	0.01	Q V			
6+30	0.0025	0.01	Q V			
6+35	0.0025	0.01	Q V			
6+40	0.0026	0.01	Q V			
6+45	0.0026	0.01	Q V			
6+50	0.0027	0.01	Q V			
6+55	0.0028	0.01	Q V			
7+ 0	0.0028	0.01	Q V			
7+ 5	0.0029	0.01	Q V			
7+10	0.0029	0.01	Q V			
7+15	0.0030	0.01	Q V			
7+20	0.0031	0.01	Q V			
7+25	0.0031	0.01	Q V			
7+30	0.0032	0.01	Q V			
7+35	0.0033	0.01	Q V			
7+40	0.0033	0.01	Q V			
7+45	0.0034	0.01	Q V			
7+50	0.0035	0.01	Q V			

7+55	0.0036	0.01	0	V
8+ 0	0.0036	0.01	0	V
8+ 5	0.0037	0.01	0	V
8+10	0.0038	0.01	0	V
8+15	0.0039	0.01	0	V
8+20	0.0040	0.01	0	V
8+25	0.0041	0.01	0	V
8+30	0.0042	0.01	0	V
8+35	0.0043	0.01	0	V
8+40	0.0044	0.01	0	V
8+45	0.0045	0.01	0	V
8+50	0.0046	0.01	0	V
8+55	0.0047	0.01	0	V
9+ 0	0.0048	0.01	0	V
9+ 5	0.0049	0.02	0	V
9+10	0.0050	0.02	0	V
9+15	0.0051	0.02	0	V
9+20	0.0052	0.02	0	V
9+25	0.0053	0.02	0	V
9+30	0.0055	0.02	0	V
9+35	0.0056	0.02	0	V
9+40	0.0057	0.02	0	V
9+45	0.0058	0.02	0	V
9+50	0.0060	0.02	0	V
9+55	0.0061	0.02	0	V
10+ 0	0.0062	0.02	0	V
10+ 5	0.0063	0.01	0	V
10+10	0.0064	0.01	0	V
10+15	0.0065	0.01	0	V
10+20	0.0066	0.01	0	V
10+25	0.0067	0.01	0	V
10+30	0.0068	0.01	0	V
10+35	0.0069	0.02	0	V
10+40	0.0070	0.02	0	V
10+45	0.0071	0.02	0	V
10+50	0.0072	0.02	0	V
10+55	0.0073	0.02	0	V
11+ 0	0.0075	0.02	0	V
11+ 5	0.0076	0.02	0	V
11+10	0.0077	0.02	0	V
11+15	0.0078	0.02	0	V
11+20	0.0079	0.02	0	V
11+25	0.0080	0.02	0	V
11+30	0.0081	0.02	0	V
11+35	0.0082	0.01	0	V
11+40	0.0083	0.01	0	V
11+45	0.0084	0.01	0	V
11+50	0.0085	0.02	0	V
11+55	0.0087	0.02	0	V
12+ 0	0.0088	0.02	0	V
12+ 5	0.0089	0.02	0	V
12+10	0.0091	0.02	0	V
12+15	0.0092	0.02	0	V
12+20	0.0094	0.02	0	V
12+25	0.0095	0.02	0	V
12+30	0.0097	0.02	0	V
12+35	0.0098	0.02	0	V
12+40	0.0100	0.02	0	V
12+45	0.0102	0.02	0	V
12+50	0.0103	0.02	0	V
12+55	0.0105	0.02	0	V
13+ 0	0.0107	0.02	0	V
13+ 5	0.0109	0.03	0	V
13+10	0.0111	0.03	0	V
13+15	0.0113	0.03	0	V
13+20	0.0115	0.03	0	V
13+25	0.0117	0.03	0	V
13+30	0.0119	0.03	0	V
13+35	0.0120	0.02	0	V
13+40	0.0122	0.02	0	V
13+45	0.0123	0.02	0	V
13+50	0.0124	0.02	0	V

19+55	0.0171	0.00	0	V
20+ 0	0.0171	0.00	0	V
20+ 5	0.0171	0.00	0	V
20+10	0.0171	0.00	0	V
20+15	0.0171	0.00	0	V
20+20	0.0172	0.00	0	V
20+25	0.0172	0.00	0	V
20+30	0.0172	0.00	0	V
20+35	0.0172	0.00	0	V
20+40	0.0172	0.00	0	V
20+45	0.0173	0.00	0	V
20+50	0.0173	0.00	0	V
20+55	0.0173	0.00	0	V
21+ 0	0.0173	0.00	0	V
21+ 5	0.0173	0.00	0	V
21+10	0.0173	0.00	0	V
21+15	0.0173	0.00	0	V
21+20	0.0174	0.00	0	V
21+25	0.0174	0.00	0	V
21+30	0.0174	0.00	0	V
21+35	0.0174	0.00	0	V
21+40	0.0174	0.00	0	V
21+45	0.0174	0.00	0	V
21+50	0.0174	0.00	0	V
21+55	0.0175	0.00	0	V
22+ 0	0.0175	0.00	0	V
22+ 5	0.0175	0.00	0	V
22+10	0.0175	0.00	0	V
22+15	0.0175	0.00	0	V
22+20	0.0175	0.00	0	V
22+25	0.0175	0.00	0	V
22+30	0.0176	0.00	0	V
22+35	0.0176	0.00	0	V
22+40	0.0176	0.00	0	V
22+45	0.0176	0.00	0	V
22+50	0.0176	0.00	0	V
22+55	0.0176	0.00	0	V
23+ 0	0.0176	0.00	0	V
23+ 5	0.0176	0.00	0	V
23+10	0.0176	0.00	0	V
23+15	0.0177	0.00	0	V
23+20	0.0177	0.00	0	V
23+25	0.0177	0.00	0	V
23+30	0.0177	0.00	0	V
23+35	0.0177	0.00	0	V
23+40	0.0177	0.00	0	V
23+45	0.0177	0.00	0	V
23+50	0.0177	0.00	0	V
23+55	0.0178	0.00	0	V
24+ 0	0.0178	0.00	0	V

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012, Version 8.2
Study date 01/04/23 File: 2216PB0262.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 132
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 0.13(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.13(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 81.00(Ft.)
Length along longest watercourse measured to centroid = 30.00(Ft.)
Length along longest watercourse = 0.015 Mi.
Length along longest watercourse measured to centroid = 0.006 Mi.
Difference in elevation = 3.70(Ft.)
Slope along watercourse = 241.1852 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.004 Hr.
Lag time = 0.22 Min.
25% of lag time = 0.05 Min.
40% of lag time = 0.09 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	1.20	0.16

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	3.00	0.39

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.200(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.200(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.130 56.00 0.900
Total Area Entered = 0.13(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.180

Unit Hydrograph
 VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	2289.994	0.131
		Sum = 100.000	Sum= 0.131

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.072	(0.134)	0.013	0.059
2	0.17	0.60	0.086	(0.134)	0.016	0.071
3	0.25	0.60	0.086	(0.134)	0.016	0.071
4	0.33	0.60	0.086	(0.134)	0.016	0.071
5	0.42	0.60	0.086	(0.134)	0.016	0.071
6	0.50	0.70	0.101	(0.134)	0.018	0.083
7	0.58	0.70	0.101	(0.134)	0.018	0.083
8	0.67	0.70	0.101	(0.134)	0.018	0.083
9	0.75	0.70	0.101	(0.134)	0.018	0.083
10	0.83	0.70	0.101	(0.134)	0.018	0.083
11	0.92	0.70	0.101	(0.134)	0.018	0.083
12	1.00	0.80	0.115	(0.134)	0.021	0.094
13	1.08	0.80	0.115	(0.134)	0.021	0.094
14	1.17	0.80	0.115	(0.134)	0.021	0.094
15	1.25	0.80	0.115	(0.134)	0.021	0.094
16	1.33	0.80	0.115	(0.134)	0.021	0.094
17	1.42	0.80	0.115	(0.134)	0.021	0.094
18	1.50	0.80	0.115	(0.134)	0.021	0.094
19	1.58	0.80	0.115	(0.134)	0.021	0.094
20	1.67	0.80	0.115	(0.134)	0.021	0.094
21	1.75	0.80	0.115	(0.134)	0.021	0.094
22	1.83	0.80	0.115	(0.134)	0.021	0.094
23	1.92	0.80	0.115	(0.134)	0.021	0.094
24	2.00	0.90	0.130	(0.134)	0.023	0.106
25	2.08	0.80	0.115	(0.134)	0.021	0.094
26	2.17	0.90	0.130	(0.134)	0.023	0.106
27	2.25	0.90	0.130	(0.134)	0.023	0.106
28	2.33	0.90	0.130	(0.134)	0.023	0.106
29	2.42	0.90	0.130	(0.134)	0.023	0.106
30	2.50	0.90	0.130	(0.134)	0.023	0.106
31	2.58	0.90	0.130	(0.134)	0.023	0.106
32	2.67	0.90	0.130	(0.134)	0.023	0.106
33	2.75	1.00	0.144	(0.134)	0.026	0.118
34	2.83	1.00	0.144	(0.134)	0.026	0.118
35	2.92	1.00	0.144	(0.134)	0.026	0.118
36	3.00	1.00	0.144	(0.134)	0.026	0.118
37	3.08	1.00	0.144	(0.134)	0.026	0.118
38	3.17	1.10	0.158	(0.134)	0.029	0.130
39	3.25	1.10	0.158	(0.134)	0.029	0.130
40	3.33	1.10	0.158	(0.134)	0.029	0.130
41	3.42	1.20	0.173	(0.134)	0.031	0.142
42	3.50	1.30	0.187	(0.134)	0.034	0.154
43	3.58	1.40	0.202	(0.134)	0.036	0.165

1+55	0.0018	0.01	Q
2+ 0	0.0019	0.01	Q
2+ 5	0.0020	0.01	Q
2+10	0.0021	0.01	Q
2+15	0.0022	0.01	Q
2+20	0.0022	0.01	Q
2+25	0.0023	0.01	Q
2+30	0.0024	0.01	Q
2+35	0.0025	0.01	Q
2+40	0.0026	0.01	Q
2+45	0.0027	0.02	Q
2+50	0.0028	0.02	Q
2+55	0.0030	0.02	Q
3+ 0	0.0031	0.02	Q
3+ 5	0.0032	0.02	Q
3+10	0.0033	0.02	Q
3+15	0.0034	0.02	Q
3+20	0.0035	0.02	Q
3+25	0.0036	0.02	Q
3+30	0.0038	0.02	Q
3+35	0.0039	0.02	Q
3+40	0.0041	0.02	Q
3+45	0.0042	0.02	Q
3+50	0.0044	0.02	Q
3+55	0.0046	0.02	Q
4+ 0	0.0047	0.02	Q
4+ 5	0.0049	0.03	Q
4+10	0.0051	0.03	Q
4+15	0.0053	0.03	Q
4+20	0.0055	0.03	Q
4+25	0.0058	0.03	Q
4+30	0.0060	0.03	Q
4+35	0.0062	0.03	Q
4+40	0.0065	0.04	Q
4+45	0.0067	0.04	Q
4+50	0.0070	0.04	Q
4+55	0.0072	0.04	Q
5+ 0	0.0075	0.04	Q
5+ 5	0.0078	0.05	Q
5+10	0.0082	0.06	Q
5+15	0.0086	0.06	Q
5+20	0.0091	0.07	Q
5+25	0.0096	0.07	Q
5+30	0.0102	0.09	Q
5+35	0.0104	0.03	Q
5+40	0.0105	0.01	Q
5+45	0.0106	0.01	Q
5+50	0.0106	0.01	Q
5+55	0.0106	0.00	Q
6+ 0	0.0107	0.00	Q

Unit Hydrograph Analysis

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 132
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 0.13(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.13(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 81.00(Ft.)
Length along longest watercourse measured to centroid = 30.00(Ft.)
Length along longest watercourse = 0.015 Mi.
Length along longest watercourse measured to centroid = 0.006 Mi.
Difference in elevation = 3.70(Ft.)
Slope along watercourse = 241.1852 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.004 Hr.
Lag time = 0.22 Min.
25% of lag time = 0.05 Min.
40% of lag time = 0.09 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	0.90	0.12

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	2.35	0.31

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 0.900(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 0.900(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.130 56.00 0.900
Total Area Entered = 0.13(Ac.)

Flood volume = 349.6 Cubic Feet
 Total soil loss = 75.1 Cubic Feet

 Peak flow rate of this hydrograph = 0.099(CFS)

+++++
 3 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume	Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0001		0.02	Q				
0+10	0.0002		0.02	QV				
0+15	0.0003		0.01	QV				
0+20	0.0004		0.02	Q V				
0+25	0.0005		0.02	Q V				
0+30	0.0007		0.02	Q V				
0+35	0.0008		0.02	Q V				
0+40	0.0009		0.02	Q V				
0+45	0.0011		0.02	Q V				
0+50	0.0012		0.02	Q V				
0+55	0.0013		0.02	Q V				
1+ 0	0.0015		0.02	Q V				
1+ 5	0.0017		0.03	Q V				
1+10	0.0018		0.03	Q V				
1+15	0.0020		0.03	Q V				
1+20	0.0022		0.02	Q V				
1+25	0.0024		0.03	Q V				
1+30	0.0026		0.03	Q V				
1+35	0.0028		0.03	Q V				
1+40	0.0030		0.03	Q V				
1+45	0.0033		0.04	Q V				
1+50	0.0035		0.04	Q V				
1+55	0.0037		0.03	Q V				
2+ 0	0.0040		0.03	Q V				
2+ 5	0.0042		0.04	Q V				
2+10	0.0046		0.05	Q V				
2+15	0.0050		0.06	Q V				
2+20	0.0052		0.04	Q V				
2+25	0.0058		0.08	Q V				
2+30	0.0064		0.09	Q V				
2+35	0.0071		0.10	Q V				
2+40	0.0075		0.07	Q V				
2+45	0.0077		0.02	Q V				
2+50	0.0078		0.02	Q V				
2+55	0.0080		0.02	Q V				
3+ 0	0.0080		0.01	Q V				

Unit Hydrograph Analysis

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 132
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 0.13(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.13(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 81.00(Ft.)
Length along longest watercourse measured to centroid = 30.00(Ft.)
Length along longest watercourse = 0.015 Mi.
Length along longest watercourse measured to centroid = 0.006 Mi.
Difference in elevation = 3.70(Ft.)
Slope along watercourse = 241.1852 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.004 Hr.
Lag time = 0.22 Min.
25% of lag time = 0.05 Min.
40% of lag time = 0.09 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	0.54	0.07

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	1.36	0.18

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.540(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 0.540(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.130 56.00 0.900
Total Area Entered = 0.13(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Slope of intensity-duration curve for a 1 hour storm = 0.4800

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	2289.994	100.000
		Sum = 100.000	Sum = 0.131

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	4.40	0.285	(0.134)	0.051	0.234
2	0.17	4.50	0.292	(0.134)	0.052	0.239
3	0.25	5.40	0.350	(0.134)	0.063	0.287
4	0.33	5.40	0.350	(0.134)	0.063	0.287
5	0.42	5.70	0.369	(0.134)	0.066	0.303
6	0.50	6.40	0.415	(0.134)	0.075	0.340
7	0.58	7.90	0.512	(0.134)	0.092	0.420
8	0.67	9.10	0.590	(0.134)	0.106	0.484
9	0.75	12.80	0.829	0.134	(0.149)	0.695
10	0.83	25.60	1.659	0.134	(0.299)	1.525
11	0.92	7.90	0.512	(0.134)	0.092	0.420
12	1.00	4.90	0.318	(0.134)	0.057	0.260

Sum = 100.0 (Loss Rate Not Used) Sum = 5.5

Flood volume = Effective rainfall 0.46(In)
 times area 0.1(Ac.) / [(In)/(Ft.)] = 0.0(Ac. Ft)
 Total soil loss = 0.08(In)
 Total soil loss = 0.001(Ac. Ft)
 Total rainfall = 0.54(In)
 Flood volume = 216.0 Cubic Feet
 Total soil loss = 38.8 Cubic Feet

Peak flow rate of this hydrograph = 0.200(CFS)

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0002	0.03	Q	V			
0+10	0.0004	0.03	Q	V			
0+15	0.0007	0.04	Q	V			
0+20	0.0009	0.04	Q	V			
0+25	0.0012	0.04	Q	V			
0+30	0.0015	0.04	Q	V			
0+35	0.0019	0.06	Q	V	V		
0+40	0.0023	0.06	Q	V	V		

0+45	0.0030	0.09	Q			V		V		V	
0+50	0.0043	0.20	Q								
0+55	0.0047	0.06	Q								
1+ 0	0.0050	0.03	Q								

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PB05245.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 132
HYDROLOGIC ANALYSIS
5-YEAR

Drainage Area = 0.13(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.13(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 81.00(Ft.)
Length along longest watercourse measured to centroid = 30.00(Ft.)
Length along longest watercourse = 0.015 Mi.
Length along longest watercourse measured to centroid = 0.006 Mi.
Difference in elevation = 3.70(Ft.)
Slope along watercourse = 241.1852 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.004 Hr.
Lag time = 0.22 Min.
25% of lag time = 0.05 Min.
40% of lag time = 0.09 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	2.00	0.26

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	6.40	0.83

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 3.031(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 3.031(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.130 56.00 0.900
Total Area Entered = 0.13(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	2289.994	100.000
		Sum = 100.000	Sum= 0.131

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.024	(0.238)	0.004	0.020
2	0.17	0.07	0.024	(0.237)	0.004	0.020
3	0.25	0.07	0.024	(0.236)	0.004	0.020
4	0.33	0.10	0.036	(0.235)	0.007	0.030
5	0.42	0.10	0.036	(0.234)	0.007	0.030
6	0.50	0.10	0.036	(0.233)	0.007	0.030
7	0.58	0.10	0.036	(0.232)	0.007	0.030
8	0.67	0.10	0.036	(0.231)	0.007	0.030
9	0.75	0.10	0.036	(0.230)	0.007	0.030
10	0.83	0.13	0.048	(0.230)	0.009	0.040
11	0.92	0.13	0.048	(0.229)	0.009	0.040
12	1.00	0.13	0.048	(0.228)	0.009	0.040
13	1.08	0.10	0.036	(0.227)	0.007	0.030
14	1.17	0.10	0.036	(0.226)	0.007	0.030
15	1.25	0.10	0.036	(0.225)	0.007	0.030
16	1.33	0.10	0.036	(0.224)	0.007	0.030
17	1.42	0.10	0.036	(0.223)	0.007	0.030
18	1.50	0.10	0.036	(0.222)	0.007	0.030
19	1.58	0.10	0.036	(0.222)	0.007	0.030
20	1.67	0.10	0.036	(0.221)	0.007	0.030
21	1.75	0.10	0.036	(0.220)	0.007	0.030
22	1.83	0.13	0.048	(0.219)	0.009	0.040
23	1.92	0.13	0.048	(0.218)	0.009	0.040
24	2.00	0.13	0.048	(0.217)	0.009	0.040
25	2.08	0.13	0.048	(0.216)	0.009	0.040
26	2.17	0.13	0.048	(0.215)	0.009	0.040
27	2.25	0.13	0.048	(0.214)	0.009	0.040
28	2.33	0.13	0.048	(0.214)	0.009	0.040
29	2.42	0.13	0.048	(0.213)	0.009	0.040
30	2.50	0.13	0.048	(0.212)	0.009	0.040
31	2.58	0.17	0.061	(0.211)	0.011	0.050
32	2.67	0.17	0.061	(0.210)	0.011	0.050
33	2.75	0.17	0.061	(0.209)	0.011	0.050
34	2.83	0.17	0.061	(0.208)	0.011	0.050
35	2.92	0.17	0.061	(0.208)	0.011	0.050
36	3.00	0.17	0.061	(0.207)	0.011	0.050
37	3.08	0.17	0.061	(0.206)	0.011	0.050
38	3.17	0.17	0.061	(0.205)	0.011	0.050
39	3.25	0.17	0.061	(0.204)	0.011	0.050
40	3.33	0.17	0.061	(0.203)	0.011	0.050
41	3.42	0.17	0.061	(0.202)	0.011	0.050
42	3.50	0.17	0.061	(0.202)	0.011	0.050
43	3.58	0.17	0.061	(0.201)	0.011	0.050

44	3.67	0.17	0.061	(0.200)	0.011	0.050
45	3.75	0.17	0.061	(0.199)	0.011	0.050
46	3.83	0.20	0.073	(0.198)	0.013	0.060
47	3.92	0.20	0.073	(0.197)	0.013	0.060
48	4.00	0.20	0.073	(0.197)	0.013	0.060
49	4.08	0.20	0.073	(0.196)	0.013	0.060
50	4.17	0.20	0.073	(0.195)	0.013	0.060
51	4.25	0.20	0.073	(0.194)	0.013	0.060
52	4.33	0.23	0.085	(0.193)	0.015	0.070
53	4.42	0.23	0.085	(0.192)	0.015	0.070
54	4.50	0.23	0.085	(0.192)	0.015	0.070
55	4.58	0.23	0.085	(0.191)	0.015	0.070
56	4.67	0.23	0.085	(0.190)	0.015	0.070
57	4.75	0.23	0.085	(0.189)	0.015	0.070
58	4.83	0.27	0.097	(0.188)	0.017	0.080
59	4.92	0.27	0.097	(0.187)	0.017	0.080
60	5.00	0.27	0.097	(0.187)	0.017	0.080
61	5.08	0.20	0.073	(0.186)	0.013	0.060
62	5.17	0.20	0.073	(0.185)	0.013	0.060
63	5.25	0.20	0.073	(0.184)	0.013	0.060
64	5.33	0.23	0.085	(0.183)	0.015	0.070
65	5.42	0.23	0.085	(0.183)	0.015	0.070
66	5.50	0.23	0.085	(0.182)	0.015	0.070
67	5.58	0.27	0.097	(0.181)	0.017	0.080
68	5.67	0.27	0.097	(0.180)	0.017	0.080
69	5.75	0.27	0.097	(0.179)	0.017	0.080
70	5.83	0.27	0.097	(0.179)	0.017	0.080
71	5.92	0.27	0.097	(0.178)	0.017	0.080
72	6.00	0.27	0.097	(0.177)	0.017	0.080
73	6.08	0.30	0.109	(0.176)	0.020	0.089
74	6.17	0.30	0.109	(0.175)	0.020	0.089
75	6.25	0.30	0.109	(0.175)	0.020	0.089
76	6.33	0.30	0.109	(0.174)	0.020	0.089
77	6.42	0.30	0.109	(0.173)	0.020	0.089
78	6.50	0.30	0.109	(0.172)	0.020	0.089
79	6.58	0.33	0.121	(0.172)	0.022	0.099
80	6.67	0.33	0.121	(0.171)	0.022	0.099
81	6.75	0.33	0.121	(0.170)	0.022	0.099
82	6.83	0.33	0.121	(0.169)	0.022	0.099
83	6.92	0.33	0.121	(0.169)	0.022	0.099
84	7.00	0.33	0.121	(0.168)	0.022	0.099
85	7.08	0.33	0.121	(0.167)	0.022	0.099
86	7.17	0.33	0.121	(0.166)	0.022	0.099
87	7.25	0.33	0.121	(0.165)	0.022	0.099
88	7.33	0.37	0.133	(0.165)	0.024	0.109
89	7.42	0.37	0.133	(0.164)	0.024	0.109
90	7.50	0.37	0.133	(0.163)	0.024	0.109
91	7.58	0.40	0.145	(0.162)	0.026	0.119
92	7.67	0.40	0.145	(0.162)	0.026	0.119
93	7.75	0.40	0.145	(0.161)	0.026	0.119
94	7.83	0.43	0.158	(0.160)	0.028	0.129
95	7.92	0.43	0.158	(0.159)	0.028	0.129
96	8.00	0.43	0.158	(0.159)	0.028	0.129
97	8.08	0.50	0.182	(0.158)	0.033	0.149
98	8.17	0.50	0.182	(0.157)	0.033	0.149
99	8.25	0.50	0.182	(0.157)	0.033	0.149
100	8.33	0.50	0.182	(0.156)	0.033	0.149
101	8.42	0.50	0.182	(0.155)	0.033	0.149
102	8.50	0.50	0.182	(0.154)	0.033	0.149
103	8.58	0.53	0.194	(0.154)	0.035	0.159
104	8.67	0.53	0.194	(0.153)	0.035	0.159
105	8.75	0.53	0.194	(0.152)	0.035	0.159
106	8.83	0.57	0.206	(0.151)	0.037	0.169
107	8.92	0.57	0.206	(0.151)	0.037	0.169
108	9.00	0.57	0.206	(0.150)	0.037	0.169
109	9.08	0.63	0.230	(0.149)	0.041	0.189
110	9.17	0.63	0.230	(0.149)	0.041	0.189
111	9.25	0.63	0.230	(0.148)	0.041	0.189
112	9.33	0.67	0.242	(0.147)	0.044	0.199
113	9.42	0.67	0.242	(0.147)	0.044	0.199
114	9.50	0.67	0.242	(0.146)	0.044	0.199
115	9.58	0.70	0.255	(0.145)	0.046	0.209

116	9.67	0.70	0.255	(0.144)	0.046	0.209
117	9.75	0.70	0.255	(0.144)	0.046	0.209
118	9.83	0.73	0.267	(0.143)	0.048	0.219
119	9.92	0.73	0.267	(0.142)	0.048	0.219
120	10.00	0.73	0.267	(0.142)	0.048	0.219
121	10.08	0.50	0.182	(0.141)	0.033	0.149
122	10.17	0.50	0.182	(0.140)	0.033	0.149
123	10.25	0.50	0.182	(0.140)	0.033	0.149
124	10.33	0.50	0.182	(0.139)	0.033	0.149
125	10.42	0.50	0.182	(0.138)	0.033	0.149
126	10.50	0.50	0.182	(0.138)	0.033	0.149
127	10.58	0.67	0.242	(0.137)	0.044	0.199
128	10.67	0.67	0.242	(0.136)	0.044	0.199
129	10.75	0.67	0.242	(0.136)	0.044	0.199
130	10.83	0.67	0.242	(0.135)	0.044	0.199
131	10.92	0.67	0.242	(0.134)	0.044	0.199
132	11.00	0.67	0.242	(0.134)	0.044	0.199
133	11.08	0.63	0.230	(0.133)	0.041	0.189
134	11.17	0.63	0.230	(0.132)	0.041	0.189
135	11.25	0.63	0.230	(0.132)	0.041	0.189
136	11.33	0.63	0.230	(0.131)	0.041	0.189
137	11.42	0.63	0.230	(0.130)	0.041	0.189
138	11.50	0.63	0.230	(0.130)	0.041	0.189
139	11.58	0.57	0.206	(0.129)	0.037	0.169
140	11.67	0.57	0.206	(0.128)	0.037	0.169
141	11.75	0.57	0.206	(0.128)	0.037	0.169
142	11.83	0.60	0.218	(0.127)	0.039	0.179
143	11.92	0.60	0.218	(0.126)	0.039	0.179
144	12.00	0.60	0.218	(0.126)	0.039	0.179
145	12.08	0.83	0.303	(0.125)	0.055	0.249
146	12.17	0.83	0.303	(0.125)	0.055	0.249
147	12.25	0.83	0.303	(0.124)	0.055	0.249
148	12.33	0.87	0.315	(0.123)	0.057	0.258
149	12.42	0.87	0.315	(0.123)	0.057	0.258
150	12.50	0.87	0.315	(0.122)	0.057	0.258
151	12.58	0.93	0.339	(0.121)	0.061	0.278
152	12.67	0.93	0.339	(0.121)	0.061	0.278
153	12.75	0.93	0.339	(0.120)	0.061	0.278
154	12.83	0.97	0.352	(0.120)	0.063	0.288
155	12.92	0.97	0.352	(0.119)	0.063	0.288
156	13.00	0.97	0.352	(0.118)	0.063	0.288
157	13.08	1.13	0.412	(0.118)	0.074	0.338
158	13.17	1.13	0.412	(0.117)	0.074	0.338
159	13.25	1.13	0.412	(0.117)	0.074	0.338
160	13.33	1.13	0.412	(0.116)	0.074	0.338
161	13.42	1.13	0.412	(0.115)	0.074	0.338
162	13.50	1.13	0.412	(0.115)	0.074	0.338
163	13.58	0.77	0.279	(0.114)	0.050	0.229
164	13.67	0.77	0.279	(0.114)	0.050	0.229
165	13.75	0.77	0.279	(0.113)	0.050	0.229
166	13.83	0.77	0.279	(0.113)	0.050	0.229
167	13.92	0.77	0.279	(0.112)	0.050	0.229
168	14.00	0.77	0.279	(0.111)	0.050	0.229
169	14.08	0.90	0.327	(0.111)	0.059	0.268
170	14.17	0.90	0.327	(0.110)	0.059	0.268
171	14.25	0.90	0.327	(0.110)	0.059	0.268
172	14.33	0.87	0.315	(0.109)	0.057	0.258
173	14.42	0.87	0.315	(0.109)	0.057	0.258
174	14.50	0.87	0.315	(0.108)	0.057	0.258
175	14.58	0.87	0.315	(0.107)	0.057	0.258
176	14.67	0.87	0.315	(0.107)	0.057	0.258
177	14.75	0.87	0.315	(0.106)	0.057	0.258
178	14.83	0.83	0.303	(0.106)	0.055	0.249
179	14.92	0.83	0.303	(0.105)	0.055	0.249
180	15.00	0.83	0.303	(0.105)	0.055	0.249
181	15.08	0.80	0.291	(0.104)	0.052	0.239
182	15.17	0.80	0.291	(0.104)	0.052	0.239
183	15.25	0.80	0.291	(0.103)	0.052	0.239
184	15.33	0.77	0.279	(0.103)	0.050	0.229
185	15.42	0.77	0.279	(0.102)	0.050	0.229
186	15.50	0.77	0.279	(0.102)	0.050	0.229
187	15.58	0.63	0.230	(0.101)	0.041	0.189

188	15.67	0.63	0.230	(0.101)	0.041	0.189
189	15.75	0.63	0.230	(0.100)	0.041	0.189
190	15.83	0.63	0.230	(0.100)	0.041	0.189
191	15.92	0.63	0.230	(0.099)	0.041	0.189
192	16.00	0.63	0.230	(0.099)	0.041	0.189
193	16.08	0.13	0.048	(0.098)	0.009	0.040
194	16.17	0.13	0.048	(0.098)	0.009	0.040
195	16.25	0.13	0.048	(0.097)	0.009	0.040
196	16.33	0.13	0.048	(0.097)	0.009	0.040
197	16.42	0.13	0.048	(0.096)	0.009	0.040
198	16.50	0.13	0.048	(0.096)	0.009	0.040
199	16.58	0.10	0.036	(0.095)	0.007	0.030
200	16.67	0.10	0.036	(0.095)	0.007	0.030
201	16.75	0.10	0.036	(0.094)	0.007	0.030
202	16.83	0.10	0.036	(0.094)	0.007	0.030
203	16.92	0.10	0.036	(0.093)	0.007	0.030
204	17.00	0.10	0.036	(0.093)	0.007	0.030
205	17.08	0.17	0.061	(0.092)	0.011	0.050
206	17.17	0.17	0.061	(0.092)	0.011	0.050
207	17.25	0.17	0.061	(0.091)	0.011	0.050
208	17.33	0.17	0.061	(0.091)	0.011	0.050
209	17.42	0.17	0.061	(0.090)	0.011	0.050
210	17.50	0.17	0.061	(0.090)	0.011	0.050
211	17.58	0.17	0.061	(0.089)	0.011	0.050
212	17.67	0.17	0.061	(0.089)	0.011	0.050
213	17.75	0.17	0.061	(0.089)	0.011	0.050
214	17.83	0.13	0.048	(0.088)	0.009	0.040
215	17.92	0.13	0.048	(0.088)	0.009	0.040
216	18.00	0.13	0.048	(0.087)	0.009	0.040
217	18.08	0.13	0.048	(0.087)	0.009	0.040
218	18.17	0.13	0.048	(0.086)	0.009	0.040
219	18.25	0.13	0.048	(0.086)	0.009	0.040
220	18.33	0.13	0.048	(0.086)	0.009	0.040
221	18.42	0.13	0.048	(0.085)	0.009	0.040
222	18.50	0.13	0.048	(0.085)	0.009	0.040
223	18.58	0.10	0.036	(0.084)	0.007	0.030
224	18.67	0.10	0.036	(0.084)	0.007	0.030
225	18.75	0.10	0.036	(0.084)	0.007	0.030
226	18.83	0.07	0.024	(0.083)	0.004	0.020
227	18.92	0.07	0.024	(0.083)	0.004	0.020
228	19.00	0.07	0.024	(0.082)	0.004	0.020
229	19.08	0.10	0.036	(0.082)	0.007	0.030
230	19.17	0.10	0.036	(0.082)	0.007	0.030
231	19.25	0.10	0.036	(0.081)	0.007	0.030
232	19.33	0.13	0.048	(0.081)	0.009	0.040
233	19.42	0.13	0.048	(0.080)	0.009	0.040
234	19.50	0.13	0.048	(0.080)	0.009	0.040
235	19.58	0.10	0.036	(0.080)	0.007	0.030
236	19.67	0.10	0.036	(0.079)	0.007	0.030
237	19.75	0.10	0.036	(0.079)	0.007	0.030
238	19.83	0.07	0.024	(0.079)	0.004	0.020
239	19.92	0.07	0.024	(0.078)	0.004	0.020
240	20.00	0.07	0.024	(0.078)	0.004	0.020
241	20.08	0.10	0.036	(0.078)	0.007	0.030
242	20.17	0.10	0.036	(0.077)	0.007	0.030
243	20.25	0.10	0.036	(0.077)	0.007	0.030
244	20.33	0.10	0.036	(0.077)	0.007	0.030
245	20.42	0.10	0.036	(0.076)	0.007	0.030
246	20.50	0.10	0.036	(0.076)	0.007	0.030
247	20.58	0.10	0.036	(0.076)	0.007	0.030
248	20.67	0.10	0.036	(0.075)	0.007	0.030
249	20.75	0.10	0.036	(0.075)	0.007	0.030
250	20.83	0.07	0.024	(0.075)	0.004	0.020
251	20.92	0.07	0.024	(0.074)	0.004	0.020
252	21.00	0.07	0.024	(0.074)	0.004	0.020
253	21.08	0.10	0.036	(0.074)	0.007	0.030
254	21.17	0.10	0.036	(0.073)	0.007	0.030
255	21.25	0.10	0.036	(0.073)	0.007	0.030
256	21.33	0.07	0.024	(0.073)	0.004	0.020
257	21.42	0.07	0.024	(0.073)	0.004	0.020
258	21.50	0.07	0.024	(0.072)	0.004	0.020
259	21.58	0.10	0.036	(0.072)	0.007	0.030

1+55	0.0006	0.01	Q
2+ 0	0.0007	0.01	Q
2+ 5	0.0007	0.01	QV
2+10	0.0007	0.01	QV
2+15	0.0008	0.01	QV
2+20	0.0008	0.01	QV
2+25	0.0009	0.01	QV
2+30	0.0009	0.01	QV
2+35	0.0009	0.01	QV
2+40	0.0010	0.01	QV
2+45	0.0010	0.01	QV
2+50	0.0011	0.01	QV
2+55	0.0011	0.01	QV
3+ 0	0.0012	0.01	QV
3+ 5	0.0012	0.01	QV
3+10	0.0012	0.01	QV
3+15	0.0013	0.01	QV
3+20	0.0013	0.01	QV
3+25	0.0014	0.01	Q V
3+30	0.0014	0.01	Q V
3+35	0.0015	0.01	Q V
3+40	0.0015	0.01	Q V
3+45	0.0016	0.01	Q V
3+50	0.0016	0.01	Q V
3+55	0.0017	0.01	Q V
4+ 0	0.0017	0.01	Q V
4+ 5	0.0018	0.01	Q V
4+10	0.0018	0.01	Q V
4+15	0.0019	0.01	Q V
4+20	0.0019	0.01	Q V
4+25	0.0020	0.01	Q V
4+30	0.0021	0.01	Q V
4+35	0.0021	0.01	Q V
4+40	0.0022	0.01	Q V
4+45	0.0023	0.01	Q V
4+50	0.0023	0.01	Q V
4+55	0.0024	0.01	Q V
5+ 0	0.0025	0.01	Q V
5+ 5	0.0025	0.01	Q V
5+10	0.0026	0.01	Q V
5+15	0.0026	0.01	Q V
5+20	0.0027	0.01	Q V
5+25	0.0028	0.01	Q V
5+30	0.0028	0.01	Q V
5+35	0.0029	0.01	Q V
5+40	0.0030	0.01	Q V
5+45	0.0030	0.01	Q V
5+50	0.0031	0.01	Q V
5+55	0.0032	0.01	Q V
6+ 0	0.0033	0.01	Q V
6+ 5	0.0033	0.01	Q V
6+10	0.0034	0.01	Q V
6+15	0.0035	0.01	Q V
6+20	0.0036	0.01	Q V
6+25	0.0037	0.01	Q V
6+30	0.0037	0.01	Q V
6+35	0.0038	0.01	Q V
6+40	0.0039	0.01	Q V
6+45	0.0040	0.01	Q V
6+50	0.0041	0.01	Q V
6+55	0.0042	0.01	Q V
7+ 0	0.0043	0.01	Q V
7+ 5	0.0044	0.01	Q V
7+10	0.0045	0.01	Q V
7+15	0.0045	0.01	Q V
7+20	0.0046	0.01	Q V
7+25	0.0047	0.01	Q V
7+30	0.0048	0.01	Q V
7+35	0.0050	0.02	Q V
7+40	0.0051	0.02	Q V
7+45	0.0052	0.02	Q V
7+50	0.0053	0.02	Q V

7+55	0.0054	0.02	Q	V			
8+ 0	0.0055	0.02	Q	V			
8+ 5	0.0057	0.02	Q	V			
8+10	0.0058	0.02	Q	V			
8+15	0.0059	0.02	Q	V			
8+20	0.0061	0.02	Q	V			
8+25	0.0062	0.02	Q	V			
8+30	0.0063	0.02	Q	V			
8+35	0.0065	0.02	Q	V			
8+40	0.0066	0.02	Q	V			
8+45	0.0068	0.02	Q	V			
8+50	0.0069	0.02	Q	V			
8+55	0.0071	0.02	Q	V			
9+ 0	0.0072	0.02	Q	V			
9+ 5	0.0074	0.02	Q	V			
9+10	0.0076	0.02	Q	V			
9+15	0.0077	0.02	Q	V			
9+20	0.0079	0.03	Q	V			
9+25	0.0081	0.03	Q	V			
9+30	0.0083	0.03	Q	V			
9+35	0.0085	0.03	Q	V			
9+40	0.0086	0.03	Q	V			
9+45	0.0088	0.03	Q	V			
9+50	0.0090	0.03	Q	V			
9+55	0.0092	0.03	Q	V			
10+ 0	0.0094	0.03	Q	V			
10+ 5	0.0096	0.02	Q	V			
10+10	0.0097	0.02	Q	V			
10+15	0.0098	0.02	Q	V			
10+20	0.0100	0.02	Q	V			
10+25	0.0101	0.02	Q	V			
10+30	0.0102	0.02	Q	V			
10+35	0.0104	0.03	Q	V			
10+40	0.0106	0.03	Q	V			
10+45	0.0108	0.03	Q	V			
10+50	0.0109	0.03	Q	V			
10+55	0.0111	0.03	Q	V			
11+ 0	0.0113	0.03	Q	V			
11+ 5	0.0115	0.02	Q	V			
11+10	0.0116	0.02	Q	V			
11+15	0.0118	0.02	Q	V			
11+20	0.0120	0.02	Q	V			
11+25	0.0122	0.02	Q	V			
11+30	0.0123	0.02	Q	V			
11+35	0.0125	0.02	Q	V			
11+40	0.0126	0.02	Q	V			
11+45	0.0128	0.02	Q	V			
11+50	0.0129	0.02	Q	V			
11+55	0.0131	0.02	Q	V			
12+ 0	0.0133	0.02	Q	V			
12+ 5	0.0135	0.03	Q	V			
12+10	0.0137	0.03	Q	V			
12+15	0.0139	0.03	Q	V			
12+20	0.0142	0.03	Q	V			
12+25	0.0144	0.03	Q	V			
12+30	0.0146	0.03	Q	V			
12+35	0.0149	0.04	Q	V			
12+40	0.0151	0.04	Q	V			
12+45	0.0154	0.04	Q	V			
12+50	0.0157	0.04	Q	V			
12+55	0.0159	0.04	Q	V			
13+ 0	0.0162	0.04	Q	V			
13+ 5	0.0165	0.04	Q	V			
13+10	0.0168	0.04	Q	V			
13+15	0.0171	0.04	Q	V			
13+20	0.0174	0.04	Q	V			
13+25	0.0177	0.04	Q	V			
13+30	0.0180	0.04	Q	V			
13+35	0.0182	0.03	Q	V			
13+40	0.0184	0.03	Q	V			
13+45	0.0186	0.03	Q	V			
13+50	0.0188	0.03	Q	V			

19+55	0.0259	0.00	0			V
20+ 0	0.0259	0.00	0			V
20+ 5	0.0259	0.00	0			V
20+10	0.0260	0.00	0			V
20+15	0.0260	0.00	0			V
20+20	0.0260	0.00	0			V
20+25	0.0260	0.00	0			V
20+30	0.0261	0.00	0			V
20+35	0.0261	0.00	0			V
20+40	0.0261	0.00	0			V
20+45	0.0261	0.00	0			V
20+50	0.0262	0.00	0			V
20+55	0.0262	0.00	0			V
21+ 0	0.0262	0.00	0			V
21+ 5	0.0262	0.00	0			V
21+10	0.0262	0.00	0			V
21+15	0.0263	0.00	0			V
21+20	0.0263	0.00	0			V
21+25	0.0263	0.00	0			V
21+30	0.0263	0.00	0			V
21+35	0.0264	0.00	0			V
21+40	0.0264	0.00	0			V
21+45	0.0264	0.00	0			V
21+50	0.0264	0.00	0			V
21+55	0.0264	0.00	0			V
22+ 0	0.0265	0.00	0			V
22+ 5	0.0265	0.00	0			V
22+10	0.0265	0.00	0			V
22+15	0.0265	0.00	0			V
22+20	0.0266	0.00	0			V
22+25	0.0266	0.00	0			V
22+30	0.0266	0.00	0			V
22+35	0.0266	0.00	0			V
22+40	0.0266	0.00	0			V
22+45	0.0267	0.00	0			V
22+50	0.0267	0.00	0			V
22+55	0.0267	0.00	0			V
23+ 0	0.0267	0.00	0			V
23+ 5	0.0267	0.00	0			V
23+10	0.0267	0.00	0			V
23+15	0.0268	0.00	0			V
23+20	0.0268	0.00	0			V
23+25	0.0268	0.00	0			V
23+30	0.0268	0.00	0			V
23+35	0.0268	0.00	0			V
23+40	0.0268	0.00	0			V
23+45	0.0269	0.00	0			V
23+50	0.0269	0.00	0			V
23+55	0.0269	0.00	0			V
24+ 0	0.0269	0.00	0			V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PB0565.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 132
HYDROLOGIC ANALYSIS
5- YEAR

Drainage Area = 0.13(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.13(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 81.00(Ft.)
Length along longest watercourse measured to centroid = 30.00(Ft.)
Length along longest watercourse = 0.015 Mi.
Length along longest watercourse measured to centroid = 0.006 Mi.
Difference in elevation = 3.70(Ft.)
Slope along watercourse = 241.1852 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.004 Hr.
Lag time = 0.22 Min.
25% of lag time = 0.05 Min.
40% of lag time = 0.09 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	1.20	0.16

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	3.00	0.39

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.622(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.622(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.130 56.00 0.900
Total Area Entered = 0.13(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.180

Unit Hydrograph
 VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	2289.994	100.000
		Sum = 100.000	Sum= 0.131

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.097	(0.134)	0.018	0.080
2	0.17	0.60	0.117	(0.134)	0.021	0.096
3	0.25	0.60	0.117	(0.134)	0.021	0.096
4	0.33	0.60	0.117	(0.134)	0.021	0.096
5	0.42	0.60	0.117	(0.134)	0.021	0.096
6	0.50	0.70	0.136	(0.134)	0.025	0.112
7	0.58	0.70	0.136	(0.134)	0.025	0.112
8	0.67	0.70	0.136	(0.134)	0.025	0.112
9	0.75	0.70	0.136	(0.134)	0.025	0.112
10	0.83	0.70	0.136	(0.134)	0.025	0.112
11	0.92	0.70	0.136	(0.134)	0.025	0.112
12	1.00	0.80	0.156	(0.134)	0.028	0.128
13	1.08	0.80	0.156	(0.134)	0.028	0.128
14	1.17	0.80	0.156	(0.134)	0.028	0.128
15	1.25	0.80	0.156	(0.134)	0.028	0.128
16	1.33	0.80	0.156	(0.134)	0.028	0.128
17	1.42	0.80	0.156	(0.134)	0.028	0.128
18	1.50	0.80	0.156	(0.134)	0.028	0.128
19	1.58	0.80	0.156	(0.134)	0.028	0.128
20	1.67	0.80	0.156	(0.134)	0.028	0.128
21	1.75	0.80	0.156	(0.134)	0.028	0.128
22	1.83	0.80	0.156	(0.134)	0.028	0.128
23	1.92	0.80	0.156	(0.134)	0.028	0.128
24	2.00	0.90	0.175	(0.134)	0.032	0.144
25	2.08	0.80	0.156	(0.134)	0.028	0.128
26	2.17	0.90	0.175	(0.134)	0.032	0.144
27	2.25	0.90	0.175	(0.134)	0.032	0.144
28	2.33	0.90	0.175	(0.134)	0.032	0.144
29	2.42	0.90	0.175	(0.134)	0.032	0.144
30	2.50	0.90	0.175	(0.134)	0.032	0.144
31	2.58	0.90	0.175	(0.134)	0.032	0.144
32	2.67	0.90	0.175	(0.134)	0.032	0.144
33	2.75	1.00	0.195	(0.134)	0.035	0.160
34	2.83	1.00	0.195	(0.134)	0.035	0.160
35	2.92	1.00	0.195	(0.134)	0.035	0.160
36	3.00	1.00	0.195	(0.134)	0.035	0.160
37	3.08	1.00	0.195	(0.134)	0.035	0.160
38	3.17	1.10	0.214	(0.134)	0.039	0.176
39	3.25	1.10	0.214	(0.134)	0.039	0.176
40	3.33	1.10	0.214	(0.134)	0.039	0.176
41	3.42	1.20	0.234	(0.134)	0.042	0.191
42	3.50	1.30	0.253	(0.134)	0.046	0.207
43	3.58	1.40	0.272	(0.134)	0.049	0.223

1+55	0.0024	0.02	Q	V
2+ 0	0.0025	0.02	Q	V
2+ 5	0.0027	0.02	Q	V
2+10	0.0028	0.02	Q	V
2+15	0.0029	0.02	Q	V
2+20	0.0030	0.02	Q	V
2+25	0.0032	0.02	Q	V
2+30	0.0033	0.02	Q	V
2+35	0.0034	0.02	Q	V
2+40	0.0036	0.02	Q	V
2+45	0.0037	0.02	Q	V
2+50	0.0038	0.02	Q	V
2+55	0.0040	0.02	Q	V
3+ 0	0.0041	0.02	Q	V
3+ 5	0.0043	0.02	Q	V
3+10	0.0044	0.02	Q	V
3+15	0.0046	0.02	Q	V
3+20	0.0048	0.02	Q	V
3+25	0.0049	0.03	Q	V
3+30	0.0051	0.03	Q	V
3+35	0.0053	0.03	Q	V
3+40	0.0055	0.03	Q	V
3+45	0.0057	0.03	Q	V
3+50	0.0059	0.03	Q	V
3+55	0.0062	0.03	Q	V
4+ 0	0.0064	0.03	Q	V
4+ 5	0.0067	0.04	Q	V
4+10	0.0069	0.04	Q	V
4+15	0.0072	0.04	Q	V
4+20	0.0075	0.04	Q	V
4+25	0.0078	0.04	Q	V
4+30	0.0081	0.04	Q	V
4+35	0.0084	0.05	Q	V
4+40	0.0087	0.05	Q	V
4+45	0.0091	0.05	Q	V
4+50	0.0094	0.05	Q	V
4+55	0.0098	0.05	Q	V
5+ 0	0.0102	0.05	Q	V
5+ 5	0.0106	0.06	Q	V
5+10	0.0111	0.08	Q	V
5+15	0.0117	0.08	Q	V
5+20	0.0123	0.09	Q	V
5+25	0.0130	0.10	Q	V
5+30	0.0139	0.13	Q	V
5+35	0.0141	0.04	Q	V
5+40	0.0143	0.02	Q	V
5+45	0.0144	0.01	Q	V
5+50	0.0144	0.01	Q	V
5+55	0.0145	0.01	Q	V
6+ 0	0.0145	0.00	Q	V

Unit Hydrograph Analysis

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 132
HYDROLOGIC ANALYSIS
5- YEAR

Drainage Area = 0.13(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.13(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 81.00(Ft.)
Length along longest watercourse measured to centroid = 30.00(Ft.)
Length along longest watercourse = 0.015 Mi.
Length along longest watercourse measured to centroid = 0.006 Mi.
Difference in elevation = 3.70(Ft.)
Slope along watercourse = 241.1852 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.004 Hr.
Lag time = 0.22 Min.
25% of lag time = 0.05 Min.
40% of lag time = 0.09 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	0.90	0.12

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	2.35	0.31

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 1.240(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.240(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.130 56.00 0.900
Total Area Entered = 0.13(Ac.)

Flood volume = 488.3 Cubic Feet
 Total soil loss = 96.7 Cubic Feet

 Peak flow rate of this hydrograph = 0.142(CFS)

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 3 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0001	0.02	Q				
0+10	0.0003	0.02	QV				
0+15	0.0004	0.02	QV				
0+20	0.0006	0.02	Q V				
0+25	0.0007	0.02	Q V				
0+30	0.0009	0.03	Q V				
0+35	0.0011	0.02	Q V				
0+40	0.0013	0.03	Q V				
0+45	0.0015	0.03	Q V				
0+50	0.0017	0.02	Q V				
0+55	0.0018	0.03	Q V				
1+ 0	0.0020	0.03	Q V				
1+ 5	0.0023	0.04	Q V				
1+10	0.0025	0.04	Q V				
1+15	0.0028	0.04	Q V				
1+20	0.0030	0.03	Q V				
1+25	0.0033	0.04	Q V				
1+30	0.0036	0.04	Q V				
1+35	0.0038	0.04	Q V				
1+40	0.0041	0.04	Q V				
1+45	0.0045	0.05	Q V				
1+50	0.0048	0.05	Q V				
1+55	0.0052	0.05	Q V				
2+ 0	0.0055	0.05	Q V				
2+ 5	0.0058	0.05	Q V				
2+10	0.0063	0.07	Q V				
2+15	0.0068	0.08	Q V				
2+20	0.0072	0.06	Q V				
2+25	0.0080	0.12	Q V				
2+30	0.0089	0.12	Q V				
2+35	0.0099	0.14	Q V				
2+40	0.0105	0.10	Q V				
2+45	0.0107	0.03	Q V				
2+50	0.0109	0.03	Q V				
2+55	0.0111	0.03	Q V				
3+ 0	0.0112	0.01	Q V				

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PB0515.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 132
HYDROLOGIC ANALYSIS
5-YEAR

Drainage Area = 0.13(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.13(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 81.00(Ft.)
Length along longest watercourse measured to centroid = 30.00(Ft.)
Length along longest watercourse = 0.015 Mi.
Length along longest watercourse measured to centroid = 0.006 Mi.
Difference in elevation = 3.70(Ft.)
Slope along watercourse = 241.1852 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.004 Hr.
Lag time = 0.22 Min.
25% of lag time = 0.05 Min.
40% of lag time = 0.09 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	0.54	0.07

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	1.36	0.18

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.732(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 0.732(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.130 56.00 0.900
Total Area Entered = 0.13(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Slope of intensity-duration curve for a 1 hour storm = 0.4800

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	2289.994	100.000
		Sum = 100.000	Sum = 0.131

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	4.40	0.387	(0.134)	0.070	0.317
2	0.17	4.50	0.395	(0.134)	0.071	0.324
3	0.25	5.40	0.474	(0.134)	0.085	0.389
4	0.33	5.40	0.474	(0.134)	0.085	0.389
5	0.42	5.70	0.501	(0.134)	0.090	0.411
6	0.50	6.40	0.562	(0.134)	0.101	0.461
7	0.58	7.90	0.694	(0.134)	0.125	0.569
8	0.67	9.10	0.799	0.134	(0.144)	0.665
9	0.75	12.80	1.124	0.134	(0.202)	0.990
10	0.83	25.60	2.249	0.134	(0.405)	2.115
11	0.92	7.90	0.694	(0.134)	0.125	0.569
12	1.00	4.90	0.430	(0.134)	0.077	0.353

Sum = 100.0 (Loss Rate Not Used) Sum = 7.6

Flood volume = Effective rainfall 0.63(In) times area 0.1(Ac.) / [(In)/(Ft.)] = 0.0(Ac. Ft)
 Total soil loss = 0.10(In)
 Total soil loss = 0.001(Ac. Ft)
 Total rainfall = 0.73(In)
 Flood volume = 297.0 Cubic Feet
 Total soil loss = 48.5 Cubic Feet

Peak flow rate of this hydrograph = 0.277(CFS)

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0003	0.04	QV				
0+10	0.0006	0.04	Q V				
0+15	0.0009	0.05	Q V				
0+20	0.0013	0.05	Q V				
0+25	0.0017	0.05	Q V				
0+30	0.0021	0.06	Q V				
0+35	0.0026	0.07	Q V				
0+40	0.0032	0.09	Q V				

0+45	0.0041	0.13	Q		V	
0+50	0.0060	0.28	Q			V
0+55	0.0065	0.07	Q			V
1+ 0	0.0068	0.05	Q			V

Unit Hydrograph Analysis

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 132
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 0.13(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.13(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 81.00(Ft.)
Length along longest watercourse measured to centroid = 30.00(Ft.)
Length along longest watercourse = 0.015 Mi.
Length along longest watercourse measured to centroid = 0.006 Mi.
Difference in elevation = 3.70(Ft.)
Slope along watercourse = 241.1852 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.004 Hr.
Lag time = 0.22 Min.
25% of lag time = 0.05 Min.
40% of lag time = 0.09 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1] Rainfall (In) [2] Weighting [1*2]
0.13 2.00 0.26

100 YEAR Area rainfall data:

Area(Ac.) [1] Rainfall (In) [2] Weighting [1*2]
0.13 6.40 0.83

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 3.810(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 3.810(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.130 56.00 0.900
Total Area Entered = 0.13(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097

Minimum soil loss rate ((In/Hr)) = 0.049

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	2289.994	100.000
		Sum = 100.000	Sum = 0.131

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.030	(0.172)	0.005	0.025
2	0.17	0.07	0.030	(0.171)	0.005	0.025
3	0.25	0.07	0.030	(0.171)	0.005	0.025
4	0.33	0.10	0.046	(0.170)	0.008	0.037
5	0.42	0.10	0.046	(0.169)	0.008	0.037
6	0.50	0.10	0.046	(0.169)	0.008	0.037
7	0.58	0.10	0.046	(0.168)	0.008	0.037
8	0.67	0.10	0.046	(0.167)	0.008	0.037
9	0.75	0.10	0.046	(0.167)	0.008	0.037
10	0.83	0.13	0.061	(0.166)	0.011	0.050
11	0.92	0.13	0.061	(0.165)	0.011	0.050
12	1.00	0.13	0.061	(0.165)	0.011	0.050
13	1.08	0.10	0.046	(0.164)	0.008	0.037
14	1.17	0.10	0.046	(0.163)	0.008	0.037
15	1.25	0.10	0.046	(0.163)	0.008	0.037
16	1.33	0.10	0.046	(0.162)	0.008	0.037
17	1.42	0.10	0.046	(0.162)	0.008	0.037
18	1.50	0.10	0.046	(0.161)	0.008	0.037
19	1.58	0.10	0.046	(0.160)	0.008	0.037
20	1.67	0.10	0.046	(0.160)	0.008	0.037
21	1.75	0.10	0.046	(0.159)	0.008	0.037
22	1.83	0.13	0.061	(0.158)	0.011	0.050
23	1.92	0.13	0.061	(0.158)	0.011	0.050
24	2.00	0.13	0.061	(0.157)	0.011	0.050
25	2.08	0.13	0.061	(0.156)	0.011	0.050
26	2.17	0.13	0.061	(0.156)	0.011	0.050
27	2.25	0.13	0.061	(0.155)	0.011	0.050
28	2.33	0.13	0.061	(0.155)	0.011	0.050
29	2.42	0.13	0.061	(0.154)	0.011	0.050
30	2.50	0.13	0.061	(0.153)	0.011	0.050
31	2.58	0.17	0.076	(0.153)	0.014	0.062
32	2.67	0.17	0.076	(0.152)	0.014	0.062
33	2.75	0.17	0.076	(0.151)	0.014	0.062
34	2.83	0.17	0.076	(0.151)	0.014	0.062
35	2.92	0.17	0.076	(0.150)	0.014	0.062
36	3.00	0.17	0.076	(0.150)	0.014	0.062
37	3.08	0.17	0.076	(0.149)	0.014	0.062
38	3.17	0.17	0.076	(0.148)	0.014	0.062
39	3.25	0.17	0.076	(0.148)	0.014	0.062
40	3.33	0.17	0.076	(0.147)	0.014	0.062
41	3.42	0.17	0.076	(0.146)	0.014	0.062
42	3.50	0.17	0.076	(0.146)	0.014	0.062
43	3.58	0.17	0.076	(0.145)	0.014	0.062

44	3.67	0.17	0.076	(0.145)	0.014	0.062
45	3.75	0.17	0.076	(0.144)	0.014	0.062
46	3.83	0.20	0.091	(0.143)	0.016	0.075
47	3.92	0.20	0.091	(0.143)	0.016	0.075
48	4.00	0.20	0.091	(0.142)	0.016	0.075
49	4.08	0.20	0.091	(0.142)	0.016	0.075
50	4.17	0.20	0.091	(0.141)	0.016	0.075
51	4.25	0.20	0.091	(0.140)	0.016	0.075
52	4.33	0.23	0.107	(0.140)	0.019	0.087
53	4.42	0.23	0.107	(0.139)	0.019	0.087
54	4.50	0.23	0.107	(0.139)	0.019	0.087
55	4.58	0.23	0.107	(0.138)	0.019	0.087
56	4.67	0.23	0.107	(0.137)	0.019	0.087
57	4.75	0.23	0.107	(0.137)	0.019	0.087
58	4.83	0.27	0.122	(0.136)	0.022	0.100
59	4.92	0.27	0.122	(0.136)	0.022	0.100
60	5.00	0.27	0.122	(0.135)	0.022	0.100
61	5.08	0.20	0.091	(0.134)	0.016	0.075
62	5.17	0.20	0.091	(0.134)	0.016	0.075
63	5.25	0.20	0.091	(0.133)	0.016	0.075
64	5.33	0.23	0.107	(0.133)	0.019	0.087
65	5.42	0.23	0.107	(0.132)	0.019	0.087
66	5.50	0.23	0.107	(0.132)	0.019	0.087
67	5.58	0.27	0.122	(0.131)	0.022	0.100
68	5.67	0.27	0.122	(0.130)	0.022	0.100
69	5.75	0.27	0.122	(0.130)	0.022	0.100
70	5.83	0.27	0.122	(0.129)	0.022	0.100
71	5.92	0.27	0.122	(0.129)	0.022	0.100
72	6.00	0.27	0.122	(0.128)	0.022	0.100
73	6.08	0.30	0.137	(0.128)	0.025	0.112
74	6.17	0.30	0.137	(0.127)	0.025	0.112
75	6.25	0.30	0.137	(0.126)	0.025	0.112
76	6.33	0.30	0.137	(0.126)	0.025	0.112
77	6.42	0.30	0.137	(0.125)	0.025	0.112
78	6.50	0.30	0.137	(0.125)	0.025	0.112
79	6.58	0.33	0.152	(0.124)	0.027	0.125
80	6.67	0.33	0.152	(0.124)	0.027	0.125
81	6.75	0.33	0.152	(0.123)	0.027	0.125
82	6.83	0.33	0.152	(0.122)	0.027	0.125
83	6.92	0.33	0.152	(0.122)	0.027	0.125
84	7.00	0.33	0.152	(0.121)	0.027	0.125
85	7.08	0.33	0.152	(0.121)	0.027	0.125
86	7.17	0.33	0.152	(0.120)	0.027	0.125
87	7.25	0.33	0.152	(0.120)	0.027	0.125
88	7.33	0.37	0.168	(0.119)	0.030	0.137
89	7.42	0.37	0.168	(0.119)	0.030	0.137
90	7.50	0.37	0.168	(0.118)	0.030	0.137
91	7.58	0.40	0.183	(0.118)	0.033	0.150
92	7.67	0.40	0.183	(0.117)	0.033	0.150
93	7.75	0.40	0.183	(0.116)	0.033	0.150
94	7.83	0.43	0.198	(0.116)	0.036	0.162
95	7.92	0.43	0.198	(0.115)	0.036	0.162
96	8.00	0.43	0.198	(0.115)	0.036	0.162
97	8.08	0.50	0.229	(0.114)	0.041	0.187
98	8.17	0.50	0.229	(0.114)	0.041	0.187
99	8.25	0.50	0.229	(0.113)	0.041	0.187
100	8.33	0.50	0.229	(0.113)	0.041	0.187
101	8.42	0.50	0.229	(0.112)	0.041	0.187
102	8.50	0.50	0.229	(0.112)	0.041	0.187
103	8.58	0.53	0.244	(0.111)	0.044	0.200
104	8.67	0.53	0.244	(0.111)	0.044	0.200
105	8.75	0.53	0.244	(0.110)	0.044	0.200
106	8.83	0.57	0.259	(0.110)	0.047	0.212
107	8.92	0.57	0.259	(0.109)	0.047	0.212
108	9.00	0.57	0.259	(0.109)	0.047	0.212
109	9.08	0.63	0.290	(0.108)	0.052	0.237
110	9.17	0.63	0.290	(0.108)	0.052	0.237
111	9.25	0.63	0.290	(0.107)	0.052	0.237
112	9.33	0.67	0.305	(0.107)	0.055	0.250
113	9.42	0.67	0.305	(0.106)	0.055	0.250
114	9.50	0.67	0.305	(0.105)	0.055	0.250
115	9.58	0.70	0.320	(0.105)	0.058	0.262

116	9.67	0.70	0.320	(0.104)	0.058	0.262
117	9.75	0.70	0.320	(0.104)	0.058	0.262
118	9.83	0.73	0.335	(0.103)	0.060	0.275
119	9.92	0.73	0.335	(0.103)	0.060	0.275
120	10.00	0.73	0.335	(0.102)	0.060	0.275
121	10.08	0.50	0.229	(0.102)	0.041	0.187
122	10.17	0.50	0.229	(0.101)	0.041	0.187
123	10.25	0.50	0.229	(0.101)	0.041	0.187
124	10.33	0.50	0.229	(0.101)	0.041	0.187
125	10.42	0.50	0.229	(0.100)	0.041	0.187
126	10.50	0.50	0.229	(0.100)	0.041	0.187
127	10.58	0.67	0.305	(0.099)	0.055	0.250
128	10.67	0.67	0.305	(0.099)	0.055	0.250
129	10.75	0.67	0.305	(0.098)	0.055	0.250
130	10.83	0.67	0.305	(0.098)	0.055	0.250
131	10.92	0.67	0.305	(0.097)	0.055	0.250
132	11.00	0.67	0.305	(0.097)	0.055	0.250
133	11.08	0.63	0.290	(0.096)	0.052	0.237
134	11.17	0.63	0.290	(0.096)	0.052	0.237
135	11.25	0.63	0.290	(0.095)	0.052	0.237
136	11.33	0.63	0.290	(0.095)	0.052	0.237
137	11.42	0.63	0.290	(0.094)	0.052	0.237
138	11.50	0.63	0.290	(0.094)	0.052	0.237
139	11.58	0.57	0.259	(0.093)	0.047	0.212
140	11.67	0.57	0.259	(0.093)	0.047	0.212
141	11.75	0.57	0.259	(0.092)	0.047	0.212
142	11.83	0.60	0.274	(0.092)	0.049	0.225
143	11.92	0.60	0.274	(0.092)	0.049	0.225
144	12.00	0.60	0.274	(0.091)	0.049	0.225
145	12.08	0.83	0.381	(0.091)	0.069	0.312
146	12.17	0.83	0.381	(0.090)	0.069	0.312
147	12.25	0.83	0.381	(0.090)	0.069	0.312
148	12.33	0.87	0.396	(0.089)	0.071	0.325
149	12.42	0.87	0.396	(0.089)	0.071	0.325
150	12.50	0.87	0.396	(0.088)	0.071	0.325
151	12.58	0.93	0.427	(0.088)	0.077	0.350
152	12.67	0.93	0.427	(0.087)	0.077	0.350
153	12.75	0.93	0.427	(0.087)	0.077	0.350
154	12.83	0.97	0.442	(0.087)	0.080	0.362
155	12.92	0.97	0.442	(0.086)	0.080	0.362
156	13.00	0.97	0.442	(0.086)	0.080	0.362
157	13.08	1.13	0.518	0.085 (0.093)	0.433	0.433
158	13.17	1.13	0.518	0.085 (0.093)	0.433	0.433
159	13.25	1.13	0.518	0.084 (0.093)	0.434	0.434
160	13.33	1.13	0.518	0.084 (0.093)	0.434	0.434
161	13.42	1.13	0.518	0.084 (0.093)	0.435	0.435
162	13.50	1.13	0.518	0.083 (0.093)	0.435	0.435
163	13.58	0.77	0.351	(0.083)	0.063	0.287
164	13.67	0.77	0.351	(0.082)	0.063	0.287
165	13.75	0.77	0.351	(0.082)	0.063	0.287
166	13.83	0.77	0.351	(0.081)	0.063	0.287
167	13.92	0.77	0.351	(0.081)	0.063	0.287
168	14.00	0.77	0.351	(0.081)	0.063	0.287
169	14.08	0.90	0.412	(0.080)	0.074	0.337
170	14.17	0.90	0.412	(0.080)	0.074	0.337
171	14.25	0.90	0.412	(0.079)	0.074	0.337
172	14.33	0.87	0.396	(0.079)	0.071	0.325
173	14.42	0.87	0.396	(0.079)	0.071	0.325
174	14.50	0.87	0.396	(0.078)	0.071	0.325
175	14.58	0.87	0.396	(0.078)	0.071	0.325
176	14.67	0.87	0.396	(0.077)	0.071	0.325
177	14.75	0.87	0.396	(0.077)	0.071	0.325
178	14.83	0.83	0.381	(0.077)	0.069	0.312
179	14.92	0.83	0.381	(0.076)	0.069	0.312
180	15.00	0.83	0.381	(0.076)	0.069	0.312
181	15.08	0.80	0.366	(0.075)	0.066	0.300
182	15.17	0.80	0.366	(0.075)	0.066	0.300
183	15.25	0.80	0.366	(0.075)	0.066	0.300
184	15.33	0.77	0.351	(0.074)	0.063	0.287
185	15.42	0.77	0.351	(0.074)	0.063	0.287
186	15.50	0.77	0.351	(0.073)	0.063	0.287
187	15.58	0.63	0.290	(0.073)	0.052	0.237

188	15.67	0.63	0.290	(0.073)	0.052	0.237
189	15.75	0.63	0.290	(0.072)	0.052	0.237
190	15.83	0.63	0.290	(0.072)	0.052	0.237
191	15.92	0.63	0.290	(0.072)	0.052	0.237
192	16.00	0.63	0.290	(0.071)	0.052	0.237
193	16.08	0.13	0.061	(0.071)	0.011	0.050
194	16.17	0.13	0.061	(0.071)	0.011	0.050
195	16.25	0.13	0.061	(0.070)	0.011	0.050
196	16.33	0.13	0.061	(0.070)	0.011	0.050
197	16.42	0.13	0.061	(0.069)	0.011	0.050
198	16.50	0.13	0.061	(0.069)	0.011	0.050
199	16.58	0.10	0.046	(0.069)	0.008	0.037
200	16.67	0.10	0.046	(0.068)	0.008	0.037
201	16.75	0.10	0.046	(0.068)	0.008	0.037
202	16.83	0.10	0.046	(0.068)	0.008	0.037
203	16.92	0.10	0.046	(0.067)	0.008	0.037
204	17.00	0.10	0.046	(0.067)	0.008	0.037
205	17.08	0.17	0.076	(0.067)	0.014	0.062
206	17.17	0.17	0.076	(0.066)	0.014	0.062
207	17.25	0.17	0.076	(0.066)	0.014	0.062
208	17.33	0.17	0.076	(0.066)	0.014	0.062
209	17.42	0.17	0.076	(0.065)	0.014	0.062
210	17.50	0.17	0.076	(0.065)	0.014	0.062
211	17.58	0.17	0.076	(0.065)	0.014	0.062
212	17.67	0.17	0.076	(0.064)	0.014	0.062
213	17.75	0.17	0.076	(0.064)	0.014	0.062
214	17.83	0.13	0.061	(0.064)	0.011	0.050
215	17.92	0.13	0.061	(0.063)	0.011	0.050
216	18.00	0.13	0.061	(0.063)	0.011	0.050
217	18.08	0.13	0.061	(0.063)	0.011	0.050
218	18.17	0.13	0.061	(0.063)	0.011	0.050
219	18.25	0.13	0.061	(0.062)	0.011	0.050
220	18.33	0.13	0.061	(0.062)	0.011	0.050
221	18.42	0.13	0.061	(0.062)	0.011	0.050
222	18.50	0.13	0.061	(0.061)	0.011	0.050
223	18.58	0.10	0.046	(0.061)	0.008	0.037
224	18.67	0.10	0.046	(0.061)	0.008	0.037
225	18.75	0.10	0.046	(0.060)	0.008	0.037
226	18.83	0.07	0.030	(0.060)	0.005	0.025
227	18.92	0.07	0.030	(0.060)	0.005	0.025
228	19.00	0.07	0.030	(0.060)	0.005	0.025
229	19.08	0.10	0.046	(0.059)	0.008	0.037
230	19.17	0.10	0.046	(0.059)	0.008	0.037
231	19.25	0.10	0.046	(0.059)	0.008	0.037
232	19.33	0.13	0.061	(0.058)	0.011	0.050
233	19.42	0.13	0.061	(0.058)	0.011	0.050
234	19.50	0.13	0.061	(0.058)	0.011	0.050
235	19.58	0.10	0.046	(0.058)	0.008	0.037
236	19.67	0.10	0.046	(0.057)	0.008	0.037
237	19.75	0.10	0.046	(0.057)	0.008	0.037
238	19.83	0.07	0.030	(0.057)	0.005	0.025
239	19.92	0.07	0.030	(0.057)	0.005	0.025
240	20.00	0.07	0.030	(0.056)	0.005	0.025
241	20.08	0.10	0.046	(0.056)	0.008	0.037
242	20.17	0.10	0.046	(0.056)	0.008	0.037
243	20.25	0.10	0.046	(0.056)	0.008	0.037
244	20.33	0.10	0.046	(0.055)	0.008	0.037
245	20.42	0.10	0.046	(0.055)	0.008	0.037
246	20.50	0.10	0.046	(0.055)	0.008	0.037
247	20.58	0.10	0.046	(0.055)	0.008	0.037
248	20.67	0.10	0.046	(0.054)	0.008	0.037
249	20.75	0.10	0.046	(0.054)	0.008	0.037
250	20.83	0.07	0.030	(0.054)	0.005	0.025
251	20.92	0.07	0.030	(0.054)	0.005	0.025
252	21.00	0.07	0.030	(0.054)	0.005	0.025
253	21.08	0.10	0.046	(0.053)	0.008	0.037
254	21.17	0.10	0.046	(0.053)	0.008	0.037
255	21.25	0.10	0.046	(0.053)	0.008	0.037
256	21.33	0.07	0.030	(0.053)	0.005	0.025
257	21.42	0.07	0.030	(0.053)	0.005	0.025
258	21.50	0.07	0.030	(0.052)	0.005	0.025
259	21.58	0.10	0.046	(0.052)	0.008	0.037

1+55	0.0008	0.01	Q			
2+ 0	0.0008	0.01	Q			
2+ 5	0.0009	0.01	QV			
2+10	0.0009	0.01	QV			
2+15	0.0010	0.01	QV			
2+20	0.0010	0.01	QV			
2+25	0.0011	0.01	QV			
2+30	0.0011	0.01	QV			
2+35	0.0012	0.01	QV			
2+40	0.0012	0.01	QV			
2+45	0.0013	0.01	QV			
2+50	0.0013	0.01	QV			
2+55	0.0014	0.01	QV			
3+ 0	0.0015	0.01	QV			
3+ 5	0.0015	0.01	QV			
3+10	0.0016	0.01	QV			
3+15	0.0016	0.01	QV			
3+20	0.0017	0.01	QV			
3+25	0.0017	0.01	Q V			
3+30	0.0018	0.01	Q V			
3+35	0.0019	0.01	Q V			
3+40	0.0019	0.01	Q V			
3+45	0.0020	0.01	Q V			
3+50	0.0020	0.01	Q V			
3+55	0.0021	0.01	Q V			
4+ 0	0.0022	0.01	Q V			
4+ 5	0.0022	0.01	Q V			
4+10	0.0023	0.01	Q V			
4+15	0.0024	0.01	Q V			
4+20	0.0024	0.01	Q V			
4+25	0.0025	0.01	Q V			
4+30	0.0026	0.01	Q V			
4+35	0.0027	0.01	Q V			
4+40	0.0028	0.01	Q V			
4+45	0.0028	0.01	Q V			
4+50	0.0029	0.01	Q V			
4+55	0.0030	0.01	Q V			
5+ 0	0.0031	0.01	Q V			
5+ 5	0.0032	0.01	Q V			
5+10	0.0032	0.01	Q V			
5+15	0.0033	0.01	Q V			
5+20	0.0034	0.01	Q V			
5+25	0.0035	0.01	Q V			
5+30	0.0036	0.01	Q V			
5+35	0.0036	0.01	Q V			
5+40	0.0037	0.01	Q V			
5+45	0.0038	0.01	Q V			
5+50	0.0039	0.01	Q V			
5+55	0.0040	0.01	Q V			
6+ 0	0.0041	0.01	Q V			
6+ 5	0.0042	0.01	Q V			
6+10	0.0043	0.01	Q V			
6+15	0.0044	0.01	Q V			
6+20	0.0045	0.01	Q V			
6+25	0.0046	0.01	Q V			
6+30	0.0047	0.01	Q V			
6+35	0.0048	0.02	Q V			
6+40	0.0049	0.02	Q V			
6+45	0.0050	0.02	Q V			
6+50	0.0052	0.02	Q V			
6+55	0.0053	0.02	Q V			
7+ 0	0.0054	0.02	Q V			
7+ 5	0.0055	0.02	Q V			
7+10	0.0056	0.02	Q V			
7+15	0.0057	0.02	Q V			
7+20	0.0058	0.02	Q V			
7+25	0.0060	0.02	Q V			
7+30	0.0061	0.02	Q V			
7+35	0.0062	0.02	Q V			
7+40	0.0064	0.02	Q V			
7+45	0.0065	0.02	Q V			
7+50	0.0066	0.02	Q V			

7+55	0.0068	0.02	Q	V			
8+ 0	0.0069	0.02	Q	V			
8+ 5	0.0071	0.02	Q	V			
8+10	0.0073	0.02	Q	V			
8+15	0.0074	0.02	Q	V			
8+20	0.0076	0.02	Q	V			
8+25	0.0078	0.02	Q	V			
8+30	0.0080	0.02	Q	V			
8+35	0.0081	0.03	Q	V			
8+40	0.0083	0.03	Q	V			
8+45	0.0085	0.03	Q	V			
8+50	0.0087	0.03	Q	V			
8+55	0.0089	0.03	Q	V			
9+ 0	0.0091	0.03	Q	V			
9+ 5	0.0093	0.03	Q	V			
9+10	0.0095	0.03	Q	V			
9+15	0.0097	0.03	Q	V			
9+20	0.0099	0.03	Q	V			
9+25	0.0102	0.03	Q	V			
9+30	0.0104	0.03	Q	V			
9+35	0.0106	0.03	Q	V			
9+40	0.0109	0.03	Q	V			
9+45	0.0111	0.03	Q	V			
9+50	0.0114	0.04	Q	V			
9+55	0.0116	0.04	Q	V			
10+ 0	0.0118	0.04	Q	V			
10+ 5	0.0120	0.02	Q	V			
10+10	0.0122	0.02	Q	V			
10+15	0.0124	0.02	Q	V			
10+20	0.0125	0.02	Q	V			
10+25	0.0127	0.02	Q	V			
10+30	0.0129	0.02	Q	V			
10+35	0.0131	0.03	Q	V			
10+40	0.0133	0.03	Q	V			
10+45	0.0135	0.03	Q	V			
10+50	0.0138	0.03	Q	V			
10+55	0.0140	0.03	Q	V			
11+ 0	0.0142	0.03	Q	V			
11+ 5	0.0144	0.03	Q	V			
11+10	0.0146	0.03	Q	V			
11+15	0.0149	0.03	Q	V			
11+20	0.0151	0.03	Q	V			
11+25	0.0153	0.03	Q	V			
11+30	0.0155	0.03	Q	V			
11+35	0.0157	0.03	Q	V			
11+40	0.0159	0.03	Q	V			
11+45	0.0161	0.03	Q	V			
11+50	0.0163	0.03	Q	V			
11+55	0.0165	0.03	Q	V			
12+ 0	0.0167	0.03	Q	V			
12+ 5	0.0170	0.04	Q	V			
12+10	0.0173	0.04	Q	V			
12+15	0.0175	0.04	Q	V			
12+20	0.0178	0.04	Q	V			
12+25	0.0181	0.04	Q	V			
12+30	0.0184	0.04	Q	V			
12+35	0.0187	0.05	Q	V			
12+40	0.0190	0.05	Q	V			
12+45	0.0194	0.05	Q	V			
12+50	0.0197	0.05	Q	V			
12+55	0.0200	0.05	Q	V			
13+ 0	0.0203	0.05	Q	V			
13+ 5	0.0207	0.06	Q	V			
13+10	0.0211	0.06	Q	V			
13+15	0.0215	0.06	Q	V			
13+20	0.0219	0.06	Q	V			
13+25	0.0223	0.06	Q	V			
13+30	0.0227	0.06	Q	V			
13+35	0.0230	0.04	Q	V			
13+40	0.0232	0.04	Q	V			
13+45	0.0235	0.04	Q	V			
13+50	0.0237	0.04	Q	V			

19+55	0.0326	0.00	0				V
20+ 0	0.0326	0.00	0				V
20+ 5	0.0326	0.00	0				V
20+10	0.0327	0.00	0				V
20+15	0.0327	0.00	0				V
20+20	0.0327	0.00	0				V
20+25	0.0328	0.00	0				V
20+30	0.0328	0.00	0				V
20+35	0.0328	0.00	0				V
20+40	0.0329	0.00	0				V
20+45	0.0329	0.00	0				V
20+50	0.0329	0.00	0				V
20+55	0.0330	0.00	0				V
21+ 0	0.0330	0.00	0				V
21+ 5	0.0330	0.00	0				V
21+10	0.0331	0.00	0				V
21+15	0.0331	0.00	0				V
21+20	0.0331	0.00	0				V
21+25	0.0331	0.00	0				V
21+30	0.0332	0.00	0				V
21+35	0.0332	0.00	0				V
21+40	0.0332	0.00	0				V
21+45	0.0333	0.00	0				V
21+50	0.0333	0.00	0				V
21+55	0.0333	0.00	0				V
22+ 0	0.0333	0.00	0				V
22+ 5	0.0334	0.00	0				V
22+10	0.0334	0.00	0				V
22+15	0.0334	0.00	0				V
22+20	0.0334	0.00	0				V
22+25	0.0335	0.00	0				V
22+30	0.0335	0.00	0				V
22+35	0.0335	0.00	0				V
22+40	0.0335	0.00	0				V
22+45	0.0336	0.00	0				V
22+50	0.0336	0.00	0				V
22+55	0.0336	0.00	0				V
23+ 0	0.0336	0.00	0				V
23+ 5	0.0336	0.00	0				V
23+10	0.0337	0.00	0				V
23+15	0.0337	0.00	0				V
23+20	0.0337	0.00	0				V
23+25	0.0337	0.00	0				V
23+30	0.0338	0.00	0				V
23+35	0.0338	0.00	0				V
23+40	0.0338	0.00	0				V
23+45	0.0338	0.00	0				V
23+50	0.0339	0.00	0				V
23+55	0.0339	0.00	0				V
24+ 0	0.0339	0.00	0				V

Unit Hydrograph Analysis

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TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 132
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 0.13(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.13(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 81.00(Ft.)
Length along longest watercourse measured to centroid = 30.00(Ft.)
Length along longest watercourse = 0.015 Mi.
Length along longest watercourse measured to centroid = 0.006 Mi.
Difference in elevation = 3.70(Ft.)
Slope along watercourse = 241.1852 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.004 Hr.
Lag time = 0.22 Min.
25% of lag time = 0.05 Min.
40% of lag time = 0.09 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	1.20	0.16

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	3.00	0.39

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.941(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.941(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.130 56.00 0.900
Total Area Entered = 0.13(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097

Minimum soil loss rate ((In/Hr)) = 0.049

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	2289.994	100.000
		Sum = 100.000	Sum= 0.131

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.116	(0.097)	0.021	0.095
2	0.17	0.60	0.140	(0.097)	0.025	0.115
3	0.25	0.60	0.140	(0.097)	0.025	0.115
4	0.33	0.60	0.140	(0.097)	0.025	0.115
5	0.42	0.60	0.140	(0.097)	0.025	0.115
6	0.50	0.70	0.163	(0.097)	0.029	0.134
7	0.58	0.70	0.163	(0.097)	0.029	0.134
8	0.67	0.70	0.163	(0.097)	0.029	0.134
9	0.75	0.70	0.163	(0.097)	0.029	0.134
10	0.83	0.70	0.163	(0.097)	0.029	0.134
11	0.92	0.70	0.163	(0.097)	0.029	0.134
12	1.00	0.80	0.186	(0.097)	0.034	0.153
13	1.08	0.80	0.186	(0.097)	0.034	0.153
14	1.17	0.80	0.186	(0.097)	0.034	0.153
15	1.25	0.80	0.186	(0.097)	0.034	0.153
16	1.33	0.80	0.186	(0.097)	0.034	0.153
17	1.42	0.80	0.186	(0.097)	0.034	0.153
18	1.50	0.80	0.186	(0.097)	0.034	0.153
19	1.58	0.80	0.186	(0.097)	0.034	0.153
20	1.67	0.80	0.186	(0.097)	0.034	0.153
21	1.75	0.80	0.186	(0.097)	0.034	0.153
22	1.83	0.80	0.186	(0.097)	0.034	0.153
23	1.92	0.80	0.186	(0.097)	0.034	0.153
24	2.00	0.90	0.210	(0.097)	0.038	0.172
25	2.08	0.80	0.186	(0.097)	0.034	0.153
26	2.17	0.90	0.210	(0.097)	0.038	0.172
27	2.25	0.90	0.210	(0.097)	0.038	0.172
28	2.33	0.90	0.210	(0.097)	0.038	0.172
29	2.42	0.90	0.210	(0.097)	0.038	0.172
30	2.50	0.90	0.210	(0.097)	0.038	0.172
31	2.58	0.90	0.210	(0.097)	0.038	0.172
32	2.67	0.90	0.210	(0.097)	0.038	0.172
33	2.75	1.00	0.233	(0.097)	0.042	0.191
34	2.83	1.00	0.233	(0.097)	0.042	0.191
35	2.92	1.00	0.233	(0.097)	0.042	0.191
36	3.00	1.00	0.233	(0.097)	0.042	0.191
37	3.08	1.00	0.233	(0.097)	0.042	0.191
38	3.17	1.10	0.256	(0.097)	0.046	0.210
39	3.25	1.10	0.256	(0.097)	0.046	0.210
40	3.33	1.10	0.256	(0.097)	0.046	0.210
41	3.42	1.20	0.279	(0.097)	0.050	0.229
42	3.50	1.30	0.303	(0.097)	0.054	0.248
43	3.58	1.40	0.326	(0.097)	0.059	0.267

1+55	0.0029	0.02	Q	V
2+ 0	0.0030	0.02	Q	V
2+ 5	0.0032	0.02	Q	V
2+10	0.0033	0.02	Q	V
2+15	0.0035	0.02	Q	V
2+20	0.0036	0.02	Q	V
2+25	0.0038	0.02	Q	V
2+30	0.0039	0.02	Q	V
2+35	0.0041	0.02	Q	V
2+40	0.0043	0.02	Q	V
2+45	0.0044	0.03	Q	V
2+50	0.0046	0.03	Q	V
2+55	0.0048	0.03	Q	V
3+ 0	0.0049	0.03	Q	V
3+ 5	0.0051	0.03	Q	V
3+10	0.0053	0.03	Q	V
3+15	0.0055	0.03	Q	V
3+20	0.0057	0.03	Q	V
3+25	0.0059	0.03	Q	V
3+30	0.0061	0.03	Q	V
3+35	0.0064	0.04	Q	V
3+40	0.0066	0.04	Q	V
3+45	0.0069	0.04	Q	V
3+50	0.0071	0.04	Q	V
3+55	0.0074	0.04	Q	V
4+ 0	0.0077	0.04	Q	V
4+ 5	0.0080	0.04	Q	V
4+10	0.0083	0.05	Q	V
4+15	0.0086	0.05	Q	V
4+20	0.0089	0.05	Q	V
4+25	0.0093	0.05	Q	V
4+30	0.0097	0.05	Q	V
4+35	0.0100	0.06	Q	V
4+40	0.0104	0.06	Q	V
4+45	0.0109	0.06	Q	V
4+50	0.0113	0.06	Q	V
4+55	0.0117	0.06	Q	V
5+ 0	0.0122	0.07	Q	V
5+ 5	0.0127	0.08	Q	V
5+10	0.0134	0.10	Q	V
5+15	0.0141	0.11	Q	V
5+20	0.0149	0.12	Q	V
5+25	0.0158	0.13	Q	V
5+30	0.0169	0.16	Q	V
5+35	0.0173	0.05	Q	V
5+40	0.0174	0.02	Q	V
5+45	0.0175	0.02	Q	V
5+50	0.0176	0.01	Q	V
5+55	0.0177	0.01	Q	V
6+ 0	0.0177	0.01	Q	V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PB10310.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 132
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 0.13(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.13(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 81.00(Ft.)
Length along longest watercourse measured to centroid = 30.00(Ft.)
Length along longest watercourse = 0.015 Mi.
Length along longest watercourse measured to centroid = 0.006 Mi.
Difference in elevation = 3.70(Ft.)
Slope along watercourse = 241.1852 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.004 Hr.
Lag time = 0.22 Min.
25% of lag time = 0.05 Min.
40% of lag time = 0.09 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	0.90	0.12

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	2.35	0.31

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 1.497(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.497(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.130 56.00 0.900
Total Area Entered = 0.13(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097

Minimum soil loss rate ((In/Hr)) = 0.049

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	2289.994	100.000
		Sum = 100.000	Sum = 0.131

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max | Low	Effective (In/Hr)
1	0.08	1.30	(0.097) | 0.042	0.191
2	0.17	1.30	(0.097) | 0.042	0.191
3	0.25	1.10	(0.097) | 0.036	0.162
4	0.33	1.50	(0.097) | 0.048	0.221
5	0.42	1.50	(0.097) | 0.048	0.221
6	0.50	1.80	(0.097) | 0.058	0.265
7	0.58	1.50	(0.097) | 0.048	0.221
8	0.67	1.80	(0.097) | 0.058	0.265
9	0.75	1.80	(0.097) | 0.058	0.265
10	0.83	1.50	(0.097) | 0.048	0.221
11	0.92	1.60	(0.097) | 0.052	0.236
12	1.00	1.80	(0.097) | 0.058	0.265
13	1.08	2.20	(0.097) | 0.071	0.324
14	1.17	2.20	(0.097) | 0.071	0.324
15	1.25	2.20	(0.097) | 0.071	0.324
16	1.33	2.00	(0.097) | 0.065	0.295
17	1.42	2.60	(0.097) | 0.084	0.383
18	1.50	2.70	(0.097) | 0.087	0.398
19	1.58	2.40	(0.097) | 0.078	0.353
20	1.67	2.70	(0.097) | 0.087	0.398
21	1.75	3.30	0.097 (0.107)	0.496
22	1.83	3.10	0.097 (0.100)	0.460
23	1.92	2.90	(0.097) | 0.094	0.427
24	2.00	3.00	(0.097) | 0.097	0.442
25	2.08	3.10	0.097 (0.100)	0.460
26	2.17	4.20	0.097 (0.136)	0.657
27	2.25	5.00	0.097 (0.162)	0.801
28	2.33	3.50	0.097 (0.113)	0.531
29	2.42	6.80	0.097 (0.220)	1.124
30	2.50	7.30	0.097 (0.236)	1.214
31	2.58	8.20	0.097 (0.265)	1.376
32	2.67	5.90	0.097 (0.191)	0.962
33	2.75	2.00	(0.097) | 0.065	0.295
34	2.83	1.80	(0.097) | 0.058	0.265
35	2.92	1.80	(0.097) | 0.058	0.265
36	3.00	0.60	(0.097) | 0.019	0.088

(Loss Rate Not Used)

Sum = 100.0

Sum = 15.4

Flood volume = Effective rainfall 1.28(In)
times area 0.1(Ac.) / [(In)/(Ft.)] =

0.0(Ac. Ft)

Total soil loss = 0.21(In)

Total soil loss = 0.002(Ac. Ft)

Total rainfall = 1.50(In)

Flood volume = 605.0 Cubic Feet
 Total soil loss = 101.2 Cubic Feet

 Peak flow rate of this hydrograph = 0.180(CFS)

+++++
 3 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume	Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0002		0.03	Q				
0+10	0.0003		0.03	Q				
0+15	0.0005		0.02	QV				
0+20	0.0007		0.03	QV				
0+25	0.0009		0.03	Q V				
0+30	0.0011		0.03	Q V				
0+35	0.0013		0.03	Q V				
0+40	0.0016		0.03	Q V				
0+45	0.0018		0.03	Q V				
0+50	0.0020		0.03	Q V				
0+55	0.0022		0.03	Q V				
1+ 0	0.0025		0.03	Q V				
1+ 5	0.0028		0.04	Q V				
1+10	0.0030		0.04	Q V				
1+15	0.0033		0.04	Q V				
1+20	0.0036		0.04	Q V				
1+25	0.0039		0.05	Q V				
1+30	0.0043		0.05	Q V				
1+35	0.0046		0.05	Q V				
1+40	0.0050		0.05	Q V				
1+45	0.0054		0.06	Q V				
1+50	0.0058		0.06	Q V				
1+55	0.0062		0.06	Q V				
2+ 0	0.0066		0.06	Q V				
2+ 5	0.0070		0.06	Q V				
2+10	0.0076		0.09	Q V				
2+15	0.0084		0.10	Q V				
2+20	0.0088		0.07	Q V				
2+25	0.0099		0.15	Q V				
2+30	0.0110		0.16	Q V				
2+35	0.0122		0.18	Q V				
2+40	0.0131		0.13	Q V				
2+45	0.0133		0.04	Q V				
2+50	0.0136		0.03	Q V				
2+55	0.0138		0.03	Q V				
3+ 0	0.0139		0.01	Q V				

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Drainage Area for Depth-Area Areal Adjustment = 0.13(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 81.00(Ft.)
Length along longest watercourse measured to centroid = 30.00(Ft.)
Length along longest watercourse = 0.015 Mi.
Length along longest watercourse measured to centroid = 0.006 Mi.
Difference in elevation = 3.70(Ft.)
Slope along watercourse = 241.1852 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.004 Hr.
Lag time = 0.22 Min.
25% of lag time = 0.05 Min.
40% of lag time = 0.09 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	0.54	0.07

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.13	1.36	0.18

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.877(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 0.877(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.130 56.00 0.900
Total Area Entered = 0.13(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097
 Minimum soil loss rate ((In/Hr)) = 0.049
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Slope of intensity-duration curve for a 1 hour storm = 0.4800

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	2289.994	100.000
		Sum = 100.000	Sum = 0.131

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	4.40	0.463	(0.097)	0.083	0.380
2	0.17	4.50	0.474	(0.097)	0.085	0.388
3	0.25	5.40	0.569	0.097	(0.102)	0.471
4	0.33	5.40	0.569	0.097	(0.102)	0.471
5	0.42	5.70	0.600	0.097	(0.108)	0.503
6	0.50	6.40	0.674	0.097	(0.121)	0.577
7	0.58	7.90	0.832	0.097	(0.150)	0.735
8	0.67	9.10	0.958	0.097	(0.172)	0.861
9	0.75	12.80	1.348	0.097	(0.243)	1.251
10	0.83	25.60	2.695	0.097	(0.485)	2.598
11	0.92	7.90	0.832	0.097	(0.150)	0.735
12	1.00	4.90	0.516	(0.097)	0.093	0.423

Sum = 100.0 (Loss Rate Not Used) Sum = 9.4

Flood volume = Effective rainfall 0.78(In)
 times area 0.1(Ac.) / [(In)/(Ft.)] = 0.0(Ac. Ft)
 Total soil loss = 0.09(In)
 Total soil loss = 0.001(Ac. Ft)
 Total rainfall = 0.88(In)
 Flood volume = 369.4 Cubic Feet
 Total soil loss = 44.6 Cubic Feet

Peak flow rate of this hydrograph = 0.341(CFS)

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0003	0.05	Q				
0+10	0.0007	0.05	Q	V			
0+15	0.0011	0.06	Q	V			
0+20	0.0015	0.06	Q	V			
0+25	0.0020	0.07	Q	V			
0+30	0.0025	0.08	Q	V			
0+35	0.0032	0.10	Q	V	V		
0+40	0.0040	0.11	Q	V	V		

0+45	0.0051	0.16	Q			V		V		V
0+50	0.0074	0.34	Q							
0+55	0.0081	0.10	Q							
1+ 0	0.0085	0.06	Q							

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PC02242.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 133
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 0.29(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.29(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 120.00(Ft.)
Length along longest watercourse measured to centroid = 25.00(Ft.)
Length along longest watercourse = 0.023 Mi.
Length along longest watercourse measured to centroid = 0.005 Mi.
Difference in elevation = 1.00(Ft.)
Slope along watercourse = 44.0000 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.005 Hr.
Lag time = 0.33 Min.
25% of lag time = 0.08 Min.
40% of lag time = 0.13 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	2.00	0.58

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	6.40	1.86

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.290 56.00 0.900
Total Area Entered = 0.29(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	1529.917	0.292
		Sum = 100.000	Sum = 0.292

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.016	(0.238)	0.003	0.013
2	0.17	0.07	0.016	(0.237)	0.003	0.013
3	0.25	0.07	0.016	(0.236)	0.003	0.013
4	0.33	0.10	0.024	(0.235)	0.004	0.020
5	0.42	0.10	0.024	(0.234)	0.004	0.020
6	0.50	0.10	0.024	(0.233)	0.004	0.020
7	0.58	0.10	0.024	(0.232)	0.004	0.020
8	0.67	0.10	0.024	(0.231)	0.004	0.020
9	0.75	0.10	0.024	(0.230)	0.004	0.020
10	0.83	0.13	0.032	(0.230)	0.006	0.026
11	0.92	0.13	0.032	(0.229)	0.006	0.026
12	1.00	0.13	0.032	(0.228)	0.006	0.026
13	1.08	0.10	0.024	(0.227)	0.004	0.020
14	1.17	0.10	0.024	(0.226)	0.004	0.020
15	1.25	0.10	0.024	(0.225)	0.004	0.020
16	1.33	0.10	0.024	(0.224)	0.004	0.020
17	1.42	0.10	0.024	(0.223)	0.004	0.020
18	1.50	0.10	0.024	(0.222)	0.004	0.020
19	1.58	0.10	0.024	(0.222)	0.004	0.020
20	1.67	0.10	0.024	(0.221)	0.004	0.020
21	1.75	0.10	0.024	(0.220)	0.004	0.020
22	1.83	0.13	0.032	(0.219)	0.006	0.026
23	1.92	0.13	0.032	(0.218)	0.006	0.026
24	2.00	0.13	0.032	(0.217)	0.006	0.026
25	2.08	0.13	0.032	(0.216)	0.006	0.026
26	2.17	0.13	0.032	(0.215)	0.006	0.026
27	2.25	0.13	0.032	(0.214)	0.006	0.026
28	2.33	0.13	0.032	(0.214)	0.006	0.026
29	2.42	0.13	0.032	(0.213)	0.006	0.026
30	2.50	0.13	0.032	(0.212)	0.006	0.026
31	2.58	0.17	0.040	(0.211)	0.007	0.033
32	2.67	0.17	0.040	(0.210)	0.007	0.033
33	2.75	0.17	0.040	(0.209)	0.007	0.033
34	2.83	0.17	0.040	(0.208)	0.007	0.033
35	2.92	0.17	0.040	(0.208)	0.007	0.033
36	3.00	0.17	0.040	(0.207)	0.007	0.033
37	3.08	0.17	0.040	(0.206)	0.007	0.033
38	3.17	0.17	0.040	(0.205)	0.007	0.033
39	3.25	0.17	0.040	(0.204)	0.007	0.033
40	3.33	0.17	0.040	(0.203)	0.007	0.033
41	3.42	0.17	0.040	(0.202)	0.007	0.033
42	3.50	0.17	0.040	(0.202)	0.007	0.033
43	3.58	0.17	0.040	(0.201)	0.007	0.033

44	3.67	0.17	0.040	(0.200)	0.007	0.033
45	3.75	0.17	0.040	(0.199)	0.007	0.033
46	3.83	0.20	0.048	(0.198)	0.009	0.039
47	3.92	0.20	0.048	(0.197)	0.009	0.039
48	4.00	0.20	0.048	(0.197)	0.009	0.039
49	4.08	0.20	0.048	(0.196)	0.009	0.039
50	4.17	0.20	0.048	(0.195)	0.009	0.039
51	4.25	0.20	0.048	(0.194)	0.009	0.039
52	4.33	0.23	0.056	(0.193)	0.010	0.046
53	4.42	0.23	0.056	(0.192)	0.010	0.046
54	4.50	0.23	0.056	(0.192)	0.010	0.046
55	4.58	0.23	0.056	(0.191)	0.010	0.046
56	4.67	0.23	0.056	(0.190)	0.010	0.046
57	4.75	0.23	0.056	(0.189)	0.010	0.046
58	4.83	0.27	0.064	(0.188)	0.012	0.052
59	4.92	0.27	0.064	(0.187)	0.012	0.052
60	5.00	0.27	0.064	(0.187)	0.012	0.052
61	5.08	0.20	0.048	(0.186)	0.009	0.039
62	5.17	0.20	0.048	(0.185)	0.009	0.039
63	5.25	0.20	0.048	(0.184)	0.009	0.039
64	5.33	0.23	0.056	(0.183)	0.010	0.046
65	5.42	0.23	0.056	(0.183)	0.010	0.046
66	5.50	0.23	0.056	(0.182)	0.010	0.046
67	5.58	0.27	0.064	(0.181)	0.012	0.052
68	5.67	0.27	0.064	(0.180)	0.012	0.052
69	5.75	0.27	0.064	(0.179)	0.012	0.052
70	5.83	0.27	0.064	(0.179)	0.012	0.052
71	5.92	0.27	0.064	(0.178)	0.012	0.052
72	6.00	0.27	0.064	(0.177)	0.012	0.052
73	6.08	0.30	0.072	(0.176)	0.013	0.059
74	6.17	0.30	0.072	(0.175)	0.013	0.059
75	6.25	0.30	0.072	(0.175)	0.013	0.059
76	6.33	0.30	0.072	(0.174)	0.013	0.059
77	6.42	0.30	0.072	(0.173)	0.013	0.059
78	6.50	0.30	0.072	(0.172)	0.013	0.059
79	6.58	0.33	0.080	(0.172)	0.014	0.066
80	6.67	0.33	0.080	(0.171)	0.014	0.066
81	6.75	0.33	0.080	(0.170)	0.014	0.066
82	6.83	0.33	0.080	(0.169)	0.014	0.066
83	6.92	0.33	0.080	(0.169)	0.014	0.066
84	7.00	0.33	0.080	(0.168)	0.014	0.066
85	7.08	0.33	0.080	(0.167)	0.014	0.066
86	7.17	0.33	0.080	(0.166)	0.014	0.066
87	7.25	0.33	0.080	(0.165)	0.014	0.066
88	7.33	0.37	0.088	(0.165)	0.016	0.072
89	7.42	0.37	0.088	(0.164)	0.016	0.072
90	7.50	0.37	0.088	(0.163)	0.016	0.072
91	7.58	0.40	0.096	(0.162)	0.017	0.079
92	7.67	0.40	0.096	(0.162)	0.017	0.079
93	7.75	0.40	0.096	(0.161)	0.017	0.079
94	7.83	0.43	0.104	(0.160)	0.019	0.085
95	7.92	0.43	0.104	(0.159)	0.019	0.085
96	8.00	0.43	0.104	(0.159)	0.019	0.085
97	8.08	0.50	0.120	(0.158)	0.022	0.098
98	8.17	0.50	0.120	(0.157)	0.022	0.098
99	8.25	0.50	0.120	(0.157)	0.022	0.098
100	8.33	0.50	0.120	(0.156)	0.022	0.098
101	8.42	0.50	0.120	(0.155)	0.022	0.098
102	8.50	0.50	0.120	(0.154)	0.022	0.098
103	8.58	0.53	0.128	(0.154)	0.023	0.105
104	8.67	0.53	0.128	(0.153)	0.023	0.105
105	8.75	0.53	0.128	(0.152)	0.023	0.105
106	8.83	0.57	0.136	(0.151)	0.024	0.112
107	8.92	0.57	0.136	(0.151)	0.024	0.112
108	9.00	0.57	0.136	(0.150)	0.024	0.112
109	9.08	0.63	0.152	(0.149)	0.027	0.125
110	9.17	0.63	0.152	(0.149)	0.027	0.125
111	9.25	0.63	0.152	(0.148)	0.027	0.125
112	9.33	0.67	0.160	(0.147)	0.029	0.131
113	9.42	0.67	0.160	(0.147)	0.029	0.131
114	9.50	0.67	0.160	(0.146)	0.029	0.131
115	9.58	0.70	0.168	(0.145)	0.030	0.138

116	9. 67	0. 70	0. 168	(0. 144)	0. 030	0. 138
117	9. 75	0. 70	0. 168	(0. 144)	0. 030	0. 138
118	9. 83	0. 73	0. 176	(0. 143)	0. 032	0. 144
119	9. 92	0. 73	0. 176	(0. 142)	0. 032	0. 144
120	10. 00	0. 73	0. 176	(0. 142)	0. 032	0. 144
121	10. 08	0. 50	0. 120	(0. 141)	0. 022	0. 098
122	10. 17	0. 50	0. 120	(0. 140)	0. 022	0. 098
123	10. 25	0. 50	0. 120	(0. 140)	0. 022	0. 098
124	10. 33	0. 50	0. 120	(0. 139)	0. 022	0. 098
125	10. 42	0. 50	0. 120	(0. 138)	0. 022	0. 098
126	10. 50	0. 50	0. 120	(0. 138)	0. 022	0. 098
127	10. 58	0. 67	0. 160	(0. 137)	0. 029	0. 131
128	10. 67	0. 67	0. 160	(0. 136)	0. 029	0. 131
129	10. 75	0. 67	0. 160	(0. 136)	0. 029	0. 131
130	10. 83	0. 67	0. 160	(0. 135)	0. 029	0. 131
131	10. 92	0. 67	0. 160	(0. 134)	0. 029	0. 131
132	11. 00	0. 67	0. 160	(0. 134)	0. 029	0. 131
133	11. 08	0. 63	0. 152	(0. 133)	0. 027	0. 125
134	11. 17	0. 63	0. 152	(0. 132)	0. 027	0. 125
135	11. 25	0. 63	0. 152	(0. 132)	0. 027	0. 125
136	11. 33	0. 63	0. 152	(0. 131)	0. 027	0. 125
137	11. 42	0. 63	0. 152	(0. 130)	0. 027	0. 125
138	11. 50	0. 63	0. 152	(0. 130)	0. 027	0. 125
139	11. 58	0. 57	0. 136	(0. 129)	0. 024	0. 112
140	11. 67	0. 57	0. 136	(0. 128)	0. 024	0. 112
141	11. 75	0. 57	0. 136	(0. 128)	0. 024	0. 112
142	11. 83	0. 60	0. 144	(0. 127)	0. 026	0. 118
143	11. 92	0. 60	0. 144	(0. 126)	0. 026	0. 118
144	12. 00	0. 60	0. 144	(0. 126)	0. 026	0. 118
145	12. 08	0. 83	0. 200	(0. 125)	0. 036	0. 164
146	12. 17	0. 83	0. 200	(0. 125)	0. 036	0. 164
147	12. 25	0. 83	0. 200	(0. 124)	0. 036	0. 164
148	12. 33	0. 87	0. 208	(0. 123)	0. 037	0. 171
149	12. 42	0. 87	0. 208	(0. 123)	0. 037	0. 171
150	12. 50	0. 87	0. 208	(0. 122)	0. 037	0. 171
151	12. 58	0. 93	0. 224	(0. 121)	0. 040	0. 184
152	12. 67	0. 93	0. 224	(0. 121)	0. 040	0. 184
153	12. 75	0. 93	0. 224	(0. 120)	0. 040	0. 184
154	12. 83	0. 97	0. 232	(0. 120)	0. 042	0. 190
155	12. 92	0. 97	0. 232	(0. 119)	0. 042	0. 190
156	13. 00	0. 97	0. 232	(0. 118)	0. 042	0. 190
157	13. 08	1. 13	0. 272	(0. 118)	0. 049	0. 223
158	13. 17	1. 13	0. 272	(0. 117)	0. 049	0. 223
159	13. 25	1. 13	0. 272	(0. 117)	0. 049	0. 223
160	13. 33	1. 13	0. 272	(0. 116)	0. 049	0. 223
161	13. 42	1. 13	0. 272	(0. 115)	0. 049	0. 223
162	13. 50	1. 13	0. 272	(0. 115)	0. 049	0. 223
163	13. 58	0. 77	0. 184	(0. 114)	0. 033	0. 151
164	13. 67	0. 77	0. 184	(0. 114)	0. 033	0. 151
165	13. 75	0. 77	0. 184	(0. 113)	0. 033	0. 151
166	13. 83	0. 77	0. 184	(0. 113)	0. 033	0. 151
167	13. 92	0. 77	0. 184	(0. 112)	0. 033	0. 151
168	14. 00	0. 77	0. 184	(0. 111)	0. 033	0. 151
169	14. 08	0. 90	0. 216	(0. 111)	0. 039	0. 177
170	14. 17	0. 90	0. 216	(0. 110)	0. 039	0. 177
171	14. 25	0. 90	0. 216	(0. 110)	0. 039	0. 177
172	14. 33	0. 87	0. 208	(0. 109)	0. 037	0. 171
173	14. 42	0. 87	0. 208	(0. 109)	0. 037	0. 171
174	14. 50	0. 87	0. 208	(0. 108)	0. 037	0. 171
175	14. 58	0. 87	0. 208	(0. 107)	0. 037	0. 171
176	14. 67	0. 87	0. 208	(0. 107)	0. 037	0. 171
177	14. 75	0. 87	0. 208	(0. 106)	0. 037	0. 171
178	14. 83	0. 83	0. 200	(0. 106)	0. 036	0. 164
179	14. 92	0. 83	0. 200	(0. 105)	0. 036	0. 164
180	15. 00	0. 83	0. 200	(0. 105)	0. 036	0. 164
181	15. 08	0. 80	0. 192	(0. 104)	0. 035	0. 157
182	15. 17	0. 80	0. 192	(0. 104)	0. 035	0. 157
183	15. 25	0. 80	0. 192	(0. 103)	0. 035	0. 157
184	15. 33	0. 77	0. 184	(0. 103)	0. 033	0. 151
185	15. 42	0. 77	0. 184	(0. 102)	0. 033	0. 151
186	15. 50	0. 77	0. 184	(0. 102)	0. 033	0. 151
187	15. 58	0. 63	0. 152	(0. 101)	0. 027	0. 125

188	15.67	0.63	0.152	(0.101)	0.027	0.125
189	15.75	0.63	0.152	(0.100)	0.027	0.125
190	15.83	0.63	0.152	(0.100)	0.027	0.125
191	15.92	0.63	0.152	(0.099)	0.027	0.125
192	16.00	0.63	0.152	(0.099)	0.027	0.125
193	16.08	0.13	0.032	(0.098)	0.006	0.026
194	16.17	0.13	0.032	(0.098)	0.006	0.026
195	16.25	0.13	0.032	(0.097)	0.006	0.026
196	16.33	0.13	0.032	(0.097)	0.006	0.026
197	16.42	0.13	0.032	(0.096)	0.006	0.026
198	16.50	0.13	0.032	(0.096)	0.006	0.026
199	16.58	0.10	0.024	(0.095)	0.004	0.020
200	16.67	0.10	0.024	(0.095)	0.004	0.020
201	16.75	0.10	0.024	(0.094)	0.004	0.020
202	16.83	0.10	0.024	(0.094)	0.004	0.020
203	16.92	0.10	0.024	(0.093)	0.004	0.020
204	17.00	0.10	0.024	(0.093)	0.004	0.020
205	17.08	0.17	0.040	(0.092)	0.007	0.033
206	17.17	0.17	0.040	(0.092)	0.007	0.033
207	17.25	0.17	0.040	(0.091)	0.007	0.033
208	17.33	0.17	0.040	(0.091)	0.007	0.033
209	17.42	0.17	0.040	(0.090)	0.007	0.033
210	17.50	0.17	0.040	(0.090)	0.007	0.033
211	17.58	0.17	0.040	(0.089)	0.007	0.033
212	17.67	0.17	0.040	(0.089)	0.007	0.033
213	17.75	0.17	0.040	(0.089)	0.007	0.033
214	17.83	0.13	0.032	(0.088)	0.006	0.026
215	17.92	0.13	0.032	(0.088)	0.006	0.026
216	18.00	0.13	0.032	(0.087)	0.006	0.026
217	18.08	0.13	0.032	(0.087)	0.006	0.026
218	18.17	0.13	0.032	(0.086)	0.006	0.026
219	18.25	0.13	0.032	(0.086)	0.006	0.026
220	18.33	0.13	0.032	(0.086)	0.006	0.026
221	18.42	0.13	0.032	(0.085)	0.006	0.026
222	18.50	0.13	0.032	(0.085)	0.006	0.026
223	18.58	0.10	0.024	(0.084)	0.004	0.020
224	18.67	0.10	0.024	(0.084)	0.004	0.020
225	18.75	0.10	0.024	(0.084)	0.004	0.020
226	18.83	0.07	0.016	(0.083)	0.003	0.013
227	18.92	0.07	0.016	(0.083)	0.003	0.013
228	19.00	0.07	0.016	(0.082)	0.003	0.013
229	19.08	0.10	0.024	(0.082)	0.004	0.020
230	19.17	0.10	0.024	(0.082)	0.004	0.020
231	19.25	0.10	0.024	(0.081)	0.004	0.020
232	19.33	0.13	0.032	(0.081)	0.006	0.026
233	19.42	0.13	0.032	(0.080)	0.006	0.026
234	19.50	0.13	0.032	(0.080)	0.006	0.026
235	19.58	0.10	0.024	(0.080)	0.004	0.020
236	19.67	0.10	0.024	(0.079)	0.004	0.020
237	19.75	0.10	0.024	(0.079)	0.004	0.020
238	19.83	0.07	0.016	(0.079)	0.003	0.013
239	19.92	0.07	0.016	(0.078)	0.003	0.013
240	20.00	0.07	0.016	(0.078)	0.003	0.013
241	20.08	0.10	0.024	(0.078)	0.004	0.020
242	20.17	0.10	0.024	(0.077)	0.004	0.020
243	20.25	0.10	0.024	(0.077)	0.004	0.020
244	20.33	0.10	0.024	(0.077)	0.004	0.020
245	20.42	0.10	0.024	(0.076)	0.004	0.020
246	20.50	0.10	0.024	(0.076)	0.004	0.020
247	20.58	0.10	0.024	(0.076)	0.004	0.020
248	20.67	0.10	0.024	(0.075)	0.004	0.020
249	20.75	0.10	0.024	(0.075)	0.004	0.020
250	20.83	0.07	0.016	(0.075)	0.003	0.013
251	20.92	0.07	0.016	(0.074)	0.003	0.013
252	21.00	0.07	0.016	(0.074)	0.003	0.013
253	21.08	0.10	0.024	(0.074)	0.004	0.020
254	21.17	0.10	0.024	(0.073)	0.004	0.020
255	21.25	0.10	0.024	(0.073)	0.004	0.020
256	21.33	0.07	0.016	(0.073)	0.003	0.013
257	21.42	0.07	0.016	(0.073)	0.003	0.013
258	21.50	0.07	0.016	(0.072)	0.003	0.013
259	21.58	0.10	0.024	(0.072)	0.004	0.020

1+55	0.0009	0.01	Q			
2+ 0	0.0010	0.01	Q			
2+ 5	0.0010	0.01	QV			
2+10	0.0011	0.01	QV			
2+15	0.0011	0.01	QV			
2+20	0.0012	0.01	QV			
2+25	0.0013	0.01	QV			
2+30	0.0013	0.01	QV			
2+35	0.0014	0.01	QV			
2+40	0.0014	0.01	QV			
2+45	0.0015	0.01	QV			
2+50	0.0016	0.01	QV			
2+55	0.0016	0.01	QV			
3+ 0	0.0017	0.01	QV			
3+ 5	0.0018	0.01	QV			
3+10	0.0018	0.01	QV			
3+15	0.0019	0.01	QV			
3+20	0.0020	0.01	QV			
3+25	0.0020	0.01	Q V			
3+30	0.0021	0.01	Q V			
3+35	0.0022	0.01	Q V			
3+40	0.0022	0.01	Q V			
3+45	0.0023	0.01	Q V			
3+50	0.0024	0.01	Q V			
3+55	0.0025	0.01	Q V			
4+ 0	0.0025	0.01	Q V			
4+ 5	0.0026	0.01	Q V			
4+10	0.0027	0.01	Q V			
4+15	0.0028	0.01	Q V			
4+20	0.0029	0.01	Q V			
4+25	0.0030	0.01	Q V			
4+30	0.0031	0.01	Q V			
4+35	0.0031	0.01	Q V			
4+40	0.0032	0.01	Q V			
4+45	0.0033	0.01	Q V			
4+50	0.0034	0.02	Q V			
4+55	0.0035	0.02	Q V			
5+ 0	0.0036	0.02	Q V			
5+ 5	0.0037	0.01	Q V			
5+10	0.0038	0.01	Q V			
5+15	0.0039	0.01	Q V			
5+20	0.0040	0.01	Q V			
5+25	0.0041	0.01	Q V			
5+30	0.0042	0.01	Q V			
5+35	0.0043	0.02	Q V			
5+40	0.0044	0.02	Q V			
5+45	0.0045	0.02	Q V			
5+50	0.0046	0.02	Q V			
5+55	0.0047	0.02	Q V			
6+ 0	0.0048	0.02	Q V			
6+ 5	0.0049	0.02	Q V			
6+10	0.0050	0.02	Q V			
6+15	0.0052	0.02	Q V			
6+20	0.0053	0.02	Q V			
6+25	0.0054	0.02	Q V			
6+30	0.0055	0.02	Q V			
6+35	0.0056	0.02	Q V			
6+40	0.0058	0.02	Q V			
6+45	0.0059	0.02	Q V			
6+50	0.0060	0.02	Q V			
6+55	0.0062	0.02	Q V			
7+ 0	0.0063	0.02	Q V			
7+ 5	0.0064	0.02	Q V			
7+10	0.0066	0.02	Q V			
7+15	0.0067	0.02	Q V			
7+20	0.0068	0.02	Q V			
7+25	0.0070	0.02	Q V			
7+30	0.0071	0.02	Q V			
7+35	0.0073	0.02	Q V			
7+40	0.0075	0.02	Q V			
7+45	0.0076	0.02	Q V			
7+50	0.0078	0.02	Q V			

7+55	0.0080	0.02	Q	V			
8+ 0	0.0081	0.02	Q	V			
8+ 5	0.0083	0.03	Q	V			
8+10	0.0085	0.03	Q	V			
8+15	0.0087	0.03	Q	V			
8+20	0.0089	0.03	Q	V			
8+25	0.0091	0.03	Q	V			
8+30	0.0093	0.03	Q	V			
8+35	0.0095	0.03	Q	V			
8+40	0.0097	0.03	Q	V			
8+45	0.0099	0.03	Q	V			
8+50	0.0102	0.03	Q	V			
8+55	0.0104	0.03	Q	V			
9+ 0	0.0106	0.03	Q	V			
9+ 5	0.0109	0.04	Q	V			
9+10	0.0111	0.04	Q	V			
9+15	0.0114	0.04	Q	V			
9+20	0.0116	0.04	Q	V			
9+25	0.0119	0.04	Q	V			
9+30	0.0122	0.04	Q	V			
9+35	0.0124	0.04	Q	V			
9+40	0.0127	0.04	Q	V			
9+45	0.0130	0.04	Q	V			
9+50	0.0133	0.04	Q	V			
9+55	0.0136	0.04	Q	V			
10+ 0	0.0139	0.04	Q	V			
10+ 5	0.0141	0.03	Q	V			
10+10	0.0143	0.03	Q	V			
10+15	0.0145	0.03	Q	V			
10+20	0.0147	0.03	Q	V			
10+25	0.0149	0.03	Q	V			
10+30	0.0151	0.03	Q	V			
10+35	0.0153	0.04	Q	V			
10+40	0.0156	0.04	Q	V			
10+45	0.0159	0.04	Q	V			
10+50	0.0161	0.04	Q	V			
10+55	0.0164	0.04	Q	V			
11+ 0	0.0166	0.04	Q	V			
11+ 5	0.0169	0.04	Q	V			
11+10	0.0171	0.04	Q	V			
11+15	0.0174	0.04	Q	V			
11+20	0.0177	0.04	Q	V			
11+25	0.0179	0.04	Q	V			
11+30	0.0182	0.04	Q	V			
11+35	0.0184	0.03	Q	V			
11+40	0.0186	0.03	Q	V			
11+45	0.0188	0.03	Q	V			
11+50	0.0191	0.03	Q	V			
11+55	0.0193	0.03	Q	V			
12+ 0	0.0195	0.03	Q	V			
12+ 5	0.0199	0.05	Q	V			
12+10	0.0202	0.05	Q	V			
12+15	0.0205	0.05	Q	V			
12+20	0.0209	0.05	Q	V			
12+25	0.0212	0.05	Q	V			
12+30	0.0216	0.05	Q	V			
12+35	0.0219	0.05	Q	V			
12+40	0.0223	0.05	Q	V			
12+45	0.0227	0.05	Q	V			
12+50	0.0231	0.06	Q	V			
12+55	0.0234	0.06	Q	V			
13+ 0	0.0238	0.06	Q	V			
13+ 5	0.0243	0.07	Q	V			
13+10	0.0247	0.07	Q	V			
13+15	0.0252	0.07	Q	V			
13+20	0.0256	0.07	Q	V			
13+25	0.0261	0.07	Q	V			
13+30	0.0265	0.07	Q	V			
13+35	0.0268	0.04	Q	V			
13+40	0.0271	0.04	Q	V			
13+45	0.0274	0.04	Q	V			
13+50	0.0277	0.04	Q	V			

19+55	0.0381	0.00	0	V
20+ 0	0.0381	0.00	0	V
20+ 5	0.0382	0.01	0	V
20+10	0.0382	0.01	0	V
20+15	0.0382	0.01	0	V
20+20	0.0383	0.01	0	V
20+25	0.0383	0.01	0	V
20+30	0.0384	0.01	0	V
20+35	0.0384	0.01	0	V
20+40	0.0384	0.01	0	V
20+45	0.0385	0.01	0	V
20+50	0.0385	0.00	0	V
20+55	0.0385	0.00	0	V
21+ 0	0.0386	0.00	0	V
21+ 5	0.0386	0.01	0	V
21+10	0.0386	0.01	0	V
21+15	0.0387	0.01	0	V
21+20	0.0387	0.00	0	V
21+25	0.0387	0.00	0	V
21+30	0.0388	0.00	0	V
21+35	0.0388	0.01	0	V
21+40	0.0388	0.01	0	V
21+45	0.0389	0.01	0	V
21+50	0.0389	0.00	0	V
21+55	0.0389	0.00	0	V
22+ 0	0.0390	0.00	0	V
22+ 5	0.0390	0.01	0	V
22+10	0.0390	0.01	0	V
22+15	0.0391	0.01	0	V
22+20	0.0391	0.00	0	V
22+25	0.0391	0.00	0	V
22+30	0.0392	0.00	0	V
22+35	0.0392	0.00	0	V
22+40	0.0392	0.00	0	V
22+45	0.0392	0.00	0	V
22+50	0.0393	0.00	0	V
22+55	0.0393	0.00	0	V
23+ 0	0.0393	0.00	0	V
23+ 5	0.0393	0.00	0	V
23+10	0.0394	0.00	0	V
23+15	0.0394	0.00	0	V
23+20	0.0394	0.00	0	V
23+25	0.0394	0.00	0	V
23+30	0.0395	0.00	0	V
23+35	0.0395	0.00	0	V
23+40	0.0395	0.00	0	V
23+45	0.0396	0.00	0	V
23+50	0.0396	0.00	0	V
23+55	0.0396	0.00	0	V
24+ 0	0.0396	0.00	0	V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PC0262.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 133
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 0.29(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.29(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 120.00(Ft.)
Length along longest watercourse measured to centroid = 25.00(Ft.)
Length along longest watercourse = 0.023 Mi.
Length along longest watercourse measured to centroid = 0.005 Mi.
Difference in elevation = 1.00(Ft.)
Slope along watercourse = 44.0000 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.005 Hr.
Lag time = 0.33 Min.
25% of lag time = 0.08 Min.
40% of lag time = 0.13 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	1.20	0.35

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	3.00	0.87

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.200(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.200(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.290 56.00 0.900
Total Area Entered = 0.29(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.180

Unit Hydrograph
 VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	1529.917	0.292
		Sum = 100.000	Sum= 0.292

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.072	(0.134)	0.013	0.059
2	0.17	0.60	0.086	(0.134)	0.016	0.071
3	0.25	0.60	0.086	(0.134)	0.016	0.071
4	0.33	0.60	0.086	(0.134)	0.016	0.071
5	0.42	0.60	0.086	(0.134)	0.016	0.071
6	0.50	0.70	0.101	(0.134)	0.018	0.083
7	0.58	0.70	0.101	(0.134)	0.018	0.083
8	0.67	0.70	0.101	(0.134)	0.018	0.083
9	0.75	0.70	0.101	(0.134)	0.018	0.083
10	0.83	0.70	0.101	(0.134)	0.018	0.083
11	0.92	0.70	0.101	(0.134)	0.018	0.083
12	1.00	0.80	0.115	(0.134)	0.021	0.094
13	1.08	0.80	0.115	(0.134)	0.021	0.094
14	1.17	0.80	0.115	(0.134)	0.021	0.094
15	1.25	0.80	0.115	(0.134)	0.021	0.094
16	1.33	0.80	0.115	(0.134)	0.021	0.094
17	1.42	0.80	0.115	(0.134)	0.021	0.094
18	1.50	0.80	0.115	(0.134)	0.021	0.094
19	1.58	0.80	0.115	(0.134)	0.021	0.094
20	1.67	0.80	0.115	(0.134)	0.021	0.094
21	1.75	0.80	0.115	(0.134)	0.021	0.094
22	1.83	0.80	0.115	(0.134)	0.021	0.094
23	1.92	0.80	0.115	(0.134)	0.021	0.094
24	2.00	0.90	0.130	(0.134)	0.023	0.106
25	2.08	0.80	0.115	(0.134)	0.021	0.094
26	2.17	0.90	0.130	(0.134)	0.023	0.106
27	2.25	0.90	0.130	(0.134)	0.023	0.106
28	2.33	0.90	0.130	(0.134)	0.023	0.106
29	2.42	0.90	0.130	(0.134)	0.023	0.106
30	2.50	0.90	0.130	(0.134)	0.023	0.106
31	2.58	0.90	0.130	(0.134)	0.023	0.106
32	2.67	0.90	0.130	(0.134)	0.023	0.106
33	2.75	1.00	0.144	(0.134)	0.026	0.118
34	2.83	1.00	0.144	(0.134)	0.026	0.118
35	2.92	1.00	0.144	(0.134)	0.026	0.118
36	3.00	1.00	0.144	(0.134)	0.026	0.118
37	3.08	1.00	0.144	(0.134)	0.026	0.118
38	3.17	1.10	0.158	(0.134)	0.029	0.130
39	3.25	1.10	0.158	(0.134)	0.029	0.130
40	3.33	1.10	0.158	(0.134)	0.029	0.130
41	3.42	1.20	0.173	(0.134)	0.031	0.142
42	3.50	1.30	0.187	(0.134)	0.034	0.154
43	3.58	1.40	0.202	(0.134)	0.036	0.165

1+55	0.0040	0.03	Q
2+ 0	0.0042	0.03	Q
2+ 5	0.0044	0.03	Q
2+10	0.0046	0.03	Q
2+15	0.0048	0.03	Q
2+20	0.0050	0.03	Q
2+25	0.0052	0.03	Q
2+30	0.0054	0.03	Q
2+35	0.0057	0.03	Q
2+40	0.0059	0.03	Q
2+45	0.0061	0.03	Q
2+50	0.0063	0.03	Q
2+55	0.0066	0.03	Q
3+ 0	0.0068	0.03	Q
3+ 5	0.0071	0.03	Q
3+10	0.0073	0.04	Q
3+15	0.0076	0.04	Q
3+20	0.0078	0.04	Q
3+25	0.0081	0.04	Q
3+30	0.0084	0.04	Q
3+35	0.0088	0.05	Q
3+40	0.0091	0.05	Q
3+45	0.0095	0.05	Q
3+50	0.0098	0.05	Q
3+55	0.0102	0.06	Q
4+ 0	0.0106	0.06	Q
4+ 5	0.0110	0.06	Q
4+10	0.0114	0.06	Q
4+15	0.0119	0.07	Q
4+20	0.0123	0.07	Q
4+25	0.0128	0.07	Q
4+30	0.0133	0.07	Q
4+35	0.0139	0.08	Q
4+40	0.0144	0.08	Q
4+45	0.0150	0.08	Q
4+50	0.0156	0.08	Q
4+55	0.0161	0.09	Q
5+ 0	0.0168	0.09	Q
5+ 5	0.0175	0.11	Q
5+10	0.0184	0.12	Q
5+15	0.0193	0.13	Q
5+20	0.0203	0.15	Q
5+25	0.0214	0.16	Q
5+30	0.0228	0.20	Q
5+35	0.0232	0.07	Q
5+40	0.0234	0.03	Q
5+45	0.0236	0.02	Q
5+50	0.0237	0.02	Q
5+55	0.0238	0.01	Q
6+ 0	0.0238	0.01	Q

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PC0232.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 133
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 0.29(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.29(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 120.00(Ft.)
Length along longest watercourse measured to centroid = 25.00(Ft.)
Length along longest watercourse = 0.023 Mi.
Length along longest watercourse measured to centroid = 0.005 Mi.
Difference in elevation = 1.00(Ft.)
Slope along watercourse = 44.0000 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.005 Hr.
Lag time = 0.33 Min.
25% of lag time = 0.08 Min.
40% of lag time = 0.13 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	0.90	0.26

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	2.35	0.68

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 0.900(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 0.900(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.290 56.00 0.900
Total Area Entered = 0.29(Ac.)

Flood volume = 779.8 Cubic Feet
 Total soil loss = 167.6 Cubic Feet

 Peak flow rate of this hydrograph = 0.220(CFS)

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 3 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0002	0.03	Q				
0+10	0.0005	0.03	QV				
0+15	0.0007	0.03	QV				
0+20	0.0009	0.04	Q V				
0+25	0.0012	0.04	Q V				
0+30	0.0015	0.05	Q V				
0+35	0.0018	0.04	Q V				
0+40	0.0021	0.05	Q V				
0+45	0.0024	0.05	Q V				
0+50	0.0027	0.04	Q V				
0+55	0.0030	0.04	Q V				
1+ 0	0.0033	0.05	Q V				
1+ 5	0.0037	0.06	Q V				
1+10	0.0041	0.06	Q V				
1+15	0.0045	0.06	Q V				
1+20	0.0048	0.05	Q V				
1+25	0.0053	0.07	Q V				
1+30	0.0058	0.07	Q V				
1+35	0.0062	0.06	Q V				
1+40	0.0067	0.07	Q V				
1+45	0.0073	0.09	Q V				
1+50	0.0078	0.08	Q V				
1+55	0.0083	0.08	Q V				
2+ 0	0.0089	0.08	Q V				
2+ 5	0.0094	0.08	Q V				
2+10	0.0102	0.11	Q V				
2+15	0.0111	0.13	Q V				
2+20	0.0117	0.09	Q V				
2+25	0.0129	0.18	Q V				
2+30	0.0142	0.19	Q V				
2+35	0.0157	0.22	Q V				
2+40	0.0168	0.15	Q V				
2+45	0.0172	0.05	Q V				
2+50	0.0175	0.05	Q V				
2+55	0.0178	0.05	Q V				
3+ 0	0.0179	0.02	Q V				

Unit Hydrograph Analysis

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 133
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 0.29(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.29(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 120.00(Ft.)
Length along longest watercourse measured to centroid = 25.00(Ft.)
Length along longest watercourse = 0.023 Mi.
Length along longest watercourse measured to centroid = 0.005 Mi.
Difference in elevation = 1.00(Ft.)
Slope along watercourse = 44.0000 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.005 Hr.
Lag time = 0.33 Min.
25% of lag time = 0.08 Min.
40% of lag time = 0.13 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	0.54	0.16

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	1.36	0.39

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.540(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 0.540(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.290 56.00 0.900
Total Area Entered = 0.29(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Slope of intensity-duration curve for a 1 hour storm = 0.4800

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	1529.917	100.000
		Sum = 100.000	Sum = 0.292

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate (In./Hr) Max	Low	Effective (In/Hr)	
1	0.08	4.40	0.285	(0.134)	0.051	0.234
2	0.17	4.50	0.292	(0.134)	0.052	0.239
3	0.25	5.40	0.350	(0.134)	0.063	0.287
4	0.33	5.40	0.350	(0.134)	0.063	0.287
5	0.42	5.70	0.369	(0.134)	0.066	0.303
6	0.50	6.40	0.415	(0.134)	0.075	0.340
7	0.58	7.90	0.512	(0.134)	0.092	0.420
8	0.67	9.10	0.590	(0.134)	0.106	0.484
9	0.75	12.80	0.829	0.134	(0.149)	0.695
10	0.83	25.60	1.659	0.134	(0.299)	1.525
11	0.92	7.90	0.512	(0.134)	0.092	0.420
12	1.00	4.90	0.318	(0.134)	0.057	0.260

Sum = 100.0 (Loss Rate Not Used) Sum = 5.5

Flood volume = Effective rainfall 0.46(In)
 times area 0.3(Ac.) / [(In)/(Ft.)] = 0.0(Ac. Ft)
 Total soil loss = 0.08(In)
 Total soil loss = 0.002(Ac. Ft)
 Total rainfall = 0.54(In)
 Flood volume = 481.9 Cubic Feet
 Total soil loss = 86.6 Cubic Feet

Peak flow rate of this hydrograph = 0.446(CFS)

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0005	0.07	QV				
0+10	0.0010	0.07	Q V				
0+15	0.0015	0.08	Q V				
0+20	0.0021	0.08	Q V				
0+25	0.0027	0.09	Q V				
0+30	0.0034	0.10	Q V				
0+35	0.0042	0.12	Q V				
0+40	0.0052	0.14	Q V				

0+45	0.0066	0.20	Q			V		V		V
0+50	0.0097	0.45	Q							
0+55	0.0105	0.12	Q							
1+ 0	0.0111	0.08	Q							

Unit Hydrograph Analysis

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 133
HYDROLOGIC ANALYSIS
5-YEAR

Drainage Area = 0.29(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.29(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 120.00(Ft.)
Length along longest watercourse measured to centroid = 25.00(Ft.)
Length along longest watercourse = 0.023 Mi.
Length along longest watercourse measured to centroid = 0.005 Mi.
Difference in elevation = 1.00(Ft.)
Slope along watercourse = 44.0000 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.005 Hr.
Lag time = 0.33 Min.
25% of lag time = 0.08 Min.
40% of lag time = 0.13 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	2.00	0.58

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	6.40	1.86

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 3.031(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 3.031(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.290 56.00 0.900
Total Area Entered = 0.29(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	1529.917	0.292
		Sum = 100.000	Sum = 0.292

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.024	(0.238)	0.004	0.020
2	0.17	0.07	0.024	(0.237)	0.004	0.020
3	0.25	0.07	0.024	(0.236)	0.004	0.020
4	0.33	0.10	0.036	(0.235)	0.007	0.030
5	0.42	0.10	0.036	(0.234)	0.007	0.030
6	0.50	0.10	0.036	(0.233)	0.007	0.030
7	0.58	0.10	0.036	(0.232)	0.007	0.030
8	0.67	0.10	0.036	(0.231)	0.007	0.030
9	0.75	0.10	0.036	(0.230)	0.007	0.030
10	0.83	0.13	0.048	(0.230)	0.009	0.040
11	0.92	0.13	0.048	(0.229)	0.009	0.040
12	1.00	0.13	0.048	(0.228)	0.009	0.040
13	1.08	0.10	0.036	(0.227)	0.007	0.030
14	1.17	0.10	0.036	(0.226)	0.007	0.030
15	1.25	0.10	0.036	(0.225)	0.007	0.030
16	1.33	0.10	0.036	(0.224)	0.007	0.030
17	1.42	0.10	0.036	(0.223)	0.007	0.030
18	1.50	0.10	0.036	(0.222)	0.007	0.030
19	1.58	0.10	0.036	(0.222)	0.007	0.030
20	1.67	0.10	0.036	(0.221)	0.007	0.030
21	1.75	0.10	0.036	(0.220)	0.007	0.030
22	1.83	0.13	0.048	(0.219)	0.009	0.040
23	1.92	0.13	0.048	(0.218)	0.009	0.040
24	2.00	0.13	0.048	(0.217)	0.009	0.040
25	2.08	0.13	0.048	(0.216)	0.009	0.040
26	2.17	0.13	0.048	(0.215)	0.009	0.040
27	2.25	0.13	0.048	(0.214)	0.009	0.040
28	2.33	0.13	0.048	(0.214)	0.009	0.040
29	2.42	0.13	0.048	(0.213)	0.009	0.040
30	2.50	0.13	0.048	(0.212)	0.009	0.040
31	2.58	0.17	0.061	(0.211)	0.011	0.050
32	2.67	0.17	0.061	(0.210)	0.011	0.050
33	2.75	0.17	0.061	(0.209)	0.011	0.050
34	2.83	0.17	0.061	(0.208)	0.011	0.050
35	2.92	0.17	0.061	(0.208)	0.011	0.050
36	3.00	0.17	0.061	(0.207)	0.011	0.050
37	3.08	0.17	0.061	(0.206)	0.011	0.050
38	3.17	0.17	0.061	(0.205)	0.011	0.050
39	3.25	0.17	0.061	(0.204)	0.011	0.050
40	3.33	0.17	0.061	(0.203)	0.011	0.050
41	3.42	0.17	0.061	(0.202)	0.011	0.050
42	3.50	0.17	0.061	(0.202)	0.011	0.050
43	3.58	0.17	0.061	(0.201)	0.011	0.050

44	3.67	0.17	0.061	(0.200)	0.011	0.050
45	3.75	0.17	0.061	(0.199)	0.011	0.050
46	3.83	0.20	0.073	(0.198)	0.013	0.060
47	3.92	0.20	0.073	(0.197)	0.013	0.060
48	4.00	0.20	0.073	(0.197)	0.013	0.060
49	4.08	0.20	0.073	(0.196)	0.013	0.060
50	4.17	0.20	0.073	(0.195)	0.013	0.060
51	4.25	0.20	0.073	(0.194)	0.013	0.060
52	4.33	0.23	0.085	(0.193)	0.015	0.070
53	4.42	0.23	0.085	(0.192)	0.015	0.070
54	4.50	0.23	0.085	(0.192)	0.015	0.070
55	4.58	0.23	0.085	(0.191)	0.015	0.070
56	4.67	0.23	0.085	(0.190)	0.015	0.070
57	4.75	0.23	0.085	(0.189)	0.015	0.070
58	4.83	0.27	0.097	(0.188)	0.017	0.080
59	4.92	0.27	0.097	(0.187)	0.017	0.080
60	5.00	0.27	0.097	(0.187)	0.017	0.080
61	5.08	0.20	0.073	(0.186)	0.013	0.060
62	5.17	0.20	0.073	(0.185)	0.013	0.060
63	5.25	0.20	0.073	(0.184)	0.013	0.060
64	5.33	0.23	0.085	(0.183)	0.015	0.070
65	5.42	0.23	0.085	(0.183)	0.015	0.070
66	5.50	0.23	0.085	(0.182)	0.015	0.070
67	5.58	0.27	0.097	(0.181)	0.017	0.080
68	5.67	0.27	0.097	(0.180)	0.017	0.080
69	5.75	0.27	0.097	(0.179)	0.017	0.080
70	5.83	0.27	0.097	(0.179)	0.017	0.080
71	5.92	0.27	0.097	(0.178)	0.017	0.080
72	6.00	0.27	0.097	(0.177)	0.017	0.080
73	6.08	0.30	0.109	(0.176)	0.020	0.089
74	6.17	0.30	0.109	(0.175)	0.020	0.089
75	6.25	0.30	0.109	(0.175)	0.020	0.089
76	6.33	0.30	0.109	(0.174)	0.020	0.089
77	6.42	0.30	0.109	(0.173)	0.020	0.089
78	6.50	0.30	0.109	(0.172)	0.020	0.089
79	6.58	0.33	0.121	(0.172)	0.022	0.099
80	6.67	0.33	0.121	(0.171)	0.022	0.099
81	6.75	0.33	0.121	(0.170)	0.022	0.099
82	6.83	0.33	0.121	(0.169)	0.022	0.099
83	6.92	0.33	0.121	(0.169)	0.022	0.099
84	7.00	0.33	0.121	(0.168)	0.022	0.099
85	7.08	0.33	0.121	(0.167)	0.022	0.099
86	7.17	0.33	0.121	(0.166)	0.022	0.099
87	7.25	0.33	0.121	(0.165)	0.022	0.099
88	7.33	0.37	0.133	(0.165)	0.024	0.109
89	7.42	0.37	0.133	(0.164)	0.024	0.109
90	7.50	0.37	0.133	(0.163)	0.024	0.109
91	7.58	0.40	0.145	(0.162)	0.026	0.119
92	7.67	0.40	0.145	(0.162)	0.026	0.119
93	7.75	0.40	0.145	(0.161)	0.026	0.119
94	7.83	0.43	0.158	(0.160)	0.028	0.129
95	7.92	0.43	0.158	(0.159)	0.028	0.129
96	8.00	0.43	0.158	(0.159)	0.028	0.129
97	8.08	0.50	0.182	(0.158)	0.033	0.149
98	8.17	0.50	0.182	(0.157)	0.033	0.149
99	8.25	0.50	0.182	(0.157)	0.033	0.149
100	8.33	0.50	0.182	(0.156)	0.033	0.149
101	8.42	0.50	0.182	(0.155)	0.033	0.149
102	8.50	0.50	0.182	(0.154)	0.033	0.149
103	8.58	0.53	0.194	(0.154)	0.035	0.159
104	8.67	0.53	0.194	(0.153)	0.035	0.159
105	8.75	0.53	0.194	(0.152)	0.035	0.159
106	8.83	0.57	0.206	(0.151)	0.037	0.169
107	8.92	0.57	0.206	(0.151)	0.037	0.169
108	9.00	0.57	0.206	(0.150)	0.037	0.169
109	9.08	0.63	0.230	(0.149)	0.041	0.189
110	9.17	0.63	0.230	(0.149)	0.041	0.189
111	9.25	0.63	0.230	(0.148)	0.041	0.189
112	9.33	0.67	0.242	(0.147)	0.044	0.199
113	9.42	0.67	0.242	(0.147)	0.044	0.199
114	9.50	0.67	0.242	(0.146)	0.044	0.199
115	9.58	0.70	0.255	(0.145)	0.046	0.209

116	9.67	0.70	0.255	(0.144)	0.046	0.209
117	9.75	0.70	0.255	(0.144)	0.046	0.209
118	9.83	0.73	0.267	(0.143)	0.048	0.219
119	9.92	0.73	0.267	(0.142)	0.048	0.219
120	10.00	0.73	0.267	(0.142)	0.048	0.219
121	10.08	0.50	0.182	(0.141)	0.033	0.149
122	10.17	0.50	0.182	(0.140)	0.033	0.149
123	10.25	0.50	0.182	(0.140)	0.033	0.149
124	10.33	0.50	0.182	(0.139)	0.033	0.149
125	10.42	0.50	0.182	(0.138)	0.033	0.149
126	10.50	0.50	0.182	(0.138)	0.033	0.149
127	10.58	0.67	0.242	(0.137)	0.044	0.199
128	10.67	0.67	0.242	(0.136)	0.044	0.199
129	10.75	0.67	0.242	(0.136)	0.044	0.199
130	10.83	0.67	0.242	(0.135)	0.044	0.199
131	10.92	0.67	0.242	(0.134)	0.044	0.199
132	11.00	0.67	0.242	(0.134)	0.044	0.199
133	11.08	0.63	0.230	(0.133)	0.041	0.189
134	11.17	0.63	0.230	(0.132)	0.041	0.189
135	11.25	0.63	0.230	(0.132)	0.041	0.189
136	11.33	0.63	0.230	(0.131)	0.041	0.189
137	11.42	0.63	0.230	(0.130)	0.041	0.189
138	11.50	0.63	0.230	(0.130)	0.041	0.189
139	11.58	0.57	0.206	(0.129)	0.037	0.169
140	11.67	0.57	0.206	(0.128)	0.037	0.169
141	11.75	0.57	0.206	(0.128)	0.037	0.169
142	11.83	0.60	0.218	(0.127)	0.039	0.179
143	11.92	0.60	0.218	(0.126)	0.039	0.179
144	12.00	0.60	0.218	(0.126)	0.039	0.179
145	12.08	0.83	0.303	(0.125)	0.055	0.249
146	12.17	0.83	0.303	(0.125)	0.055	0.249
147	12.25	0.83	0.303	(0.124)	0.055	0.249
148	12.33	0.87	0.315	(0.123)	0.057	0.258
149	12.42	0.87	0.315	(0.123)	0.057	0.258
150	12.50	0.87	0.315	(0.122)	0.057	0.258
151	12.58	0.93	0.339	(0.121)	0.061	0.278
152	12.67	0.93	0.339	(0.121)	0.061	0.278
153	12.75	0.93	0.339	(0.120)	0.061	0.278
154	12.83	0.97	0.352	(0.120)	0.063	0.288
155	12.92	0.97	0.352	(0.119)	0.063	0.288
156	13.00	0.97	0.352	(0.118)	0.063	0.288
157	13.08	1.13	0.412	(0.118)	0.074	0.338
158	13.17	1.13	0.412	(0.117)	0.074	0.338
159	13.25	1.13	0.412	(0.117)	0.074	0.338
160	13.33	1.13	0.412	(0.116)	0.074	0.338
161	13.42	1.13	0.412	(0.115)	0.074	0.338
162	13.50	1.13	0.412	(0.115)	0.074	0.338
163	13.58	0.77	0.279	(0.114)	0.050	0.229
164	13.67	0.77	0.279	(0.114)	0.050	0.229
165	13.75	0.77	0.279	(0.113)	0.050	0.229
166	13.83	0.77	0.279	(0.113)	0.050	0.229
167	13.92	0.77	0.279	(0.112)	0.050	0.229
168	14.00	0.77	0.279	(0.111)	0.050	0.229
169	14.08	0.90	0.327	(0.111)	0.059	0.268
170	14.17	0.90	0.327	(0.110)	0.059	0.268
171	14.25	0.90	0.327	(0.110)	0.059	0.268
172	14.33	0.87	0.315	(0.109)	0.057	0.258
173	14.42	0.87	0.315	(0.109)	0.057	0.258
174	14.50	0.87	0.315	(0.108)	0.057	0.258
175	14.58	0.87	0.315	(0.107)	0.057	0.258
176	14.67	0.87	0.315	(0.107)	0.057	0.258
177	14.75	0.87	0.315	(0.106)	0.057	0.258
178	14.83	0.83	0.303	(0.106)	0.055	0.249
179	14.92	0.83	0.303	(0.105)	0.055	0.249
180	15.00	0.83	0.303	(0.105)	0.055	0.249
181	15.08	0.80	0.291	(0.104)	0.052	0.239
182	15.17	0.80	0.291	(0.104)	0.052	0.239
183	15.25	0.80	0.291	(0.103)	0.052	0.239
184	15.33	0.77	0.279	(0.103)	0.050	0.229
185	15.42	0.77	0.279	(0.102)	0.050	0.229
186	15.50	0.77	0.279	(0.102)	0.050	0.229
187	15.58	0.63	0.230	(0.101)	0.041	0.189

188	15.67	0.63	0.230	(0.101)	0.041	0.189
189	15.75	0.63	0.230	(0.100)	0.041	0.189
190	15.83	0.63	0.230	(0.100)	0.041	0.189
191	15.92	0.63	0.230	(0.099)	0.041	0.189
192	16.00	0.63	0.230	(0.099)	0.041	0.189
193	16.08	0.13	0.048	(0.098)	0.009	0.040
194	16.17	0.13	0.048	(0.098)	0.009	0.040
195	16.25	0.13	0.048	(0.097)	0.009	0.040
196	16.33	0.13	0.048	(0.097)	0.009	0.040
197	16.42	0.13	0.048	(0.096)	0.009	0.040
198	16.50	0.13	0.048	(0.096)	0.009	0.040
199	16.58	0.10	0.036	(0.095)	0.007	0.030
200	16.67	0.10	0.036	(0.095)	0.007	0.030
201	16.75	0.10	0.036	(0.094)	0.007	0.030
202	16.83	0.10	0.036	(0.094)	0.007	0.030
203	16.92	0.10	0.036	(0.093)	0.007	0.030
204	17.00	0.10	0.036	(0.093)	0.007	0.030
205	17.08	0.17	0.061	(0.092)	0.011	0.050
206	17.17	0.17	0.061	(0.092)	0.011	0.050
207	17.25	0.17	0.061	(0.091)	0.011	0.050
208	17.33	0.17	0.061	(0.091)	0.011	0.050
209	17.42	0.17	0.061	(0.090)	0.011	0.050
210	17.50	0.17	0.061	(0.090)	0.011	0.050
211	17.58	0.17	0.061	(0.089)	0.011	0.050
212	17.67	0.17	0.061	(0.089)	0.011	0.050
213	17.75	0.17	0.061	(0.089)	0.011	0.050
214	17.83	0.13	0.048	(0.088)	0.009	0.040
215	17.92	0.13	0.048	(0.088)	0.009	0.040
216	18.00	0.13	0.048	(0.087)	0.009	0.040
217	18.08	0.13	0.048	(0.087)	0.009	0.040
218	18.17	0.13	0.048	(0.086)	0.009	0.040
219	18.25	0.13	0.048	(0.086)	0.009	0.040
220	18.33	0.13	0.048	(0.086)	0.009	0.040
221	18.42	0.13	0.048	(0.085)	0.009	0.040
222	18.50	0.13	0.048	(0.085)	0.009	0.040
223	18.58	0.10	0.036	(0.084)	0.007	0.030
224	18.67	0.10	0.036	(0.084)	0.007	0.030
225	18.75	0.10	0.036	(0.084)	0.007	0.030
226	18.83	0.07	0.024	(0.083)	0.004	0.020
227	18.92	0.07	0.024	(0.083)	0.004	0.020
228	19.00	0.07	0.024	(0.082)	0.004	0.020
229	19.08	0.10	0.036	(0.082)	0.007	0.030
230	19.17	0.10	0.036	(0.082)	0.007	0.030
231	19.25	0.10	0.036	(0.081)	0.007	0.030
232	19.33	0.13	0.048	(0.081)	0.009	0.040
233	19.42	0.13	0.048	(0.080)	0.009	0.040
234	19.50	0.13	0.048	(0.080)	0.009	0.040
235	19.58	0.10	0.036	(0.080)	0.007	0.030
236	19.67	0.10	0.036	(0.079)	0.007	0.030
237	19.75	0.10	0.036	(0.079)	0.007	0.030
238	19.83	0.07	0.024	(0.079)	0.004	0.020
239	19.92	0.07	0.024	(0.078)	0.004	0.020
240	20.00	0.07	0.024	(0.078)	0.004	0.020
241	20.08	0.10	0.036	(0.078)	0.007	0.030
242	20.17	0.10	0.036	(0.077)	0.007	0.030
243	20.25	0.10	0.036	(0.077)	0.007	0.030
244	20.33	0.10	0.036	(0.077)	0.007	0.030
245	20.42	0.10	0.036	(0.076)	0.007	0.030
246	20.50	0.10	0.036	(0.076)	0.007	0.030
247	20.58	0.10	0.036	(0.076)	0.007	0.030
248	20.67	0.10	0.036	(0.075)	0.007	0.030
249	20.75	0.10	0.036	(0.075)	0.007	0.030
250	20.83	0.07	0.024	(0.075)	0.004	0.020
251	20.92	0.07	0.024	(0.074)	0.004	0.020
252	21.00	0.07	0.024	(0.074)	0.004	0.020
253	21.08	0.10	0.036	(0.074)	0.007	0.030
254	21.17	0.10	0.036	(0.073)	0.007	0.030
255	21.25	0.10	0.036	(0.073)	0.007	0.030
256	21.33	0.07	0.024	(0.073)	0.004	0.020
257	21.42	0.07	0.024	(0.073)	0.004	0.020
258	21.50	0.07	0.024	(0.072)	0.004	0.020
259	21.58	0.10	0.036	(0.072)	0.007	0.030

1+55	0.0014	0.01	Q				
2+ 0	0.0015	0.01	QV				
2+ 5	0.0016	0.01	QV				
2+10	0.0017	0.01	QV				
2+15	0.0017	0.01	QV				
2+20	0.0018	0.01	QV				
2+25	0.0019	0.01	QV				
2+30	0.0020	0.01	QV				
2+35	0.0021	0.01	QV				
2+40	0.0022	0.01	QV				
2+45	0.0023	0.01	QV				
2+50	0.0024	0.01	QV				
2+55	0.0025	0.01	QV				
3+ 0	0.0026	0.01	QV				
3+ 5	0.0027	0.01	QV				
3+10	0.0028	0.01	QV				
3+15	0.0029	0.01	QV				
3+20	0.0030	0.01	QV				
3+25	0.0031	0.01	Q V				
3+30	0.0032	0.01	Q V				
3+35	0.0033	0.01	Q V				
3+40	0.0034	0.01	Q V				
3+45	0.0035	0.01	Q V				
3+50	0.0036	0.02	Q V				
3+55	0.0037	0.02	Q V				
4+ 0	0.0038	0.02	Q V				
4+ 5	0.0040	0.02	Q V				
4+10	0.0041	0.02	Q V				
4+15	0.0042	0.02	Q V				
4+20	0.0043	0.02	Q V				
4+25	0.0045	0.02	Q V				
4+30	0.0046	0.02	Q V				
4+35	0.0048	0.02	Q V				
4+40	0.0049	0.02	Q V				
4+45	0.0050	0.02	Q V				
4+50	0.0052	0.02	Q V				
4+55	0.0054	0.02	Q V				
5+ 0	0.0055	0.02	Q V				
5+ 5	0.0056	0.02	Q V				
5+10	0.0058	0.02	Q V				
5+15	0.0059	0.02	Q V				
5+20	0.0060	0.02	Q V				
5+25	0.0062	0.02	Q V				
5+30	0.0063	0.02	Q V				
5+35	0.0065	0.02	Q V				
5+40	0.0066	0.02	Q V				
5+45	0.0068	0.02	Q V				
5+50	0.0069	0.02	Q V				
5+55	0.0071	0.02	Q V				
6+ 0	0.0073	0.02	Q V				
6+ 5	0.0074	0.03	Q V				
6+10	0.0076	0.03	Q V				
6+15	0.0078	0.03	Q V				
6+20	0.0080	0.03	Q V				
6+25	0.0082	0.03	Q V				
6+30	0.0083	0.03	Q V				
6+35	0.0085	0.03	Q V				
6+40	0.0087	0.03	Q V				
6+45	0.0089	0.03	Q V				
6+50	0.0091	0.03	Q V				
6+55	0.0093	0.03	Q V				
7+ 0	0.0095	0.03	Q V				
7+ 5	0.0097	0.03	Q V				
7+10	0.0099	0.03	Q V				
7+15	0.0101	0.03	Q V				
7+20	0.0104	0.03	Q V				
7+25	0.0106	0.03	Q V				
7+30	0.0108	0.03	Q V				
7+35	0.0111	0.03	Q V				
7+40	0.0113	0.03	Q V				
7+45	0.0115	0.03	Q V				
7+50	0.0118	0.04	Q V				

7+55	0. 0121	0. 04	Q	V			
8+ 0	0. 0123	0. 04	Q	V			
8+ 5	0. 0126	0. 04	Q	V			
8+10	0. 0129	0. 04	Q	V			
8+15	0. 0132	0. 04	Q	V			
8+20	0. 0135	0. 04	Q	V			
8+25	0. 0138	0. 04	Q	V			
8+30	0. 0141	0. 04	Q	V			
8+35	0. 0144	0. 05	Q	V			
8+40	0. 0148	0. 05	Q	V			
8+45	0. 0151	0. 05	Q	V			
8+50	0. 0154	0. 05	Q	V			
8+55	0. 0158	0. 05	Q	V			
9+ 0	0. 0161	0. 05	Q	V			
9+ 5	0. 0165	0. 06	Q	V			
9+10	0. 0169	0. 06	Q	V			
9+15	0. 0172	0. 06	Q	V			
9+20	0. 0176	0. 06	Q	V			
9+25	0. 0180	0. 06	Q	V			
9+30	0. 0184	0. 06	Q	V			
9+35	0. 0189	0. 06	Q	V			
9+40	0. 0193	0. 06	Q	V			
9+45	0. 0197	0. 06	Q	V			
9+50	0. 0201	0. 06	Q	V			
9+55	0. 0206	0. 06	Q	V			
10+ 0	0. 0210	0. 06	Q	V			
10+ 5	0. 0213	0. 04	Q	V			
10+10	0. 0216	0. 04	Q	V			
10+15	0. 0219	0. 04	Q	V			
10+20	0. 0222	0. 04	Q	V			
10+25	0. 0225	0. 04	Q	V			
10+30	0. 0228	0. 04	Q	V			
10+35	0. 0232	0. 06	Q	V			
10+40	0. 0236	0. 06	Q	V			
10+45	0. 0240	0. 06	Q	V			
10+50	0. 0244	0. 06	Q	V			
10+55	0. 0248	0. 06	Q	V			
11+ 0	0. 0252	0. 06	Q	V			
11+ 5	0. 0256	0. 06	Q	V			
11+10	0. 0260	0. 06	Q	V			
11+15	0. 0264	0. 06	Q	V			
11+20	0. 0267	0. 06	Q	V			
11+25	0. 0271	0. 06	Q	V			
11+30	0. 0275	0. 06	Q	V			
11+35	0. 0278	0. 05	Q	V			
11+40	0. 0282	0. 05	Q	V			
11+45	0. 0285	0. 05	Q	V			
11+50	0. 0289	0. 05	Q	V			
11+55	0. 0292	0. 05	Q	V			
12+ 0	0. 0296	0. 05	Q	V			
12+ 5	0. 0301	0. 07	Q	V			
12+10	0. 0306	0. 07	Q	V			
12+15	0. 0311	0. 07	Q	V			
12+20	0. 0316	0. 08	Q	V			
12+25	0. 0322	0. 08	Q	V			
12+30	0. 0327	0. 08	Q	V			
12+35	0. 0332	0. 08	Q	V			
12+40	0. 0338	0. 08	Q	V			
12+45	0. 0344	0. 08	Q	V			
12+50	0. 0349	0. 08	Q	V			
12+55	0. 0355	0. 08	Q	V			
13+ 0	0. 0361	0. 08	Q	V			
13+ 5	0. 0368	0. 10	Q	V			
13+10	0. 0375	0. 10	Q	V			
13+15	0. 0381	0. 10	Q	V			
13+20	0. 0388	0. 10	Q	V			
13+25	0. 0395	0. 10	Q	V			
13+30	0. 0402	0. 10	Q	V			
13+35	0. 0406	0. 07	Q	V			
13+40	0. 0411	0. 07	Q	V			
13+45	0. 0416	0. 07	Q	V			
13+50	0. 0420	0. 07	Q	V			

19+55	0.0577	0.01	Q	V
20+ 0	0.0578	0.01	Q	V
20+ 5	0.0578	0.01	Q	V
20+10	0.0579	0.01	Q	V
20+15	0.0580	0.01	Q	V
20+20	0.0580	0.01	Q	V
20+25	0.0581	0.01	Q	V
20+30	0.0581	0.01	Q	V
20+35	0.0582	0.01	Q	V
20+40	0.0583	0.01	Q	V
20+45	0.0583	0.01	Q	V
20+50	0.0584	0.01	Q	V
20+55	0.0584	0.01	Q	V
21+ 0	0.0584	0.01	Q	V
21+ 5	0.0585	0.01	Q	V
21+10	0.0586	0.01	Q	V
21+15	0.0586	0.01	Q	V
21+20	0.0587	0.01	Q	V
21+25	0.0587	0.01	Q	V
21+30	0.0587	0.01	Q	V
21+35	0.0588	0.01	Q	V
21+40	0.0589	0.01	Q	V
21+45	0.0589	0.01	Q	V
21+50	0.0590	0.01	Q	V
21+55	0.0590	0.01	Q	V
22+ 0	0.0590	0.01	Q	V
22+ 5	0.0591	0.01	Q	V
22+10	0.0592	0.01	Q	V
22+15	0.0592	0.01	Q	V
22+20	0.0593	0.01	Q	V
22+25	0.0593	0.01	Q	V
22+30	0.0593	0.01	Q	V
22+35	0.0594	0.01	Q	V
22+40	0.0594	0.01	Q	V
22+45	0.0595	0.01	Q	V
22+50	0.0595	0.01	Q	V
22+55	0.0595	0.01	Q	V
23+ 0	0.0596	0.01	Q	V
23+ 5	0.0596	0.01	Q	V
23+10	0.0597	0.01	Q	V
23+15	0.0597	0.01	Q	V
23+20	0.0597	0.01	Q	V
23+25	0.0598	0.01	Q	V
23+30	0.0598	0.01	Q	V
23+35	0.0599	0.01	Q	V
23+40	0.0599	0.01	Q	V
23+45	0.0599	0.01	Q	V
23+50	0.0600	0.01	Q	V
23+55	0.0600	0.01	Q	V
24+ 0	0.0601	0.01	Q	V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PC0565.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 133
HYDROLOGIC ANALYSIS
5-YEAR

Drainage Area = 0.29(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.29(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 120.00(Ft.)
Length along longest watercourse measured to centroid = 25.00(Ft.)
Length along longest watercourse = 0.023 Mi.
Length along longest watercourse measured to centroid = 0.005 Mi.
Difference in elevation = 1.00(Ft.)
Slope along watercourse = 44.0000 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.005 Hr.
Lag time = 0.33 Min.
25% of lag time = 0.08 Min.
40% of lag time = 0.13 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	1.20	0.35

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	3.00	0.87

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.622(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.622(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.290 56.00 0.900
Total Area Entered = 0.29(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil low loss rate (decimal) = 0.180

Unit Hydrograph
 VALLEY S-Curve

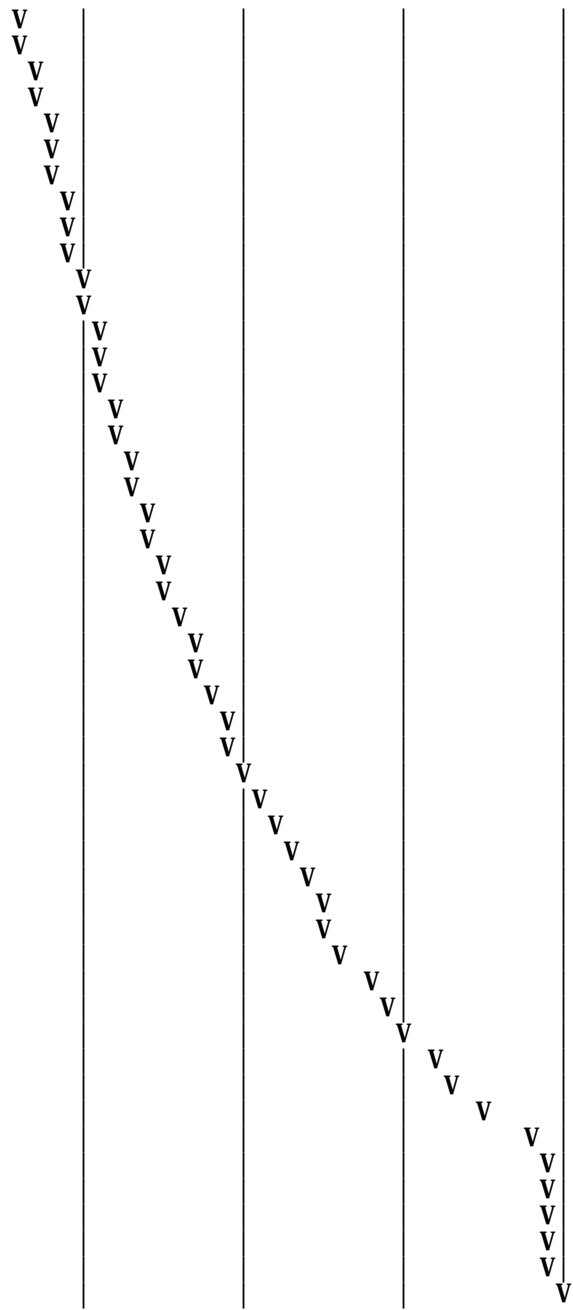
Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	1529.917	0.292
		Sum = 100.000	Sum= 0.292

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.097	(0.134)	0.018	0.080
2	0.17	0.60	0.117	(0.134)	0.021	0.096
3	0.25	0.60	0.117	(0.134)	0.021	0.096
4	0.33	0.60	0.117	(0.134)	0.021	0.096
5	0.42	0.60	0.117	(0.134)	0.021	0.096
6	0.50	0.70	0.136	(0.134)	0.025	0.112
7	0.58	0.70	0.136	(0.134)	0.025	0.112
8	0.67	0.70	0.136	(0.134)	0.025	0.112
9	0.75	0.70	0.136	(0.134)	0.025	0.112
10	0.83	0.70	0.136	(0.134)	0.025	0.112
11	0.92	0.70	0.136	(0.134)	0.025	0.112
12	1.00	0.80	0.156	(0.134)	0.028	0.128
13	1.08	0.80	0.156	(0.134)	0.028	0.128
14	1.17	0.80	0.156	(0.134)	0.028	0.128
15	1.25	0.80	0.156	(0.134)	0.028	0.128
16	1.33	0.80	0.156	(0.134)	0.028	0.128
17	1.42	0.80	0.156	(0.134)	0.028	0.128
18	1.50	0.80	0.156	(0.134)	0.028	0.128
19	1.58	0.80	0.156	(0.134)	0.028	0.128
20	1.67	0.80	0.156	(0.134)	0.028	0.128
21	1.75	0.80	0.156	(0.134)	0.028	0.128
22	1.83	0.80	0.156	(0.134)	0.028	0.128
23	1.92	0.80	0.156	(0.134)	0.028	0.128
24	2.00	0.90	0.175	(0.134)	0.032	0.144
25	2.08	0.80	0.156	(0.134)	0.028	0.128
26	2.17	0.90	0.175	(0.134)	0.032	0.144
27	2.25	0.90	0.175	(0.134)	0.032	0.144
28	2.33	0.90	0.175	(0.134)	0.032	0.144
29	2.42	0.90	0.175	(0.134)	0.032	0.144
30	2.50	0.90	0.175	(0.134)	0.032	0.144
31	2.58	0.90	0.175	(0.134)	0.032	0.144
32	2.67	0.90	0.175	(0.134)	0.032	0.144
33	2.75	1.00	0.195	(0.134)	0.035	0.160
34	2.83	1.00	0.195	(0.134)	0.035	0.160
35	2.92	1.00	0.195	(0.134)	0.035	0.160
36	3.00	1.00	0.195	(0.134)	0.035	0.160
37	3.08	1.00	0.195	(0.134)	0.035	0.160
38	3.17	1.10	0.214	(0.134)	0.039	0.176
39	3.25	1.10	0.214	(0.134)	0.039	0.176
40	3.33	1.10	0.214	(0.134)	0.039	0.176
41	3.42	1.20	0.234	(0.134)	0.042	0.191
42	3.50	1.30	0.253	(0.134)	0.046	0.207
43	3.58	1.40	0.272	(0.134)	0.049	0.223

1+55	0.0054	0.04	Q
2+ 0	0.0057	0.04	Q
2+ 5	0.0059	0.04	Q
2+10	0.0062	0.04	Q
2+15	0.0065	0.04	Q
2+20	0.0068	0.04	Q
2+25	0.0071	0.04	Q
2+30	0.0074	0.04	Q
2+35	0.0076	0.04	Q
2+40	0.0079	0.04	Q
2+45	0.0083	0.05	Q
2+50	0.0086	0.05	Q
2+55	0.0089	0.05	Q
3+ 0	0.0092	0.05	Q
3+ 5	0.0095	0.05	Q
3+10	0.0099	0.05	Q
3+15	0.0103	0.05	Q
3+20	0.0106	0.05	Q
3+25	0.0110	0.06	Q
3+30	0.0114	0.06	Q
3+35	0.0119	0.07	Q
3+40	0.0123	0.07	Q
3+45	0.0128	0.07	Q
3+50	0.0133	0.07	Q
3+55	0.0138	0.07	Q
4+ 0	0.0143	0.07	Q
4+ 5	0.0148	0.08	Q
4+10	0.0154	0.08	Q
4+15	0.0160	0.09	Q
4+20	0.0167	0.09	Q
4+25	0.0174	0.10	Q
4+30	0.0180	0.10	Q
4+35	0.0187	0.10	Q
4+40	0.0195	0.11	Q
4+45	0.0202	0.11	Q
4+50	0.0210	0.11	Q
4+55	0.0218	0.12	Q
5+ 0	0.0227	0.12	Q
5+ 5	0.0237	0.14	Q
5+10	0.0248	0.17	Q
5+15	0.0261	0.18	Q
5+20	0.0274	0.20	Q
5+25	0.0290	0.23	Q
5+30	0.0309	0.28	Q
5+35	0.0315	0.09	Q
5+40	0.0318	0.04	Q
5+45	0.0320	0.03	Q
5+50	0.0322	0.02	Q
5+55	0.0323	0.01	Q
6+ 0	0.0324	0.01	Q



Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PC0535.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 133
HYDROLOGIC ANALYSIS
5-YEAR

Drainage Area = 0.29(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.29(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 120.00(Ft.)
Length along longest watercourse measured to centroid = 25.00(Ft.)
Length along longest watercourse = 0.023 Mi.
Length along longest watercourse measured to centroid = 0.005 Mi.
Difference in elevation = 1.00(Ft.)
Slope along watercourse = 44.0000 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.005 Hr.
Lag time = 0.33 Min.
25% of lag time = 0.08 Min.
40% of lag time = 0.13 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	0.90	0.26

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	2.35	0.68

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 1.240(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.240(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.290 56.00 0.900
Total Area Entered = 0.29(Ac.)

Flood volume = 1089.2 Cubic Feet
 Total soil loss = 215.7 Cubic Feet

 Peak flow rate of this hydrograph = 0.317(CFS)

+++++
 3 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0003	0.05	Q				
0+10	0.0006	0.05	QV				
0+15	0.0009	0.04	QV				
0+20	0.0013	0.05	Q V				
0+25	0.0016	0.05	Q V				
0+30	0.0021	0.06	Q V				
0+35	0.0025	0.05	Q V				
0+40	0.0029	0.06	Q V				
0+45	0.0033	0.06	Q V				
0+50	0.0037	0.05	Q V				
0+55	0.0041	0.06	Q V				
1+ 0	0.0045	0.06	Q V				
1+ 5	0.0051	0.08	Q V				
1+10	0.0056	0.08	Q V				
1+15	0.0062	0.08	Q V				
1+20	0.0067	0.07	Q V				
1+25	0.0073	0.09	Q V				
1+30	0.0080	0.10	Q V				
1+35	0.0085	0.09	Q V				
1+40	0.0092	0.10	Q V				
1+45	0.0100	0.12	Q V				
1+50	0.0108	0.11	Q V				
1+55	0.0115	0.10	Q V				
2+ 0	0.0122	0.11	Q V				
2+ 5	0.0130	0.11	Q V				
2+10	0.0140	0.15	Q V				
2+15	0.0153	0.18	Q V				
2+20	0.0161	0.12	Q V				
2+25	0.0179	0.26	Q V				
2+30	0.0198	0.28	Q V				
2+35	0.0220	0.32	Q V				
2+40	0.0235	0.22	Q V				
2+45	0.0240	0.07	Q V				
2+50	0.0244	0.06	Q V				
2+55	0.0249	0.06	Q V				
3+ 0	0.0250	0.02	Q V				

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PC0515.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 133
HYDROLOGIC ANALYSIS
5-YEAR

Drainage Area = 0.29(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.29(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 120.00(Ft.)
Length along longest watercourse measured to centroid = 25.00(Ft.)
Length along longest watercourse = 0.023 Mi.
Length along longest watercourse measured to centroid = 0.005 Mi.
Difference in elevation = 1.00(Ft.)
Slope along watercourse = 44.0000 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.005 Hr.
Lag time = 0.33 Min.
25% of lag time = 0.08 Min.
40% of lag time = 0.13 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	0.54	0.16

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	1.36	0.39

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.732(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 0.732(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.290 56.00 0.900
Total Area Entered = 0.29(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Slope of intensity-duration curve for a 1 hour storm = 0.4800

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	1529.917	100.000
		Sum = 100.000	Sum = 0.292

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	4.40	0.387	(0.134)	0.070	0.317
2	0.17	4.50	0.395	(0.134)	0.071	0.324
3	0.25	5.40	0.474	(0.134)	0.085	0.389
4	0.33	5.40	0.474	(0.134)	0.085	0.389
5	0.42	5.70	0.501	(0.134)	0.090	0.411
6	0.50	6.40	0.562	(0.134)	0.101	0.461
7	0.58	7.90	0.694	(0.134)	0.125	0.569
8	0.67	9.10	0.799	0.134	(0.144)	0.665
9	0.75	12.80	1.124	0.134	(0.202)	0.990
10	0.83	25.60	2.249	0.134	(0.405)	2.115
11	0.92	7.90	0.694	(0.134)	0.125	0.569
12	1.00	4.90	0.430	(0.134)	0.077	0.353

Sum = 100.0 (Loss Rate Not Used) Sum = 7.6

Flood volume = Effective rainfall 0.63(In) times area 0.3(Ac.) / [(In)/(Ft.)] = 0.0(Ac. Ft)
 Total soil loss = 0.10(In)
 Total soil loss = 0.002(Ac. Ft)
 Total rainfall = 0.73(In)
 Flood volume = 662.5 Cubic Feet
 Total soil loss = 108.1 Cubic Feet

Peak flow rate of this hydrograph = 0.618(CFS)

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0006	0.09	Q	V			
0+10	0.0013	0.09	Q	V			
0+15	0.0021	0.11	Q	V			
0+20	0.0029	0.11	Q	V			
0+25	0.0037	0.12	Q	V			
0+30	0.0046	0.13	Q	V	V		
0+35	0.0058	0.17	Q	V	V		
0+40	0.0071	0.19	Q	V	V		

0+45	0.0091	0.29	Q	|	V	|	V	|
0+50	0.0134	0.62	Q				V	
0+55	0.0145	0.17	Q				V	
1+ 0	0.0152	0.10	Q				V	

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PC102410.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 133
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 0.29(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.29(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 120.00(Ft.)
Length along longest watercourse measured to centroid = 25.00(Ft.)
Length along longest watercourse = 0.023 Mi.
Length along longest watercourse measured to centroid = 0.005 Mi.
Difference in elevation = 1.00(Ft.)
Slope along watercourse = 44.0000 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.005 Hr.
Lag time = 0.33 Min.
25% of lag time = 0.08 Min.
40% of lag time = 0.13 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	2.00	0.58

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	6.40	1.86

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 3.810(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 3.810(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.290 56.00 0.900
Total Area Entered = 0.29(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097

Minimum soil loss rate ((In/Hr)) = 0.049

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	1529.917	100.000
		Sum = 100.000	Sum = 0.292

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.030	(0.172)	0.005	0.025
2	0.17	0.07	0.030	(0.171)	0.005	0.025
3	0.25	0.07	0.030	(0.171)	0.005	0.025
4	0.33	0.10	0.046	(0.170)	0.008	0.037
5	0.42	0.10	0.046	(0.169)	0.008	0.037
6	0.50	0.10	0.046	(0.169)	0.008	0.037
7	0.58	0.10	0.046	(0.168)	0.008	0.037
8	0.67	0.10	0.046	(0.167)	0.008	0.037
9	0.75	0.10	0.046	(0.167)	0.008	0.037
10	0.83	0.13	0.061	(0.166)	0.011	0.050
11	0.92	0.13	0.061	(0.165)	0.011	0.050
12	1.00	0.13	0.061	(0.165)	0.011	0.050
13	1.08	0.10	0.046	(0.164)	0.008	0.037
14	1.17	0.10	0.046	(0.163)	0.008	0.037
15	1.25	0.10	0.046	(0.163)	0.008	0.037
16	1.33	0.10	0.046	(0.162)	0.008	0.037
17	1.42	0.10	0.046	(0.162)	0.008	0.037
18	1.50	0.10	0.046	(0.161)	0.008	0.037
19	1.58	0.10	0.046	(0.160)	0.008	0.037
20	1.67	0.10	0.046	(0.160)	0.008	0.037
21	1.75	0.10	0.046	(0.159)	0.008	0.037
22	1.83	0.13	0.061	(0.158)	0.011	0.050
23	1.92	0.13	0.061	(0.158)	0.011	0.050
24	2.00	0.13	0.061	(0.157)	0.011	0.050
25	2.08	0.13	0.061	(0.156)	0.011	0.050
26	2.17	0.13	0.061	(0.156)	0.011	0.050
27	2.25	0.13	0.061	(0.155)	0.011	0.050
28	2.33	0.13	0.061	(0.155)	0.011	0.050
29	2.42	0.13	0.061	(0.154)	0.011	0.050
30	2.50	0.13	0.061	(0.153)	0.011	0.050
31	2.58	0.17	0.076	(0.153)	0.014	0.062
32	2.67	0.17	0.076	(0.152)	0.014	0.062
33	2.75	0.17	0.076	(0.151)	0.014	0.062
34	2.83	0.17	0.076	(0.151)	0.014	0.062
35	2.92	0.17	0.076	(0.150)	0.014	0.062
36	3.00	0.17	0.076	(0.150)	0.014	0.062
37	3.08	0.17	0.076	(0.149)	0.014	0.062
38	3.17	0.17	0.076	(0.148)	0.014	0.062
39	3.25	0.17	0.076	(0.148)	0.014	0.062
40	3.33	0.17	0.076	(0.147)	0.014	0.062
41	3.42	0.17	0.076	(0.146)	0.014	0.062
42	3.50	0.17	0.076	(0.146)	0.014	0.062
43	3.58	0.17	0.076	(0.145)	0.014	0.062

44	3.67	0.17	0.076	(0.145)	0.014	0.062
45	3.75	0.17	0.076	(0.144)	0.014	0.062
46	3.83	0.20	0.091	(0.143)	0.016	0.075
47	3.92	0.20	0.091	(0.143)	0.016	0.075
48	4.00	0.20	0.091	(0.142)	0.016	0.075
49	4.08	0.20	0.091	(0.142)	0.016	0.075
50	4.17	0.20	0.091	(0.141)	0.016	0.075
51	4.25	0.20	0.091	(0.140)	0.016	0.075
52	4.33	0.23	0.107	(0.140)	0.019	0.087
53	4.42	0.23	0.107	(0.139)	0.019	0.087
54	4.50	0.23	0.107	(0.139)	0.019	0.087
55	4.58	0.23	0.107	(0.138)	0.019	0.087
56	4.67	0.23	0.107	(0.137)	0.019	0.087
57	4.75	0.23	0.107	(0.137)	0.019	0.087
58	4.83	0.27	0.122	(0.136)	0.022	0.100
59	4.92	0.27	0.122	(0.136)	0.022	0.100
60	5.00	0.27	0.122	(0.135)	0.022	0.100
61	5.08	0.20	0.091	(0.134)	0.016	0.075
62	5.17	0.20	0.091	(0.134)	0.016	0.075
63	5.25	0.20	0.091	(0.133)	0.016	0.075
64	5.33	0.23	0.107	(0.133)	0.019	0.087
65	5.42	0.23	0.107	(0.132)	0.019	0.087
66	5.50	0.23	0.107	(0.132)	0.019	0.087
67	5.58	0.27	0.122	(0.131)	0.022	0.100
68	5.67	0.27	0.122	(0.130)	0.022	0.100
69	5.75	0.27	0.122	(0.130)	0.022	0.100
70	5.83	0.27	0.122	(0.129)	0.022	0.100
71	5.92	0.27	0.122	(0.129)	0.022	0.100
72	6.00	0.27	0.122	(0.128)	0.022	0.100
73	6.08	0.30	0.137	(0.128)	0.025	0.112
74	6.17	0.30	0.137	(0.127)	0.025	0.112
75	6.25	0.30	0.137	(0.126)	0.025	0.112
76	6.33	0.30	0.137	(0.126)	0.025	0.112
77	6.42	0.30	0.137	(0.125)	0.025	0.112
78	6.50	0.30	0.137	(0.125)	0.025	0.112
79	6.58	0.33	0.152	(0.124)	0.027	0.125
80	6.67	0.33	0.152	(0.124)	0.027	0.125
81	6.75	0.33	0.152	(0.123)	0.027	0.125
82	6.83	0.33	0.152	(0.122)	0.027	0.125
83	6.92	0.33	0.152	(0.122)	0.027	0.125
84	7.00	0.33	0.152	(0.121)	0.027	0.125
85	7.08	0.33	0.152	(0.121)	0.027	0.125
86	7.17	0.33	0.152	(0.120)	0.027	0.125
87	7.25	0.33	0.152	(0.120)	0.027	0.125
88	7.33	0.37	0.168	(0.119)	0.030	0.137
89	7.42	0.37	0.168	(0.119)	0.030	0.137
90	7.50	0.37	0.168	(0.118)	0.030	0.137
91	7.58	0.40	0.183	(0.118)	0.033	0.150
92	7.67	0.40	0.183	(0.117)	0.033	0.150
93	7.75	0.40	0.183	(0.116)	0.033	0.150
94	7.83	0.43	0.198	(0.116)	0.036	0.162
95	7.92	0.43	0.198	(0.115)	0.036	0.162
96	8.00	0.43	0.198	(0.115)	0.036	0.162
97	8.08	0.50	0.229	(0.114)	0.041	0.187
98	8.17	0.50	0.229	(0.114)	0.041	0.187
99	8.25	0.50	0.229	(0.113)	0.041	0.187
100	8.33	0.50	0.229	(0.113)	0.041	0.187
101	8.42	0.50	0.229	(0.112)	0.041	0.187
102	8.50	0.50	0.229	(0.112)	0.041	0.187
103	8.58	0.53	0.244	(0.111)	0.044	0.200
104	8.67	0.53	0.244	(0.111)	0.044	0.200
105	8.75	0.53	0.244	(0.110)	0.044	0.200
106	8.83	0.57	0.259	(0.110)	0.047	0.212
107	8.92	0.57	0.259	(0.109)	0.047	0.212
108	9.00	0.57	0.259	(0.109)	0.047	0.212
109	9.08	0.63	0.290	(0.108)	0.052	0.237
110	9.17	0.63	0.290	(0.108)	0.052	0.237
111	9.25	0.63	0.290	(0.107)	0.052	0.237
112	9.33	0.67	0.305	(0.107)	0.055	0.250
113	9.42	0.67	0.305	(0.106)	0.055	0.250
114	9.50	0.67	0.305	(0.105)	0.055	0.250
115	9.58	0.70	0.320	(0.105)	0.058	0.262

116	9.67	0.70	0.320	(0.104)	0.058	0.262
117	9.75	0.70	0.320	(0.104)	0.058	0.262
118	9.83	0.73	0.335	(0.103)	0.060	0.275
119	9.92	0.73	0.335	(0.103)	0.060	0.275
120	10.00	0.73	0.335	(0.102)	0.060	0.275
121	10.08	0.50	0.229	(0.102)	0.041	0.187
122	10.17	0.50	0.229	(0.101)	0.041	0.187
123	10.25	0.50	0.229	(0.101)	0.041	0.187
124	10.33	0.50	0.229	(0.101)	0.041	0.187
125	10.42	0.50	0.229	(0.100)	0.041	0.187
126	10.50	0.50	0.229	(0.100)	0.041	0.187
127	10.58	0.67	0.305	(0.099)	0.055	0.250
128	10.67	0.67	0.305	(0.099)	0.055	0.250
129	10.75	0.67	0.305	(0.098)	0.055	0.250
130	10.83	0.67	0.305	(0.098)	0.055	0.250
131	10.92	0.67	0.305	(0.097)	0.055	0.250
132	11.00	0.67	0.305	(0.097)	0.055	0.250
133	11.08	0.63	0.290	(0.096)	0.052	0.237
134	11.17	0.63	0.290	(0.096)	0.052	0.237
135	11.25	0.63	0.290	(0.095)	0.052	0.237
136	11.33	0.63	0.290	(0.095)	0.052	0.237
137	11.42	0.63	0.290	(0.094)	0.052	0.237
138	11.50	0.63	0.290	(0.094)	0.052	0.237
139	11.58	0.57	0.259	(0.093)	0.047	0.212
140	11.67	0.57	0.259	(0.093)	0.047	0.212
141	11.75	0.57	0.259	(0.092)	0.047	0.212
142	11.83	0.60	0.274	(0.092)	0.049	0.225
143	11.92	0.60	0.274	(0.092)	0.049	0.225
144	12.00	0.60	0.274	(0.091)	0.049	0.225
145	12.08	0.83	0.381	(0.091)	0.069	0.312
146	12.17	0.83	0.381	(0.090)	0.069	0.312
147	12.25	0.83	0.381	(0.090)	0.069	0.312
148	12.33	0.87	0.396	(0.089)	0.071	0.325
149	12.42	0.87	0.396	(0.089)	0.071	0.325
150	12.50	0.87	0.396	(0.088)	0.071	0.325
151	12.58	0.93	0.427	(0.088)	0.077	0.350
152	12.67	0.93	0.427	(0.087)	0.077	0.350
153	12.75	0.93	0.427	(0.087)	0.077	0.350
154	12.83	0.97	0.442	(0.087)	0.080	0.362
155	12.92	0.97	0.442	(0.086)	0.080	0.362
156	13.00	0.97	0.442	(0.086)	0.080	0.362
157	13.08	1.13	0.518	0.085 (0.093)	0.433	0.433
158	13.17	1.13	0.518	0.085 (0.093)	0.433	0.433
159	13.25	1.13	0.518	0.084 (0.093)	0.434	0.434
160	13.33	1.13	0.518	0.084 (0.093)	0.434	0.434
161	13.42	1.13	0.518	0.084 (0.093)	0.435	0.435
162	13.50	1.13	0.518	0.083 (0.093)	0.435	0.435
163	13.58	0.77	0.351	(0.083)	0.063	0.287
164	13.67	0.77	0.351	(0.082)	0.063	0.287
165	13.75	0.77	0.351	(0.082)	0.063	0.287
166	13.83	0.77	0.351	(0.081)	0.063	0.287
167	13.92	0.77	0.351	(0.081)	0.063	0.287
168	14.00	0.77	0.351	(0.081)	0.063	0.287
169	14.08	0.90	0.412	(0.080)	0.074	0.337
170	14.17	0.90	0.412	(0.080)	0.074	0.337
171	14.25	0.90	0.412	(0.079)	0.074	0.337
172	14.33	0.87	0.396	(0.079)	0.071	0.325
173	14.42	0.87	0.396	(0.079)	0.071	0.325
174	14.50	0.87	0.396	(0.078)	0.071	0.325
175	14.58	0.87	0.396	(0.078)	0.071	0.325
176	14.67	0.87	0.396	(0.077)	0.071	0.325
177	14.75	0.87	0.396	(0.077)	0.071	0.325
178	14.83	0.83	0.381	(0.077)	0.069	0.312
179	14.92	0.83	0.381	(0.076)	0.069	0.312
180	15.00	0.83	0.381	(0.076)	0.069	0.312
181	15.08	0.80	0.366	(0.075)	0.066	0.300
182	15.17	0.80	0.366	(0.075)	0.066	0.300
183	15.25	0.80	0.366	(0.075)	0.066	0.300
184	15.33	0.77	0.351	(0.074)	0.063	0.287
185	15.42	0.77	0.351	(0.074)	0.063	0.287
186	15.50	0.77	0.351	(0.073)	0.063	0.287
187	15.58	0.63	0.290	(0.073)	0.052	0.237

188	15.67	0.63	0.290	(0.073)	0.052	0.237
189	15.75	0.63	0.290	(0.072)	0.052	0.237
190	15.83	0.63	0.290	(0.072)	0.052	0.237
191	15.92	0.63	0.290	(0.072)	0.052	0.237
192	16.00	0.63	0.290	(0.071)	0.052	0.237
193	16.08	0.13	0.061	(0.071)	0.011	0.050
194	16.17	0.13	0.061	(0.071)	0.011	0.050
195	16.25	0.13	0.061	(0.070)	0.011	0.050
196	16.33	0.13	0.061	(0.070)	0.011	0.050
197	16.42	0.13	0.061	(0.069)	0.011	0.050
198	16.50	0.13	0.061	(0.069)	0.011	0.050
199	16.58	0.10	0.046	(0.069)	0.008	0.037
200	16.67	0.10	0.046	(0.068)	0.008	0.037
201	16.75	0.10	0.046	(0.068)	0.008	0.037
202	16.83	0.10	0.046	(0.068)	0.008	0.037
203	16.92	0.10	0.046	(0.067)	0.008	0.037
204	17.00	0.10	0.046	(0.067)	0.008	0.037
205	17.08	0.17	0.076	(0.067)	0.014	0.062
206	17.17	0.17	0.076	(0.066)	0.014	0.062
207	17.25	0.17	0.076	(0.066)	0.014	0.062
208	17.33	0.17	0.076	(0.066)	0.014	0.062
209	17.42	0.17	0.076	(0.065)	0.014	0.062
210	17.50	0.17	0.076	(0.065)	0.014	0.062
211	17.58	0.17	0.076	(0.065)	0.014	0.062
212	17.67	0.17	0.076	(0.064)	0.014	0.062
213	17.75	0.17	0.076	(0.064)	0.014	0.062
214	17.83	0.13	0.061	(0.064)	0.011	0.050
215	17.92	0.13	0.061	(0.063)	0.011	0.050
216	18.00	0.13	0.061	(0.063)	0.011	0.050
217	18.08	0.13	0.061	(0.063)	0.011	0.050
218	18.17	0.13	0.061	(0.063)	0.011	0.050
219	18.25	0.13	0.061	(0.062)	0.011	0.050
220	18.33	0.13	0.061	(0.062)	0.011	0.050
221	18.42	0.13	0.061	(0.062)	0.011	0.050
222	18.50	0.13	0.061	(0.061)	0.011	0.050
223	18.58	0.10	0.046	(0.061)	0.008	0.037
224	18.67	0.10	0.046	(0.061)	0.008	0.037
225	18.75	0.10	0.046	(0.060)	0.008	0.037
226	18.83	0.07	0.030	(0.060)	0.005	0.025
227	18.92	0.07	0.030	(0.060)	0.005	0.025
228	19.00	0.07	0.030	(0.060)	0.005	0.025
229	19.08	0.10	0.046	(0.059)	0.008	0.037
230	19.17	0.10	0.046	(0.059)	0.008	0.037
231	19.25	0.10	0.046	(0.059)	0.008	0.037
232	19.33	0.13	0.061	(0.058)	0.011	0.050
233	19.42	0.13	0.061	(0.058)	0.011	0.050
234	19.50	0.13	0.061	(0.058)	0.011	0.050
235	19.58	0.10	0.046	(0.058)	0.008	0.037
236	19.67	0.10	0.046	(0.057)	0.008	0.037
237	19.75	0.10	0.046	(0.057)	0.008	0.037
238	19.83	0.07	0.030	(0.057)	0.005	0.025
239	19.92	0.07	0.030	(0.057)	0.005	0.025
240	20.00	0.07	0.030	(0.056)	0.005	0.025
241	20.08	0.10	0.046	(0.056)	0.008	0.037
242	20.17	0.10	0.046	(0.056)	0.008	0.037
243	20.25	0.10	0.046	(0.056)	0.008	0.037
244	20.33	0.10	0.046	(0.055)	0.008	0.037
245	20.42	0.10	0.046	(0.055)	0.008	0.037
246	20.50	0.10	0.046	(0.055)	0.008	0.037
247	20.58	0.10	0.046	(0.055)	0.008	0.037
248	20.67	0.10	0.046	(0.054)	0.008	0.037
249	20.75	0.10	0.046	(0.054)	0.008	0.037
250	20.83	0.07	0.030	(0.054)	0.005	0.025
251	20.92	0.07	0.030	(0.054)	0.005	0.025
252	21.00	0.07	0.030	(0.054)	0.005	0.025
253	21.08	0.10	0.046	(0.053)	0.008	0.037
254	21.17	0.10	0.046	(0.053)	0.008	0.037
255	21.25	0.10	0.046	(0.053)	0.008	0.037
256	21.33	0.07	0.030	(0.053)	0.005	0.025
257	21.42	0.07	0.030	(0.053)	0.005	0.025
258	21.50	0.07	0.030	(0.052)	0.005	0.025
259	21.58	0.10	0.046	(0.052)	0.008	0.037

1+55	0.0018	0.01	Q			
2+ 0	0.0019	0.01	Q			
2+ 5	0.0020	0.01	QV			
2+10	0.0021	0.01	QV			
2+15	0.0022	0.01	QV			
2+20	0.0023	0.01	QV			
2+25	0.0024	0.01	QV			
2+30	0.0025	0.01	QV			
2+35	0.0026	0.02	QV			
2+40	0.0027	0.02	QV			
2+45	0.0029	0.02	QV			
2+50	0.0030	0.02	QV			
2+55	0.0031	0.02	QV			
3+ 0	0.0032	0.02	QV			
3+ 5	0.0034	0.02	QV			
3+10	0.0035	0.02	QV			
3+15	0.0036	0.02	QV			
3+20	0.0038	0.02	QV			
3+25	0.0039	0.02	Q V			
3+30	0.0040	0.02	Q V			
3+35	0.0041	0.02	Q V			
3+40	0.0043	0.02	Q V			
3+45	0.0044	0.02	Q V			
3+50	0.0045	0.02	Q V			
3+55	0.0047	0.02	Q V			
4+ 0	0.0048	0.02	Q V			
4+ 5	0.0050	0.02	Q V			
4+10	0.0051	0.02	Q V			
4+15	0.0053	0.02	Q V			
4+20	0.0055	0.03	Q V			
4+25	0.0056	0.03	Q V			
4+30	0.0058	0.03	Q V			
4+35	0.0060	0.03	Q V			
4+40	0.0062	0.03	Q V			
4+45	0.0063	0.03	Q V			
4+50	0.0065	0.03	Q V			
4+55	0.0067	0.03	Q V			
5+ 0	0.0069	0.03	Q V			
5+ 5	0.0071	0.02	Q V			
5+10	0.0072	0.02	Q V			
5+15	0.0074	0.02	Q V			
5+20	0.0076	0.03	Q V			
5+25	0.0078	0.03	Q V			
5+30	0.0079	0.03	Q V			
5+35	0.0081	0.03	Q V			
5+40	0.0083	0.03	Q V			
5+45	0.0085	0.03	Q V			
5+50	0.0087	0.03	Q V			
5+55	0.0089	0.03	Q V			
6+ 0	0.0091	0.03	Q V			
6+ 5	0.0094	0.03	Q V			
6+10	0.0096	0.03	Q V			
6+15	0.0098	0.03	Q V			
6+20	0.0100	0.03	Q V			
6+25	0.0103	0.03	Q V			
6+30	0.0105	0.03	Q V			
6+35	0.0107	0.04	Q V			
6+40	0.0110	0.04	Q V			
6+45	0.0113	0.04	Q V			
6+50	0.0115	0.04	Q V			
6+55	0.0118	0.04	Q V			
7+ 0	0.0120	0.04	Q V			
7+ 5	0.0123	0.04	Q V			
7+10	0.0125	0.04	Q V			
7+15	0.0128	0.04	Q V			
7+20	0.0130	0.04	Q V			
7+25	0.0133	0.04	Q V			
7+30	0.0136	0.04	Q V			
7+35	0.0139	0.04	Q V			
7+40	0.0142	0.04	Q V			
7+45	0.0145	0.04	Q V			
7+50	0.0148	0.05	Q V			

7+55	0.0152	0.05	Q	V
8+ 0	0.0155	0.05	Q	V
8+ 5	0.0159	0.05	Q	V
8+10	0.0162	0.05	Q	V
8+15	0.0166	0.05	Q	V
8+20	0.0170	0.05	Q	V
8+25	0.0174	0.05	Q	V
8+30	0.0177	0.05	Q	V
8+35	0.0181	0.06	Q	V
8+40	0.0185	0.06	Q	V
8+45	0.0190	0.06	Q	V
8+50	0.0194	0.06	Q	V
8+55	0.0198	0.06	Q	V
9+ 0	0.0202	0.06	Q	V
9+ 5	0.0207	0.07	Q	V
9+10	0.0212	0.07	Q	V
9+15	0.0217	0.07	Q	V
9+20	0.0222	0.07	Q	V
9+25	0.0227	0.07	Q	V
9+30	0.0232	0.07	Q	V
9+35	0.0237	0.08	Q	V
9+40	0.0242	0.08	Q	V
9+45	0.0248	0.08	Q	V
9+50	0.0253	0.08	Q	V
9+55	0.0259	0.08	Q	V
10+ 0	0.0264	0.08	Q	V
10+ 5	0.0268	0.05	Q	V
10+10	0.0272	0.05	Q	V
10+15	0.0276	0.05	Q	V
10+20	0.0279	0.05	Q	V
10+25	0.0283	0.05	Q	V
10+30	0.0287	0.05	Q	V
10+35	0.0292	0.07	Q	V
10+40	0.0297	0.07	Q	V
10+45	0.0302	0.07	Q	V
10+50	0.0307	0.07	Q	V
10+55	0.0312	0.07	Q	V
11+ 0	0.0317	0.07	Q	V
11+ 5	0.0322	0.07	Q	V
11+10	0.0327	0.07	Q	V
11+15	0.0331	0.07	Q	V
11+20	0.0336	0.07	Q	V
11+25	0.0341	0.07	Q	V
11+30	0.0346	0.07	Q	V
11+35	0.0350	0.06	Q	V
11+40	0.0354	0.06	Q	V
11+45	0.0359	0.06	Q	V
11+50	0.0363	0.07	Q	V
11+55	0.0368	0.07	Q	V
12+ 0	0.0372	0.07	Q	V
12+ 5	0.0379	0.09	Q	V
12+10	0.0385	0.09	Q	V
12+15	0.0391	0.09	Q	V
12+20	0.0398	0.10	Q	V
12+25	0.0404	0.10	Q	V
12+30	0.0411	0.10	Q	V
12+35	0.0418	0.10	Q	V
12+40	0.0425	0.10	Q	V
12+45	0.0432	0.10	Q	V
12+50	0.0439	0.11	Q	V
12+55	0.0446	0.11	Q	V
13+ 0	0.0454	0.11	Q	V
13+ 5	0.0463	0.13	Q	V
13+10	0.0471	0.13	Q	V
13+15	0.0480	0.13	Q	V
13+20	0.0489	0.13	Q	V
13+25	0.0497	0.13	Q	V
13+30	0.0506	0.13	Q	V
13+35	0.0512	0.08	Q	V
13+40	0.0518	0.08	Q	V
13+45	0.0524	0.08	Q	V
13+50	0.0529	0.08	Q	V

19+55	0.0727	0.01	Q	V
20+ 0	0.0727	0.01	Q	V
20+ 5	0.0728	0.01	Q	V
20+10	0.0729	0.01	Q	V
20+15	0.0730	0.01	Q	V
20+20	0.0730	0.01	Q	V
20+25	0.0731	0.01	Q	V
20+30	0.0732	0.01	Q	V
20+35	0.0733	0.01	Q	V
20+40	0.0733	0.01	Q	V
20+45	0.0734	0.01	Q	V
20+50	0.0735	0.01	Q	V
20+55	0.0735	0.01	Q	V
21+ 0	0.0736	0.01	Q	V
21+ 5	0.0737	0.01	Q	V
21+10	0.0737	0.01	Q	V
21+15	0.0738	0.01	Q	V
21+20	0.0739	0.01	Q	V
21+25	0.0739	0.01	Q	V
21+30	0.0740	0.01	Q	V
21+35	0.0740	0.01	Q	V
21+40	0.0741	0.01	Q	V
21+45	0.0742	0.01	Q	V
21+50	0.0742	0.01	Q	V
21+55	0.0743	0.01	Q	V
22+ 0	0.0743	0.01	Q	V
22+ 5	0.0744	0.01	Q	V
22+10	0.0745	0.01	Q	V
22+15	0.0746	0.01	Q	V
22+20	0.0746	0.01	Q	V
22+25	0.0747	0.01	Q	V
22+30	0.0747	0.01	Q	V
22+35	0.0748	0.01	Q	V
22+40	0.0748	0.01	Q	V
22+45	0.0749	0.01	Q	V
22+50	0.0749	0.01	Q	V
22+55	0.0750	0.01	Q	V
23+ 0	0.0750	0.01	Q	V
23+ 5	0.0751	0.01	Q	V
23+10	0.0751	0.01	Q	V
23+15	0.0752	0.01	Q	V
23+20	0.0752	0.01	Q	V
23+25	0.0753	0.01	Q	V
23+30	0.0753	0.01	Q	V
23+35	0.0754	0.01	Q	V
23+40	0.0754	0.01	Q	V
23+45	0.0755	0.01	Q	V
23+50	0.0755	0.01	Q	V
23+55	0.0756	0.01	Q	V
24+ 0	0.0756	0.01	Q	V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PC10610.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 133
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 0.29(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.29(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 120.00(Ft.)
Length along longest watercourse measured to centroid = 25.00(Ft.)
Length along longest watercourse = 0.023 Mi.
Length along longest watercourse measured to centroid = 0.005 Mi.
Difference in elevation = 1.00(Ft.)
Slope along watercourse = 44.0000 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.005 Hr.
Lag time = 0.33 Min.
25% of lag time = 0.08 Min.
40% of lag time = 0.13 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	1.20	0.35

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	3.00	0.87

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.941(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.941(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.290 56.00 0.900
Total Area Entered = 0.29(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097

Minimum soil loss rate ((In/Hr)) = 0.049

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	1529.917	100.000
		Sum = 100.000	Sum= 0.292

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.116	(0.097)	0.021	0.095
2	0.17	0.60	0.140	(0.097)	0.025	0.115
3	0.25	0.60	0.140	(0.097)	0.025	0.115
4	0.33	0.60	0.140	(0.097)	0.025	0.115
5	0.42	0.60	0.140	(0.097)	0.025	0.115
6	0.50	0.70	0.163	(0.097)	0.029	0.134
7	0.58	0.70	0.163	(0.097)	0.029	0.134
8	0.67	0.70	0.163	(0.097)	0.029	0.134
9	0.75	0.70	0.163	(0.097)	0.029	0.134
10	0.83	0.70	0.163	(0.097)	0.029	0.134
11	0.92	0.70	0.163	(0.097)	0.029	0.134
12	1.00	0.80	0.186	(0.097)	0.034	0.153
13	1.08	0.80	0.186	(0.097)	0.034	0.153
14	1.17	0.80	0.186	(0.097)	0.034	0.153
15	1.25	0.80	0.186	(0.097)	0.034	0.153
16	1.33	0.80	0.186	(0.097)	0.034	0.153
17	1.42	0.80	0.186	(0.097)	0.034	0.153
18	1.50	0.80	0.186	(0.097)	0.034	0.153
19	1.58	0.80	0.186	(0.097)	0.034	0.153
20	1.67	0.80	0.186	(0.097)	0.034	0.153
21	1.75	0.80	0.186	(0.097)	0.034	0.153
22	1.83	0.80	0.186	(0.097)	0.034	0.153
23	1.92	0.80	0.186	(0.097)	0.034	0.153
24	2.00	0.90	0.210	(0.097)	0.038	0.172
25	2.08	0.80	0.186	(0.097)	0.034	0.153
26	2.17	0.90	0.210	(0.097)	0.038	0.172
27	2.25	0.90	0.210	(0.097)	0.038	0.172
28	2.33	0.90	0.210	(0.097)	0.038	0.172
29	2.42	0.90	0.210	(0.097)	0.038	0.172
30	2.50	0.90	0.210	(0.097)	0.038	0.172
31	2.58	0.90	0.210	(0.097)	0.038	0.172
32	2.67	0.90	0.210	(0.097)	0.038	0.172
33	2.75	1.00	0.233	(0.097)	0.042	0.191
34	2.83	1.00	0.233	(0.097)	0.042	0.191
35	2.92	1.00	0.233	(0.097)	0.042	0.191
36	3.00	1.00	0.233	(0.097)	0.042	0.191
37	3.08	1.00	0.233	(0.097)	0.042	0.191
38	3.17	1.10	0.256	(0.097)	0.046	0.210
39	3.25	1.10	0.256	(0.097)	0.046	0.210
40	3.33	1.10	0.256	(0.097)	0.046	0.210
41	3.42	1.20	0.279	(0.097)	0.050	0.229
42	3.50	1.30	0.303	(0.097)	0.054	0.248
43	3.58	1.40	0.326	(0.097)	0.059	0.267

1+55	0.0064	0.04	Q	V			
2+ 0	0.0068	0.05	Q	V			
2+ 5	0.0071	0.04	Q	V			
2+10	0.0074	0.05	Q	V			
2+15	0.0078	0.05	Q	V			
2+20	0.0081	0.05	Q	V			
2+25	0.0085	0.05	Q	V			
2+30	0.0088	0.05	Q	V			
2+35	0.0092	0.05	Q	V			
2+40	0.0095	0.05	Q	V			
2+45	0.0099	0.06	Q	V			
2+50	0.0103	0.06	Q	V			
2+55	0.0107	0.06	Q	V			
3+ 0	0.0110	0.06	Q	V			
3+ 5	0.0114	0.06	Q	V			
3+10	0.0118	0.06	Q	V			
3+15	0.0123	0.06	Q	V			
3+20	0.0127	0.06	Q	V			
3+25	0.0132	0.07	Q	V			
3+30	0.0137	0.07	Q	V			
3+35	0.0142	0.08	Q	V			
3+40	0.0147	0.08	Q	V			
3+45	0.0153	0.08	Q	V			
3+50	0.0159	0.08	Q	V			
3+55	0.0165	0.09	Q	V			
4+ 0	0.0171	0.09	Q	V			
4+ 5	0.0178	0.09	Q	V			
4+10	0.0185	0.10	Q	V			
4+15	0.0192	0.11	Q	V			
4+20	0.0200	0.11	Q	V			
4+25	0.0208	0.12	Q	V			
4+30	0.0216	0.12	Q	V			
4+35	0.0224	0.12	Q	V			
4+40	0.0233	0.13	Q	V			
4+45	0.0242	0.14	Q	V			
4+50	0.0252	0.14	Q	V			
4+55	0.0261	0.14	Q	V			
5+ 0	0.0272	0.15	Q	V			
5+ 5	0.0284	0.18	Q	V			
5+10	0.0299	0.22	Q	V			
5+15	0.0315	0.24	Q	V			
5+20	0.0333	0.26	Q	V			
5+25	0.0353	0.29	Q	V			
5+30	0.0378	0.35	Q	V			
5+35	0.0385	0.11	Q	V			
5+40	0.0388	0.05	Q	V			
5+45	0.0391	0.03	Q	V			
5+50	0.0393	0.03	Q	V			
5+55	0.0394	0.02	Q	V			
6+ 0	0.0395	0.01	Q	V			

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PC10310.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 133
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 0.29(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.29(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 120.00(Ft.)
Length along longest watercourse measured to centroid = 25.00(Ft.)
Length along longest watercourse = 0.023 Mi.
Length along longest watercourse measured to centroid = 0.005 Mi.
Difference in elevation = 1.00(Ft.)
Slope along watercourse = 44.0000 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.005 Hr.
Lag time = 0.33 Min.
25% of lag time = 0.08 Min.
40% of lag time = 0.13 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	0.90	0.26

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	2.35	0.68

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 1.497(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.497(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.290 56.00 0.900
Total Area Entered = 0.29(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097

Minimum soil loss rate ((In/Hr)) = 0.049

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	1529.917	100.000
		Sum = 100.000	Sum = 0.292

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max | Low	Effective (In/Hr)
1	0.08	1.30	0.233	(0.097)	0.042
2	0.17	1.30	0.233	(0.097)	0.042
3	0.25	1.10	0.198	(0.097)	0.036
4	0.33	1.50	0.269	(0.097)	0.048
5	0.42	1.50	0.269	(0.097)	0.048
6	0.50	1.80	0.323	(0.097)	0.058
7	0.58	1.50	0.269	(0.097)	0.048
8	0.67	1.80	0.323	(0.097)	0.058
9	0.75	1.80	0.323	(0.097)	0.058
10	0.83	1.50	0.269	(0.097)	0.048
11	0.92	1.60	0.287	(0.097)	0.052
12	1.00	1.80	0.323	(0.097)	0.058
13	1.08	2.20	0.395	(0.097)	0.071
14	1.17	2.20	0.395	(0.097)	0.071
15	1.25	2.20	0.395	(0.097)	0.071
16	1.33	2.00	0.359	(0.097)	0.065
17	1.42	2.60	0.467	(0.097)	0.084
18	1.50	2.70	0.485	(0.097)	0.087
19	1.58	2.40	0.431	(0.097)	0.078
20	1.67	2.70	0.485	(0.097)	0.087
21	1.75	3.30	0.593	(0.097)	0.097
22	1.83	3.10	0.557	(0.097)	0.107
23	1.92	2.90	0.521	(0.097)	0.100
24	2.00	3.00	0.539	(0.097)	0.094
25	2.08	3.10	0.557	(0.097)	0.097
26	2.17	4.20	0.754	(0.097)	0.100
27	2.25	5.00	0.898	(0.097)	0.136
28	2.33	3.50	0.629	(0.097)	0.162
29	2.42	6.80	1.221	(0.097)	0.113
30	2.50	7.30	1.311	(0.097)	0.220
31	2.58	8.20	1.473	(0.097)	0.236
32	2.67	5.90	1.060	(0.097)	0.265
33	2.75	2.00	0.359	(0.097)	0.191
34	2.83	1.80	0.323	(0.097)	0.065
35	2.92	1.80	0.323	(0.097)	0.058
36	3.00	0.60	0.108	(0.097)	0.058

(Loss Rate Not Used)

Sum = 100.0

Sum = 15.4

Flood volume = Effective rainfall 1.28(In)
times area 0.3(Ac.) / [(In)/(Ft.)] =

0.0(Ac. Ft)

Total soil loss = 0.21(In)

Total soil loss = 0.005(Ac. Ft)

Total rainfall = 1.50(In)

Flood volume = 1349.6 Cubic Feet
 Total soil loss = 225.8 Cubic Feet

 Peak flow rate of this hydrograph = 0.402(CFS)

+++++
 3 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume	Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0004		0.06	Q				
0+10	0.0008		0.06	Q				
0+15	0.0011		0.05	QV				
0+20	0.0015		0.06	QV				
0+25	0.0020		0.06	Q V				
0+30	0.0025		0.08	Q V				
0+35	0.0030		0.06	Q V				
0+40	0.0035		0.08	Q V				
0+45	0.0040		0.08	Q V				
0+50	0.0045		0.06	Q V				
0+55	0.0050		0.07	Q V				
1+ 0	0.0055		0.08	Q V				
1+ 5	0.0061		0.09	Q V				
1+10	0.0068		0.09	Q V				
1+15	0.0074		0.09	Q V				
1+20	0.0080		0.09	Q V				
1+25	0.0088		0.11	Q V				
1+30	0.0096		0.12	Q V				
1+35	0.0103		0.10	Q V				
1+40	0.0111		0.12	Q V				
1+45	0.0121		0.14	Q V				
1+50	0.0130		0.13	Q V				
1+55	0.0139		0.12	Q V				
2+ 0	0.0148		0.13	Q V				
2+ 5	0.0157		0.13	Q V				
2+10	0.0170		0.19	Q V				
2+15	0.0187		0.23	Q V				
2+20	0.0197		0.16	Q V				
2+25	0.0220		0.33	Q V				
2+30	0.0244		0.35	Q V				
2+35	0.0272		0.40	Q V				
2+40	0.0291		0.28	Q V				
2+45	0.0297		0.09	Q V				
2+50	0.0303		0.08	Q V				
2+55	0.0308		0.08	Q V				
3+ 0	0.0310		0.03	Q V				

Unit Hydrograph Analysis

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TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODE 133
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 0.29(Ac.) = 0.000 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 0.29(Ac.) = 0.000 Sq. Mi.
Length along longest watercourse = 120.00(Ft.)
Length along longest watercourse measured to centroid = 25.00(Ft.)
Length along longest watercourse = 0.023 Mi.
Length along longest watercourse measured to centroid = 0.005 Mi.
Difference in elevation = 1.00(Ft.)
Slope along watercourse = 44.0000 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.005 Hr.
Lag time = 0.33 Min.
25% of lag time = 0.08 Min.
40% of lag time = 0.13 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	0.54	0.16

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
0.29	1.36	0.39

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.877(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 0.877(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
0.290 56.00 0.900
Total Area Entered = 0.29(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097
 Minimum soil loss rate ((In/Hr)) = 0.049
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Slope of intensity-duration curve for a 1 hour storm = 0.4800

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	1529.917	100.000
		Sum = 100.000	Sum = 0.292

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
			Max	Low	
1	0.08	4.40	(0.097)	0.083	0.380
2	0.17	4.50	(0.097)	0.085	0.388
3	0.25	5.40	0.097	(0.102)	0.471
4	0.33	5.40	0.097	(0.102)	0.471
5	0.42	5.70	0.097	(0.108)	0.503
6	0.50	6.40	0.097	(0.121)	0.577
7	0.58	7.90	0.097	(0.150)	0.735
8	0.67	9.10	0.097	(0.172)	0.861
9	0.75	12.80	0.097	(0.243)	1.251
10	0.83	25.60	0.097	(0.485)	2.598
11	0.92	7.90	0.097	(0.150)	0.735
12	1.00	4.90	(0.097)	0.093	0.423

Sum = 100.0 (Loss Rate Not Used) Sum = 9.4

Flood volume = Effective rainfall 0.78(In)
 times area 0.3(Ac.) / [(In)/(Ft.)] = 0.0(Ac. Ft)
 Total soil loss = 0.09(In)
 Total soil loss = 0.002(Ac. Ft)
 Total rainfall = 0.88(In)
 Flood volume = 824.0 Cubic Feet
 Total soil loss = 99.6 Cubic Feet

Peak flow rate of this hydrograph = 0.760(CFS)

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0008	0.11	QV				
0+10	0.0015	0.11	Q V				
0+15	0.0025	0.14	Q V				
0+20	0.0034	0.14	Q V				
0+25	0.0045	0.15	Q V				
0+30	0.0056	0.17	Q V				
0+35	0.0071	0.21	Q V				
0+40	0.0088	0.25	Q V				

0+45	0.0114	0.37	Q		V	
0+50	0.0166	0.76	Q			V
0+55	0.0181	0.21	Q			V
1+ 0	0.0189	0.12	Q			V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PD02242.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 140-161
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 6.07(Ac.) = 0.009 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.07(Ac.) = 0.009 Sq. Mi.
Length along longest watercourse = 687.00(Ft.)
Length along longest watercourse measured to centroid = 100.00(Ft.)
Length along longest watercourse = 0.130 Mi.
Length along longest watercourse measured to centroid = 0.019 Mi.
Difference in elevation = 18.60(Ft.)
Slope along watercourse = 142.9520 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.014 Hr.
Lag time = 0.86 Min.
25% of lag time = 0.21 Min.
40% of lag time = 0.34 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
6.07	2.00	12.14

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
6.07	6.40	38.85

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 2.000(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.000(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
6.070 56.00 0.900
Total Area Entered = 6.07(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Unit Hydrograph
 VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	582.319	74.564
2	0.167	1164.637	25.436
		Sum = 100.000	Sum = 6.117

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.016	(0.238)	0.003	0.013
2	0.17	0.07	0.016	(0.237)	0.003	0.013
3	0.25	0.07	0.016	(0.236)	0.003	0.013
4	0.33	0.10	0.024	(0.235)	0.004	0.020
5	0.42	0.10	0.024	(0.234)	0.004	0.020
6	0.50	0.10	0.024	(0.233)	0.004	0.020
7	0.58	0.10	0.024	(0.232)	0.004	0.020
8	0.67	0.10	0.024	(0.231)	0.004	0.020
9	0.75	0.10	0.024	(0.230)	0.004	0.020
10	0.83	0.13	0.032	(0.230)	0.006	0.026
11	0.92	0.13	0.032	(0.229)	0.006	0.026
12	1.00	0.13	0.032	(0.228)	0.006	0.026
13	1.08	0.10	0.024	(0.227)	0.004	0.020
14	1.17	0.10	0.024	(0.226)	0.004	0.020
15	1.25	0.10	0.024	(0.225)	0.004	0.020
16	1.33	0.10	0.024	(0.224)	0.004	0.020
17	1.42	0.10	0.024	(0.223)	0.004	0.020
18	1.50	0.10	0.024	(0.222)	0.004	0.020
19	1.58	0.10	0.024	(0.222)	0.004	0.020
20	1.67	0.10	0.024	(0.221)	0.004	0.020
21	1.75	0.10	0.024	(0.220)	0.004	0.020
22	1.83	0.13	0.032	(0.219)	0.006	0.026
23	1.92	0.13	0.032	(0.218)	0.006	0.026
24	2.00	0.13	0.032	(0.217)	0.006	0.026
25	2.08	0.13	0.032	(0.216)	0.006	0.026
26	2.17	0.13	0.032	(0.215)	0.006	0.026
27	2.25	0.13	0.032	(0.214)	0.006	0.026
28	2.33	0.13	0.032	(0.214)	0.006	0.026
29	2.42	0.13	0.032	(0.213)	0.006	0.026
30	2.50	0.13	0.032	(0.212)	0.006	0.026
31	2.58	0.17	0.040	(0.211)	0.007	0.033
32	2.67	0.17	0.040	(0.210)	0.007	0.033
33	2.75	0.17	0.040	(0.209)	0.007	0.033
34	2.83	0.17	0.040	(0.208)	0.007	0.033
35	2.92	0.17	0.040	(0.208)	0.007	0.033
36	3.00	0.17	0.040	(0.207)	0.007	0.033
37	3.08	0.17	0.040	(0.206)	0.007	0.033
38	3.17	0.17	0.040	(0.205)	0.007	0.033
39	3.25	0.17	0.040	(0.204)	0.007	0.033
40	3.33	0.17	0.040	(0.203)	0.007	0.033
41	3.42	0.17	0.040	(0.202)	0.007	0.033
42	3.50	0.17	0.040	(0.202)	0.007	0.033

43	3.58	0.17	0.040	(0.201)	0.007	0.033
44	3.67	0.17	0.040	(0.200)	0.007	0.033
45	3.75	0.17	0.040	(0.199)	0.007	0.033
46	3.83	0.20	0.048	(0.198)	0.009	0.039
47	3.92	0.20	0.048	(0.197)	0.009	0.039
48	4.00	0.20	0.048	(0.197)	0.009	0.039
49	4.08	0.20	0.048	(0.196)	0.009	0.039
50	4.17	0.20	0.048	(0.195)	0.009	0.039
51	4.25	0.20	0.048	(0.194)	0.009	0.039
52	4.33	0.23	0.056	(0.193)	0.010	0.046
53	4.42	0.23	0.056	(0.192)	0.010	0.046
54	4.50	0.23	0.056	(0.192)	0.010	0.046
55	4.58	0.23	0.056	(0.191)	0.010	0.046
56	4.67	0.23	0.056	(0.190)	0.010	0.046
57	4.75	0.23	0.056	(0.189)	0.010	0.046
58	4.83	0.27	0.064	(0.188)	0.012	0.052
59	4.92	0.27	0.064	(0.187)	0.012	0.052
60	5.00	0.27	0.064	(0.187)	0.012	0.052
61	5.08	0.20	0.048	(0.186)	0.009	0.039
62	5.17	0.20	0.048	(0.185)	0.009	0.039
63	5.25	0.20	0.048	(0.184)	0.009	0.039
64	5.33	0.23	0.056	(0.183)	0.010	0.046
65	5.42	0.23	0.056	(0.183)	0.010	0.046
66	5.50	0.23	0.056	(0.182)	0.010	0.046
67	5.58	0.27	0.064	(0.181)	0.012	0.052
68	5.67	0.27	0.064	(0.180)	0.012	0.052
69	5.75	0.27	0.064	(0.179)	0.012	0.052
70	5.83	0.27	0.064	(0.179)	0.012	0.052
71	5.92	0.27	0.064	(0.178)	0.012	0.052
72	6.00	0.27	0.064	(0.177)	0.012	0.052
73	6.08	0.30	0.072	(0.176)	0.013	0.059
74	6.17	0.30	0.072	(0.175)	0.013	0.059
75	6.25	0.30	0.072	(0.175)	0.013	0.059
76	6.33	0.30	0.072	(0.174)	0.013	0.059
77	6.42	0.30	0.072	(0.173)	0.013	0.059
78	6.50	0.30	0.072	(0.172)	0.013	0.059
79	6.58	0.33	0.080	(0.172)	0.014	0.066
80	6.67	0.33	0.080	(0.171)	0.014	0.066
81	6.75	0.33	0.080	(0.170)	0.014	0.066
82	6.83	0.33	0.080	(0.169)	0.014	0.066
83	6.92	0.33	0.080	(0.169)	0.014	0.066
84	7.00	0.33	0.080	(0.168)	0.014	0.066
85	7.08	0.33	0.080	(0.167)	0.014	0.066
86	7.17	0.33	0.080	(0.166)	0.014	0.066
87	7.25	0.33	0.080	(0.165)	0.014	0.066
88	7.33	0.37	0.088	(0.165)	0.016	0.072
89	7.42	0.37	0.088	(0.164)	0.016	0.072
90	7.50	0.37	0.088	(0.163)	0.016	0.072
91	7.58	0.40	0.096	(0.162)	0.017	0.079
92	7.67	0.40	0.096	(0.162)	0.017	0.079
93	7.75	0.40	0.096	(0.161)	0.017	0.079
94	7.83	0.43	0.104	(0.160)	0.019	0.085
95	7.92	0.43	0.104	(0.159)	0.019	0.085
96	8.00	0.43	0.104	(0.159)	0.019	0.085
97	8.08	0.50	0.120	(0.158)	0.022	0.098
98	8.17	0.50	0.120	(0.157)	0.022	0.098
99	8.25	0.50	0.120	(0.157)	0.022	0.098
100	8.33	0.50	0.120	(0.156)	0.022	0.098
101	8.42	0.50	0.120	(0.155)	0.022	0.098
102	8.50	0.50	0.120	(0.154)	0.022	0.098
103	8.58	0.53	0.128	(0.154)	0.023	0.105
104	8.67	0.53	0.128	(0.153)	0.023	0.105
105	8.75	0.53	0.128	(0.152)	0.023	0.105
106	8.83	0.57	0.136	(0.151)	0.024	0.112
107	8.92	0.57	0.136	(0.151)	0.024	0.112
108	9.00	0.57	0.136	(0.150)	0.024	0.112
109	9.08	0.63	0.152	(0.149)	0.027	0.125
110	9.17	0.63	0.152	(0.149)	0.027	0.125
111	9.25	0.63	0.152	(0.148)	0.027	0.125
112	9.33	0.67	0.160	(0.147)	0.029	0.131
113	9.42	0.67	0.160	(0.147)	0.029	0.131
114	9.50	0.67	0.160	(0.146)	0.029	0.131

115	9.58	0.70	0.168	(0.145)	0.030	0.138
116	9.67	0.70	0.168	(0.144)	0.030	0.138
117	9.75	0.70	0.168	(0.144)	0.030	0.138
118	9.83	0.73	0.176	(0.143)	0.032	0.144
119	9.92	0.73	0.176	(0.142)	0.032	0.144
120	10.00	0.73	0.176	(0.142)	0.032	0.144
121	10.08	0.50	0.120	(0.141)	0.022	0.098
122	10.17	0.50	0.120	(0.140)	0.022	0.098
123	10.25	0.50	0.120	(0.140)	0.022	0.098
124	10.33	0.50	0.120	(0.139)	0.022	0.098
125	10.42	0.50	0.120	(0.138)	0.022	0.098
126	10.50	0.50	0.120	(0.138)	0.022	0.098
127	10.58	0.67	0.160	(0.137)	0.029	0.131
128	10.67	0.67	0.160	(0.136)	0.029	0.131
129	10.75	0.67	0.160	(0.136)	0.029	0.131
130	10.83	0.67	0.160	(0.135)	0.029	0.131
131	10.92	0.67	0.160	(0.134)	0.029	0.131
132	11.00	0.67	0.160	(0.134)	0.029	0.131
133	11.08	0.63	0.152	(0.133)	0.027	0.125
134	11.17	0.63	0.152	(0.132)	0.027	0.125
135	11.25	0.63	0.152	(0.132)	0.027	0.125
136	11.33	0.63	0.152	(0.131)	0.027	0.125
137	11.42	0.63	0.152	(0.130)	0.027	0.125
138	11.50	0.63	0.152	(0.130)	0.027	0.125
139	11.58	0.57	0.136	(0.129)	0.024	0.112
140	11.67	0.57	0.136	(0.128)	0.024	0.112
141	11.75	0.57	0.136	(0.128)	0.024	0.112
142	11.83	0.60	0.144	(0.127)	0.026	0.118
143	11.92	0.60	0.144	(0.126)	0.026	0.118
144	12.00	0.60	0.144	(0.126)	0.026	0.118
145	12.08	0.83	0.200	(0.125)	0.036	0.164
146	12.17	0.83	0.200	(0.125)	0.036	0.164
147	12.25	0.83	0.200	(0.124)	0.036	0.164
148	12.33	0.87	0.208	(0.123)	0.037	0.171
149	12.42	0.87	0.208	(0.123)	0.037	0.171
150	12.50	0.87	0.208	(0.122)	0.037	0.171
151	12.58	0.93	0.224	(0.121)	0.040	0.184
152	12.67	0.93	0.224	(0.121)	0.040	0.184
153	12.75	0.93	0.224	(0.120)	0.040	0.184
154	12.83	0.97	0.232	(0.120)	0.042	0.190
155	12.92	0.97	0.232	(0.119)	0.042	0.190
156	13.00	0.97	0.232	(0.118)	0.042	0.190
157	13.08	1.13	0.272	(0.118)	0.049	0.223
158	13.17	1.13	0.272	(0.117)	0.049	0.223
159	13.25	1.13	0.272	(0.117)	0.049	0.223
160	13.33	1.13	0.272	(0.116)	0.049	0.223
161	13.42	1.13	0.272	(0.115)	0.049	0.223
162	13.50	1.13	0.272	(0.115)	0.049	0.223
163	13.58	0.77	0.184	(0.114)	0.033	0.151
164	13.67	0.77	0.184	(0.114)	0.033	0.151
165	13.75	0.77	0.184	(0.113)	0.033	0.151
166	13.83	0.77	0.184	(0.113)	0.033	0.151
167	13.92	0.77	0.184	(0.112)	0.033	0.151
168	14.00	0.77	0.184	(0.111)	0.033	0.151
169	14.08	0.90	0.216	(0.111)	0.039	0.177
170	14.17	0.90	0.216	(0.110)	0.039	0.177
171	14.25	0.90	0.216	(0.110)	0.039	0.177
172	14.33	0.87	0.208	(0.109)	0.037	0.171
173	14.42	0.87	0.208	(0.109)	0.037	0.171
174	14.50	0.87	0.208	(0.108)	0.037	0.171
175	14.58	0.87	0.208	(0.107)	0.037	0.171
176	14.67	0.87	0.208	(0.107)	0.037	0.171
177	14.75	0.87	0.208	(0.106)	0.037	0.171
178	14.83	0.83	0.200	(0.106)	0.036	0.164
179	14.92	0.83	0.200	(0.105)	0.036	0.164
180	15.00	0.83	0.200	(0.105)	0.036	0.164
181	15.08	0.80	0.192	(0.104)	0.035	0.157
182	15.17	0.80	0.192	(0.104)	0.035	0.157
183	15.25	0.80	0.192	(0.103)	0.035	0.157
184	15.33	0.77	0.184	(0.103)	0.033	0.151
185	15.42	0.77	0.184	(0.102)	0.033	0.151
186	15.50	0.77	0.184	(0.102)	0.033	0.151

187	15.58	0.63	0.152	(0.101)	0.027	0.125
188	15.67	0.63	0.152	(0.101)	0.027	0.125
189	15.75	0.63	0.152	(0.100)	0.027	0.125
190	15.83	0.63	0.152	(0.100)	0.027	0.125
191	15.92	0.63	0.152	(0.099)	0.027	0.125
192	16.00	0.63	0.152	(0.099)	0.027	0.125
193	16.08	0.13	0.032	(0.098)	0.006	0.026
194	16.17	0.13	0.032	(0.098)	0.006	0.026
195	16.25	0.13	0.032	(0.097)	0.006	0.026
196	16.33	0.13	0.032	(0.097)	0.006	0.026
197	16.42	0.13	0.032	(0.096)	0.006	0.026
198	16.50	0.13	0.032	(0.096)	0.006	0.026
199	16.58	0.10	0.024	(0.095)	0.004	0.020
200	16.67	0.10	0.024	(0.095)	0.004	0.020
201	16.75	0.10	0.024	(0.094)	0.004	0.020
202	16.83	0.10	0.024	(0.094)	0.004	0.020
203	16.92	0.10	0.024	(0.093)	0.004	0.020
204	17.00	0.10	0.024	(0.093)	0.004	0.020
205	17.08	0.17	0.040	(0.092)	0.007	0.033
206	17.17	0.17	0.040	(0.092)	0.007	0.033
207	17.25	0.17	0.040	(0.091)	0.007	0.033
208	17.33	0.17	0.040	(0.091)	0.007	0.033
209	17.42	0.17	0.040	(0.090)	0.007	0.033
210	17.50	0.17	0.040	(0.090)	0.007	0.033
211	17.58	0.17	0.040	(0.089)	0.007	0.033
212	17.67	0.17	0.040	(0.089)	0.007	0.033
213	17.75	0.17	0.040	(0.089)	0.007	0.033
214	17.83	0.13	0.032	(0.088)	0.006	0.026
215	17.92	0.13	0.032	(0.088)	0.006	0.026
216	18.00	0.13	0.032	(0.087)	0.006	0.026
217	18.08	0.13	0.032	(0.087)	0.006	0.026
218	18.17	0.13	0.032	(0.086)	0.006	0.026
219	18.25	0.13	0.032	(0.086)	0.006	0.026
220	18.33	0.13	0.032	(0.086)	0.006	0.026
221	18.42	0.13	0.032	(0.085)	0.006	0.026
222	18.50	0.13	0.032	(0.085)	0.006	0.026
223	18.58	0.10	0.024	(0.084)	0.004	0.020
224	18.67	0.10	0.024	(0.084)	0.004	0.020
225	18.75	0.10	0.024	(0.084)	0.004	0.020
226	18.83	0.07	0.016	(0.083)	0.003	0.013
227	18.92	0.07	0.016	(0.083)	0.003	0.013
228	19.00	0.07	0.016	(0.082)	0.003	0.013
229	19.08	0.10	0.024	(0.082)	0.004	0.020
230	19.17	0.10	0.024	(0.082)	0.004	0.020
231	19.25	0.10	0.024	(0.081)	0.004	0.020
232	19.33	0.13	0.032	(0.081)	0.006	0.026
233	19.42	0.13	0.032	(0.080)	0.006	0.026
234	19.50	0.13	0.032	(0.080)	0.006	0.026
235	19.58	0.10	0.024	(0.080)	0.004	0.020
236	19.67	0.10	0.024	(0.079)	0.004	0.020
237	19.75	0.10	0.024	(0.079)	0.004	0.020
238	19.83	0.07	0.016	(0.079)	0.003	0.013
239	19.92	0.07	0.016	(0.078)	0.003	0.013
240	20.00	0.07	0.016	(0.078)	0.003	0.013
241	20.08	0.10	0.024	(0.078)	0.004	0.020
242	20.17	0.10	0.024	(0.077)	0.004	0.020
243	20.25	0.10	0.024	(0.077)	0.004	0.020
244	20.33	0.10	0.024	(0.077)	0.004	0.020
245	20.42	0.10	0.024	(0.076)	0.004	0.020
246	20.50	0.10	0.024	(0.076)	0.004	0.020
247	20.58	0.10	0.024	(0.076)	0.004	0.020
248	20.67	0.10	0.024	(0.075)	0.004	0.020
249	20.75	0.10	0.024	(0.075)	0.004	0.020
250	20.83	0.07	0.016	(0.075)	0.003	0.013
251	20.92	0.07	0.016	(0.074)	0.003	0.013
252	21.00	0.07	0.016	(0.074)	0.003	0.013
253	21.08	0.10	0.024	(0.074)	0.004	0.020
254	21.17	0.10	0.024	(0.073)	0.004	0.020
255	21.25	0.10	0.024	(0.073)	0.004	0.020
256	21.33	0.07	0.016	(0.073)	0.003	0.013
257	21.42	0.07	0.016	(0.073)	0.003	0.013
258	21.50	0.07	0.016	(0.072)	0.003	0.013

1+50	0. 0182	0. 15	Q
1+55	0. 0194	0. 16	Q
2+ 0	0. 0205	0. 16	Q
2+ 5	0. 0216	0. 16	QV
2+10	0. 0227	0. 16	QV
2+15	0. 0238	0. 16	QV
2+20	0. 0249	0. 16	QV
2+25	0. 0260	0. 16	QV
2+30	0. 0271	0. 16	QV
2+35	0. 0284	0. 19	QV
2+40	0. 0298	0. 20	QV
2+45	0. 0312	0. 20	QV
2+50	0. 0326	0. 20	QV
2+55	0. 0339	0. 20	QV
3+ 0	0. 0353	0. 20	QV
3+ 5	0. 0367	0. 20	QV
3+10	0. 0381	0. 20	QV
3+15	0. 0395	0. 20	QV
3+20	0. 0408	0. 20	QV
3+25	0. 0422	0. 20	Q V
3+30	0. 0436	0. 20	Q V
3+35	0. 0450	0. 20	Q V
3+40	0. 0464	0. 20	Q V
3+45	0. 0478	0. 20	Q V
3+50	0. 0494	0. 23	Q V
3+55	0. 0510	0. 24	Q V
4+ 0	0. 0527	0. 24	Q V
4+ 5	0. 0543	0. 24	Q V
4+10	0. 0560	0. 24	Q V
4+15	0. 0576	0. 24	Q V
4+20	0. 0595	0. 27	QV
4+25	0. 0614	0. 28	QV
4+30	0. 0634	0. 28	Q V
4+35	0. 0653	0. 28	Q V
4+40	0. 0673	0. 28	Q V
4+45	0. 0692	0. 28	Q V
4+50	0. 0713	0. 31	Q V
4+55	0. 0735	0. 32	Q V
5+ 0	0. 0758	0. 32	Q V
5+ 5	0. 0776	0. 26	Q V
5+10	0. 0792	0. 24	Q V
5+15	0. 0809	0. 24	Q V
5+20	0. 0827	0. 27	Q V
5+25	0. 0847	0. 28	Q V
5+30	0. 0866	0. 28	Q V
5+35	0. 0888	0. 31	Q V
5+40	0. 0910	0. 32	Q V
5+45	0. 0932	0. 32	Q V
5+50	0. 0954	0. 32	Q V
5+55	0. 0976	0. 32	Q V
6+ 0	0. 0998	0. 32	Q V
6+ 5	0. 1022	0. 35	Q V
6+10	0. 1047	0. 36	Q V
6+15	0. 1072	0. 36	Q V
6+20	0. 1097	0. 36	Q V
6+25	0. 1122	0. 36	Q V
6+30	0. 1147	0. 36	Q V
6+35	0. 1174	0. 39	Q V
6+40	0. 1201	0. 40	Q V
6+45	0. 1229	0. 40	Q V
6+50	0. 1257	0. 40	Q V
6+55	0. 1284	0. 40	Q V
7+ 0	0. 1312	0. 40	Q V
7+ 5	0. 1340	0. 40	Q V
7+10	0. 1367	0. 40	Q V
7+15	0. 1395	0. 40	Q V
7+20	0. 1425	0. 43	Q V
7+25	0. 1455	0. 44	Q V
7+30	0. 1485	0. 44	Q V
7+35	0. 1518	0. 47	Q V
7+40	0. 1551	0. 48	Q V
7+45	0. 1584	0. 48	Q V

19+50	0. 7968	0. 09	Q	V
19+55	0. 7973	0. 08	Q	V
20+ 0	0. 7979	0. 08	Q	V
20+ 5	0. 7987	0. 11	Q	V
20+10	0. 7995	0. 12	Q	V
20+15	0. 8003	0. 12	Q	V
20+20	0. 8011	0. 12	Q	V
20+25	0. 8020	0. 12	Q	V
20+30	0. 8028	0. 12	Q	V
20+35	0. 8036	0. 12	Q	V
20+40	0. 8045	0. 12	Q	V
20+45	0. 8053	0. 12	Q	V
20+50	0. 8059	0. 09	Q	V
20+55	0. 8065	0. 08	Q	V
21+ 0	0. 8070	0. 08	Q	V
21+ 5	0. 8078	0. 11	Q	V
21+10	0. 8086	0. 12	Q	V
21+15	0. 8094	0. 12	Q	V
21+20	0. 8101	0. 09	Q	V
21+25	0. 8106	0. 08	Q	V
21+30	0. 8112	0. 08	Q	V
21+35	0. 8119	0. 11	Q	V
21+40	0. 8128	0. 12	Q	V
21+45	0. 8136	0. 12	Q	V
21+50	0. 8142	0. 09	Q	V
21+55	0. 8148	0. 08	Q	V
22+ 0	0. 8153	0. 08	Q	V
22+ 5	0. 8161	0. 11	Q	V
22+10	0. 8169	0. 12	Q	V
22+15	0. 8177	0. 12	Q	V
22+20	0. 8184	0. 09	Q	V
22+25	0. 8189	0. 08	Q	V
22+30	0. 8195	0. 08	Q	V
22+35	0. 8200	0. 08	Q	V
22+40	0. 8206	0. 08	Q	V
22+45	0. 8211	0. 08	Q	V
22+50	0. 8217	0. 08	Q	V
22+55	0. 8222	0. 08	Q	V
23+ 0	0. 8228	0. 08	Q	V
23+ 5	0. 8233	0. 08	Q	V
23+10	0. 8239	0. 08	Q	V
23+15	0. 8244	0. 08	Q	V
23+20	0. 8250	0. 08	Q	V
23+25	0. 8255	0. 08	Q	V
23+30	0. 8261	0. 08	Q	V
23+35	0. 8267	0. 08	Q	V
23+40	0. 8272	0. 08	Q	V
23+45	0. 8278	0. 08	Q	V
23+50	0. 8283	0. 08	Q	V
23+55	0. 8289	0. 08	Q	V
24+ 0	0. 8294	0. 08	Q	V
24+ 5	0. 8296	0. 02	Q	V

Unit Hydrograph Analysis

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 140-161
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 6.07(Ac.) = 0.009 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.07(Ac.) = 0.009 Sq. Mi.
Length along longest watercourse = 687.00(Ft.)
Length along longest watercourse measured to centroid = 100.00(Ft.)
Length along longest watercourse = 0.130 Mi.
Length along longest watercourse measured to centroid = 0.019 Mi.
Difference in elevation = 18.60(Ft.)
Slope along watercourse = 142.9520 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.014 Hr.
Lag time = 0.86 Min.
25% of lag time = 0.21 Min.
40% of lag time = 0.34 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1] Rainfall (In) [2] Weighting [1*2]
6.07 1.20 7.28

100 YEAR Area rainfall data:

Area(Ac.) [1] Rainfall (In) [2] Weighting [1*2]
6.07 3.00 18.21

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.200(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.200(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
6.070 56.00 0.900
Total Area Entered = 6.07(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	582.319	4.561
2	0.167	1164.637	1.556
Sum =		100.000	Sum= 6.117

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.072	(0.134)	0.013	0.059
2	0.17	0.60	0.086	(0.134)	0.016	0.071
3	0.25	0.60	0.086	(0.134)	0.016	0.071
4	0.33	0.60	0.086	(0.134)	0.016	0.071
5	0.42	0.60	0.086	(0.134)	0.016	0.071
6	0.50	0.70	0.101	(0.134)	0.018	0.083
7	0.58	0.70	0.101	(0.134)	0.018	0.083
8	0.67	0.70	0.101	(0.134)	0.018	0.083
9	0.75	0.70	0.101	(0.134)	0.018	0.083
10	0.83	0.70	0.101	(0.134)	0.018	0.083
11	0.92	0.70	0.101	(0.134)	0.018	0.083
12	1.00	0.80	0.115	(0.134)	0.021	0.094
13	1.08	0.80	0.115	(0.134)	0.021	0.094
14	1.17	0.80	0.115	(0.134)	0.021	0.094
15	1.25	0.80	0.115	(0.134)	0.021	0.094
16	1.33	0.80	0.115	(0.134)	0.021	0.094
17	1.42	0.80	0.115	(0.134)	0.021	0.094
18	1.50	0.80	0.115	(0.134)	0.021	0.094
19	1.58	0.80	0.115	(0.134)	0.021	0.094
20	1.67	0.80	0.115	(0.134)	0.021	0.094
21	1.75	0.80	0.115	(0.134)	0.021	0.094
22	1.83	0.80	0.115	(0.134)	0.021	0.094
23	1.92	0.80	0.115	(0.134)	0.021	0.094
24	2.00	0.90	0.130	(0.134)	0.023	0.106
25	2.08	0.80	0.115	(0.134)	0.021	0.094
26	2.17	0.90	0.130	(0.134)	0.023	0.106
27	2.25	0.90	0.130	(0.134)	0.023	0.106
28	2.33	0.90	0.130	(0.134)	0.023	0.106
29	2.42	0.90	0.130	(0.134)	0.023	0.106
30	2.50	0.90	0.130	(0.134)	0.023	0.106
31	2.58	0.90	0.130	(0.134)	0.023	0.106
32	2.67	0.90	0.130	(0.134)	0.023	0.106
33	2.75	1.00	0.144	(0.134)	0.026	0.118
34	2.83	1.00	0.144	(0.134)	0.026	0.118
35	2.92	1.00	0.144	(0.134)	0.026	0.118
36	3.00	1.00	0.144	(0.134)	0.026	0.118
37	3.08	1.00	0.144	(0.134)	0.026	0.118
38	3.17	1.10	0.158	(0.134)	0.029	0.130
39	3.25	1.10	0.158	(0.134)	0.029	0.130
40	3.33	1.10	0.158	(0.134)	0.029	0.130
41	3.42	1.20	0.173	(0.134)	0.031	0.142
42	3.50	1.30	0.187	(0.134)	0.034	0.154

1+50	0.0781	0.58	Q	V			
1+55	0.0821	0.58	Q	V			
2+ 0	0.0865	0.63	Q	V			
2+ 5	0.0906	0.60	Q	V			
2+10	0.0949	0.63	Q	V			
2+15	0.0994	0.65	Q	V			
2+20	0.1039	0.65	Q	V			
2+25	0.1084	0.65	Q	V			
2+30	0.1128	0.65	Q	V			
2+35	0.1173	0.65	Q	V			
2+40	0.1218	0.65	Q	V			
2+45	0.1267	0.70	Q	V			
2+50	0.1316	0.72	Q	V			
2+55	0.1366	0.72	Q	V			
3+ 0	0.1416	0.72	Q	V			
3+ 5	0.1466	0.72	Q	V			
3+10	0.1519	0.78	Q	V			
3+15	0.1574	0.79	Q	V			
3+20	0.1629	0.79	Q	V			
3+25	0.1687	0.85	Q	V			
3+30	0.1750	0.92	Q	V			
3+35	0.1819	0.99	Q	V			
3+40	0.1889	1.01	Q	V			
3+45	0.1962	1.07	Q	V			
3+50	0.2037	1.08	Q	V			
3+55	0.2115	1.14	Q	V			
4+ 0	0.2195	1.16	Q	V			
4+ 5	0.2278	1.21	Q	V			
4+10	0.2366	1.28	Q	V			
4+15	0.2460	1.35	Q	V			
4+20	0.2558	1.43	Q	V			
4+25	0.2661	1.50	Q	V			
4+30	0.2766	1.52	Q	V			
4+35	0.2874	1.57	Q	V			
4+40	0.2987	1.64	Q	V			
4+45	0.3105	1.72	Q	V			
4+50	0.3225	1.73	Q	V			
4+55	0.3348	1.79	Q	V			
5+ 0	0.3476	1.86	Q	V			
5+ 5	0.3624	2.15	Q	V			
5+10	0.3797	2.51	Q	V			
5+15	0.3987	2.76	Q	V			
5+20	0.4192	2.98	Q	V			
5+25	0.4420	3.30	Q	V			
5+30	0.4691	3.93	Q	V			
5+35	0.4833	2.07	Q	V			
5+40	0.4891	0.83	Q	V			
5+45	0.4925	0.49	Q	V			
5+50	0.4951	0.38	Q	V			
5+55	0.4968	0.25	Q	V			
6+ 0	0.4979	0.16	Q	V			
6+ 5	0.4982	0.04	Q	V			

Unit Hydrograph Analysis

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 140-161
HYDROLOGIC ANALYSIS
2-YEAR

Drainage Area = 6.07(Ac.) = 0.009 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.07(Ac.) = 0.009 Sq. Mi.
Length along longest watercourse = 687.00(Ft.)
Length along longest watercourse measured to centroid = 100.00(Ft.)
Length along longest watercourse = 0.130 Mi.
Length along longest watercourse measured to centroid = 0.019 Mi.
Difference in elevation = 18.60(Ft.)
Slope along watercourse = 142.9520 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.014 Hr.
Lag time = 0.86 Min.
25% of lag time = 0.21 Min.
40% of lag time = 0.34 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	0.90	5.46

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	2.35	14.26

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 0.900(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 0.900(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
6.070 56.00 0.900
Total Area Entered = 6.07(Ac.)

Total rainfall = 0.90(In)
 Flood volume = 16321.4 Cubic Feet
 Total soil loss = 3508.8 Cubic Feet

 Peak flow rate of this hydrograph = 4.448(CFS)

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 3 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

 Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0036	0.53	V Q				
0+10	0.0085	0.70	V Q				
0+15	0.0128	0.62	V Q				
0+20	0.0180	0.76	V Q				
0+25	0.0236	0.81	V Q				
0+30	0.0300	0.93	V Q				
0+35	0.0359	0.85	V Q				
0+40	0.0423	0.93	V Q				
0+45	0.0491	0.98	V Q				
0+50	0.0549	0.85	V Q				
0+55	0.0608	0.85	V Q				
1+ 0	0.0674	0.95	V Q				
1+ 5	0.0752	1.14	V Q				
1+10	0.0834	1.19	V Q				
1+15	0.0916	1.19	V Q				
1+20	0.0993	1.11	V Q				
1+25	0.1084	1.33	V Q				
1+30	0.1184	1.45	V Q				
1+35	0.1276	1.34	V Q				
1+40	0.1374	1.42	V Q				
1+45	0.1492	1.71	V Q				
1+50	0.1609	1.71	V Q				
1+55	0.1719	1.60	V Q				
2+ 0	0.1831	1.61	V Q				
2+ 5	0.1945	1.67	V Q				
2+10	0.2092	2.12	V Q				
2+15	0.2271	2.60	V Q				
2+20	0.2416	2.10	V Q				
2+25	0.2638	3.23	V Q				
2+30	0.2908	3.92	V Q				
2+35	0.3215	4.45	V Q				
2+40	0.3459	3.55	V Q				
2+45	0.3571	1.62	V Q				
2+50	0.3640	1.00	V Q				
2+55	0.3707	0.98	V Q				
3+ 0	0.3741	0.49	V Q				
3+ 5	0.3747	0.08	V Q				

Unit Hydrograph Analysis

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Program License Serial Number 6310

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English Rainfall Data (Inches) Input Values Used

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Length along longest watercourse = 0.130 Mi.
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Slope along watercourse = 142.9520 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.014 Hr.
Lag time = 0.86 Min.
25% of lag time = 0.21 Min.
40% of lag time = 0.34 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	0.54	3.28

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	1.36	8.26

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.540(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 0.540(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
6.070 56.00 0.900
Total Area Entered = 6.07(Ac.)

0+40	0. 1041	2. 86		Q	V		
0+45	0. 1312	3. 93		Q	V		
0+50	0. 1865	8. 04					
0+55	0. 2161	4. 29			Q		
1+ 0	0. 2287	1. 84					
1+ 5	0. 2315	0. 41	Q	Q			Q V V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PD05245.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 140-161
HYDROLOGIC ANALYSIS
5-YEAR

Drainage Area = 6.07(Ac.) = 0.009 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.07(Ac.) = 0.009 Sq. Mi.
Length along longest watercourse = 687.00(Ft.)
Length along longest watercourse measured to centroid = 100.00(Ft.)
Length along longest watercourse = 0.130 Mi.
Length along longest watercourse measured to centroid = 0.019 Mi.
Difference in elevation = 18.60(Ft.)
Slope along watercourse = 142.9520 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.014 Hr.
Lag time = 0.86 Min.
25% of lag time = 0.21 Min.
40% of lag time = 0.34 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
6.07	2.00	12.14

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting[1*2]
6.07	6.40	38.85

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 3.031(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 3.031(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
6.070 56.00 0.900
Total Area Entered = 6.07(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	582.319	4.561
2	0.167	1164.637	1.556
Sum =		100.000	Sum= 6.117

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.024	(0.238)	0.004	0.020
2	0.17	0.07	0.024	(0.237)	0.004	0.020
3	0.25	0.07	0.024	(0.236)	0.004	0.020
4	0.33	0.10	0.036	(0.235)	0.007	0.030
5	0.42	0.10	0.036	(0.234)	0.007	0.030
6	0.50	0.10	0.036	(0.233)	0.007	0.030
7	0.58	0.10	0.036	(0.232)	0.007	0.030
8	0.67	0.10	0.036	(0.231)	0.007	0.030
9	0.75	0.10	0.036	(0.230)	0.007	0.030
10	0.83	0.13	0.048	(0.230)	0.009	0.040
11	0.92	0.13	0.048	(0.229)	0.009	0.040
12	1.00	0.13	0.048	(0.228)	0.009	0.040
13	1.08	0.10	0.036	(0.227)	0.007	0.030
14	1.17	0.10	0.036	(0.226)	0.007	0.030
15	1.25	0.10	0.036	(0.225)	0.007	0.030
16	1.33	0.10	0.036	(0.224)	0.007	0.030
17	1.42	0.10	0.036	(0.223)	0.007	0.030
18	1.50	0.10	0.036	(0.222)	0.007	0.030
19	1.58	0.10	0.036	(0.222)	0.007	0.030
20	1.67	0.10	0.036	(0.221)	0.007	0.030
21	1.75	0.10	0.036	(0.220)	0.007	0.030
22	1.83	0.13	0.048	(0.219)	0.009	0.040
23	1.92	0.13	0.048	(0.218)	0.009	0.040
24	2.00	0.13	0.048	(0.217)	0.009	0.040
25	2.08	0.13	0.048	(0.216)	0.009	0.040
26	2.17	0.13	0.048	(0.215)	0.009	0.040
27	2.25	0.13	0.048	(0.214)	0.009	0.040
28	2.33	0.13	0.048	(0.214)	0.009	0.040
29	2.42	0.13	0.048	(0.213)	0.009	0.040
30	2.50	0.13	0.048	(0.212)	0.009	0.040
31	2.58	0.17	0.061	(0.211)	0.011	0.050
32	2.67	0.17	0.061	(0.210)	0.011	0.050
33	2.75	0.17	0.061	(0.209)	0.011	0.050
34	2.83	0.17	0.061	(0.208)	0.011	0.050
35	2.92	0.17	0.061	(0.208)	0.011	0.050
36	3.00	0.17	0.061	(0.207)	0.011	0.050
37	3.08	0.17	0.061	(0.206)	0.011	0.050
38	3.17	0.17	0.061	(0.205)	0.011	0.050
39	3.25	0.17	0.061	(0.204)	0.011	0.050
40	3.33	0.17	0.061	(0.203)	0.011	0.050
41	3.42	0.17	0.061	(0.202)	0.011	0.050
42	3.50	0.17	0.061	(0.202)	0.011	0.050

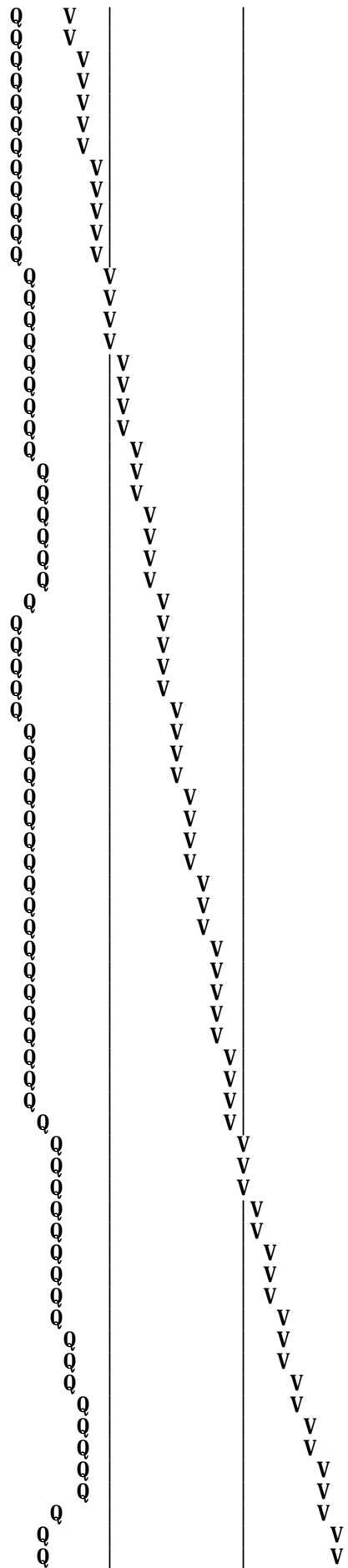
43	3.58	0.17	0.061	(0.201)	0.011	0.050
44	3.67	0.17	0.061	(0.200)	0.011	0.050
45	3.75	0.17	0.061	(0.199)	0.011	0.050
46	3.83	0.20	0.073	(0.198)	0.013	0.060
47	3.92	0.20	0.073	(0.197)	0.013	0.060
48	4.00	0.20	0.073	(0.197)	0.013	0.060
49	4.08	0.20	0.073	(0.196)	0.013	0.060
50	4.17	0.20	0.073	(0.195)	0.013	0.060
51	4.25	0.20	0.073	(0.194)	0.013	0.060
52	4.33	0.23	0.085	(0.193)	0.015	0.070
53	4.42	0.23	0.085	(0.192)	0.015	0.070
54	4.50	0.23	0.085	(0.192)	0.015	0.070
55	4.58	0.23	0.085	(0.191)	0.015	0.070
56	4.67	0.23	0.085	(0.190)	0.015	0.070
57	4.75	0.23	0.085	(0.189)	0.015	0.070
58	4.83	0.27	0.097	(0.188)	0.017	0.080
59	4.92	0.27	0.097	(0.187)	0.017	0.080
60	5.00	0.27	0.097	(0.187)	0.017	0.080
61	5.08	0.20	0.073	(0.186)	0.013	0.060
62	5.17	0.20	0.073	(0.185)	0.013	0.060
63	5.25	0.20	0.073	(0.184)	0.013	0.060
64	5.33	0.23	0.085	(0.183)	0.015	0.070
65	5.42	0.23	0.085	(0.183)	0.015	0.070
66	5.50	0.23	0.085	(0.182)	0.015	0.070
67	5.58	0.27	0.097	(0.181)	0.017	0.080
68	5.67	0.27	0.097	(0.180)	0.017	0.080
69	5.75	0.27	0.097	(0.179)	0.017	0.080
70	5.83	0.27	0.097	(0.179)	0.017	0.080
71	5.92	0.27	0.097	(0.178)	0.017	0.080
72	6.00	0.27	0.097	(0.177)	0.017	0.080
73	6.08	0.30	0.109	(0.176)	0.020	0.089
74	6.17	0.30	0.109	(0.175)	0.020	0.089
75	6.25	0.30	0.109	(0.175)	0.020	0.089
76	6.33	0.30	0.109	(0.174)	0.020	0.089
77	6.42	0.30	0.109	(0.173)	0.020	0.089
78	6.50	0.30	0.109	(0.172)	0.020	0.089
79	6.58	0.33	0.121	(0.172)	0.022	0.099
80	6.67	0.33	0.121	(0.171)	0.022	0.099
81	6.75	0.33	0.121	(0.170)	0.022	0.099
82	6.83	0.33	0.121	(0.169)	0.022	0.099
83	6.92	0.33	0.121	(0.169)	0.022	0.099
84	7.00	0.33	0.121	(0.168)	0.022	0.099
85	7.08	0.33	0.121	(0.167)	0.022	0.099
86	7.17	0.33	0.121	(0.166)	0.022	0.099
87	7.25	0.33	0.121	(0.165)	0.022	0.099
88	7.33	0.37	0.133	(0.165)	0.024	0.109
89	7.42	0.37	0.133	(0.164)	0.024	0.109
90	7.50	0.37	0.133	(0.163)	0.024	0.109
91	7.58	0.40	0.145	(0.162)	0.026	0.119
92	7.67	0.40	0.145	(0.162)	0.026	0.119
93	7.75	0.40	0.145	(0.161)	0.026	0.119
94	7.83	0.43	0.158	(0.160)	0.028	0.129
95	7.92	0.43	0.158	(0.159)	0.028	0.129
96	8.00	0.43	0.158	(0.159)	0.028	0.129
97	8.08	0.50	0.182	(0.158)	0.033	0.149
98	8.17	0.50	0.182	(0.157)	0.033	0.149
99	8.25	0.50	0.182	(0.157)	0.033	0.149
100	8.33	0.50	0.182	(0.156)	0.033	0.149
101	8.42	0.50	0.182	(0.155)	0.033	0.149
102	8.50	0.50	0.182	(0.154)	0.033	0.149
103	8.58	0.53	0.194	(0.154)	0.035	0.159
104	8.67	0.53	0.194	(0.153)	0.035	0.159
105	8.75	0.53	0.194	(0.152)	0.035	0.159
106	8.83	0.57	0.206	(0.151)	0.037	0.169
107	8.92	0.57	0.206	(0.151)	0.037	0.169
108	9.00	0.57	0.206	(0.150)	0.037	0.169
109	9.08	0.63	0.230	(0.149)	0.041	0.189
110	9.17	0.63	0.230	(0.149)	0.041	0.189
111	9.25	0.63	0.230	(0.148)	0.041	0.189
112	9.33	0.67	0.242	(0.147)	0.044	0.199
113	9.42	0.67	0.242	(0.147)	0.044	0.199
114	9.50	0.67	0.242	(0.146)	0.044	0.199

115	9.58	0.70	0.255	(0.145)	0.046	0.209
116	9.67	0.70	0.255	(0.144)	0.046	0.209
117	9.75	0.70	0.255	(0.144)	0.046	0.209
118	9.83	0.73	0.267	(0.143)	0.048	0.219
119	9.92	0.73	0.267	(0.142)	0.048	0.219
120	10.00	0.73	0.267	(0.142)	0.048	0.219
121	10.08	0.50	0.182	(0.141)	0.033	0.149
122	10.17	0.50	0.182	(0.140)	0.033	0.149
123	10.25	0.50	0.182	(0.140)	0.033	0.149
124	10.33	0.50	0.182	(0.139)	0.033	0.149
125	10.42	0.50	0.182	(0.138)	0.033	0.149
126	10.50	0.50	0.182	(0.138)	0.033	0.149
127	10.58	0.67	0.242	(0.137)	0.044	0.199
128	10.67	0.67	0.242	(0.136)	0.044	0.199
129	10.75	0.67	0.242	(0.136)	0.044	0.199
130	10.83	0.67	0.242	(0.135)	0.044	0.199
131	10.92	0.67	0.242	(0.134)	0.044	0.199
132	11.00	0.67	0.242	(0.134)	0.044	0.199
133	11.08	0.63	0.230	(0.133)	0.041	0.189
134	11.17	0.63	0.230	(0.132)	0.041	0.189
135	11.25	0.63	0.230	(0.132)	0.041	0.189
136	11.33	0.63	0.230	(0.131)	0.041	0.189
137	11.42	0.63	0.230	(0.130)	0.041	0.189
138	11.50	0.63	0.230	(0.130)	0.041	0.189
139	11.58	0.57	0.206	(0.129)	0.037	0.169
140	11.67	0.57	0.206	(0.128)	0.037	0.169
141	11.75	0.57	0.206	(0.128)	0.037	0.169
142	11.83	0.60	0.218	(0.127)	0.039	0.179
143	11.92	0.60	0.218	(0.126)	0.039	0.179
144	12.00	0.60	0.218	(0.126)	0.039	0.179
145	12.08	0.83	0.303	(0.125)	0.055	0.249
146	12.17	0.83	0.303	(0.125)	0.055	0.249
147	12.25	0.83	0.303	(0.124)	0.055	0.249
148	12.33	0.87	0.315	(0.123)	0.057	0.258
149	12.42	0.87	0.315	(0.123)	0.057	0.258
150	12.50	0.87	0.315	(0.122)	0.057	0.258
151	12.58	0.93	0.339	(0.121)	0.061	0.278
152	12.67	0.93	0.339	(0.121)	0.061	0.278
153	12.75	0.93	0.339	(0.120)	0.061	0.278
154	12.83	0.97	0.352	(0.120)	0.063	0.288
155	12.92	0.97	0.352	(0.119)	0.063	0.288
156	13.00	0.97	0.352	(0.118)	0.063	0.288
157	13.08	1.13	0.412	(0.118)	0.074	0.338
158	13.17	1.13	0.412	(0.117)	0.074	0.338
159	13.25	1.13	0.412	(0.117)	0.074	0.338
160	13.33	1.13	0.412	(0.116)	0.074	0.338
161	13.42	1.13	0.412	(0.115)	0.074	0.338
162	13.50	1.13	0.412	(0.115)	0.074	0.338
163	13.58	0.77	0.279	(0.114)	0.050	0.229
164	13.67	0.77	0.279	(0.114)	0.050	0.229
165	13.75	0.77	0.279	(0.113)	0.050	0.229
166	13.83	0.77	0.279	(0.113)	0.050	0.229
167	13.92	0.77	0.279	(0.112)	0.050	0.229
168	14.00	0.77	0.279	(0.111)	0.050	0.229
169	14.08	0.90	0.327	(0.111)	0.059	0.268
170	14.17	0.90	0.327	(0.110)	0.059	0.268
171	14.25	0.90	0.327	(0.110)	0.059	0.268
172	14.33	0.87	0.315	(0.109)	0.057	0.258
173	14.42	0.87	0.315	(0.109)	0.057	0.258
174	14.50	0.87	0.315	(0.108)	0.057	0.258
175	14.58	0.87	0.315	(0.107)	0.057	0.258
176	14.67	0.87	0.315	(0.107)	0.057	0.258
177	14.75	0.87	0.315	(0.106)	0.057	0.258
178	14.83	0.83	0.303	(0.106)	0.055	0.249
179	14.92	0.83	0.303	(0.105)	0.055	0.249
180	15.00	0.83	0.303	(0.105)	0.055	0.249
181	15.08	0.80	0.291	(0.104)	0.052	0.239
182	15.17	0.80	0.291	(0.104)	0.052	0.239
183	15.25	0.80	0.291	(0.103)	0.052	0.239
184	15.33	0.77	0.279	(0.103)	0.050	0.229
185	15.42	0.77	0.279	(0.102)	0.050	0.229
186	15.50	0.77	0.279	(0.102)	0.050	0.229

187	15.58	0.63	0.230	(0.101)	0.041	0.189
188	15.67	0.63	0.230	(0.101)	0.041	0.189
189	15.75	0.63	0.230	(0.100)	0.041	0.189
190	15.83	0.63	0.230	(0.100)	0.041	0.189
191	15.92	0.63	0.230	(0.099)	0.041	0.189
192	16.00	0.63	0.230	(0.099)	0.041	0.189
193	16.08	0.13	0.048	(0.098)	0.009	0.040
194	16.17	0.13	0.048	(0.098)	0.009	0.040
195	16.25	0.13	0.048	(0.097)	0.009	0.040
196	16.33	0.13	0.048	(0.097)	0.009	0.040
197	16.42	0.13	0.048	(0.096)	0.009	0.040
198	16.50	0.13	0.048	(0.096)	0.009	0.040
199	16.58	0.10	0.036	(0.095)	0.007	0.030
200	16.67	0.10	0.036	(0.095)	0.007	0.030
201	16.75	0.10	0.036	(0.094)	0.007	0.030
202	16.83	0.10	0.036	(0.094)	0.007	0.030
203	16.92	0.10	0.036	(0.093)	0.007	0.030
204	17.00	0.10	0.036	(0.093)	0.007	0.030
205	17.08	0.17	0.061	(0.092)	0.011	0.050
206	17.17	0.17	0.061	(0.092)	0.011	0.050
207	17.25	0.17	0.061	(0.091)	0.011	0.050
208	17.33	0.17	0.061	(0.091)	0.011	0.050
209	17.42	0.17	0.061	(0.090)	0.011	0.050
210	17.50	0.17	0.061	(0.090)	0.011	0.050
211	17.58	0.17	0.061	(0.089)	0.011	0.050
212	17.67	0.17	0.061	(0.089)	0.011	0.050
213	17.75	0.17	0.061	(0.089)	0.011	0.050
214	17.83	0.13	0.048	(0.088)	0.009	0.040
215	17.92	0.13	0.048	(0.088)	0.009	0.040
216	18.00	0.13	0.048	(0.087)	0.009	0.040
217	18.08	0.13	0.048	(0.087)	0.009	0.040
218	18.17	0.13	0.048	(0.086)	0.009	0.040
219	18.25	0.13	0.048	(0.086)	0.009	0.040
220	18.33	0.13	0.048	(0.086)	0.009	0.040
221	18.42	0.13	0.048	(0.085)	0.009	0.040
222	18.50	0.13	0.048	(0.085)	0.009	0.040
223	18.58	0.10	0.036	(0.084)	0.007	0.030
224	18.67	0.10	0.036	(0.084)	0.007	0.030
225	18.75	0.10	0.036	(0.084)	0.007	0.030
226	18.83	0.07	0.024	(0.083)	0.004	0.020
227	18.92	0.07	0.024	(0.083)	0.004	0.020
228	19.00	0.07	0.024	(0.082)	0.004	0.020
229	19.08	0.10	0.036	(0.082)	0.007	0.030
230	19.17	0.10	0.036	(0.082)	0.007	0.030
231	19.25	0.10	0.036	(0.081)	0.007	0.030
232	19.33	0.13	0.048	(0.081)	0.009	0.040
233	19.42	0.13	0.048	(0.080)	0.009	0.040
234	19.50	0.13	0.048	(0.080)	0.009	0.040
235	19.58	0.10	0.036	(0.080)	0.007	0.030
236	19.67	0.10	0.036	(0.079)	0.007	0.030
237	19.75	0.10	0.036	(0.079)	0.007	0.030
238	19.83	0.07	0.024	(0.079)	0.004	0.020
239	19.92	0.07	0.024	(0.078)	0.004	0.020
240	20.00	0.07	0.024	(0.078)	0.004	0.020
241	20.08	0.10	0.036	(0.078)	0.007	0.030
242	20.17	0.10	0.036	(0.077)	0.007	0.030
243	20.25	0.10	0.036	(0.077)	0.007	0.030
244	20.33	0.10	0.036	(0.077)	0.007	0.030
245	20.42	0.10	0.036	(0.076)	0.007	0.030
246	20.50	0.10	0.036	(0.076)	0.007	0.030
247	20.58	0.10	0.036	(0.076)	0.007	0.030
248	20.67	0.10	0.036	(0.075)	0.007	0.030
249	20.75	0.10	0.036	(0.075)	0.007	0.030
250	20.83	0.07	0.024	(0.075)	0.004	0.020
251	20.92	0.07	0.024	(0.074)	0.004	0.020
252	21.00	0.07	0.024	(0.074)	0.004	0.020
253	21.08	0.10	0.036	(0.074)	0.007	0.030
254	21.17	0.10	0.036	(0.073)	0.007	0.030
255	21.25	0.10	0.036	(0.073)	0.007	0.030
256	21.33	0.07	0.024	(0.073)	0.004	0.020
257	21.42	0.07	0.024	(0.073)	0.004	0.020
258	21.50	0.07	0.024	(0.072)	0.004	0.020

1+50	0. 0276	0. 23	Q
1+55	0. 0293	0. 24	Q
2+ 0	0. 0310	0. 24	Q
2+ 5	0. 0327	0. 24	QV
2+10	0. 0344	0. 24	QV
2+15	0. 0360	0. 24	QV
2+20	0. 0377	0. 24	QV
2+25	0. 0394	0. 24	QV
2+30	0. 0411	0. 24	QV
2+35	0. 0430	0. 29	Q
2+40	0. 0451	0. 30	Q
2+45	0. 0472	0. 30	Q
2+50	0. 0493	0. 30	Q
2+55	0. 0514	0. 30	Q
3+ 0	0. 0535	0. 30	Q
3+ 5	0. 0556	0. 30	Q
3+10	0. 0577	0. 30	Q
3+15	0. 0598	0. 30	Q
3+20	0. 0619	0. 30	Q
3+25	0. 0640	0. 30	QV
3+30	0. 0661	0. 30	QV
3+35	0. 0682	0. 30	QV
3+40	0. 0703	0. 30	QV
3+45	0. 0724	0. 30	QV
3+50	0. 0748	0. 35	QV
3+55	0. 0773	0. 37	QV
4+ 0	0. 0798	0. 37	QV
4+ 5	0. 0823	0. 37	QV
4+10	0. 0848	0. 37	QV
4+15	0. 0874	0. 37	QV
4+20	0. 0902	0. 41	QV
4+25	0. 0931	0. 43	QV
4+30	0. 0960	0. 43	Q V
4+35	0. 0990	0. 43	Q V
4+40	0. 1019	0. 43	Q V
4+45	0. 1048	0. 43	Q V
4+50	0. 1081	0. 47	Q V
4+55	0. 1114	0. 49	Q V
5+ 0	0. 1148	0. 49	Q V
5+ 5	0. 1175	0. 40	Q V
5+10	0. 1200	0. 37	Q V
5+15	0. 1225	0. 37	Q V
5+20	0. 1254	0. 41	Q V
5+25	0. 1283	0. 43	Q V
5+30	0. 1312	0. 43	Q V
5+35	0. 1345	0. 47	Q V
5+40	0. 1378	0. 49	Q V
5+45	0. 1412	0. 49	Q V
5+50	0. 1445	0. 49	Q V
5+55	0. 1479	0. 49	Q V
6+ 0	0. 1512	0. 49	Q V
6+ 5	0. 1549	0. 53	Q V
6+10	0. 1587	0. 55	Q V
6+15	0. 1625	0. 55	Q V
6+20	0. 1662	0. 55	Q V
6+25	0. 1700	0. 55	Q V
6+30	0. 1738	0. 55	Q V
6+35	0. 1779	0. 59	Q V
6+40	0. 1820	0. 61	Q V
6+45	0. 1862	0. 61	Q V
6+50	0. 1904	0. 61	Q V
6+55	0. 1946	0. 61	Q V
7+ 0	0. 1988	0. 61	Q V
7+ 5	0. 2030	0. 61	Q V
7+10	0. 2072	0. 61	Q V
7+15	0. 2114	0. 61	Q V
7+20	0. 2159	0. 65	Q V
7+25	0. 2205	0. 67	Q V
7+30	0. 2251	0. 67	Q V
7+35	0. 2300	0. 71	Q V
7+40	0. 2350	0. 73	Q V
7+45	0. 2401	0. 73	Q V

7+50	0. 2454	0. 78
7+55	0. 2509	0. 79
8+ 0	0. 2563	0. 79
8+ 5	0. 2624	0. 88
8+10	0. 2687	0. 91
8+15	0. 2749	0. 91
8+20	0. 2812	0. 91
8+25	0. 2875	0. 91
8+30	0. 2938	0. 91
8+35	0. 3004	0. 96
8+40	0. 3071	0. 97
8+45	0. 3138	0. 97
8+50	0. 3208	1. 02
8+55	0. 3279	1. 03
9+ 0	0. 3351	1. 03
9+ 5	0. 3428	1. 13
9+10	0. 3508	1. 16
9+15	0. 3587	1. 16
9+20	0. 3670	1. 20
9+25	0. 3754	1. 22
9+30	0. 3838	1. 22
9+35	0. 3925	1. 26
9+40	0. 4013	1. 28
9+45	0. 4101	1. 28
9+50	0. 4192	1. 32
9+55	0. 4284	1. 34
10+ 0	0. 4376	1. 34
10+ 5	0. 4446	1. 02
10+10	0. 4509	0. 91
10+15	0. 4572	0. 91
10+20	0. 4635	0. 91
10+25	0. 4698	0. 91
10+30	0. 4761	0. 91
10+35	0. 4839	1. 14
10+40	0. 4923	1. 22
10+45	0. 5007	1. 22
10+50	0. 5091	1. 22
10+55	0. 5174	1. 22
11+ 0	0. 5258	1. 22
11+ 5	0. 5339	1. 17
11+10	0. 5418	1. 16
11+15	0. 5498	1. 16
11+20	0. 5578	1. 16
11+25	0. 5657	1. 16
11+30	0. 5737	1. 16
11+35	0. 5810	1. 07
11+40	0. 5882	1. 03
11+45	0. 5953	1. 03
11+50	0. 6027	1. 08
11+55	0. 6103	1. 10
12+ 0	0. 6178	1. 10
12+ 5	0. 6275	1. 41
12+10	0. 6380	1. 52
12+15	0. 6485	1. 52
12+20	0. 6593	1. 57
12+25	0. 6702	1. 58
12+30	0. 6810	1. 58
12+35	0. 6926	1. 67
12+40	0. 7043	1. 70
12+45	0. 7160	1. 70
12+50	0. 7281	1. 75
12+55	0. 7402	1. 76
13+ 0	0. 7524	1. 76
13+ 5	0. 7661	1. 99
13+10	0. 7803	2. 07
13+15	0. 7946	2. 07
13+20	0. 8088	2. 07
13+25	0. 8231	2. 07
13+30	0. 8373	2. 07
13+35	0. 8481	1. 57
13+40	0. 8578	1. 40
13+45	0. 8674	1. 40



19+50	1. 2074	0. 14	Q	V
19+55	1. 2082	0. 12	Q	V
20+ 0	1. 2090	0. 12	Q	V
20+ 5	1. 2102	0. 17	Q	V
20+10	1. 2114	0. 18	Q	V
20+15	1. 2127	0. 18	Q	V
20+20	1. 2140	0. 18	Q	V
20+25	1. 2152	0. 18	Q	V
20+30	1. 2165	0. 18	Q	V
20+35	1. 2177	0. 18	Q	V
20+40	1. 2190	0. 18	Q	V
20+45	1. 2202	0. 18	Q	V
20+50	1. 2212	0. 14	Q	V
20+55	1. 2220	0. 12	Q	V
21+ 0	1. 2229	0. 12	Q	V
21+ 5	1. 2240	0. 17	Q	V
21+10	1. 2253	0. 18	Q	V
21+15	1. 2265	0. 18	Q	V
21+20	1. 2275	0. 14	Q	V
21+25	1. 2283	0. 12	Q	V
21+30	1. 2292	0. 12	Q	V
21+35	1. 2303	0. 17	Q	V
21+40	1. 2316	0. 18	Q	V
21+45	1. 2328	0. 18	Q	V
21+50	1. 2338	0. 14	Q	V
21+55	1. 2346	0. 12	Q	V
22+ 0	1. 2354	0. 12	Q	V
22+ 5	1. 2366	0. 17	Q	V
22+10	1. 2378	0. 18	Q	V
22+15	1. 2391	0. 18	Q	V
22+20	1. 2400	0. 14	Q	V
22+25	1. 2409	0. 12	Q	V
22+30	1. 2417	0. 12	Q	V
22+35	1. 2426	0. 12	Q	V
22+40	1. 2434	0. 12	Q	V
22+45	1. 2442	0. 12	Q	V
22+50	1. 2451	0. 12	Q	V
22+55	1. 2459	0. 12	Q	V
23+ 0	1. 2468	0. 12	Q	V
23+ 5	1. 2476	0. 12	Q	V
23+10	1. 2484	0. 12	Q	V
23+15	1. 2493	0. 12	Q	V
23+20	1. 2501	0. 12	Q	V
23+25	1. 2509	0. 12	Q	V
23+30	1. 2518	0. 12	Q	V
23+35	1. 2526	0. 12	Q	V
23+40	1. 2535	0. 12	Q	V
23+45	1. 2543	0. 12	Q	V
23+50	1. 2551	0. 12	Q	V
23+55	1. 2560	0. 12	Q	V
24+ 0	1. 2568	0. 12	Q	V
24+ 5	1. 2570	0. 03	Q	V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PD0565.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 140-161
HYDROLOGIC ANALYSIS
5-YEAR

Drainage Area = 6.07(Ac.) = 0.009 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.07(Ac.) = 0.009 Sq. Mi.
Length along longest watercourse = 687.00(Ft.)
Length along longest watercourse measured to centroid = 100.00(Ft.)
Length along longest watercourse = 0.130 Mi.
Length along longest watercourse measured to centroid = 0.019 Mi.
Difference in elevation = 18.60(Ft.)
Slope along watercourse = 142.9520 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.014 Hr.
Lag time = 0.86 Min.
25% of lag time = 0.21 Min.
40% of lag time = 0.34 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	1.20	7.28

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	3.00	18.21

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.622(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.622(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
6.070 56.00 0.900
Total Area Entered = 6.07(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	582.319	4.561
2	0.167	1164.637	1.556
Sum =		100.000	Sum= 6.117

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In. /Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.097	(0.134)	0.018	0.080
2	0.17	0.60	0.117	(0.134)	0.021	0.096
3	0.25	0.60	0.117	(0.134)	0.021	0.096
4	0.33	0.60	0.117	(0.134)	0.021	0.096
5	0.42	0.60	0.117	(0.134)	0.021	0.096
6	0.50	0.70	0.136	(0.134)	0.025	0.112
7	0.58	0.70	0.136	(0.134)	0.025	0.112
8	0.67	0.70	0.136	(0.134)	0.025	0.112
9	0.75	0.70	0.136	(0.134)	0.025	0.112
10	0.83	0.70	0.136	(0.134)	0.025	0.112
11	0.92	0.70	0.136	(0.134)	0.025	0.112
12	1.00	0.80	0.156	(0.134)	0.028	0.128
13	1.08	0.80	0.156	(0.134)	0.028	0.128
14	1.17	0.80	0.156	(0.134)	0.028	0.128
15	1.25	0.80	0.156	(0.134)	0.028	0.128
16	1.33	0.80	0.156	(0.134)	0.028	0.128
17	1.42	0.80	0.156	(0.134)	0.028	0.128
18	1.50	0.80	0.156	(0.134)	0.028	0.128
19	1.58	0.80	0.156	(0.134)	0.028	0.128
20	1.67	0.80	0.156	(0.134)	0.028	0.128
21	1.75	0.80	0.156	(0.134)	0.028	0.128
22	1.83	0.80	0.156	(0.134)	0.028	0.128
23	1.92	0.80	0.156	(0.134)	0.028	0.128
24	2.00	0.90	0.175	(0.134)	0.032	0.144
25	2.08	0.80	0.156	(0.134)	0.028	0.128
26	2.17	0.90	0.175	(0.134)	0.032	0.144
27	2.25	0.90	0.175	(0.134)	0.032	0.144
28	2.33	0.90	0.175	(0.134)	0.032	0.144
29	2.42	0.90	0.175	(0.134)	0.032	0.144
30	2.50	0.90	0.175	(0.134)	0.032	0.144
31	2.58	0.90	0.175	(0.134)	0.032	0.144
32	2.67	0.90	0.175	(0.134)	0.032	0.144
33	2.75	1.00	0.195	(0.134)	0.035	0.160
34	2.83	1.00	0.195	(0.134)	0.035	0.160
35	2.92	1.00	0.195	(0.134)	0.035	0.160
36	3.00	1.00	0.195	(0.134)	0.035	0.160
37	3.08	1.00	0.195	(0.134)	0.035	0.160
38	3.17	1.10	0.214	(0.134)	0.039	0.176
39	3.25	1.10	0.214	(0.134)	0.039	0.176
40	3.33	1.10	0.214	(0.134)	0.039	0.176
41	3.42	1.20	0.234	(0.134)	0.042	0.191
42	3.50	1.30	0.253	(0.134)	0.046	0.207

1+50	0. 1056	0. 78	Q	V			
1+55	0. 1110	0. 78	Q	V			
2+ 0	0. 1168	0. 85	Q	V			
2+ 5	0. 1224	0. 81	Q	V			
2+10	0. 1283	0. 85	Q	V			
2+15	0. 1343	0. 88	Q	V			
2+20	0. 1404	0. 88	Q	V			
2+25	0. 1464	0. 88	Q	V			
2+30	0. 1525	0. 88	Q	V			
2+35	0. 1585	0. 88	Q	V			
2+40	0. 1646	0. 88	Q	V			
2+45	0. 1711	0. 95	Q	V			
2+50	0. 1779	0. 98	Q	V			
2+55	0. 1846	0. 98	Q	V			
3+ 0	0. 1913	0. 98	Q	V			
3+ 5	0. 1981	0. 98	Q	V			
3+10	0. 2053	1. 05	Q	V			
3+15	0. 2127	1. 07	Q	V			
3+20	0. 2201	1. 07	Q	V			
3+25	0. 2280	1. 15	Q	V			
3+30	0. 2365	1. 24	Q	V			
3+35	0. 2458	1. 34	Q	V			
3+40	0. 2552	1. 37	Q	V			
3+45	0. 2651	1. 44	Q	V			
3+50	0. 2752	1. 46	Q	V			
3+55	0. 2858	1. 54	Q	V			
4+ 0	0. 2966	1. 56	Q	V			
4+ 5	0. 3078	1. 64	Q	V			
4+10	0. 3198	1. 73	Q	V			
4+15	0. 3324	1. 83	Q	V			
4+20	0. 3457	1. 93	Q	V			
4+25	0. 3596	2. 03	Q	V			
4+30	0. 3737	2. 05	Q	V			
4+35	0. 3884	2. 12	Q	V			
4+40	0. 4037	2. 22	Q	V			
4+45	0. 4196	2. 32	Q	V			
4+50	0. 4358	2. 34	Q	V			
4+55	0. 4524	2. 42	Q	V			
5+ 0	0. 4697	2. 51	Q	V			
5+ 5	0. 4897	2. 90	Q	V			
5+10	0. 5131	3. 39	Q	V			
5+15	0. 5389	3. 75	Q	V			
5+20	0. 5671	4. 09	Q	V			
5+25	0. 5989	4. 63	Q	V			
5+30	0. 6373	5. 58	Q	V			
5+35	0. 6571	2. 87	Q	V			
5+40	0. 6648	1. 13	Q	V			
5+45	0. 6694	0. 66	Q	V			
5+50	0. 6729	0. 51	Q	V			
5+55	0. 6753	0. 34	Q	V			
6+ 0	0. 6768	0. 22	Q	V			
6+ 5	0. 6771	0. 05	Q	V			

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PD0535.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 140-161
HYDROLOGIC ANALYSIS
5-YEAR

Drainage Area = 6.07(Ac.) = 0.009 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.07(Ac.) = 0.009 Sq. Mi.
Length along longest watercourse = 687.00(Ft.)
Length along longest watercourse measured to centroid = 100.00(Ft.)
Length along longest watercourse = 0.130 Mi.
Length along longest watercourse measured to centroid = 0.019 Mi.
Difference in elevation = 18.60(Ft.)
Slope along watercourse = 142.9520 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.014 Hr.
Lag time = 0.86 Min.
25% of lag time = 0.21 Min.
40% of lag time = 0.34 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	0.90	5.46

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	2.35	14.26

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 1.240(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.240(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
6.070 56.00 0.900
Total Area Entered = 6.07(Ac.)

Total rainfall = 1.24(In)
 Flood volume = 22798.1 Cubic Feet
 Total soil loss = 4515.2 Cubic Feet

 Peak flow rate of this hydrograph = 6.436(CFS)

+++++

3 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

 Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0050	0.72	V Q				
0+10	0.0117	0.97	V Q				
0+15	0.0176	0.86	V Q				
0+20	0.0248	1.04	V Q				
0+25	0.0325	1.12	V Q				
0+30	0.0413	1.29	V Q				
0+35	0.0495	1.18	V Q				
0+40	0.0583	1.29	V Q				
0+45	0.0676	1.34	V Q				
0+50	0.0757	1.18	V Q				
0+55	0.0838	1.18	V Q				
1+ 0	0.0928	1.31	V Q				
1+ 5	0.1036	1.57	V Q				
1+10	0.1149	1.64	V Q				
1+15	0.1262	1.64	V Q				
1+20	0.1367	1.53	V Q				
1+25	0.1493	1.83	V Q				
1+30	0.1631	2.00	V Q				
1+35	0.1758	1.85	V Q				
1+40	0.1893	1.96	V Q				
1+45	0.2055	2.35	V Q				
1+50	0.2217	2.35	V Q				
1+55	0.2368	2.20	V Q				
2+ 0	0.2521	2.22	V Q				
2+ 5	0.2679	2.30	V Q				
2+10	0.2881	2.93	V Q				
2+15	0.3128	3.58	V Q				
2+20	0.3327	2.90	V Q				
2+25	0.3649	4.67	V Q				
2+30	0.4042	5.71	V Q				
2+35	0.4485	6.44	V Q				
2+40	0.4835	5.08	V Q				
2+45	0.4992	2.27	V Q				
2+50	0.5087	1.38	V Q				
2+55	0.5179	1.34	V Q				
3+ 0	0.5226	0.68	V Q				
3+ 5	0.5234	0.11	V Q				

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PD0515.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 140-161
HYDROLOGIC ANALYSIS
5-YEAR

Drainage Area = 6.07(Ac.) = 0.009 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.07(Ac.) = 0.009 Sq. Mi.
Length along longest watercourse = 687.00(Ft.)
Length along longest watercourse measured to centroid = 100.00(Ft.)
Length along longest watercourse = 0.130 Mi.
Length along longest watercourse measured to centroid = 0.019 Mi.
Difference in elevation = 18.60(Ft.)
Slope along watercourse = 142.9520 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.014 Hr.
Lag time = 0.86 Min.
25% of lag time = 0.21 Min.
40% of lag time = 0.34 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	0.54	3.28

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	1.36	8.26

STORM EVENT (YEAR) = 5.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.732(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 0.732(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
6.070 56.00 0.900
Total Area Entered = 6.07(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-1	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	36.0	0.706	0.900	0.134	1.000	0.134
Sum (F) =						0.134

Area averaged mean soil loss (F) (In/Hr) = 0.134
 Minimum soil loss rate ((In/Hr)) = 0.067
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Slope of intensity-duration curve for a 1 hour storm = 0.4800

Unit Hydrograph
 VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	582.319	74.564
2	0.167	1164.637	25.436
Sum =		100.000	Sum= 6.117

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	4.40	0.387	(0.134)	0.070	0.317
2	0.17	4.50	0.395	(0.134)	0.071	0.324
3	0.25	5.40	0.474	(0.134)	0.085	0.389
4	0.33	5.40	0.474	(0.134)	0.085	0.389
5	0.42	5.70	0.501	(0.134)	0.090	0.411
6	0.50	6.40	0.562	(0.134)	0.101	0.461
7	0.58	7.90	0.694	(0.134)	0.125	0.569
8	0.67	9.10	0.799	0.134	(0.144)	0.665
9	0.75	12.80	1.124	0.134	(0.202)	0.990
10	0.83	25.60	2.249	0.134	(0.405)	2.115
11	0.92	7.90	0.694	(0.134)	0.125	0.569
12	1.00	4.90	0.430	(0.134)	0.077	0.353

Sum = 100.0 (Loss Rate Not Used) Sum = 7.6

Flood volume = Effective rainfall 0.63(In)
 times area 6.1(Ac.) / [(In)/(Ft.)] = 0.3(Ac. Ft)
 Total soil loss = 0.10(In)
 Total soil loss = 0.052(Ac. Ft)
 Total rainfall = 0.73(In)
 Flood volume = 13866.3 Cubic Feet
 Total soil loss = 2263.1 Cubic Feet

Peak flow rate of this hydrograph = 11.192(CFS)

1 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0100	1.45	V	Q			
0+10	0.0235	1.97	V	Q			
0+15	0.0392	2.28	Q	Q			
0+20	0.0556	2.38	Q	Q	V		
0+25	0.0727	2.48	Q	Q	V		
0+30	0.0916	2.74	Q	Q	V		
0+35	0.1144	3.31	Q		V		

0+40	0.1415	3.92		Q		V			
0+45	0.1797	5.55			Q			V	
0+50	0.2568	11.19			Q				V
0+55	0.2973	5.89			Q				V
1+ 0	0.3145	2.50		Q					V
1+ 5	0.3183	0.55	Q						V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PD102410.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 140-161
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 6.07(Ac.) = 0.009 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.07(Ac.) = 0.009 Sq. Mi.
Length along longest watercourse = 687.00(Ft.)
Length along longest watercourse measured to centroid = 100.00(Ft.)
Length along longest watercourse = 0.130 Mi.
Length along longest watercourse measured to centroid = 0.019 Mi.
Difference in elevation = 18.60(Ft.)
Slope along watercourse = 142.9520 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.014 Hr.
Lag time = 0.86 Min.
25% of lag time = 0.21 Min.
40% of lag time = 0.34 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	2.00	12.14

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	6.40	38.85

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 2.000(In)
Area Averaged 100-Year Rainfall = 6.400(In)

Point rain (area averaged) = 3.810(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 3.810(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
6.070 56.00 0.900
Total Area Entered = 6.07(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097

Minimum soil loss rate ((In/Hr)) = 0.049

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	582.319	74.564
2	0.167	1164.637	25.436
Sum =		100.000	Sum= 6.117

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.07	0.030	(0.172)	0.005	0.025
2	0.17	0.07	0.030	(0.171)	0.005	0.025
3	0.25	0.07	0.030	(0.171)	0.005	0.025
4	0.33	0.10	0.046	(0.170)	0.008	0.037
5	0.42	0.10	0.046	(0.169)	0.008	0.037
6	0.50	0.10	0.046	(0.169)	0.008	0.037
7	0.58	0.10	0.046	(0.168)	0.008	0.037
8	0.67	0.10	0.046	(0.167)	0.008	0.037
9	0.75	0.10	0.046	(0.167)	0.008	0.037
10	0.83	0.13	0.061	(0.166)	0.011	0.050
11	0.92	0.13	0.061	(0.165)	0.011	0.050
12	1.00	0.13	0.061	(0.165)	0.011	0.050
13	1.08	0.10	0.046	(0.164)	0.008	0.037
14	1.17	0.10	0.046	(0.163)	0.008	0.037
15	1.25	0.10	0.046	(0.163)	0.008	0.037
16	1.33	0.10	0.046	(0.162)	0.008	0.037
17	1.42	0.10	0.046	(0.162)	0.008	0.037
18	1.50	0.10	0.046	(0.161)	0.008	0.037
19	1.58	0.10	0.046	(0.160)	0.008	0.037
20	1.67	0.10	0.046	(0.160)	0.008	0.037
21	1.75	0.10	0.046	(0.159)	0.008	0.037
22	1.83	0.13	0.061	(0.158)	0.011	0.050
23	1.92	0.13	0.061	(0.158)	0.011	0.050
24	2.00	0.13	0.061	(0.157)	0.011	0.050
25	2.08	0.13	0.061	(0.156)	0.011	0.050
26	2.17	0.13	0.061	(0.156)	0.011	0.050
27	2.25	0.13	0.061	(0.155)	0.011	0.050
28	2.33	0.13	0.061	(0.155)	0.011	0.050
29	2.42	0.13	0.061	(0.154)	0.011	0.050
30	2.50	0.13	0.061	(0.153)	0.011	0.050
31	2.58	0.17	0.076	(0.153)	0.014	0.062
32	2.67	0.17	0.076	(0.152)	0.014	0.062
33	2.75	0.17	0.076	(0.151)	0.014	0.062
34	2.83	0.17	0.076	(0.151)	0.014	0.062
35	2.92	0.17	0.076	(0.150)	0.014	0.062
36	3.00	0.17	0.076	(0.150)	0.014	0.062
37	3.08	0.17	0.076	(0.149)	0.014	0.062
38	3.17	0.17	0.076	(0.148)	0.014	0.062
39	3.25	0.17	0.076	(0.148)	0.014	0.062
40	3.33	0.17	0.076	(0.147)	0.014	0.062
41	3.42	0.17	0.076	(0.146)	0.014	0.062
42	3.50	0.17	0.076	(0.146)	0.014	0.062

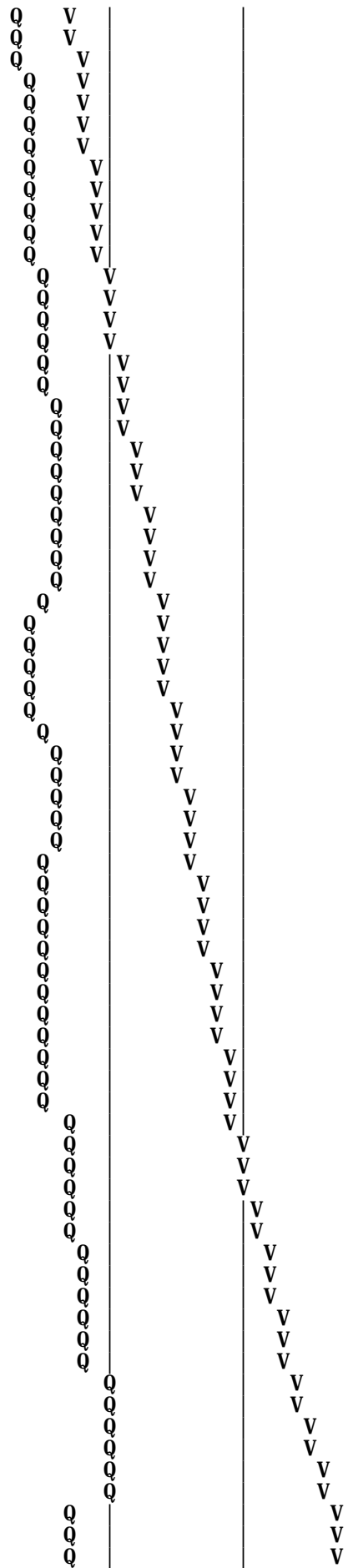
43	3.58	0.17	0.076	(0.145)	0.014	0.062
44	3.67	0.17	0.076	(0.145)	0.014	0.062
45	3.75	0.17	0.076	(0.144)	0.014	0.062
46	3.83	0.20	0.091	(0.143)	0.016	0.075
47	3.92	0.20	0.091	(0.143)	0.016	0.075
48	4.00	0.20	0.091	(0.142)	0.016	0.075
49	4.08	0.20	0.091	(0.142)	0.016	0.075
50	4.17	0.20	0.091	(0.141)	0.016	0.075
51	4.25	0.20	0.091	(0.140)	0.016	0.075
52	4.33	0.23	0.107	(0.140)	0.019	0.087
53	4.42	0.23	0.107	(0.139)	0.019	0.087
54	4.50	0.23	0.107	(0.139)	0.019	0.087
55	4.58	0.23	0.107	(0.138)	0.019	0.087
56	4.67	0.23	0.107	(0.137)	0.019	0.087
57	4.75	0.23	0.107	(0.137)	0.019	0.087
58	4.83	0.27	0.122	(0.136)	0.022	0.100
59	4.92	0.27	0.122	(0.136)	0.022	0.100
60	5.00	0.27	0.122	(0.135)	0.022	0.100
61	5.08	0.20	0.091	(0.134)	0.016	0.075
62	5.17	0.20	0.091	(0.134)	0.016	0.075
63	5.25	0.20	0.091	(0.133)	0.016	0.075
64	5.33	0.23	0.107	(0.133)	0.019	0.087
65	5.42	0.23	0.107	(0.132)	0.019	0.087
66	5.50	0.23	0.107	(0.132)	0.019	0.087
67	5.58	0.27	0.122	(0.131)	0.022	0.100
68	5.67	0.27	0.122	(0.130)	0.022	0.100
69	5.75	0.27	0.122	(0.130)	0.022	0.100
70	5.83	0.27	0.122	(0.129)	0.022	0.100
71	5.92	0.27	0.122	(0.129)	0.022	0.100
72	6.00	0.27	0.122	(0.128)	0.022	0.100
73	6.08	0.30	0.137	(0.128)	0.025	0.112
74	6.17	0.30	0.137	(0.127)	0.025	0.112
75	6.25	0.30	0.137	(0.126)	0.025	0.112
76	6.33	0.30	0.137	(0.126)	0.025	0.112
77	6.42	0.30	0.137	(0.125)	0.025	0.112
78	6.50	0.30	0.137	(0.125)	0.025	0.112
79	6.58	0.33	0.152	(0.124)	0.027	0.125
80	6.67	0.33	0.152	(0.124)	0.027	0.125
81	6.75	0.33	0.152	(0.123)	0.027	0.125
82	6.83	0.33	0.152	(0.122)	0.027	0.125
83	6.92	0.33	0.152	(0.122)	0.027	0.125
84	7.00	0.33	0.152	(0.121)	0.027	0.125
85	7.08	0.33	0.152	(0.121)	0.027	0.125
86	7.17	0.33	0.152	(0.120)	0.027	0.125
87	7.25	0.33	0.152	(0.120)	0.027	0.125
88	7.33	0.37	0.168	(0.119)	0.030	0.137
89	7.42	0.37	0.168	(0.119)	0.030	0.137
90	7.50	0.37	0.168	(0.118)	0.030	0.137
91	7.58	0.40	0.183	(0.118)	0.033	0.150
92	7.67	0.40	0.183	(0.117)	0.033	0.150
93	7.75	0.40	0.183	(0.116)	0.033	0.150
94	7.83	0.43	0.198	(0.116)	0.036	0.162
95	7.92	0.43	0.198	(0.115)	0.036	0.162
96	8.00	0.43	0.198	(0.115)	0.036	0.162
97	8.08	0.50	0.229	(0.114)	0.041	0.187
98	8.17	0.50	0.229	(0.114)	0.041	0.187
99	8.25	0.50	0.229	(0.113)	0.041	0.187
100	8.33	0.50	0.229	(0.113)	0.041	0.187
101	8.42	0.50	0.229	(0.112)	0.041	0.187
102	8.50	0.50	0.229	(0.112)	0.041	0.187
103	8.58	0.53	0.244	(0.111)	0.044	0.200
104	8.67	0.53	0.244	(0.111)	0.044	0.200
105	8.75	0.53	0.244	(0.110)	0.044	0.200
106	8.83	0.57	0.259	(0.110)	0.047	0.212
107	8.92	0.57	0.259	(0.109)	0.047	0.212
108	9.00	0.57	0.259	(0.109)	0.047	0.212
109	9.08	0.63	0.290	(0.108)	0.052	0.237
110	9.17	0.63	0.290	(0.108)	0.052	0.237
111	9.25	0.63	0.290	(0.107)	0.052	0.237
112	9.33	0.67	0.305	(0.107)	0.055	0.250
113	9.42	0.67	0.305	(0.106)	0.055	0.250
114	9.50	0.67	0.305	(0.105)	0.055	0.250

115	9.58	0.70	0.320	(0.105)	0.058	0.262
116	9.67	0.70	0.320	(0.104)	0.058	0.262
117	9.75	0.70	0.320	(0.104)	0.058	0.262
118	9.83	0.73	0.335	(0.103)	0.060	0.275
119	9.92	0.73	0.335	(0.103)	0.060	0.275
120	10.00	0.73	0.335	(0.102)	0.060	0.275
121	10.08	0.50	0.229	(0.102)	0.041	0.187
122	10.17	0.50	0.229	(0.101)	0.041	0.187
123	10.25	0.50	0.229	(0.101)	0.041	0.187
124	10.33	0.50	0.229	(0.101)	0.041	0.187
125	10.42	0.50	0.229	(0.100)	0.041	0.187
126	10.50	0.50	0.229	(0.100)	0.041	0.187
127	10.58	0.67	0.305	(0.099)	0.055	0.250
128	10.67	0.67	0.305	(0.099)	0.055	0.250
129	10.75	0.67	0.305	(0.098)	0.055	0.250
130	10.83	0.67	0.305	(0.098)	0.055	0.250
131	10.92	0.67	0.305	(0.097)	0.055	0.250
132	11.00	0.67	0.305	(0.097)	0.055	0.250
133	11.08	0.63	0.290	(0.096)	0.052	0.237
134	11.17	0.63	0.290	(0.096)	0.052	0.237
135	11.25	0.63	0.290	(0.095)	0.052	0.237
136	11.33	0.63	0.290	(0.095)	0.052	0.237
137	11.42	0.63	0.290	(0.094)	0.052	0.237
138	11.50	0.63	0.290	(0.094)	0.052	0.237
139	11.58	0.57	0.259	(0.093)	0.047	0.212
140	11.67	0.57	0.259	(0.093)	0.047	0.212
141	11.75	0.57	0.259	(0.092)	0.047	0.212
142	11.83	0.60	0.274	(0.092)	0.049	0.225
143	11.92	0.60	0.274	(0.092)	0.049	0.225
144	12.00	0.60	0.274	(0.091)	0.049	0.225
145	12.08	0.83	0.381	(0.091)	0.069	0.312
146	12.17	0.83	0.381	(0.090)	0.069	0.312
147	12.25	0.83	0.381	(0.090)	0.069	0.312
148	12.33	0.87	0.396	(0.089)	0.071	0.325
149	12.42	0.87	0.396	(0.089)	0.071	0.325
150	12.50	0.87	0.396	(0.088)	0.071	0.325
151	12.58	0.93	0.427	(0.088)	0.077	0.350
152	12.67	0.93	0.427	(0.087)	0.077	0.350
153	12.75	0.93	0.427	(0.087)	0.077	0.350
154	12.83	0.97	0.442	(0.087)	0.080	0.362
155	12.92	0.97	0.442	(0.086)	0.080	0.362
156	13.00	0.97	0.442	(0.086)	0.080	0.362
157	13.08	1.13	0.518	0.085 (0.093)	0.433	
158	13.17	1.13	0.518	0.085 (0.093)	0.433	
159	13.25	1.13	0.518	0.084 (0.093)	0.434	
160	13.33	1.13	0.518	0.084 (0.093)	0.434	
161	13.42	1.13	0.518	0.084 (0.093)	0.435	
162	13.50	1.13	0.518	0.083 (0.093)	0.435	
163	13.58	0.77	0.351	(0.083)	0.063	0.287
164	13.67	0.77	0.351	(0.082)	0.063	0.287
165	13.75	0.77	0.351	(0.082)	0.063	0.287
166	13.83	0.77	0.351	(0.081)	0.063	0.287
167	13.92	0.77	0.351	(0.081)	0.063	0.287
168	14.00	0.77	0.351	(0.081)	0.063	0.287
169	14.08	0.90	0.411	(0.080)	0.074	0.337
170	14.17	0.90	0.411	(0.080)	0.074	0.337
171	14.25	0.90	0.411	(0.079)	0.074	0.337
172	14.33	0.87	0.396	(0.079)	0.071	0.325
173	14.42	0.87	0.396	(0.079)	0.071	0.325
174	14.50	0.87	0.396	(0.078)	0.071	0.325
175	14.58	0.87	0.396	(0.078)	0.071	0.325
176	14.67	0.87	0.396	(0.077)	0.071	0.325
177	14.75	0.87	0.396	(0.077)	0.071	0.325
178	14.83	0.83	0.381	(0.077)	0.069	0.312
179	14.92	0.83	0.381	(0.076)	0.069	0.312
180	15.00	0.83	0.381	(0.076)	0.069	0.312
181	15.08	0.80	0.366	(0.075)	0.066	0.300
182	15.17	0.80	0.366	(0.075)	0.066	0.300
183	15.25	0.80	0.366	(0.075)	0.066	0.300
184	15.33	0.77	0.351	(0.074)	0.063	0.287
185	15.42	0.77	0.351	(0.074)	0.063	0.287
186	15.50	0.77	0.351	(0.073)	0.063	0.287

187	15.58	0.63	0.290	(0.073)	0.052	0.237
188	15.67	0.63	0.290	(0.073)	0.052	0.237
189	15.75	0.63	0.290	(0.072)	0.052	0.237
190	15.83	0.63	0.290	(0.072)	0.052	0.237
191	15.92	0.63	0.290	(0.072)	0.052	0.237
192	16.00	0.63	0.290	(0.071)	0.052	0.237
193	16.08	0.13	0.061	(0.071)	0.011	0.050
194	16.17	0.13	0.061	(0.071)	0.011	0.050
195	16.25	0.13	0.061	(0.070)	0.011	0.050
196	16.33	0.13	0.061	(0.070)	0.011	0.050
197	16.42	0.13	0.061	(0.069)	0.011	0.050
198	16.50	0.13	0.061	(0.069)	0.011	0.050
199	16.58	0.10	0.046	(0.069)	0.008	0.037
200	16.67	0.10	0.046	(0.068)	0.008	0.037
201	16.75	0.10	0.046	(0.068)	0.008	0.037
202	16.83	0.10	0.046	(0.068)	0.008	0.037
203	16.92	0.10	0.046	(0.067)	0.008	0.037
204	17.00	0.10	0.046	(0.067)	0.008	0.037
205	17.08	0.17	0.076	(0.067)	0.014	0.062
206	17.17	0.17	0.076	(0.066)	0.014	0.062
207	17.25	0.17	0.076	(0.066)	0.014	0.062
208	17.33	0.17	0.076	(0.066)	0.014	0.062
209	17.42	0.17	0.076	(0.065)	0.014	0.062
210	17.50	0.17	0.076	(0.065)	0.014	0.062
211	17.58	0.17	0.076	(0.065)	0.014	0.062
212	17.67	0.17	0.076	(0.064)	0.014	0.062
213	17.75	0.17	0.076	(0.064)	0.014	0.062
214	17.83	0.13	0.061	(0.064)	0.011	0.050
215	17.92	0.13	0.061	(0.063)	0.011	0.050
216	18.00	0.13	0.061	(0.063)	0.011	0.050
217	18.08	0.13	0.061	(0.063)	0.011	0.050
218	18.17	0.13	0.061	(0.063)	0.011	0.050
219	18.25	0.13	0.061	(0.062)	0.011	0.050
220	18.33	0.13	0.061	(0.062)	0.011	0.050
221	18.42	0.13	0.061	(0.062)	0.011	0.050
222	18.50	0.13	0.061	(0.061)	0.011	0.050
223	18.58	0.10	0.046	(0.061)	0.008	0.037
224	18.67	0.10	0.046	(0.061)	0.008	0.037
225	18.75	0.10	0.046	(0.060)	0.008	0.037
226	18.83	0.07	0.030	(0.060)	0.005	0.025
227	18.92	0.07	0.030	(0.060)	0.005	0.025
228	19.00	0.07	0.030	(0.060)	0.005	0.025
229	19.08	0.10	0.046	(0.059)	0.008	0.037
230	19.17	0.10	0.046	(0.059)	0.008	0.037
231	19.25	0.10	0.046	(0.059)	0.008	0.037
232	19.33	0.13	0.061	(0.058)	0.011	0.050
233	19.42	0.13	0.061	(0.058)	0.011	0.050
234	19.50	0.13	0.061	(0.058)	0.011	0.050
235	19.58	0.10	0.046	(0.058)	0.008	0.037
236	19.67	0.10	0.046	(0.057)	0.008	0.037
237	19.75	0.10	0.046	(0.057)	0.008	0.037
238	19.83	0.07	0.030	(0.057)	0.005	0.025
239	19.92	0.07	0.030	(0.057)	0.005	0.025
240	20.00	0.07	0.030	(0.056)	0.005	0.025
241	20.08	0.10	0.046	(0.056)	0.008	0.037
242	20.17	0.10	0.046	(0.056)	0.008	0.037
243	20.25	0.10	0.046	(0.056)	0.008	0.037
244	20.33	0.10	0.046	(0.055)	0.008	0.037
245	20.42	0.10	0.046	(0.055)	0.008	0.037
246	20.50	0.10	0.046	(0.055)	0.008	0.037
247	20.58	0.10	0.046	(0.055)	0.008	0.037
248	20.67	0.10	0.046	(0.054)	0.008	0.037
249	20.75	0.10	0.046	(0.054)	0.008	0.037
250	20.83	0.07	0.030	(0.054)	0.005	0.025
251	20.92	0.07	0.030	(0.054)	0.005	0.025
252	21.00	0.07	0.030	(0.054)	0.005	0.025
253	21.08	0.10	0.046	(0.053)	0.008	0.037
254	21.17	0.10	0.046	(0.053)	0.008	0.037
255	21.25	0.10	0.046	(0.053)	0.008	0.037
256	21.33	0.07	0.030	(0.053)	0.005	0.025
257	21.42	0.07	0.030	(0.053)	0.005	0.025
258	21.50	0.07	0.030	(0.052)	0.005	0.025

1+50	0. 0348	0. 29	VQ
1+55	0. 0369	0. 31	VQ
2+ 0	0. 0390	0. 31	VQ
2+ 5	0. 0411	0. 31	Q
2+10	0. 0432	0. 31	Q
2+15	0. 0453	0. 31	Q
2+20	0. 0474	0. 31	Q
2+25	0. 0495	0. 31	Q
2+30	0. 0516	0. 31	Q
2+35	0. 0541	0. 36	Q
2+40	0. 0568	0. 38	Q
2+45	0. 0594	0. 38	Q
2+50	0. 0620	0. 38	Q
2+55	0. 0647	0. 38	Q
3+ 0	0. 0673	0. 38	Q
3+ 5	0. 0699	0. 38	Q
3+10	0. 0726	0. 38	Q
3+15	0. 0752	0. 38	Q
3+20	0. 0778	0. 38	Q
3+25	0. 0805	0. 38	QV
3+30	0. 0831	0. 38	QV
3+35	0. 0857	0. 38	QV
3+40	0. 0884	0. 38	QV
3+45	0. 0910	0. 38	QV
3+50	0. 0940	0. 44	QV
3+55	0. 0972	0. 46	QV
4+ 0	0. 1003	0. 46	QV
4+ 5	0. 1035	0. 46	QV
4+10	0. 1067	0. 46	QV
4+15	0. 1098	0. 46	QV
4+20	0. 1134	0. 52	Q
4+25	0. 1171	0. 54	Q
4+30	0. 1208	0. 54	QV
4+35	0. 1244	0. 54	QV
4+40	0. 1281	0. 54	QV
4+45	0. 1318	0. 54	QV
4+50	0. 1359	0. 59	QV
4+55	0. 1401	0. 61	QV
5+ 0	0. 1443	0. 61	QV
5+ 5	0. 1478	0. 50	Q V
5+10	0. 1509	0. 46	Q Q V
5+15	0. 1541	0. 46	Q V
5+20	0. 1576	0. 52	QV
5+25	0. 1613	0. 54	Q V
5+30	0. 1650	0. 54	Q V
5+35	0. 1691	0. 59	Q V
5+40	0. 1733	0. 61	Q V
5+45	0. 1775	0. 61	Q V
5+50	0. 1817	0. 61	Q V
5+55	0. 1859	0. 61	Q V
6+ 0	0. 1902	0. 61	Q V
6+ 5	0. 1948	0. 67	Q V
6+10	0. 1995	0. 69	Q V
6+15	0. 2042	0. 69	Q V
6+20	0. 2090	0. 69	Q V
6+25	0. 2137	0. 69	Q V
6+30	0. 2185	0. 69	Q V
6+35	0. 2236	0. 75	Q V
6+40	0. 2289	0. 76	Q V
6+45	0. 2341	0. 76	Q V
6+50	0. 2394	0. 76	Q V
6+55	0. 2447	0. 76	Q V
7+ 0	0. 2499	0. 76	Q V
7+ 5	0. 2552	0. 76	Q V
7+10	0. 2605	0. 76	Q V
7+15	0. 2657	0. 76	Q V
7+20	0. 2714	0. 82	Q V
7+25	0. 2772	0. 84	Q V
7+30	0. 2830	0. 84	Q V
7+35	0. 2892	0. 90	Q V
7+40	0. 2955	0. 92	Q V
7+45	0. 3018	0. 92	Q V

7+50	0. 3085	0. 97
7+55	0. 3154	0. 99
8+ 0	0. 3222	0. 99
8+ 5	0. 3299	1. 11
8+10	0. 3378	1. 15
8+15	0. 3457	1. 15
8+20	0. 3536	1. 15
8+25	0. 3615	1. 15
8+30	0. 3694	1. 15
8+35	0. 3777	1. 20
8+40	0. 3861	1. 22
8+45	0. 3945	1. 22
8+50	0. 4034	1. 28
8+55	0. 4123	1. 30
9+ 0	0. 4213	1. 30
9+ 5	0. 4310	1. 41
9+10	0. 4410	1. 45
9+15	0. 4510	1. 45
9+20	0. 4614	1. 51
9+25	0. 4720	1. 53
9+30	0. 4825	1. 53
9+35	0. 4934	1. 59
9+40	0. 5045	1. 61
9+45	0. 5156	1. 61
9+50	0. 5270	1. 66
9+55	0. 5386	1. 68
10+ 0	0. 5502	1. 68
10+ 5	0. 5590	1. 28
10+10	0. 5669	1. 15
10+15	0. 5748	1. 15
10+20	0. 5827	1. 15
10+25	0. 5906	1. 15
10+30	0. 5985	1. 15
10+35	0. 6084	1. 43
10+40	0. 6189	1. 53
10+45	0. 6295	1. 53
10+50	0. 6400	1. 53
10+55	0. 6505	1. 53
11+ 0	0. 6611	1. 53
11+ 5	0. 6712	1. 47
11+10	0. 6812	1. 45
11+15	0. 6912	1. 45
11+20	0. 7013	1. 45
11+25	0. 7113	1. 45
11+30	0. 7213	1. 45
11+35	0. 7305	1. 34
11+40	0. 7395	1. 30
11+45	0. 7484	1. 30
11+50	0. 7578	1. 36
11+55	0. 7672	1. 38
12+ 0	0. 7767	1. 38
12+ 5	0. 7890	1. 78
12+10	0. 8021	1. 91
12+15	0. 8153	1. 91
12+20	0. 8289	1. 97
12+25	0. 8425	1. 99
12+30	0. 8562	1. 99
12+35	0. 8707	2. 10
12+40	0. 8855	2. 14
12+45	0. 9002	2. 14
12+50	0. 9154	2. 20
12+55	0. 9306	2. 22
13+ 0	0. 9459	2. 22
13+ 5	0. 9634	2. 54
13+10	0. 9817	2. 65
13+15	1. 0000	2. 65
13+20	1. 0183	2. 66
13+25	1. 0366	2. 66
13+30	1. 0549	2. 66
13+35	1. 0686	1. 99
13+40	1. 0807	1. 76
13+45	1. 0928	1. 76



19+50	1. 5203	0. 17	Q	V
19+55	1. 5213	0. 15	Q	V
20+ 0	1. 5224	0. 15	Q	V
20+ 5	1. 5238	0. 21	Q	V
20+10	1. 5254	0. 23	Q	V
20+15	1. 5270	0. 23	Q	V
20+20	1. 5285	0. 23	Q	V
20+25	1. 5301	0. 23	Q	V
20+30	1. 5317	0. 23	Q	V
20+35	1. 5333	0. 23	Q	V
20+40	1. 5349	0. 23	Q	V
20+45	1. 5364	0. 23	Q	V
20+50	1. 5376	0. 17	Q	V
20+55	1. 5387	0. 15	Q	V
21+ 0	1. 5397	0. 15	Q	V
21+ 5	1. 5412	0. 21	Q	V
21+10	1. 5428	0. 23	Q	V
21+15	1. 5444	0. 23	Q	V
21+20	1. 5455	0. 17	Q	V
21+25	1. 5466	0. 15	Q	V
21+30	1. 5476	0. 15	Q	V
21+35	1. 5491	0. 21	Q	V
21+40	1. 5507	0. 23	Q	V
21+45	1. 5523	0. 23	Q	V
21+50	1. 5534	0. 17	Q	V
21+55	1. 5545	0. 15	Q	V
22+ 0	1. 5555	0. 15	Q	V
22+ 5	1. 5570	0. 21	Q	V
22+10	1. 5586	0. 23	Q	V
22+15	1. 5602	0. 23	Q	V
22+20	1. 5613	0. 17	Q	V
22+25	1. 5624	0. 15	Q	V
22+30	1. 5634	0. 15	Q	V
22+35	1. 5645	0. 15	Q	V
22+40	1. 5656	0. 15	Q	V
22+45	1. 5666	0. 15	Q	V
22+50	1. 5677	0. 15	Q	V
22+55	1. 5687	0. 15	Q	V
23+ 0	1. 5698	0. 15	Q	V
23+ 5	1. 5708	0. 15	Q	V
23+10	1. 5719	0. 15	Q	V
23+15	1. 5729	0. 15	Q	V
23+20	1. 5740	0. 15	Q	V
23+25	1. 5750	0. 15	Q	V
23+30	1. 5761	0. 15	Q	V
23+35	1. 5771	0. 15	Q	V
23+40	1. 5782	0. 15	Q	V
23+45	1. 5793	0. 15	Q	V
23+50	1. 5803	0. 15	Q	V
23+55	1. 5814	0. 15	Q	V
24+ 0	1. 5824	0. 15	Q	V
24+ 5	1. 5827	0. 04	Q	V

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PD10610.out

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 140-161
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 6.07(Ac.) = 0.009 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.07(Ac.) = 0.009 Sq. Mi.
Length along longest watercourse = 687.00(Ft.)
Length along longest watercourse measured to centroid = 100.00(Ft.)
Length along longest watercourse = 0.130 Mi.
Length along longest watercourse measured to centroid = 0.019 Mi.
Difference in elevation = 18.60(Ft.)
Slope along watercourse = 142.9520 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.014 Hr.
Lag time = 0.86 Min.
25% of lag time = 0.21 Min.
40% of lag time = 0.34 Min.
Unit time = 5.00 Min.
Duration of storm = 6 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	1.20	7.28

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	3.00	18.21

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.200(In)
Area Averaged 100-Year Rainfall = 3.000(In)

Point rain (area averaged) = 1.941(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.940(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
6.070 56.00 0.900
Total Area Entered = 6.07(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097
 Minimum soil loss rate ((In/Hr)) = 0.049
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

U n i t H y d r o g r a p h
 VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	582.319	4.561
2	0.167	1164.637	1.556
Sum = 100.000			Sum= 6.117

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	0.50	0.116	(0.097)	0.021	0.095
2	0.17	0.60	0.140	(0.097)	0.025	0.115
3	0.25	0.60	0.140	(0.097)	0.025	0.115
4	0.33	0.60	0.140	(0.097)	0.025	0.115
5	0.42	0.60	0.140	(0.097)	0.025	0.115
6	0.50	0.70	0.163	(0.097)	0.029	0.134
7	0.58	0.70	0.163	(0.097)	0.029	0.134
8	0.67	0.70	0.163	(0.097)	0.029	0.134
9	0.75	0.70	0.163	(0.097)	0.029	0.134
10	0.83	0.70	0.163	(0.097)	0.029	0.134
11	0.92	0.70	0.163	(0.097)	0.029	0.134
12	1.00	0.80	0.186	(0.097)	0.034	0.153
13	1.08	0.80	0.186	(0.097)	0.034	0.153
14	1.17	0.80	0.186	(0.097)	0.034	0.153
15	1.25	0.80	0.186	(0.097)	0.034	0.153
16	1.33	0.80	0.186	(0.097)	0.034	0.153
17	1.42	0.80	0.186	(0.097)	0.034	0.153
18	1.50	0.80	0.186	(0.097)	0.034	0.153
19	1.58	0.80	0.186	(0.097)	0.034	0.153
20	1.67	0.80	0.186	(0.097)	0.034	0.153
21	1.75	0.80	0.186	(0.097)	0.034	0.153
22	1.83	0.80	0.186	(0.097)	0.034	0.153
23	1.92	0.80	0.186	(0.097)	0.034	0.153
24	2.00	0.90	0.210	(0.097)	0.038	0.172
25	2.08	0.80	0.186	(0.097)	0.034	0.153
26	2.17	0.90	0.210	(0.097)	0.038	0.172
27	2.25	0.90	0.210	(0.097)	0.038	0.172
28	2.33	0.90	0.210	(0.097)	0.038	0.172
29	2.42	0.90	0.210	(0.097)	0.038	0.172
30	2.50	0.90	0.210	(0.097)	0.038	0.172
31	2.58	0.90	0.210	(0.097)	0.038	0.172
32	2.67	0.90	0.210	(0.097)	0.038	0.172
33	2.75	1.00	0.233	(0.097)	0.042	0.191
34	2.83	1.00	0.233	(0.097)	0.042	0.191
35	2.92	1.00	0.233	(0.097)	0.042	0.191
36	3.00	1.00	0.233	(0.097)	0.042	0.191
37	3.08	1.00	0.233	(0.097)	0.042	0.191
38	3.17	1.10	0.256	(0.097)	0.046	0.210
39	3.25	1.10	0.256	(0.097)	0.046	0.210
40	3.33	1.10	0.256	(0.097)	0.046	0.210
41	3.42	1.20	0.279	(0.097)	0.050	0.229
42	3.50	1.30	0.303	(0.097)	0.054	0.248

43	3.58	1.40	0.326	(0.097)	0.059	0.267
44	3.67	1.40	0.326	(0.097)	0.059	0.267
45	3.75	1.50	0.349	(0.097)	0.063	0.286
46	3.83	1.50	0.349	(0.097)	0.063	0.286
47	3.92	1.60	0.373	(0.097)	0.067	0.306
48	4.00	1.60	0.373	(0.097)	0.067	0.306
49	4.08	1.70	0.396	(0.097)	0.071	0.325
50	4.17	1.80	0.419	(0.097)	0.075	0.344
51	4.25	1.90	0.442	(0.097)	0.080	0.363
52	4.33	2.00	0.466	(0.097)	0.084	0.382
53	4.42	2.10	0.489	(0.097)	0.088	0.401
54	4.50	2.10	0.489	(0.097)	0.088	0.401
55	4.58	2.20	0.512	(0.097)	0.092	0.420
56	4.67	2.30	0.536	(0.097)	0.096	0.439
57	4.75	2.40	0.559	0.097	(0.101)	0.462
58	4.83	2.40	0.559	0.097	(0.101)	0.462
59	4.92	2.50	0.582	0.097	(0.105)	0.485
60	5.00	2.60	0.605	0.097	(0.109)	0.508
61	5.08	3.10	0.722	0.097	(0.130)	0.625
62	5.17	3.60	0.838	0.097	(0.151)	0.741
63	5.25	3.90	0.908	0.097	(0.163)	0.811
64	5.33	4.20	0.978	0.097	(0.176)	0.881
65	5.42	4.70	1.094	0.097	(0.197)	0.997
66	5.50	5.60	1.304	0.097	(0.235)	1.207
67	5.58	1.90	0.442	(0.097)	0.080	0.363
68	5.67	0.90	0.210	(0.097)	0.038	0.172
69	5.75	0.60	0.140	(0.097)	0.025	0.115
70	5.83	0.50	0.116	(0.097)	0.021	0.095
71	5.92	0.30	0.070	(0.097)	0.013	0.057
72	6.00	0.20	0.047	(0.097)	0.008	0.038

(Loss Rate Not Used)

Sum = 100.0

Sum = 19.6

Flood volume = Effective rainfall 1.63(In)
times area 6.1(Ac.)/[(In)/(Ft.)] = 0.8(Ac. Ft)
Total soil loss = 0.31(In)
Total soil loss = 0.156(Ac. Ft)
Total rainfall = 1.94(In)
Flood volume = 35972.4 Cubic Feet
Total soil loss = 6784.6 Cubic Feet

Peak flow rate of this hydrograph = 7.061(CFS)

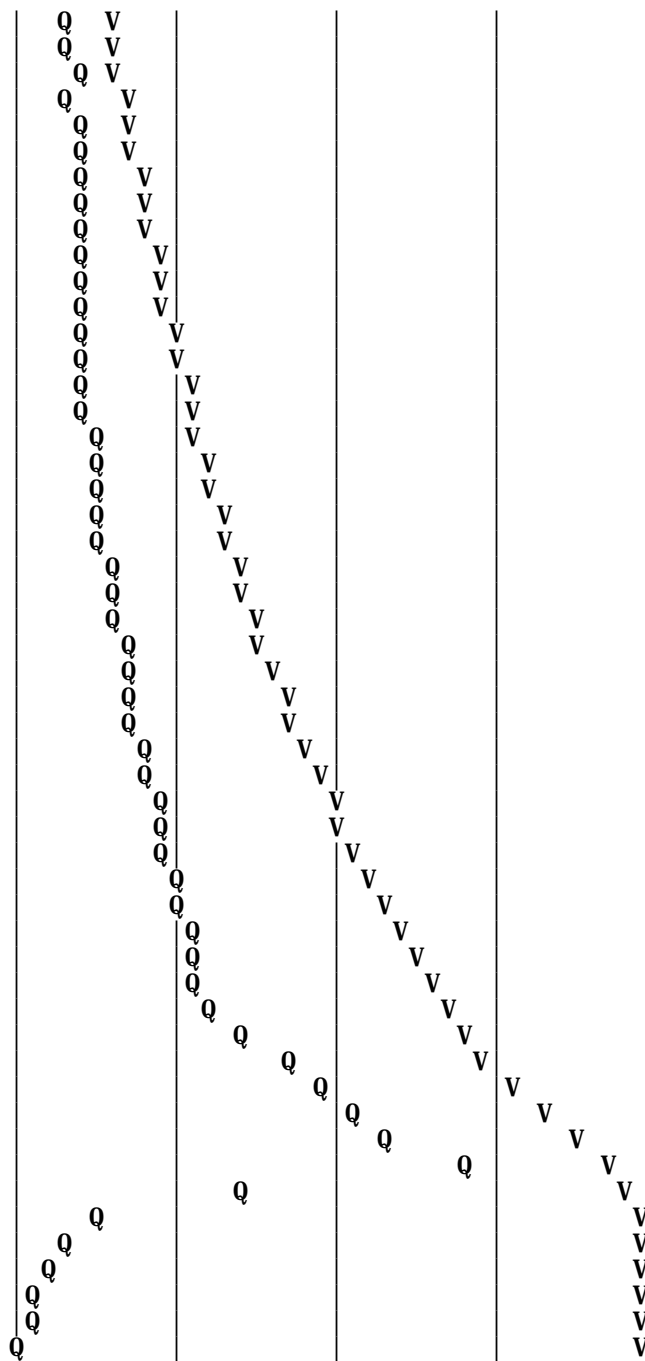
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6 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0030	0.44	VQ				
0+10	0.0076	0.67	V Q				
0+15	0.0125	0.70	V Q				
0+20	0.0173	0.70	V Q				
0+25	0.0221	0.70	VQ				
0+30	0.0275	0.79	V Q				
0+35	0.0332	0.82	V Q				
0+40	0.0388	0.82	V Q				
0+45	0.0444	0.82	VQ				
0+50	0.0501	0.82	VQ				
0+55	0.0557	0.82	VQ				
1+ 0	0.0619	0.91	Q				
1+ 5	0.0684	0.93	Q				
1+10	0.0748	0.93	Q				
1+15	0.0813	0.93	Q				
1+20	0.0877	0.93	QV				
1+25	0.0941	0.93	QV				
1+30	0.1006	0.93	QV				
1+35	0.1070	0.93	Q V				
1+40	0.1135	0.93	Q V				
1+45	0.1199	0.93	Q V				

1+50	0. 1263	0. 93
1+55	0. 1328	0. 93
2+ 0	0. 1398	1. 02
2+ 5	0. 1465	0. 96
2+10	0. 1535	1. 02
2+15	0. 1607	1. 05
2+20	0. 1680	1. 05
2+25	0. 1752	1. 05
2+30	0. 1825	1. 05
2+35	0. 1897	1. 05
2+40	0. 1970	1. 05
2+45	0. 2048	1. 14
2+50	0. 2129	1. 17
2+55	0. 2209	1. 17
3+ 0	0. 2290	1. 17
3+ 5	0. 2370	1. 17
3+10	0. 2457	1. 26
3+15	0. 2545	1. 29
3+20	0. 2634	1. 29
3+25	0. 2728	1. 37
3+30	0. 2831	1. 49
3+35	0. 2941	1. 61
3+40	0. 3054	1. 64
3+45	0. 3173	1. 72
3+50	0. 3293	1. 75
3+55	0. 3420	1. 84
4+ 0	0. 3549	1. 87
4+ 5	0. 3684	1. 96
4+10	0. 3827	2. 07
4+15	0. 3977	2. 19
4+20	0. 4136	2. 31
4+25	0. 4303	2. 42
4+30	0. 4472	2. 45
4+35	0. 4647	2. 54
4+40	0. 4831	2. 66
4+45	0. 5023	2. 79
4+50	0. 5217	2. 83
4+55	0. 5419	2. 93
5+ 0	0. 5631	3. 08
5+ 5	0. 5882	3. 64
5+10	0. 6182	4. 36
5+15	0. 6516	4. 86
5+20	0. 6880	5. 28
5+25	0. 7288	5. 92
5+30	0. 7775	7. 06
5+35	0. 8018	3. 53
5+40	0. 8111	1. 35
5+45	0. 8165	0. 79
5+50	0. 8208	0. 61
5+55	0. 8236	0. 41
6+ 0	0. 8254	0. 26
6+ 5	0. 8258	0. 06



Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PD10310.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 140-161
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 6.07(Ac.) = 0.009 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.07(Ac.) = 0.009 Sq. Mi.
Length along longest watercourse = 687.00(Ft.)
Length along longest watercourse measured to centroid = 100.00(Ft.)
Length along longest watercourse = 0.130 Mi.
Length along longest watercourse measured to centroid = 0.019 Mi.
Difference in elevation = 18.60(Ft.)
Slope along watercourse = 142.9520 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.014 Hr.
Lag time = 0.86 Min.
25% of lag time = 0.21 Min.
40% of lag time = 0.34 Min.
Unit time = 5.00 Min.
Duration of storm = 3 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	0.90	5.46

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	2.35	14.26

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 0.900(In)
Area Averaged 100-Year Rainfall = 2.350(In)

Point rain (area averaged) = 1.497(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.497(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
6.070 56.00 0.900
Total Area Entered = 6.07(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec. %)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097

Minimum soil loss rate ((In/Hr)) = 0.049

(for 24 hour storm duration)

Soil loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	582.319	74.564
2	0.167	1164.637	25.436
Sum =		100.000	Sum= 6.117

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
				Max	Low	
1	0.08	1.30	0.233	(0.097)	0.042	0.191
2	0.17	1.30	0.233	(0.097)	0.042	0.191
3	0.25	1.10	0.198	(0.097)	0.036	0.162
4	0.33	1.50	0.269	(0.097)	0.048	0.221
5	0.42	1.50	0.269	(0.097)	0.048	0.221
6	0.50	1.80	0.323	(0.097)	0.058	0.265
7	0.58	1.50	0.269	(0.097)	0.048	0.221
8	0.67	1.80	0.323	(0.097)	0.058	0.265
9	0.75	1.80	0.323	(0.097)	0.058	0.265
10	0.83	1.50	0.269	(0.097)	0.048	0.221
11	0.92	1.60	0.287	(0.097)	0.052	0.236
12	1.00	1.80	0.323	(0.097)	0.058	0.265
13	1.08	2.20	0.395	(0.097)	0.071	0.324
14	1.17	2.20	0.395	(0.097)	0.071	0.324
15	1.25	2.20	0.395	(0.097)	0.071	0.324
16	1.33	2.00	0.359	(0.097)	0.065	0.295
17	1.42	2.60	0.467	(0.097)	0.084	0.383
18	1.50	2.70	0.485	(0.097)	0.087	0.398
19	1.58	2.40	0.431	(0.097)	0.078	0.353
20	1.67	2.70	0.485	(0.097)	0.087	0.398
21	1.75	3.30	0.593	0.097 (	0.107)	0.496
22	1.83	3.10	0.557	(0.097	(0.100)	0.460
23	1.92	2.90	0.521	(0.097)	0.094	0.427
24	2.00	3.00	0.539	(0.097)	0.097	0.442
25	2.08	3.10	0.557	0.097 (	0.100)	0.460
26	2.17	4.20	0.754	0.097 (	0.136)	0.657
27	2.25	5.00	0.898	0.097 (	0.162)	0.801
28	2.33	3.50	0.629	0.097 (	0.113)	0.531
29	2.42	6.80	1.221	0.097 (	0.220)	1.124
30	2.50	7.30	1.311	0.097 (	0.236)	1.214
31	2.58	8.20	1.473	0.097 (	0.265)	1.376
32	2.67	5.90	1.060	0.097 (	0.191)	0.962
33	2.75	2.00	0.359	(0.097)	0.065	0.295
34	2.83	1.80	0.323	(0.097)	0.058	0.265
35	2.92	1.80	0.323	(0.097)	0.058	0.265
36	3.00	0.60	0.108	(0.097)	0.019	0.088

(Loss Rate Not Used)

Sum = 100.0

Sum = 15.4

Flood volume = Effective rainfall 1.28(In)

times area 6.1(Ac.) / [(In)/(Ft.)] = 0.6(Ac. Ft)

Total soil loss = 0.21(In)

Total soil loss = 0.108(Ac. Ft)

Total rainfall = 1.50(In)
 Flood volume = 28248.1 Cubic Feet
 Total soil loss = 4726.0 Cubic Feet

 Peak flow rate of this hydrograph = 8.167(CFS)

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 3 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

 Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac. Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0060	0.87	V	Q			
0+10	0.0141	1.17	V	Q			
0+15	0.0212	1.04	V	Q			
0+20	0.0299	1.26	V	Q			
0+25	0.0392	1.35	V	Q			
0+30	0.0499	1.55	V	Q			
0+35	0.0597	1.42	V	Q			
0+40	0.0704	1.55	V	Q			
0+45	0.0816	1.62	V	Q			
0+50	0.0914	1.42	V	Q			
0+55	0.1011	1.42	V	Q			
1+ 0	0.1120	1.58	V	Q			
1+ 5	0.1250	1.89	V	Q			
1+10	0.1387	1.98	V	Q			
1+15	0.1523	1.98	V	Q			
1+20	0.1651	1.85	V	Q			
1+25	0.1802	2.21	V	Q			
1+30	0.1969	2.41	V	Q			
1+35	0.2122	2.23	V	Q			
1+40	0.2285	2.36	V	Q			
1+45	0.2483	2.88	V	Q			
1+50	0.2681	2.87	V	Q			
1+55	0.2865	2.66	V	Q			
2+ 0	0.3049	2.68	V	Q			
2+ 5	0.3241	2.79	V	Q			
2+10	0.3497	3.71	V	Q			
2+15	0.3819	4.68	V	Q			
2+20	0.4072	3.67	V	Q			
2+25	0.4482	5.96	V	Q			
2+30	0.4984	7.29	V	Q			
2+35	0.5547	8.17	V	Q			
2+40	0.5997	6.53	V	Q			
2+45	0.6193	2.84	V	Q			
2+50	0.6307	1.67	V	Q			
2+55	0.6419	1.62	V	Q			
3+ 0	0.6475	0.82	V	Q			
3+ 5	0.6485	0.14	V	Q			

Unit Hydrograph Analysis

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Study date 01/04/23 File: 2216PD10110.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6310

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
PROPOSED CONDITION - NODES 140-161
HYDROLOGIC ANALYSIS
10- YEAR

Drainage Area = 6.07(Ac.) = 0.009 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 6.07(Ac.) = 0.009 Sq. Mi.
Length along longest watercourse = 687.00(Ft.)
Length along longest watercourse measured to centroid = 100.00(Ft.)
Length along longest watercourse = 0.130 Mi.
Length along longest watercourse measured to centroid = 0.019 Mi.
Difference in elevation = 18.60(Ft.)
Slope along watercourse = 142.9520 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.014 Hr.
Lag time = 0.86 Min.
25% of lag time = 0.21 Min.
40% of lag time = 0.34 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	0.54	3.28

100 YEAR Area rainfall data:

Area(Ac.) [1]	Rainfall (In) [2]	Weighting [1*2]
6.07	1.36	8.26

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 0.540(In)
Area Averaged 100-Year Rainfall = 1.360(In)

Point rain (area averaged) = 0.877(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 0.877(In)

Sub-Area Data:
Area(Ac.) Runoff Index Impervious %
6.070 56.00 0.900
Total Area Entered = 6.07(Ac.)

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.)	(In/Hr)	(Dec.)	(In/Hr)
56.0	56.0	0.511	0.900	0.097	1.000	0.097
Sum (F) =						0.097

Area averaged mean soil loss (F) (In/Hr) = 0.097
 Minimum soil loss rate ((In/Hr)) = 0.049
 (for 24 hour storm duration)
 Soil loss rate (decimal) = 0.180

Slope of intensity-duration curve for a 1 hour storm = 0.4800

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	582.319	74.564
2	0.167	1164.637	25.436
		Sum = 100.000	Sum = 6.117

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate (In./Hr) Max	Loss rate (In./Hr) Low	Effective (In/Hr)
1	0.08	4.40	0.463	(0.097)	0.380
2	0.17	4.50	0.474	(0.097)	0.388
3	0.25	5.40	0.568	0.097 (0.102)	0.471
4	0.33	5.40	0.568	0.097 (0.102)	0.471
5	0.42	5.70	0.600	0.097 (0.108)	0.503
6	0.50	6.40	0.674	0.097 (0.121)	0.577
7	0.58	7.90	0.832	0.097 (0.150)	0.735
8	0.67	9.10	0.958	0.097 (0.172)	0.861
9	0.75	12.80	1.348	0.097 (0.243)	1.250
10	0.83	25.60	2.695	0.097 (0.485)	2.598
11	0.92	7.90	0.832	0.097 (0.150)	0.735
12	1.00	4.90	0.516	(0.097)	0.423
Sum =	100.0	(Loss Rate Not Used)		Sum =	9.4

Flood volume = Effective rainfall 0.78(In)
 times area 6.1(Ac.) / [(In)/(Ft.)] = 0.4(Ac. Ft)
 Total soil loss = 0.09(In)
 Total soil loss = 0.048(Ac. Ft)
 Total rainfall = 0.88(In)
 Flood volume = 17246.6 Cubic Feet
 Total soil loss = 2084.0 Cubic Feet

Peak flow rate of this hydrograph = 13.804(CFS)

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time (h+m)	Volume Ac. Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0119	1.73	V	Q			
0+10	0.0282	2.36	V	Q			
0+15	0.0472	2.76	V	Q			
0+20	0.0671	2.89	V	Q			
0+25	0.0879	3.03	V	Q	V		
0+30	0.1115	3.42	V	Q	V		
0+35	0.1407	4.25	V	Q	V		

0+40	0.1757	5.07		Q	V			
0+45	0.2242	7.05			Q	V		
0+50	0.3193	13.80			Q		Q	V
0+55	0.3702	7.40			Q			V
1+ 0	0.3914	3.07						V
1+ 5	0.3959	0.66	Q	Q				V

Underground Storage Analysis

Proposed Condition

Temescal Canyon Self Storage - Riverside County Underground Storage Analysis

West

Storage

Arch Span (ft)	Arch Rise (ft)	Number Rows (#)	Row Length (ft)	Row Slope (ft/ft)	Invert (D/S) (ft)	Invert U/S (ft)
16	4	2	340	0.0010	900.50	900.84

Low Flow Discharge

Orifice C (ϕ)	Number Outlets (#)	Outlet Diameter (in)	Outlet Invert (ft)	Outlet Soffit (ft)
0.60	1	3	900.50	900.75

High Flow Discharge

Orifice C (ϕ)	Number Outlets (#)	Outlet Diameter (in)	Outlet Invert (ft)	Outlet Soffit (ft)
0.60	1	12	903.60	904.60

Rating Curve

Elevation (ft)	Depth (ft)	Storage (cu-ft)	Storage (ac-ft)	Low Flow Discharge (cfs)	High Flow Discharge (cfs)	Total Discharge (cfs)
900.50	0.00	0	0.000	0.000	0.000	0.000
900.75	0.25	960	0.022	0.118	0.000	0.118
900.84	0.34	1,850	0.042	0.138	0.000	0.138
901.00	0.50	3,536	0.081	0.167	0.000	0.167
901.50	1.00	8,967	0.206	0.236	0.000	0.236
901.85	1.35	12,742	0.293	0.275	0.000	0.275
902.00	1.50	14,349	0.329	0.289	0.000	0.289
902.50	2.00	19,624	0.451	0.334	0.000	0.334
903.00	2.50	24,712	0.567	0.374	0.000	0.374
903.50	3.00	29,507	0.677	0.409	0.000	0.409
903.60	3.10	30,377	0.697	0.416	0.000	0.416
904.00	3.50	33,761	0.775	0.442	0.893	1.336
904.50	4.00	36,637	0.841	0.473	3.401	3.874
904.60	4.10	36,863	0.846	0.479	3.782	4.260
904.84	4.34	37,427	0.859	0.492	4.211	4.703

FLOOD HYDROGRAPH ROUTING PROGRAM
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 Study date: 01/05/23

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 100-131
 MITIGATION ANALYSIS
 24-HOUR - 2-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PA02242.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 290
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 1.194 (CFS)
 Total volume = 0.726 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 290
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.022	0.118	0.022	0.022
0.340	0.042	0.138	0.042	0.042
0.500	0.081	0.167	0.080	0.082
1.000	0.206	0.236	0.205	0.207
1.350	0.293	0.275	0.292	0.294
1.500	0.329	0.289	0.328	0.330
2.000	0.451	0.334	0.450	0.452
2.500	0.567	0.374	0.566	0.568
3.000	0.677	0.409	0.676	0.678
3.100	0.697	0.416	0.696	0.698
3.500	0.775	1.336	0.770	0.780
4.000	0.841	3.874	0.828	0.854
4.100	0.846	4.260	0.831	0.861
4.340	0.859	4.703	0.843	0.875

Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	Depth (Ft.)					
				. 0	0. 3	0. 60	0. 90	1. 19	
0. 083	0. 04	0. 00	0. 000	OI					0. 00
0. 167	0. 07	0. 00	0. 000	OI					0. 01
0. 250	0. 07	0. 01	0. 001	OI					0. 01
0. 333	0. 09	0. 01	0. 001	O I					0. 02
0. 417	0. 10	0. 01	0. 002	O I					0. 02
0. 500	0. 11	0. 01	0. 003	O I					0. 03
0. 583	0. 11	0. 02	0. 003	O I					0. 04
0. 667	0. 11	0. 02	0. 004	O I					0. 04
0. 750	0. 11	0. 02	0. 004	O I					0. 05
0. 833	0. 13	0. 03	0. 005	O I					0. 06
0. 917	0. 14	0. 03	0. 006	O I					0. 07
1. 000	0. 14	0. 03	0. 007	O I					0. 07
1. 083	0. 12	0. 04	0. 007	O I					0. 08
1. 167	0. 11	0. 04	0. 008	OI					0. 09
1. 250	0. 11	0. 04	0. 008	OI					0. 09
1. 333	0. 11	0. 05	0. 009	OI					0. 10
1. 417	0. 11	0. 05	0. 009	OI					0. 10
1. 500	0. 11	0. 05	0. 009	OI					0. 11
1. 583	0. 11	0. 05	0. 010	OI					0. 11
1. 667	0. 11	0. 05	0. 010	OI					0. 11
1. 750	0. 11	0. 06	0. 010	OI					0. 12
1. 833	0. 13	0. 06	0. 011	O I					0. 12
1. 917	0. 14	0. 06	0. 011	O I					0. 13
2. 000	0. 14	0. 06	0. 012	O I					0. 13
2. 083	0. 14	0. 07	0. 012	O I					0. 14
2. 167	0. 14	0. 07	0. 013	O I					0. 15
2. 250	0. 14	0. 07	0. 013	O I					0. 15
2. 333	0. 14	0. 07	0. 014	O I					0. 16
2. 417	0. 14	0. 08	0. 014	OI					0. 16
2. 500	0. 14	0. 08	0. 015	OI					0. 17
2. 583	0. 16	0. 08	0. 015	O I					0. 17
2. 667	0. 17	0. 08	0. 016	O I					0. 18
2. 750	0. 18	0. 09	0. 016	O I					0. 19
2. 833	0. 18	0. 09	0. 017	O I					0. 19
2. 917	0. 18	0. 09	0. 018	O I					0. 20
3. 000	0. 18	0. 10	0. 018	O I					0. 21
3. 083	0. 18	0. 10	0. 019	O I					0. 21
3. 167	0. 18	0. 10	0. 019	O I					0. 22
3. 250	0. 18	0. 11	0. 020	O I					0. 22
3. 333	0. 18	0. 11	0. 020	O I					0. 23
3. 417	0. 18	0. 11	0. 021	O I					0. 23
3. 500	0. 18	0. 11	0. 021	OI					0. 24
3. 583	0. 18	0. 11	0. 021	OI					0. 24
3. 667	0. 18	0. 12	0. 022	OI					0. 25
3. 750	0. 18	0. 12	0. 022	OI					0. 25
3. 833	0. 20	0. 12	0. 023	O I					0. 25
3. 917	0. 21	0. 12	0. 023	O I					0. 26
4. 000	0. 21	0. 12	0. 024	O I					0. 26
4. 083	0. 21	0. 12	0. 025	O I					0. 26
4. 167	0. 21	0. 12	0. 025	O I					0. 26
4. 250	0. 21	0. 12	0. 026	O I					0. 27
4. 333	0. 23	0. 12	0. 026	O I					0. 27
4. 417	0. 24	0. 12	0. 027	O I					0. 27
4. 500	0. 25	0. 12	0. 028	O I					0. 28
4. 583	0. 25	0. 12	0. 029	O I					0. 28
4. 667	0. 25	0. 13	0. 030	O I					0. 28
4. 750	0. 25	0. 13	0. 031	O I					0. 29
4. 833	0. 27	0. 13	0. 031	O I					0. 29
4. 917	0. 28	0. 13	0. 032	O I					0. 30
5. 000	0. 28	0. 13	0. 033	O I					0. 30
5. 083	0. 24	0. 13	0. 034	O I					0. 31
5. 167	0. 21	0. 13	0. 035	O I					0. 31
5. 250	0. 21	0. 13	0. 036	O I					0. 31
5. 333	0. 23	0. 13	0. 036	O I					0. 31
5. 417	0. 24	0. 13	0. 037	O I					0. 32

11. 500	0. 67	0. 23	0. 203	0	I	0. 99
11. 583	0. 63	0. 24	0. 206	0	I	1. 00
11. 667	0. 60	0. 24	0. 208	0	I	1. 01
11. 750	0. 60	0. 24	0. 211	0	I	1. 02
11. 833	0. 62	0. 24	0. 213	0	I	1. 03
11. 917	0. 63	0. 24	0. 216	0	I	1. 04
12. 000	0. 63	0. 24	0. 219	0	I	1. 05
12. 083	0. 77	0. 24	0. 222	0	I	1. 06
12. 167	0. 86	0. 24	0. 226	0	I	1. 08
12. 250	0. 88	0. 25	0. 230	0	I	1. 10
12. 333	0. 90	0. 25	0. 235	0	I	1. 12
12. 417	0. 91	0. 25	0. 239	0	I	1. 13
12. 500	0. 91	0. 25	0. 244	0	I	1. 15
12. 583	0. 95	0. 25	0. 248	0	I	1. 17
12. 667	0. 98	0. 26	0. 253	0	I	1. 19
12. 750	0. 98	0. 26	0. 258	0	I	1. 21
12. 833	1. 00	0. 26	0. 263	0	I	1. 23
12. 917	1. 02	0. 26	0. 268	0	I	1. 25
13. 000	1. 02	0. 27	0. 274	0	I	1. 27
13. 083	1. 12	0. 27	0. 279	0	I	1. 29
13. 167	1. 18	0. 27	0. 285	0	I	1. 32
13. 250	1. 19	0. 27	0. 291	0	I	1. 34
13. 333	1. 19	0. 28	0. 298	0	I	1. 37
13. 417	1. 19	0. 28	0. 304	0	I	1. 40
13. 500	1. 19	0. 28	0. 310	0	I	1. 42
13. 583	0. 97	0. 28	0. 316	0	I	1. 45
13. 667	0. 83	0. 29	0. 320	0	I	1. 46
13. 750	0. 81	0. 29	0. 324	0	I	1. 48
13. 833	0. 81	0. 29	0. 327	0	I	1. 49
13. 917	0. 81	0. 29	0. 331	0	I	1. 51
14. 000	0. 81	0. 29	0. 335	0	I	1. 52
14. 083	0. 89	0. 29	0. 338	0	I	1. 54
14. 167	0. 94	0. 29	0. 343	0	I	1. 56
14. 250	0. 95	0. 30	0. 347	0	I	1. 57
14. 333	0. 93	0. 30	0. 352	0	I	1. 59
14. 417	0. 92	0. 30	0. 356	0	I	1. 61
14. 500	0. 91	0. 30	0. 360	0	I	1. 63
14. 583	0. 91	0. 30	0. 364	0	I	1. 64
14. 667	0. 91	0. 30	0. 369	0	I	1. 66
14. 750	0. 91	0. 31	0. 373	0	I	1. 68
14. 833	0. 89	0. 31	0. 377	0	I	1. 70
14. 917	0. 88	0. 31	0. 381	0	I	1. 71
15. 000	0. 88	0. 31	0. 385	0	I	1. 73
15. 083	0. 86	0. 31	0. 389	0	I	1. 74
15. 167	0. 84	0. 31	0. 392	0	I	1. 76
15. 250	0. 84	0. 31	0. 396	0	I	1. 77
15. 333	0. 82	0. 32	0. 400	0	I	1. 79
15. 417	0. 81	0. 32	0. 403	0	I	1. 80
15. 500	0. 81	0. 32	0. 406	0	I	1. 82
15. 583	0. 73	0. 32	0. 409	0	I	1. 83
15. 667	0. 68	0. 32	0. 412	0	I	1. 84
15. 750	0. 67	0. 32	0. 414	0	I	1. 85
15. 833	0. 67	0. 32	0. 417	0	I	1. 86
15. 917	0. 67	0. 32	0. 419	0	I	1. 87
16. 000	0. 67	0. 32	0. 422	0	I	1. 88
16. 083	0. 36	0. 32	0. 423	0I	I	1. 89
16. 167	0. 17	0. 32	0. 423	I	I	1. 88
16. 250	0. 14	0. 32	0. 421	I	I	1. 88
16. 333	0. 14	0. 32	0. 420	I	I	1. 87
16. 417	0. 14	0. 32	0. 419	I	I	1. 87
16. 500	0. 14	0. 32	0. 418	I	I	1. 86
16. 583	0. 12	0. 32	0. 416	I	I	1. 86
16. 667	0. 11	0. 32	0. 415	I	I	1. 85
16. 750	0. 11	0. 32	0. 413	I	I	1. 85
16. 833	0. 11	0. 32	0. 412	I	I	1. 84
16. 917	0. 11	0. 32	0. 410	I	I	1. 83
17. 000	0. 11	0. 32	0. 409	I	I	1. 83
17. 083	0. 15	0. 32	0. 408	I	I	1. 82
17. 167	0. 17	0. 32	0. 407	I	I	1. 82
17. 250	0. 18	0. 32	0. 406	I	I	1. 81
17. 333	0. 18	0. 32	0. 405	I	I	1. 81
17. 417	0. 18	0. 32	0. 404	I	I	1. 81

17. 500	0. 18	0. 32	0. 403	I	0	1. 80
17. 583	0. 18	0. 32	0. 402	I	0	1. 80
17. 667	0. 18	0. 32	0. 401	I	0	1. 79
17. 750	0. 18	0. 32	0. 400	I	0	1. 79
17. 833	0. 16	0. 31	0. 399	I	0	1. 79
17. 917	0. 14	0. 31	0. 398	I	0	1. 78
18. 000	0. 14	0. 31	0. 396	I	0	1. 78
18. 083	0. 14	0. 31	0. 395	I	0	1. 77
18. 167	0. 14	0. 31	0. 394	I	0	1. 77
18. 250	0. 14	0. 31	0. 393	I	0	1. 76
18. 333	0. 14	0. 31	0. 392	I	0	1. 76
18. 417	0. 14	0. 31	0. 390	I	0	1. 75
18. 500	0. 14	0. 31	0. 389	I	0	1. 75
18. 583	0. 12	0. 31	0. 388	I	0	1. 74
18. 667	0. 11	0. 31	0. 387	I	0	1. 74
18. 750	0. 11	0. 31	0. 385	I	0	1. 73
18. 833	0. 09	0. 31	0. 384	I	0	1. 72
18. 917	0. 07	0. 31	0. 382	I	0	1. 72
19. 000	0. 07	0. 31	0. 381	I	0	1. 71
19. 083	0. 09	0. 31	0. 379	I	0	1. 71
19. 167	0. 10	0. 31	0. 378	I	0	1. 70
19. 250	0. 11	0. 31	0. 376	I	0	1. 69
19. 333	0. 13	0. 31	0. 375	I	0	1. 69
19. 417	0. 14	0. 31	0. 374	I	0	1. 68
19. 500	0. 14	0. 31	0. 373	I	0	1. 68
19. 583	0. 12	0. 30	0. 371	I	0	1. 67
19. 667	0. 11	0. 30	0. 370	I	0	1. 67
19. 750	0. 11	0. 30	0. 369	I	0	1. 66
19. 833	0. 09	0. 30	0. 367	I	0	1. 66
19. 917	0. 07	0. 30	0. 366	I	0	1. 65
20. 000	0. 07	0. 30	0. 364	I	0	1. 64
20. 083	0. 09	0. 30	0. 363	I	0	1. 64
20. 167	0. 10	0. 30	0. 361	I	0	1. 63
20. 250	0. 11	0. 30	0. 360	I	0	1. 63
20. 333	0. 11	0. 30	0. 358	I	0	1. 62
20. 417	0. 11	0. 30	0. 357	I	0	1. 62
20. 500	0. 11	0. 30	0. 356	I	0	1. 61
20. 583	0. 11	0. 30	0. 354	I	0	1. 60
20. 667	0. 11	0. 30	0. 353	I	0	1. 60
20. 750	0. 11	0. 30	0. 352	I	0	1. 59
20. 833	0. 09	0. 30	0. 350	I	0	1. 59
20. 917	0. 07	0. 30	0. 349	I	0	1. 58
21. 000	0. 07	0. 30	0. 347	I	0	1. 58
21. 083	0. 09	0. 30	0. 346	I	0	1. 57
21. 167	0. 10	0. 29	0. 345	I	0	1. 56
21. 250	0. 11	0. 29	0. 343	I	0	1. 56
21. 333	0. 09	0. 29	0. 342	I	0	1. 55
21. 417	0. 07	0. 29	0. 340	I	0	1. 55
21. 500	0. 07	0. 29	0. 339	I	0	1. 54
21. 583	0. 09	0. 29	0. 337	I	0	1. 53
21. 667	0. 10	0. 29	0. 336	I	0	1. 53
21. 750	0. 11	0. 29	0. 335	I	0	1. 52
21. 833	0. 09	0. 29	0. 333	I	0	1. 52
21. 917	0. 07	0. 29	0. 332	I	0	1. 51
22. 000	0. 07	0. 29	0. 330	I	0	1. 51
22. 083	0. 09	0. 29	0. 329	I	0	1. 50
22. 167	0. 10	0. 29	0. 328	I	0	1. 49
22. 250	0. 11	0. 29	0. 326	I	0	1. 49
22. 333	0. 09	0. 29	0. 325	I	0	1. 48
22. 417	0. 07	0. 29	0. 324	I	0	1. 48
22. 500	0. 07	0. 29	0. 322	I	0	1. 47
22. 583	0. 07	0. 29	0. 321	I	0	1. 47
22. 667	0. 07	0. 29	0. 319	I	0	1. 46
22. 750	0. 07	0. 28	0. 318	I	0	1. 45
22. 833	0. 07	0. 28	0. 316	I	0	1. 45
22. 917	0. 07	0. 28	0. 315	I	0	1. 44
23. 000	0. 07	0. 28	0. 313	I	0	1. 43
23. 083	0. 07	0. 28	0. 312	I	0	1. 43
23. 167	0. 07	0. 28	0. 310	I	0	1. 42
23. 250	0. 07	0. 28	0. 309	I	0	1. 42
23. 333	0. 07	0. 28	0. 308	I	0	1. 41
23. 417	0. 07	0. 28	0. 306	I	0	1. 40

23.500	0.07	0.28	0.305	I	0	1.40
23.583	0.07	0.28	0.303	I	0	1.39
23.667	0.07	0.28	0.302	I	0	1.39
23.750	0.07	0.28	0.300	I	0	1.38
23.833	0.07	0.28	0.299	I	0	1.37
23.917	0.07	0.28	0.297	I	0	1.37
24.000	0.07	0.28	0.296	I	0	1.36
24.083	0.03	0.28	0.294	I	0	1.36
24.167	0.00	0.27	0.293	I	0	1.35
24.250	0.00	0.27	0.291	I	0	1.34
24.333	0.00	0.27	0.289	I	0	1.33
24.417	0.00	0.27	0.287	I	0	1.33
24.500	0.00	0.27	0.285	I	0	1.32
24.583	0.00	0.27	0.283	I	0	1.31
24.667	0.00	0.27	0.281	I	0	1.30
24.750	0.00	0.27	0.280	I	0	1.30
24.833	0.00	0.27	0.278	I	0	1.29
24.917	0.00	0.27	0.276	I	0	1.28
25.000	0.00	0.27	0.274	I	0	1.27
25.083	0.00	0.27	0.272	I	0	1.27
25.167	0.00	0.26	0.270	I	0	1.26
25.250	0.00	0.26	0.269	I	0	1.25
25.333	0.00	0.26	0.267	I	0	1.24
25.417	0.00	0.26	0.265	I	0	1.24
25.500	0.00	0.26	0.263	I	0	1.23
25.583	0.00	0.26	0.261	I	0	1.22
25.667	0.00	0.26	0.260	I	0	1.22
25.750	0.00	0.26	0.258	I	0	1.21
25.833	0.00	0.26	0.256	I	0	1.20
25.917	0.00	0.26	0.254	I	0	1.19
26.000	0.00	0.26	0.252	I	0	1.19
26.083	0.00	0.26	0.251	I	0	1.18
26.167	0.00	0.26	0.249	I	0	1.17
26.250	0.00	0.25	0.247	I	0	1.17
26.333	0.00	0.25	0.245	I	0	1.16
26.417	0.00	0.25	0.244	I	0	1.15
26.500	0.00	0.25	0.242	I	0	1.14
26.583	0.00	0.25	0.240	I	0	1.14
26.667	0.00	0.25	0.238	I	0	1.13
26.750	0.00	0.25	0.237	I	0	1.12
26.833	0.00	0.25	0.235	I	0	1.12
26.917	0.00	0.25	0.233	I	0	1.11
27.000	0.00	0.25	0.232	I	0	1.10
27.083	0.00	0.25	0.230	I	0	1.10
27.167	0.00	0.25	0.228	I	0	1.09
27.250	0.00	0.25	0.227	I	0	1.08
27.333	0.00	0.24	0.225	I	0	1.08
27.417	0.00	0.24	0.223	I	0	1.07
27.500	0.00	0.24	0.221	I	0	1.06
27.583	0.00	0.24	0.220	I	0	1.06
27.667	0.00	0.24	0.218	I	0	1.05
27.750	0.00	0.24	0.216	I	0	1.04
27.833	0.00	0.24	0.215	I	0	1.04
27.917	0.00	0.24	0.213	I	0	1.03
28.000	0.00	0.24	0.212	I	0	1.02
28.083	0.00	0.24	0.210	I	0	1.02
28.167	0.00	0.24	0.208	I	0	1.01
28.250	0.00	0.24	0.207	I	0	1.00
28.333	0.00	0.24	0.205	I	0	1.00
28.417	0.00	0.23	0.203	I	0	0.99
28.500	0.00	0.23	0.202	I	0	0.98
28.583	0.00	0.23	0.200	I	0	0.98
28.667	0.00	0.23	0.199	I	0	0.97
28.750	0.00	0.23	0.197	I	0	0.96
28.833	0.00	0.23	0.195	I	0	0.96
28.917	0.00	0.23	0.194	I	0	0.95
29.000	0.00	0.23	0.192	I	0	0.94
29.083	0.00	0.23	0.191	I	0	0.94
29.167	0.00	0.23	0.189	I	0	0.93
29.250	0.00	0.23	0.188	I	0	0.93
29.333	0.00	0.22	0.186	I	0	0.92
29.417	0.00	0.22	0.184	I	0	0.91

29.500	0.00	0.22	0.183	I	0	0.91
29.583	0.00	0.22	0.181	I	0	0.90
29.667	0.00	0.22	0.180	I	0	0.90
29.750	0.00	0.22	0.178	I	0	0.89
29.833	0.00	0.22	0.177	I	0	0.88
29.917	0.00	0.22	0.175	I	0	0.88
30.000	0.00	0.22	0.174	I	0	0.87
30.083	0.00	0.22	0.172	I	0	0.87
30.167	0.00	0.22	0.171	I	0	0.86
30.250	0.00	0.22	0.169	I	0	0.85
30.333	0.00	0.21	0.168	I	0	0.85
30.417	0.00	0.21	0.166	I	0	0.84
30.500	0.00	0.21	0.165	I	0	0.84
30.583	0.00	0.21	0.163	I	0	0.83
30.667	0.00	0.21	0.162	I	0	0.82
30.750	0.00	0.21	0.160	I	0	0.82
30.833	0.00	0.21	0.159	I	0	0.81
30.917	0.00	0.21	0.158	I	0	0.81
31.000	0.00	0.21	0.156	I	0	0.80
31.083	0.00	0.21	0.155	I	0	0.79
31.167	0.00	0.21	0.153	I	0	0.79
31.250	0.00	0.21	0.152	I	0	0.78
31.333	0.00	0.21	0.150	I	0	0.78
31.417	0.00	0.20	0.149	I	0	0.77
31.500	0.00	0.20	0.148	I	0	0.77
31.583	0.00	0.20	0.146	I	0	0.76
31.667	0.00	0.20	0.145	I	0	0.76
31.750	0.00	0.20	0.143	I	0	0.75
31.833	0.00	0.20	0.142	I	0	0.74
31.917	0.00	0.20	0.141	I	0	0.74
32.000	0.00	0.20	0.139	I	0	0.73
32.083	0.00	0.20	0.138	I	0	0.73
32.167	0.00	0.20	0.137	I	0	0.72
32.250	0.00	0.20	0.135	I	0	0.72
32.333	0.00	0.20	0.134	I	0	0.71
32.417	0.00	0.20	0.133	I	0	0.71
32.500	0.00	0.19	0.131	I	0	0.70
32.583	0.00	0.19	0.130	I	0	0.70
32.667	0.00	0.19	0.128	I	0	0.69
32.750	0.00	0.19	0.127	I	0	0.68
32.833	0.00	0.19	0.126	I	0	0.68
32.917	0.00	0.19	0.125	I	0	0.67
33.000	0.00	0.19	0.123	I	0	0.67
33.083	0.00	0.19	0.122	I	0	0.66
33.167	0.00	0.19	0.121	I	0	0.66
33.250	0.00	0.19	0.119	I	0	0.65
33.333	0.00	0.19	0.118	I	0	0.65
33.417	0.00	0.19	0.117	I	0	0.64
33.500	0.00	0.19	0.115	I	0	0.64
33.583	0.00	0.19	0.114	I	0	0.63
33.667	0.00	0.18	0.113	I	0	0.63
33.750	0.00	0.18	0.112	I	0	0.62
33.833	0.00	0.18	0.110	I	0	0.62
33.917	0.00	0.18	0.109	I	0	0.61
34.000	0.00	0.18	0.108	I	0	0.61
34.083	0.00	0.18	0.107	I	0	0.60
34.167	0.00	0.18	0.105	I	0	0.60
34.250	0.00	0.18	0.104	I	0	0.59
34.333	0.00	0.18	0.103	I	0	0.59
34.417	0.00	0.18	0.102	I	0	0.58
34.500	0.00	0.18	0.100	I	0	0.58
34.583	0.00	0.18	0.099	I	0	0.57
34.667	0.00	0.18	0.098	I	0	0.57
34.750	0.00	0.18	0.097	I	0	0.56
34.833	0.00	0.18	0.096	I	0	0.56
34.917	0.00	0.17	0.094	I	0	0.55
35.000	0.00	0.17	0.093	I	0	0.55
35.083	0.00	0.17	0.092	I	0	0.54
35.167	0.00	0.17	0.091	I	0	0.54
35.250	0.00	0.17	0.090	I	0	0.53
35.333	0.00	0.17	0.088	I	0	0.53
35.417	0.00	0.17	0.087	I	0	0.52

35.500	0.00	0.17	0.086	I	0	0.52
35.583	0.00	0.17	0.085	I	0	0.52
35.667	0.00	0.17	0.084	I	0	0.51
35.750	0.00	0.17	0.083	I	0	0.51
35.833	0.00	0.17	0.081	I	0	0.50
35.917	0.00	0.17	0.080	I	0	0.50
36.000	0.00	0.17	0.079	I	0	0.49
36.083	0.00	0.16	0.078	I	0	0.49
36.167	0.00	0.16	0.077	I	0	0.48
36.250	0.00	0.16	0.076	I	0	0.48
36.333	0.00	0.16	0.075	I	0	0.47
36.417	0.00	0.16	0.073	I	0	0.47
36.500	0.00	0.16	0.072	I	0	0.46
36.583	0.00	0.16	0.071	I	0	0.46
36.667	0.00	0.16	0.070	I	0	0.46
36.750	0.00	0.16	0.069	I	0	0.45
36.833	0.00	0.16	0.068	I	0	0.45
36.917	0.00	0.16	0.067	I	0	0.44
37.000	0.00	0.16	0.066	I	0	0.44
37.083	0.00	0.15	0.065	I	0	0.43
37.167	0.00	0.15	0.064	I	0	0.43
37.250	0.00	0.15	0.063	I	0	0.42
37.333	0.00	0.15	0.062	I	0	0.42
37.417	0.00	0.15	0.061	I	0	0.42
37.500	0.00	0.15	0.060	I	0	0.41
37.583	0.00	0.15	0.058	I	0	0.41
37.667	0.00	0.15	0.057	I	0	0.40
37.750	0.00	0.15	0.056	I	0	0.40
37.833	0.00	0.15	0.055	I	0	0.39
37.917	0.00	0.15	0.054	I	0	0.39
38.000	0.00	0.15	0.053	I	0	0.39
38.083	0.00	0.15	0.052	I	0	0.38
38.167	0.00	0.14	0.051	I	0	0.38
38.250	0.00	0.14	0.050	I	0	0.37
38.333	0.00	0.14	0.049	I	0	0.37
38.417	0.00	0.14	0.048	I	0	0.37
38.500	0.00	0.14	0.047	I	0	0.36
38.583	0.00	0.14	0.046	I	0	0.36
38.667	0.00	0.14	0.045	I	0	0.35
38.750	0.00	0.14	0.044	I	0	0.35
38.833	0.00	0.14	0.044	I	0	0.35
38.917	0.00	0.14	0.043	I	0	0.34
39.000	0.00	0.14	0.042	I	0	0.34
39.083	0.00	0.14	0.041	I	0	0.33
39.167	0.00	0.14	0.040	I	0	0.33
39.250	0.00	0.13	0.039	I	0	0.33
39.333	0.00	0.13	0.038	I	0	0.32
39.417	0.00	0.13	0.037	I	0	0.32
39.500	0.00	0.13	0.036	I	0	0.31
39.583	0.00	0.13	0.035	I	0	0.31
39.667	0.00	0.13	0.034	I	0	0.31
39.750	0.00	0.13	0.033	I	0	0.30
39.833	0.00	0.13	0.032	I	0	0.30
39.917	0.00	0.13	0.032	I	0	0.29
40.000	0.00	0.13	0.031	I	0	0.29
40.083	0.00	0.13	0.030	I	0	0.29
40.167	0.00	0.12	0.029	I	0	0.28
40.250	0.00	0.12	0.028	I	0	0.28
40.333	0.00	0.12	0.027	I	0	0.27
40.417	0.00	0.12	0.026	I	0	0.27
40.500	0.00	0.12	0.026	I	0	0.27
40.583	0.00	0.12	0.025	I	0	0.26
40.667	0.00	0.12	0.024	I	0	0.26
40.750	0.00	0.12	0.023	I	0	0.25
40.833	0.00	0.12	0.022	I	0	0.25
40.917	0.00	0.12	0.021	I	0	0.24
41.000	0.00	0.11	0.021	I	0	0.24
41.083	0.00	0.11	0.020	I	0	0.23
41.167	0.00	0.10	0.019	I	0	0.22
41.250	0.00	0.10	0.019	I	0	0.21
41.333	0.00	0.10	0.018	I	0	0.20
41.417	0.00	0.09	0.017	I	0	0.20

41.500	0.00	0.09	0.017	I 0	0.19
41.583	0.00	0.09	0.016	I 0	0.18
41.667	0.00	0.08	0.015	I 0	0.17
41.750	0.00	0.08	0.015	I 0	0.17
41.833	0.00	0.08	0.014	I 0	0.16
41.917	0.00	0.07	0.014	IO	0.16
42.000	0.00	0.07	0.013	IO	0.15
42.083	0.00	0.07	0.013	IO	0.15
42.167	0.00	0.07	0.012	IO	0.14
42.250	0.00	0.06	0.012	IO	0.14
42.333	0.00	0.06	0.011	IO	0.13
42.417	0.00	0.06	0.011	IO	0.13
42.500	0.00	0.06	0.011	IO	0.12
42.583	0.00	0.06	0.010	IO	0.12
42.667	0.00	0.05	0.010	IO	0.11
42.750	0.00	0.05	0.010	IO	0.11
42.833	0.00	0.05	0.009	IO	0.10
42.917	0.00	0.05	0.009	IO	0.10
43.000	0.00	0.05	0.009	IO	0.10
43.083	0.00	0.04	0.008	IO	0.09
43.167	0.00	0.04	0.008	IO	0.09
43.250	0.00	0.04	0.008	IO	0.09
43.333	0.00	0.04	0.007	IO	0.08
43.417	0.00	0.04	0.007	IO	0.08
43.500	0.00	0.04	0.007	0	0.08
43.583	0.00	0.04	0.007	0	0.07
43.667	0.00	0.03	0.006	0	0.07
43.750	0.00	0.03	0.006	0	0.07
43.833	0.00	0.03	0.006	0	0.07
43.917	0.00	0.03	0.006	0	0.06
44.000	0.00	0.03	0.005	0	0.06
44.083	0.00	0.03	0.005	0	0.06
44.167	0.00	0.03	0.005	0	0.06
44.250	0.00	0.03	0.005	0	0.06
44.333	0.00	0.03	0.005	0	0.05
44.417	0.00	0.02	0.005	0	0.05
44.500	0.00	0.02	0.004	0	0.05
44.583	0.00	0.02	0.004	0	0.05
44.667	0.00	0.02	0.004	0	0.05
44.750	0.00	0.02	0.004	0	0.04
44.833	0.00	0.02	0.004	0	0.04
44.917	0.00	0.02	0.004	0	0.04
45.000	0.00	0.02	0.004	0	0.04
45.083	0.00	0.02	0.003	0	0.04
45.167	0.00	0.02	0.003	0	0.04
45.250	0.00	0.02	0.003	0	0.04
45.333	0.00	0.02	0.003	0	0.03
45.417	0.00	0.02	0.003	0	0.03
45.500	0.00	0.02	0.003	0	0.03
45.583	0.00	0.01	0.003	0	0.03
45.667	0.00	0.01	0.003	0	0.03
45.750	0.00	0.01	0.003	0	0.03
45.833	0.00	0.01	0.002	0	0.03
45.917	0.00	0.01	0.002	0	0.03
46.000	0.00	0.01	0.002	0	0.03
46.083	0.00	0.01	0.002	0	0.02
46.167	0.00	0.01	0.002	0	0.02
46.250	0.00	0.01	0.002	0	0.02
46.333	0.00	0.01	0.002	0	0.02
46.417	0.00	0.01	0.002	0	0.02
46.500	0.00	0.01	0.002	0	0.02
46.583	0.00	0.01	0.002	0	0.02
46.667	0.00	0.01	0.002	0	0.02
46.750	0.00	0.01	0.002	0	0.02
46.833	0.00	0.01	0.002	0	0.02
46.917	0.00	0.01	0.002	0	0.02
47.000	0.00	0.01	0.001	0	0.02
47.083	0.00	0.01	0.001	0	0.02
47.167	0.00	0.01	0.001	0	0.02
47.250	0.00	0.01	0.001	0	0.01
47.333	0.00	0.01	0.001	0	0.01
47.417	0.00	0.01	0.001	0	0.01

47.500	0.00	0.01	0.001	0					0.01
47.583	0.00	0.01	0.001	0					0.01
47.667	0.00	0.01	0.001	0					0.01
47.750	0.00	0.01	0.001	0					0.01
47.833	0.00	0.01	0.001	0					0.01
47.917	0.00	0.01	0.001	0					0.01
48.000	0.00	0.00	0.001	0					0.01
48.083	0.00	0.00	0.001	0					0.01
48.167	0.00	0.00	0.001	0					0.01
48.250	0.00	0.00	0.001	0					0.01
48.333	0.00	0.00	0.001	0					0.01
48.417	0.00	0.00	0.001	0					0.01
48.500	0.00	0.00	0.001	0					0.01
48.583	0.00	0.00	0.001	0					0.01
48.667	0.00	0.00	0.001	0					0.01
48.750	0.00	0.00	0.001	0					0.01
48.833	0.00	0.00	0.001	0					0.01
48.917	0.00	0.00	0.001	0					0.01
49.000	0.00	0.00	0.001	0					0.01
49.083	0.00	0.00	0.001	0					0.01
49.167	0.00	0.00	0.001	0					0.01
49.250	0.00	0.00	0.001	0					0.01
49.333	0.00	0.00	0.001	0					0.01
49.417	0.00	0.00	0.000	0					0.01
49.500	0.00	0.00	0.000	0					0.01
49.583	0.00	0.00	0.000	0					0.01
49.667	0.00	0.00	0.000	0					0.01
49.750	0.00	0.00	0.000	0					0.00
49.833	0.00	0.00	0.000	0					0.00
49.917	0.00	0.00	0.000	0					0.00
50.000	0.00	0.00	0.000	0					0.00
50.083	0.00	0.00	0.000	0					0.00
50.167	0.00	0.00	0.000	0					0.00
50.250	0.00	0.00	0.000	0					0.00
50.333	0.00	0.00	0.000	0					0.00
50.417	0.00	0.00	0.000	0					0.00
50.500	0.00	0.00	0.000	0					0.00
50.583	0.00	0.00	0.000	0					0.00
50.667	0.00	0.00	0.000	0					0.00
50.750	0.00	0.00	0.000	0					0.00
50.833	0.00	0.00	0.000	0					0.00
50.917	0.00	0.00	0.000	0					0.00
51.000	0.00	0.00	0.000	0					0.00
51.083	0.00	0.00	0.000	0					0.00
51.167	0.00	0.00	0.000	0					0.00
51.250	0.00	0.00	0.000	0					0.00
51.333	0.00	0.00	0.000	0					0.00
51.417	0.00	0.00	0.000	0					0.00
51.500	0.00	0.00	0.000	0					0.00
51.583	0.00	0.00	0.000	0					0.00
51.667	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****
Number of intervals = 620
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.324 (CFS)
Total volume = 0.726 (Ac. Ft)
Status of hydrographs being held in storage
Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
Peak (CFS) 0.000 0.000 0.000 0.000 0.000
Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/05/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 100-131
 MITIGATION ANALYSIS
 6-HOUR - 2-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PA0262.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 74
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 3.317 (CFS)
 Total volume = 0.436 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 74
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.022	0.118	0.022	0.022
0.340	0.042	0.138	0.042	0.042
0.500	0.081	0.167	0.080	0.082
1.000	0.206	0.236	0.205	0.207
1.350	0.293	0.275	0.292	0.294
1.500	0.329	0.289	0.328	0.330
2.000	0.451	0.334	0.450	0.452
2.500	0.567	0.374	0.566	0.568
3.000	0.677	0.409	0.676	0.678
3.100	0.697	0.416	0.696	0.698
3.500	0.775	1.336	0.770	0.780
4.000	0.841	3.874	0.828	0.854
4.100	0.846	4.260	0.831	0.861
4.340	0.859	4.703	0.843	0.875

Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; '0' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	0	0.8	1.66	2.49	3.32	Depth (Ft.)
0.083	0.18	0.00	0.001	0I					0.01
0.167	0.33	0.01	0.002	0 I					0.03
0.250	0.38	0.03	0.005	0 I					0.05
0.333	0.38	0.04	0.007	0 I					0.08
0.417	0.38	0.05	0.009	0 I					0.11
0.500	0.42	0.06	0.012	0 I					0.13
0.583	0.44	0.08	0.014	0 I					0.16
0.667	0.44	0.09	0.017	0 I					0.19
0.750	0.44	0.10	0.019	0 I					0.22
0.833	0.44	0.11	0.021	0 I					0.24
0.917	0.44	0.12	0.024	0 I					0.26
1.000	0.48	0.12	0.026	0 I					0.27
1.083	0.50	0.12	0.028	0 I					0.28
1.167	0.51	0.13	0.031	0 I					0.29
1.250	0.51	0.13	0.034	0 I					0.30
1.333	0.51	0.13	0.036	0 I					0.31
1.417	0.51	0.13	0.039	0 I					0.33
1.500	0.51	0.14	0.041	0 I					0.34
1.583	0.51	0.14	0.044	0 I					0.35
1.667	0.51	0.14	0.046	0 I					0.36
1.750	0.51	0.14	0.049	0 I					0.37
1.833	0.51	0.14	0.051	0 I					0.38
1.917	0.51	0.15	0.054	0 I					0.39
2.000	0.54	0.15	0.056	0 I					0.40
2.083	0.53	0.15	0.059	0 I					0.41
2.167	0.55	0.15	0.062	0 I					0.42
2.250	0.57	0.15	0.065	0 I					0.43
2.333	0.57	0.16	0.067	0 I					0.44
2.417	0.57	0.16	0.070	0 I					0.46
2.500	0.57	0.16	0.073	0 I					0.47
2.583	0.57	0.16	0.076	0 I					0.48
2.667	0.57	0.17	0.079	0 I					0.49
2.750	0.61	0.17	0.082	0 I					0.50
2.833	0.63	0.17	0.085	0 I					0.51
2.917	0.63	0.17	0.088	0 I					0.53
3.000	0.63	0.17	0.091	0 I					0.54
3.083	0.63	0.17	0.094	0 I					0.55
3.167	0.67	0.18	0.097	0 I					0.57
3.250	0.69	0.18	0.101	0 I					0.58
3.333	0.70	0.18	0.104	0 I					0.59
3.417	0.73	0.18	0.108	0 I					0.61
3.500	0.79	0.18	0.112	0 I					0.62
3.583	0.85	0.19	0.116	0 I					0.64
3.667	0.88	0.19	0.121	0 I					0.66
3.750	0.92	0.19	0.126	0 I					0.68
3.833	0.94	0.19	0.131	0 I					0.70
3.917	0.98	0.20	0.136	0 I					0.72
4.000	1.01	0.20	0.142	0 I					0.74
4.083	1.05	0.20	0.148	0 I					0.77
4.167	1.11	0.21	0.154	0 I					0.79
4.250	1.17	0.21	0.160	0 I					0.82
4.333	1.23	0.21	0.167	0 I					0.84
4.417	1.30	0.22	0.174	0 I					0.87
4.500	1.32	0.22	0.182	0 I					0.90
4.583	1.36	0.23	0.189	0 I					0.93
4.667	1.42	0.23	0.197	0 I					0.97
4.750	1.49	0.24	0.206	0 I					1.00
4.833	1.51	0.24	0.214	0 I					1.03
4.917	1.55	0.24	0.223	0 I					1.07
5.000	1.61	0.25	0.233	0 I					1.11
5.083	1.82	0.25	0.243	0 I					1.15
5.167	2.12	0.26	0.254	0 I					1.19
5.250	2.37	0.26	0.268	0 I					1.25
5.333	2.56	0.27	0.283	0 I					1.31
5.417	2.83	0.28	0.300	0 I					1.38

5. 500	3. 32	0. 29	0. 319	0				1. 46
5. 583	2. 18	0. 29	0. 336	0				1. 53
5. 667	0. 97	0. 29	0. 345	0	I			1. 57
5. 750	0. 50	0. 30	0. 348	0	I			1. 58
5. 833	0. 35	0. 30	0. 349	0I				1. 58
5. 917	0. 25	0. 30	0. 349	0				1. 58
6. 000	0. 16	0. 30	0. 348	I0				1. 58
6. 083	0. 06	0. 30	0. 347	I 0				1. 57
6. 167	0. 01	0. 29	0. 345	I 0				1. 57
6. 250	0. 00	0. 29	0. 343	I 0				1. 56
6. 333	0. 00	0. 29	0. 341	I 0				1. 55
6. 417	0. 00	0. 29	0. 339	I 0				1. 54
6. 500	0. 00	0. 29	0. 337	I 0				1. 53
6. 583	0. 00	0. 29	0. 335	I 0				1. 52
6. 667	0. 00	0. 29	0. 333	I 0				1. 52
6. 750	0. 00	0. 29	0. 331	I 0				1. 51
6. 833	0. 00	0. 29	0. 329	I 0				1. 50
6. 917	0. 00	0. 29	0. 327	I 0				1. 49
7. 000	0. 00	0. 29	0. 325	I 0				1. 48
7. 083	0. 00	0. 29	0. 323	I 0				1. 48
7. 167	0. 00	0. 29	0. 321	I 0				1. 47
7. 250	0. 00	0. 29	0. 319	I 0				1. 46
7. 333	0. 00	0. 28	0. 317	I 0				1. 45
7. 417	0. 00	0. 28	0. 315	I 0				1. 44
7. 500	0. 00	0. 28	0. 313	I 0				1. 43
7. 583	0. 00	0. 28	0. 311	I 0				1. 43
7. 667	0. 00	0. 28	0. 309	I 0				1. 42
7. 750	0. 00	0. 28	0. 307	I 0				1. 41
7. 833	0. 00	0. 28	0. 306	I 0				1. 40
7. 917	0. 00	0. 28	0. 304	I 0				1. 39
8. 000	0. 00	0. 28	0. 302	I 0				1. 39
8. 083	0. 00	0. 28	0. 300	I 0				1. 38
8. 167	0. 00	0. 28	0. 298	I 0				1. 37
8. 250	0. 00	0. 28	0. 296	I 0				1. 36
8. 333	0. 00	0. 28	0. 294	I 0				1. 35
8. 417	0. 00	0. 27	0. 292	I 0				1. 35
8. 500	0. 00	0. 27	0. 290	I 0				1. 34
8. 583	0. 00	0. 27	0. 288	I 0				1. 33
8. 667	0. 00	0. 27	0. 287	I 0				1. 32
8. 750	0. 00	0. 27	0. 285	I 0				1. 32
8. 833	0. 00	0. 27	0. 283	I 0				1. 31
8. 917	0. 00	0. 27	0. 281	I 0				1. 30
9. 000	0. 00	0. 27	0. 279	I 0				1. 29
9. 083	0. 00	0. 27	0. 277	I 0				1. 29
9. 167	0. 00	0. 27	0. 275	I 0				1. 28
9. 250	0. 00	0. 27	0. 274	I 0				1. 27
9. 333	0. 00	0. 27	0. 272	I 0				1. 26
9. 417	0. 00	0. 26	0. 270	I 0				1. 26
9. 500	0. 00	0. 26	0. 268	I 0				1. 25
9. 583	0. 00	0. 26	0. 266	I 0				1. 24
9. 667	0. 00	0. 26	0. 264	I 0				1. 24
9. 750	0. 00	0. 26	0. 263	I 0				1. 23
9. 833	0. 00	0. 26	0. 261	I 0				1. 22
9. 917	0. 00	0. 26	0. 259	I 0				1. 21
10. 000	0. 00	0. 26	0. 257	I 0				1. 21
10. 083	0. 00	0. 26	0. 255	I 0				1. 20
10. 167	0. 00	0. 26	0. 254	I 0				1. 19
10. 250	0. 00	0. 26	0. 252	I 0				1. 18
10. 333	0. 00	0. 26	0. 250	I 0				1. 18
10. 417	0. 00	0. 26	0. 248	I 0				1. 17
10. 500	0. 00	0. 25	0. 247	I 0				1. 16
10. 583	0. 00	0. 25	0. 245	I 0				1. 16
10. 667	0. 00	0. 25	0. 243	I 0				1. 15
10. 750	0. 00	0. 25	0. 241	I 0				1. 14
10. 833	0. 00	0. 25	0. 240	I 0				1. 14
10. 917	0. 00	0. 25	0. 238	I 0				1. 13
11. 000	0. 00	0. 25	0. 236	I 0				1. 12
11. 083	0. 00	0. 25	0. 235	I 0				1. 11
11. 167	0. 00	0. 25	0. 233	I 0				1. 11
11. 250	0. 00	0. 25	0. 231	I 0				1. 10
11. 333	0. 00	0. 25	0. 229	I 0				1. 09
11. 417	0. 00	0. 25	0. 228	I 0				1. 09

11. 500	0. 00	0. 24	0. 226	I 0	1. 08
11. 583	0. 00	0. 24	0. 224	I 0	1. 07
11. 667	0. 00	0. 24	0. 223	I 0	1. 07
11. 750	0. 00	0. 24	0. 221	I 0	1. 06
11. 833	0. 00	0. 24	0. 219	I 0	1. 05
11. 917	0. 00	0. 24	0. 218	I 0	1. 05
12. 000	0. 00	0. 24	0. 216	I 0	1. 04
12. 083	0. 00	0. 24	0. 214	I 0	1. 03
12. 167	0. 00	0. 24	0. 213	I 0	1. 03
12. 250	0. 00	0. 24	0. 211	I 0	1. 02
12. 333	0. 00	0. 24	0. 209	I 0	1. 01
12. 417	0. 00	0. 24	0. 208	I 0	1. 01
12. 500	0. 00	0. 24	0. 206	I 0	1. 00
12. 583	0. 00	0. 24	0. 205	I 0	0. 99
12. 667	0. 00	0. 23	0. 203	I 0	0. 99
12. 750	0. 00	0. 23	0. 201	I 0	0. 98
12. 833	0. 00	0. 23	0. 200	I 0	0. 97
12. 917	0. 00	0. 23	0. 198	I 0	0. 97
13. 000	0. 00	0. 23	0. 197	I 0	0. 96
13. 083	0. 00	0. 23	0. 195	I 0	0. 96
13. 167	0. 00	0. 23	0. 193	I 0	0. 95
13. 250	0. 00	0. 23	0. 192	I 0	0. 94
13. 333	0. 00	0. 23	0. 190	I 0	0. 94
13. 417	0. 00	0. 23	0. 189	I 0	0. 93
13. 500	0. 00	0. 23	0. 187	I 0	0. 92
13. 583	0. 00	0. 22	0. 186	I 0	0. 92
13. 667	0. 00	0. 22	0. 184	I 0	0. 91
13. 750	0. 00	0. 22	0. 182	I 0	0. 91
13. 833	0. 00	0. 22	0. 181	I 0	0. 90
13. 917	0. 00	0. 22	0. 179	I 0	0. 89
14. 000	0. 00	0. 22	0. 178	I 0	0. 89
14. 083	0. 00	0. 22	0. 176	I 0	0. 88
14. 167	0. 00	0. 22	0. 175	I 0	0. 88
14. 250	0. 00	0. 22	0. 173	I 0	0. 87
14. 333	0. 00	0. 22	0. 172	I 0	0. 86
14. 417	0. 00	0. 22	0. 170	I 0	0. 86
14. 500	0. 00	0. 22	0. 169	I 0	0. 85
14. 583	0. 00	0. 21	0. 167	I 0	0. 85
14. 667	0. 00	0. 21	0. 166	I 0	0. 84
14. 750	0. 00	0. 21	0. 164	I 0	0. 83
14. 833	0. 00	0. 21	0. 163	I 0	0. 83
14. 917	0. 00	0. 21	0. 162	I 0	0. 82
15. 000	0. 00	0. 21	0. 160	I 0	0. 82
15. 083	0. 00	0. 21	0. 159	I 0	0. 81
15. 167	0. 00	0. 21	0. 157	I 0	0. 80
15. 250	0. 00	0. 21	0. 156	I 0	0. 80
15. 333	0. 00	0. 21	0. 154	I 0	0. 79
15. 417	0. 00	0. 21	0. 153	I 0	0. 79
15. 500	0. 00	0. 21	0. 151	I 0	0. 78
15. 583	0. 00	0. 21	0. 150	I 0	0. 78
15. 667	0. 00	0. 20	0. 149	I 0	0. 77
15. 750	0. 00	0. 20	0. 147	I 0	0. 76
15. 833	0. 00	0. 20	0. 146	I 0	0. 76
15. 917	0. 00	0. 20	0. 144	I 0	0. 75
16. 000	0. 00	0. 20	0. 143	I 0	0. 75
16. 083	0. 00	0. 20	0. 142	I 0	0. 74
16. 167	0. 00	0. 20	0. 140	I 0	0. 74
16. 250	0. 00	0. 20	0. 139	I 0	0. 73
16. 333	0. 00	0. 20	0. 138	I 0	0. 73
16. 417	0. 00	0. 20	0. 136	I 0	0. 72
16. 500	0. 00	0. 20	0. 135	I 0	0. 72
16. 583	0. 00	0. 20	0. 133	I 0	0. 71
16. 667	0. 00	0. 20	0. 132	I 0	0. 70
16. 750	0. 00	0. 19	0. 131	I 0	0. 70
16. 833	0. 00	0. 19	0. 129	I 0	0. 69
16. 917	0. 00	0. 19	0. 128	I 0	0. 69
17. 000	0. 00	0. 19	0. 127	I 0	0. 68
17. 083	0. 00	0. 19	0. 125	I 0	0. 68
17. 167	0. 00	0. 19	0. 124	I 0	0. 67
17. 250	0. 00	0. 19	0. 123	I 0	0. 67
17. 333	0. 00	0. 19	0. 122	I 0	0. 66
17. 417	0. 00	0. 19	0. 120	I 0	0. 66

17. 500	0. 00	0. 19	0. 119	IO	0. 65
17. 583	0. 00	0. 19	0. 118	IO	0. 65
17. 667	0. 00	0. 19	0. 116	IO	0. 64
17. 750	0. 00	0. 19	0. 115	IO	0. 64
17. 833	0. 00	0. 19	0. 114	IO	0. 63
17. 917	0. 00	0. 18	0. 113	IO	0. 63
18. 000	0. 00	0. 18	0. 111	IO	0. 62
18. 083	0. 00	0. 18	0. 110	IO	0. 62
18. 167	0. 00	0. 18	0. 109	IO	0. 61
18. 250	0. 00	0. 18	0. 107	IO	0. 61
18. 333	0. 00	0. 18	0. 106	IO	0. 60
18. 417	0. 00	0. 18	0. 105	IO	0. 60
18. 500	0. 00	0. 18	0. 104	IO	0. 59
18. 583	0. 00	0. 18	0. 103	IO	0. 59
18. 667	0. 00	0. 18	0. 101	IO	0. 58
18. 750	0. 00	0. 18	0. 100	IO	0. 58
18. 833	0. 00	0. 18	0. 099	IO	0. 57
18. 917	0. 00	0. 18	0. 098	IO	0. 57
19. 000	0. 00	0. 18	0. 096	IO	0. 56
19. 083	0. 00	0. 17	0. 095	IO	0. 56
19. 167	0. 00	0. 17	0. 094	IO	0. 55
19. 250	0. 00	0. 17	0. 093	IO	0. 55
19. 333	0. 00	0. 17	0. 092	IO	0. 54
19. 417	0. 00	0. 17	0. 090	IO	0. 54
19. 500	0. 00	0. 17	0. 089	IO	0. 53
19. 583	0. 00	0. 17	0. 088	IO	0. 53
19. 667	0. 00	0. 17	0. 087	IO	0. 52
19. 750	0. 00	0. 17	0. 086	IO	0. 52
19. 833	0. 00	0. 17	0. 085	IO	0. 51
19. 917	0. 00	0. 17	0. 083	IO	0. 51
20. 000	0. 00	0. 17	0. 082	IO	0. 50
20. 083	0. 00	0. 17	0. 081	IO	0. 50
20. 167	0. 00	0. 17	0. 080	IO	0. 50
20. 250	0. 00	0. 17	0. 079	IO	0. 49
20. 333	0. 00	0. 16	0. 078	IO	0. 49
20. 417	0. 00	0. 16	0. 077	IO	0. 48
20. 500	0. 00	0. 16	0. 075	IO	0. 48
20. 583	0. 00	0. 16	0. 074	IO	0. 47
20. 667	0. 00	0. 16	0. 073	IO	0. 47
20. 750	0. 00	0. 16	0. 072	IO	0. 46
20. 833	0. 00	0. 16	0. 071	IO	0. 46
20. 917	0. 00	0. 16	0. 070	IO	0. 45
21. 000	0. 00	0. 16	0. 069	IO	0. 45
21. 083	0. 00	0. 16	0. 068	IO	0. 45
21. 167	0. 00	0. 16	0. 067	IO	0. 44
21. 250	0. 00	0. 16	0. 066	IO	0. 44
21. 333	0. 00	0. 15	0. 064	IO	0. 43
21. 417	0. 00	0. 15	0. 063	IO	0. 43
21. 500	0. 00	0. 15	0. 062	IO	0. 42
21. 583	0. 00	0. 15	0. 061	IO	0. 42
21. 667	0. 00	0. 15	0. 060	IO	0. 41
21. 750	0. 00	0. 15	0. 059	IO	0. 41
21. 833	0. 00	0. 15	0. 058	IO	0. 41
21. 917	0. 00	0. 15	0. 057	IO	0. 40
22. 000	0. 00	0. 15	0. 056	IO	0. 40
22. 083	0. 00	0. 15	0. 055	IO	0. 39
22. 167	0. 00	0. 15	0. 054	IO	0. 39
22. 250	0. 00	0. 15	0. 053	IO	0. 39
22. 333	0. 00	0. 15	0. 052	IO	0. 38
22. 417	0. 00	0. 14	0. 051	IO	0. 38
22. 500	0. 00	0. 14	0. 050	IO	0. 37
22. 583	0. 00	0. 14	0. 049	IO	0. 37
22. 667	0. 00	0. 14	0. 048	IO	0. 37
22. 750	0. 00	0. 14	0. 047	IO	0. 36
22. 833	0. 00	0. 14	0. 046	IO	0. 36
22. 917	0. 00	0. 14	0. 045	IO	0. 35
23. 000	0. 00	0. 14	0. 044	IO	0. 35
23. 083	0. 00	0. 14	0. 043	IO	0. 35
23. 167	0. 00	0. 14	0. 042	IO	0. 34
23. 250	0. 00	0. 14	0. 041	IO	0. 34
23. 333	0. 00	0. 14	0. 040	IO	0. 33
23. 417	0. 00	0. 14	0. 039	IO	0. 33

23.500	0.00	0.13	0.039	IO	0.32
23.583	0.00	0.13	0.038	IO	0.32
23.667	0.00	0.13	0.037	IO	0.32
23.750	0.00	0.13	0.036	IO	0.31
23.833	0.00	0.13	0.035	IO	0.31
23.917	0.00	0.13	0.034	IO	0.30
24.000	0.00	0.13	0.033	IO	0.30
24.083	0.00	0.13	0.032	IO	0.30
24.167	0.00	0.13	0.031	IO	0.29
24.250	0.00	0.13	0.030	IO	0.29
24.333	0.00	0.13	0.030	IO	0.28
24.417	0.00	0.12	0.029	IO	0.28
24.500	0.00	0.12	0.028	IO	0.28
24.583	0.00	0.12	0.027	IO	0.27
24.667	0.00	0.12	0.026	IO	0.27
24.750	0.00	0.12	0.025	IO	0.27
24.833	0.00	0.12	0.025	IO	0.26
24.917	0.00	0.12	0.024	IO	0.26
25.000	0.00	0.12	0.023	IO	0.25
25.083	0.00	0.12	0.022	IO	0.25
25.167	0.00	0.11	0.021	IO	0.24
25.250	0.00	0.11	0.020	IO	0.23
25.333	0.00	0.11	0.020	IO	0.22
25.417	0.00	0.10	0.019	0	0.22
25.500	0.00	0.10	0.018	0	0.21
25.583	0.00	0.09	0.018	0	0.20
25.667	0.00	0.09	0.017	0	0.19
25.750	0.00	0.09	0.016	0	0.19
25.833	0.00	0.08	0.016	0	0.18
25.917	0.00	0.08	0.015	0	0.17
26.000	0.00	0.08	0.015	0	0.17
26.083	0.00	0.08	0.014	0	0.16
26.167	0.00	0.07	0.014	0	0.15
26.250	0.00	0.07	0.013	0	0.15
26.333	0.00	0.07	0.013	0	0.14
26.417	0.00	0.07	0.012	0	0.14
26.500	0.00	0.06	0.012	0	0.13
26.583	0.00	0.06	0.011	0	0.13
26.667	0.00	0.06	0.011	0	0.12
26.750	0.00	0.06	0.011	0	0.12
26.833	0.00	0.05	0.010	0	0.12
26.917	0.00	0.05	0.010	0	0.11
27.000	0.00	0.05	0.009	0	0.11
27.083	0.00	0.05	0.009	0	0.10
27.167	0.00	0.05	0.009	0	0.10
27.250	0.00	0.05	0.008	0	0.10
27.333	0.00	0.04	0.008	0	0.09
27.417	0.00	0.04	0.008	0	0.09
27.500	0.00	0.04	0.008	0	0.09
27.583	0.00	0.04	0.007	0	0.08
27.667	0.00	0.04	0.007	0	0.08
27.750	0.00	0.04	0.007	0	0.08
27.833	0.00	0.03	0.007	0	0.07
27.917	0.00	0.03	0.006	0	0.07
28.000	0.00	0.03	0.006	0	0.07
28.083	0.00	0.03	0.006	0	0.07
28.167	0.00	0.03	0.006	0	0.06
28.250	0.00	0.03	0.005	0	0.06
28.333	0.00	0.03	0.005	0	0.06
28.417	0.00	0.03	0.005	0	0.06
28.500	0.00	0.03	0.005	0	0.06
28.583	0.00	0.03	0.005	0	0.05
28.667	0.00	0.02	0.005	0	0.05
28.750	0.00	0.02	0.004	0	0.05
28.833	0.00	0.02	0.004	0	0.05
28.917	0.00	0.02	0.004	0	0.05
29.000	0.00	0.02	0.004	0	0.04
29.083	0.00	0.02	0.004	0	0.04
29.167	0.00	0.02	0.004	0	0.04
29.250	0.00	0.02	0.003	0	0.04
29.333	0.00	0.02	0.003	0	0.04
29.417	0.00	0.02	0.003	0	0.04

29.500	0.00	0.02	0.003	0	0.04
29.583	0.00	0.02	0.003	0	0.03
29.667	0.00	0.02	0.003	0	0.03
29.750	0.00	0.01	0.003	0	0.03
29.833	0.00	0.01	0.003	0	0.03
29.917	0.00	0.01	0.003	0	0.03
30.000	0.00	0.01	0.002	0	0.03
30.083	0.00	0.01	0.002	0	0.03
30.167	0.00	0.01	0.002	0	0.03
30.250	0.00	0.01	0.002	0	0.03
30.333	0.00	0.01	0.002	0	0.02
30.417	0.00	0.01	0.002	0	0.02
30.500	0.00	0.01	0.002	0	0.02
30.583	0.00	0.01	0.002	0	0.02
30.667	0.00	0.01	0.002	0	0.02
30.750	0.00	0.01	0.002	0	0.02
30.833	0.00	0.01	0.002	0	0.02
30.917	0.00	0.01	0.002	0	0.02
31.000	0.00	0.01	0.002	0	0.02
31.083	0.00	0.01	0.002	0	0.02
31.167	0.00	0.01	0.001	0	0.02
31.250	0.00	0.01	0.001	0	0.02
31.333	0.00	0.01	0.001	0	0.02
31.417	0.00	0.01	0.001	0	0.02
31.500	0.00	0.01	0.001	0	0.01
31.583	0.00	0.01	0.001	0	0.01
31.667	0.00	0.01	0.001	0	0.01
31.750	0.00	0.01	0.001	0	0.01
31.833	0.00	0.01	0.001	0	0.01
31.917	0.00	0.01	0.001	0	0.01
32.000	0.00	0.01	0.001	0	0.01
32.083	0.00	0.01	0.001	0	0.01
32.167	0.00	0.01	0.001	0	0.01
32.250	0.00	0.00	0.001	0	0.01
32.333	0.00	0.00	0.001	0	0.01
32.417	0.00	0.00	0.001	0	0.01
32.500	0.00	0.00	0.001	0	0.01
32.583	0.00	0.00	0.001	0	0.01
32.667	0.00	0.00	0.001	0	0.01
32.750	0.00	0.00	0.001	0	0.01
32.833	0.00	0.00	0.001	0	0.01
32.917	0.00	0.00	0.001	0	0.01
33.000	0.00	0.00	0.001	0	0.01
33.083	0.00	0.00	0.001	0	0.01
33.167	0.00	0.00	0.001	0	0.01
33.250	0.00	0.00	0.001	0	0.01
33.333	0.00	0.00	0.001	0	0.01
33.417	0.00	0.00	0.001	0	0.01
33.500	0.00	0.00	0.001	0	0.01
33.583	0.00	0.00	0.001	0	0.01
33.667	0.00	0.00	0.000	0	0.01
33.750	0.00	0.00	0.000	0	0.01
33.833	0.00	0.00	0.000	0	0.01
33.917	0.00	0.00	0.000	0	0.00
34.000	0.00	0.00	0.000	0	0.00
34.083	0.00	0.00	0.000	0	0.00
34.167	0.00	0.00	0.000	0	0.00
34.250	0.00	0.00	0.000	0	0.00
34.333	0.00	0.00	0.000	0	0.00
34.417	0.00	0.00	0.000	0	0.00
34.500	0.00	0.00	0.000	0	0.00
34.583	0.00	0.00	0.000	0	0.00
34.667	0.00	0.00	0.000	0	0.00
34.750	0.00	0.00	0.000	0	0.00
34.833	0.00	0.00	0.000	0	0.00
34.917	0.00	0.00	0.000	0	0.00
35.000	0.00	0.00	0.000	0	0.00
35.083	0.00	0.00	0.000	0	0.00
35.167	0.00	0.00	0.000	0	0.00
35.250	0.00	0.00	0.000	0	0.00
35.333	0.00	0.00	0.000	0	0.00
35.417	0.00	0.00	0.000	0	0.00

35.500	0.00	0.00	0.000	0					0.00
35.583	0.00	0.00	0.000	0					0.00
35.667	0.00	0.00	0.000	0					0.00
35.750	0.00	0.00	0.000	0					0.00
35.833	0.00	0.00	0.000	0					0.00
35.917	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 431
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 0.296 (CFS)
 Total volume = 0.436 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/05/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 100-131
 MITIGATION ANALYSIS
 3-HOUR - 2-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PA0232.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 38
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 3.788 (CFS)
 Total volume = 0.328 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 38
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.022	0.118	0.022	0.022
0.340	0.042	0.138	0.042	0.042
0.500	0.081	0.167	0.080	0.082
1.000	0.206	0.236	0.205	0.207
1.350	0.293	0.275	0.292	0.294
1.500	0.329	0.289	0.328	0.330
2.000	0.451	0.334	0.450	0.452
2.500	0.567	0.374	0.566	0.568
3.000	0.677	0.409	0.676	0.678
3.100	0.697	0.416	0.696	0.698
3.500	0.775	1.336	0.770	0.780
4.000	0.841	3.874	0.828	0.854
4.100	0.846	4.260	0.831	0.861
4.340	0.859	4.703	0.843	0.875

Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; '0' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	0	0.9	1.89	2.84	3.79	Depth (Ft.)
0.083	0.36	0.01	0.001	0	I				0.01
0.167	0.58	0.02	0.004	0	I				0.05
0.250	0.56	0.04	0.008	0	I				0.09
0.333	0.64	0.06	0.012	0	I				0.13
0.417	0.70	0.09	0.016	0	I				0.18
0.500	0.79	0.11	0.020	0	I				0.23
0.583	0.76	0.12	0.025	0	I				0.26
0.667	0.80	0.13	0.029	0	I				0.28
0.750	0.85	0.13	0.034	0	I				0.31
0.833	0.77	0.13	0.039	0	I				0.33
0.917	0.75	0.14	0.043	0	I				0.34
1.000	0.81	0.14	0.048	0	I				0.36
1.083	0.96	0.15	0.053	0	I				0.38
1.167	1.03	0.15	0.059	0	I				0.41
1.250	1.04	0.15	0.065	0	I				0.43
1.333	0.99	0.16	0.071	0	I				0.46
1.417	1.12	0.16	0.077	0	I				0.48
1.500	1.24	0.17	0.084	0	I				0.51
1.583	1.20	0.17	0.091	0	I				0.54
1.667	1.23	0.18	0.098	0	I				0.57
1.750	1.44	0.18	0.106	0	I				0.60
1.833	1.49	0.19	0.115	0	I				0.64
1.917	1.42	0.19	0.124	0	I				0.67
2.000	1.41	0.20	0.132	0	I				0.70
2.083	1.45	0.20	0.140	0	I				0.74
2.167	1.77	0.21	0.150	0	I				0.78
2.250	2.18	0.21	0.162	0	I				0.83
2.333	1.94	0.22	0.175	0	I				0.88
2.417	2.60	0.23	0.189	0	I				0.93
2.500	3.30	0.24	0.208	0	I				1.01
2.583	3.79	0.25	0.231	0	I				1.10
2.667	3.29	0.26	0.253	0	I				1.19
2.750	1.80	0.26	0.269	0	I				1.25
2.833	1.00	0.27	0.277	0	I				1.28
2.917	0.86	0.27	0.281	0	I				1.30
3.000	0.52	0.27	0.284	0	I				1.31
3.083	0.15	0.27	0.285	I	0				1.32
3.167	0.02	0.27	0.283	I	0				1.31
3.250	0.00	0.27	0.281	I	0				1.30
3.333	0.00	0.27	0.280	I	0				1.30
3.417	0.00	0.27	0.278	I	0				1.29
3.500	0.00	0.27	0.276	I	0				1.28
3.583	0.00	0.27	0.274	I	0				1.27
3.667	0.00	0.27	0.272	I	0				1.27
3.750	0.00	0.26	0.270	I	0				1.26
3.833	0.00	0.26	0.269	I	0				1.25
3.917	0.00	0.26	0.267	I	0				1.24
4.000	0.00	0.26	0.265	I	0				1.24
4.083	0.00	0.26	0.263	I	0				1.23
4.167	0.00	0.26	0.261	I	0				1.22
4.250	0.00	0.26	0.260	I	0				1.22
4.333	0.00	0.26	0.258	I	0				1.21
4.417	0.00	0.26	0.256	I	0				1.20
4.500	0.00	0.26	0.254	I	0				1.19
4.583	0.00	0.26	0.252	I	0				1.19
4.667	0.00	0.26	0.251	I	0				1.18
4.750	0.00	0.26	0.249	I	0				1.17
4.833	0.00	0.25	0.247	I	0				1.17
4.917	0.00	0.25	0.245	I	0				1.16
5.000	0.00	0.25	0.244	I	0				1.15
5.083	0.00	0.25	0.242	I	0				1.14
5.167	0.00	0.25	0.240	I	0				1.14
5.250	0.00	0.25	0.239	I	0				1.13
5.333	0.00	0.25	0.237	I	0				1.12
5.417	0.00	0.25	0.235	I	0				1.12

5. 500	0. 00	0. 25	0. 233	I 0	1. 11
5. 583	0. 00	0. 25	0. 232	I 0	1. 10
5. 667	0. 00	0. 25	0. 230	I 0	1. 10
5. 750	0. 00	0. 25	0. 228	I 0	1. 09
5. 833	0. 00	0. 25	0. 227	I 0	1. 08
5. 917	0. 00	0. 24	0. 225	I 0	1. 08
6. 000	0. 00	0. 24	0. 223	I 0	1. 07
6. 083	0. 00	0. 24	0. 222	I 0	1. 06
6. 167	0. 00	0. 24	0. 220	I 0	1. 06
6. 250	0. 00	0. 24	0. 218	I 0	1. 05
6. 333	0. 00	0. 24	0. 217	I 0	1. 04
6. 417	0. 00	0. 24	0. 215	I 0	1. 04
6. 500	0. 00	0. 24	0. 213	I 0	1. 03
6. 583	0. 00	0. 24	0. 212	I 0	1. 02
6. 667	0. 00	0. 24	0. 210	I 0	1. 02
6. 750	0. 00	0. 24	0. 208	I 0	1. 01
6. 833	0. 00	0. 24	0. 207	IO	1. 00
6. 917	0. 00	0. 24	0. 205	IO	1. 00
7. 000	0. 00	0. 23	0. 203	IO	0. 99
7. 083	0. 00	0. 23	0. 202	IO	0. 98
7. 167	0. 00	0. 23	0. 200	IO	0. 98
7. 250	0. 00	0. 23	0. 199	IO	0. 97
7. 333	0. 00	0. 23	0. 197	IO	0. 96
7. 417	0. 00	0. 23	0. 195	IO	0. 96
7. 500	0. 00	0. 23	0. 194	IO	0. 95
7. 583	0. 00	0. 23	0. 192	IO	0. 95
7. 667	0. 00	0. 23	0. 191	IO	0. 94
7. 750	0. 00	0. 23	0. 189	IO	0. 93
7. 833	0. 00	0. 23	0. 188	IO	0. 93
7. 917	0. 00	0. 22	0. 186	IO	0. 92
8. 000	0. 00	0. 22	0. 184	IO	0. 91
8. 083	0. 00	0. 22	0. 183	IO	0. 91
8. 167	0. 00	0. 22	0. 181	IO	0. 90
8. 250	0. 00	0. 22	0. 180	IO	0. 90
8. 333	0. 00	0. 22	0. 178	IO	0. 89
8. 417	0. 00	0. 22	0. 177	IO	0. 88
8. 500	0. 00	0. 22	0. 175	IO	0. 88
8. 583	0. 00	0. 22	0. 174	IO	0. 87
8. 667	0. 00	0. 22	0. 172	IO	0. 87
8. 750	0. 00	0. 22	0. 171	IO	0. 86
8. 833	0. 00	0. 22	0. 169	IO	0. 85
8. 917	0. 00	0. 21	0. 168	IO	0. 85
9. 000	0. 00	0. 21	0. 166	IO	0. 84
9. 083	0. 00	0. 21	0. 165	IO	0. 84
9. 167	0. 00	0. 21	0. 163	IO	0. 83
9. 250	0. 00	0. 21	0. 162	IO	0. 82
9. 333	0. 00	0. 21	0. 161	IO	0. 82
9. 417	0. 00	0. 21	0. 159	IO	0. 81
9. 500	0. 00	0. 21	0. 158	IO	0. 81
9. 583	0. 00	0. 21	0. 156	IO	0. 80
9. 667	0. 00	0. 21	0. 155	IO	0. 79
9. 750	0. 00	0. 21	0. 153	IO	0. 79
9. 833	0. 00	0. 21	0. 152	IO	0. 78
9. 917	0. 00	0. 21	0. 150	IO	0. 78
10. 000	0. 00	0. 20	0. 149	IO	0. 77
10. 083	0. 00	0. 20	0. 148	IO	0. 77
10. 167	0. 00	0. 20	0. 146	IO	0. 76
10. 250	0. 00	0. 20	0. 145	IO	0. 76
10. 333	0. 00	0. 20	0. 143	IO	0. 75
10. 417	0. 00	0. 20	0. 142	IO	0. 74
10. 500	0. 00	0. 20	0. 141	IO	0. 74
10. 583	0. 00	0. 20	0. 139	IO	0. 73
10. 667	0. 00	0. 20	0. 138	IO	0. 73
10. 750	0. 00	0. 20	0. 137	IO	0. 72
10. 833	0. 00	0. 20	0. 135	IO	0. 72
10. 917	0. 00	0. 20	0. 134	IO	0. 71
11. 000	0. 00	0. 20	0. 133	IO	0. 71
11. 083	0. 00	0. 19	0. 131	IO	0. 70
11. 167	0. 00	0. 19	0. 130	IO	0. 70
11. 250	0. 00	0. 19	0. 129	IO	0. 69
11. 333	0. 00	0. 19	0. 127	IO	0. 68
11. 417	0. 00	0. 19	0. 126	IO	0. 68

11. 500	0. 00	0. 19	0. 125	IO	0. 67
11. 583	0. 00	0. 19	0. 123	IO	0. 67
11. 667	0. 00	0. 19	0. 122	IO	0. 66
11. 750	0. 00	0. 19	0. 121	IO	0. 66
11. 833	0. 00	0. 19	0. 119	IO	0. 65
11. 917	0. 00	0. 19	0. 118	IO	0. 65
12. 000	0. 00	0. 19	0. 117	IO	0. 64
12. 083	0. 00	0. 19	0. 115	IO	0. 64
12. 167	0. 00	0. 19	0. 114	IO	0. 63
12. 250	0. 00	0. 18	0. 113	IO	0. 63
12. 333	0. 00	0. 18	0. 112	IO	0. 62
12. 417	0. 00	0. 18	0. 110	IO	0. 62
12. 500	0. 00	0. 18	0. 109	IO	0. 61
12. 583	0. 00	0. 18	0. 108	IO	0. 61
12. 667	0. 00	0. 18	0. 107	IO	0. 60
12. 750	0. 00	0. 18	0. 105	IO	0. 60
12. 833	0. 00	0. 18	0. 104	IO	0. 59
12. 917	0. 00	0. 18	0. 103	IO	0. 59
13. 000	0. 00	0. 18	0. 102	IO	0. 58
13. 083	0. 00	0. 18	0. 100	IO	0. 58
13. 167	0. 00	0. 18	0. 099	IO	0. 57
13. 250	0. 00	0. 18	0. 098	IO	0. 57
13. 333	0. 00	0. 18	0. 097	IO	0. 56
13. 417	0. 00	0. 18	0. 096	IO	0. 56
13. 500	0. 00	0. 17	0. 094	IO	0. 55
13. 583	0. 00	0. 17	0. 093	IO	0. 55
13. 667	0. 00	0. 17	0. 092	IO	0. 54
13. 750	0. 00	0. 17	0. 091	IO	0. 54
13. 833	0. 00	0. 17	0. 090	IO	0. 53
13. 917	0. 00	0. 17	0. 088	IO	0. 53
14. 000	0. 00	0. 17	0. 087	IO	0. 52
14. 083	0. 00	0. 17	0. 086	IO	0. 52
14. 167	0. 00	0. 17	0. 085	IO	0. 52
14. 250	0. 00	0. 17	0. 084	IO	0. 51
14. 333	0. 00	0. 17	0. 083	IO	0. 51
14. 417	0. 00	0. 17	0. 081	IO	0. 50
14. 500	0. 00	0. 17	0. 080	IO	0. 50
14. 583	0. 00	0. 17	0. 079	IO	0. 49
14. 667	0. 00	0. 16	0. 078	IO	0. 49
14. 750	0. 00	0. 16	0. 077	IO	0. 48
14. 833	0. 00	0. 16	0. 076	IO	0. 48
14. 917	0. 00	0. 16	0. 075	IO	0. 47
15. 000	0. 00	0. 16	0. 074	IO	0. 47
15. 083	0. 00	0. 16	0. 072	IO	0. 46
15. 167	0. 00	0. 16	0. 071	IO	0. 46
15. 250	0. 00	0. 16	0. 070	IO	0. 46
15. 333	0. 00	0. 16	0. 069	IO	0. 45
15. 417	0. 00	0. 16	0. 068	IO	0. 45
15. 500	0. 00	0. 16	0. 067	IO	0. 44
15. 583	0. 00	0. 16	0. 066	IO	0. 44
15. 667	0. 00	0. 15	0. 065	IO	0. 43
15. 750	0. 00	0. 15	0. 064	IO	0. 43
15. 833	0. 00	0. 15	0. 063	IO	0. 42
15. 917	0. 00	0. 15	0. 062	IO	0. 42
16. 000	0. 00	0. 15	0. 061	IO	0. 42
16. 083	0. 00	0. 15	0. 060	IO	0. 41
16. 167	0. 00	0. 15	0. 058	IO	0. 41
16. 250	0. 00	0. 15	0. 057	IO	0. 40
16. 333	0. 00	0. 15	0. 056	IO	0. 40
16. 417	0. 00	0. 15	0. 055	IO	0. 40
16. 500	0. 00	0. 15	0. 054	IO	0. 39
16. 583	0. 00	0. 15	0. 053	IO	0. 39
16. 667	0. 00	0. 15	0. 052	IO	0. 38
16. 750	0. 00	0. 14	0. 051	IO	0. 38
16. 833	0. 00	0. 14	0. 050	IO	0. 37
16. 917	0. 00	0. 14	0. 049	IO	0. 37
17. 000	0. 00	0. 14	0. 048	IO	0. 37
17. 083	0. 00	0. 14	0. 047	IO	0. 36
17. 167	0. 00	0. 14	0. 046	IO	0. 36
17. 250	0. 00	0. 14	0. 045	IO	0. 35
17. 333	0. 00	0. 14	0. 045	IO	0. 35
17. 417	0. 00	0. 14	0. 044	IO	0. 35

17. 500	0. 00	0. 14	0. 043	IO	0. 34
17. 583	0. 00	0. 14	0. 042	IO	0. 34
17. 667	0. 00	0. 14	0. 041	IO	0. 33
17. 750	0. 00	0. 14	0. 040	IO	0. 33
17. 833	0. 00	0. 13	0. 039	IO	0. 33
17. 917	0. 00	0. 13	0. 038	IO	0. 32
18. 000	0. 00	0. 13	0. 037	IO	0. 32
18. 083	0. 00	0. 13	0. 036	IO	0. 31
18. 167	0. 00	0. 13	0. 035	IO	0. 31
18. 250	0. 00	0. 13	0. 034	IO	0. 31
18. 333	0. 00	0. 13	0. 033	IO	0. 30
18. 417	0. 00	0. 13	0. 032	IO	0. 30
18. 500	0. 00	0. 13	0. 032	IO	0. 29
18. 583	0. 00	0. 13	0. 031	IO	0. 29
18. 667	0. 00	0. 13	0. 030	IO	0. 29
18. 750	0. 00	0. 12	0. 029	IO	0. 28
18. 833	0. 00	0. 12	0. 028	IO	0. 28
18. 917	0. 00	0. 12	0. 027	IO	0. 27
19. 000	0. 00	0. 12	0. 026	IO	0. 27
19. 083	0. 00	0. 12	0. 026	IO	0. 27
19. 167	0. 00	0. 12	0. 025	IO	0. 26
19. 250	0. 00	0. 12	0. 024	IO	0. 26
19. 333	0. 00	0. 12	0. 023	IO	0. 25
19. 417	0. 00	0. 12	0. 022	0	0. 25
19. 500	0. 00	0. 12	0. 021	0	0. 24
19. 583	0. 00	0. 11	0. 021	0	0. 24
19. 667	0. 00	0. 11	0. 020	0	0. 23
19. 750	0. 00	0. 10	0. 019	0	0. 22
19. 833	0. 00	0. 10	0. 019	0	0. 21
19. 917	0. 00	0. 10	0. 018	0	0. 20
20. 000	0. 00	0. 09	0. 017	0	0. 20
20. 083	0. 00	0. 09	0. 017	0	0. 19
20. 167	0. 00	0. 09	0. 016	0	0. 18
20. 250	0. 00	0. 08	0. 015	0	0. 18
20. 333	0. 00	0. 08	0. 015	0	0. 17
20. 417	0. 00	0. 08	0. 014	0	0. 16
20. 500	0. 00	0. 07	0. 014	0	0. 16
20. 583	0. 00	0. 07	0. 013	0	0. 15
20. 667	0. 00	0. 07	0. 013	0	0. 15
20. 750	0. 00	0. 07	0. 012	0	0. 14
20. 833	0. 00	0. 06	0. 012	0	0. 14
20. 917	0. 00	0. 06	0. 011	0	0. 13
21. 000	0. 00	0. 06	0. 011	0	0. 13
21. 083	0. 00	0. 06	0. 011	0	0. 12
21. 167	0. 00	0. 06	0. 010	0	0. 12
21. 250	0. 00	0. 05	0. 010	0	0. 11
21. 333	0. 00	0. 05	0. 010	0	0. 11
21. 417	0. 00	0. 05	0. 009	0	0. 10
21. 500	0. 00	0. 05	0. 009	0	0. 10
21. 583	0. 00	0. 05	0. 009	0	0. 10
21. 667	0. 00	0. 04	0. 008	0	0. 09
21. 750	0. 00	0. 04	0. 008	0	0. 09
21. 833	0. 00	0. 04	0. 008	0	0. 09
21. 917	0. 00	0. 04	0. 007	0	0. 08
22. 000	0. 00	0. 04	0. 007	0	0. 08
22. 083	0. 00	0. 04	0. 007	0	0. 08
22. 167	0. 00	0. 04	0. 007	0	0. 07
22. 250	0. 00	0. 03	0. 006	0	0. 07
22. 333	0. 00	0. 03	0. 006	0	0. 07
22. 417	0. 00	0. 03	0. 006	0	0. 07
22. 500	0. 00	0. 03	0. 006	0	0. 06
22. 583	0. 00	0. 03	0. 005	0	0. 06
22. 667	0. 00	0. 03	0. 005	0	0. 06
22. 750	0. 00	0. 03	0. 005	0	0. 06
22. 833	0. 00	0. 03	0. 005	0	0. 06
22. 917	0. 00	0. 03	0. 005	0	0. 05
23. 000	0. 00	0. 02	0. 005	0	0. 05
23. 083	0. 00	0. 02	0. 004	0	0. 05
23. 167	0. 00	0. 02	0. 004	0	0. 05
23. 250	0. 00	0. 02	0. 004	0	0. 05
23. 333	0. 00	0. 02	0. 004	0	0. 04
23. 417	0. 00	0. 02	0. 004	0	0. 04

23.500	0.00	0.02	0.004	0	0.04
23.583	0.00	0.02	0.004	0	0.04
23.667	0.00	0.02	0.003	0	0.04
23.750	0.00	0.02	0.003	0	0.04
23.833	0.00	0.02	0.003	0	0.04
23.917	0.00	0.02	0.003	0	0.03
24.000	0.00	0.02	0.003	0	0.03
24.083	0.00	0.02	0.003	0	0.03
24.167	0.00	0.01	0.003	0	0.03
24.250	0.00	0.01	0.003	0	0.03
24.333	0.00	0.01	0.003	0	0.03
24.417	0.00	0.01	0.002	0	0.03
24.500	0.00	0.01	0.002	0	0.03
24.583	0.00	0.01	0.002	0	0.03
24.667	0.00	0.01	0.002	0	0.02
24.750	0.00	0.01	0.002	0	0.02
24.833	0.00	0.01	0.002	0	0.02
24.917	0.00	0.01	0.002	0	0.02
25.000	0.00	0.01	0.002	0	0.02
25.083	0.00	0.01	0.002	0	0.02
25.167	0.00	0.01	0.002	0	0.02
25.250	0.00	0.01	0.002	0	0.02
25.333	0.00	0.01	0.002	0	0.02
25.417	0.00	0.01	0.002	0	0.02
25.500	0.00	0.01	0.002	0	0.02
25.583	0.00	0.01	0.001	0	0.02
25.667	0.00	0.01	0.001	0	0.02
25.750	0.00	0.01	0.001	0	0.02
25.833	0.00	0.01	0.001	0	0.01
25.917	0.00	0.01	0.001	0	0.01
26.000	0.00	0.01	0.001	0	0.01
26.083	0.00	0.01	0.001	0	0.01
26.167	0.00	0.01	0.001	0	0.01
26.250	0.00	0.01	0.001	0	0.01
26.333	0.00	0.01	0.001	0	0.01
26.417	0.00	0.01	0.001	0	0.01
26.500	0.00	0.01	0.001	0	0.01
26.583	0.00	0.00	0.001	0	0.01
26.667	0.00	0.00	0.001	0	0.01
26.750	0.00	0.00	0.001	0	0.01
26.833	0.00	0.00	0.001	0	0.01
26.917	0.00	0.00	0.001	0	0.01
27.000	0.00	0.00	0.001	0	0.01
27.083	0.00	0.00	0.001	0	0.01
27.167	0.00	0.00	0.001	0	0.01
27.250	0.00	0.00	0.001	0	0.01
27.333	0.00	0.00	0.001	0	0.01
27.417	0.00	0.00	0.001	0	0.01
27.500	0.00	0.00	0.001	0	0.01
27.583	0.00	0.00	0.001	0	0.01
27.667	0.00	0.00	0.001	0	0.01
27.750	0.00	0.00	0.001	0	0.01
27.833	0.00	0.00	0.001	0	0.01
27.917	0.00	0.00	0.001	0	0.01
28.000	0.00	0.00	0.000	0	0.01
28.083	0.00	0.00	0.000	0	0.01
28.167	0.00	0.00	0.000	0	0.01
28.250	0.00	0.00	0.000	0	0.01
28.333	0.00	0.00	0.000	0	0.00
28.417	0.00	0.00	0.000	0	0.00
28.500	0.00	0.00	0.000	0	0.00
28.583	0.00	0.00	0.000	0	0.00
28.667	0.00	0.00	0.000	0	0.00
28.750	0.00	0.00	0.000	0	0.00
28.833	0.00	0.00	0.000	0	0.00
28.917	0.00	0.00	0.000	0	0.00
29.000	0.00	0.00	0.000	0	0.00
29.083	0.00	0.00	0.000	0	0.00
29.167	0.00	0.00	0.000	0	0.00
29.250	0.00	0.00	0.000	0	0.00
29.333	0.00	0.00	0.000	0	0.00
29.417	0.00	0.00	0.000	0	0.00

29.500	0.00	0.00	0.000	0					0.00
29.583	0.00	0.00	0.000	0					0.00
29.667	0.00	0.00	0.000	0					0.00
29.750	0.00	0.00	0.000	0					0.00
29.833	0.00	0.00	0.000	0					0.00
29.917	0.00	0.00	0.000	0					0.00
30.000	0.00	0.00	0.000	0					0.00
30.083	0.00	0.00	0.000	0					0.00
30.167	0.00	0.00	0.000	0					0.00
30.250	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 363
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.271 (CFS)
Total volume = 0.328 (Ac. Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac. Ft)	0.000	0.000	0.000	0.000	0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/05/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 100-131
 MITIGATION ANALYSIS
 1-HOUR - 2-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PA0212.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 14
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 6.226 (CFS)
 Total volume = 0.203 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 14
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.022	0.118	0.022	0.022
0.340	0.042	0.138	0.042	0.042
0.500	0.081	0.167	0.080	0.082
1.000	0.206	0.236	0.205	0.207
1.350	0.293	0.275	0.292	0.294
1.500	0.329	0.289	0.328	0.330
2.000	0.451	0.334	0.450	0.452
2.500	0.567	0.374	0.566	0.568
3.000	0.677	0.409	0.676	0.678
3.100	0.697	0.416	0.696	0.698
3.500	0.775	1.336	0.770	0.780
4.000	0.841	3.874	0.828	0.854
4.100	0.846	4.260	0.831	0.861
4.340	0.859	4.703	0.843	0.875

Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	Depth (Ft.)
0.083	0.72	0.01	0.002	0.03
0.167	1.20	0.05	0.009	0.10
0.250	1.43	0.09	0.017	0.20
0.333	1.52	0.12	0.027	0.27
0.417	1.59	0.13	0.037	0.32
0.500	1.73	0.14	0.047	0.36
0.583	2.06	0.15	0.059	0.41
0.667	2.42	0.16	0.073	0.47
0.750	3.22	0.17	0.092	0.54
0.833	6.23	0.19	0.123	0.67
0.917	4.49	0.21	0.159	0.81
1.000	2.09	0.22	0.180	0.90
1.083	0.64	0.23	0.188	0.93
1.167	0.08	0.23	0.189	0.93
1.250	0.00	0.23	0.187	0.92
1.333	0.00	0.22	0.186	0.92
1.417	0.00	0.22	0.184	0.91
1.500	0.00	0.22	0.183	0.91
1.583	0.00	0.22	0.181	0.90
1.667	0.00	0.22	0.180	0.89
1.750	0.00	0.22	0.178	0.89
1.833	0.00	0.22	0.177	0.88
1.917	0.00	0.22	0.175	0.88
2.000	0.00	0.22	0.173	0.87
2.083	0.00	0.22	0.172	0.86
2.167	0.00	0.22	0.171	0.86
2.250	0.00	0.22	0.169	0.85
2.333	0.00	0.21	0.168	0.85
2.417	0.00	0.21	0.166	0.84
2.500	0.00	0.21	0.165	0.83
2.583	0.00	0.21	0.163	0.83
2.667	0.00	0.21	0.162	0.82
2.750	0.00	0.21	0.160	0.82
2.833	0.00	0.21	0.159	0.81
2.917	0.00	0.21	0.157	0.81
3.000	0.00	0.21	0.156	0.80
3.083	0.00	0.21	0.154	0.79
3.167	0.00	0.21	0.153	0.79
3.250	0.00	0.21	0.152	0.78
3.333	0.00	0.21	0.150	0.78
3.417	0.00	0.20	0.149	0.77
3.500	0.00	0.20	0.147	0.77
3.583	0.00	0.20	0.146	0.76
3.667	0.00	0.20	0.145	0.75
3.750	0.00	0.20	0.143	0.75
3.833	0.00	0.20	0.142	0.74
3.917	0.00	0.20	0.140	0.74
4.000	0.00	0.20	0.139	0.73
4.083	0.00	0.20	0.138	0.73
4.167	0.00	0.20	0.136	0.72
4.250	0.00	0.20	0.135	0.72
4.333	0.00	0.20	0.134	0.71
4.417	0.00	0.20	0.132	0.71
4.500	0.00	0.19	0.131	0.70
4.583	0.00	0.19	0.130	0.69
4.667	0.00	0.19	0.128	0.69
4.750	0.00	0.19	0.127	0.68
4.833	0.00	0.19	0.126	0.68
4.917	0.00	0.19	0.124	0.67
5.000	0.00	0.19	0.123	0.67
5.083	0.00	0.19	0.122	0.66
5.167	0.00	0.19	0.120	0.66
5.250	0.00	0.19	0.119	0.65
5.333	0.00	0.19	0.118	0.65
5.417	0.00	0.19	0.116	0.64

5. 500	0. 00	0. 19	0. 115	0	0. 64
5. 583	0. 00	0. 19	0. 114	0	0. 63
5. 667	0. 00	0. 18	0. 113	0	0. 63
5. 750	0. 00	0. 18	0. 111	0	0. 62
5. 833	0. 00	0. 18	0. 110	0	0. 62
5. 917	0. 00	0. 18	0. 109	0	0. 61
6. 000	0. 00	0. 18	0. 108	0	0. 61
6. 083	0. 00	0. 18	0. 106	0	0. 60
6. 167	0. 00	0. 18	0. 105	0	0. 60
6. 250	0. 00	0. 18	0. 104	0	0. 59
6. 333	0. 00	0. 18	0. 103	0	0. 59
6. 417	0. 00	0. 18	0. 101	0	0. 58
6. 500	0. 00	0. 18	0. 100	0	0. 58
6. 583	0. 00	0. 18	0. 099	0	0. 57
6. 667	0. 00	0. 18	0. 098	0	0. 57
6. 750	0. 00	0. 18	0. 097	0	0. 56
6. 833	0. 00	0. 17	0. 095	0	0. 56
6. 917	0. 00	0. 17	0. 094	0	0. 55
7. 000	0. 00	0. 17	0. 093	0	0. 55
7. 083	0. 00	0. 17	0. 092	0	0. 54
7. 167	0. 00	0. 17	0. 091	0	0. 54
7. 250	0. 00	0. 17	0. 089	0	0. 53
7. 333	0. 00	0. 17	0. 088	0	0. 53
7. 417	0. 00	0. 17	0. 087	0	0. 52
7. 500	0. 00	0. 17	0. 086	0	0. 52
7. 583	0. 00	0. 17	0. 085	0	0. 51
7. 667	0. 00	0. 17	0. 084	0	0. 51
7. 750	0. 00	0. 17	0. 082	0	0. 51
7. 833	0. 00	0. 17	0. 081	0	0. 50
7. 917	0. 00	0. 17	0. 080	0	0. 50
8. 000	0. 00	0. 17	0. 079	0	0. 49
8. 083	0. 00	0. 16	0. 078	0	0. 49
8. 167	0. 00	0. 16	0. 077	0	0. 48
8. 250	0. 00	0. 16	0. 076	0	0. 48
8. 333	0. 00	0. 16	0. 074	0	0. 47
8. 417	0. 00	0. 16	0. 073	0	0. 47
8. 500	0. 00	0. 16	0. 072	0	0. 46
8. 583	0. 00	0. 16	0. 071	0	0. 46
8. 667	0. 00	0. 16	0. 070	0	0. 45
8. 750	0. 00	0. 16	0. 069	0	0. 45
8. 833	0. 00	0. 16	0. 068	0	0. 45
8. 917	0. 00	0. 16	0. 067	0	0. 44
9. 000	0. 00	0. 16	0. 066	0	0. 44
9. 083	0. 00	0. 15	0. 065	0	0. 43
9. 167	0. 00	0. 15	0. 064	0	0. 43
9. 250	0. 00	0. 15	0. 062	0	0. 42
9. 333	0. 00	0. 15	0. 061	0	0. 42
9. 417	0. 00	0. 15	0. 060	0	0. 42
9. 500	0. 00	0. 15	0. 059	0	0. 41
9. 583	0. 00	0. 15	0. 058	0	0. 41
9. 667	0. 00	0. 15	0. 057	0	0. 40
9. 750	0. 00	0. 15	0. 056	0	0. 40
9. 833	0. 00	0. 15	0. 055	0	0. 39
9. 917	0. 00	0. 15	0. 054	0	0. 39
10. 000	0. 00	0. 15	0. 053	0	0. 39
10. 083	0. 00	0. 15	0. 052	0	0. 38
10. 167	0. 00	0. 14	0. 051	0	0. 38
10. 250	0. 00	0. 14	0. 050	0	0. 37
10. 333	0. 00	0. 14	0. 049	0	0. 37
10. 417	0. 00	0. 14	0. 048	0	0. 37
10. 500	0. 00	0. 14	0. 047	0	0. 36
10. 583	0. 00	0. 14	0. 046	0	0. 36
10. 667	0. 00	0. 14	0. 045	0	0. 35
10. 750	0. 00	0. 14	0. 044	0	0. 35
10. 833	0. 00	0. 14	0. 043	0	0. 35
10. 917	0. 00	0. 14	0. 042	0	0. 34
11. 000	0. 00	0. 14	0. 041	0	0. 34
11. 083	0. 00	0. 14	0. 041	0	0. 33
11. 167	0. 00	0. 14	0. 040	0	0. 33
11. 250	0. 00	0. 13	0. 039	0	0. 32
11. 333	0. 00	0. 13	0. 038	0	0. 32
11. 417	0. 00	0. 13	0. 037	0	0. 32

11. 500	0. 00	0. 13	0. 036	0	0. 31
11. 583	0. 00	0. 13	0. 035	0	0. 31
11. 667	0. 00	0. 13	0. 034	0	0. 30
11. 750	0. 00	0. 13	0. 033	0	0. 30
11. 833	0. 00	0. 13	0. 032	0	0. 30
11. 917	0. 00	0. 13	0. 031	0	0. 29
12. 000	0. 00	0. 13	0. 031	0	0. 29
12. 083	0. 00	0. 13	0. 030	0	0. 28
12. 167	0. 00	0. 12	0. 029	0	0. 28
12. 250	0. 00	0. 12	0. 028	0	0. 28
12. 333	0. 00	0. 12	0. 027	0	0. 27
12. 417	0. 00	0. 12	0. 026	0	0. 27
12. 500	0. 00	0. 12	0. 025	0	0. 27
12. 583	0. 00	0. 12	0. 025	0	0. 26
12. 667	0. 00	0. 12	0. 024	0	0. 26
12. 750	0. 00	0. 12	0. 023	0	0. 25
12. 833	0. 00	0. 12	0. 022	0	0. 25
12. 917	0. 00	0. 11	0. 021	0	0. 24
13. 000	0. 00	0. 11	0. 021	0	0. 23
13. 083	0. 00	0. 11	0. 020	0	0. 23
13. 167	0. 00	0. 10	0. 019	0	0. 22
13. 250	0. 00	0. 10	0. 018	0	0. 21
13. 333	0. 00	0. 10	0. 018	0	0. 20
13. 417	0. 00	0. 09	0. 017	0	0. 19
13. 500	0. 00	0. 09	0. 016	0	0. 19
13. 583	0. 00	0. 09	0. 016	0	0. 18
13. 667	0. 00	0. 08	0. 015	0	0. 17
13. 750	0. 00	0. 08	0. 015	0	0. 17
13. 833	0. 00	0. 08	0. 014	0	0. 16
13. 917	0. 00	0. 07	0. 014	0	0. 16
14. 000	0. 00	0. 07	0. 013	0	0. 15
14. 083	0. 00	0. 07	0. 013	0	0. 14
14. 167	0. 00	0. 07	0. 012	0	0. 14
14. 250	0. 00	0. 06	0. 012	0	0. 13
14. 333	0. 00	0. 06	0. 011	0	0. 13
14. 417	0. 00	0. 06	0. 011	0	0. 12
14. 500	0. 00	0. 06	0. 011	0	0. 12
14. 583	0. 00	0. 05	0. 010	0	0. 12
14. 667	0. 00	0. 05	0. 010	0	0. 11
14. 750	0. 00	0. 05	0. 009	0	0. 11
14. 833	0. 00	0. 05	0. 009	0	0. 10
14. 917	0. 00	0. 05	0. 009	0	0. 10
15. 000	0. 00	0. 05	0. 008	0	0. 10
15. 083	0. 00	0. 04	0. 008	0	0. 09
15. 167	0. 00	0. 04	0. 008	0	0. 09
15. 250	0. 00	0. 04	0. 008	0	0. 09
15. 333	0. 00	0. 04	0. 007	0	0. 08
15. 417	0. 00	0. 04	0. 007	0	0. 08
15. 500	0. 00	0. 04	0. 007	0	0. 08
15. 583	0. 00	0. 04	0. 007	0	0. 07
15. 667	0. 00	0. 03	0. 006	0	0. 07
15. 750	0. 00	0. 03	0. 006	0	0. 07
15. 833	0. 00	0. 03	0. 006	0	0. 07
15. 917	0. 00	0. 03	0. 006	0	0. 06
16. 000	0. 00	0. 03	0. 005	0	0. 06
16. 083	0. 00	0. 03	0. 005	0	0. 06
16. 167	0. 00	0. 03	0. 005	0	0. 06
16. 250	0. 00	0. 03	0. 005	0	0. 06
16. 333	0. 00	0. 03	0. 005	0	0. 05
16. 417	0. 00	0. 02	0. 005	0	0. 05
16. 500	0. 00	0. 02	0. 004	0	0. 05
16. 583	0. 00	0. 02	0. 004	0	0. 05
16. 667	0. 00	0. 02	0. 004	0	0. 05
16. 750	0. 00	0. 02	0. 004	0	0. 04
16. 833	0. 00	0. 02	0. 004	0	0. 04
16. 917	0. 00	0. 02	0. 004	0	0. 04
17. 000	0. 00	0. 02	0. 003	0	0. 04
17. 083	0. 00	0. 02	0. 003	0	0. 04
17. 167	0. 00	0. 02	0. 003	0	0. 04
17. 250	0. 00	0. 02	0. 003	0	0. 04
17. 333	0. 00	0. 02	0. 003	0	0. 03
17. 417	0. 00	0. 02	0. 003	0	0. 03

17. 500	0. 00	0. 01	0. 003	0	0. 03
17. 583	0. 00	0. 01	0. 003	0	0. 03
17. 667	0. 00	0. 01	0. 003	0	0. 03
17. 750	0. 00	0. 01	0. 003	0	0. 03
17. 833	0. 00	0. 01	0. 002	0	0. 03
17. 917	0. 00	0. 01	0. 002	0	0. 03
18. 000	0. 00	0. 01	0. 002	0	0. 03
18. 083	0. 00	0. 01	0. 002	0	0. 02
18. 167	0. 00	0. 01	0. 002	0	0. 02
18. 250	0. 00	0. 01	0. 002	0	0. 02
18. 333	0. 00	0. 01	0. 002	0	0. 02
18. 417	0. 00	0. 01	0. 002	0	0. 02
18. 500	0. 00	0. 01	0. 002	0	0. 02
18. 583	0. 00	0. 01	0. 002	0	0. 02
18. 667	0. 00	0. 01	0. 002	0	0. 02
18. 750	0. 00	0. 01	0. 002	0	0. 02
18. 833	0. 00	0. 01	0. 002	0	0. 02
18. 917	0. 00	0. 01	0. 001	0	0. 02
19. 000	0. 00	0. 01	0. 001	0	0. 02
19. 083	0. 00	0. 01	0. 001	0	0. 02
19. 167	0. 00	0. 01	0. 001	0	0. 02
19. 250	0. 00	0. 01	0. 001	0	0. 01
19. 333	0. 00	0. 01	0. 001	0	0. 01
19. 417	0. 00	0. 01	0. 001	0	0. 01
19. 500	0. 00	0. 01	0. 001	0	0. 01
19. 583	0. 00	0. 01	0. 001	0	0. 01
19. 667	0. 00	0. 01	0. 001	0	0. 01
19. 750	0. 00	0. 01	0. 001	0	0. 01
19. 833	0. 00	0. 01	0. 001	0	0. 01
19. 917	0. 00	0. 01	0. 001	0	0. 01
20. 000	0. 00	0. 00	0. 001	0	0. 01
20. 083	0. 00	0. 00	0. 001	0	0. 01
20. 167	0. 00	0. 00	0. 001	0	0. 01
20. 250	0. 00	0. 00	0. 001	0	0. 01
20. 333	0. 00	0. 00	0. 001	0	0. 01
20. 417	0. 00	0. 00	0. 001	0	0. 01
20. 500	0. 00	0. 00	0. 001	0	0. 01
20. 583	0. 00	0. 00	0. 001	0	0. 01
20. 667	0. 00	0. 00	0. 001	0	0. 01
20. 750	0. 00	0. 00	0. 001	0	0. 01
20. 833	0. 00	0. 00	0. 001	0	0. 01
20. 917	0. 00	0. 00	0. 001	0	0. 01
21. 000	0. 00	0. 00	0. 001	0	0. 01
21. 083	0. 00	0. 00	0. 001	0	0. 01
21. 167	0. 00	0. 00	0. 001	0	0. 01
21. 250	0. 00	0. 00	0. 001	0	0. 01
21. 333	0. 00	0. 00	0. 001	0	0. 01
21. 417	0. 00	0. 00	0. 000	0	0. 01
21. 500	0. 00	0. 00	0. 000	0	0. 01
21. 583	0. 00	0. 00	0. 000	0	0. 01
21. 667	0. 00	0. 00	0. 000	0	0. 01
21. 750	0. 00	0. 00	0. 000	0	0. 00
21. 833	0. 00	0. 00	0. 000	0	0. 00
21. 917	0. 00	0. 00	0. 000	0	0. 00
22. 000	0. 00	0. 00	0. 000	0	0. 00
22. 083	0. 00	0. 00	0. 000	0	0. 00
22. 167	0. 00	0. 00	0. 000	0	0. 00
22. 250	0. 00	0. 00	0. 000	0	0. 00
22. 333	0. 00	0. 00	0. 000	0	0. 00
22. 417	0. 00	0. 00	0. 000	0	0. 00
22. 500	0. 00	0. 00	0. 000	0	0. 00
22. 583	0. 00	0. 00	0. 000	0	0. 00
22. 667	0. 00	0. 00	0. 000	0	0. 00
22. 750	0. 00	0. 00	0. 000	0	0. 00
22. 833	0. 00	0. 00	0. 000	0	0. 00
22. 917	0. 00	0. 00	0. 000	0	0. 00
23. 000	0. 00	0. 00	0. 000	0	0. 00
23. 083	0. 00	0. 00	0. 000	0	0. 00
23. 167	0. 00	0. 00	0. 000	0	0. 00
23. 250	0. 00	0. 00	0. 000	0	0. 00
23. 333	0. 00	0. 00	0. 000	0	0. 00
23. 417	0. 00	0. 00	0. 000	0	0. 00

23.500	0.00	0.00	0.000	0					0.00
23.583	0.00	0.00	0.000	0					0.00
23.667	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 284
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.226 (CFS)
Total volume = 0.202 (Ac. Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac. Ft)	0.000	0.000	0.000	0.000	0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/05/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 100-131
 MITIGATION ANALYSIS
 24-HOUR - 5-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PA05245.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 290
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 1.810 (CFS)
 Total volume = 1.100 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 290
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.022	0.118	0.022	0.022
0.340	0.042	0.138	0.042	0.042
0.500	0.081	0.167	0.080	0.082
1.000	0.206	0.236	0.205	0.207
1.350	0.293	0.275	0.292	0.294
1.500	0.329	0.289	0.328	0.330
2.000	0.451	0.334	0.450	0.452
2.500	0.567	0.374	0.566	0.568
3.000	0.677	0.409	0.676	0.678
3.100	0.697	0.416	0.696	0.698
3.500	0.775	1.336	0.770	0.780
4.000	0.841	3.874	0.828	0.854
4.100	0.846	4.260	0.831	0.861
4.340	0.859	4.703	0.843	0.875

Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	. 0	0. 5	0. 90	1. 36	1. 81	Depth (Ft.)
0. 083	0. 06	0. 00	0. 000	OI					0. 00
0. 167	0. 10	0. 00	0. 001	OI					0. 01
0. 250	0. 11	0. 01	0. 001	OI					0. 02
0. 333	0. 14	0. 01	0. 002	O I					0. 02
0. 417	0. 16	0. 02	0. 003	O I					0. 04
0. 500	0. 16	0. 02	0. 004	O I					0. 05
0. 583	0. 16	0. 03	0. 005	O I					0. 06
0. 667	0. 16	0. 03	0. 006	O I					0. 07
0. 750	0. 16	0. 04	0. 007	O I					0. 08
0. 833	0. 19	0. 04	0. 008	O I					0. 09
0. 917	0. 21	0. 05	0. 009	O I					0. 10
1. 000	0. 21	0. 05	0. 010	O I					0. 11
1. 083	0. 18	0. 06	0. 011	O I					0. 12
1. 167	0. 16	0. 06	0. 012	OI					0. 13
1. 250	0. 16	0. 07	0. 012	OI					0. 14
1. 333	0. 16	0. 07	0. 013	OI					0. 15
1. 417	0. 16	0. 07	0. 014	OI					0. 15
1. 500	0. 16	0. 08	0. 014	OI					0. 16
1. 583	0. 16	0. 08	0. 015	OI					0. 17
1. 667	0. 16	0. 08	0. 015	OI					0. 17
1. 750	0. 16	0. 08	0. 016	OI					0. 18
1. 833	0. 19	0. 09	0. 016	O I					0. 19
1. 917	0. 21	0. 09	0. 017	O I					0. 19
2. 000	0. 21	0. 10	0. 018	O I					0. 20
2. 083	0. 21	0. 10	0. 019	O I					0. 21
2. 167	0. 21	0. 10	0. 020	O I					0. 22
2. 250	0. 21	0. 11	0. 020	O I					0. 23
2. 333	0. 21	0. 11	0. 021	O I					0. 24
2. 417	0. 21	0. 12	0. 022	OI					0. 25
2. 500	0. 21	0. 12	0. 022	OI					0. 25
2. 583	0. 24	0. 12	0. 023	O I					0. 25
2. 667	0. 26	0. 12	0. 024	O I					0. 26
2. 750	0. 27	0. 12	0. 025	O I					0. 26
2. 833	0. 27	0. 12	0. 026	O I					0. 27
2. 917	0. 27	0. 12	0. 027	O I					0. 27
3. 000	0. 27	0. 12	0. 028	O I					0. 28
3. 083	0. 27	0. 12	0. 029	O I					0. 28
3. 167	0. 27	0. 13	0. 030	O I					0. 29
3. 250	0. 27	0. 13	0. 031	O I					0. 29
3. 333	0. 27	0. 13	0. 032	O I					0. 29
3. 417	0. 27	0. 13	0. 033	O I					0. 30
3. 500	0. 27	0. 13	0. 034	O I					0. 30
3. 583	0. 27	0. 13	0. 035	O I					0. 31
3. 667	0. 27	0. 13	0. 036	O I					0. 31
3. 750	0. 27	0. 13	0. 036	O I					0. 32
3. 833	0. 30	0. 13	0. 037	O I					0. 32
3. 917	0. 32	0. 13	0. 039	O I					0. 33
4. 000	0. 32	0. 14	0. 040	O I					0. 33
4. 083	0. 32	0. 14	0. 041	O I					0. 34
4. 167	0. 32	0. 14	0. 042	O I					0. 34
4. 250	0. 32	0. 14	0. 044	O I					0. 35
4. 333	0. 35	0. 14	0. 045	O I					0. 35
4. 417	0. 37	0. 14	0. 047	O I					0. 36
4. 500	0. 37	0. 14	0. 048	O I					0. 37
4. 583	0. 37	0. 14	0. 050	O I					0. 37
4. 667	0. 37	0. 14	0. 051	O I					0. 38
4. 750	0. 37	0. 15	0. 053	O I					0. 38
4. 833	0. 40	0. 15	0. 054	O I					0. 39
4. 917	0. 42	0. 15	0. 056	O I					0. 40
5. 000	0. 43	0. 15	0. 058	O I					0. 41
5. 083	0. 36	0. 15	0. 060	O I					0. 41
5. 167	0. 33	0. 15	0. 061	O I					0. 42
5. 250	0. 32	0. 15	0. 062	O I					0. 42
5. 333	0. 35	0. 15	0. 064	O I					0. 43
5. 417	0. 37	0. 16	0. 065	O I					0. 43

5. 500	0. 37	0. 16	0. 067	0	I					0. 44
5. 583	0. 40	0. 16	0. 068	0	I					0. 45
5. 667	0. 42	0. 16	0. 070	0	I					0. 45
5. 750	0. 43	0. 16	0. 072	0	I					0. 46
5. 833	0. 43	0. 16	0. 074	0	I					0. 47
5. 917	0. 43	0. 16	0. 075	0	I					0. 48
6. 000	0. 43	0. 16	0. 077	0	I					0. 48
6. 083	0. 46	0. 17	0. 079	0	I					0. 49
6. 167	0. 48	0. 17	0. 081	0	I					0. 50
6. 250	0. 48	0. 17	0. 083	0	I					0. 51
6. 333	0. 48	0. 17	0. 085	0	I					0. 52
6. 417	0. 48	0. 17	0. 088	0	I					0. 53
6. 500	0. 48	0. 17	0. 090	0	I					0. 53
6. 583	0. 51	0. 17	0. 092	0	I					0. 54
6. 667	0. 53	0. 17	0. 094	0	I					0. 55
6. 750	0. 53	0. 18	0. 097	0	I					0. 56
6. 833	0. 53	0. 18	0. 099	0	I					0. 57
6. 917	0. 53	0. 18	0. 102	0	I					0. 58
7. 000	0. 53	0. 18	0. 104	0	I					0. 59
7. 083	0. 53	0. 18	0. 106	0	I					0. 60
7. 167	0. 53	0. 18	0. 109	0	I					0. 61
7. 250	0. 53	0. 18	0. 111	0	I					0. 62
7. 333	0. 56	0. 19	0. 114	0	I					0. 63
7. 417	0. 58	0. 19	0. 116	0	I					0. 64
7. 500	0. 59	0. 19	0. 119	0	I					0. 65
7. 583	0. 62	0. 19	0. 122	0	I					0. 66
7. 667	0. 64	0. 19	0. 125	0	I					0. 68
7. 750	0. 64	0. 19	0. 128	0	I					0. 69
7. 833	0. 67	0. 19	0. 131	0	I					0. 70
7. 917	0. 69	0. 20	0. 135	0	I					0. 71
8. 000	0. 69	0. 20	0. 138	0	I					0. 73
8. 083	0. 75	0. 20	0. 142	0	I					0. 74
8. 167	0. 79	0. 20	0. 145	0	I					0. 76
8. 250	0. 80	0. 20	0. 150	0	I					0. 77
8. 333	0. 80	0. 21	0. 154	0	I					0. 79
8. 417	0. 80	0. 21	0. 158	0	I					0. 81
8. 500	0. 80	0. 21	0. 162	0	I					0. 82
8. 583	0. 83	0. 21	0. 166	0	I					0. 84
8. 667	0. 85	0. 22	0. 170	0	I					0. 86
8. 750	0. 85	0. 22	0. 175	0	I					0. 87
8. 833	0. 88	0. 22	0. 179	0	I					0. 89
8. 917	0. 90	0. 22	0. 184	0	I					0. 91
9. 000	0. 90	0. 23	0. 188	0	I					0. 93
9. 083	0. 97	0. 23	0. 193	0	I					0. 95
9. 167	1. 01	0. 23	0. 198	0	I					0. 97
9. 250	1. 01	0. 23	0. 204	0	I					0. 99
9. 333	1. 04	0. 24	0. 209	0	I					1. 01
9. 417	1. 06	0. 24	0. 215	0	I					1. 04
9. 500	1. 06	0. 24	0. 220	0	I					1. 06
9. 583	1. 10	0. 25	0. 226	0	I					1. 08
9. 667	1. 11	0. 25	0. 232	0	I					1. 10
9. 750	1. 12	0. 25	0. 238	0	I					1. 13
9. 833	1. 15	0. 25	0. 244	0	I					1. 15
9. 917	1. 17	0. 26	0. 250	0	I					1. 18
10. 000	1. 17	0. 26	0. 257	0	I					1. 20
10. 083	0. 96	0. 26	0. 262	0	I					1. 23
10. 167	0. 82	0. 26	0. 266	0	I					1. 24
10. 250	0. 80	0. 26	0. 270	0	I					1. 26
10. 333	0. 80	0. 27	0. 274	0	I					1. 27
10. 417	0. 80	0. 27	0. 278	0	I					1. 29
10. 500	0. 80	0. 27	0. 281	0	I					1. 30
10. 583	0. 95	0. 27	0. 285	0	I					1. 32
10. 667	1. 05	0. 27	0. 290	0	I					1. 34
10. 750	1. 06	0. 28	0. 296	0	I					1. 36
10. 833	1. 06	0. 28	0. 301	0	I					1. 38
10. 917	1. 06	0. 28	0. 307	0	I					1. 41
11. 000	1. 06	0. 28	0. 312	0	I					1. 43
11. 083	1. 03	0. 28	0. 317	0	I					1. 45
11. 167	1. 01	0. 29	0. 322	0	I					1. 47
11. 250	1. 01	0. 29	0. 327	0	I					1. 49
11. 333	1. 01	0. 29	0. 332	0	I					1. 51
11. 417	1. 01	0. 29	0. 337	0	I					1. 53

11. 500	1. 01	0. 29	0. 342	0	I	1. 55
11. 583	0. 95	0. 30	0. 347	0	I	1. 57
11. 667	0. 91	0. 30	0. 351	0	I	1. 59
11. 750	0. 90	0. 30	0. 355	0	I	1. 61
11. 833	0. 94	0. 30	0. 360	0	I	1. 63
11. 917	0. 95	0. 30	0. 364	0	I	1. 64
12. 000	0. 96	0. 30	0. 369	0	I	1. 66
12. 083	1. 17	0. 31	0. 374	0	I	1. 68
12. 167	1. 31	0. 31	0. 380	0	I	1. 71
12. 250	1. 33	0. 31	0. 387	0	I	1. 74
12. 333	1. 36	0. 31	0. 394	0	I	1. 77
12. 417	1. 38	0. 32	0. 402	0	I	1. 80
12. 500	1. 38	0. 32	0. 409	0	I	1. 83
12. 583	1. 45	0. 32	0. 417	0	I	1. 86
12. 667	1. 48	0. 32	0. 424	0	I	1. 89
12. 750	1. 49	0. 33	0. 432	0	I	1. 92
12. 833	1. 52	0. 33	0. 441	0	I	1. 96
12. 917	1. 54	0. 33	0. 449	0	I	1. 99
13. 000	1. 54	0. 34	0. 457	0	I	2. 03
13. 083	1. 70	0. 34	0. 466	0	I	2. 06
13. 167	1. 79	0. 34	0. 476	0	I	2. 11
13. 250	1. 81	0. 35	0. 486	0	I	2. 15
13. 333	1. 81	0. 35	0. 496	0	I	2. 19
13. 417	1. 81	0. 35	0. 506	0	I	2. 24
13. 500	1. 81	0. 36	0. 516	0	I	2. 28
13. 583	1. 47	0. 36	0. 525	0	I	2. 32
13. 667	1. 26	0. 36	0. 532	0	I	2. 35
13. 750	1. 22	0. 36	0. 538	0	I	2. 37
13. 833	1. 22	0. 37	0. 544	0	I	2. 40
13. 917	1. 22	0. 37	0. 549	0	I	2. 42
14. 000	1. 22	0. 37	0. 555	0	I	2. 45
14. 083	1. 35	0. 37	0. 562	0	I	2. 48
14. 167	1. 42	0. 37	0. 569	0	I	2. 51
14. 250	1. 44	0. 38	0. 576	0	I	2. 54
14. 333	1. 41	0. 38	0. 583	0	I	2. 57
14. 417	1. 39	0. 38	0. 590	0	I	2. 60
14. 500	1. 38	0. 38	0. 597	0	I	2. 64
14. 583	1. 38	0. 39	0. 604	0	I	2. 67
14. 667	1. 38	0. 39	0. 611	0	I	2. 70
14. 750	1. 38	0. 39	0. 618	0	I	2. 73
14. 833	1. 35	0. 39	0. 624	0	I	2. 76
14. 917	1. 33	0. 39	0. 631	0	I	2. 79
15. 000	1. 33	0. 40	0. 637	0	I	2. 82
15. 083	1. 30	0. 40	0. 644	0	I	2. 85
15. 167	1. 28	0. 40	0. 650	0	I	2. 88
15. 250	1. 28	0. 40	0. 656	0	I	2. 90
15. 333	1. 25	0. 40	0. 662	0	I	2. 93
15. 417	1. 23	0. 41	0. 667	0	I	2. 96
15. 500	1. 22	0. 41	0. 673	0	I	2. 98
15. 583	1. 10	0. 41	0. 678	0	I	3. 01
15. 667	1. 02	0. 41	0. 683	0	I	3. 03
15. 750	1. 01	0. 41	0. 687	0	I	3. 05
15. 833	1. 01	0. 41	0. 691	0	I	3. 07
15. 917	1. 01	0. 42	0. 695	0	I	3. 09
16. 000	1. 01	0. 44	0. 699	0	I	3. 11
16. 083	0. 55	0. 47	0. 701	0	I	3. 12
16. 167	0. 26	0. 46	0. 701	0	I	3. 12
16. 250	0. 21	0. 45	0. 699	0	I	3. 11
16. 333	0. 21	0. 43	0. 698	0	I	3. 10
16. 417	0. 21	0. 42	0. 697	0	I	3. 10
16. 500	0. 21	0. 42	0. 695	0	I	3. 09
16. 583	0. 18	0. 41	0. 694	0	I	3. 08
16. 667	0. 16	0. 41	0. 692	0	I	3. 07
16. 750	0. 16	0. 41	0. 690	0	I	3. 07
16. 833	0. 16	0. 41	0. 688	0	I	3. 06
16. 917	0. 16	0. 41	0. 687	0	I	3. 05
17. 000	0. 16	0. 41	0. 685	0	I	3. 04
17. 083	0. 22	0. 41	0. 683	0	I	3. 03
17. 167	0. 26	0. 41	0. 682	0	I	3. 03
17. 250	0. 27	0. 41	0. 681	0	I	3. 02
17. 333	0. 27	0. 41	0. 680	0	I	3. 02
17. 417	0. 27	0. 41	0. 679	0	I	3. 01

17. 500	0. 27	0. 41	0. 678	I	0	3. 01
17. 583	0. 27	0. 41	0. 677	I	0	3. 00
17. 667	0. 27	0. 41	0. 676	I	0	3. 00
17. 750	0. 27	0. 41	0. 675	I	0	2. 99
17. 833	0. 24	0. 41	0. 674	I	0	2. 99
17. 917	0. 22	0. 41	0. 673	I	0	2. 98
18. 000	0. 21	0. 41	0. 672	I	0	2. 98
18. 083	0. 21	0. 41	0. 670	I	0	2. 97
18. 167	0. 21	0. 41	0. 669	I	0	2. 96
18. 250	0. 21	0. 41	0. 668	I	0	2. 96
18. 333	0. 21	0. 41	0. 666	I	0	2. 95
18. 417	0. 21	0. 41	0. 665	I	0	2. 95
18. 500	0. 21	0. 40	0. 664	I	0	2. 94
18. 583	0. 18	0. 40	0. 662	I	0	2. 93
18. 667	0. 16	0. 40	0. 661	I	0	2. 93
18. 750	0. 16	0. 40	0. 659	I	0	2. 92
18. 833	0. 13	0. 40	0. 657	I	0	2. 91
18. 917	0. 11	0. 40	0. 655	I	0	2. 90
19. 000	0. 11	0. 40	0. 653	I	0	2. 89
19. 083	0. 14	0. 40	0. 651	I	0	2. 88
19. 167	0. 16	0. 40	0. 650	I	0	2. 88
19. 250	0. 16	0. 40	0. 648	I	0	2. 87
19. 333	0. 19	0. 40	0. 646	I	0	2. 86
19. 417	0. 21	0. 40	0. 645	I	0	2. 85
19. 500	0. 21	0. 40	0. 644	I	0	2. 85
19. 583	0. 18	0. 40	0. 642	I	0	2. 84
19. 667	0. 16	0. 40	0. 641	I	0	2. 84
19. 750	0. 16	0. 40	0. 639	I	0	2. 83
19. 833	0. 13	0. 40	0. 637	I	0	2. 82
19. 917	0. 11	0. 40	0. 636	I	0	2. 81
20. 000	0. 11	0. 40	0. 634	I	0	2. 80
20. 083	0. 14	0. 39	0. 632	I	0	2. 79
20. 167	0. 16	0. 39	0. 630	I	0	2. 79
20. 250	0. 16	0. 39	0. 628	I	0	2. 78
20. 333	0. 16	0. 39	0. 627	I	0	2. 77
20. 417	0. 16	0. 39	0. 625	I	0	2. 76
20. 500	0. 16	0. 39	0. 624	I	0	2. 76
20. 583	0. 16	0. 39	0. 622	I	0	2. 75
20. 667	0. 16	0. 39	0. 620	I	0	2. 74
20. 750	0. 16	0. 39	0. 619	I	0	2. 74
20. 833	0. 13	0. 39	0. 617	I	0	2. 73
20. 917	0. 11	0. 39	0. 615	I	0	2. 72
21. 000	0. 11	0. 39	0. 613	I	0	2. 71
21. 083	0. 14	0. 39	0. 611	I	0	2. 70
21. 167	0. 16	0. 39	0. 610	I	0	2. 69
21. 250	0. 16	0. 39	0. 608	I	0	2. 69
21. 333	0. 13	0. 39	0. 606	I	0	2. 68
21. 417	0. 11	0. 39	0. 605	I	0	2. 67
21. 500	0. 11	0. 39	0. 603	I	0	2. 66
21. 583	0. 14	0. 38	0. 601	I	0	2. 65
21. 667	0. 16	0. 38	0. 599	I	0	2. 65
21. 750	0. 16	0. 38	0. 598	I	0	2. 64
21. 833	0. 13	0. 38	0. 596	I	0	2. 63
21. 917	0. 11	0. 38	0. 594	I	0	2. 62
22. 000	0. 11	0. 38	0. 592	I	0	2. 62
22. 083	0. 14	0. 38	0. 591	I	0	2. 61
22. 167	0. 16	0. 38	0. 589	I	0	2. 60
22. 250	0. 16	0. 38	0. 587	I	0	2. 59
22. 333	0. 13	0. 38	0. 586	I	0	2. 59
22. 417	0. 11	0. 38	0. 584	I	0	2. 58
22. 500	0. 11	0. 38	0. 582	I	0	2. 57
22. 583	0. 11	0. 38	0. 580	I	0	2. 56
22. 667	0. 11	0. 38	0. 578	I	0	2. 55
22. 750	0. 11	0. 38	0. 577	I	0	2. 54
22. 833	0. 11	0. 38	0. 575	I	0	2. 53
22. 917	0. 11	0. 38	0. 573	I	0	2. 53
23. 000	0. 11	0. 38	0. 571	I	0	2. 52
23. 083	0. 11	0. 37	0. 569	I	0	2. 51
23. 167	0. 11	0. 37	0. 567	I	0	2. 50
23. 250	0. 11	0. 37	0. 565	I	0	2. 49
23. 333	0. 11	0. 37	0. 564	I	0	2. 49
23. 417	0. 11	0. 37	0. 562	I	0	2. 48

23. 500	0. 11	0. 37	0. 560	I	0	2. 47
23. 583	0. 11	0. 37	0. 558	I	0	2. 46
23. 667	0. 11	0. 37	0. 556	I	0	2. 45
23. 750	0. 11	0. 37	0. 554	I	0	2. 45
23. 833	0. 11	0. 37	0. 553	I	0	2. 44
23. 917	0. 11	0. 37	0. 551	I	0	2. 43
24. 000	0. 11	0. 37	0. 549	I	0	2. 42
24. 083	0. 04	0. 37	0. 547	I	0	2. 41
24. 167	0. 01	0. 37	0. 545	I	0	2. 40
24. 250	0. 00	0. 37	0. 542	I	0	2. 39
24. 333	0. 00	0. 36	0. 540	I	0	2. 38
24. 417	0. 00	0. 36	0. 537	I	0	2. 37
24. 500	0. 00	0. 36	0. 535	I	0	2. 36
24. 583	0. 00	0. 36	0. 532	I	0	2. 35
24. 667	0. 00	0. 36	0. 530	I	0	2. 34
24. 750	0. 00	0. 36	0. 527	I	0	2. 33
24. 833	0. 00	0. 36	0. 525	I	0	2. 32
24. 917	0. 00	0. 36	0. 522	I	0	2. 31
25. 000	0. 00	0. 36	0. 520	I	0	2. 30
25. 083	0. 00	0. 36	0. 517	I	0	2. 29
25. 167	0. 00	0. 36	0. 515	I	0	2. 28
25. 250	0. 00	0. 36	0. 512	I	0	2. 26
25. 333	0. 00	0. 35	0. 510	I	0	2. 25
25. 417	0. 00	0. 35	0. 508	I	0	2. 24
25. 500	0. 00	0. 35	0. 505	I	0	2. 23
25. 583	0. 00	0. 35	0. 503	I	0	2. 22
25. 667	0. 00	0. 35	0. 500	I	0	2. 21
25. 750	0. 00	0. 35	0. 498	I	0	2. 20
25. 833	0. 00	0. 35	0. 495	I	0	2. 19
25. 917	0. 00	0. 35	0. 493	I	0	2. 18
26. 000	0. 00	0. 35	0. 491	I	0	2. 17
26. 083	0. 00	0. 35	0. 488	I	0	2. 16
26. 167	0. 00	0. 35	0. 486	I	0	2. 15
26. 250	0. 00	0. 35	0. 483	I	0	2. 14
26. 333	0. 00	0. 34	0. 481	I	0	2. 13
26. 417	0. 00	0. 34	0. 479	I	0	2. 12
26. 500	0. 00	0. 34	0. 476	I	0	2. 11
26. 583	0. 00	0. 34	0. 474	I	0	2. 10
26. 667	0. 00	0. 34	0. 472	I	0	2. 09
26. 750	0. 00	0. 34	0. 469	I	0	2. 08
26. 833	0. 00	0. 34	0. 467	I	0	2. 07
26. 917	0. 00	0. 34	0. 465	I	0	2. 06
27. 000	0. 00	0. 34	0. 462	I	0	2. 05
27. 083	0. 00	0. 34	0. 460	I	0	2. 04
27. 167	0. 00	0. 34	0. 458	I	0	2. 03
27. 250	0. 00	0. 34	0. 455	I	0	2. 02
27. 333	0. 00	0. 33	0. 453	I	0	2. 01
27. 417	0. 00	0. 33	0. 451	I	0	2. 00
27. 500	0. 00	0. 33	0. 448	I	0	1. 99
27. 583	0. 00	0. 33	0. 446	I	0	1. 98
27. 667	0. 00	0. 33	0. 444	I	0	1. 97
27. 750	0. 00	0. 33	0. 442	I	0	1. 96
27. 833	0. 00	0. 33	0. 439	I	0	1. 95
27. 917	0. 00	0. 33	0. 437	I	0	1. 94
28. 000	0. 00	0. 33	0. 435	I	0	1. 93
28. 083	0. 00	0. 33	0. 433	I	0	1. 92
28. 167	0. 00	0. 33	0. 430	I	0	1. 92
28. 250	0. 00	0. 33	0. 428	I	0	1. 91
28. 333	0. 00	0. 32	0. 426	I	0	1. 90
28. 417	0. 00	0. 32	0. 424	I	0	1. 89
28. 500	0. 00	0. 32	0. 421	I	0	1. 88
28. 583	0. 00	0. 32	0. 419	I	0	1. 87
28. 667	0. 00	0. 32	0. 417	I	0	1. 86
28. 750	0. 00	0. 32	0. 415	I	0	1. 85
28. 833	0. 00	0. 32	0. 412	I	0	1. 84
28. 917	0. 00	0. 32	0. 410	I	0	1. 83
29. 000	0. 00	0. 32	0. 408	I	0	1. 82
29. 083	0. 00	0. 32	0. 406	I	0	1. 82
29. 167	0. 00	0. 32	0. 404	I	0	1. 81
29. 250	0. 00	0. 32	0. 402	I	0	1. 80
29. 333	0. 00	0. 31	0. 399	I	0	1. 79
29. 417	0. 00	0. 31	0. 397	I	0	1. 78

29.500	0.00	0.31	0.395	I	0	1.77
29.583	0.00	0.31	0.393	I	0	1.76
29.667	0.00	0.31	0.391	I	0	1.75
29.750	0.00	0.31	0.389	I	0	1.74
29.833	0.00	0.31	0.386	I	0	1.74
29.917	0.00	0.31	0.384	I	0	1.73
30.000	0.00	0.31	0.382	I	0	1.72
30.083	0.00	0.31	0.380	I	0	1.71
30.167	0.00	0.31	0.378	I	0	1.70
30.250	0.00	0.31	0.376	I	0	1.69
30.333	0.00	0.31	0.374	I	0	1.68
30.417	0.00	0.30	0.372	I	0	1.67
30.500	0.00	0.30	0.370	I	0	1.67
30.583	0.00	0.30	0.367	I	0	1.66
30.667	0.00	0.30	0.365	I	0	1.65
30.750	0.00	0.30	0.363	I	0	1.64
30.833	0.00	0.30	0.361	I	0	1.63
30.917	0.00	0.30	0.359	I	0	1.62
31.000	0.00	0.30	0.357	I	0	1.62
31.083	0.00	0.30	0.355	I	0	1.61
31.167	0.00	0.30	0.353	I	0	1.60
31.250	0.00	0.30	0.351	I	0	1.59
31.333	0.00	0.30	0.349	I	0	1.58
31.417	0.00	0.30	0.347	I	0	1.57
31.500	0.00	0.29	0.345	I	0	1.56
31.583	0.00	0.29	0.343	I	0	1.56
31.667	0.00	0.29	0.341	I	0	1.55
31.750	0.00	0.29	0.339	I	0	1.54
31.833	0.00	0.29	0.337	I	0	1.53
31.917	0.00	0.29	0.335	I	0	1.52
32.000	0.00	0.29	0.333	I	0	1.52
32.083	0.00	0.29	0.331	I	0	1.51
32.167	0.00	0.29	0.329	I	0	1.50
32.250	0.00	0.29	0.327	I	0	1.49
32.333	0.00	0.29	0.325	I	0	1.48
32.417	0.00	0.29	0.323	I	0	1.47
32.500	0.00	0.29	0.321	I	0	1.47
32.583	0.00	0.29	0.319	I	0	1.46
32.667	0.00	0.28	0.317	I	0	1.45
32.750	0.00	0.28	0.315	I	0	1.44
32.833	0.00	0.28	0.313	I	0	1.43
32.917	0.00	0.28	0.311	I	0	1.43
33.000	0.00	0.28	0.309	I	0	1.42
33.083	0.00	0.28	0.307	I	0	1.41
33.167	0.00	0.28	0.305	I	0	1.40
33.250	0.00	0.28	0.303	I	0	1.39
33.333	0.00	0.28	0.301	I	0	1.38
33.417	0.00	0.28	0.299	I	0	1.38
33.500	0.00	0.28	0.298	I	0	1.37
33.583	0.00	0.28	0.296	I	0	1.36
33.667	0.00	0.28	0.294	I	0	1.35
33.750	0.00	0.27	0.292	I	0	1.35
33.833	0.00	0.27	0.290	I	0	1.34
33.917	0.00	0.27	0.288	I	0	1.33
34.000	0.00	0.27	0.286	I	0	1.32
34.083	0.00	0.27	0.284	I	0	1.32
34.167	0.00	0.27	0.282	I	0	1.31
34.250	0.00	0.27	0.281	I	0	1.30
34.333	0.00	0.27	0.279	I	0	1.29
34.417	0.00	0.27	0.277	I	0	1.29
34.500	0.00	0.27	0.275	I	0	1.28
34.583	0.00	0.27	0.273	I	0	1.27
34.667	0.00	0.27	0.271	I	0	1.26
34.750	0.00	0.26	0.270	I	0	1.26
34.833	0.00	0.26	0.268	I	0	1.25
34.917	0.00	0.26	0.266	I	0	1.24
35.000	0.00	0.26	0.264	I	0	1.23
35.083	0.00	0.26	0.262	I	0	1.23
35.167	0.00	0.26	0.261	I	0	1.22
35.250	0.00	0.26	0.259	I	0	1.21
35.333	0.00	0.26	0.257	I	0	1.21
35.417	0.00	0.26	0.255	I	0	1.20

35.500	0.00	0.26	0.253	I	0	1.19
35.583	0.00	0.26	0.252	I	0	1.18
35.667	0.00	0.26	0.250	I	0	1.18
35.750	0.00	0.25	0.248	I	0	1.17
35.833	0.00	0.25	0.246	I	0	1.16
35.917	0.00	0.25	0.245	I	0	1.16
36.000	0.00	0.25	0.243	I	0	1.15
36.083	0.00	0.25	0.241	I	0	1.14
36.167	0.00	0.25	0.239	I	0	1.13
36.250	0.00	0.25	0.238	I	0	1.13
36.333	0.00	0.25	0.236	I	0	1.12
36.417	0.00	0.25	0.234	I	0	1.11
36.500	0.00	0.25	0.233	I	0	1.11
36.583	0.00	0.25	0.231	I	0	1.10
36.667	0.00	0.25	0.229	I	0	1.09
36.750	0.00	0.25	0.227	I	0	1.09
36.833	0.00	0.24	0.226	I	0	1.08
36.917	0.00	0.24	0.224	I	0	1.07
37.000	0.00	0.24	0.222	I	0	1.07
37.083	0.00	0.24	0.221	I	0	1.06
37.167	0.00	0.24	0.219	I	0	1.05
37.250	0.00	0.24	0.217	I	0	1.05
37.333	0.00	0.24	0.216	I	0	1.04
37.417	0.00	0.24	0.214	I	0	1.03
37.500	0.00	0.24	0.212	I	0	1.03
37.583	0.00	0.24	0.211	I	0	1.02
37.667	0.00	0.24	0.209	I	0	1.01
37.750	0.00	0.24	0.208	I	0	1.01
37.833	0.00	0.24	0.206	I	0	1.00
37.917	0.00	0.24	0.204	I	0	0.99
38.000	0.00	0.23	0.203	I	0	0.99
38.083	0.00	0.23	0.201	I	0	0.98
38.167	0.00	0.23	0.199	I	0	0.97
38.250	0.00	0.23	0.198	I	0	0.97
38.333	0.00	0.23	0.196	I	0	0.96
38.417	0.00	0.23	0.195	I	0	0.95
38.500	0.00	0.23	0.193	I	0	0.95
38.583	0.00	0.23	0.192	I	0	0.94
38.667	0.00	0.23	0.190	I	0	0.94
38.750	0.00	0.23	0.188	I	0	0.93
38.833	0.00	0.23	0.187	I	0	0.92
38.917	0.00	0.22	0.185	I	0	0.92
39.000	0.00	0.22	0.184	I	0	0.91
39.083	0.00	0.22	0.182	I	0	0.90
39.167	0.00	0.22	0.181	I	0	0.90
39.250	0.00	0.22	0.179	I	0	0.89
39.333	0.00	0.22	0.178	I	0	0.89
39.417	0.00	0.22	0.176	I	0	0.88
39.500	0.00	0.22	0.175	I	0	0.87
39.583	0.00	0.22	0.173	I	0	0.87
39.667	0.00	0.22	0.172	I	0	0.86
39.750	0.00	0.22	0.170	I	0	0.86
39.833	0.00	0.22	0.169	I	0	0.85
39.917	0.00	0.21	0.167	I	0	0.84
40.000	0.00	0.21	0.166	I	0	0.84
40.083	0.00	0.21	0.164	I	0	0.83
40.167	0.00	0.21	0.163	I	0	0.83
40.250	0.00	0.21	0.161	I	0	0.82
40.333	0.00	0.21	0.160	I	0	0.82
40.417	0.00	0.21	0.158	I	0	0.81
40.500	0.00	0.21	0.157	I	0	0.80
40.583	0.00	0.21	0.155	I	0	0.80
40.667	0.00	0.21	0.154	I	0	0.79
40.750	0.00	0.21	0.153	I	0	0.79
40.833	0.00	0.21	0.151	I	0	0.78
40.917	0.00	0.20	0.150	I	0	0.78
41.000	0.00	0.20	0.148	I	0	0.77
41.083	0.00	0.20	0.147	I	0	0.76
41.167	0.00	0.20	0.146	I	0	0.76
41.250	0.00	0.20	0.144	I	0	0.75
41.333	0.00	0.20	0.143	I	0	0.75
41.417	0.00	0.20	0.141	I	0	0.74

41. 500	0. 00	0. 20	0. 140	I	0	0. 74
41. 583	0. 00	0. 20	0. 139	I	0	0. 73
41. 667	0. 00	0. 20	0. 137	I	0	0. 73
41. 750	0. 00	0. 20	0. 136	I	0	0. 72
41. 833	0. 00	0. 20	0. 135	I	0	0. 71
41. 917	0. 00	0. 20	0. 133	I	0	0. 71
42. 000	0. 00	0. 20	0. 132	I	0	0. 70
42. 083	0. 00	0. 19	0. 131	I	0	0. 70
42. 167	0. 00	0. 19	0. 129	I	0	0. 69
42. 250	0. 00	0. 19	0. 128	I	0	0. 69
42. 333	0. 00	0. 19	0. 127	I	0	0. 68
42. 417	0. 00	0. 19	0. 125	I	0	0. 68
42. 500	0. 00	0. 19	0. 124	I	0	0. 67
42. 583	0. 00	0. 19	0. 123	I	0	0. 67
42. 667	0. 00	0. 19	0. 121	I	0	0. 66
42. 750	0. 00	0. 19	0. 120	I	0	0. 66
42. 833	0. 00	0. 19	0. 119	I	0	0. 65
42. 917	0. 00	0. 19	0. 117	I	0	0. 65
43. 000	0. 00	0. 19	0. 116	I	0	0. 64
43. 083	0. 00	0. 19	0. 115	I	0	0. 64
43. 167	0. 00	0. 18	0. 114	I	0	0. 63
43. 250	0. 00	0. 18	0. 112	I	0	0. 63
43. 333	0. 00	0. 18	0. 111	I	0	0. 62
43. 417	0. 00	0. 18	0. 110	I	0	0. 62
43. 500	0. 00	0. 18	0. 109	I	0	0. 61
43. 583	0. 00	0. 18	0. 107	I	0	0. 61
43. 667	0. 00	0. 18	0. 106	I	0	0. 60
43. 750	0. 00	0. 18	0. 105	I	0	0. 60
43. 833	0. 00	0. 18	0. 104	I	0	0. 59
43. 917	0. 00	0. 18	0. 102	I	0	0. 59
44. 000	0. 00	0. 18	0. 101	I	0	0. 58
44. 083	0. 00	0. 18	0. 100	I	0	0. 58
44. 167	0. 00	0. 18	0. 099	I	0	0. 57
44. 250	0. 00	0. 18	0. 097	I	0	0. 57
44. 333	0. 00	0. 18	0. 096	I	0	0. 56
44. 417	0. 00	0. 17	0. 095	I	0	0. 56
44. 500	0. 00	0. 17	0. 094	I	0	0. 55
44. 583	0. 00	0. 17	0. 093	I	0	0. 55
44. 667	0. 00	0. 17	0. 091	I	0	0. 54
44. 750	0. 00	0. 17	0. 090	I	0	0. 54
44. 833	0. 00	0. 17	0. 089	I	0	0. 53
44. 917	0. 00	0. 17	0. 088	I	0	0. 53
45. 000	0. 00	0. 17	0. 087	I	0	0. 52
45. 083	0. 00	0. 17	0. 086	I	0	0. 52
45. 167	0. 00	0. 17	0. 084	I	0	0. 51
45. 250	0. 00	0. 17	0. 083	I	0	0. 51
45. 333	0. 00	0. 17	0. 082	I	0	0. 50
45. 417	0. 00	0. 17	0. 081	I	0	0. 50
45. 500	0. 00	0. 17	0. 080	I	0	0. 49
45. 583	0. 00	0. 17	0. 079	I	0	0. 49
45. 667	0. 00	0. 16	0. 077	I	0	0. 49
45. 750	0. 00	0. 16	0. 076	I	0	0. 48
45. 833	0. 00	0. 16	0. 075	I	0	0. 48
45. 917	0. 00	0. 16	0. 074	I	0	0. 47
46. 000	0. 00	0. 16	0. 073	I	0	0. 47
46. 083	0. 00	0. 16	0. 072	I	0	0. 46
46. 167	0. 00	0. 16	0. 071	I	0	0. 46
46. 250	0. 00	0. 16	0. 070	I	0	0. 45
46. 333	0. 00	0. 16	0. 069	I	0	0. 45
46. 417	0. 00	0. 16	0. 068	I	0	0. 44
46. 500	0. 00	0. 16	0. 066	I	0	0. 44
46. 583	0. 00	0. 16	0. 065	I	0	0. 44
46. 667	0. 00	0. 15	0. 064	I	0	0. 43
46. 750	0. 00	0. 15	0. 063	I	0	0. 43
46. 833	0. 00	0. 15	0. 062	I	0	0. 42
46. 917	0. 00	0. 15	0. 061	I	0	0. 42
47. 000	0. 00	0. 15	0. 060	I	0	0. 41
47. 083	0. 00	0. 15	0. 059	I	0	0. 41
47. 167	0. 00	0. 15	0. 058	I	0	0. 41
47. 250	0. 00	0. 15	0. 057	I	0	0. 40
47. 333	0. 00	0. 15	0. 056	I	0	0. 40
47. 417	0. 00	0. 15	0. 055	I	0	0. 39

47.500	0.00	0.15	0.054	I 0	0.39
47.583	0.00	0.15	0.053	I 0	0.38
47.667	0.00	0.15	0.052	I 0	0.38
47.750	0.00	0.14	0.051	I 0	0.38
47.833	0.00	0.14	0.050	I 0	0.37
47.917	0.00	0.14	0.049	I 0	0.37
48.000	0.00	0.14	0.048	I 0	0.36
48.083	0.00	0.14	0.047	I 0	0.36
48.167	0.00	0.14	0.046	I 0	0.36
48.250	0.00	0.14	0.045	I 0	0.35
48.333	0.00	0.14	0.044	I 0	0.35
48.417	0.00	0.14	0.043	I 0	0.34
48.500	0.00	0.14	0.042	I 0	0.34
48.583	0.00	0.14	0.041	I 0	0.34
48.667	0.00	0.14	0.040	I 0	0.33
48.750	0.00	0.14	0.039	I 0	0.33
48.833	0.00	0.13	0.038	I 0	0.32
48.917	0.00	0.13	0.037	I 0	0.32
49.000	0.00	0.13	0.037	I 0	0.32
49.083	0.00	0.13	0.036	I 0	0.31
49.167	0.00	0.13	0.035	I 0	0.31
49.250	0.00	0.13	0.034	I 0	0.30
49.333	0.00	0.13	0.033	I 0	0.30
49.417	0.00	0.13	0.032	I 0	0.30
49.500	0.00	0.13	0.031	I 0	0.29
49.583	0.00	0.13	0.030	I 0	0.29
49.667	0.00	0.13	0.029	I 0	0.28
49.750	0.00	0.12	0.029	I 0	0.28
49.833	0.00	0.12	0.028	I 0	0.28
49.917	0.00	0.12	0.027	I 0	0.27
50.000	0.00	0.12	0.026	I 0	0.27
50.083	0.00	0.12	0.025	I 0	0.26
50.167	0.00	0.12	0.024	I 0	0.26
50.250	0.00	0.12	0.024	I 0	0.26
50.333	0.00	0.12	0.023	I 0	0.25
50.417	0.00	0.12	0.022	I 0	0.25
50.500	0.00	0.11	0.021	I 0	0.24
50.583	0.00	0.11	0.020	I 0	0.23
50.667	0.00	0.11	0.020	I 0	0.22
50.750	0.00	0.10	0.019	I 0	0.21
50.833	0.00	0.10	0.018	I 0	0.21
50.917	0.00	0.09	0.018	I 0	0.20
51.000	0.00	0.09	0.017	I 0	0.19
51.083	0.00	0.09	0.016	I 0	0.19
51.167	0.00	0.08	0.016	I 0	0.18
51.250	0.00	0.08	0.015	I 0	0.17
51.333	0.00	0.08	0.015	I 0	0.17
51.417	0.00	0.08	0.014	I 0	0.16
51.500	0.00	0.07	0.014	I 0	0.15
51.583	0.00	0.07	0.013	I 0	0.15
51.667	0.00	0.07	0.013	I 0	0.14
51.750	0.00	0.07	0.012	I 0	0.14
51.833	0.00	0.06	0.012	I 0	0.13
51.917	0.00	0.06	0.011	I 0	0.13
52.000	0.00	0.06	0.011	I 0	0.12
52.083	0.00	0.06	0.010	0	0.12
52.167	0.00	0.05	0.010	0	0.11
52.250	0.00	0.05	0.010	0	0.11
52.333	0.00	0.05	0.009	0	0.11
52.417	0.00	0.05	0.009	0	0.10
52.500	0.00	0.05	0.009	0	0.10
52.583	0.00	0.04	0.008	0	0.10
52.667	0.00	0.04	0.008	0	0.09
52.750	0.00	0.04	0.008	0	0.09
52.833	0.00	0.04	0.008	0	0.09
52.917	0.00	0.04	0.007	0	0.08
53.000	0.00	0.04	0.007	0	0.08
53.083	0.00	0.04	0.007	0	0.08
53.167	0.00	0.03	0.006	0	0.07
53.250	0.00	0.03	0.006	0	0.07
53.333	0.00	0.03	0.006	0	0.07
53.417	0.00	0.03	0.006	0	0.07

53.500	0.00	0.03	0.006	0	0.06
53.583	0.00	0.03	0.005	0	0.06
53.667	0.00	0.03	0.005	0	0.06
53.750	0.00	0.03	0.005	0	0.06
53.833	0.00	0.03	0.005	0	0.05
53.917	0.00	0.02	0.005	0	0.05
54.000	0.00	0.02	0.004	0	0.05
54.083	0.00	0.02	0.004	0	0.05
54.167	0.00	0.02	0.004	0	0.05
54.250	0.00	0.02	0.004	0	0.05
54.333	0.00	0.02	0.004	0	0.04
54.417	0.00	0.02	0.004	0	0.04
54.500	0.00	0.02	0.004	0	0.04
54.583	0.00	0.02	0.003	0	0.04
54.667	0.00	0.02	0.003	0	0.04
54.750	0.00	0.02	0.003	0	0.04
54.833	0.00	0.02	0.003	0	0.04
54.917	0.00	0.02	0.003	0	0.03
55.000	0.00	0.02	0.003	0	0.03
55.083	0.00	0.01	0.003	0	0.03
55.167	0.00	0.01	0.003	0	0.03
55.250	0.00	0.01	0.003	0	0.03
55.333	0.00	0.01	0.002	0	0.03
55.417	0.00	0.01	0.002	0	0.03
55.500	0.00	0.01	0.002	0	0.03
55.583	0.00	0.01	0.002	0	0.03
55.667	0.00	0.01	0.002	0	0.02
55.750	0.00	0.01	0.002	0	0.02
55.833	0.00	0.01	0.002	0	0.02
55.917	0.00	0.01	0.002	0	0.02
56.000	0.00	0.01	0.002	0	0.02
56.083	0.00	0.01	0.002	0	0.02
56.167	0.00	0.01	0.002	0	0.02
56.250	0.00	0.01	0.002	0	0.02
56.333	0.00	0.01	0.002	0	0.02
56.417	0.00	0.01	0.002	0	0.02
56.500	0.00	0.01	0.001	0	0.02
56.583	0.00	0.01	0.001	0	0.02
56.667	0.00	0.01	0.001	0	0.02
56.750	0.00	0.01	0.001	0	0.02
56.833	0.00	0.01	0.001	0	0.01
56.917	0.00	0.01	0.001	0	0.01
57.000	0.00	0.01	0.001	0	0.01
57.083	0.00	0.01	0.001	0	0.01
57.167	0.00	0.01	0.001	0	0.01
57.250	0.00	0.01	0.001	0	0.01
57.333	0.00	0.01	0.001	0	0.01
57.417	0.00	0.01	0.001	0	0.01
57.500	0.00	0.01	0.001	0	0.01
57.583	0.00	0.00	0.001	0	0.01
57.667	0.00	0.00	0.001	0	0.01
57.750	0.00	0.00	0.001	0	0.01
57.833	0.00	0.00	0.001	0	0.01
57.917	0.00	0.00	0.001	0	0.01
58.000	0.00	0.00	0.001	0	0.01
58.083	0.00	0.00	0.001	0	0.01
58.167	0.00	0.00	0.001	0	0.01
58.250	0.00	0.00	0.001	0	0.01
58.333	0.00	0.00	0.001	0	0.01
58.417	0.00	0.00	0.001	0	0.01
58.500	0.00	0.00	0.001	0	0.01
58.583	0.00	0.00	0.001	0	0.01
58.667	0.00	0.00	0.001	0	0.01
58.750	0.00	0.00	0.001	0	0.01
58.833	0.00	0.00	0.001	0	0.01
58.917	0.00	0.00	0.001	0	0.01
59.000	0.00	0.00	0.000	0	0.01
59.083	0.00	0.00	0.000	0	0.01
59.167	0.00	0.00	0.000	0	0.01
59.250	0.00	0.00	0.000	0	0.00
59.333	0.00	0.00	0.000	0	0.00
59.417	0.00	0.00	0.000	0	0.00

59.500	0.00	0.00	0.000	0					0.00
59.583	0.00	0.00	0.000	0					0.00
59.667	0.00	0.00	0.000	0					0.00
59.750	0.00	0.00	0.000	0					0.00
59.833	0.00	0.00	0.000	0					0.00
59.917	0.00	0.00	0.000	0					0.00
60.000	0.00	0.00	0.000	0					0.00
60.083	0.00	0.00	0.000	0					0.00
60.167	0.00	0.00	0.000	0					0.00
60.250	0.00	0.00	0.000	0					0.00
60.333	0.00	0.00	0.000	0					0.00
60.417	0.00	0.00	0.000	0					0.00
60.500	0.00	0.00	0.000	0					0.00
60.583	0.00	0.00	0.000	0					0.00
60.667	0.00	0.00	0.000	0					0.00
60.750	0.00	0.00	0.000	0					0.00
60.833	0.00	0.00	0.000	0					0.00
60.917	0.00	0.00	0.000	0					0.00
61.000	0.00	0.00	0.000	0					0.00
61.083	0.00	0.00	0.000	0					0.00
61.167	0.00	0.00	0.000	0					0.00
61.250	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 735
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.468 (CFS)
Total volume = 1.099 (Ac. Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac. Ft)	0.000	0.000	0.000	0.000	0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/05/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 100-131
 MITIGATION ANALYSIS
 6-HOUR - 5-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PA0565.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 74
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 4.691 (CFS)
 Total volume = 0.592 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 74
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.022	0.118	0.022	0.022
0.340	0.042	0.138	0.042	0.042
0.500	0.081	0.167	0.080	0.082
1.000	0.206	0.236	0.205	0.207
1.350	0.293	0.275	0.292	0.294
1.500	0.329	0.289	0.328	0.330
2.000	0.451	0.334	0.450	0.452
2.500	0.567	0.374	0.566	0.568
3.000	0.677	0.409	0.676	0.678
3.100	0.697	0.416	0.696	0.698
3.500	0.775	1.336	0.770	0.780
4.000	0.841	3.874	0.828	0.854
4.100	0.846	4.260	0.831	0.861
4.340	0.859	4.703	0.843	0.875

Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; '0' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	. 0	1. 2	2. 35	3. 52	4. 69	Depth (Ft.)
0. 083	0. 25	0. 00	0. 001	0I					0. 01
0. 167	0. 45	0. 02	0. 003	0 I					0. 04
0. 250	0. 51	0. 03	0. 006	0 I					0. 07
0. 333	0. 51	0. 05	0. 010	0 I					0. 11
0. 417	0. 51	0. 07	0. 013	0 I					0. 14
0. 500	0. 56	0. 08	0. 016	0 I					0. 18
0. 583	0. 59	0. 10	0. 019	0 I					0. 22
0. 667	0. 60	0. 12	0. 022	0 I					0. 25
0. 750	0. 60	0. 12	0. 026	0 I					0. 27
0. 833	0. 60	0. 13	0. 029	0 I					0. 28
0. 917	0. 60	0. 13	0. 032	0 I					0. 30
1. 000	0. 65	0. 13	0. 036	0 I					0. 31
1. 083	0. 68	0. 14	0. 039	0 I					0. 33
1. 167	0. 68	0. 14	0. 043	0 I					0. 34
1. 250	0. 68	0. 14	0. 047	0 I					0. 36
1. 333	0. 68	0. 14	0. 051	0 I					0. 38
1. 417	0. 68	0. 15	0. 054	0 I					0. 39
1. 500	0. 68	0. 15	0. 058	0 I					0. 41
1. 583	0. 68	0. 15	0. 062	0 I					0. 42
1. 667	0. 68	0. 16	0. 065	0 I					0. 44
1. 750	0. 68	0. 16	0. 069	0 I					0. 45
1. 833	0. 68	0. 16	0. 072	0 I					0. 47
1. 917	0. 68	0. 16	0. 076	0 I					0. 48
2. 000	0. 73	0. 17	0. 080	0 I					0. 50
2. 083	0. 71	0. 17	0. 084	0 I					0. 51
2. 167	0. 74	0. 17	0. 087	0 I					0. 53
2. 250	0. 76	0. 17	0. 091	0 I					0. 54
2. 333	0. 77	0. 18	0. 096	0 I					0. 56
2. 417	0. 77	0. 18	0. 100	0 I					0. 57
2. 500	0. 77	0. 18	0. 104	0 I					0. 59
2. 583	0. 77	0. 18	0. 108	0 I					0. 61
2. 667	0. 77	0. 18	0. 112	0 I					0. 62
2. 750	0. 82	0. 19	0. 116	0 I					0. 64
2. 833	0. 85	0. 19	0. 120	0 I					0. 66
2. 917	0. 85	0. 19	0. 125	0 I					0. 68
3. 000	0. 85	0. 19	0. 130	0 I					0. 69
3. 083	0. 85	0. 20	0. 134	0 I					0. 71
3. 167	0. 90	0. 20	0. 139	0 I					0. 73
3. 250	0. 93	0. 20	0. 144	0 I					0. 75
3. 333	0. 94	0. 20	0. 149	0 I					0. 77
3. 417	0. 99	0. 21	0. 154	0 I					0. 79
3. 500	1. 07	0. 21	0. 160	0 I					0. 81
3. 583	1. 16	0. 21	0. 166	0 I					0. 84
3. 667	1. 19	0. 22	0. 172	0 I					0. 87
3. 750	1. 25	0. 22	0. 179	0 I					0. 89
3. 833	1. 28	0. 23	0. 186	0 I					0. 92
3. 917	1. 33	0. 23	0. 194	0 I					0. 95
4. 000	1. 36	0. 23	0. 202	0 I					0. 98
4. 083	1. 42	0. 24	0. 210	0 I					1. 01
4. 167	1. 50	0. 24	0. 218	0 I					1. 05
4. 250	1. 58	0. 25	0. 227	0 I					1. 08
4. 333	1. 67	0. 25	0. 236	0 I					1. 12
4. 417	1. 75	0. 25	0. 246	0 I					1. 16
4. 500	1. 79	0. 26	0. 257	0 I					1. 20
4. 583	1. 84	0. 26	0. 268	0 I					1. 25
4. 667	1. 92	0. 27	0. 279	0 I					1. 29
4. 750	2. 01	0. 27	0. 290	0 I					1. 34
4. 833	2. 05	0. 28	0. 302	0 I					1. 39
4. 917	2. 10	0. 28	0. 315	0 I					1. 44
5. 000	2. 18	0. 29	0. 328	0 I					1. 49
5. 083	2. 46	0. 29	0. 341	0 I					1. 55
5. 167	2. 87	0. 30	0. 358	0 I					1. 62
5. 250	3. 21	0. 31	0. 377	0 I					1. 70
5. 333	3. 51	0. 31	0. 398	0 I					1. 78
5. 417	3. 94	0. 32	0. 421	0 I					1. 88

5. 500	4. 69	0. 33	0. 449	0				1. 99
5. 583	3. 04	0. 34	0. 473	0				2. 09
5. 667	1. 33	0. 35	0. 486	0				2. 15
5. 750	0. 67	0. 35	0. 490	0	I			2. 17
5. 833	0. 48	0. 35	0. 492	0	I			2. 18
5. 917	0. 33	0. 35	0. 492	0				2. 18
6. 000	0. 22	0. 35	0. 492	0	I			2. 17
6. 083	0. 08	0. 35	0. 490	0	I			2. 17
6. 167	0. 01	0. 35	0. 488	0	I			2. 16
6. 250	0. 00	0. 35	0. 486	0	I			2. 15
6. 333	0. 00	0. 35	0. 483	0	I			2. 14
6. 417	0. 00	0. 34	0. 481	0	I			2. 13
6. 500	0. 00	0. 34	0. 479	0	I			2. 12
6. 583	0. 00	0. 34	0. 476	0	I			2. 11
6. 667	0. 00	0. 34	0. 474	0	I			2. 10
6. 750	0. 00	0. 34	0. 471	0	I			2. 09
6. 833	0. 00	0. 34	0. 469	0	I			2. 08
6. 917	0. 00	0. 34	0. 467	0	I			2. 07
7. 000	0. 00	0. 34	0. 464	0	I			2. 06
7. 083	0. 00	0. 34	0. 462	0	I			2. 05
7. 167	0. 00	0. 34	0. 460	0	I			2. 04
7. 250	0. 00	0. 34	0. 458	0	I			2. 03
7. 333	0. 00	0. 34	0. 455	0	I			2. 02
7. 417	0. 00	0. 33	0. 453	0	I			2. 01
7. 500	0. 00	0. 33	0. 451	0	I			2. 00
7. 583	0. 00	0. 33	0. 448	0	I			1. 99
7. 667	0. 00	0. 33	0. 446	0	I			1. 98
7. 750	0. 00	0. 33	0. 444	0	I			1. 97
7. 833	0. 00	0. 33	0. 441	0	I			1. 96
7. 917	0. 00	0. 33	0. 439	0	I			1. 95
8. 000	0. 00	0. 33	0. 437	0	I			1. 94
8. 083	0. 00	0. 33	0. 435	0	I			1. 93
8. 167	0. 00	0. 33	0. 432	0	I			1. 92
8. 250	0. 00	0. 33	0. 430	0	I			1. 91
8. 333	0. 00	0. 33	0. 428	0	I			1. 91
8. 417	0. 00	0. 32	0. 426	0	I			1. 90
8. 500	0. 00	0. 32	0. 423	0	I			1. 89
8. 583	0. 00	0. 32	0. 421	0	I			1. 88
8. 667	0. 00	0. 32	0. 419	0	I			1. 87
8. 750	0. 00	0. 32	0. 417	0	I			1. 86
8. 833	0. 00	0. 32	0. 415	0	I			1. 85
8. 917	0. 00	0. 32	0. 412	0	I			1. 84
9. 000	0. 00	0. 32	0. 410	0	I			1. 83
9. 083	0. 00	0. 32	0. 408	0	I			1. 82
9. 167	0. 00	0. 32	0. 406	0	I			1. 81
9. 250	0. 00	0. 32	0. 404	0	I			1. 81
9. 333	0. 00	0. 32	0. 401	0	I			1. 80
9. 417	0. 00	0. 31	0. 399	0	I			1. 79
9. 500	0. 00	0. 31	0. 397	0	I			1. 78
9. 583	0. 00	0. 31	0. 395	0	I			1. 77
9. 667	0. 00	0. 31	0. 393	0	I			1. 76
9. 750	0. 00	0. 31	0. 391	0	I			1. 75
9. 833	0. 00	0. 31	0. 388	0	I			1. 74
9. 917	0. 00	0. 31	0. 386	0	I			1. 73
10. 000	0. 00	0. 31	0. 384	0	I			1. 73
10. 083	0. 00	0. 31	0. 382	0	I			1. 72
10. 167	0. 00	0. 31	0. 380	0	I			1. 71
10. 250	0. 00	0. 31	0. 378	0	I			1. 70
10. 333	0. 00	0. 31	0. 376	0	I			1. 69
10. 417	0. 00	0. 31	0. 374	0	I			1. 68
10. 500	0. 00	0. 30	0. 371	0	I			1. 67
10. 583	0. 00	0. 30	0. 369	0	I			1. 67
10. 667	0. 00	0. 30	0. 367	0	I			1. 66
10. 750	0. 00	0. 30	0. 365	0	I			1. 65
10. 833	0. 00	0. 30	0. 363	0	I			1. 64
10. 917	0. 00	0. 30	0. 361	0	I			1. 63
11. 000	0. 00	0. 30	0. 359	0	I			1. 62
11. 083	0. 00	0. 30	0. 357	0	I			1. 61
11. 167	0. 00	0. 30	0. 355	0	I			1. 61
11. 250	0. 00	0. 30	0. 353	0	I			1. 60
11. 333	0. 00	0. 30	0. 351	0	I			1. 59
11. 417	0. 00	0. 30	0. 349	0	I			1. 58

11. 500	0. 00	0. 30	0. 347	I 0
11. 583	0. 00	0. 29	0. 345	I 0
11. 667	0. 00	0. 29	0. 343	I 0
11. 750	0. 00	0. 29	0. 341	I 0
11. 833	0. 00	0. 29	0. 339	IO
11. 917	0. 00	0. 29	0. 337	IO
12. 000	0. 00	0. 29	0. 335	IO
12. 083	0. 00	0. 29	0. 333	IO
12. 167	0. 00	0. 29	0. 331	IO
12. 250	0. 00	0. 29	0. 329	IO
12. 333	0. 00	0. 29	0. 327	IO
12. 417	0. 00	0. 29	0. 325	IO
12. 500	0. 00	0. 29	0. 323	IO
12. 583	0. 00	0. 29	0. 321	IO
12. 667	0. 00	0. 28	0. 319	IO
12. 750	0. 00	0. 28	0. 317	IO
12. 833	0. 00	0. 28	0. 315	IO
12. 917	0. 00	0. 28	0. 313	IO
13. 000	0. 00	0. 28	0. 311	IO
13. 083	0. 00	0. 28	0. 309	IO
13. 167	0. 00	0. 28	0. 307	IO
13. 250	0. 00	0. 28	0. 305	IO
13. 333	0. 00	0. 28	0. 303	IO
13. 417	0. 00	0. 28	0. 301	IO
13. 500	0. 00	0. 28	0. 299	IO
13. 583	0. 00	0. 28	0. 297	IO
13. 667	0. 00	0. 28	0. 296	IO
13. 750	0. 00	0. 28	0. 294	IO
13. 833	0. 00	0. 27	0. 292	IO
13. 917	0. 00	0. 27	0. 290	IO
14. 000	0. 00	0. 27	0. 288	IO
14. 083	0. 00	0. 27	0. 286	IO
14. 167	0. 00	0. 27	0. 284	IO
14. 250	0. 00	0. 27	0. 282	IO
14. 333	0. 00	0. 27	0. 280	IO
14. 417	0. 00	0. 27	0. 279	IO
14. 500	0. 00	0. 27	0. 277	IO
14. 583	0. 00	0. 27	0. 275	IO
14. 667	0. 00	0. 27	0. 273	IO
14. 750	0. 00	0. 27	0. 271	IO
14. 833	0. 00	0. 26	0. 269	IO
14. 917	0. 00	0. 26	0. 268	IO
15. 000	0. 00	0. 26	0. 266	IO
15. 083	0. 00	0. 26	0. 264	IO
15. 167	0. 00	0. 26	0. 262	IO
15. 250	0. 00	0. 26	0. 260	IO
15. 333	0. 00	0. 26	0. 259	IO
15. 417	0. 00	0. 26	0. 257	IO
15. 500	0. 00	0. 26	0. 255	IO
15. 583	0. 00	0. 26	0. 253	IO
15. 667	0. 00	0. 26	0. 252	IO
15. 750	0. 00	0. 26	0. 250	IO
15. 833	0. 00	0. 25	0. 248	IO
15. 917	0. 00	0. 25	0. 246	IO
16. 000	0. 00	0. 25	0. 245	IO
16. 083	0. 00	0. 25	0. 243	IO
16. 167	0. 00	0. 25	0. 241	IO
16. 250	0. 00	0. 25	0. 239	IO
16. 333	0. 00	0. 25	0. 238	IO
16. 417	0. 00	0. 25	0. 236	IO
16. 500	0. 00	0. 25	0. 234	IO
16. 583	0. 00	0. 25	0. 232	IO
16. 667	0. 00	0. 25	0. 231	IO
16. 750	0. 00	0. 25	0. 229	IO
16. 833	0. 00	0. 25	0. 227	IO
16. 917	0. 00	0. 24	0. 226	IO
17. 000	0. 00	0. 24	0. 224	IO
17. 083	0. 00	0. 24	0. 222	IO
17. 167	0. 00	0. 24	0. 221	IO
17. 250	0. 00	0. 24	0. 219	IO
17. 333	0. 00	0. 24	0. 217	IO
17. 417	0. 00	0. 24	0. 216	IO

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17. 500	0. 00	0. 24	0. 214	IO	1. 03
17. 583	0. 00	0. 24	0. 212	IO	1. 03
17. 667	0. 00	0. 24	0. 211	IO	1. 02
17. 750	0. 00	0. 24	0. 209	IO	1. 01
17. 833	0. 00	0. 24	0. 207	IO	1. 01
17. 917	0. 00	0. 24	0. 206	IO	1. 00
18. 000	0. 00	0. 23	0. 204	IO	0. 99
18. 083	0. 00	0. 23	0. 203	IO	0. 99
18. 167	0. 00	0. 23	0. 201	IO	0. 98
18. 250	0. 00	0. 23	0. 199	IO	0. 97
18. 333	0. 00	0. 23	0. 198	IO	0. 97
18. 417	0. 00	0. 23	0. 196	IO	0. 96
18. 500	0. 00	0. 23	0. 195	IO	0. 95
18. 583	0. 00	0. 23	0. 193	IO	0. 95
18. 667	0. 00	0. 23	0. 191	IO	0. 94
18. 750	0. 00	0. 23	0. 190	IO	0. 94
18. 833	0. 00	0. 23	0. 188	IO	0. 93
18. 917	0. 00	0. 23	0. 187	IO	0. 92
19. 000	0. 00	0. 22	0. 185	IO	0. 92
19. 083	0. 00	0. 22	0. 184	IO	0. 91
19. 167	0. 00	0. 22	0. 182	IO	0. 90
19. 250	0. 00	0. 22	0. 181	IO	0. 90
19. 333	0. 00	0. 22	0. 179	IO	0. 89
19. 417	0. 00	0. 22	0. 178	IO	0. 89
19. 500	0. 00	0. 22	0. 176	IO	0. 88
19. 583	0. 00	0. 22	0. 174	IO	0. 87
19. 667	0. 00	0. 22	0. 173	IO	0. 87
19. 750	0. 00	0. 22	0. 171	IO	0. 86
19. 833	0. 00	0. 22	0. 170	IO	0. 86
19. 917	0. 00	0. 22	0. 169	IO	0. 85
20. 000	0. 00	0. 21	0. 167	IO	0. 84
20. 083	0. 00	0. 21	0. 166	IO	0. 84
20. 167	0. 00	0. 21	0. 164	IO	0. 83
20. 250	0. 00	0. 21	0. 163	IO	0. 83
20. 333	0. 00	0. 21	0. 161	IO	0. 82
20. 417	0. 00	0. 21	0. 160	IO	0. 81
20. 500	0. 00	0. 21	0. 158	IO	0. 81
20. 583	0. 00	0. 21	0. 157	IO	0. 80
20. 667	0. 00	0. 21	0. 155	IO	0. 80
20. 750	0. 00	0. 21	0. 154	IO	0. 79
20. 833	0. 00	0. 21	0. 153	IO	0. 79
20. 917	0. 00	0. 21	0. 151	IO	0. 78
21. 000	0. 00	0. 20	0. 150	IO	0. 77
21. 083	0. 00	0. 20	0. 148	IO	0. 77
21. 167	0. 00	0. 20	0. 147	IO	0. 76
21. 250	0. 00	0. 20	0. 145	IO	0. 76
21. 333	0. 00	0. 20	0. 144	IO	0. 75
21. 417	0. 00	0. 20	0. 143	IO	0. 75
21. 500	0. 00	0. 20	0. 141	IO	0. 74
21. 583	0. 00	0. 20	0. 140	IO	0. 74
21. 667	0. 00	0. 20	0. 139	IO	0. 73
21. 750	0. 00	0. 20	0. 137	IO	0. 72
21. 833	0. 00	0. 20	0. 136	IO	0. 72
21. 917	0. 00	0. 20	0. 135	IO	0. 71
22. 000	0. 00	0. 20	0. 133	IO	0. 71
22. 083	0. 00	0. 20	0. 132	IO	0. 70
22. 167	0. 00	0. 19	0. 130	IO	0. 70
22. 250	0. 00	0. 19	0. 129	IO	0. 69
22. 333	0. 00	0. 19	0. 128	IO	0. 69
22. 417	0. 00	0. 19	0. 126	IO	0. 68
22. 500	0. 00	0. 19	0. 125	IO	0. 68
22. 583	0. 00	0. 19	0. 124	IO	0. 67
22. 667	0. 00	0. 19	0. 123	IO	0. 67
22. 750	0. 00	0. 19	0. 121	IO	0. 66
22. 833	0. 00	0. 19	0. 120	IO	0. 66
22. 917	0. 00	0. 19	0. 119	IO	0. 65
23. 000	0. 00	0. 19	0. 117	IO	0. 65
23. 083	0. 00	0. 19	0. 116	IO	0. 64
23. 167	0. 00	0. 19	0. 115	IO	0. 64
23. 250	0. 00	0. 18	0. 113	IO	0. 63
23. 333	0. 00	0. 18	0. 112	IO	0. 62
23. 417	0. 00	0. 18	0. 111	IO	0. 62

23.500	0.00	0.18	0.110	IO	0.61
23.583	0.00	0.18	0.108	IO	0.61
23.667	0.00	0.18	0.107	IO	0.60
23.750	0.00	0.18	0.106	IO	0.60
23.833	0.00	0.18	0.105	IO	0.59
23.917	0.00	0.18	0.103	IO	0.59
24.000	0.00	0.18	0.102	IO	0.58
24.083	0.00	0.18	0.101	IO	0.58
24.167	0.00	0.18	0.100	IO	0.58
24.250	0.00	0.18	0.099	IO	0.57
24.333	0.00	0.18	0.097	IO	0.57
24.417	0.00	0.18	0.096	IO	0.56
24.500	0.00	0.17	0.095	IO	0.56
24.583	0.00	0.17	0.094	IO	0.55
24.667	0.00	0.17	0.093	IO	0.55
24.750	0.00	0.17	0.091	IO	0.54
24.833	0.00	0.17	0.090	IO	0.54
24.917	0.00	0.17	0.089	IO	0.53
25.000	0.00	0.17	0.088	IO	0.53
25.083	0.00	0.17	0.087	IO	0.52
25.167	0.00	0.17	0.085	IO	0.52
25.250	0.00	0.17	0.084	IO	0.51
25.333	0.00	0.17	0.083	IO	0.51
25.417	0.00	0.17	0.082	IO	0.50
25.500	0.00	0.17	0.081	IO	0.50
25.583	0.00	0.17	0.080	IO	0.49
25.667	0.00	0.17	0.079	IO	0.49
25.750	0.00	0.16	0.077	IO	0.49
25.833	0.00	0.16	0.076	IO	0.48
25.917	0.00	0.16	0.075	IO	0.48
26.000	0.00	0.16	0.074	IO	0.47
26.083	0.00	0.16	0.073	IO	0.47
26.167	0.00	0.16	0.072	IO	0.46
26.250	0.00	0.16	0.071	IO	0.46
26.333	0.00	0.16	0.070	IO	0.45
26.417	0.00	0.16	0.069	IO	0.45
26.500	0.00	0.16	0.067	IO	0.44
26.583	0.00	0.16	0.066	IO	0.44
26.667	0.00	0.16	0.065	IO	0.44
26.750	0.00	0.15	0.064	IO	0.43
26.833	0.00	0.15	0.063	IO	0.43
26.917	0.00	0.15	0.062	IO	0.42
27.000	0.00	0.15	0.061	IO	0.42
27.083	0.00	0.15	0.060	IO	0.41
27.167	0.00	0.15	0.059	IO	0.41
27.250	0.00	0.15	0.058	IO	0.41
27.333	0.00	0.15	0.057	IO	0.40
27.417	0.00	0.15	0.056	IO	0.40
27.500	0.00	0.15	0.055	IO	0.39
27.583	0.00	0.15	0.054	IO	0.39
27.667	0.00	0.15	0.053	0	0.38
27.750	0.00	0.15	0.052	0	0.38
27.833	0.00	0.14	0.051	0	0.38
27.917	0.00	0.14	0.050	0	0.37
28.000	0.00	0.14	0.049	0	0.37
28.083	0.00	0.14	0.048	0	0.36
28.167	0.00	0.14	0.047	0	0.36
28.250	0.00	0.14	0.046	0	0.36
28.333	0.00	0.14	0.045	0	0.35
28.417	0.00	0.14	0.044	0	0.35
28.500	0.00	0.14	0.043	0	0.34
28.583	0.00	0.14	0.042	0	0.34
28.667	0.00	0.14	0.041	0	0.34
28.750	0.00	0.14	0.040	0	0.33
28.833	0.00	0.14	0.039	0	0.33
28.917	0.00	0.13	0.038	0	0.32
29.000	0.00	0.13	0.037	0	0.32
29.083	0.00	0.13	0.036	0	0.32
29.167	0.00	0.13	0.036	0	0.31
29.250	0.00	0.13	0.035	0	0.31
29.333	0.00	0.13	0.034	0	0.30
29.417	0.00	0.13	0.033	0	0.30

29.500	0.00	0.13	0.032	0	0.30
29.583	0.00	0.13	0.031	0	0.29
29.667	0.00	0.13	0.030	0	0.29
29.750	0.00	0.13	0.029	0	0.28
29.833	0.00	0.12	0.029	0	0.28
29.917	0.00	0.12	0.028	0	0.28
30.000	0.00	0.12	0.027	0	0.27
30.083	0.00	0.12	0.026	0	0.27
30.167	0.00	0.12	0.025	0	0.26
30.250	0.00	0.12	0.024	0	0.26
30.333	0.00	0.12	0.023	0	0.26
30.417	0.00	0.12	0.023	0	0.25
30.500	0.00	0.12	0.022	0	0.25
30.583	0.00	0.11	0.021	0	0.24
30.667	0.00	0.11	0.020	0	0.23
30.750	0.00	0.10	0.020	0	0.22
30.833	0.00	0.10	0.019	0	0.21
30.917	0.00	0.10	0.018	0	0.21
31.000	0.00	0.09	0.018	0	0.20
31.083	0.00	0.09	0.017	0	0.19
31.167	0.00	0.09	0.016	0	0.18
31.250	0.00	0.08	0.016	0	0.18
31.333	0.00	0.08	0.015	0	0.17
31.417	0.00	0.08	0.015	0	0.17
31.500	0.00	0.08	0.014	0	0.16
31.583	0.00	0.07	0.014	0	0.15
31.667	0.00	0.07	0.013	0	0.15
31.750	0.00	0.07	0.013	0	0.14
31.833	0.00	0.06	0.012	0	0.14
31.917	0.00	0.06	0.012	0	0.13
32.000	0.00	0.06	0.011	0	0.13
32.083	0.00	0.06	0.011	0	0.12
32.167	0.00	0.06	0.010	0	0.12
32.250	0.00	0.05	0.010	0	0.11
32.333	0.00	0.05	0.010	0	0.11
32.417	0.00	0.05	0.009	0	0.11
32.500	0.00	0.05	0.009	0	0.10
32.583	0.00	0.05	0.009	0	0.10
32.667	0.00	0.04	0.008	0	0.10
32.750	0.00	0.04	0.008	0	0.09
32.833	0.00	0.04	0.008	0	0.09
32.917	0.00	0.04	0.007	0	0.09
33.000	0.00	0.04	0.007	0	0.08
33.083	0.00	0.04	0.007	0	0.08
33.167	0.00	0.04	0.007	0	0.08
33.250	0.00	0.03	0.006	0	0.07
33.333	0.00	0.03	0.006	0	0.07
33.417	0.00	0.03	0.006	0	0.07
33.500	0.00	0.03	0.006	0	0.07
33.583	0.00	0.03	0.006	0	0.06
33.667	0.00	0.03	0.005	0	0.06
33.750	0.00	0.03	0.005	0	0.06
33.833	0.00	0.03	0.005	0	0.06
33.917	0.00	0.03	0.005	0	0.05
34.000	0.00	0.02	0.005	0	0.05
34.083	0.00	0.02	0.004	0	0.05
34.167	0.00	0.02	0.004	0	0.05
34.250	0.00	0.02	0.004	0	0.05
34.333	0.00	0.02	0.004	0	0.05
34.417	0.00	0.02	0.004	0	0.04
34.500	0.00	0.02	0.004	0	0.04
34.583	0.00	0.02	0.004	0	0.04
34.667	0.00	0.02	0.003	0	0.04
34.750	0.00	0.02	0.003	0	0.04
34.833	0.00	0.02	0.003	0	0.04
34.917	0.00	0.02	0.003	0	0.04
35.000	0.00	0.02	0.003	0	0.03
35.083	0.00	0.02	0.003	0	0.03
35.167	0.00	0.01	0.003	0	0.03
35.250	0.00	0.01	0.003	0	0.03
35.333	0.00	0.01	0.003	0	0.03
35.417	0.00	0.01	0.002	0	0.03

35.500	0.00	0.01	0.002	0	0.03
35.583	0.00	0.01	0.002	0	0.03
35.667	0.00	0.01	0.002	0	0.03
35.750	0.00	0.01	0.002	0	0.02
35.833	0.00	0.01	0.002	0	0.02
35.917	0.00	0.01	0.002	0	0.02
36.000	0.00	0.01	0.002	0	0.02
36.083	0.00	0.01	0.002	0	0.02
36.167	0.00	0.01	0.002	0	0.02
36.250	0.00	0.01	0.002	0	0.02
36.333	0.00	0.01	0.002	0	0.02
36.417	0.00	0.01	0.002	0	0.02
36.500	0.00	0.01	0.002	0	0.02
36.583	0.00	0.01	0.001	0	0.02
36.667	0.00	0.01	0.001	0	0.02
36.750	0.00	0.01	0.001	0	0.02
36.833	0.00	0.01	0.001	0	0.01
36.917	0.00	0.01	0.001	0	0.01
37.000	0.00	0.01	0.001	0	0.01
37.083	0.00	0.01	0.001	0	0.01
37.167	0.00	0.01	0.001	0	0.01
37.250	0.00	0.01	0.001	0	0.01
37.333	0.00	0.01	0.001	0	0.01
37.417	0.00	0.01	0.001	0	0.01
37.500	0.00	0.01	0.001	0	0.01
37.583	0.00	0.01	0.001	0	0.01
37.667	0.00	0.00	0.001	0	0.01
37.750	0.00	0.00	0.001	0	0.01
37.833	0.00	0.00	0.001	0	0.01
37.917	0.00	0.00	0.001	0	0.01
38.000	0.00	0.00	0.001	0	0.01
38.083	0.00	0.00	0.001	0	0.01
38.167	0.00	0.00	0.001	0	0.01
38.250	0.00	0.00	0.001	0	0.01
38.333	0.00	0.00	0.001	0	0.01
38.417	0.00	0.00	0.001	0	0.01
38.500	0.00	0.00	0.001	0	0.01
38.583	0.00	0.00	0.001	0	0.01
38.667	0.00	0.00	0.001	0	0.01
38.750	0.00	0.00	0.001	0	0.01
38.833	0.00	0.00	0.001	0	0.01
38.917	0.00	0.00	0.001	0	0.01
39.000	0.00	0.00	0.001	0	0.01
39.083	0.00	0.00	0.000	0	0.01
39.167	0.00	0.00	0.000	0	0.01
39.250	0.00	0.00	0.000	0	0.01
39.333	0.00	0.00	0.000	0	0.00
39.417	0.00	0.00	0.000	0	0.00
39.500	0.00	0.00	0.000	0	0.00
39.583	0.00	0.00	0.000	0	0.00
39.667	0.00	0.00	0.000	0	0.00
39.750	0.00	0.00	0.000	0	0.00
39.833	0.00	0.00	0.000	0	0.00
39.917	0.00	0.00	0.000	0	0.00
40.000	0.00	0.00	0.000	0	0.00
40.083	0.00	0.00	0.000	0	0.00
40.167	0.00	0.00	0.000	0	0.00
40.250	0.00	0.00	0.000	0	0.00
40.333	0.00	0.00	0.000	0	0.00
40.417	0.00	0.00	0.000	0	0.00
40.500	0.00	0.00	0.000	0	0.00
40.583	0.00	0.00	0.000	0	0.00
40.667	0.00	0.00	0.000	0	0.00
40.750	0.00	0.00	0.000	0	0.00
40.833	0.00	0.00	0.000	0	0.00
40.917	0.00	0.00	0.000	0	0.00
41.000	0.00	0.00	0.000	0	0.00
41.083	0.00	0.00	0.000	0	0.00
41.167	0.00	0.00	0.000	0	0.00
41.250	0.00	0.00	0.000	0	0.00

*****HYDROGRAPH DATA*****

Number of intervals = 495
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 0.348 (CFS)
 Total volume = 0.592 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/05/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 100-131
 MITIGATION ANALYSIS
 3-HOUR - 5-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PA0535.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 38
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 5.488 (CFS)
 Total volume = 0.458 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 38
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.022	0.118	0.022	0.022
0.340	0.042	0.138	0.042	0.042
0.500	0.081	0.167	0.080	0.082
1.000	0.206	0.236	0.205	0.207
1.350	0.293	0.275	0.292	0.294
1.500	0.329	0.289	0.328	0.330
2.000	0.451	0.334	0.450	0.452
2.500	0.567	0.374	0.566	0.568
3.000	0.677	0.409	0.676	0.678
3.100	0.697	0.416	0.696	0.698
3.500	0.775	1.336	0.770	0.780
4.000	0.841	3.874	0.828	0.854
4.100	0.846	4.260	0.831	0.861
4.340	0.859	4.703	0.843	0.875

Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	0	1.4	2.74	4.12	5.49	Depth (Ft.)
0.083	0.49	0.01	0.002	0	I				0.02
0.167	0.80	0.03	0.006	0	I				0.07
0.250	0.77	0.06	0.011	0	I				0.13
0.333	0.88	0.09	0.016	0	I				0.18
0.417	0.96	0.12	0.022	0	I				0.25
0.500	1.09	0.12	0.028	0	I				0.28
0.583	1.05	0.13	0.035	0	I				0.31
0.667	1.10	0.14	0.041	0	I				0.34
0.750	1.16	0.14	0.048	0	I				0.36
0.833	1.06	0.15	0.055	0	I				0.39
0.917	1.03	0.15	0.061	0	I				0.42
1.000	1.12	0.16	0.067	0	I				0.44
1.083	1.32	0.16	0.074	0	I				0.47
1.167	1.42	0.17	0.083	0	I				0.51
1.250	1.44	0.17	0.091	0	I				0.54
1.333	1.36	0.18	0.100	0	I				0.58
1.417	1.54	0.18	0.109	0	I				0.61
1.500	1.71	0.19	0.119	0	I				0.65
1.583	1.65	0.19	0.129	0	I				0.69
1.667	1.69	0.20	0.139	0	I				0.73
1.750	1.98	0.21	0.150	0	I				0.78
1.833	2.06	0.21	0.163	0	I				0.83
1.917	1.96	0.22	0.175	0	I				0.88
2.000	1.94	0.23	0.187	0	I				0.92
2.083	1.99	0.23	0.199	0	I				0.97
2.167	2.44	0.24	0.212	0	I				1.03
2.250	3.00	0.25	0.230	0	I				1.09
2.333	2.67	0.25	0.247	0	I				1.17
2.417	3.74	0.26	0.268	0	I				1.25
2.500	4.79	0.28	0.295	0	I				1.36
2.583	5.49	0.29	0.329	0	I				1.50
2.667	4.71	0.30	0.362	0	I				1.63
2.750	2.54	0.31	0.385	0	I				1.73
2.833	1.38	0.31	0.396	0	I				1.77
2.917	1.18	0.32	0.403	0	I				1.80
3.000	0.72	0.32	0.407	0	I				1.82
3.083	0.21	0.32	0.408	0	I				1.82
3.167	0.02	0.32	0.407	IO					1.82
3.250	0.00	0.32	0.404	IO					1.81
3.333	0.00	0.32	0.402	IO					1.80
3.417	0.00	0.32	0.400	IO					1.79
3.500	0.00	0.31	0.398	IO					1.78
3.583	0.00	0.31	0.396	IO					1.77
3.667	0.00	0.31	0.394	IO					1.76
3.750	0.00	0.31	0.391	IO					1.76
3.833	0.00	0.31	0.389	IO					1.75
3.917	0.00	0.31	0.387	IO					1.74
4.000	0.00	0.31	0.385	IO					1.73
4.083	0.00	0.31	0.383	IO					1.72
4.167	0.00	0.31	0.381	IO					1.71
4.250	0.00	0.31	0.379	IO					1.70
4.333	0.00	0.31	0.377	IO					1.69
4.417	0.00	0.31	0.374	IO					1.69
4.500	0.00	0.30	0.372	IO					1.68
4.583	0.00	0.30	0.370	IO					1.67
4.667	0.00	0.30	0.368	IO					1.66
4.750	0.00	0.30	0.366	IO					1.65
4.833	0.00	0.30	0.364	IO					1.64
4.917	0.00	0.30	0.362	IO					1.63
5.000	0.00	0.30	0.360	IO					1.63
5.083	0.00	0.30	0.358	IO					1.62
5.167	0.00	0.30	0.356	IO					1.61
5.250	0.00	0.30	0.354	IO					1.60
5.333	0.00	0.30	0.352	IO					1.59
5.417	0.00	0.30	0.350	IO					1.58

5. 500	0. 00	0. 30	0. 348	IO	1. 58
5. 583	0. 00	0. 30	0. 345	IO	1. 57
5. 667	0. 00	0. 29	0. 343	IO	1. 56
5. 750	0. 00	0. 29	0. 341	IO	1. 55
5. 833	0. 00	0. 29	0. 339	IO	1. 54
5. 917	0. 00	0. 29	0. 337	IO	1. 53
6. 000	0. 00	0. 29	0. 335	IO	1. 53
6. 083	0. 00	0. 29	0. 333	IO	1. 52
6. 167	0. 00	0. 29	0. 331	IO	1. 51
6. 250	0. 00	0. 29	0. 329	IO	1. 50
6. 333	0. 00	0. 29	0. 327	IO	1. 49
6. 417	0. 00	0. 29	0. 325	IO	1. 49
6. 500	0. 00	0. 29	0. 323	IO	1. 48
6. 583	0. 00	0. 29	0. 321	IO	1. 47
6. 667	0. 00	0. 29	0. 319	IO	1. 46
6. 750	0. 00	0. 28	0. 318	IO	1. 45
6. 833	0. 00	0. 28	0. 316	IO	1. 44
6. 917	0. 00	0. 28	0. 314	IO	1. 44
7. 000	0. 00	0. 28	0. 312	IO	1. 43
7. 083	0. 00	0. 28	0. 310	IO	1. 42
7. 167	0. 00	0. 28	0. 308	IO	1. 41
7. 250	0. 00	0. 28	0. 306	IO	1. 40
7. 333	0. 00	0. 28	0. 304	IO	1. 40
7. 417	0. 00	0. 28	0. 302	IO	1. 39
7. 500	0. 00	0. 28	0. 300	IO	1. 38
7. 583	0. 00	0. 28	0. 298	IO	1. 37
7. 667	0. 00	0. 28	0. 296	IO	1. 36
7. 750	0. 00	0. 28	0. 294	IO	1. 36
7. 833	0. 00	0. 27	0. 292	IO	1. 35
7. 917	0. 00	0. 27	0. 291	IO	1. 34
8. 000	0. 00	0. 27	0. 289	IO	1. 33
8. 083	0. 00	0. 27	0. 287	IO	1. 33
8. 167	0. 00	0. 27	0. 285	IO	1. 32
8. 250	0. 00	0. 27	0. 283	IO	1. 31
8. 333	0. 00	0. 27	0. 281	IO	1. 30
8. 417	0. 00	0. 27	0. 279	IO	1. 30
8. 500	0. 00	0. 27	0. 278	IO	1. 29
8. 583	0. 00	0. 27	0. 276	IO	1. 28
8. 667	0. 00	0. 27	0. 274	IO	1. 27
8. 750	0. 00	0. 27	0. 272	IO	1. 27
8. 833	0. 00	0. 26	0. 270	IO	1. 26
8. 917	0. 00	0. 26	0. 268	IO	1. 25
9. 000	0. 00	0. 26	0. 267	IO	1. 24
9. 083	0. 00	0. 26	0. 265	IO	1. 24
9. 167	0. 00	0. 26	0. 263	IO	1. 23
9. 250	0. 00	0. 26	0. 261	IO	1. 22
9. 333	0. 00	0. 26	0. 259	IO	1. 21
9. 417	0. 00	0. 26	0. 258	IO	1. 21
9. 500	0. 00	0. 26	0. 256	IO	1. 20
9. 583	0. 00	0. 26	0. 254	IO	1. 19
9. 667	0. 00	0. 26	0. 252	IO	1. 19
9. 750	0. 00	0. 26	0. 250	IO	1. 18
9. 833	0. 00	0. 26	0. 249	IO	1. 17
9. 917	0. 00	0. 25	0. 247	IO	1. 16
10. 000	0. 00	0. 25	0. 245	IO	1. 16
10. 083	0. 00	0. 25	0. 243	IO	1. 15
10. 167	0. 00	0. 25	0. 242	IO	1. 14
10. 250	0. 00	0. 25	0. 240	IO	1. 14
10. 333	0. 00	0. 25	0. 238	IO	1. 13
10. 417	0. 00	0. 25	0. 237	IO	1. 12
10. 500	0. 00	0. 25	0. 235	IO	1. 12
10. 583	0. 00	0. 25	0. 233	IO	1. 11
10. 667	0. 00	0. 25	0. 231	IO	1. 10
10. 750	0. 00	0. 25	0. 230	IO	1. 10
10. 833	0. 00	0. 25	0. 228	IO	1. 09
10. 917	0. 00	0. 25	0. 226	IO	1. 08
11. 000	0. 00	0. 24	0. 225	IO	1. 08
11. 083	0. 00	0. 24	0. 223	IO	1. 07
11. 167	0. 00	0. 24	0. 221	IO	1. 06
11. 250	0. 00	0. 24	0. 220	IO	1. 05
11. 333	0. 00	0. 24	0. 218	IO	1. 05
11. 417	0. 00	0. 24	0. 216	IO	1. 04

11. 500	0. 00	0. 24	0. 215	IO	1. 03
11. 583	0. 00	0. 24	0. 213	IO	1. 03
11. 667	0. 00	0. 24	0. 211	IO	1. 02
11. 750	0. 00	0. 24	0. 210	IO	1. 01
11. 833	0. 00	0. 24	0. 208	IO	1. 01
11. 917	0. 00	0. 24	0. 206	IO	1. 00
12. 000	0. 00	0. 24	0. 205	IO	1. 00
12. 083	0. 00	0. 23	0. 203	IO	0. 99
12. 167	0. 00	0. 23	0. 202	IO	0. 98
12. 250	0. 00	0. 23	0. 200	IO	0. 98
12. 333	0. 00	0. 23	0. 198	IO	0. 97
12. 417	0. 00	0. 23	0. 197	IO	0. 96
12. 500	0. 00	0. 23	0. 195	IO	0. 96
12. 583	0. 00	0. 23	0. 194	IO	0. 95
12. 667	0. 00	0. 23	0. 192	IO	0. 94
12. 750	0. 00	0. 23	0. 190	IO	0. 94
12. 833	0. 00	0. 23	0. 189	IO	0. 93
12. 917	0. 00	0. 23	0. 187	IO	0. 93
13. 000	0. 00	0. 22	0. 186	IO	0. 92
13. 083	0. 00	0. 22	0. 184	IO	0. 91
13. 167	0. 00	0. 22	0. 183	IO	0. 91
13. 250	0. 00	0. 22	0. 181	IO	0. 90
13. 333	0. 00	0. 22	0. 180	IO	0. 89
13. 417	0. 00	0. 22	0. 178	IO	0. 89
13. 500	0. 00	0. 22	0. 177	IO	0. 88
13. 583	0. 00	0. 22	0. 175	IO	0. 88
13. 667	0. 00	0. 22	0. 174	IO	0. 87
13. 750	0. 00	0. 22	0. 172	IO	0. 86
13. 833	0. 00	0. 22	0. 171	IO	0. 86
13. 917	0. 00	0. 22	0. 169	IO	0. 85
14. 000	0. 00	0. 21	0. 168	IO	0. 85
14. 083	0. 00	0. 21	0. 166	IO	0. 84
14. 167	0. 00	0. 21	0. 165	IO	0. 83
14. 250	0. 00	0. 21	0. 163	IO	0. 83
14. 333	0. 00	0. 21	0. 162	IO	0. 82
14. 417	0. 00	0. 21	0. 160	IO	0. 82
14. 500	0. 00	0. 21	0. 159	IO	0. 81
14. 583	0. 00	0. 21	0. 157	IO	0. 81
14. 667	0. 00	0. 21	0. 156	IO	0. 80
14. 750	0. 00	0. 21	0. 155	IO	0. 79
14. 833	0. 00	0. 21	0. 153	IO	0. 79
14. 917	0. 00	0. 21	0. 152	IO	0. 78
15. 000	0. 00	0. 21	0. 150	IO	0. 78
15. 083	0. 00	0. 20	0. 149	IO	0. 77
15. 167	0. 00	0. 20	0. 147	IO	0. 77
15. 250	0. 00	0. 20	0. 146	IO	0. 76
15. 333	0. 00	0. 20	0. 145	IO	0. 75
15. 417	0. 00	0. 20	0. 143	IO	0. 75
15. 500	0. 00	0. 20	0. 142	IO	0. 74
15. 583	0. 00	0. 20	0. 141	IO	0. 74
15. 667	0. 00	0. 20	0. 139	IO	0. 73
15. 750	0. 00	0. 20	0. 138	IO	0. 73
15. 833	0. 00	0. 20	0. 136	IO	0. 72
15. 917	0. 00	0. 20	0. 135	IO	0. 72
16. 000	0. 00	0. 20	0. 134	IO	0. 71
16. 083	0. 00	0. 20	0. 132	IO	0. 71
16. 167	0. 00	0. 19	0. 131	IO	0. 70
16. 250	0. 00	0. 19	0. 130	IO	0. 69
16. 333	0. 00	0. 19	0. 128	IO	0. 69
16. 417	0. 00	0. 19	0. 127	IO	0. 68
16. 500	0. 00	0. 19	0. 126	IO	0. 68
16. 583	0. 00	0. 19	0. 124	IO	0. 67
16. 667	0. 00	0. 19	0. 123	IO	0. 67
16. 750	0. 00	0. 19	0. 122	IO	0. 66
16. 833	0. 00	0. 19	0. 120	IO	0. 66
16. 917	0. 00	0. 19	0. 119	IO	0. 65
17. 000	0. 00	0. 19	0. 118	IO	0. 65
17. 083	0. 00	0. 19	0. 117	IO	0. 64
17. 167	0. 00	0. 19	0. 115	IO	0. 64
17. 250	0. 00	0. 19	0. 114	IO	0. 63
17. 333	0. 00	0. 18	0. 113	IO	0. 63
17. 417	0. 00	0. 18	0. 111	IO	0. 62

17. 500	0. 00	0. 18	0. 110	IO	0. 62
17. 583	0. 00	0. 18	0. 109	IO	0. 61
17. 667	0. 00	0. 18	0. 108	IO	0. 61
17. 750	0. 00	0. 18	0. 106	IO	0. 60
17. 833	0. 00	0. 18	0. 105	IO	0. 60
17. 917	0. 00	0. 18	0. 104	IO	0. 59
18. 000	0. 00	0. 18	0. 103	IO	0. 59
18. 083	0. 00	0. 18	0. 101	IO	0. 58
18. 167	0. 00	0. 18	0. 100	IO	0. 58
18. 250	0. 00	0. 18	0. 099	IO	0. 57
18. 333	0. 00	0. 18	0. 098	IO	0. 57
18. 417	0. 00	0. 18	0. 097	IO	0. 56
18. 500	0. 00	0. 17	0. 095	IO	0. 56
18. 583	0. 00	0. 17	0. 094	IO	0. 55
18. 667	0. 00	0. 17	0. 093	IO	0. 55
18. 750	0. 00	0. 17	0. 092	IO	0. 54
18. 833	0. 00	0. 17	0. 091	IO	0. 54
18. 917	0. 00	0. 17	0. 089	IO	0. 53
19. 000	0. 00	0. 17	0. 088	0	0. 53
19. 083	0. 00	0. 17	0. 087	0	0. 52
19. 167	0. 00	0. 17	0. 086	0	0. 52
19. 250	0. 00	0. 17	0. 085	0	0. 52
19. 333	0. 00	0. 17	0. 084	0	0. 51
19. 417	0. 00	0. 17	0. 082	0	0. 51
19. 500	0. 00	0. 17	0. 081	0	0. 50
19. 583	0. 00	0. 17	0. 080	0	0. 50
19. 667	0. 00	0. 17	0. 079	0	0. 49
19. 750	0. 00	0. 16	0. 078	0	0. 49
19. 833	0. 00	0. 16	0. 077	0	0. 48
19. 917	0. 00	0. 16	0. 076	0	0. 48
20. 000	0. 00	0. 16	0. 074	0	0. 47
20. 083	0. 00	0. 16	0. 073	0	0. 47
20. 167	0. 00	0. 16	0. 072	0	0. 46
20. 250	0. 00	0. 16	0. 071	0	0. 46
20. 333	0. 00	0. 16	0. 070	0	0. 46
20. 417	0. 00	0. 16	0. 069	0	0. 45
20. 500	0. 00	0. 16	0. 068	0	0. 45
20. 583	0. 00	0. 16	0. 067	0	0. 44
20. 667	0. 00	0. 16	0. 066	0	0. 44
20. 750	0. 00	0. 15	0. 065	0	0. 43
20. 833	0. 00	0. 15	0. 064	0	0. 43
20. 917	0. 00	0. 15	0. 063	0	0. 42
21. 000	0. 00	0. 15	0. 061	0	0. 42
21. 083	0. 00	0. 15	0. 060	0	0. 42
21. 167	0. 00	0. 15	0. 059	0	0. 41
21. 250	0. 00	0. 15	0. 058	0	0. 41
21. 333	0. 00	0. 15	0. 057	0	0. 40
21. 417	0. 00	0. 15	0. 056	0	0. 40
21. 500	0. 00	0. 15	0. 055	0	0. 39
21. 583	0. 00	0. 15	0. 054	0	0. 39
21. 667	0. 00	0. 15	0. 053	0	0. 39
21. 750	0. 00	0. 15	0. 052	0	0. 38
21. 833	0. 00	0. 14	0. 051	0	0. 38
21. 917	0. 00	0. 14	0. 050	0	0. 37
22. 000	0. 00	0. 14	0. 049	0	0. 37
22. 083	0. 00	0. 14	0. 048	0	0. 37
22. 167	0. 00	0. 14	0. 047	0	0. 36
22. 250	0. 00	0. 14	0. 046	0	0. 36
22. 333	0. 00	0. 14	0. 045	0	0. 35
22. 417	0. 00	0. 14	0. 044	0	0. 35
22. 500	0. 00	0. 14	0. 043	0	0. 35
22. 583	0. 00	0. 14	0. 042	0	0. 34
22. 667	0. 00	0. 14	0. 042	0	0. 34
22. 750	0. 00	0. 14	0. 041	0	0. 33
22. 833	0. 00	0. 14	0. 040	0	0. 33
22. 917	0. 00	0. 13	0. 039	0	0. 33
23. 000	0. 00	0. 13	0. 038	0	0. 32
23. 083	0. 00	0. 13	0. 037	0	0. 32
23. 167	0. 00	0. 13	0. 036	0	0. 31
23. 250	0. 00	0. 13	0. 035	0	0. 31
23. 333	0. 00	0. 13	0. 034	0	0. 30
23. 417	0. 00	0. 13	0. 033	0	0. 30

23.500	0.00	0.13	0.032	0	0.30
23.583	0.00	0.13	0.031	0	0.29
23.667	0.00	0.13	0.031	0	0.29
23.750	0.00	0.13	0.030	0	0.28
23.833	0.00	0.12	0.029	0	0.28
23.917	0.00	0.12	0.028	0	0.28
24.000	0.00	0.12	0.027	0	0.27
24.083	0.00	0.12	0.026	0	0.27
24.167	0.00	0.12	0.025	0	0.27
24.250	0.00	0.12	0.025	0	0.26
24.333	0.00	0.12	0.024	0	0.26
24.417	0.00	0.12	0.023	0	0.25
24.500	0.00	0.12	0.022	0	0.25
24.583	0.00	0.11	0.021	0	0.24
24.667	0.00	0.11	0.021	0	0.23
24.750	0.00	0.11	0.020	0	0.23
24.833	0.00	0.10	0.019	0	0.22
24.917	0.00	0.10	0.018	0	0.21
25.000	0.00	0.10	0.018	0	0.20
25.083	0.00	0.09	0.017	0	0.19
25.167	0.00	0.09	0.017	0	0.19
25.250	0.00	0.09	0.016	0	0.18
25.333	0.00	0.08	0.015	0	0.17
25.417	0.00	0.08	0.015	0	0.17
25.500	0.00	0.08	0.014	0	0.16
25.583	0.00	0.07	0.014	0	0.16
25.667	0.00	0.07	0.013	0	0.15
25.750	0.00	0.07	0.013	0	0.14
25.833	0.00	0.07	0.012	0	0.14
25.917	0.00	0.06	0.012	0	0.13
26.000	0.00	0.06	0.011	0	0.13
26.083	0.00	0.06	0.011	0	0.12
26.167	0.00	0.06	0.011	0	0.12
26.250	0.00	0.05	0.010	0	0.12
26.333	0.00	0.05	0.010	0	0.11
26.417	0.00	0.05	0.009	0	0.11
26.500	0.00	0.05	0.009	0	0.10
26.583	0.00	0.05	0.009	0	0.10
26.667	0.00	0.05	0.008	0	0.10
26.750	0.00	0.04	0.008	0	0.09
26.833	0.00	0.04	0.008	0	0.09
26.917	0.00	0.04	0.008	0	0.09
27.000	0.00	0.04	0.007	0	0.08
27.083	0.00	0.04	0.007	0	0.08
27.167	0.00	0.04	0.007	0	0.08
27.250	0.00	0.04	0.007	0	0.07
27.333	0.00	0.03	0.006	0	0.07
27.417	0.00	0.03	0.006	0	0.07
27.500	0.00	0.03	0.006	0	0.07
27.583	0.00	0.03	0.006	0	0.06
27.667	0.00	0.03	0.005	0	0.06
27.750	0.00	0.03	0.005	0	0.06
27.833	0.00	0.03	0.005	0	0.06
27.917	0.00	0.03	0.005	0	0.06
28.000	0.00	0.03	0.005	0	0.05
28.083	0.00	0.02	0.005	0	0.05
28.167	0.00	0.02	0.004	0	0.05
28.250	0.00	0.02	0.004	0	0.05
28.333	0.00	0.02	0.004	0	0.05
28.417	0.00	0.02	0.004	0	0.04
28.500	0.00	0.02	0.004	0	0.04
28.583	0.00	0.02	0.004	0	0.04
28.667	0.00	0.02	0.003	0	0.04
28.750	0.00	0.02	0.003	0	0.04
28.833	0.00	0.02	0.003	0	0.04
28.917	0.00	0.02	0.003	0	0.04
29.000	0.00	0.02	0.003	0	0.03
29.083	0.00	0.02	0.003	0	0.03
29.167	0.00	0.02	0.003	0	0.03
29.250	0.00	0.01	0.003	0	0.03
29.333	0.00	0.01	0.003	0	0.03
29.417	0.00	0.01	0.003	0	0.03

29.500	0.00	0.01	0.002	0	0.03
29.583	0.00	0.01	0.002	0	0.03
29.667	0.00	0.01	0.002	0	0.03
29.750	0.00	0.01	0.002	0	0.02
29.833	0.00	0.01	0.002	0	0.02
29.917	0.00	0.01	0.002	0	0.02
30.000	0.00	0.01	0.002	0	0.02
30.083	0.00	0.01	0.002	0	0.02
30.167	0.00	0.01	0.002	0	0.02
30.250	0.00	0.01	0.002	0	0.02
30.333	0.00	0.01	0.002	0	0.02
30.417	0.00	0.01	0.002	0	0.02
30.500	0.00	0.01	0.002	0	0.02
30.583	0.00	0.01	0.001	0	0.02
30.667	0.00	0.01	0.001	0	0.02
30.750	0.00	0.01	0.001	0	0.02
30.833	0.00	0.01	0.001	0	0.02
30.917	0.00	0.01	0.001	0	0.01
31.000	0.00	0.01	0.001	0	0.01
31.083	0.00	0.01	0.001	0	0.01
31.167	0.00	0.01	0.001	0	0.01
31.250	0.00	0.01	0.001	0	0.01
31.333	0.00	0.01	0.001	0	0.01
31.417	0.00	0.01	0.001	0	0.01
31.500	0.00	0.01	0.001	0	0.01
31.583	0.00	0.01	0.001	0	0.01
31.667	0.00	0.00	0.001	0	0.01
31.750	0.00	0.00	0.001	0	0.01
31.833	0.00	0.00	0.001	0	0.01
31.917	0.00	0.00	0.001	0	0.01
32.000	0.00	0.00	0.001	0	0.01
32.083	0.00	0.00	0.001	0	0.01
32.167	0.00	0.00	0.001	0	0.01
32.250	0.00	0.00	0.001	0	0.01
32.333	0.00	0.00	0.001	0	0.01
32.417	0.00	0.00	0.001	0	0.01
32.500	0.00	0.00	0.001	0	0.01
32.583	0.00	0.00	0.001	0	0.01
32.667	0.00	0.00	0.001	0	0.01
32.750	0.00	0.00	0.001	0	0.01
32.833	0.00	0.00	0.001	0	0.01
32.917	0.00	0.00	0.001	0	0.01
33.000	0.00	0.00	0.001	0	0.01
33.083	0.00	0.00	0.000	0	0.01
33.167	0.00	0.00	0.000	0	0.01
33.250	0.00	0.00	0.000	0	0.01
33.333	0.00	0.00	0.000	0	0.01
33.417	0.00	0.00	0.000	0	0.00
33.500	0.00	0.00	0.000	0	0.00
33.583	0.00	0.00	0.000	0	0.00
33.667	0.00	0.00	0.000	0	0.00
33.750	0.00	0.00	0.000	0	0.00
33.833	0.00	0.00	0.000	0	0.00
33.917	0.00	0.00	0.000	0	0.00
34.000	0.00	0.00	0.000	0	0.00
34.083	0.00	0.00	0.000	0	0.00
34.167	0.00	0.00	0.000	0	0.00
34.250	0.00	0.00	0.000	0	0.00
34.333	0.00	0.00	0.000	0	0.00
34.417	0.00	0.00	0.000	0	0.00
34.500	0.00	0.00	0.000	0	0.00
34.583	0.00	0.00	0.000	0	0.00
34.667	0.00	0.00	0.000	0	0.00
34.750	0.00	0.00	0.000	0	0.00
34.833	0.00	0.00	0.000	0	0.00
34.917	0.00	0.00	0.000	0	0.00
35.000	0.00	0.00	0.000	0	0.00
35.083	0.00	0.00	0.000	0	0.00
35.167	0.00	0.00	0.000	0	0.00
35.250	0.00	0.00	0.000	0	0.00
35.333	0.00	0.00	0.000	0	0.00

*****HYDROGRAPH DATA*****
Number of intervals = 424
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.318 (CFS)
Total volume = 0.458 (Ac. Ft)
Status of hydrographs being held in storage
Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
Peak (CFS) 0.000 0.000 0.000 0.000 0.000
Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/05/23

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 100-131
 MITIGATION ANALYSIS
 1-HOUR - 5-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PA0515.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 14
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 8.684 (CFS)
 Total volume = 0.278 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 14
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.022	0.118	0.022	0.022
0.340	0.042	0.138	0.042	0.042
0.500	0.081	0.167	0.080	0.082
1.000	0.206	0.236	0.205	0.207
1.350	0.293	0.275	0.292	0.294
1.500	0.329	0.289	0.328	0.330
2.000	0.451	0.334	0.450	0.452
2.500	0.567	0.374	0.566	0.568
3.000	0.677	0.409	0.676	0.678
3.100	0.697	0.416	0.696	0.698
3.500	0.775	1.336	0.770	0.780
4.000	0.841	3.874	0.828	0.854
4.100	0.846	4.260	0.831	0.861
4.340	0.859	4.703	0.843	0.875

Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	0	2.2	4.34	6.51	8.68	Depth (Ft.)
0.083	0.98	0.02	0.003	0	I				0.04
0.167	1.62	0.06	0.012	0	I				0.14
0.250	1.93	0.12	0.024	0	I				0.26
0.333	2.06	0.13	0.037	0	I				0.32
0.417	2.15	0.14	0.050	0	I				0.37
0.500	2.35	0.15	0.065	0	I				0.43
0.583	2.79	0.17	0.081	0	I				0.50
0.667	3.31	0.18	0.101	0	I	I			0.58
0.750	4.54	0.19	0.127	0	I	I			0.68
0.833	8.68	0.22	0.171	0	I	I		I	0.86
0.917	6.20	0.24	0.220	0	I	I	I		1.06
1.000	2.85	0.26	0.250	0	I	I	I		1.18
1.083	0.86	0.26	0.261	0	I				1.22
1.167	0.11	0.26	0.262	0					1.23
1.250	0.00	0.26	0.261	0					1.22
1.333	0.00	0.26	0.259	0					1.21
1.417	0.00	0.26	0.257	0					1.21
1.500	0.00	0.26	0.256	0					1.20
1.583	0.00	0.26	0.254	0					1.19
1.667	0.00	0.26	0.252	0					1.19
1.750	0.00	0.26	0.250	0					1.18
1.833	0.00	0.26	0.249	0					1.17
1.917	0.00	0.25	0.247	0					1.16
2.000	0.00	0.25	0.245	0					1.16
2.083	0.00	0.25	0.243	0					1.15
2.167	0.00	0.25	0.242	0					1.14
2.250	0.00	0.25	0.240	0					1.14
2.333	0.00	0.25	0.238	0					1.13
2.417	0.00	0.25	0.236	0					1.12
2.500	0.00	0.25	0.235	0					1.12
2.583	0.00	0.25	0.233	0					1.11
2.667	0.00	0.25	0.231	0					1.10
2.750	0.00	0.25	0.230	0					1.09
2.833	0.00	0.25	0.228	0					1.09
2.917	0.00	0.25	0.226	0					1.08
3.000	0.00	0.24	0.224	0					1.07
3.083	0.00	0.24	0.223	0					1.07
3.167	0.00	0.24	0.221	0					1.06
3.250	0.00	0.24	0.219	0					1.05
3.333	0.00	0.24	0.218	0					1.05
3.417	0.00	0.24	0.216	0					1.04
3.500	0.00	0.24	0.214	0					1.03
3.583	0.00	0.24	0.213	0					1.03
3.667	0.00	0.24	0.211	0					1.02
3.750	0.00	0.24	0.210	0					1.01
3.833	0.00	0.24	0.208	0					1.01
3.917	0.00	0.24	0.206	0					1.00
4.000	0.00	0.24	0.205	0					0.99
4.083	0.00	0.23	0.203	0					0.99
4.167	0.00	0.23	0.201	0					0.98
4.250	0.00	0.23	0.200	0					0.98
4.333	0.00	0.23	0.198	0					0.97
4.417	0.00	0.23	0.197	0					0.96
4.500	0.00	0.23	0.195	0					0.96
4.583	0.00	0.23	0.193	0					0.95
4.667	0.00	0.23	0.192	0					0.94
4.750	0.00	0.23	0.190	0					0.94
4.833	0.00	0.23	0.189	0					0.93
4.917	0.00	0.23	0.187	0					0.92
5.000	0.00	0.22	0.186	0					0.92
5.083	0.00	0.22	0.184	0					0.91
5.167	0.00	0.22	0.183	0					0.91
5.250	0.00	0.22	0.181	0					0.90
5.333	0.00	0.22	0.180	0					0.89
5.417	0.00	0.22	0.178	0					0.89

5. 500	0. 00	0. 22	0. 176	0	0. 88
5. 583	0. 00	0. 22	0. 175	0	0. 88
5. 667	0. 00	0. 22	0. 173	0	0. 87
5. 750	0. 00	0. 22	0. 172	0	0. 86
5. 833	0. 00	0. 22	0. 170	0	0. 86
5. 917	0. 00	0. 22	0. 169	0	0. 85
6. 000	0. 00	0. 21	0. 168	0	0. 85
6. 083	0. 00	0. 21	0. 166	0	0. 84
6. 167	0. 00	0. 21	0. 165	0	0. 83
6. 250	0. 00	0. 21	0. 163	0	0. 83
6. 333	0. 00	0. 21	0. 162	0	0. 82
6. 417	0. 00	0. 21	0. 160	0	0. 82
6. 500	0. 00	0. 21	0. 159	0	0. 81
6. 583	0. 00	0. 21	0. 157	0	0. 81
6. 667	0. 00	0. 21	0. 156	0	0. 80
6. 750	0. 00	0. 21	0. 154	0	0. 79
6. 833	0. 00	0. 21	0. 153	0	0. 79
6. 917	0. 00	0. 21	0. 152	0	0. 78
7. 000	0. 00	0. 21	0. 150	0	0. 78
7. 083	0. 00	0. 20	0. 149	0	0. 77
7. 167	0. 00	0. 20	0. 147	0	0. 77
7. 250	0. 00	0. 20	0. 146	0	0. 76
7. 333	0. 00	0. 20	0. 145	0	0. 75
7. 417	0. 00	0. 20	0. 143	0	0. 75
7. 500	0. 00	0. 20	0. 142	0	0. 74
7. 583	0. 00	0. 20	0. 140	0	0. 74
7. 667	0. 00	0. 20	0. 139	0	0. 73
7. 750	0. 00	0. 20	0. 138	0	0. 73
7. 833	0. 00	0. 20	0. 136	0	0. 72
7. 917	0. 00	0. 20	0. 135	0	0. 72
8. 000	0. 00	0. 20	0. 134	0	0. 71
8. 083	0. 00	0. 20	0. 132	0	0. 70
8. 167	0. 00	0. 19	0. 131	0	0. 70
8. 250	0. 00	0. 19	0. 130	0	0. 69
8. 333	0. 00	0. 19	0. 128	0	0. 69
8. 417	0. 00	0. 19	0. 127	0	0. 68
8. 500	0. 00	0. 19	0. 126	0	0. 68
8. 583	0. 00	0. 19	0. 124	0	0. 67
8. 667	0. 00	0. 19	0. 123	0	0. 67
8. 750	0. 00	0. 19	0. 122	0	0. 66
8. 833	0. 00	0. 19	0. 120	0	0. 66
8. 917	0. 00	0. 19	0. 119	0	0. 65
9. 000	0. 00	0. 19	0. 118	0	0. 65
9. 083	0. 00	0. 19	0. 116	0	0. 64
9. 167	0. 00	0. 19	0. 115	0	0. 64
9. 250	0. 00	0. 19	0. 114	0	0. 63
9. 333	0. 00	0. 18	0. 113	0	0. 63
9. 417	0. 00	0. 18	0. 111	0	0. 62
9. 500	0. 00	0. 18	0. 110	0	0. 62
9. 583	0. 00	0. 18	0. 109	0	0. 61
9. 667	0. 00	0. 18	0. 108	0	0. 61
9. 750	0. 00	0. 18	0. 106	0	0. 60
9. 833	0. 00	0. 18	0. 105	0	0. 60
9. 917	0. 00	0. 18	0. 104	0	0. 59
10. 000	0. 00	0. 18	0. 103	0	0. 59
10. 083	0. 00	0. 18	0. 101	0	0. 58
10. 167	0. 00	0. 18	0. 100	0	0. 58
10. 250	0. 00	0. 18	0. 099	0	0. 57
10. 333	0. 00	0. 18	0. 098	0	0. 57
10. 417	0. 00	0. 18	0. 097	0	0. 56
10. 500	0. 00	0. 17	0. 095	0	0. 56
10. 583	0. 00	0. 17	0. 094	0	0. 55
10. 667	0. 00	0. 17	0. 093	0	0. 55
10. 750	0. 00	0. 17	0. 092	0	0. 54
10. 833	0. 00	0. 17	0. 091	0	0. 54
10. 917	0. 00	0. 17	0. 089	0	0. 53
11. 000	0. 00	0. 17	0. 088	0	0. 53
11. 083	0. 00	0. 17	0. 087	0	0. 52
11. 167	0. 00	0. 17	0. 086	0	0. 52
11. 250	0. 00	0. 17	0. 085	0	0. 51
11. 333	0. 00	0. 17	0. 083	0	0. 51
11. 417	0. 00	0. 17	0. 082	0	0. 51

11. 500	0. 00	0. 17	0. 081	0	0. 50
11. 583	0. 00	0. 17	0. 080	0	0. 50
11. 667	0. 00	0. 17	0. 079	0	0. 49
11. 750	0. 00	0. 16	0. 078	0	0. 49
11. 833	0. 00	0. 16	0. 077	0	0. 48
11. 917	0. 00	0. 16	0. 075	0	0. 48
12. 000	0. 00	0. 16	0. 074	0	0. 47
12. 083	0. 00	0. 16	0. 073	0	0. 47
12. 167	0. 00	0. 16	0. 072	0	0. 46
12. 250	0. 00	0. 16	0. 071	0	0. 46
12. 333	0. 00	0. 16	0. 070	0	0. 45
12. 417	0. 00	0. 16	0. 069	0	0. 45
12. 500	0. 00	0. 16	0. 068	0	0. 45
12. 583	0. 00	0. 16	0. 067	0	0. 44
12. 667	0. 00	0. 16	0. 066	0	0. 44
12. 750	0. 00	0. 15	0. 065	0	0. 43
12. 833	0. 00	0. 15	0. 063	0	0. 43
12. 917	0. 00	0. 15	0. 062	0	0. 42
13. 000	0. 00	0. 15	0. 061	0	0. 42
13. 083	0. 00	0. 15	0. 060	0	0. 42
13. 167	0. 00	0. 15	0. 059	0	0. 41
13. 250	0. 00	0. 15	0. 058	0	0. 41
13. 333	0. 00	0. 15	0. 057	0	0. 40
13. 417	0. 00	0. 15	0. 056	0	0. 40
13. 500	0. 00	0. 15	0. 055	0	0. 39
13. 583	0. 00	0. 15	0. 054	0	0. 39
13. 667	0. 00	0. 15	0. 053	0	0. 39
13. 750	0. 00	0. 15	0. 052	0	0. 38
13. 833	0. 00	0. 14	0. 051	0	0. 38
13. 917	0. 00	0. 14	0. 050	0	0. 37
14. 000	0. 00	0. 14	0. 049	0	0. 37
14. 083	0. 00	0. 14	0. 048	0	0. 37
14. 167	0. 00	0. 14	0. 047	0	0. 36
14. 250	0. 00	0. 14	0. 046	0	0. 36
14. 333	0. 00	0. 14	0. 045	0	0. 35
14. 417	0. 00	0. 14	0. 044	0	0. 35
14. 500	0. 00	0. 14	0. 043	0	0. 35
14. 583	0. 00	0. 14	0. 042	0	0. 34
14. 667	0. 00	0. 14	0. 041	0	0. 34
14. 750	0. 00	0. 14	0. 040	0	0. 33
14. 833	0. 00	0. 14	0. 040	0	0. 33
14. 917	0. 00	0. 13	0. 039	0	0. 32
15. 000	0. 00	0. 13	0. 038	0	0. 32
15. 083	0. 00	0. 13	0. 037	0	0. 32
15. 167	0. 00	0. 13	0. 036	0	0. 31
15. 250	0. 00	0. 13	0. 035	0	0. 31
15. 333	0. 00	0. 13	0. 034	0	0. 30
15. 417	0. 00	0. 13	0. 033	0	0. 30
15. 500	0. 00	0. 13	0. 032	0	0. 30
15. 583	0. 00	0. 13	0. 031	0	0. 29
15. 667	0. 00	0. 13	0. 031	0	0. 29
15. 750	0. 00	0. 13	0. 030	0	0. 28
15. 833	0. 00	0. 12	0. 029	0	0. 28
15. 917	0. 00	0. 12	0. 028	0	0. 28
16. 000	0. 00	0. 12	0. 027	0	0. 27
16. 083	0. 00	0. 12	0. 026	0	0. 27
16. 167	0. 00	0. 12	0. 025	0	0. 27
16. 250	0. 00	0. 12	0. 025	0	0. 26
16. 333	0. 00	0. 12	0. 024	0	0. 26
16. 417	0. 00	0. 12	0. 023	0	0. 25
16. 500	0. 00	0. 12	0. 022	0	0. 25
16. 583	0. 00	0. 11	0. 021	0	0. 24
16. 667	0. 00	0. 11	0. 021	0	0. 23
16. 750	0. 00	0. 11	0. 020	0	0. 22
16. 833	0. 00	0. 10	0. 019	0	0. 22
16. 917	0. 00	0. 10	0. 018	0	0. 21
17. 000	0. 00	0. 10	0. 018	0	0. 20
17. 083	0. 00	0. 09	0. 017	0	0. 19
17. 167	0. 00	0. 09	0. 016	0	0. 19
17. 250	0. 00	0. 09	0. 016	0	0. 18
17. 333	0. 00	0. 08	0. 015	0	0. 17
17. 417	0. 00	0. 08	0. 015	0	0. 17

17. 500	0. 00	0. 08	0. 014	0	0. 16
17. 583	0. 00	0. 07	0. 014	0	0. 16
17. 667	0. 00	0. 07	0. 013	0	0. 15
17. 750	0. 00	0. 07	0. 013	0	0. 14
17. 833	0. 00	0. 07	0. 012	0	0. 14
17. 917	0. 00	0. 06	0. 012	0	0. 13
18. 000	0. 00	0. 06	0. 011	0	0. 13
18. 083	0. 00	0. 06	0. 011	0	0. 12
18. 167	0. 00	0. 06	0. 011	0	0. 12
18. 250	0. 00	0. 05	0. 010	0	0. 12
18. 333	0. 00	0. 05	0. 010	0	0. 11
18. 417	0. 00	0. 05	0. 009	0	0. 11
18. 500	0. 00	0. 05	0. 009	0	0. 10
18. 583	0. 00	0. 05	0. 009	0	0. 10
18. 667	0. 00	0. 05	0. 008	0	0. 10
18. 750	0. 00	0. 04	0. 008	0	0. 09
18. 833	0. 00	0. 04	0. 008	0	0. 09
18. 917	0. 00	0. 04	0. 008	0	0. 09
19. 000	0. 00	0. 04	0. 007	0	0. 08
19. 083	0. 00	0. 04	0. 007	0	0. 08
19. 167	0. 00	0. 04	0. 007	0	0. 08
19. 250	0. 00	0. 04	0. 007	0	0. 07
19. 333	0. 00	0. 03	0. 006	0	0. 07
19. 417	0. 00	0. 03	0. 006	0	0. 07
19. 500	0. 00	0. 03	0. 006	0	0. 07
19. 583	0. 00	0. 03	0. 006	0	0. 06
19. 667	0. 00	0. 03	0. 005	0	0. 06
19. 750	0. 00	0. 03	0. 005	0	0. 06
19. 833	0. 00	0. 03	0. 005	0	0. 06
19. 917	0. 00	0. 03	0. 005	0	0. 06
20. 000	0. 00	0. 03	0. 005	0	0. 05
20. 083	0. 00	0. 02	0. 005	0	0. 05
20. 167	0. 00	0. 02	0. 004	0	0. 05
20. 250	0. 00	0. 02	0. 004	0	0. 05
20. 333	0. 00	0. 02	0. 004	0	0. 05
20. 417	0. 00	0. 02	0. 004	0	0. 04
20. 500	0. 00	0. 02	0. 004	0	0. 04
20. 583	0. 00	0. 02	0. 004	0	0. 04
20. 667	0. 00	0. 02	0. 003	0	0. 04
20. 750	0. 00	0. 02	0. 003	0	0. 04
20. 833	0. 00	0. 02	0. 003	0	0. 04
20. 917	0. 00	0. 02	0. 003	0	0. 04
21. 000	0. 00	0. 02	0. 003	0	0. 03
21. 083	0. 00	0. 02	0. 003	0	0. 03
21. 167	0. 00	0. 01	0. 003	0	0. 03
21. 250	0. 00	0. 01	0. 003	0	0. 03
21. 333	0. 00	0. 01	0. 003	0	0. 03
21. 417	0. 00	0. 01	0. 003	0	0. 03
21. 500	0. 00	0. 01	0. 002	0	0. 03
21. 583	0. 00	0. 01	0. 002	0	0. 03
21. 667	0. 00	0. 01	0. 002	0	0. 03
21. 750	0. 00	0. 01	0. 002	0	0. 02
21. 833	0. 00	0. 01	0. 002	0	0. 02
21. 917	0. 00	0. 01	0. 002	0	0. 02
22. 000	0. 00	0. 01	0. 002	0	0. 02
22. 083	0. 00	0. 01	0. 002	0	0. 02
22. 167	0. 00	0. 01	0. 002	0	0. 02
22. 250	0. 00	0. 01	0. 002	0	0. 02
22. 333	0. 00	0. 01	0. 002	0	0. 02
22. 417	0. 00	0. 01	0. 002	0	0. 02
22. 500	0. 00	0. 01	0. 002	0	0. 02
22. 583	0. 00	0. 01	0. 001	0	0. 02
22. 667	0. 00	0. 01	0. 001	0	0. 02
22. 750	0. 00	0. 01	0. 001	0	0. 02
22. 833	0. 00	0. 01	0. 001	0	0. 02
22. 917	0. 00	0. 01	0. 001	0	0. 01
23. 000	0. 00	0. 01	0. 001	0	0. 01
23. 083	0. 00	0. 01	0. 001	0	0. 01
23. 167	0. 00	0. 01	0. 001	0	0. 01
23. 250	0. 00	0. 01	0. 001	0	0. 01
23. 333	0. 00	0. 01	0. 001	0	0. 01
23. 417	0. 00	0. 01	0. 001	0	0. 01

23.500	0.00	0.01	0.001	0					0.01
23.583	0.00	0.01	0.001	0					0.01
23.667	0.00	0.00	0.001	0					0.01
23.750	0.00	0.00	0.001	0					0.01
23.833	0.00	0.00	0.001	0					0.01
23.917	0.00	0.00	0.001	0					0.01
24.000	0.00	0.00	0.001	0					0.01
24.083	0.00	0.00	0.001	0					0.01
24.167	0.00	0.00	0.001	0					0.01
24.250	0.00	0.00	0.001	0					0.01
24.333	0.00	0.00	0.001	0					0.01
24.417	0.00	0.00	0.001	0					0.01
24.500	0.00	0.00	0.001	0					0.01
24.583	0.00	0.00	0.001	0					0.01
24.667	0.00	0.00	0.001	0					0.01
24.750	0.00	0.00	0.001	0					0.01
24.833	0.00	0.00	0.001	0					0.01
24.917	0.00	0.00	0.001	0					0.01
25.000	0.00	0.00	0.001	0					0.01
25.083	0.00	0.00	0.000	0					0.01
25.167	0.00	0.00	0.000	0					0.01
25.250	0.00	0.00	0.000	0					0.01
25.333	0.00	0.00	0.000	0					0.01
25.417	0.00	0.00	0.000	0					0.00
25.500	0.00	0.00	0.000	0					0.00
25.583	0.00	0.00	0.000	0					0.00
25.667	0.00	0.00	0.000	0					0.00
25.750	0.00	0.00	0.000	0					0.00
25.833	0.00	0.00	0.000	0					0.00
25.917	0.00	0.00	0.000	0					0.00
26.000	0.00	0.00	0.000	0					0.00
26.083	0.00	0.00	0.000	0					0.00
26.167	0.00	0.00	0.000	0					0.00
26.250	0.00	0.00	0.000	0					0.00
26.333	0.00	0.00	0.000	0					0.00
26.417	0.00	0.00	0.000	0					0.00
26.500	0.00	0.00	0.000	0					0.00
26.583	0.00	0.00	0.000	0					0.00
26.667	0.00	0.00	0.000	0					0.00
26.750	0.00	0.00	0.000	0					0.00
26.833	0.00	0.00	0.000	0					0.00
26.917	0.00	0.00	0.000	0					0.00
27.000	0.00	0.00	0.000	0					0.00
27.083	0.00	0.00	0.000	0					0.00
27.167	0.00	0.00	0.000	0					0.00
27.250	0.00	0.00	0.000	0					0.00
27.333	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 328
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 0.261 (CFS)
 Total volume = 0.278 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/05/23

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 100-131
 MITIGATION ANALYSIS
 24-HOUR - 10-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PA102410.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 290
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 2.328 (CFS)
 Total volume = 1.385 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 290
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.022	0.118	0.022	0.022
0.340	0.042	0.138	0.042	0.042
0.500	0.081	0.167	0.080	0.082
1.000	0.206	0.236	0.205	0.207
1.350	0.293	0.275	0.292	0.294
1.500	0.329	0.289	0.328	0.330
2.000	0.451	0.334	0.450	0.452
2.500	0.567	0.374	0.566	0.568
3.000	0.677	0.409	0.676	0.678
3.100	0.697	0.416	0.696	0.698
3.500	0.775	1.336	0.770	0.780
4.000	0.841	3.874	0.828	0.854
4.100	0.846	4.260	0.831	0.861
4.340	0.859	4.703	0.843	0.875

Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	. 0	0. 6	1. 16	1. 75	2. 33	Depth (Ft.)
0. 083	0. 08	0. 00	0. 000	OI					0. 00
0. 167	0. 13	0. 01	0. 001	OI					0. 01
0. 250	0. 13	0. 01	0. 002	OI					0. 02
0. 333	0. 17	0. 01	0. 003	O I					0. 03
0. 417	0. 20	0. 02	0. 004	O I					0. 04
0. 500	0. 20	0. 03	0. 005	O I					0. 06
0. 583	0. 20	0. 03	0. 006	O I					0. 07
0. 667	0. 20	0. 04	0. 007	O I					0. 08
0. 750	0. 20	0. 05	0. 008	O I					0. 10
0. 833	0. 24	0. 05	0. 010	O I					0. 11
0. 917	0. 26	0. 06	0. 011	O I					0. 13
1. 000	0. 27	0. 07	0. 012	O I					0. 14
1. 083	0. 23	0. 07	0. 014	O I					0. 16
1. 167	0. 20	0. 08	0. 015	OI					0. 17
1. 250	0. 20	0. 08	0. 015	OI					0. 18
1. 333	0. 20	0. 09	0. 016	OI					0. 18
1. 417	0. 20	0. 09	0. 017	OI					0. 19
1. 500	0. 20	0. 10	0. 018	OI					0. 20
1. 583	0. 20	0. 10	0. 018	OI					0. 21
1. 667	0. 20	0. 10	0. 019	OI					0. 22
1. 750	0. 20	0. 11	0. 020	OI					0. 23
1. 833	0. 24	0. 11	0. 021	O I					0. 23
1. 917	0. 26	0. 12	0. 022	O I					0. 24
2. 000	0. 27	0. 12	0. 023	O I					0. 25
2. 083	0. 27	0. 12	0. 024	O I					0. 26
2. 167	0. 27	0. 12	0. 025	O I					0. 26
2. 250	0. 27	0. 12	0. 026	O I					0. 27
2. 333	0. 27	0. 12	0. 027	O I					0. 27
2. 417	0. 27	0. 12	0. 028	O I					0. 28
2. 500	0. 27	0. 12	0. 029	O I					0. 28
2. 583	0. 31	0. 13	0. 030	O I					0. 28
2. 667	0. 33	0. 13	0. 031	O I					0. 29
2. 750	0. 33	0. 13	0. 032	O I					0. 30
2. 833	0. 33	0. 13	0. 034	O I					0. 30
2. 917	0. 33	0. 13	0. 035	O I					0. 31
3. 000	0. 33	0. 13	0. 037	O I					0. 32
3. 083	0. 33	0. 13	0. 038	O I					0. 32
3. 167	0. 33	0. 14	0. 039	O I					0. 33
3. 250	0. 33	0. 14	0. 041	O I					0. 33
3. 333	0. 33	0. 14	0. 042	O I					0. 34
3. 417	0. 33	0. 14	0. 044	O I					0. 35
3. 500	0. 33	0. 14	0. 045	O I					0. 35
3. 583	0. 33	0. 14	0. 046	O I					0. 36
3. 667	0. 33	0. 14	0. 048	O I					0. 36
3. 750	0. 33	0. 14	0. 049	O I					0. 37
3. 833	0. 37	0. 14	0. 050	O I					0. 37
3. 917	0. 40	0. 15	0. 052	O I					0. 38
4. 000	0. 40	0. 15	0. 054	O I					0. 39
4. 083	0. 40	0. 15	0. 055	O I					0. 40
4. 167	0. 40	0. 15	0. 057	O I					0. 40
4. 250	0. 40	0. 15	0. 059	O I					0. 41
4. 333	0. 44	0. 15	0. 061	O I					0. 42
4. 417	0. 46	0. 15	0. 063	O I					0. 43
4. 500	0. 47	0. 16	0. 065	O I					0. 43
4. 583	0. 47	0. 16	0. 067	O I					0. 44
4. 667	0. 47	0. 16	0. 069	O I					0. 45
4. 750	0. 47	0. 16	0. 071	O I					0. 46
4. 833	0. 51	0. 16	0. 074	O I					0. 47
4. 917	0. 53	0. 16	0. 076	O I					0. 48
5. 000	0. 54	0. 17	0. 079	O I					0. 49
5. 083	0. 46	0. 17	0. 081	O I					0. 50
5. 167	0. 41	0. 17	0. 083	O I					0. 51
5. 250	0. 40	0. 17	0. 084	O I					0. 51
5. 333	0. 44	0. 17	0. 086	O I					0. 52
5. 417	0. 46	0. 17	0. 088	O I					0. 53

17. 500	0. 33	0. 54	0. 708	I	0				3. 15
17. 583	0. 33	0. 52	0. 706	I	0				3. 15
17. 667	0. 33	0. 51	0. 705	I	0				3. 14
17. 750	0. 33	0. 50	0. 704	I	0				3. 13
17. 833	0. 30	0. 48	0. 703	I	0				3. 13
17. 917	0. 27	0. 47	0. 701	I	0				3. 12
18. 000	0. 27	0. 45	0. 700	I	0				3. 12
18. 083	0. 27	0. 44	0. 699	I	0				3. 11
18. 167	0. 27	0. 42	0. 698	I	0				3. 10
18. 250	0. 27	0. 42	0. 697	I	0				3. 10
18. 333	0. 27	0. 42	0. 696	I	0				3. 09
18. 417	0. 27	0. 42	0. 695	I	0				3. 09
18. 500	0. 27	0. 41	0. 694	I	0				3. 08
18. 583	0. 23	0. 41	0. 692	I	0				3. 08
18. 667	0. 20	0. 41	0. 691	I	0				3. 07
18. 750	0. 20	0. 41	0. 690	I	0				3. 06
18. 833	0. 16	0. 41	0. 688	I	0				3. 05
18. 917	0. 14	0. 41	0. 686	I	0				3. 05
19. 000	0. 13	0. 41	0. 684	I	0				3. 04
19. 083	0. 17	0. 41	0. 682	I	0				3. 03
19. 167	0. 20	0. 41	0. 681	I	0				3. 02
19. 250	0. 20	0. 41	0. 679	I	0				3. 01
19. 333	0. 24	0. 41	0. 678	I	0				3. 01
19. 417	0. 26	0. 41	0. 677	I	0				3. 00
19. 500	0. 27	0. 41	0. 676	I	0				3. 00
19. 583	0. 23	0. 41	0. 675	I	0				2. 99
19. 667	0. 20	0. 41	0. 674	I	0				2. 98
19. 750	0. 20	0. 41	0. 672	I	0				2. 98
19. 833	0. 16	0. 41	0. 671	I	0				2. 97
19. 917	0. 14	0. 41	0. 669	I	0				2. 96
20. 000	0. 13	0. 41	0. 667	I	0				2. 95
20. 083	0. 17	0. 41	0. 665	I	0				2. 95
20. 167	0. 20	0. 40	0. 664	I	0				2. 94
20. 250	0. 20	0. 40	0. 662	I	0				2. 93
20. 333	0. 20	0. 40	0. 661	I	0				2. 93
20. 417	0. 20	0. 40	0. 660	I	0				2. 92
20. 500	0. 20	0. 40	0. 658	I	0				2. 91
20. 583	0. 20	0. 40	0. 657	I	0				2. 91
20. 667	0. 20	0. 40	0. 655	I	0				2. 90
20. 750	0. 20	0. 40	0. 654	I	0				2. 90
20. 833	0. 16	0. 40	0. 653	I	0				2. 89
20. 917	0. 14	0. 40	0. 651	I	0				2. 88
21. 000	0. 13	0. 40	0. 649	I	0				2. 87
21. 083	0. 17	0. 40	0. 647	I	0				2. 86
21. 167	0. 20	0. 40	0. 646	I	0				2. 86
21. 250	0. 20	0. 40	0. 644	I	0				2. 85
21. 333	0. 16	0. 40	0. 643	I	0				2. 85
21. 417	0. 14	0. 40	0. 641	I	0				2. 84
21. 500	0. 13	0. 40	0. 639	I	0				2. 83
21. 583	0. 17	0. 40	0. 638	I	0				2. 82
21. 667	0. 20	0. 40	0. 636	I	0				2. 81
21. 750	0. 20	0. 40	0. 635	I	0				2. 81
21. 833	0. 16	0. 40	0. 633	I	0				2. 80
21. 917	0. 14	0. 39	0. 632	I	0				2. 79
22. 000	0. 13	0. 39	0. 630	I	0				2. 79
22. 083	0. 17	0. 39	0. 628	I	0				2. 78
22. 167	0. 20	0. 39	0. 627	I	0				2. 77
22. 250	0. 20	0. 39	0. 626	I	0				2. 77
22. 333	0. 16	0. 39	0. 624	I	0				2. 76
22. 417	0. 14	0. 39	0. 622	I	0				2. 75
22. 500	0. 13	0. 39	0. 621	I	0				2. 74
22. 583	0. 13	0. 39	0. 619	I	0				2. 74
22. 667	0. 13	0. 39	0. 617	I	0				2. 73
22. 750	0. 13	0. 39	0. 615	I	0				2. 72
22. 833	0. 13	0. 39	0. 614	I	0				2. 71
22. 917	0. 13	0. 39	0. 612	I	0				2. 70
23. 000	0. 13	0. 39	0. 610	I	0				2. 70
23. 083	0. 13	0. 39	0. 608	I	0				2. 69
23. 167	0. 13	0. 39	0. 607	I	0				2. 68
23. 250	0. 13	0. 39	0. 605	I	0				2. 67
23. 333	0. 13	0. 39	0. 603	I	0				2. 66
23. 417	0. 13	0. 38	0. 601	I	0				2. 66

23. 500	0. 13	0. 38	0. 600	I	0	2. 65
23. 583	0. 13	0. 38	0. 598	I	0	2. 64
23. 667	0. 13	0. 38	0. 596	I	0	2. 63
23. 750	0. 13	0. 38	0. 595	I	0	2. 63
23. 833	0. 13	0. 38	0. 593	I	0	2. 62
23. 917	0. 13	0. 38	0. 591	I	0	2. 61
24. 000	0. 13	0. 38	0. 589	I	0	2. 60
24. 083	0. 06	0. 38	0. 587	I	0	2. 59
24. 167	0. 01	0. 38	0. 585	I	0	2. 58
24. 250	0. 00	0. 38	0. 582	I	0	2. 57
24. 333	0. 00	0. 38	0. 580	I	0	2. 56
24. 417	0. 00	0. 38	0. 577	I	0	2. 55
24. 500	0. 00	0. 38	0. 575	I	0	2. 53
24. 583	0. 00	0. 38	0. 572	I	0	2. 52
24. 667	0. 00	0. 37	0. 569	I	0	2. 51
24. 750	0. 00	0. 37	0. 567	I	0	2. 50
24. 833	0. 00	0. 37	0. 564	I	0	2. 49
24. 917	0. 00	0. 37	0. 562	I	0	2. 48
25. 000	0. 00	0. 37	0. 559	I	0	2. 47
25. 083	0. 00	0. 37	0. 557	I	0	2. 46
25. 167	0. 00	0. 37	0. 554	I	0	2. 44
25. 250	0. 00	0. 37	0. 552	I	0	2. 43
25. 333	0. 00	0. 37	0. 549	I	0	2. 42
25. 417	0. 00	0. 37	0. 546	I	0	2. 41
25. 500	0. 00	0. 37	0. 544	I	0	2. 40
25. 583	0. 00	0. 37	0. 541	I	0	2. 39
25. 667	0. 00	0. 36	0. 539	I	0	2. 38
25. 750	0. 00	0. 36	0. 536	I	0	2. 37
25. 833	0. 00	0. 36	0. 534	I	0	2. 36
25. 917	0. 00	0. 36	0. 531	I	0	2. 35
26. 000	0. 00	0. 36	0. 529	I	0	2. 34
26. 083	0. 00	0. 36	0. 526	I	0	2. 33
26. 167	0. 00	0. 36	0. 524	I	0	2. 31
26. 250	0. 00	0. 36	0. 522	I	0	2. 30
26. 333	0. 00	0. 36	0. 519	I	0	2. 29
26. 417	0. 00	0. 36	0. 517	I	0	2. 28
26. 500	0. 00	0. 36	0. 514	I	0	2. 27
26. 583	0. 00	0. 35	0. 512	I	0	2. 26
26. 667	0. 00	0. 35	0. 509	I	0	2. 25
26. 750	0. 00	0. 35	0. 507	I	0	2. 24
26. 833	0. 00	0. 35	0. 504	I	0	2. 23
26. 917	0. 00	0. 35	0. 502	I	0	2. 22
27. 000	0. 00	0. 35	0. 500	I	0	2. 21
27. 083	0. 00	0. 35	0. 497	I	0	2. 20
27. 167	0. 00	0. 35	0. 495	I	0	2. 19
27. 250	0. 00	0. 35	0. 492	I	0	2. 18
27. 333	0. 00	0. 35	0. 490	I	0	2. 17
27. 417	0. 00	0. 35	0. 488	I	0	2. 16
27. 500	0. 00	0. 35	0. 485	I	0	2. 15
27. 583	0. 00	0. 34	0. 483	I	0	2. 14
27. 667	0. 00	0. 34	0. 480	I	0	2. 13
27. 750	0. 00	0. 34	0. 478	I	0	2. 12
27. 833	0. 00	0. 34	0. 476	I	0	2. 11
27. 917	0. 00	0. 34	0. 473	I	0	2. 10
28. 000	0. 00	0. 34	0. 471	I	0	2. 09
28. 083	0. 00	0. 34	0. 469	I	0	2. 08
28. 167	0. 00	0. 34	0. 466	I	0	2. 07
28. 250	0. 00	0. 34	0. 464	I	0	2. 06
28. 333	0. 00	0. 34	0. 462	I	0	2. 05
28. 417	0. 00	0. 34	0. 459	I	0	2. 04
28. 500	0. 00	0. 34	0. 457	I	0	2. 03
28. 583	0. 00	0. 34	0. 455	I	0	2. 02
28. 667	0. 00	0. 33	0. 452	I	0	2. 01
28. 750	0. 00	0. 33	0. 450	I	0	2. 00
28. 833	0. 00	0. 33	0. 448	I	0	1. 99
28. 917	0. 00	0. 33	0. 445	I	0	1. 98
29. 000	0. 00	0. 33	0. 443	I	0	1. 97
29. 083	0. 00	0. 33	0. 441	I	0	1. 96
29. 167	0. 00	0. 33	0. 439	I	0	1. 95
29. 250	0. 00	0. 33	0. 436	I	0	1. 94
29. 333	0. 00	0. 33	0. 434	I	0	1. 93
29. 417	0. 00	0. 33	0. 432	I	0	1. 92

29.500	0.00	0.33	0.430	I	0	1.91
29.583	0.00	0.33	0.427	I	0	1.90
29.667	0.00	0.32	0.425	I	0	1.89
29.750	0.00	0.32	0.423	I	0	1.88
29.833	0.00	0.32	0.421	I	0	1.88
29.917	0.00	0.32	0.418	I	0	1.87
30.000	0.00	0.32	0.416	I	0	1.86
30.083	0.00	0.32	0.414	I	0	1.85
30.167	0.00	0.32	0.412	I	0	1.84
30.250	0.00	0.32	0.410	I	0	1.83
30.333	0.00	0.32	0.407	I	0	1.82
30.417	0.00	0.32	0.405	I	0	1.81
30.500	0.00	0.32	0.403	I	0	1.80
30.583	0.00	0.32	0.401	I	0	1.79
30.667	0.00	0.31	0.399	I	0	1.79
30.750	0.00	0.31	0.397	I	0	1.78
30.833	0.00	0.31	0.394	I	0	1.77
30.917	0.00	0.31	0.392	I	0	1.76
31.000	0.00	0.31	0.390	I	0	1.75
31.083	0.00	0.31	0.388	I	0	1.74
31.167	0.00	0.31	0.386	I	0	1.73
31.250	0.00	0.31	0.384	I	0	1.72
31.333	0.00	0.31	0.382	I	0	1.72
31.417	0.00	0.31	0.379	I	0	1.71
31.500	0.00	0.31	0.377	I	0	1.70
31.583	0.00	0.31	0.375	I	0	1.69
31.667	0.00	0.31	0.373	I	0	1.68
31.750	0.00	0.30	0.371	I	0	1.67
31.833	0.00	0.30	0.369	I	0	1.66
31.917	0.00	0.30	0.367	I	0	1.66
32.000	0.00	0.30	0.365	I	0	1.65
32.083	0.00	0.30	0.363	I	0	1.64
32.167	0.00	0.30	0.361	I	0	1.63
32.250	0.00	0.30	0.359	I	0	1.62
32.333	0.00	0.30	0.356	I	0	1.61
32.417	0.00	0.30	0.354	I	0	1.60
32.500	0.00	0.30	0.352	I	0	1.60
32.583	0.00	0.30	0.350	I	0	1.59
32.667	0.00	0.30	0.348	I	0	1.58
32.750	0.00	0.30	0.346	I	0	1.57
32.833	0.00	0.29	0.344	I	0	1.56
32.917	0.00	0.29	0.342	I	0	1.55
33.000	0.00	0.29	0.340	I	0	1.55
33.083	0.00	0.29	0.338	I	0	1.54
33.167	0.00	0.29	0.336	I	0	1.53
33.250	0.00	0.29	0.334	I	0	1.52
33.333	0.00	0.29	0.332	I	0	1.51
33.417	0.00	0.29	0.330	I	0	1.50
33.500	0.00	0.29	0.328	I	0	1.50
33.583	0.00	0.29	0.326	I	0	1.49
33.667	0.00	0.29	0.324	I	0	1.48
33.750	0.00	0.29	0.322	I	0	1.47
33.833	0.00	0.29	0.320	I	0	1.46
33.917	0.00	0.28	0.318	I	0	1.46
34.000	0.00	0.28	0.316	I	0	1.45
34.083	0.00	0.28	0.314	I	0	1.44
34.167	0.00	0.28	0.312	I	0	1.43
34.250	0.00	0.28	0.310	I	0	1.42
34.333	0.00	0.28	0.309	I	0	1.41
34.417	0.00	0.28	0.307	I	0	1.41
34.500	0.00	0.28	0.305	I	0	1.40
34.583	0.00	0.28	0.303	I	0	1.39
34.667	0.00	0.28	0.301	I	0	1.38
34.750	0.00	0.28	0.299	I	0	1.37
34.833	0.00	0.28	0.297	I	0	1.37
34.917	0.00	0.28	0.295	I	0	1.36
35.000	0.00	0.28	0.293	I	0	1.35
35.083	0.00	0.27	0.291	I	0	1.34
35.167	0.00	0.27	0.289	I	0	1.34
35.250	0.00	0.27	0.288	I	0	1.33
35.333	0.00	0.27	0.286	I	0	1.32
35.417	0.00	0.27	0.284	I	0	1.31

35.500	0.00	0.27	0.282	I	0	1.31
35.583	0.00	0.27	0.280	I	0	1.30
35.667	0.00	0.27	0.278	I	0	1.29
35.750	0.00	0.27	0.276	I	0	1.28
35.833	0.00	0.27	0.275	I	0	1.28
35.917	0.00	0.27	0.273	I	0	1.27
36.000	0.00	0.27	0.271	I	0	1.26
36.083	0.00	0.26	0.269	I	0	1.25
36.167	0.00	0.26	0.267	I	0	1.25
36.250	0.00	0.26	0.265	I	0	1.24
36.333	0.00	0.26	0.264	I	0	1.23
36.417	0.00	0.26	0.262	I	0	1.22
36.500	0.00	0.26	0.260	I	0	1.22
36.583	0.00	0.26	0.258	I	0	1.21
36.667	0.00	0.26	0.256	I	0	1.20
36.750	0.00	0.26	0.255	I	0	1.20
36.833	0.00	0.26	0.253	I	0	1.19
36.917	0.00	0.26	0.251	I	0	1.18
37.000	0.00	0.26	0.249	I	0	1.17
37.083	0.00	0.25	0.248	I	0	1.17
37.167	0.00	0.25	0.246	I	0	1.16
37.250	0.00	0.25	0.244	I	0	1.15
37.333	0.00	0.25	0.242	I	0	1.15
37.417	0.00	0.25	0.241	I	0	1.14
37.500	0.00	0.25	0.239	I	0	1.13
37.583	0.00	0.25	0.237	I	0	1.13
37.667	0.00	0.25	0.235	I	0	1.12
37.750	0.00	0.25	0.234	I	0	1.11
37.833	0.00	0.25	0.232	I	0	1.10
37.917	0.00	0.25	0.230	I	0	1.10
38.000	0.00	0.25	0.229	I	0	1.09
38.083	0.00	0.25	0.227	I	0	1.08
38.167	0.00	0.24	0.225	I	0	1.08
38.250	0.00	0.24	0.224	I	0	1.07
38.333	0.00	0.24	0.222	I	0	1.06
38.417	0.00	0.24	0.220	I	0	1.06
38.500	0.00	0.24	0.219	I	0	1.05
38.583	0.00	0.24	0.217	I	0	1.04
38.667	0.00	0.24	0.215	I	0	1.04
38.750	0.00	0.24	0.214	I	0	1.03
38.833	0.00	0.24	0.212	I	0	1.02
38.917	0.00	0.24	0.210	I	0	1.02
39.000	0.00	0.24	0.209	I	0	1.01
39.083	0.00	0.24	0.207	I	0	1.00
39.167	0.00	0.24	0.205	I	0	1.00
39.250	0.00	0.23	0.204	I	0	0.99
39.333	0.00	0.23	0.202	I	0	0.98
39.417	0.00	0.23	0.201	I	0	0.98
39.500	0.00	0.23	0.199	I	0	0.97
39.583	0.00	0.23	0.197	I	0	0.97
39.667	0.00	0.23	0.196	I	0	0.96
39.750	0.00	0.23	0.194	I	0	0.95
39.833	0.00	0.23	0.193	I	0	0.95
39.917	0.00	0.23	0.191	I	0	0.94
40.000	0.00	0.23	0.189	I	0	0.93
40.083	0.00	0.23	0.188	I	0	0.93
40.167	0.00	0.23	0.186	I	0	0.92
40.250	0.00	0.22	0.185	I	0	0.92
40.333	0.00	0.22	0.183	I	0	0.91
40.417	0.00	0.22	0.182	I	0	0.90
40.500	0.00	0.22	0.180	I	0	0.90
40.583	0.00	0.22	0.179	I	0	0.89
40.667	0.00	0.22	0.177	I	0	0.88
40.750	0.00	0.22	0.176	I	0	0.88
40.833	0.00	0.22	0.174	I	0	0.87
40.917	0.00	0.22	0.173	I	0	0.87
41.000	0.00	0.22	0.171	I	0	0.86
41.083	0.00	0.22	0.170	I	0	0.85
41.167	0.00	0.22	0.168	I	0	0.85
41.250	0.00	0.21	0.167	I	0	0.84
41.333	0.00	0.21	0.165	I	0	0.84
41.417	0.00	0.21	0.164	I	0	0.83

41. 500	0. 00	0. 21	0. 162	I 0	0. 83
41. 583	0. 00	0. 21	0. 161	I 0	0. 82
41. 667	0. 00	0. 21	0. 159	I 0	0. 81
41. 750	0. 00	0. 21	0. 158	I 0	0. 81
41. 833	0. 00	0. 21	0. 157	I 0	0. 80
41. 917	0. 00	0. 21	0. 155	I 0	0. 80
42. 000	0. 00	0. 21	0. 154	I 0	0. 79
42. 083	0. 00	0. 21	0. 152	I 0	0. 78
42. 167	0. 00	0. 21	0. 151	I 0	0. 78
42. 250	0. 00	0. 20	0. 149	I 0	0. 77
42. 333	0. 00	0. 20	0. 148	I 0	0. 77
42. 417	0. 00	0. 20	0. 147	I 0	0. 76
42. 500	0. 00	0. 20	0. 145	I 0	0. 76
42. 583	0. 00	0. 20	0. 144	I 0	0. 75
42. 667	0. 00	0. 20	0. 142	I 0	0. 75
42. 750	0. 00	0. 20	0. 141	I 0	0. 74
42. 833	0. 00	0. 20	0. 140	I 0	0. 73
42. 917	0. 00	0. 20	0. 138	I 0	0. 73
43. 000	0. 00	0. 20	0. 137	I 0	0. 72
43. 083	0. 00	0. 20	0. 136	I 0	0. 72
43. 167	0. 00	0. 20	0. 134	I 0	0. 71
43. 250	0. 00	0. 20	0. 133	I 0	0. 71
43. 333	0. 00	0. 19	0. 132	I 0	0. 70
43. 417	0. 00	0. 19	0. 130	I 0	0. 70
43. 500	0. 00	0. 19	0. 129	I 0	0. 69
43. 583	0. 00	0. 19	0. 128	I 0	0. 69
43. 667	0. 00	0. 19	0. 126	I 0	0. 68
43. 750	0. 00	0. 19	0. 125	I 0	0. 68
43. 833	0. 00	0. 19	0. 124	I 0	0. 67
43. 917	0. 00	0. 19	0. 122	I 0	0. 66
44. 000	0. 00	0. 19	0. 121	I 0	0. 66
44. 083	0. 00	0. 19	0. 120	I 0	0. 65
44. 167	0. 00	0. 19	0. 118	I 0	0. 65
44. 250	0. 00	0. 19	0. 117	I 0	0. 64
44. 333	0. 00	0. 19	0. 116	I 0	0. 64
44. 417	0. 00	0. 19	0. 114	I 0	0. 63
44. 500	0. 00	0. 18	0. 113	I 0	0. 63
44. 583	0. 00	0. 18	0. 112	I 0	0. 62
44. 667	0. 00	0. 18	0. 111	I 0	0. 62
44. 750	0. 00	0. 18	0. 109	I 0	0. 61
44. 833	0. 00	0. 18	0. 108	I 0	0. 61
44. 917	0. 00	0. 18	0. 107	I 0	0. 60
45. 000	0. 00	0. 18	0. 106	I 0	0. 60
45. 083	0. 00	0. 18	0. 104	I 0	0. 59
45. 167	0. 00	0. 18	0. 103	I 0	0. 59
45. 250	0. 00	0. 18	0. 102	I 0	0. 58
45. 333	0. 00	0. 18	0. 101	I 0	0. 58
45. 417	0. 00	0. 18	0. 099	I 0	0. 57
45. 500	0. 00	0. 18	0. 098	I 0	0. 57
45. 583	0. 00	0. 18	0. 097	I 0	0. 56
45. 667	0. 00	0. 18	0. 096	I 0	0. 56
45. 750	0. 00	0. 17	0. 095	I 0	0. 55
45. 833	0. 00	0. 17	0. 093	I 0	0. 55
45. 917	0. 00	0. 17	0. 092	I 0	0. 55
46. 000	0. 00	0. 17	0. 091	I 0	0. 54
46. 083	0. 00	0. 17	0. 090	I 0	0. 54
46. 167	0. 00	0. 17	0. 089	I 0	0. 53
46. 250	0. 00	0. 17	0. 088	I 0	0. 53
46. 333	0. 00	0. 17	0. 086	I 0	0. 52
46. 417	0. 00	0. 17	0. 085	I 0	0. 52
46. 500	0. 00	0. 17	0. 084	I 0	0. 51
46. 583	0. 00	0. 17	0. 083	I 0	0. 51
46. 667	0. 00	0. 17	0. 082	I 0	0. 50
46. 750	0. 00	0. 17	0. 081	I 0	0. 50
46. 833	0. 00	0. 17	0. 079	I 0	0. 49
46. 917	0. 00	0. 16	0. 078	I 0	0. 49
47. 000	0. 00	0. 16	0. 077	I 0	0. 48
47. 083	0. 00	0. 16	0. 076	I 0	0. 48
47. 167	0. 00	0. 16	0. 075	I 0	0. 47
47. 250	0. 00	0. 16	0. 074	I 0	0. 47
47. 333	0. 00	0. 16	0. 073	I 0	0. 47
47. 417	0. 00	0. 16	0. 072	I 0	0. 46

47.500	0.00	0.16	0.070	I 0	0.46
47.583	0.00	0.16	0.069	I 0	0.45
47.667	0.00	0.16	0.068	I 0	0.45
47.750	0.00	0.16	0.067	I 0	0.44
47.833	0.00	0.16	0.066	I 0	0.44
47.917	0.00	0.16	0.065	I 0	0.43
48.000	0.00	0.15	0.064	I 0	0.43
48.083	0.00	0.15	0.063	I 0	0.43
48.167	0.00	0.15	0.062	I 0	0.42
48.250	0.00	0.15	0.061	I 0	0.42
48.333	0.00	0.15	0.060	I 0	0.41
48.417	0.00	0.15	0.059	I 0	0.41
48.500	0.00	0.15	0.058	I 0	0.40
48.583	0.00	0.15	0.057	I 0	0.40
48.667	0.00	0.15	0.056	I 0	0.40
48.750	0.00	0.15	0.055	I 0	0.39
48.833	0.00	0.15	0.054	I 0	0.39
48.917	0.00	0.15	0.053	I 0	0.38
49.000	0.00	0.15	0.052	IO	0.38
49.083	0.00	0.14	0.051	IO	0.38
49.167	0.00	0.14	0.050	IO	0.37
49.250	0.00	0.14	0.049	IO	0.37
49.333	0.00	0.14	0.048	IO	0.36
49.417	0.00	0.14	0.047	IO	0.36
49.500	0.00	0.14	0.046	IO	0.36
49.583	0.00	0.14	0.045	IO	0.35
49.667	0.00	0.14	0.044	IO	0.35
49.750	0.00	0.14	0.043	IO	0.34
49.833	0.00	0.14	0.042	IO	0.34
49.917	0.00	0.14	0.041	IO	0.34
50.000	0.00	0.14	0.040	IO	0.33
50.083	0.00	0.14	0.039	IO	0.33
50.167	0.00	0.13	0.038	IO	0.32
50.250	0.00	0.13	0.037	IO	0.32
50.333	0.00	0.13	0.036	IO	0.31
50.417	0.00	0.13	0.035	IO	0.31
50.500	0.00	0.13	0.034	IO	0.31
50.583	0.00	0.13	0.034	IO	0.30
50.667	0.00	0.13	0.033	IO	0.30
50.750	0.00	0.13	0.032	IO	0.29
50.833	0.00	0.13	0.031	IO	0.29
50.917	0.00	0.13	0.030	IO	0.29
51.000	0.00	0.13	0.029	IO	0.28
51.083	0.00	0.12	0.028	IO	0.28
51.167	0.00	0.12	0.027	IO	0.27
51.250	0.00	0.12	0.027	IO	0.27
51.333	0.00	0.12	0.026	IO	0.27
51.417	0.00	0.12	0.025	IO	0.26
51.500	0.00	0.12	0.024	IO	0.26
51.583	0.00	0.12	0.023	IO	0.26
51.667	0.00	0.12	0.022	IO	0.25
51.750	0.00	0.12	0.022	IO	0.25
51.833	0.00	0.11	0.021	IO	0.24
51.917	0.00	0.11	0.020	IO	0.23
52.000	0.00	0.10	0.019	IO	0.22
52.083	0.00	0.10	0.019	IO	0.21
52.167	0.00	0.10	0.018	IO	0.20
52.250	0.00	0.09	0.017	IO	0.20
52.333	0.00	0.09	0.017	IO	0.19
52.417	0.00	0.09	0.016	IO	0.18
52.500	0.00	0.08	0.016	IO	0.18
52.583	0.00	0.08	0.015	IO	0.17
52.667	0.00	0.08	0.014	IO	0.16
52.750	0.00	0.07	0.014	IO	0.16
52.833	0.00	0.07	0.013	0	0.15
52.917	0.00	0.07	0.013	0	0.15
53.000	0.00	0.07	0.012	0	0.14
53.083	0.00	0.06	0.012	0	0.14
53.167	0.00	0.06	0.012	0	0.13
53.250	0.00	0.06	0.011	0	0.13
53.333	0.00	0.06	0.011	0	0.12
53.417	0.00	0.06	0.010	0	0.12

53.500	0.00	0.05	0.010	0	0.11
53.583	0.00	0.05	0.010	0	0.11
53.667	0.00	0.05	0.009	0	0.11
53.750	0.00	0.05	0.009	0	0.10
53.833	0.00	0.05	0.009	0	0.10
53.917	0.00	0.04	0.008	0	0.09
54.000	0.00	0.04	0.008	0	0.09
54.083	0.00	0.04	0.008	0	0.09
54.167	0.00	0.04	0.007	0	0.08
54.250	0.00	0.04	0.007	0	0.08
54.333	0.00	0.04	0.007	0	0.08
54.417	0.00	0.04	0.007	0	0.08
54.500	0.00	0.03	0.006	0	0.07
54.583	0.00	0.03	0.006	0	0.07
54.667	0.00	0.03	0.006	0	0.07
54.750	0.00	0.03	0.006	0	0.07
54.833	0.00	0.03	0.006	0	0.06
54.917	0.00	0.03	0.005	0	0.06
55.000	0.00	0.03	0.005	0	0.06
55.083	0.00	0.03	0.005	0	0.06
55.167	0.00	0.03	0.005	0	0.05
55.250	0.00	0.02	0.005	0	0.05
55.333	0.00	0.02	0.004	0	0.05
55.417	0.00	0.02	0.004	0	0.05
55.500	0.00	0.02	0.004	0	0.05
55.583	0.00	0.02	0.004	0	0.05
55.667	0.00	0.02	0.004	0	0.04
55.750	0.00	0.02	0.004	0	0.04
55.833	0.00	0.02	0.004	0	0.04
55.917	0.00	0.02	0.003	0	0.04
56.000	0.00	0.02	0.003	0	0.04
56.083	0.00	0.02	0.003	0	0.04
56.167	0.00	0.02	0.003	0	0.03
56.250	0.00	0.02	0.003	0	0.03
56.333	0.00	0.02	0.003	0	0.03
56.417	0.00	0.01	0.003	0	0.03
56.500	0.00	0.01	0.003	0	0.03
56.583	0.00	0.01	0.003	0	0.03
56.667	0.00	0.01	0.002	0	0.03
56.750	0.00	0.01	0.002	0	0.03
56.833	0.00	0.01	0.002	0	0.03
56.917	0.00	0.01	0.002	0	0.02
57.000	0.00	0.01	0.002	0	0.02
57.083	0.00	0.01	0.002	0	0.02
57.167	0.00	0.01	0.002	0	0.02
57.250	0.00	0.01	0.002	0	0.02
57.333	0.00	0.01	0.002	0	0.02
57.417	0.00	0.01	0.002	0	0.02
57.500	0.00	0.01	0.002	0	0.02
57.583	0.00	0.01	0.002	0	0.02
57.667	0.00	0.01	0.002	0	0.02
57.750	0.00	0.01	0.002	0	0.02
57.833	0.00	0.01	0.001	0	0.02
57.917	0.00	0.01	0.001	0	0.02
58.000	0.00	0.01	0.001	0	0.02
58.083	0.00	0.01	0.001	0	0.01
58.167	0.00	0.01	0.001	0	0.01
58.250	0.00	0.01	0.001	0	0.01
58.333	0.00	0.01	0.001	0	0.01
58.417	0.00	0.01	0.001	0	0.01
58.500	0.00	0.01	0.001	0	0.01
58.583	0.00	0.01	0.001	0	0.01
58.667	0.00	0.01	0.001	0	0.01
58.750	0.00	0.01	0.001	0	0.01
58.833	0.00	0.01	0.001	0	0.01
58.917	0.00	0.00	0.001	0	0.01
59.000	0.00	0.00	0.001	0	0.01
59.083	0.00	0.00	0.001	0	0.01
59.167	0.00	0.00	0.001	0	0.01
59.250	0.00	0.00	0.001	0	0.01
59.333	0.00	0.00	0.001	0	0.01
59.417	0.00	0.00	0.001	0	0.01

59.500	0.00	0.00	0.001	0					0.01
59.583	0.00	0.00	0.001	0					0.01
59.667	0.00	0.00	0.001	0					0.01
59.750	0.00	0.00	0.001	0					0.01
59.833	0.00	0.00	0.001	0					0.01
59.917	0.00	0.00	0.001	0					0.01
60.000	0.00	0.00	0.001	0					0.01
60.083	0.00	0.00	0.001	0					0.01
60.167	0.00	0.00	0.001	0					0.01
60.250	0.00	0.00	0.001	0					0.01
60.333	0.00	0.00	0.000	0					0.01
60.417	0.00	0.00	0.000	0					0.01
60.500	0.00	0.00	0.000	0					0.01
60.583	0.00	0.00	0.000	0					0.00
60.667	0.00	0.00	0.000	0					0.00
60.750	0.00	0.00	0.000	0					0.00
60.833	0.00	0.00	0.000	0					0.00
60.917	0.00	0.00	0.000	0					0.00
61.000	0.00	0.00	0.000	0					0.00
61.083	0.00	0.00	0.000	0					0.00
61.167	0.00	0.00	0.000	0					0.00
61.250	0.00	0.00	0.000	0					0.00
61.333	0.00	0.00	0.000	0					0.00
61.417	0.00	0.00	0.000	0					0.00
61.500	0.00	0.00	0.000	0					0.00
61.583	0.00	0.00	0.000	0					0.00
61.667	0.00	0.00	0.000	0					0.00
61.750	0.00	0.00	0.000	0					0.00
61.833	0.00	0.00	0.000	0					0.00
61.917	0.00	0.00	0.000	0					0.00
62.000	0.00	0.00	0.000	0					0.00
62.083	0.00	0.00	0.000	0					0.00
62.167	0.00	0.00	0.000	0					0.00
62.250	0.00	0.00	0.000	0					0.00
62.333	0.00	0.00	0.000	0					0.00
62.417	0.00	0.00	0.000	0					0.00
62.500	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****
Number of intervals = 750
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 1.539 (CFS)
Total volume = 1.384 (Ac. Ft)
Status of hydrographs being held in storage
Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
Peak (CFS) 0.000 0.000 0.000 0.000 0.000
Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/05/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 100-131
 MITIGATION ANALYSIS
 6-HOUR - 10-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PA10610.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 74
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 5.954 (CFS)
 Total volume = 0.722 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 74
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.022	0.118	0.022	0.022
0.340	0.042	0.138	0.042	0.042
0.500	0.081	0.167	0.080	0.082
1.000	0.206	0.236	0.205	0.207
1.350	0.293	0.275	0.292	0.294
1.500	0.329	0.289	0.328	0.330
2.000	0.451	0.334	0.450	0.452
2.500	0.567	0.374	0.566	0.568
3.000	0.677	0.409	0.676	0.678
3.100	0.697	0.416	0.696	0.698
3.500	0.775	1.336	0.770	0.780
4.000	0.841	3.874	0.828	0.854
4.100	0.846	4.260	0.831	0.861
4.340	0.859	4.703	0.843	0.875

Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	0	1.5	2.98	4.47	5.95	Depth (Ft.)
0.083	0.30	0.01	0.001	O					0.01
0.167	0.54	0.02	0.004	O I					0.04
0.250	0.61	0.04	0.008	O I					0.09
0.333	0.61	0.06	0.011	O I					0.13
0.417	0.61	0.08	0.015	O I					0.17
0.500	0.67	0.10	0.019	O I					0.22
0.583	0.71	0.12	0.023	O I					0.25
0.667	0.72	0.12	0.027	O I					0.27
0.750	0.72	0.13	0.031	O I					0.29
0.833	0.72	0.13	0.035	O I					0.31
0.917	0.72	0.14	0.039	O I					0.33
1.000	0.77	0.14	0.043	O I					0.35
1.083	0.81	0.14	0.048	O I					0.36
1.167	0.82	0.15	0.052	O I					0.38
1.250	0.82	0.15	0.057	O I					0.40
1.333	0.82	0.15	0.062	O I					0.42
1.417	0.82	0.16	0.066	O I					0.44
1.500	0.82	0.16	0.071	O I					0.46
1.583	0.82	0.16	0.075	O I					0.48
1.667	0.82	0.17	0.080	O I					0.50
1.750	0.82	0.17	0.084	O I					0.51
1.833	0.82	0.17	0.089	O I					0.53
1.917	0.82	0.17	0.093	O I					0.55
2.000	0.88	0.18	0.098	O I					0.57
2.083	0.86	0.18	0.103	O I					0.59
2.167	0.88	0.18	0.107	O I					0.61
2.250	0.91	0.18	0.112	O I					0.62
2.333	0.92	0.19	0.117	O I					0.65
2.417	0.92	0.19	0.122	O I					0.67
2.500	0.92	0.19	0.127	O I					0.69
2.583	0.92	0.20	0.132	O I					0.71
2.667	0.92	0.20	0.137	O I					0.73
2.750	0.98	0.20	0.142	O I					0.75
2.833	1.02	0.20	0.148	O I					0.77
2.917	1.02	0.21	0.154	O I					0.79
3.000	1.02	0.21	0.159	O I					0.81
3.083	1.02	0.21	0.165	O I					0.83
3.167	1.08	0.22	0.171	O I					0.86
3.250	1.12	0.22	0.177	O I					0.88
3.333	1.12	0.22	0.183	O I					0.91
3.417	1.18	0.23	0.189	O I					0.93
3.500	1.28	0.23	0.196	O I					0.96
3.583	1.38	0.23	0.204	O I					0.99
3.667	1.43	0.24	0.212	O I					1.02
3.750	1.49	0.24	0.220	O I					1.06
3.833	1.53	0.25	0.229	O I					1.09
3.917	1.59	0.25	0.238	O I					1.13
4.000	1.63	0.25	0.247	O I					1.17
4.083	1.69	0.26	0.257	O I					1.20
4.167	1.79	0.26	0.267	O I					1.25
4.250	1.89	0.27	0.278	O I					1.29
4.333	2.00	0.27	0.289	O I					1.34
4.417	2.10	0.28	0.302	O I					1.39
4.500	2.14	0.28	0.314	O I					1.44
4.583	2.21	0.29	0.327	O I					1.49
4.667	2.30	0.29	0.341	O I					1.55
4.750	2.42	0.30	0.355	O I					1.61
4.833	2.47	0.30	0.370	O I					1.67
4.917	2.54	0.31	0.385	O I					1.73
5.000	2.66	0.32	0.401	O I					1.79
5.083	3.08	0.32	0.418	O I					1.87
5.167	3.67	0.33	0.439	O I					1.95
5.250	4.15	0.34	0.464	O I					2.06
5.333	4.54	0.35	0.491	O I					2.17
5.417	5.06	0.36	0.522	O I					2.31

5. 500	5. 95	0. 37	0. 557	0				2. 46
5. 583	3. 79	0. 38	0. 588	0				2. 60
5. 667	1. 61	0. 39	0. 604	0				2. 67
5. 750	0. 80	0. 39	0. 610	0	I			2. 70
5. 833	0. 57	0. 39	0. 612	0I				2. 70
5. 917	0. 40	0. 39	0. 613	0				2. 71
6. 000	0. 26	0. 39	0. 612	I0				2. 71
6. 083	0. 09	0. 39	0. 611	I 0				2. 70
6. 167	0. 01	0. 39	0. 608	I 0				2. 69
6. 250	0. 00	0. 39	0. 606	I 0				2. 68
6. 333	0. 00	0. 39	0. 603	I 0				2. 66
6. 417	0. 00	0. 38	0. 601	I 0				2. 65
6. 500	0. 00	0. 38	0. 598	I 0				2. 64
6. 583	0. 00	0. 38	0. 595	I 0				2. 63
6. 667	0. 00	0. 38	0. 593	I 0				2. 62
6. 750	0. 00	0. 38	0. 590	I 0				2. 60
6. 833	0. 00	0. 38	0. 587	I 0				2. 59
6. 917	0. 00	0. 38	0. 585	I 0				2. 58
7. 000	0. 00	0. 38	0. 582	I 0				2. 57
7. 083	0. 00	0. 38	0. 580	I 0				2. 56
7. 167	0. 00	0. 38	0. 577	I 0				2. 55
7. 250	0. 00	0. 38	0. 574	I 0				2. 53
7. 333	0. 00	0. 38	0. 572	I 0				2. 52
7. 417	0. 00	0. 37	0. 569	I 0				2. 51
7. 500	0. 00	0. 37	0. 567	I 0				2. 50
7. 583	0. 00	0. 37	0. 564	I 0				2. 49
7. 667	0. 00	0. 37	0. 561	I0				2. 48
7. 750	0. 00	0. 37	0. 559	I0				2. 47
7. 833	0. 00	0. 37	0. 556	I0				2. 45
7. 917	0. 00	0. 37	0. 554	I0				2. 44
8. 000	0. 00	0. 37	0. 551	I0				2. 43
8. 083	0. 00	0. 37	0. 549	I0				2. 42
8. 167	0. 00	0. 37	0. 546	I0				2. 41
8. 250	0. 00	0. 37	0. 544	I0				2. 40
8. 333	0. 00	0. 37	0. 541	I0				2. 39
8. 417	0. 00	0. 36	0. 539	I0				2. 38
8. 500	0. 00	0. 36	0. 536	I0				2. 37
8. 583	0. 00	0. 36	0. 534	I0				2. 36
8. 667	0. 00	0. 36	0. 531	I0				2. 35
8. 750	0. 00	0. 36	0. 529	I0				2. 33
8. 833	0. 00	0. 36	0. 526	I0				2. 32
8. 917	0. 00	0. 36	0. 524	I0				2. 31
9. 000	0. 00	0. 36	0. 521	I0				2. 30
9. 083	0. 00	0. 36	0. 519	I0				2. 29
9. 167	0. 00	0. 36	0. 516	I0				2. 28
9. 250	0. 00	0. 36	0. 514	I0				2. 27
9. 333	0. 00	0. 35	0. 511	I0				2. 26
9. 417	0. 00	0. 35	0. 509	I0				2. 25
9. 500	0. 00	0. 35	0. 507	I0				2. 24
9. 583	0. 00	0. 35	0. 504	I0				2. 23
9. 667	0. 00	0. 35	0. 502	I0				2. 22
9. 750	0. 00	0. 35	0. 499	I0				2. 21
9. 833	0. 00	0. 35	0. 497	I0				2. 20
9. 917	0. 00	0. 35	0. 494	I0				2. 19
10. 000	0. 00	0. 35	0. 492	I0				2. 18
10. 083	0. 00	0. 35	0. 490	I0				2. 17
10. 167	0. 00	0. 35	0. 487	I0				2. 16
10. 250	0. 00	0. 35	0. 485	I0				2. 15
10. 333	0. 00	0. 34	0. 482	I0				2. 14
10. 417	0. 00	0. 34	0. 480	I0				2. 13
10. 500	0. 00	0. 34	0. 478	I0				2. 12
10. 583	0. 00	0. 34	0. 475	I0				2. 11
10. 667	0. 00	0. 34	0. 473	I0				2. 09
10. 750	0. 00	0. 34	0. 471	I0				2. 08
10. 833	0. 00	0. 34	0. 468	I0				2. 07
10. 917	0. 00	0. 34	0. 466	I0				2. 06
11. 000	0. 00	0. 34	0. 464	I0				2. 05
11. 083	0. 00	0. 34	0. 461	I0				2. 04
11. 167	0. 00	0. 34	0. 459	I0				2. 03
11. 250	0. 00	0. 34	0. 457	I0				2. 02
11. 333	0. 00	0. 34	0. 454	I0				2. 01
11. 417	0. 00	0. 33	0. 452	I0				2. 00

11. 500	0. 00	0. 33	0. 450	IO	2. 00
11. 583	0. 00	0. 33	0. 447	IO	1. 99
11. 667	0. 00	0. 33	0. 445	IO	1. 98
11. 750	0. 00	0. 33	0. 443	IO	1. 97
11. 833	0. 00	0. 33	0. 441	IO	1. 96
11. 917	0. 00	0. 33	0. 438	IO	1. 95
12. 000	0. 00	0. 33	0. 436	IO	1. 94
12. 083	0. 00	0. 33	0. 434	IO	1. 93
12. 167	0. 00	0. 33	0. 432	IO	1. 92
12. 250	0. 00	0. 33	0. 429	IO	1. 91
12. 333	0. 00	0. 33	0. 427	IO	1. 90
12. 417	0. 00	0. 32	0. 425	IO	1. 89
12. 500	0. 00	0. 32	0. 423	IO	1. 88
12. 583	0. 00	0. 32	0. 420	IO	1. 87
12. 667	0. 00	0. 32	0. 418	IO	1. 87
12. 750	0. 00	0. 32	0. 416	IO	1. 86
12. 833	0. 00	0. 32	0. 414	IO	1. 85
12. 917	0. 00	0. 32	0. 412	IO	1. 84
13. 000	0. 00	0. 32	0. 409	IO	1. 83
13. 083	0. 00	0. 32	0. 407	IO	1. 82
13. 167	0. 00	0. 32	0. 405	IO	1. 81
13. 250	0. 00	0. 32	0. 403	IO	1. 80
13. 333	0. 00	0. 32	0. 401	IO	1. 79
13. 417	0. 00	0. 31	0. 398	IO	1. 78
13. 500	0. 00	0. 31	0. 396	IO	1. 78
13. 583	0. 00	0. 31	0. 394	IO	1. 77
13. 667	0. 00	0. 31	0. 392	IO	1. 76
13. 750	0. 00	0. 31	0. 390	IO	1. 75
13. 833	0. 00	0. 31	0. 388	IO	1. 74
13. 917	0. 00	0. 31	0. 386	IO	1. 73
14. 000	0. 00	0. 31	0. 383	IO	1. 72
14. 083	0. 00	0. 31	0. 381	IO	1. 71
14. 167	0. 00	0. 31	0. 379	IO	1. 71
14. 250	0. 00	0. 31	0. 377	IO	1. 70
14. 333	0. 00	0. 31	0. 375	IO	1. 69
14. 417	0. 00	0. 31	0. 373	IO	1. 68
14. 500	0. 00	0. 30	0. 371	IO	1. 67
14. 583	0. 00	0. 30	0. 369	IO	1. 66
14. 667	0. 00	0. 30	0. 367	IO	1. 65
14. 750	0. 00	0. 30	0. 364	IO	1. 65
14. 833	0. 00	0. 30	0. 362	IO	1. 64
14. 917	0. 00	0. 30	0. 360	IO	1. 63
15. 000	0. 00	0. 30	0. 358	IO	1. 62
15. 083	0. 00	0. 30	0. 356	IO	1. 61
15. 167	0. 00	0. 30	0. 354	IO	1. 60
15. 250	0. 00	0. 30	0. 352	IO	1. 59
15. 333	0. 00	0. 30	0. 350	IO	1. 59
15. 417	0. 00	0. 30	0. 348	IO	1. 58
15. 500	0. 00	0. 30	0. 346	IO	1. 57
15. 583	0. 00	0. 29	0. 344	IO	1. 56
15. 667	0. 00	0. 29	0. 342	IO	1. 55
15. 750	0. 00	0. 29	0. 340	IO	1. 54
15. 833	0. 00	0. 29	0. 338	IO	1. 54
15. 917	0. 00	0. 29	0. 336	IO	1. 53
16. 000	0. 00	0. 29	0. 334	IO	1. 52
16. 083	0. 00	0. 29	0. 332	IO	1. 51
16. 167	0. 00	0. 29	0. 330	IO	1. 50
16. 250	0. 00	0. 29	0. 328	IO	1. 50
16. 333	0. 00	0. 29	0. 326	IO	1. 49
16. 417	0. 00	0. 29	0. 324	IO	1. 48
16. 500	0. 00	0. 29	0. 322	IO	1. 47
16. 583	0. 00	0. 29	0. 320	IO	1. 46
16. 667	0. 00	0. 28	0. 318	IO	1. 45
16. 750	0. 00	0. 28	0. 316	IO	1. 45
16. 833	0. 00	0. 28	0. 314	IO	1. 44
16. 917	0. 00	0. 28	0. 312	IO	1. 43
17. 000	0. 00	0. 28	0. 310	IO	1. 42
17. 083	0. 00	0. 28	0. 308	IO	1. 41
17. 167	0. 00	0. 28	0. 306	IO	1. 41
17. 250	0. 00	0. 28	0. 304	IO	1. 40
17. 333	0. 00	0. 28	0. 302	IO	1. 39
17. 417	0. 00	0. 28	0. 301	IO	1. 38

17. 500	0. 00	0. 28	0. 299	IO
17. 583	0. 00	0. 28	0. 297	IO
17. 667	0. 00	0. 28	0. 295	IO
17. 750	0. 00	0. 27	0. 293	IO
17. 833	0. 00	0. 27	0. 291	IO
17. 917	0. 00	0. 27	0. 289	IO
18. 000	0. 00	0. 27	0. 287	IO
18. 083	0. 00	0. 27	0. 285	IO
18. 167	0. 00	0. 27	0. 284	IO
18. 250	0. 00	0. 27	0. 282	IO
18. 333	0. 00	0. 27	0. 280	IO
18. 417	0. 00	0. 27	0. 278	IO
18. 500	0. 00	0. 27	0. 276	IO
18. 583	0. 00	0. 27	0. 274	IO
18. 667	0. 00	0. 27	0. 272	IO
18. 750	0. 00	0. 26	0. 271	IO
18. 833	0. 00	0. 26	0. 269	IO
18. 917	0. 00	0. 26	0. 267	IO
19. 000	0. 00	0. 26	0. 265	IO
19. 083	0. 00	0. 26	0. 263	IO
19. 167	0. 00	0. 26	0. 262	IO
19. 250	0. 00	0. 26	0. 260	IO
19. 333	0. 00	0. 26	0. 258	IO
19. 417	0. 00	0. 26	0. 256	IO
19. 500	0. 00	0. 26	0. 254	IO
19. 583	0. 00	0. 26	0. 253	IO
19. 667	0. 00	0. 26	0. 251	IO
19. 750	0. 00	0. 26	0. 249	IO
19. 833	0. 00	0. 25	0. 247	IO
19. 917	0. 00	0. 25	0. 246	IO
20. 000	0. 00	0. 25	0. 244	IO
20. 083	0. 00	0. 25	0. 242	IO
20. 167	0. 00	0. 25	0. 240	IO
20. 250	0. 00	0. 25	0. 239	IO
20. 333	0. 00	0. 25	0. 237	IO
20. 417	0. 00	0. 25	0. 235	IO
20. 500	0. 00	0. 25	0. 234	IO
20. 583	0. 00	0. 25	0. 232	IO
20. 667	0. 00	0. 25	0. 230	IO
20. 750	0. 00	0. 25	0. 228	IO
20. 833	0. 00	0. 25	0. 227	IO
20. 917	0. 00	0. 24	0. 225	IO
21. 000	0. 00	0. 24	0. 223	IO
21. 083	0. 00	0. 24	0. 222	IO
21. 167	0. 00	0. 24	0. 220	IO
21. 250	0. 00	0. 24	0. 218	IO
21. 333	0. 00	0. 24	0. 217	IO
21. 417	0. 00	0. 24	0. 215	IO
21. 500	0. 00	0. 24	0. 213	IO
21. 583	0. 00	0. 24	0. 212	IO
21. 667	0. 00	0. 24	0. 210	IO
21. 750	0. 00	0. 24	0. 208	IO
21. 833	0. 00	0. 24	0. 207	IO
21. 917	0. 00	0. 24	0. 205	IO
22. 000	0. 00	0. 23	0. 204	IO
22. 083	0. 00	0. 23	0. 202	IO
22. 167	0. 00	0. 23	0. 200	IO
22. 250	0. 00	0. 23	0. 199	IO
22. 333	0. 00	0. 23	0. 197	IO
22. 417	0. 00	0. 23	0. 196	IO
22. 500	0. 00	0. 23	0. 194	IO
22. 583	0. 00	0. 23	0. 192	IO
22. 667	0. 00	0. 23	0. 191	IO
22. 750	0. 00	0. 23	0. 189	IO
22. 833	0. 00	0. 23	0. 188	IO
22. 917	0. 00	0. 23	0. 186	IO
23. 000	0. 00	0. 22	0. 185	IO
23. 083	0. 00	0. 22	0. 183	IO
23. 167	0. 00	0. 22	0. 182	IO
23. 250	0. 00	0. 22	0. 180	IO
23. 333	0. 00	0. 22	0. 179	IO
23. 417	0. 00	0. 22	0. 177	IO

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23.500	0.00	0.22	0.175	IO	0.88
23.583	0.00	0.22	0.174	IO	0.87
23.667	0.00	0.22	0.172	IO	0.87
23.750	0.00	0.22	0.171	IO	0.86
23.833	0.00	0.22	0.169	IO	0.85
23.917	0.00	0.22	0.168	IO	0.85
24.000	0.00	0.21	0.167	IO	0.84
24.083	0.00	0.21	0.165	IO	0.84
24.167	0.00	0.21	0.164	IO	0.83
24.250	0.00	0.21	0.162	IO	0.82
24.333	0.00	0.21	0.161	IO	0.82
24.417	0.00	0.21	0.159	IO	0.81
24.500	0.00	0.21	0.158	IO	0.81
24.583	0.00	0.21	0.156	IO	0.80
24.667	0.00	0.21	0.155	IO	0.80
24.750	0.00	0.21	0.153	IO	0.79
24.833	0.00	0.21	0.152	IO	0.78
24.917	0.00	0.21	0.151	IO	0.78
25.000	0.00	0.20	0.149	IO	0.77
25.083	0.00	0.20	0.148	IO	0.77
25.167	0.00	0.20	0.146	IO	0.76
25.250	0.00	0.20	0.145	IO	0.76
25.333	0.00	0.20	0.144	IO	0.75
25.417	0.00	0.20	0.142	IO	0.74
25.500	0.00	0.20	0.141	IO	0.74
25.583	0.00	0.20	0.139	IO	0.73
25.667	0.00	0.20	0.138	IO	0.73
25.750	0.00	0.20	0.137	IO	0.72
25.833	0.00	0.20	0.135	IO	0.72
25.917	0.00	0.20	0.134	IO	0.71
26.000	0.00	0.20	0.133	IO	0.71
26.083	0.00	0.19	0.131	IO	0.70
26.167	0.00	0.19	0.130	IO	0.70
26.250	0.00	0.19	0.129	IO	0.69
26.333	0.00	0.19	0.127	IO	0.69
26.417	0.00	0.19	0.126	IO	0.68
26.500	0.00	0.19	0.125	IO	0.67
26.583	0.00	0.19	0.123	IO	0.67
26.667	0.00	0.19	0.122	IO	0.66
26.750	0.00	0.19	0.121	IO	0.66
26.833	0.00	0.19	0.119	IO	0.65
26.917	0.00	0.19	0.118	IO	0.65
27.000	0.00	0.19	0.117	IO	0.64
27.083	0.00	0.19	0.116	IO	0.64
27.167	0.00	0.19	0.114	0	0.63
27.250	0.00	0.18	0.113	0	0.63
27.333	0.00	0.18	0.112	0	0.62
27.417	0.00	0.18	0.111	0	0.62
27.500	0.00	0.18	0.109	0	0.61
27.583	0.00	0.18	0.108	0	0.61
27.667	0.00	0.18	0.107	0	0.60
27.750	0.00	0.18	0.106	0	0.60
27.833	0.00	0.18	0.104	0	0.59
27.917	0.00	0.18	0.103	0	0.59
28.000	0.00	0.18	0.102	0	0.58
28.083	0.00	0.18	0.101	0	0.58
28.167	0.00	0.18	0.099	0	0.57
28.250	0.00	0.18	0.098	0	0.57
28.333	0.00	0.18	0.097	0	0.56
28.417	0.00	0.18	0.096	0	0.56
28.500	0.00	0.17	0.095	0	0.55
28.583	0.00	0.17	0.093	0	0.55
28.667	0.00	0.17	0.092	0	0.54
28.750	0.00	0.17	0.091	0	0.54
28.833	0.00	0.17	0.090	0	0.53
28.917	0.00	0.17	0.089	0	0.53
29.000	0.00	0.17	0.087	0	0.53
29.083	0.00	0.17	0.086	0	0.52
29.167	0.00	0.17	0.085	0	0.52
29.250	0.00	0.17	0.084	0	0.51
29.333	0.00	0.17	0.083	0	0.51
29.417	0.00	0.17	0.082	0	0.50

29.500	0.00	0.17	0.080	0	0.50
29.583	0.00	0.17	0.079	0	0.49
29.667	0.00	0.16	0.078	0	0.49
29.750	0.00	0.16	0.077	0	0.48
29.833	0.00	0.16	0.076	0	0.48
29.917	0.00	0.16	0.075	0	0.47
30.000	0.00	0.16	0.074	0	0.47
30.083	0.00	0.16	0.073	0	0.47
30.167	0.00	0.16	0.071	0	0.46
30.250	0.00	0.16	0.070	0	0.46
30.333	0.00	0.16	0.069	0	0.45
30.417	0.00	0.16	0.068	0	0.45
30.500	0.00	0.16	0.067	0	0.44
30.583	0.00	0.16	0.066	0	0.44
30.667	0.00	0.16	0.065	0	0.43
30.750	0.00	0.15	0.064	0	0.43
30.833	0.00	0.15	0.063	0	0.43
30.917	0.00	0.15	0.062	0	0.42
31.000	0.00	0.15	0.061	0	0.42
31.083	0.00	0.15	0.060	0	0.41
31.167	0.00	0.15	0.059	0	0.41
31.250	0.00	0.15	0.058	0	0.40
31.333	0.00	0.15	0.057	0	0.40
31.417	0.00	0.15	0.056	0	0.40
31.500	0.00	0.15	0.055	0	0.39
31.583	0.00	0.15	0.053	0	0.39
31.667	0.00	0.15	0.052	0	0.38
31.750	0.00	0.15	0.051	0	0.38
31.833	0.00	0.14	0.050	0	0.37
31.917	0.00	0.14	0.049	0	0.37
32.000	0.00	0.14	0.049	0	0.37
32.083	0.00	0.14	0.048	0	0.36
32.167	0.00	0.14	0.047	0	0.36
32.250	0.00	0.14	0.046	0	0.35
32.333	0.00	0.14	0.045	0	0.35
32.417	0.00	0.14	0.044	0	0.35
32.500	0.00	0.14	0.043	0	0.34
32.583	0.00	0.14	0.042	0	0.34
32.667	0.00	0.14	0.041	0	0.33
32.750	0.00	0.14	0.040	0	0.33
32.833	0.00	0.13	0.039	0	0.33
32.917	0.00	0.13	0.038	0	0.32
33.000	0.00	0.13	0.037	0	0.32
33.083	0.00	0.13	0.036	0	0.31
33.167	0.00	0.13	0.035	0	0.31
33.250	0.00	0.13	0.034	0	0.31
33.333	0.00	0.13	0.033	0	0.30
33.417	0.00	0.13	0.033	0	0.30
33.500	0.00	0.13	0.032	0	0.29
33.583	0.00	0.13	0.031	0	0.29
33.667	0.00	0.13	0.030	0	0.29
33.750	0.00	0.13	0.029	0	0.28
33.833	0.00	0.12	0.028	0	0.28
33.917	0.00	0.12	0.027	0	0.27
34.000	0.00	0.12	0.027	0	0.27
34.083	0.00	0.12	0.026	0	0.27
34.167	0.00	0.12	0.025	0	0.26
34.250	0.00	0.12	0.024	0	0.26
34.333	0.00	0.12	0.023	0	0.26
34.417	0.00	0.12	0.022	0	0.25
34.500	0.00	0.12	0.022	0	0.25
34.583	0.00	0.11	0.021	0	0.24
34.667	0.00	0.11	0.020	0	0.23
34.750	0.00	0.10	0.019	0	0.22
34.833	0.00	0.10	0.019	0	0.21
34.917	0.00	0.10	0.018	0	0.20
35.000	0.00	0.09	0.017	0	0.20
35.083	0.00	0.09	0.017	0	0.19
35.167	0.00	0.09	0.016	0	0.18
35.250	0.00	0.08	0.015	0	0.18
35.333	0.00	0.08	0.015	0	0.17
35.417	0.00	0.08	0.014	0	0.16

35.500	0.00	0.07	0.014	0	0.16
35.583	0.00	0.07	0.013	0	0.15
35.667	0.00	0.07	0.013	0	0.15
35.750	0.00	0.07	0.012	0	0.14
35.833	0.00	0.06	0.012	0	0.14
35.917	0.00	0.06	0.012	0	0.13
36.000	0.00	0.06	0.011	0	0.13
36.083	0.00	0.06	0.011	0	0.12
36.167	0.00	0.06	0.010	0	0.12
36.250	0.00	0.05	0.010	0	0.11
36.333	0.00	0.05	0.010	0	0.11
36.417	0.00	0.05	0.009	0	0.10
36.500	0.00	0.05	0.009	0	0.10
36.583	0.00	0.05	0.009	0	0.10
36.667	0.00	0.04	0.008	0	0.09
36.750	0.00	0.04	0.008	0	0.09
36.833	0.00	0.04	0.008	0	0.09
36.917	0.00	0.04	0.007	0	0.08
37.000	0.00	0.04	0.007	0	0.08
37.083	0.00	0.04	0.007	0	0.08
37.167	0.00	0.04	0.007	0	0.08
37.250	0.00	0.03	0.006	0	0.07
37.333	0.00	0.03	0.006	0	0.07
37.417	0.00	0.03	0.006	0	0.07
37.500	0.00	0.03	0.006	0	0.06
37.583	0.00	0.03	0.005	0	0.06
37.667	0.00	0.03	0.005	0	0.06
37.750	0.00	0.03	0.005	0	0.06
37.833	0.00	0.03	0.005	0	0.06
37.917	0.00	0.03	0.005	0	0.05
38.000	0.00	0.02	0.005	0	0.05
38.083	0.00	0.02	0.004	0	0.05
38.167	0.00	0.02	0.004	0	0.05
38.250	0.00	0.02	0.004	0	0.05
38.333	0.00	0.02	0.004	0	0.04
38.417	0.00	0.02	0.004	0	0.04
38.500	0.00	0.02	0.004	0	0.04
38.583	0.00	0.02	0.004	0	0.04
38.667	0.00	0.02	0.003	0	0.04
38.750	0.00	0.02	0.003	0	0.04
38.833	0.00	0.02	0.003	0	0.04
38.917	0.00	0.02	0.003	0	0.03
39.000	0.00	0.02	0.003	0	0.03
39.083	0.00	0.02	0.003	0	0.03
39.167	0.00	0.01	0.003	0	0.03
39.250	0.00	0.01	0.003	0	0.03
39.333	0.00	0.01	0.003	0	0.03
39.417	0.00	0.01	0.002	0	0.03
39.500	0.00	0.01	0.002	0	0.03
39.583	0.00	0.01	0.002	0	0.03
39.667	0.00	0.01	0.002	0	0.02
39.750	0.00	0.01	0.002	0	0.02
39.833	0.00	0.01	0.002	0	0.02
39.917	0.00	0.01	0.002	0	0.02
40.000	0.00	0.01	0.002	0	0.02
40.083	0.00	0.01	0.002	0	0.02
40.167	0.00	0.01	0.002	0	0.02
40.250	0.00	0.01	0.002	0	0.02
40.333	0.00	0.01	0.002	0	0.02
40.417	0.00	0.01	0.002	0	0.02
40.500	0.00	0.01	0.002	0	0.02
40.583	0.00	0.01	0.001	0	0.02
40.667	0.00	0.01	0.001	0	0.02
40.750	0.00	0.01	0.001	0	0.02
40.833	0.00	0.01	0.001	0	0.01
40.917	0.00	0.01	0.001	0	0.01
41.000	0.00	0.01	0.001	0	0.01
41.083	0.00	0.01	0.001	0	0.01
41.167	0.00	0.01	0.001	0	0.01
41.250	0.00	0.01	0.001	0	0.01
41.333	0.00	0.01	0.001	0	0.01
41.417	0.00	0.01	0.001	0	0.01

41.500	0.00	0.01	0.001	0					0.01
41.583	0.00	0.01	0.001	0					0.01
41.667	0.00	0.00	0.001	0					0.01
41.750	0.00	0.00	0.001	0					0.01
41.833	0.00	0.00	0.001	0					0.01
41.917	0.00	0.00	0.001	0					0.01
42.000	0.00	0.00	0.001	0					0.01
42.083	0.00	0.00	0.001	0					0.01
42.167	0.00	0.00	0.001	0					0.01
42.250	0.00	0.00	0.001	0					0.01
42.333	0.00	0.00	0.001	0					0.01
42.417	0.00	0.00	0.001	0					0.01
42.500	0.00	0.00	0.001	0					0.01
42.583	0.00	0.00	0.001	0					0.01
42.667	0.00	0.00	0.001	0					0.01
42.750	0.00	0.00	0.001	0					0.01
42.833	0.00	0.00	0.001	0					0.01
42.917	0.00	0.00	0.001	0					0.01
43.000	0.00	0.00	0.000	0					0.01
43.083	0.00	0.00	0.000	0					0.01
43.167	0.00	0.00	0.000	0					0.01
43.250	0.00	0.00	0.000	0					0.01
43.333	0.00	0.00	0.000	0					0.00
43.417	0.00	0.00	0.000	0					0.00
43.500	0.00	0.00	0.000	0					0.00
43.583	0.00	0.00	0.000	0					0.00
43.667	0.00	0.00	0.000	0					0.00
43.750	0.00	0.00	0.000	0					0.00
43.833	0.00	0.00	0.000	0					0.00
43.917	0.00	0.00	0.000	0					0.00
44.000	0.00	0.00	0.000	0					0.00
44.083	0.00	0.00	0.000	0					0.00
44.167	0.00	0.00	0.000	0					0.00
44.250	0.00	0.00	0.000	0					0.00
44.333	0.00	0.00	0.000	0					0.00
44.417	0.00	0.00	0.000	0					0.00
44.500	0.00	0.00	0.000	0					0.00
44.583	0.00	0.00	0.000	0					0.00
44.667	0.00	0.00	0.000	0					0.00
44.750	0.00	0.00	0.000	0					0.00
44.833	0.00	0.00	0.000	0					0.00
44.917	0.00	0.00	0.000	0					0.00
45.000	0.00	0.00	0.000	0					0.00
45.083	0.00	0.00	0.000	0					0.00
45.167	0.00	0.00	0.000	0					0.00
45.250	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 543
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 0.389 (CFS)
 Total volume = 0.722 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/05/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 100-131
 MITIGATION ANALYSIS
 3-HOUR - 10-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PA10310.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 38
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 6.973 (CFS)
 Total volume = 0.567 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 38
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

 Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.022	0.118	0.022	0.022
0.340	0.042	0.138	0.042	0.042
0.500	0.081	0.167	0.080	0.082
1.000	0.206	0.236	0.205	0.207
1.350	0.293	0.275	0.292	0.294
1.500	0.329	0.289	0.328	0.330
2.000	0.451	0.334	0.450	0.452
2.500	0.567	0.374	0.566	0.568
3.000	0.677	0.409	0.676	0.678
3.100	0.697	0.416	0.696	0.698
3.500	0.775	1.336	0.770	0.780
4.000	0.841	3.874	0.828	0.854
4.100	0.846	4.260	0.831	0.861
4.340	0.859	4.703	0.843	0.875

Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	0	1.7	3.49	5.23	6.97	Depth (Ft.)
0.083	0.59	0.01	0.002	0	I				0.02
0.167	0.97	0.04	0.007	0	I				0.08
0.250	0.93	0.07	0.013	0	I				0.15
0.333	1.06	0.11	0.020	0	I				0.22
0.417	1.16	0.12	0.026	0	I				0.27
0.500	1.32	0.13	0.034	0	I				0.30
0.583	1.27	0.14	0.042	0	I				0.34
0.667	1.33	0.14	0.050	0	I				0.37
0.750	1.41	0.15	0.059	0	I				0.41
0.833	1.28	0.16	0.067	0	I				0.44
0.917	1.24	0.16	0.074	0	I				0.47
1.000	1.35	0.17	0.082	0	I				0.50
1.083	1.59	0.17	0.091	0	I				0.54
1.167	1.72	0.18	0.101	0	I				0.58
1.250	1.73	0.18	0.112	0	I				0.62
1.333	1.64	0.19	0.122	0	I				0.67
1.417	1.86	0.20	0.133	0	I				0.71
1.500	2.07	0.20	0.145	0	I				0.76
1.583	1.99	0.21	0.158	0	I				0.81
1.667	2.04	0.22	0.170	0	I				0.86
1.750	2.42	0.22	0.184	0	I				0.91
1.833	2.51	0.23	0.199	0	I				0.97
1.917	2.37	0.24	0.215	0	I				1.03
2.000	2.34	0.25	0.229	0	I				1.09
2.083	2.42	0.25	0.244	0	I				1.15
2.167	3.07	0.26	0.261	0	I				1.22
2.250	3.90	0.27	0.283	0	I				1.31
2.333	3.41	0.28	0.306	0	I				1.41
2.417	4.76	0.29	0.333	0	I				1.51
2.500	6.12	0.30	0.368	0	I				1.66
2.583	6.97	0.32	0.411	0	I				1.84
2.667	6.04	0.33	0.453	0	I				2.01
2.750	3.21	0.35	0.483	0	I				2.14
2.833	1.69	0.35	0.497	0	I				2.20
2.917	1.43	0.35	0.506	0	I				2.24
3.000	0.87	0.35	0.511	0	I				2.26
3.083	0.25	0.36	0.513	0	I				2.27
3.167	0.03	0.35	0.511	IO					2.26
3.250	0.00	0.35	0.509	IO					2.25
3.333	0.00	0.35	0.506	IO					2.24
3.417	0.00	0.35	0.504	IO					2.23
3.500	0.00	0.35	0.502	IO					2.22
3.583	0.00	0.35	0.499	IO					2.21
3.667	0.00	0.35	0.497	IO					2.20
3.750	0.00	0.35	0.494	IO					2.19
3.833	0.00	0.35	0.492	IO					2.18
3.917	0.00	0.35	0.490	IO					2.17
4.000	0.00	0.35	0.487	IO					2.16
4.083	0.00	0.35	0.485	IO					2.15
4.167	0.00	0.34	0.482	IO					2.14
4.250	0.00	0.34	0.480	IO					2.12
4.333	0.00	0.34	0.478	IO					2.11
4.417	0.00	0.34	0.475	IO					2.10
4.500	0.00	0.34	0.473	IO					2.09
4.583	0.00	0.34	0.471	IO					2.08
4.667	0.00	0.34	0.468	IO					2.07
4.750	0.00	0.34	0.466	IO					2.06
4.833	0.00	0.34	0.464	IO					2.05
4.917	0.00	0.34	0.461	IO					2.04
5.000	0.00	0.34	0.459	IO					2.03
5.083	0.00	0.34	0.457	IO					2.02
5.167	0.00	0.34	0.454	IO					2.01
5.250	0.00	0.33	0.452	IO					2.00
5.333	0.00	0.33	0.450	IO					1.99
5.417	0.00	0.33	0.447	IO					1.99

5. 500	0. 00	0. 33	0. 445	IO	1. 98
5. 583	0. 00	0. 33	0. 443	IO	1. 97
5. 667	0. 00	0. 33	0. 441	IO	1. 96
5. 750	0. 00	0. 33	0. 438	IO	1. 95
5. 833	0. 00	0. 33	0. 436	IO	1. 94
5. 917	0. 00	0. 33	0. 434	IO	1. 93
6. 000	0. 00	0. 33	0. 431	IO	1. 92
6. 083	0. 00	0. 33	0. 429	IO	1. 91
6. 167	0. 00	0. 33	0. 427	IO	1. 90
6. 250	0. 00	0. 32	0. 425	IO	1. 89
6. 333	0. 00	0. 32	0. 423	IO	1. 88
6. 417	0. 00	0. 32	0. 420	IO	1. 87
6. 500	0. 00	0. 32	0. 418	IO	1. 87
6. 583	0. 00	0. 32	0. 416	IO	1. 86
6. 667	0. 00	0. 32	0. 414	IO	1. 85
6. 750	0. 00	0. 32	0. 411	IO	1. 84
6. 833	0. 00	0. 32	0. 409	IO	1. 83
6. 917	0. 00	0. 32	0. 407	IO	1. 82
7. 000	0. 00	0. 32	0. 405	IO	1. 81
7. 083	0. 00	0. 32	0. 403	IO	1. 80
7. 167	0. 00	0. 32	0. 401	IO	1. 79
7. 250	0. 00	0. 31	0. 398	IO	1. 78
7. 333	0. 00	0. 31	0. 396	IO	1. 78
7. 417	0. 00	0. 31	0. 394	IO	1. 77
7. 500	0. 00	0. 31	0. 392	IO	1. 76
7. 583	0. 00	0. 31	0. 390	IO	1. 75
7. 667	0. 00	0. 31	0. 388	IO	1. 74
7. 750	0. 00	0. 31	0. 385	IO	1. 73
7. 833	0. 00	0. 31	0. 383	IO	1. 72
7. 917	0. 00	0. 31	0. 381	IO	1. 71
8. 000	0. 00	0. 31	0. 379	IO	1. 71
8. 083	0. 00	0. 31	0. 377	IO	1. 70
8. 167	0. 00	0. 31	0. 375	IO	1. 69
8. 250	0. 00	0. 31	0. 373	IO	1. 68
8. 333	0. 00	0. 30	0. 371	IO	1. 67
8. 417	0. 00	0. 30	0. 369	IO	1. 66
8. 500	0. 00	0. 30	0. 366	IO	1. 65
8. 583	0. 00	0. 30	0. 364	IO	1. 64
8. 667	0. 00	0. 30	0. 362	IO	1. 64
8. 750	0. 00	0. 30	0. 360	IO	1. 63
8. 833	0. 00	0. 30	0. 358	IO	1. 62
8. 917	0. 00	0. 30	0. 356	IO	1. 61
9. 000	0. 00	0. 30	0. 354	IO	1. 60
9. 083	0. 00	0. 30	0. 352	IO	1. 59
9. 167	0. 00	0. 30	0. 350	IO	1. 59
9. 250	0. 00	0. 30	0. 348	IO	1. 58
9. 333	0. 00	0. 30	0. 346	IO	1. 57
9. 417	0. 00	0. 29	0. 344	IO	1. 56
9. 500	0. 00	0. 29	0. 342	IO	1. 55
9. 583	0. 00	0. 29	0. 340	IO	1. 54
9. 667	0. 00	0. 29	0. 338	IO	1. 54
9. 750	0. 00	0. 29	0. 336	IO	1. 53
9. 833	0. 00	0. 29	0. 334	IO	1. 52
9. 917	0. 00	0. 29	0. 332	IO	1. 51
10. 000	0. 00	0. 29	0. 330	IO	1. 50
10. 083	0. 00	0. 29	0. 328	IO	1. 49
10. 167	0. 00	0. 29	0. 326	IO	1. 49
10. 250	0. 00	0. 29	0. 324	IO	1. 48
10. 333	0. 00	0. 29	0. 322	IO	1. 47
10. 417	0. 00	0. 29	0. 320	IO	1. 46
10. 500	0. 00	0. 28	0. 318	IO	1. 45
10. 583	0. 00	0. 28	0. 316	IO	1. 45
10. 667	0. 00	0. 28	0. 314	IO	1. 44
10. 750	0. 00	0. 28	0. 312	IO	1. 43
10. 833	0. 00	0. 28	0. 310	IO	1. 42
10. 917	0. 00	0. 28	0. 308	IO	1. 41
11. 000	0. 00	0. 28	0. 306	IO	1. 41
11. 083	0. 00	0. 28	0. 304	IO	1. 40
11. 167	0. 00	0. 28	0. 302	IO	1. 39
11. 250	0. 00	0. 28	0. 300	IO	1. 38
11. 333	0. 00	0. 28	0. 299	IO	1. 37
11. 417	0. 00	0. 28	0. 297	IO	1. 37

11. 500	0. 00	0. 28	0. 295	IO
11. 583	0. 00	0. 27	0. 293	IO
11. 667	0. 00	0. 27	0. 291	IO
11. 750	0. 00	0. 27	0. 289	IO
11. 833	0. 00	0. 27	0. 287	IO
11. 917	0. 00	0. 27	0. 285	IO
12. 000	0. 00	0. 27	0. 283	IO
12. 083	0. 00	0. 27	0. 282	IO
12. 167	0. 00	0. 27	0. 280	IO
12. 250	0. 00	0. 27	0. 278	IO
12. 333	0. 00	0. 27	0. 276	IO
12. 417	0. 00	0. 27	0. 274	IO
12. 500	0. 00	0. 27	0. 272	IO
12. 583	0. 00	0. 26	0. 271	IO
12. 667	0. 00	0. 26	0. 269	IO
12. 750	0. 00	0. 26	0. 267	IO
12. 833	0. 00	0. 26	0. 265	IO
12. 917	0. 00	0. 26	0. 263	IO
13. 000	0. 00	0. 26	0. 261	IO
13. 083	0. 00	0. 26	0. 260	IO
13. 167	0. 00	0. 26	0. 258	IO
13. 250	0. 00	0. 26	0. 256	IO
13. 333	0. 00	0. 26	0. 254	IO
13. 417	0. 00	0. 26	0. 253	IO
13. 500	0. 00	0. 26	0. 251	IO
13. 583	0. 00	0. 26	0. 249	IO
13. 667	0. 00	0. 25	0. 247	IO
13. 750	0. 00	0. 25	0. 246	IO
13. 833	0. 00	0. 25	0. 244	IO
13. 917	0. 00	0. 25	0. 242	IO
14. 000	0. 00	0. 25	0. 240	IO
14. 083	0. 00	0. 25	0. 239	IO
14. 167	0. 00	0. 25	0. 237	IO
14. 250	0. 00	0. 25	0. 235	IO
14. 333	0. 00	0. 25	0. 233	IO
14. 417	0. 00	0. 25	0. 232	IO
14. 500	0. 00	0. 25	0. 230	IO
14. 583	0. 00	0. 25	0. 228	IO
14. 667	0. 00	0. 25	0. 227	IO
14. 750	0. 00	0. 24	0. 225	IO
14. 833	0. 00	0. 24	0. 223	IO
14. 917	0. 00	0. 24	0. 222	IO
15. 000	0. 00	0. 24	0. 220	IO
15. 083	0. 00	0. 24	0. 218	IO
15. 167	0. 00	0. 24	0. 217	IO
15. 250	0. 00	0. 24	0. 215	IO
15. 333	0. 00	0. 24	0. 213	IO
15. 417	0. 00	0. 24	0. 212	IO
15. 500	0. 00	0. 24	0. 210	IO
15. 583	0. 00	0. 24	0. 208	IO
15. 667	0. 00	0. 24	0. 207	IO
15. 750	0. 00	0. 24	0. 205	IO
15. 833	0. 00	0. 23	0. 204	IO
15. 917	0. 00	0. 23	0. 202	IO
16. 000	0. 00	0. 23	0. 200	IO
16. 083	0. 00	0. 23	0. 199	IO
16. 167	0. 00	0. 23	0. 197	IO
16. 250	0. 00	0. 23	0. 196	IO
16. 333	0. 00	0. 23	0. 194	IO
16. 417	0. 00	0. 23	0. 192	IO
16. 500	0. 00	0. 23	0. 191	IO
16. 583	0. 00	0. 23	0. 189	IO
16. 667	0. 00	0. 23	0. 188	IO
16. 750	0. 00	0. 23	0. 186	IO
16. 833	0. 00	0. 22	0. 185	IO
16. 917	0. 00	0. 22	0. 183	IO
17. 000	0. 00	0. 22	0. 181	IO
17. 083	0. 00	0. 22	0. 180	IO
17. 167	0. 00	0. 22	0. 178	IO
17. 250	0. 00	0. 22	0. 177	IO
17. 333	0. 00	0. 22	0. 175	IO
17. 417	0. 00	0. 22	0. 174	IO

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17. 500	0. 00	0. 22	0. 172	0	0. 87
17. 583	0. 00	0. 22	0. 171	0	0. 86
17. 667	0. 00	0. 22	0. 169	0	0. 85
17. 750	0. 00	0. 21	0. 168	0	0. 85
17. 833	0. 00	0. 21	0. 166	0	0. 84
17. 917	0. 00	0. 21	0. 165	0	0. 84
18. 000	0. 00	0. 21	0. 164	0	0. 83
18. 083	0. 00	0. 21	0. 162	0	0. 82
18. 167	0. 00	0. 21	0. 161	0	0. 82
18. 250	0. 00	0. 21	0. 159	0	0. 81
18. 333	0. 00	0. 21	0. 158	0	0. 81
18. 417	0. 00	0. 21	0. 156	0	0. 80
18. 500	0. 00	0. 21	0. 155	0	0. 80
18. 583	0. 00	0. 21	0. 153	0	0. 79
18. 667	0. 00	0. 21	0. 152	0	0. 78
18. 750	0. 00	0. 21	0. 151	0	0. 78
18. 833	0. 00	0. 20	0. 149	0	0. 77
18. 917	0. 00	0. 20	0. 148	0	0. 77
19. 000	0. 00	0. 20	0. 146	0	0. 76
19. 083	0. 00	0. 20	0. 145	0	0. 76
19. 167	0. 00	0. 20	0. 144	0	0. 75
19. 250	0. 00	0. 20	0. 142	0	0. 74
19. 333	0. 00	0. 20	0. 141	0	0. 74
19. 417	0. 00	0. 20	0. 139	0	0. 73
19. 500	0. 00	0. 20	0. 138	0	0. 73
19. 583	0. 00	0. 20	0. 137	0	0. 72
19. 667	0. 00	0. 20	0. 135	0	0. 72
19. 750	0. 00	0. 20	0. 134	0	0. 71
19. 833	0. 00	0. 20	0. 133	0	0. 71
19. 917	0. 00	0. 19	0. 131	0	0. 70
20. 000	0. 00	0. 19	0. 130	0	0. 70
20. 083	0. 00	0. 19	0. 129	0	0. 69
20. 167	0. 00	0. 19	0. 127	0	0. 69
20. 250	0. 00	0. 19	0. 126	0	0. 68
20. 333	0. 00	0. 19	0. 125	0	0. 67
20. 417	0. 00	0. 19	0. 123	0	0. 67
20. 500	0. 00	0. 19	0. 122	0	0. 66
20. 583	0. 00	0. 19	0. 121	0	0. 66
20. 667	0. 00	0. 19	0. 119	0	0. 65
20. 750	0. 00	0. 19	0. 118	0	0. 65
20. 833	0. 00	0. 19	0. 117	0	0. 64
20. 917	0. 00	0. 19	0. 116	0	0. 64
21. 000	0. 00	0. 19	0. 114	0	0. 63
21. 083	0. 00	0. 18	0. 113	0	0. 63
21. 167	0. 00	0. 18	0. 112	0	0. 62
21. 250	0. 00	0. 18	0. 110	0	0. 62
21. 333	0. 00	0. 18	0. 109	0	0. 61
21. 417	0. 00	0. 18	0. 108	0	0. 61
21. 500	0. 00	0. 18	0. 107	0	0. 60
21. 583	0. 00	0. 18	0. 105	0	0. 60
21. 667	0. 00	0. 18	0. 104	0	0. 59
21. 750	0. 00	0. 18	0. 103	0	0. 59
21. 833	0. 00	0. 18	0. 102	0	0. 58
21. 917	0. 00	0. 18	0. 101	0	0. 58
22. 000	0. 00	0. 18	0. 099	0	0. 57
22. 083	0. 00	0. 18	0. 098	0	0. 57
22. 167	0. 00	0. 18	0. 097	0	0. 56
22. 250	0. 00	0. 18	0. 096	0	0. 56
22. 333	0. 00	0. 17	0. 094	0	0. 55
22. 417	0. 00	0. 17	0. 093	0	0. 55
22. 500	0. 00	0. 17	0. 092	0	0. 54
22. 583	0. 00	0. 17	0. 091	0	0. 54
22. 667	0. 00	0. 17	0. 090	0	0. 53
22. 750	0. 00	0. 17	0. 088	0	0. 53
22. 833	0. 00	0. 17	0. 087	0	0. 53
22. 917	0. 00	0. 17	0. 086	0	0. 52
23. 000	0. 00	0. 17	0. 085	0	0. 52
23. 083	0. 00	0. 17	0. 084	0	0. 51
23. 167	0. 00	0. 17	0. 083	0	0. 51
23. 250	0. 00	0. 17	0. 081	0	0. 50
23. 333	0. 00	0. 17	0. 080	0	0. 50
23. 417	0. 00	0. 17	0. 079	0	0. 49

23.500	0.00	0.16	0.078	0	0.49
23.583	0.00	0.16	0.077	0	0.48
23.667	0.00	0.16	0.076	0	0.48
23.750	0.00	0.16	0.075	0	0.47
23.833	0.00	0.16	0.074	0	0.47
23.917	0.00	0.16	0.072	0	0.46
24.000	0.00	0.16	0.071	0	0.46
24.083	0.00	0.16	0.070	0	0.46
24.167	0.00	0.16	0.069	0	0.45
24.250	0.00	0.16	0.068	0	0.45
24.333	0.00	0.16	0.067	0	0.44
24.417	0.00	0.16	0.066	0	0.44
24.500	0.00	0.15	0.065	0	0.43
24.583	0.00	0.15	0.064	0	0.43
24.667	0.00	0.15	0.063	0	0.43
24.750	0.00	0.15	0.062	0	0.42
24.833	0.00	0.15	0.061	0	0.42
24.917	0.00	0.15	0.060	0	0.41
25.000	0.00	0.15	0.059	0	0.41
25.083	0.00	0.15	0.058	0	0.40
25.167	0.00	0.15	0.056	0	0.40
25.250	0.00	0.15	0.055	0	0.40
25.333	0.00	0.15	0.054	0	0.39
25.417	0.00	0.15	0.053	0	0.39
25.500	0.00	0.15	0.052	0	0.38
25.583	0.00	0.15	0.051	0	0.38
25.667	0.00	0.14	0.050	0	0.37
25.750	0.00	0.14	0.049	0	0.37
25.833	0.00	0.14	0.048	0	0.37
25.917	0.00	0.14	0.047	0	0.36
26.000	0.00	0.14	0.046	0	0.36
26.083	0.00	0.14	0.046	0	0.35
26.167	0.00	0.14	0.045	0	0.35
26.250	0.00	0.14	0.044	0	0.35
26.333	0.00	0.14	0.043	0	0.34
26.417	0.00	0.14	0.042	0	0.34
26.500	0.00	0.14	0.041	0	0.33
26.583	0.00	0.14	0.040	0	0.33
26.667	0.00	0.13	0.039	0	0.33
26.750	0.00	0.13	0.038	0	0.32
26.833	0.00	0.13	0.037	0	0.32
26.917	0.00	0.13	0.036	0	0.31
27.000	0.00	0.13	0.035	0	0.31
27.083	0.00	0.13	0.034	0	0.31
27.167	0.00	0.13	0.033	0	0.30
27.250	0.00	0.13	0.033	0	0.30
27.333	0.00	0.13	0.032	0	0.29
27.417	0.00	0.13	0.031	0	0.29
27.500	0.00	0.13	0.030	0	0.29
27.583	0.00	0.13	0.029	0	0.28
27.667	0.00	0.12	0.028	0	0.28
27.750	0.00	0.12	0.027	0	0.27
27.833	0.00	0.12	0.026	0	0.27
27.917	0.00	0.12	0.026	0	0.27
28.000	0.00	0.12	0.025	0	0.26
28.083	0.00	0.12	0.024	0	0.26
28.167	0.00	0.12	0.023	0	0.26
28.250	0.00	0.12	0.022	0	0.25
28.333	0.00	0.12	0.022	0	0.24
28.417	0.00	0.11	0.021	0	0.24
28.500	0.00	0.11	0.020	0	0.23
28.583	0.00	0.10	0.019	0	0.22
28.667	0.00	0.10	0.019	0	0.21
28.750	0.00	0.10	0.018	0	0.20
28.833	0.00	0.09	0.017	0	0.20
28.917	0.00	0.09	0.017	0	0.19
29.000	0.00	0.09	0.016	0	0.18
29.083	0.00	0.08	0.015	0	0.18
29.167	0.00	0.08	0.015	0	0.17
29.250	0.00	0.08	0.014	0	0.16
29.333	0.00	0.07	0.014	0	0.16
29.417	0.00	0.07	0.013	0	0.15

29.500	0.00	0.07	0.013	0	0.15
29.583	0.00	0.07	0.012	0	0.14
29.667	0.00	0.06	0.012	0	0.14
29.750	0.00	0.06	0.011	0	0.13
29.833	0.00	0.06	0.011	0	0.13
29.917	0.00	0.06	0.011	0	0.12
30.000	0.00	0.06	0.010	0	0.12
30.083	0.00	0.05	0.010	0	0.11
30.167	0.00	0.05	0.010	0	0.11
30.250	0.00	0.05	0.009	0	0.10
30.333	0.00	0.05	0.009	0	0.10
30.417	0.00	0.05	0.009	0	0.10
30.500	0.00	0.04	0.008	0	0.09
30.583	0.00	0.04	0.008	0	0.09
30.667	0.00	0.04	0.008	0	0.09
30.750	0.00	0.04	0.007	0	0.08
30.833	0.00	0.04	0.007	0	0.08
30.917	0.00	0.04	0.007	0	0.08
31.000	0.00	0.04	0.007	0	0.08
31.083	0.00	0.03	0.006	0	0.07
31.167	0.00	0.03	0.006	0	0.07
31.250	0.00	0.03	0.006	0	0.07
31.333	0.00	0.03	0.006	0	0.06
31.417	0.00	0.03	0.005	0	0.06
31.500	0.00	0.03	0.005	0	0.06
31.583	0.00	0.03	0.005	0	0.06
31.667	0.00	0.03	0.005	0	0.06
31.750	0.00	0.03	0.005	0	0.05
31.833	0.00	0.02	0.005	0	0.05
31.917	0.00	0.02	0.004	0	0.05
32.000	0.00	0.02	0.004	0	0.05
32.083	0.00	0.02	0.004	0	0.05
32.167	0.00	0.02	0.004	0	0.04
32.250	0.00	0.02	0.004	0	0.04
32.333	0.00	0.02	0.004	0	0.04
32.417	0.00	0.02	0.004	0	0.04
32.500	0.00	0.02	0.003	0	0.04
32.583	0.00	0.02	0.003	0	0.04
32.667	0.00	0.02	0.003	0	0.04
32.750	0.00	0.02	0.003	0	0.04
32.833	0.00	0.02	0.003	0	0.03
32.917	0.00	0.02	0.003	0	0.03
33.000	0.00	0.01	0.003	0	0.03
33.083	0.00	0.01	0.003	0	0.03
33.167	0.00	0.01	0.003	0	0.03
33.250	0.00	0.01	0.002	0	0.03
33.333	0.00	0.01	0.002	0	0.03
33.417	0.00	0.01	0.002	0	0.03
33.500	0.00	0.01	0.002	0	0.02
33.583	0.00	0.01	0.002	0	0.02
33.667	0.00	0.01	0.002	0	0.02
33.750	0.00	0.01	0.002	0	0.02
33.833	0.00	0.01	0.002	0	0.02
33.917	0.00	0.01	0.002	0	0.02
34.000	0.00	0.01	0.002	0	0.02
34.083	0.00	0.01	0.002	0	0.02
34.167	0.00	0.01	0.002	0	0.02
34.250	0.00	0.01	0.002	0	0.02
34.333	0.00	0.01	0.002	0	0.02
34.417	0.00	0.01	0.001	0	0.02
34.500	0.00	0.01	0.001	0	0.02
34.583	0.00	0.01	0.001	0	0.02
34.667	0.00	0.01	0.001	0	0.01
34.750	0.00	0.01	0.001	0	0.01
34.833	0.00	0.01	0.001	0	0.01
34.917	0.00	0.01	0.001	0	0.01
35.000	0.00	0.01	0.001	0	0.01
35.083	0.00	0.01	0.001	0	0.01
35.167	0.00	0.01	0.001	0	0.01
35.250	0.00	0.01	0.001	0	0.01
35.333	0.00	0.01	0.001	0	0.01
35.417	0.00	0.00	0.001	0	0.01

35.500	0.00	0.00	0.001	0					0.01
35.583	0.00	0.00	0.001	0					0.01
35.667	0.00	0.00	0.001	0					0.01
35.750	0.00	0.00	0.001	0					0.01
35.833	0.00	0.00	0.001	0					0.01
35.917	0.00	0.00	0.001	0					0.01
36.000	0.00	0.00	0.001	0					0.01
36.083	0.00	0.00	0.001	0					0.01
36.167	0.00	0.00	0.001	0					0.01
36.250	0.00	0.00	0.001	0					0.01
36.333	0.00	0.00	0.001	0					0.01
36.417	0.00	0.00	0.001	0					0.01
36.500	0.00	0.00	0.001	0					0.01
36.583	0.00	0.00	0.001	0					0.01
36.667	0.00	0.00	0.001	0					0.01
36.750	0.00	0.00	0.001	0					0.01
36.833	0.00	0.00	0.000	0					0.01
36.917	0.00	0.00	0.000	0					0.01
37.000	0.00	0.00	0.000	0					0.01
37.083	0.00	0.00	0.000	0					0.01
37.167	0.00	0.00	0.000	0					0.00
37.250	0.00	0.00	0.000	0					0.00
37.333	0.00	0.00	0.000	0					0.00
37.417	0.00	0.00	0.000	0					0.00
37.500	0.00	0.00	0.000	0					0.00
37.583	0.00	0.00	0.000	0					0.00
37.667	0.00	0.00	0.000	0					0.00
37.750	0.00	0.00	0.000	0					0.00
37.833	0.00	0.00	0.000	0					0.00
37.917	0.00	0.00	0.000	0					0.00
38.000	0.00	0.00	0.000	0					0.00
38.083	0.00	0.00	0.000	0					0.00
38.167	0.00	0.00	0.000	0					0.00
38.250	0.00	0.00	0.000	0					0.00
38.333	0.00	0.00	0.000	0					0.00
38.417	0.00	0.00	0.000	0					0.00
38.500	0.00	0.00	0.000	0					0.00
38.583	0.00	0.00	0.000	0					0.00
38.667	0.00	0.00	0.000	0					0.00
38.750	0.00	0.00	0.000	0					0.00
38.833	0.00	0.00	0.000	0					0.00
38.917	0.00	0.00	0.000	0					0.00
39.000	0.00	0.00	0.000	0					0.00
39.083	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 469
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 0.355 (CFS)
 Total volume = 0.567 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/05/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 100-131
 MITIGATION ANALYSIS
 1-HOUR - 10-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PA10110.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 14
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 10.749 (CFS)
 Total volume = 0.346 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 14
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.022	0.118	0.022	0.022
0.340	0.042	0.138	0.042	0.042
0.500	0.081	0.167	0.080	0.082
1.000	0.206	0.236	0.205	0.207
1.350	0.293	0.275	0.292	0.294
1.500	0.329	0.289	0.328	0.330
2.000	0.451	0.334	0.450	0.452
2.500	0.567	0.374	0.566	0.568
3.000	0.677	0.409	0.676	0.678
3.100	0.697	0.416	0.696	0.698
3.500	0.775	1.336	0.770	0.780
4.000	0.841	3.874	0.828	0.854
4.100	0.846	4.260	0.831	0.861
4.340	0.859	4.703	0.843	0.875

Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; '0' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	0	2.7	5.37	8.06	10.75	Depth (Ft.)
0.083	1.18	0.02	0.004	0	I				0.05
0.167	1.95	0.08	0.014	0	I				0.16
0.250	2.33	0.12	0.028	0	I				0.28
0.333	2.50	0.14	0.044	0	I				0.35
0.417	2.62	0.15	0.061	0	I				0.42
0.500	2.91	0.17	0.079	0	I				0.49
0.583	3.55	0.18	0.100	0	I	I			0.58
0.667	4.28	0.19	0.126	0	I	I			0.68
0.750	5.78	0.21	0.159	0	I	I			0.81
0.833	10.75	0.24	0.214	0	I	I		I	1.03
0.917	7.73	0.27	0.276	0	I		I		1.28
1.000	3.53	0.28	0.313	0	I				1.43
1.083	1.05	0.29	0.327	0	I				1.49
1.167	0.13	0.29	0.329	0					1.50
1.250	0.00	0.29	0.327	0					1.49
1.333	0.00	0.29	0.325	0					1.48
1.417	0.00	0.29	0.323	0					1.48
1.500	0.00	0.29	0.321	0					1.47
1.583	0.00	0.29	0.319	0					1.46
1.667	0.00	0.28	0.317	0					1.45
1.750	0.00	0.28	0.315	0					1.44
1.833	0.00	0.28	0.314	0					1.44
1.917	0.00	0.28	0.312	0					1.43
2.000	0.00	0.28	0.310	0					1.42
2.083	0.00	0.28	0.308	0					1.41
2.167	0.00	0.28	0.306	0					1.40
2.250	0.00	0.28	0.304	0					1.40
2.333	0.00	0.28	0.302	0					1.39
2.417	0.00	0.28	0.300	0					1.38
2.500	0.00	0.28	0.298	0					1.37
2.583	0.00	0.28	0.296	0					1.36
2.667	0.00	0.28	0.294	0					1.36
2.750	0.00	0.27	0.292	0					1.35
2.833	0.00	0.27	0.290	0					1.34
2.917	0.00	0.27	0.289	0					1.33
3.000	0.00	0.27	0.287	0					1.32
3.083	0.00	0.27	0.285	0					1.32
3.167	0.00	0.27	0.283	0					1.31
3.250	0.00	0.27	0.281	0					1.30
3.333	0.00	0.27	0.279	0					1.29
3.417	0.00	0.27	0.277	0					1.29
3.500	0.00	0.27	0.276	0					1.28
3.583	0.00	0.27	0.274	0					1.27
3.667	0.00	0.27	0.272	0					1.27
3.750	0.00	0.26	0.270	0					1.26
3.833	0.00	0.26	0.268	0					1.25
3.917	0.00	0.26	0.266	0					1.24
4.000	0.00	0.26	0.265	0					1.24
4.083	0.00	0.26	0.263	0					1.23
4.167	0.00	0.26	0.261	0					1.22
4.250	0.00	0.26	0.259	0					1.21
4.333	0.00	0.26	0.257	0					1.21
4.417	0.00	0.26	0.256	0					1.20
4.500	0.00	0.26	0.254	0					1.19
4.583	0.00	0.26	0.252	0					1.19
4.667	0.00	0.26	0.250	0					1.18
4.750	0.00	0.26	0.249	0					1.17
4.833	0.00	0.25	0.247	0					1.16
4.917	0.00	0.25	0.245	0					1.16
5.000	0.00	0.25	0.243	0					1.15
5.083	0.00	0.25	0.242	0					1.14
5.167	0.00	0.25	0.240	0					1.14
5.250	0.00	0.25	0.238	0					1.13
5.333	0.00	0.25	0.236	0					1.12
5.417	0.00	0.25	0.235	0					1.12

5. 500	0. 00	0. 25	0. 233	0	1. 11
5. 583	0. 00	0. 25	0. 231	0	1. 10
5. 667	0. 00	0. 25	0. 230	0	1. 10
5. 750	0. 00	0. 25	0. 228	0	1. 09
5. 833	0. 00	0. 25	0. 226	0	1. 08
5. 917	0. 00	0. 24	0. 225	0	1. 07
6. 000	0. 00	0. 24	0. 223	0	1. 07
6. 083	0. 00	0. 24	0. 221	0	1. 06
6. 167	0. 00	0. 24	0. 220	0	1. 05
6. 250	0. 00	0. 24	0. 218	0	1. 05
6. 333	0. 00	0. 24	0. 216	0	1. 04
6. 417	0. 00	0. 24	0. 215	0	1. 03
6. 500	0. 00	0. 24	0. 213	0	1. 03
6. 583	0. 00	0. 24	0. 211	0	1. 02
6. 667	0. 00	0. 24	0. 210	0	1. 01
6. 750	0. 00	0. 24	0. 208	0	1. 01
6. 833	0. 00	0. 24	0. 206	0	1. 00
6. 917	0. 00	0. 24	0. 205	0	0. 99
7. 000	0. 00	0. 23	0. 203	0	0. 99
7. 083	0. 00	0. 23	0. 201	0	0. 98
7. 167	0. 00	0. 23	0. 200	0	0. 98
7. 250	0. 00	0. 23	0. 198	0	0. 97
7. 333	0. 00	0. 23	0. 197	0	0. 96
7. 417	0. 00	0. 23	0. 195	0	0. 96
7. 500	0. 00	0. 23	0. 194	0	0. 95
7. 583	0. 00	0. 23	0. 192	0	0. 94
7. 667	0. 00	0. 23	0. 190	0	0. 94
7. 750	0. 00	0. 23	0. 189	0	0. 93
7. 833	0. 00	0. 23	0. 187	0	0. 93
7. 917	0. 00	0. 22	0. 186	0	0. 92
8. 000	0. 00	0. 22	0. 184	0	0. 91
8. 083	0. 00	0. 22	0. 183	0	0. 91
8. 167	0. 00	0. 22	0. 181	0	0. 90
8. 250	0. 00	0. 22	0. 180	0	0. 89
8. 333	0. 00	0. 22	0. 178	0	0. 89
8. 417	0. 00	0. 22	0. 177	0	0. 88
8. 500	0. 00	0. 22	0. 175	0	0. 88
8. 583	0. 00	0. 22	0. 174	0	0. 87
8. 667	0. 00	0. 22	0. 172	0	0. 86
8. 750	0. 00	0. 22	0. 171	0	0. 86
8. 833	0. 00	0. 22	0. 169	0	0. 85
8. 917	0. 00	0. 21	0. 168	0	0. 85
9. 000	0. 00	0. 21	0. 166	0	0. 84
9. 083	0. 00	0. 21	0. 165	0	0. 83
9. 167	0. 00	0. 21	0. 163	0	0. 83
9. 250	0. 00	0. 21	0. 162	0	0. 82
9. 333	0. 00	0. 21	0. 160	0	0. 82
9. 417	0. 00	0. 21	0. 159	0	0. 81
9. 500	0. 00	0. 21	0. 157	0	0. 81
9. 583	0. 00	0. 21	0. 156	0	0. 80
9. 667	0. 00	0. 21	0. 154	0	0. 79
9. 750	0. 00	0. 21	0. 153	0	0. 79
9. 833	0. 00	0. 21	0. 152	0	0. 78
9. 917	0. 00	0. 21	0. 150	0	0. 78
10. 000	0. 00	0. 20	0. 149	0	0. 77
10. 083	0. 00	0. 20	0. 147	0	0. 77
10. 167	0. 00	0. 20	0. 146	0	0. 76
10. 250	0. 00	0. 20	0. 145	0	0. 75
10. 333	0. 00	0. 20	0. 143	0	0. 75
10. 417	0. 00	0. 20	0. 142	0	0. 74
10. 500	0. 00	0. 20	0. 140	0	0. 74
10. 583	0. 00	0. 20	0. 139	0	0. 73
10. 667	0. 00	0. 20	0. 138	0	0. 73
10. 750	0. 00	0. 20	0. 136	0	0. 72
10. 833	0. 00	0. 20	0. 135	0	0. 72
10. 917	0. 00	0. 20	0. 134	0	0. 71
11. 000	0. 00	0. 20	0. 132	0	0. 71
11. 083	0. 00	0. 19	0. 131	0	0. 70
11. 167	0. 00	0. 19	0. 130	0	0. 69
11. 250	0. 00	0. 19	0. 128	0	0. 69
11. 333	0. 00	0. 19	0. 127	0	0. 68
11. 417	0. 00	0. 19	0. 126	0	0. 68

11. 500	0. 00	0. 19	0. 124	0	0. 67
11. 583	0. 00	0. 19	0. 123	0	0. 67
11. 667	0. 00	0. 19	0. 122	0	0. 66
11. 750	0. 00	0. 19	0. 120	0	0. 66
11. 833	0. 00	0. 19	0. 119	0	0. 65
11. 917	0. 00	0. 19	0. 118	0	0. 65
12. 000	0. 00	0. 19	0. 116	0	0. 64
12. 083	0. 00	0. 19	0. 115	0	0. 64
12. 167	0. 00	0. 19	0. 114	0	0. 63
12. 250	0. 00	0. 18	0. 113	0	0. 63
12. 333	0. 00	0. 18	0. 111	0	0. 62
12. 417	0. 00	0. 18	0. 110	0	0. 62
12. 500	0. 00	0. 18	0. 109	0	0. 61
12. 583	0. 00	0. 18	0. 108	0	0. 61
12. 667	0. 00	0. 18	0. 106	0	0. 60
12. 750	0. 00	0. 18	0. 105	0	0. 60
12. 833	0. 00	0. 18	0. 104	0	0. 59
12. 917	0. 00	0. 18	0. 103	0	0. 59
13. 000	0. 00	0. 18	0. 101	0	0. 58
13. 083	0. 00	0. 18	0. 100	0	0. 58
13. 167	0. 00	0. 18	0. 099	0	0. 57
13. 250	0. 00	0. 18	0. 098	0	0. 57
13. 333	0. 00	0. 18	0. 097	0	0. 56
13. 417	0. 00	0. 17	0. 095	0	0. 56
13. 500	0. 00	0. 17	0. 094	0	0. 55
13. 583	0. 00	0. 17	0. 093	0	0. 55
13. 667	0. 00	0. 17	0. 092	0	0. 54
13. 750	0. 00	0. 17	0. 091	0	0. 54
13. 833	0. 00	0. 17	0. 089	0	0. 53
13. 917	0. 00	0. 17	0. 088	0	0. 53
14. 000	0. 00	0. 17	0. 087	0	0. 52
14. 083	0. 00	0. 17	0. 086	0	0. 52
14. 167	0. 00	0. 17	0. 085	0	0. 51
14. 250	0. 00	0. 17	0. 084	0	0. 51
14. 333	0. 00	0. 17	0. 082	0	0. 51
14. 417	0. 00	0. 17	0. 081	0	0. 50
14. 500	0. 00	0. 17	0. 080	0	0. 50
14. 583	0. 00	0. 17	0. 079	0	0. 49
14. 667	0. 00	0. 16	0. 078	0	0. 49
14. 750	0. 00	0. 16	0. 077	0	0. 48
14. 833	0. 00	0. 16	0. 076	0	0. 48
14. 917	0. 00	0. 16	0. 074	0	0. 47
15. 000	0. 00	0. 16	0. 073	0	0. 47
15. 083	0. 00	0. 16	0. 072	0	0. 46
15. 167	0. 00	0. 16	0. 071	0	0. 46
15. 250	0. 00	0. 16	0. 070	0	0. 45
15. 333	0. 00	0. 16	0. 069	0	0. 45
15. 417	0. 00	0. 16	0. 068	0	0. 45
15. 500	0. 00	0. 16	0. 067	0	0. 44
15. 583	0. 00	0. 16	0. 066	0	0. 44
15. 667	0. 00	0. 15	0. 065	0	0. 43
15. 750	0. 00	0. 15	0. 064	0	0. 43
15. 833	0. 00	0. 15	0. 062	0	0. 42
15. 917	0. 00	0. 15	0. 061	0	0. 42
16. 000	0. 00	0. 15	0. 060	0	0. 42
16. 083	0. 00	0. 15	0. 059	0	0. 41
16. 167	0. 00	0. 15	0. 058	0	0. 41
16. 250	0. 00	0. 15	0. 057	0	0. 40
16. 333	0. 00	0. 15	0. 056	0	0. 40
16. 417	0. 00	0. 15	0. 055	0	0. 39
16. 500	0. 00	0. 15	0. 054	0	0. 39
16. 583	0. 00	0. 15	0. 053	0	0. 39
16. 667	0. 00	0. 15	0. 052	0	0. 38
16. 750	0. 00	0. 14	0. 051	0	0. 38
16. 833	0. 00	0. 14	0. 050	0	0. 37
16. 917	0. 00	0. 14	0. 049	0	0. 37
17. 000	0. 00	0. 14	0. 048	0	0. 37
17. 083	0. 00	0. 14	0. 047	0	0. 36
17. 167	0. 00	0. 14	0. 046	0	0. 36
17. 250	0. 00	0. 14	0. 045	0	0. 35
17. 333	0. 00	0. 14	0. 044	0	0. 35
17. 417	0. 00	0. 14	0. 043	0	0. 35

17. 500	0. 00	0. 14	0. 042	0	0. 34
17. 583	0. 00	0. 14	0. 041	0	0. 34
17. 667	0. 00	0. 14	0. 041	0	0. 33
17. 750	0. 00	0. 14	0. 040	0	0. 33
17. 833	0. 00	0. 13	0. 039	0	0. 32
17. 917	0. 00	0. 13	0. 038	0	0. 32
18. 000	0. 00	0. 13	0. 037	0	0. 32
18. 083	0. 00	0. 13	0. 036	0	0. 31
18. 167	0. 00	0. 13	0. 035	0	0. 31
18. 250	0. 00	0. 13	0. 034	0	0. 30
18. 333	0. 00	0. 13	0. 033	0	0. 30
18. 417	0. 00	0. 13	0. 032	0	0. 30
18. 500	0. 00	0. 13	0. 031	0	0. 29
18. 583	0. 00	0. 13	0. 031	0	0. 29
18. 667	0. 00	0. 13	0. 030	0	0. 28
18. 750	0. 00	0. 12	0. 029	0	0. 28
18. 833	0. 00	0. 12	0. 028	0	0. 28
18. 917	0. 00	0. 12	0. 027	0	0. 27
19. 000	0. 00	0. 12	0. 026	0	0. 27
19. 083	0. 00	0. 12	0. 025	0	0. 27
19. 167	0. 00	0. 12	0. 025	0	0. 26
19. 250	0. 00	0. 12	0. 024	0	0. 26
19. 333	0. 00	0. 12	0. 023	0	0. 25
19. 417	0. 00	0. 12	0. 022	0	0. 25
19. 500	0. 00	0. 11	0. 021	0	0. 24
19. 583	0. 00	0. 11	0. 021	0	0. 23
19. 667	0. 00	0. 11	0. 020	0	0. 23
19. 750	0. 00	0. 10	0. 019	0	0. 22
19. 833	0. 00	0. 10	0. 018	0	0. 21
19. 917	0. 00	0. 10	0. 018	0	0. 20
20. 000	0. 00	0. 09	0. 017	0	0. 19
20. 083	0. 00	0. 09	0. 016	0	0. 19
20. 167	0. 00	0. 09	0. 016	0	0. 18
20. 250	0. 00	0. 08	0. 015	0	0. 17
20. 333	0. 00	0. 08	0. 015	0	0. 17
20. 417	0. 00	0. 08	0. 014	0	0. 16
20. 500	0. 00	0. 07	0. 014	0	0. 16
20. 583	0. 00	0. 07	0. 013	0	0. 15
20. 667	0. 00	0. 07	0. 013	0	0. 14
20. 750	0. 00	0. 07	0. 012	0	0. 14
20. 833	0. 00	0. 06	0. 012	0	0. 13
20. 917	0. 00	0. 06	0. 011	0	0. 13
21. 000	0. 00	0. 06	0. 011	0	0. 12
21. 083	0. 00	0. 06	0. 011	0	0. 12
21. 167	0. 00	0. 05	0. 010	0	0. 12
21. 250	0. 00	0. 05	0. 010	0	0. 11
21. 333	0. 00	0. 05	0. 009	0	0. 11
21. 417	0. 00	0. 05	0. 009	0	0. 10
21. 500	0. 00	0. 05	0. 009	0	0. 10
21. 583	0. 00	0. 05	0. 008	0	0. 10
21. 667	0. 00	0. 04	0. 008	0	0. 09
21. 750	0. 00	0. 04	0. 008	0	0. 09
21. 833	0. 00	0. 04	0. 008	0	0. 09
21. 917	0. 00	0. 04	0. 007	0	0. 08
22. 000	0. 00	0. 04	0. 007	0	0. 08
22. 083	0. 00	0. 04	0. 007	0	0. 08
22. 167	0. 00	0. 04	0. 007	0	0. 07
22. 250	0. 00	0. 03	0. 006	0	0. 07
22. 333	0. 00	0. 03	0. 006	0	0. 07
22. 417	0. 00	0. 03	0. 006	0	0. 07
22. 500	0. 00	0. 03	0. 006	0	0. 06
22. 583	0. 00	0. 03	0. 005	0	0. 06
22. 667	0. 00	0. 03	0. 005	0	0. 06
22. 750	0. 00	0. 03	0. 005	0	0. 06
22. 833	0. 00	0. 03	0. 005	0	0. 06
22. 917	0. 00	0. 03	0. 005	0	0. 05
23. 000	0. 00	0. 02	0. 005	0	0. 05
23. 083	0. 00	0. 02	0. 004	0	0. 05
23. 167	0. 00	0. 02	0. 004	0	0. 05
23. 250	0. 00	0. 02	0. 004	0	0. 05
23. 333	0. 00	0. 02	0. 004	0	0. 04
23. 417	0. 00	0. 02	0. 004	0	0. 04

23.500	0.00	0.02	0.004	0	0.04
23.583	0.00	0.02	0.003	0	0.04
23.667	0.00	0.02	0.003	0	0.04
23.750	0.00	0.02	0.003	0	0.04
23.833	0.00	0.02	0.003	0	0.04
23.917	0.00	0.02	0.003	0	0.03
24.000	0.00	0.02	0.003	0	0.03
24.083	0.00	0.01	0.003	0	0.03
24.167	0.00	0.01	0.003	0	0.03
24.250	0.00	0.01	0.003	0	0.03
24.333	0.00	0.01	0.003	0	0.03
24.417	0.00	0.01	0.002	0	0.03
24.500	0.00	0.01	0.002	0	0.03
24.583	0.00	0.01	0.002	0	0.03
24.667	0.00	0.01	0.002	0	0.02
24.750	0.00	0.01	0.002	0	0.02
24.833	0.00	0.01	0.002	0	0.02
24.917	0.00	0.01	0.002	0	0.02
25.000	0.00	0.01	0.002	0	0.02
25.083	0.00	0.01	0.002	0	0.02
25.167	0.00	0.01	0.002	0	0.02
25.250	0.00	0.01	0.002	0	0.02
25.333	0.00	0.01	0.002	0	0.02
25.417	0.00	0.01	0.002	0	0.02
25.500	0.00	0.01	0.001	0	0.02
25.583	0.00	0.01	0.001	0	0.02
25.667	0.00	0.01	0.001	0	0.02
25.750	0.00	0.01	0.001	0	0.02
25.833	0.00	0.01	0.001	0	0.01
25.917	0.00	0.01	0.001	0	0.01
26.000	0.00	0.01	0.001	0	0.01
26.083	0.00	0.01	0.001	0	0.01
26.167	0.00	0.01	0.001	0	0.01
26.250	0.00	0.01	0.001	0	0.01
26.333	0.00	0.01	0.001	0	0.01
26.417	0.00	0.01	0.001	0	0.01
26.500	0.00	0.01	0.001	0	0.01
26.583	0.00	0.00	0.001	0	0.01
26.667	0.00	0.00	0.001	0	0.01
26.750	0.00	0.00	0.001	0	0.01
26.833	0.00	0.00	0.001	0	0.01
26.917	0.00	0.00	0.001	0	0.01
27.000	0.00	0.00	0.001	0	0.01
27.083	0.00	0.00	0.001	0	0.01
27.167	0.00	0.00	0.001	0	0.01
27.250	0.00	0.00	0.001	0	0.01
27.333	0.00	0.00	0.001	0	0.01
27.417	0.00	0.00	0.001	0	0.01
27.500	0.00	0.00	0.001	0	0.01
27.583	0.00	0.00	0.001	0	0.01
27.667	0.00	0.00	0.001	0	0.01
27.750	0.00	0.00	0.001	0	0.01
27.833	0.00	0.00	0.001	0	0.01
27.917	0.00	0.00	0.001	0	0.01
28.000	0.00	0.00	0.000	0	0.01
28.083	0.00	0.00	0.000	0	0.01
28.167	0.00	0.00	0.000	0	0.01
28.250	0.00	0.00	0.000	0	0.01
28.333	0.00	0.00	0.000	0	0.00
28.417	0.00	0.00	0.000	0	0.00
28.500	0.00	0.00	0.000	0	0.00
28.583	0.00	0.00	0.000	0	0.00
28.667	0.00	0.00	0.000	0	0.00
28.750	0.00	0.00	0.000	0	0.00
28.833	0.00	0.00	0.000	0	0.00
28.917	0.00	0.00	0.000	0	0.00
29.000	0.00	0.00	0.000	0	0.00
29.083	0.00	0.00	0.000	0	0.00
29.167	0.00	0.00	0.000	0	0.00
29.250	0.00	0.00	0.000	0	0.00
29.333	0.00	0.00	0.000	0	0.00
29.417	0.00	0.00	0.000	0	0.00

29.500	0.00	0.00	0.000	0					0.00
29.583	0.00	0.00	0.000	0					0.00
29.667	0.00	0.00	0.000	0					0.00
29.750	0.00	0.00	0.000	0					0.00
29.833	0.00	0.00	0.000	0					0.00
29.917	0.00	0.00	0.000	0					0.00
30.000	0.00	0.00	0.000	0					0.00
30.083	0.00	0.00	0.000	0					0.00
30.167	0.00	0.00	0.000	0					0.00
30.250	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 363
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.289 (CFS)
Total volume = 0.346 (Ac. Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac. Ft)	0.000	0.000	0.000	0.000	0.000

Temescal Canyon Self Storage - Riverside County Underground Storage Analysis

East

Storage

Arch Span (ft)	Arch Rise (ft)	Number Rows (#)	Row Length (ft)	Row Slope (ft/ft)	Invert (D/S) (ft)	Invert U/S (ft)
16	5	1	600	0.0010	897.94	898.54

Low Flow Discharge

Orifice C (ϕ)	Number Outlets (#)	Outlet Diameter (in)	Outlet Invert (ft)	Outlet Soffit (ft)
0.60	1	3	897.94	898.19

High Flow Discharge

Orifice C (ϕ)	Number Outlets (#)	Outlet Diameter (in)	Outlet Invert (ft)	Outlet Soffit (ft)
0.60	1	12	901.84	902.84

Rating Curve

Elevation (ft)	Depth (ft)	Storage (cu-ft)	Storage (ac-ft)	Low Flow Discharge (cfs)	High Flow Discharge (cfs)	Total Discharge (cfs)
897.94	0.00	0	0.000	0.000	0.000	0.000
898.19	0.25	480	0.011	0.118	0.000	0.118
898.44	0.50	2,000	0.046	0.167	0.000	0.167
898.54	0.60	2,880	0.066	0.183	0.000	0.183
898.94	1.00	6,672	0.153	0.236	0.000	0.236
899.44	1.50	11,472	0.263	0.289	0.000	0.289
899.75	1.81	14,396	0.330	0.318	0.000	0.318
899.94	2.00	16,266	0.373	0.334	0.000	0.334
900.44	2.50	21,025	0.483	0.374	0.000	0.374
900.94	3.00	25,703	0.590	0.409	0.000	0.409
901.44	3.50	30,233	0.694	0.442	0.000	0.442
901.84	3.90	33,633	0.772	0.467	0.000	0.467
901.94	4.00	34,530	0.793	0.473	0.062	0.535
902.44	4.50	38,402	0.882	0.501	1.835	2.336
902.84	4.90	40,663	0.933	0.523	3.782	4.305
902.94	5.00	41,237	0.947	0.529	3.966	4.495
903.44	5.50	42,405	0.973	0.554	4.783	5.338
903.54	5.60	42,624	0.979	0.559	4.931	5.490

FLOOD HYDROGRAPH ROUTING PROGRAM
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 Study date: 01/06/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 140-161
 MITIGATION ANALYSIS
 24-HOUR - 2-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PD02242.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 289
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 1.365 (CFS)
 Total volume = 0.830 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 289
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

 Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.011	0.118	0.011	0.011
0.500	0.046	0.167	0.045	0.047
0.600	0.066	0.183	0.065	0.067
1.000	0.153	0.236	0.152	0.154
1.500	0.263	0.289	0.262	0.264
1.810	0.330	0.318	0.329	0.331
2.000	0.373	0.334	0.372	0.374
2.500	0.483	0.374	0.482	0.484
3.000	0.590	0.409	0.589	0.591
3.500	0.694	0.442	0.692	0.696
3.900	0.772	0.467	0.770	0.774
4.000	0.793	0.535	0.791	0.795
4.500	0.882	2.336	0.874	0.890
4.900	0.933	4.305	0.918	0.948
5.000	0.947	4.495	0.932	0.962

5. 500 0. 973 5. 338 0. 955 0. 991
 5. 600 0. 979 5. 490 0. 960 0. 998

 Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	. 0	0. 3	0. 68	1. 02	1. 37	Depth (Ft.)
0. 083	0. 06	0. 00	0. 000	OI					0. 00
0. 167	0. 08	0. 01	0. 001	OI					0. 01
0. 250	0. 08	0. 01	0. 001	OI					0. 03
0. 333	0. 11	0. 02	0. 002	O I					0. 04
0. 417	0. 12	0. 03	0. 002	O I					0. 05
0. 500	0. 12	0. 03	0. 003	O I					0. 07
0. 583	0. 12	0. 04	0. 004	O I					0. 08
0. 667	0. 12	0. 04	0. 004	OI					0. 09
0. 750	0. 12	0. 05	0. 005	OI					0. 10
0. 833	0. 15	0. 06	0. 005	O I					0. 12
0. 917	0. 16	0. 06	0. 006	O I					0. 13
1. 000	0. 16	0. 07	0. 006	O I					0. 15
1. 083	0. 13	0. 08	0. 007	O I					0. 16
1. 167	0. 12	0. 08	0. 007	OI					0. 17
1. 250	0. 12	0. 08	0. 008	OI					0. 17
1. 333	0. 12	0. 08	0. 008	OI					0. 18
1. 417	0. 12	0. 09	0. 008	O					0. 18
1. 500	0. 12	0. 09	0. 008	O					0. 19
1. 583	0. 12	0. 09	0. 009	O					0. 19
1. 667	0. 12	0. 09	0. 009	O					0. 20
1. 750	0. 12	0. 10	0. 009	O					0. 20
1. 833	0. 15	0. 10	0. 009	OI					0. 21
1. 917	0. 16	0. 10	0. 010	OI					0. 22
2. 000	0. 16	0. 11	0. 010	OI					0. 23
2. 083	0. 16	0. 11	0. 010	OI					0. 23
2. 167	0. 16	0. 11	0. 011	OI					0. 24
2. 250	0. 16	0. 12	0. 011	OI					0. 25
2. 333	0. 16	0. 12	0. 011	OI					0. 25
2. 417	0. 16	0. 12	0. 012	OI					0. 25
2. 500	0. 16	0. 12	0. 012	OI					0. 26
2. 583	0. 19	0. 12	0. 012	O I					0. 26
2. 667	0. 20	0. 12	0. 013	O I					0. 26
2. 750	0. 20	0. 12	0. 013	O I					0. 27
2. 833	0. 20	0. 12	0. 014	O I					0. 27
2. 917	0. 20	0. 12	0. 014	O I					0. 27
3. 000	0. 20	0. 12	0. 015	O I					0. 28
3. 083	0. 20	0. 12	0. 015	O I					0. 28
3. 167	0. 20	0. 12	0. 016	O I					0. 29
3. 250	0. 20	0. 13	0. 016	O I					0. 29
3. 333	0. 20	0. 13	0. 017	O I					0. 29
3. 417	0. 20	0. 13	0. 017	O I					0. 30
3. 500	0. 20	0. 13	0. 018	O I					0. 30
3. 583	0. 20	0. 13	0. 018	OI					0. 30
3. 667	0. 20	0. 13	0. 019	OI					0. 31
3. 750	0. 20	0. 13	0. 019	OI					0. 31
3. 833	0. 23	0. 13	0. 020	O I					0. 31
3. 917	0. 24	0. 13	0. 021	O I					0. 32
4. 000	0. 24	0. 13	0. 022	O I					0. 33
4. 083	0. 24	0. 13	0. 022	O I					0. 33
4. 167	0. 24	0. 13	0. 023	O I					0. 34
4. 250	0. 24	0. 14	0. 024	O I					0. 34
4. 333	0. 27	0. 14	0. 025	O I					0. 35
4. 417	0. 28	0. 14	0. 026	O I					0. 35
4. 500	0. 28	0. 14	0. 026	O I					0. 36
4. 583	0. 28	0. 14	0. 027	O I					0. 37
4. 667	0. 28	0. 14	0. 028	O I					0. 37
4. 750	0. 28	0. 14	0. 029	O I					0. 38
4. 833	0. 31	0. 15	0. 030	O I					0. 39
4. 917	0. 32	0. 15	0. 032	O I					0. 40
5. 000	0. 32	0. 15	0. 033	O I					0. 41
5. 083	0. 26	0. 15	0. 034	O I					0. 41
5. 167	0. 24	0. 15	0. 034	O I					0. 42

11. 250	0. 76	0. 27	0. 214	0		I		1. 28
11. 333	0. 76	0. 27	0. 218	0		I		1. 29
11. 417	0. 76	0. 27	0. 221	0		I		1. 31
11. 500	0. 76	0. 27	0. 224	0		I		1. 32
11. 583	0. 70	0. 27	0. 227	0		I		1. 34
11. 667	0. 68	0. 27	0. 230	0		I		1. 35
11. 750	0. 68	0. 27	0. 233	0		I		1. 36
11. 833	0. 71	0. 28	0. 236	0		I		1. 38
11. 917	0. 72	0. 28	0. 239	0		I		1. 39
12. 000	0. 72	0. 28	0. 242	0		I		1. 41
12. 083	0. 93	0. 28	0. 246	0		I		1. 42
12. 167	1. 00	0. 28	0. 251	0		I		1. 44
12. 250	1. 00	0. 29	0. 256	0		I		1. 47
12. 333	1. 03	0. 29	0. 261	0		I		1. 49
12. 417	1. 04	0. 29	0. 266	0		I		1. 51
12. 500	1. 04	0. 29	0. 271	0		I		1. 54
12. 583	1. 10	0. 29	0. 276	0		I		1. 56
12. 667	1. 12	0. 30	0. 282	0		I		1. 59
12. 750	1. 12	0. 30	0. 288	0		I		1. 61
12. 833	1. 15	0. 30	0. 294	0		I		1. 64
12. 917	1. 16	0. 30	0. 299	0		I		1. 67
13. 000	1. 16	0. 31	0. 305	0		I		1. 70
13. 083	1. 31	0. 31	0. 312	0		I		1. 73
13. 167	1. 37	0. 31	0. 319	0		I		1. 76
13. 250	1. 37	0. 32	0. 326	0		I		1. 79
13. 333	1. 37	0. 32	0. 333	0		I		1. 82
13. 417	1. 37	0. 32	0. 340	0		I		1. 86
13. 500	1. 37	0. 32	0. 348	0		I		1. 89
13. 583	1. 04	0. 33	0. 354	0		I		1. 91
13. 667	0. 92	0. 33	0. 358	0		I		1. 93
13. 750	0. 92	0. 33	0. 362	0		I		1. 95
13. 833	0. 92	0. 33	0. 366	0		I		1. 97
13. 917	0. 92	0. 33	0. 370	0		I		1. 99
14. 000	0. 92	0. 33	0. 374	0		I		2. 01
14. 083	1. 04	0. 34	0. 379	0		I		2. 03
14. 167	1. 08	0. 34	0. 384	0		I		2. 05
14. 250	1. 08	0. 34	0. 389	0		I		2. 07
14. 333	1. 05	0. 34	0. 394	0		I		2. 10
14. 417	1. 04	0. 34	0. 399	0		I		2. 12
14. 500	1. 04	0. 35	0. 404	0		I		2. 14
14. 583	1. 04	0. 35	0. 409	0		I		2. 16
14. 667	1. 04	0. 35	0. 413	0		I		2. 18
14. 750	1. 04	0. 35	0. 418	0		I		2. 21
14. 833	1. 01	0. 35	0. 423	0		I		2. 23
14. 917	1. 00	0. 35	0. 427	0		I		2. 25
15. 000	1. 00	0. 36	0. 432	0		I		2. 27
15. 083	0. 97	0. 36	0. 436	0		I		2. 29
15. 167	0. 96	0. 36	0. 440	0		I		2. 31
15. 250	0. 96	0. 36	0. 445	0		I		2. 33
15. 333	0. 93	0. 36	0. 449	0		I		2. 34
15. 417	0. 92	0. 36	0. 452	0		I		2. 36
15. 500	0. 92	0. 36	0. 456	0		I		2. 38
15. 583	0. 80	0. 37	0. 460	0		I		2. 39
15. 667	0. 76	0. 37	0. 463	0		I		2. 41
15. 750	0. 76	0. 37	0. 465	0		I		2. 42
15. 833	0. 76	0. 37	0. 468	0		I		2. 43
15. 917	0. 76	0. 37	0. 471	0		I		2. 44
16. 000	0. 76	0. 37	0. 473	0		I		2. 46
16. 083	0. 31	0. 37	0. 475	0		I		2. 46
16. 167	0. 16	0. 37	0. 474	0		I		2. 46
16. 250	0. 16	0. 37	0. 472	0		I		2. 45
16. 333	0. 16	0. 37	0. 471	0		I		2. 44
16. 417	0. 16	0. 37	0. 469	0		I		2. 44
16. 500	0. 16	0. 37	0. 468	0		I		2. 43
16. 583	0. 13	0. 37	0. 466	0		I		2. 42
16. 667	0. 12	0. 37	0. 465	0		I		2. 42
16. 750	0. 12	0. 37	0. 463	0		I		2. 41
16. 833	0. 12	0. 37	0. 461	0		I		2. 40
16. 917	0. 12	0. 37	0. 460	0		I		2. 39
17. 000	0. 12	0. 36	0. 458	0		I		2. 39
17. 083	0. 18	0. 36	0. 457	0		I		2. 38
17. 167	0. 20	0. 36	0. 455	0		I		2. 37

17. 250	0. 20	0. 36	0. 454	I	0	2. 37
17. 333	0. 20	0. 36	0. 453	I	0	2. 36
17. 417	0. 20	0. 36	0. 452	I	0	2. 36
17. 500	0. 20	0. 36	0. 451	I	0	2. 35
17. 583	0. 20	0. 36	0. 450	I	0	2. 35
17. 667	0. 20	0. 36	0. 449	I	0	2. 34
17. 750	0. 20	0. 36	0. 448	I	0	2. 34
17. 833	0. 17	0. 36	0. 446	I	0	2. 33
17. 917	0. 16	0. 36	0. 445	I	0	2. 33
18. 000	0. 16	0. 36	0. 444	I	0	2. 32
18. 083	0. 16	0. 36	0. 442	I	0	2. 31
18. 167	0. 16	0. 36	0. 441	I	0	2. 31
18. 250	0. 16	0. 36	0. 440	I	0	2. 30
18. 333	0. 16	0. 36	0. 438	I	0	2. 30
18. 417	0. 16	0. 36	0. 437	I	0	2. 29
18. 500	0. 16	0. 36	0. 435	I	0	2. 28
18. 583	0. 13	0. 36	0. 434	I	0	2. 28
18. 667	0. 12	0. 36	0. 432	I	0	2. 27
18. 750	0. 12	0. 36	0. 431	I	0	2. 26
18. 833	0. 09	0. 35	0. 429	I	0	2. 25
18. 917	0. 08	0. 35	0. 427	I	0	2. 25
19. 000	0. 08	0. 35	0. 425	I	0	2. 24
19. 083	0. 11	0. 35	0. 424	I	0	2. 23
19. 167	0. 12	0. 35	0. 422	I	0	2. 22
19. 250	0. 12	0. 35	0. 420	I	0	2. 22
19. 333	0. 15	0. 35	0. 419	I	0	2. 21
19. 417	0. 16	0. 35	0. 418	I	0	2. 20
19. 500	0. 16	0. 35	0. 416	I	0	2. 20
19. 583	0. 13	0. 35	0. 415	I	0	2. 19
19. 667	0. 12	0. 35	0. 413	I	0	2. 18
19. 750	0. 12	0. 35	0. 412	I	0	2. 18
19. 833	0. 09	0. 35	0. 410	I	0	2. 17
19. 917	0. 08	0. 35	0. 408	I	0	2. 16
20. 000	0. 08	0. 35	0. 406	I	0	2. 15
20. 083	0. 11	0. 35	0. 405	I	0	2. 14
20. 167	0. 12	0. 34	0. 403	I	0	2. 14
20. 250	0. 12	0. 34	0. 402	I	0	2. 13
20. 333	0. 12	0. 34	0. 400	I	0	2. 12
20. 417	0. 12	0. 34	0. 398	I	0	2. 12
20. 500	0. 12	0. 34	0. 397	I	0	2. 11
20. 583	0. 12	0. 34	0. 395	I	0	2. 10
20. 667	0. 12	0. 34	0. 394	I	0	2. 09
20. 750	0. 12	0. 34	0. 392	I	0	2. 09
20. 833	0. 09	0. 34	0. 391	I	0	2. 08
20. 917	0. 08	0. 34	0. 389	I	0	2. 07
21. 000	0. 08	0. 34	0. 387	I	0	2. 06
21. 083	0. 11	0. 34	0. 386	I	0	2. 06
21. 167	0. 12	0. 34	0. 384	I	0	2. 05
21. 250	0. 12	0. 34	0. 382	I	0	2. 04
21. 333	0. 09	0. 34	0. 381	I	0	2. 04
21. 417	0. 08	0. 34	0. 379	I	0	2. 03
21. 500	0. 08	0. 34	0. 377	I	0	2. 02
21. 583	0. 11	0. 33	0. 376	I	0	2. 01
21. 667	0. 12	0. 33	0. 374	I	0	2. 01
21. 750	0. 12	0. 33	0. 373	I	0	2. 00
21. 833	0. 09	0. 33	0. 371	I	0	1. 99
21. 917	0. 08	0. 33	0. 369	I	0	1. 98
22. 000	0. 08	0. 33	0. 368	I	0	1. 98
22. 083	0. 11	0. 33	0. 366	I	0	1. 97
22. 167	0. 12	0. 33	0. 365	I	0	1. 96
22. 250	0. 12	0. 33	0. 363	I	0	1. 96
22. 333	0. 09	0. 33	0. 362	I	0	1. 95
22. 417	0. 08	0. 33	0. 360	I	0	1. 94
22. 500	0. 08	0. 33	0. 358	I	0	1. 93
22. 583	0. 08	0. 33	0. 357	I	0	1. 93
22. 667	0. 08	0. 33	0. 355	I	0	1. 92
22. 750	0. 08	0. 33	0. 353	I	0	1. 91
22. 833	0. 08	0. 33	0. 351	I	0	1. 90
22. 917	0. 08	0. 33	0. 350	I	0	1. 90
23. 000	0. 08	0. 32	0. 348	I	0	1. 89
23. 083	0. 08	0. 32	0. 346	I	0	1. 88
23. 167	0. 08	0. 32	0. 345	I	0	1. 88

23.250	0.08	0.32	0.343	I	0	1.87
23.333	0.08	0.32	0.341	I	0	1.86
23.417	0.08	0.32	0.340	I	0	1.85
23.500	0.08	0.32	0.338	I	0	1.85
23.583	0.08	0.32	0.336	I	0	1.84
23.667	0.08	0.32	0.335	I	0	1.83
23.750	0.08	0.32	0.333	I	0	1.82
23.833	0.08	0.32	0.331	I	0	1.82
23.917	0.08	0.32	0.330	I	0	1.81
24.000	0.08	0.32	0.328	I	0	1.80
24.083	0.02	0.32	0.326	I	0	1.79
24.167	0.00	0.32	0.324	I	0	1.78
24.250	0.00	0.31	0.322	I	0	1.77
24.333	0.00	0.31	0.320	I	0	1.76
24.417	0.00	0.31	0.318	I	0	1.75
24.500	0.00	0.31	0.316	I	0	1.74
24.583	0.00	0.31	0.313	I	0	1.73
24.667	0.00	0.31	0.311	I	0	1.72
24.750	0.00	0.31	0.309	I	0	1.71
24.833	0.00	0.31	0.307	I	0	1.70
24.917	0.00	0.31	0.305	I	0	1.69
25.000	0.00	0.31	0.303	I	0	1.68
25.083	0.00	0.31	0.301	I	0	1.67
25.167	0.00	0.30	0.299	I	0	1.66
25.250	0.00	0.30	0.297	I	0	1.66
25.333	0.00	0.30	0.294	I	0	1.65
25.417	0.00	0.30	0.292	I	0	1.64
25.500	0.00	0.30	0.290	I	0	1.63
25.583	0.00	0.30	0.288	I	0	1.62
25.667	0.00	0.30	0.286	I	0	1.61
25.750	0.00	0.30	0.284	I	0	1.60
25.833	0.00	0.30	0.282	I	0	1.59
25.917	0.00	0.30	0.280	I	0	1.58
26.000	0.00	0.30	0.278	I	0	1.57
26.083	0.00	0.29	0.276	I	0	1.56
26.167	0.00	0.29	0.274	I	0	1.55
26.250	0.00	0.29	0.272	I	0	1.54
26.333	0.00	0.29	0.270	I	0	1.53
26.417	0.00	0.29	0.268	I	0	1.52
26.500	0.00	0.29	0.266	I	0	1.51
26.583	0.00	0.29	0.264	I	0	1.50
26.667	0.00	0.29	0.262	I	0	1.49
26.750	0.00	0.29	0.260	I	0	1.49
26.833	0.00	0.29	0.258	I	0	1.48
26.917	0.00	0.29	0.256	I	0	1.47
27.000	0.00	0.28	0.254	I	0	1.46
27.083	0.00	0.28	0.252	I	0	1.45
27.167	0.00	0.28	0.250	I	0	1.44
27.250	0.00	0.28	0.248	I	0	1.43
27.333	0.00	0.28	0.246	I	0	1.42
27.417	0.00	0.28	0.244	I	0	1.41
27.500	0.00	0.28	0.242	I	0	1.41
27.583	0.00	0.28	0.240	I	0	1.40
27.667	0.00	0.28	0.239	I	0	1.39
27.750	0.00	0.28	0.237	I	0	1.38
27.833	0.00	0.28	0.235	I	0	1.37
27.917	0.00	0.27	0.233	I	0	1.36
28.000	0.00	0.27	0.231	I	0	1.35
28.083	0.00	0.27	0.229	I	0	1.35
28.167	0.00	0.27	0.227	I	0	1.34
28.250	0.00	0.27	0.225	I	0	1.33
28.333	0.00	0.27	0.223	I	0	1.32
28.417	0.00	0.27	0.222	I	0	1.31
28.500	0.00	0.27	0.220	I	0	1.30
28.583	0.00	0.27	0.218	I	0	1.29
28.667	0.00	0.27	0.216	I	0	1.29
28.750	0.00	0.27	0.214	I	0	1.28
28.833	0.00	0.26	0.212	I	0	1.27
28.917	0.00	0.26	0.211	I	0	1.26
29.000	0.00	0.26	0.209	I	0	1.25
29.083	0.00	0.26	0.207	I	0	1.25
29.167	0.00	0.26	0.205	I	0	1.24

29.250	0.00	0.26	0.203	I	0	1.23
29.333	0.00	0.26	0.202	I	0	1.22
29.417	0.00	0.26	0.200	I	0	1.21
29.500	0.00	0.26	0.198	I	0	1.20
29.583	0.00	0.26	0.196	I	0	1.20
29.667	0.00	0.26	0.194	I	0	1.19
29.750	0.00	0.26	0.193	I	0	1.18
29.833	0.00	0.25	0.191	I	0	1.17
29.917	0.00	0.25	0.189	I	0	1.16
30.000	0.00	0.25	0.187	I	0	1.16
30.083	0.00	0.25	0.186	I	0	1.15
30.167	0.00	0.25	0.184	I	0	1.14
30.250	0.00	0.25	0.182	I	0	1.13
30.333	0.00	0.25	0.181	I	0	1.13
30.417	0.00	0.25	0.179	I	0	1.12
30.500	0.00	0.25	0.177	I	0	1.11
30.583	0.00	0.25	0.175	I	0	1.10
30.667	0.00	0.25	0.174	I	0	1.09
30.750	0.00	0.25	0.172	I	0	1.09
30.833	0.00	0.24	0.170	I	0	1.08
30.917	0.00	0.24	0.169	I	0	1.07
31.000	0.00	0.24	0.167	I	0	1.06
31.083	0.00	0.24	0.165	I	0	1.06
31.167	0.00	0.24	0.164	I	0	1.05
31.250	0.00	0.24	0.162	I	0	1.04
31.333	0.00	0.24	0.160	I	0	1.03
31.417	0.00	0.24	0.159	I	0	1.03
31.500	0.00	0.24	0.157	I	0	1.02
31.583	0.00	0.24	0.155	I	0	1.01
31.667	0.00	0.24	0.154	I	0	1.00
31.750	0.00	0.24	0.152	I	0	1.00
31.833	0.00	0.23	0.151	I	0	0.99
31.917	0.00	0.23	0.149	I	0	0.98
32.000	0.00	0.23	0.147	I	0	0.97
32.083	0.00	0.23	0.146	I	0	0.97
32.167	0.00	0.23	0.144	I	0	0.96
32.250	0.00	0.23	0.143	I	0	0.95
32.333	0.00	0.23	0.141	I	0	0.94
32.417	0.00	0.23	0.139	I	0	0.94
32.500	0.00	0.23	0.138	I	0	0.93
32.583	0.00	0.23	0.136	I	0	0.92
32.667	0.00	0.22	0.135	I	0	0.92
32.750	0.00	0.22	0.133	I	0	0.91
32.833	0.00	0.22	0.132	I	0	0.90
32.917	0.00	0.22	0.130	I	0	0.89
33.000	0.00	0.22	0.129	I	0	0.89
33.083	0.00	0.22	0.127	I	0	0.88
33.167	0.00	0.22	0.126	I	0	0.87
33.250	0.00	0.22	0.124	I	0	0.87
33.333	0.00	0.22	0.123	I	0	0.86
33.417	0.00	0.22	0.121	I	0	0.85
33.500	0.00	0.22	0.120	I	0	0.85
33.583	0.00	0.21	0.118	I	0	0.84
33.667	0.00	0.21	0.117	I	0	0.83
33.750	0.00	0.21	0.115	I	0	0.83
33.833	0.00	0.21	0.114	I	0	0.82
33.917	0.00	0.21	0.112	I	0	0.81
34.000	0.00	0.21	0.111	I	0	0.81
34.083	0.00	0.21	0.109	I	0	0.80
34.167	0.00	0.21	0.108	I	0	0.79
34.250	0.00	0.21	0.106	I	0	0.79
34.333	0.00	0.21	0.105	I	0	0.78
34.417	0.00	0.21	0.104	I	0	0.77
34.500	0.00	0.21	0.102	I	0	0.77
34.583	0.00	0.20	0.101	I	0	0.76
34.667	0.00	0.20	0.099	I	0	0.75
34.750	0.00	0.20	0.098	I	0	0.75
34.833	0.00	0.20	0.097	I	0	0.74
34.917	0.00	0.20	0.095	I	0	0.73
35.000	0.00	0.20	0.094	I	0	0.73
35.083	0.00	0.20	0.092	I	0	0.72
35.167	0.00	0.20	0.091	I	0	0.72

35.250	0.00	0.20	0.090	I	0	0.71
35.333	0.00	0.20	0.088	I	0	0.70
35.417	0.00	0.20	0.087	I	0	0.70
35.500	0.00	0.19	0.086	I	0	0.69
35.583	0.00	0.19	0.084	I	0	0.68
35.667	0.00	0.19	0.083	I	0	0.68
35.750	0.00	0.19	0.082	I	0	0.67
35.833	0.00	0.19	0.080	I	0	0.67
35.917	0.00	0.19	0.079	I	0	0.66
36.000	0.00	0.19	0.078	I	0	0.65
36.083	0.00	0.19	0.076	I	0	0.65
36.167	0.00	0.19	0.075	I	0	0.64
36.250	0.00	0.19	0.074	I	0	0.64
36.333	0.00	0.19	0.073	I	0	0.63
36.417	0.00	0.19	0.071	I	0	0.62
36.500	0.00	0.19	0.070	I	0	0.62
36.583	0.00	0.18	0.069	I	0	0.61
36.667	0.00	0.18	0.067	I	0	0.61
36.750	0.00	0.18	0.066	I	0	0.60
36.833	0.00	0.18	0.065	I	0	0.59
36.917	0.00	0.18	0.064	I	0	0.59
37.000	0.00	0.18	0.062	I	0	0.58
37.083	0.00	0.18	0.061	I	0	0.58
37.167	0.00	0.18	0.060	I	0	0.57
37.250	0.00	0.18	0.059	I	0	0.56
37.333	0.00	0.18	0.057	I	0	0.56
37.417	0.00	0.18	0.056	I	0	0.55
37.500	0.00	0.17	0.055	I	0	0.55
37.583	0.00	0.17	0.054	I	0	0.54
37.667	0.00	0.17	0.053	I	0	0.53
37.750	0.00	0.17	0.051	I	0	0.53
37.833	0.00	0.17	0.050	I	0	0.52
37.917	0.00	0.17	0.049	I	0	0.52
38.000	0.00	0.17	0.048	I	0	0.51
38.083	0.00	0.17	0.047	I	0	0.50
38.167	0.00	0.17	0.046	I	0	0.50
38.250	0.00	0.16	0.045	I	0	0.49
38.333	0.00	0.16	0.043	I	0	0.48
38.417	0.00	0.16	0.042	I	0	0.47
38.500	0.00	0.16	0.041	I	0	0.47
38.583	0.00	0.16	0.040	I	0	0.46
38.667	0.00	0.16	0.039	I	0	0.45
38.750	0.00	0.16	0.038	I	0	0.44
38.833	0.00	0.15	0.037	I	0	0.43
38.917	0.00	0.15	0.036	I	0	0.43
39.000	0.00	0.15	0.035	I	0	0.42
39.083	0.00	0.15	0.034	I	0	0.41
39.167	0.00	0.15	0.033	I	0	0.40
39.250	0.00	0.15	0.032	I	0	0.40
39.333	0.00	0.15	0.031	I	0	0.39
39.417	0.00	0.14	0.030	I	0	0.38
39.500	0.00	0.14	0.029	I	0	0.38
39.583	0.00	0.14	0.028	I	0	0.37
39.667	0.00	0.14	0.027	I	0	0.36
39.750	0.00	0.14	0.026	I	0	0.36
39.833	0.00	0.14	0.025	I	0	0.35
39.917	0.00	0.14	0.024	I	0	0.34
40.000	0.00	0.13	0.023	I	0	0.34
40.083	0.00	0.13	0.022	I	0	0.33
40.167	0.00	0.13	0.021	I	0	0.32
40.250	0.00	0.13	0.020	I	0	0.32
40.333	0.00	0.13	0.019	I	0	0.31
40.417	0.00	0.13	0.018	I	0	0.30
40.500	0.00	0.13	0.018	I	0	0.30
40.583	0.00	0.13	0.017	I	0	0.29
40.667	0.00	0.12	0.016	I	0	0.28
40.750	0.00	0.12	0.015	I	0	0.28
40.833	0.00	0.12	0.014	I	0	0.27
40.917	0.00	0.12	0.013	I	0	0.27
41.000	0.00	0.12	0.012	I	0	0.26
41.083	0.00	0.12	0.012	I	0	0.25
41.167	0.00	0.12	0.011	I	0	0.25

41. 250	0. 00	0. 11	0. 010	I 0	0. 23
41. 333	0. 00	0. 10	0. 009	I 0	0. 21
41. 417	0. 00	0. 09	0. 009	I 0	0. 20
41. 500	0. 00	0. 09	0. 008	I 0	0. 18
41. 583	0. 00	0. 08	0. 007	IO	0. 17
41. 667	0. 00	0. 07	0. 007	IO	0. 16
41. 750	0. 00	0. 07	0. 006	IO	0. 15
41. 833	0. 00	0. 06	0. 006	IO	0. 14
41. 917	0. 00	0. 06	0. 006	IO	0. 13
42. 000	0. 00	0. 06	0. 005	IO	0. 12
42. 083	0. 00	0. 05	0. 005	IO	0. 11
42. 167	0. 00	0. 05	0. 004	IO	0. 10
42. 250	0. 00	0. 04	0. 004	IO	0. 09
42. 333	0. 00	0. 04	0. 004	0	0. 09
42. 417	0. 00	0. 04	0. 004	0	0. 08
42. 500	0. 00	0. 04	0. 003	0	0. 08
42. 583	0. 00	0. 03	0. 003	0	0. 07
42. 667	0. 00	0. 03	0. 003	0	0. 06
42. 750	0. 00	0. 03	0. 003	0	0. 06
42. 833	0. 00	0. 03	0. 002	0	0. 06
42. 917	0. 00	0. 02	0. 002	0	0. 05
43. 000	0. 00	0. 02	0. 002	0	0. 05
43. 083	0. 00	0. 02	0. 002	0	0. 04
43. 167	0. 00	0. 02	0. 002	0	0. 04
43. 250	0. 00	0. 02	0. 002	0	0. 04
43. 333	0. 00	0. 02	0. 002	0	0. 04
43. 417	0. 00	0. 02	0. 001	0	0. 03
43. 500	0. 00	0. 01	0. 001	0	0. 03
43. 583	0. 00	0. 01	0. 001	0	0. 03
43. 667	0. 00	0. 01	0. 001	0	0. 03
43. 750	0. 00	0. 01	0. 001	0	0. 02
43. 833	0. 00	0. 01	0. 001	0	0. 02
43. 917	0. 00	0. 01	0. 001	0	0. 02
44. 000	0. 00	0. 01	0. 001	0	0. 02
44. 083	0. 00	0. 01	0. 001	0	0. 02
44. 167	0. 00	0. 01	0. 001	0	0. 02
44. 250	0. 00	0. 01	0. 001	0	0. 02
44. 333	0. 00	0. 01	0. 001	0	0. 01
44. 417	0. 00	0. 01	0. 001	0	0. 01
44. 500	0. 00	0. 01	0. 001	0	0. 01
44. 583	0. 00	0. 01	0. 001	0	0. 01
44. 667	0. 00	0. 01	0. 000	0	0. 01
44. 750	0. 00	0. 00	0. 000	0	0. 01
44. 833	0. 00	0. 00	0. 000	0	0. 01
44. 917	0. 00	0. 00	0. 000	0	0. 01
45. 000	0. 00	0. 00	0. 000	0	0. 01
45. 083	0. 00	0. 00	0. 000	0	0. 01
45. 167	0. 00	0. 00	0. 000	0	0. 01
45. 250	0. 00	0. 00	0. 000	0	0. 01
45. 333	0. 00	0. 00	0. 000	0	0. 01
45. 417	0. 00	0. 00	0. 000	0	0. 01
45. 500	0. 00	0. 00	0. 000	0	0. 01
45. 583	0. 00	0. 00	0. 000	0	0. 00
45. 667	0. 00	0. 00	0. 000	0	0. 00
45. 750	0. 00	0. 00	0. 000	0	0. 00
45. 833	0. 00	0. 00	0. 000	0	0. 00
45. 917	0. 00	0. 00	0. 000	0	0. 00
46. 000	0. 00	0. 00	0. 000	0	0. 00
46. 083	0. 00	0. 00	0. 000	0	0. 00
46. 167	0. 00	0. 00	0. 000	0	0. 00
46. 250	0. 00	0. 00	0. 000	0	0. 00
46. 333	0. 00	0. 00	0. 000	0	0. 00
46. 417	0. 00	0. 00	0. 000	0	0. 00
46. 500	0. 00	0. 00	0. 000	0	0. 00
46. 583	0. 00	0. 00	0. 000	0	0. 00

*****HYDROGRAPH DATA*****

Number of intervals = 559
Time interval = 5. 0 (Min.)
Maximum/Peak flow rate = 0. 371 (CFS)
Total volume = 0. 829 (Ac. Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac. Ft)	0.000	0.000	0.000	0.000	0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/06/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 140-161
 MITIGATION ANALYSIS
 6-HOUR - 2-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PD0262.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 73
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 3.932 (CFS)
 Total volume = 0.498 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 73
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.011	0.118	0.011	0.011
0.500	0.046	0.167	0.045	0.047
0.600	0.066	0.183	0.065	0.067
1.000	0.153	0.236	0.152	0.154
1.500	0.263	0.289	0.262	0.264
1.810	0.330	0.318	0.329	0.331
2.000	0.373	0.334	0.372	0.374
2.500	0.483	0.374	0.482	0.484
3.000	0.590	0.409	0.589	0.591
3.500	0.694	0.442	0.692	0.696
3.900	0.772	0.467	0.770	0.774
4.000	0.793	0.535	0.791	0.795
4.500	0.882	2.336	0.874	0.890
4.900	0.933	4.305	0.918	0.948
5.000	0.947	4.495	0.932	0.962

5. 500 0. 973 5. 338 0. 955 0. 991
 5. 600 0. 979 5. 490 0. 960 0. 998

 Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; '0' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	. 0	1. 0	1. 97	2. 95	3. 93	Depth (Ft.)
0. 083	0. 27	0. 01	0. 001	0 I					0. 02
0. 167	0. 42	0. 03	0. 003	0 I					0. 07
0. 250	0. 43	0. 06	0. 006	0 I					0. 13
0. 333	0. 43	0. 09	0. 008	0 I					0. 19
0. 417	0. 43	0. 11	0. 010	0 I					0. 24
0. 500	0. 49	0. 12	0. 013	0 I					0. 26
0. 583	0. 51	0. 12	0. 015	0 I					0. 28
0. 667	0. 51	0. 13	0. 018	0 I					0. 30
0. 750	0. 51	0. 13	0. 021	0 I					0. 32
0. 833	0. 51	0. 14	0. 023	0 I					0. 34
0. 917	0. 51	0. 14	0. 026	0 I					0. 36
1. 000	0. 56	0. 14	0. 028	0 I					0. 37
1. 083	0. 58	0. 15	0. 031	0 I					0. 40
1. 167	0. 58	0. 15	0. 034	0 I					0. 42
1. 250	0. 58	0. 15	0. 037	0 I					0. 44
1. 333	0. 58	0. 16	0. 040	0 I					0. 46
1. 417	0. 58	0. 16	0. 043	0 I					0. 48
1. 500	0. 58	0. 17	0. 046	0 I					0. 50
1. 583	0. 58	0. 17	0. 049	0 I					0. 51
1. 667	0. 58	0. 17	0. 052	0 I					0. 53
1. 750	0. 58	0. 17	0. 054	0 I					0. 54
1. 833	0. 58	0. 18	0. 057	0 I					0. 56
1. 917	0. 58	0. 18	0. 060	0 I					0. 57
2. 000	0. 63	0. 18	0. 063	0 I					0. 58
2. 083	0. 60	0. 18	0. 066	0 I					0. 60
2. 167	0. 63	0. 18	0. 069	0 I					0. 61
2. 250	0. 65	0. 19	0. 072	0 I					0. 63
2. 333	0. 65	0. 19	0. 075	0 I					0. 64
2. 417	0. 65	0. 19	0. 078	0 I					0. 66
2. 500	0. 65	0. 19	0. 081	0 I					0. 67
2. 583	0. 65	0. 19	0. 085	0 I					0. 69
2. 667	0. 65	0. 20	0. 088	0 I					0. 70
2. 750	0. 70	0. 20	0. 091	0 I					0. 71
2. 833	0. 72	0. 20	0. 095	0 I					0. 73
2. 917	0. 72	0. 20	0. 098	0 I					0. 75
3. 000	0. 72	0. 20	0. 102	0 I					0. 76
3. 083	0. 72	0. 21	0. 105	0 I					0. 78
3. 167	0. 78	0. 21	0. 109	0 I	I				0. 80
3. 250	0. 79	0. 21	0. 113	0 I	I				0. 82
3. 333	0. 79	0. 21	0. 117	0 I	I				0. 83
3. 417	0. 85	0. 22	0. 121	0 I	I				0. 85
3. 500	0. 92	0. 22	0. 126	0 I	I				0. 87
3. 583	0. 99	0. 22	0. 131	0 I	I				0. 90
3. 667	1. 01	0. 23	0. 136	0 I	I				0. 92
3. 750	1. 07	0. 23	0. 142	0 I	I				0. 95
3. 833	1. 08	0. 23	0. 148	0 I	I				0. 97
3. 917	1. 14	0. 24	0. 154	0 I	I				1. 00
4. 000	1. 16	0. 24	0. 160	0 I	I				1. 03
4. 083	1. 21	0. 24	0. 166	0 I	I				1. 06
4. 167	1. 28	0. 25	0. 173	0 I	I				1. 09
4. 250	1. 35	0. 25	0. 181	0 I	I				1. 13
4. 333	1. 43	0. 25	0. 188	0 I	I				1. 16
4. 417	1. 50	0. 26	0. 197	0 I	I				1. 20
4. 500	1. 52	0. 26	0. 205	0 I	I				1. 24
4. 583	1. 57	0. 27	0. 214	0 I	I				1. 28
4. 667	1. 64	0. 27	0. 223	0 I	I				1. 32
4. 750	1. 72	0. 27	0. 233	0 I	I				1. 36
4. 833	1. 73	0. 28	0. 243	0 I	I				1. 41
4. 917	1. 79	0. 28	0. 253	0 I	I				1. 46
5. 000	1. 86	0. 29	0. 264	0 I	I				1. 50
5. 083	2. 15	0. 29	0. 276	0 I	I				1. 56
5. 167	2. 51	0. 30	0. 290	0 I	I				1. 62

5. 250	2. 76	0. 31	0. 306	0					1. 70
5. 333	2. 98	0. 32	0. 323	0			I		1. 78
5. 417	3. 30	0. 32	0. 343	0			I		1. 87
5. 500	3. 93	0. 33	0. 365	0				I	1. 97
5. 583	2. 07	0. 34	0. 384	0		I			2. 05
5. 667	0. 83	0. 34	0. 392	0	I				2. 08
5. 750	0. 49	0. 34	0. 394	0I					2. 09
5. 833	0. 38	0. 34	0. 394	0I					2. 10
5. 917	0. 25	0. 34	0. 394	0					2. 10
6. 000	0. 16	0. 34	0. 393	I0					2. 09
6. 083	0. 04	0. 34	0. 392	I 0					2. 08
6. 167	0. 00	0. 34	0. 389	I 0					2. 07
6. 250	0. 00	0. 34	0. 387	I 0					2. 06
6. 333	0. 00	0. 34	0. 385	I 0					2. 05
6. 417	0. 00	0. 34	0. 382	I 0					2. 04
6. 500	0. 00	0. 34	0. 380	I 0					2. 03
6. 583	0. 00	0. 34	0. 378	I 0					2. 02
6. 667	0. 00	0. 33	0. 375	I 0					2. 01
6. 750	0. 00	0. 33	0. 373	I 0					2. 00
6. 833	0. 00	0. 33	0. 371	I 0					1. 99
6. 917	0. 00	0. 33	0. 369	I 0					1. 98
7. 000	0. 00	0. 33	0. 366	I 0					1. 97
7. 083	0. 00	0. 33	0. 364	I 0					1. 96
7. 167	0. 00	0. 33	0. 362	I 0					1. 95
7. 250	0. 00	0. 33	0. 359	I 0					1. 94
7. 333	0. 00	0. 33	0. 357	I 0					1. 93
7. 417	0. 00	0. 33	0. 355	I 0					1. 92
7. 500	0. 00	0. 33	0. 353	I 0					1. 91
7. 583	0. 00	0. 33	0. 350	I 0					1. 90
7. 667	0. 00	0. 32	0. 348	I 0					1. 89
7. 750	0. 00	0. 32	0. 346	I 0					1. 88
7. 833	0. 00	0. 32	0. 344	I 0					1. 87
7. 917	0. 00	0. 32	0. 342	I 0					1. 86
8. 000	0. 00	0. 32	0. 339	I 0					1. 85
8. 083	0. 00	0. 32	0. 337	I 0					1. 84
8. 167	0. 00	0. 32	0. 335	I 0					1. 83
8. 250	0. 00	0. 32	0. 333	I 0					1. 82
8. 333	0. 00	0. 32	0. 330	I 0					1. 81
8. 417	0. 00	0. 32	0. 328	I 0					1. 80
8. 500	0. 00	0. 32	0. 326	I 0					1. 79
8. 583	0. 00	0. 32	0. 324	I 0					1. 78
8. 667	0. 00	0. 31	0. 322	I 0					1. 77
8. 750	0. 00	0. 31	0. 320	I 0					1. 76
8. 833	0. 00	0. 31	0. 317	I 0					1. 75
8. 917	0. 00	0. 31	0. 315	I 0					1. 74
9. 000	0. 00	0. 31	0. 313	I 0					1. 73
9. 083	0. 00	0. 31	0. 311	I 0					1. 72
9. 167	0. 00	0. 31	0. 309	I 0					1. 71
9. 250	0. 00	0. 31	0. 307	I 0					1. 70
9. 333	0. 00	0. 31	0. 305	I 0					1. 69
9. 417	0. 00	0. 31	0. 303	I 0					1. 68
9. 500	0. 00	0. 31	0. 300	I 0					1. 67
9. 583	0. 00	0. 30	0. 298	I 0					1. 66
9. 667	0. 00	0. 30	0. 296	I 0					1. 65
9. 750	0. 00	0. 30	0. 294	I 0					1. 64
9. 833	0. 00	0. 30	0. 292	I 0					1. 63
9. 917	0. 00	0. 30	0. 290	I 0					1. 62
10. 000	0. 00	0. 30	0. 288	I 0					1. 62
10. 083	0. 00	0. 30	0. 286	I 0					1. 61
10. 167	0. 00	0. 30	0. 284	I 0					1. 60
10. 250	0. 00	0. 30	0. 282	I 0					1. 59
10. 333	0. 00	0. 30	0. 280	I 0					1. 58
10. 417	0. 00	0. 30	0. 278	I 0					1. 57
10. 500	0. 00	0. 29	0. 276	I 0					1. 56
10. 583	0. 00	0. 29	0. 274	I 0					1. 55
10. 667	0. 00	0. 29	0. 272	I 0					1. 54
10. 750	0. 00	0. 29	0. 270	I 0					1. 53
10. 833	0. 00	0. 29	0. 268	I 0					1. 52
10. 917	0. 00	0. 29	0. 266	I 0					1. 51
11. 000	0. 00	0. 29	0. 264	I 0					1. 50
11. 083	0. 00	0. 29	0. 262	I 0					1. 49
11. 167	0. 00	0. 29	0. 260	I 0					1. 48

11. 250	0. 00	0. 29	0. 258	I 0	1. 48
11. 333	0. 00	0. 29	0. 256	I 0	1. 47
11. 417	0. 00	0. 28	0. 254	I 0	1. 46
11. 500	0. 00	0. 28	0. 252	I 0	1. 45
11. 583	0. 00	0. 28	0. 250	I 0	1. 44
11. 667	0. 00	0. 28	0. 248	I 0	1. 43
11. 750	0. 00	0. 28	0. 246	I 0	1. 42
11. 833	0. 00	0. 28	0. 244	I 0	1. 41
11. 917	0. 00	0. 28	0. 242	I 0	1. 40
12. 000	0. 00	0. 28	0. 240	I 0	1. 40
12. 083	0. 00	0. 28	0. 238	I 0	1. 39
12. 167	0. 00	0. 28	0. 236	I 0	1. 38
12. 250	0. 00	0. 28	0. 234	I 0	1. 37
12. 333	0. 00	0. 27	0. 233	I 0	1. 36
12. 417	0. 00	0. 27	0. 231	I 0	1. 35
12. 500	0. 00	0. 27	0. 229	I 0	1. 34
12. 583	0. 00	0. 27	0. 227	I 0	1. 34
12. 667	0. 00	0. 27	0. 225	I 0	1. 33
12. 750	0. 00	0. 27	0. 223	I 0	1. 32
12. 833	0. 00	0. 27	0. 221	I 0	1. 31
12. 917	0. 00	0. 27	0. 219	I 0	1. 30
13. 000	0. 00	0. 27	0. 218	I 0	1. 29
13. 083	0. 00	0. 27	0. 216	I 0	1. 29
13. 167	0. 00	0. 27	0. 214	I 0	1. 28
13. 250	0. 00	0. 26	0. 212	I 0	1. 27
13. 333	0. 00	0. 26	0. 210	I 0	1. 26
13. 417	0. 00	0. 26	0. 209	I 0	1. 25
13. 500	0. 00	0. 26	0. 207	I 0	1. 24
13. 583	0. 00	0. 26	0. 205	I 0	1. 24
13. 667	0. 00	0. 26	0. 203	I 0	1. 23
13. 750	0. 00	0. 26	0. 201	I 0	1. 22
13. 833	0. 00	0. 26	0. 200	I 0	1. 21
13. 917	0. 00	0. 26	0. 198	I 0	1. 20
14. 000	0. 00	0. 26	0. 196	I 0	1. 20
14. 083	0. 00	0. 26	0. 194	I 0	1. 19
14. 167	0. 00	0. 26	0. 192	I 0	1. 18
14. 250	0. 00	0. 25	0. 191	I 0	1. 17
14. 333	0. 00	0. 25	0. 189	I 0	1. 16
14. 417	0. 00	0. 25	0. 187	I 0	1. 16
14. 500	0. 00	0. 25	0. 185	I 0	1. 15
14. 583	0. 00	0. 25	0. 184	I 0	1. 14
14. 667	0. 00	0. 25	0. 182	I 0	1. 13
14. 750	0. 00	0. 25	0. 180	I 0	1. 12
14. 833	0. 00	0. 25	0. 179	I 0	1. 12
14. 917	0. 00	0. 25	0. 177	I 0	1. 11
15. 000	0. 00	0. 25	0. 175	I 0	1. 10
15. 083	0. 00	0. 25	0. 173	I 0	1. 09
15. 167	0. 00	0. 25	0. 172	I 0	1. 09
15. 250	0. 00	0. 24	0. 170	I 0	1. 08
15. 333	0. 00	0. 24	0. 168	I 0	1. 07
15. 417	0. 00	0. 24	0. 167	I 0	1. 06
15. 500	0. 00	0. 24	0. 165	I 0	1. 05
15. 583	0. 00	0. 24	0. 163	I 0	1. 05
15. 667	0. 00	0. 24	0. 162	I 0	1. 04
15. 750	0. 00	0. 24	0. 160	I 0	1. 03
15. 833	0. 00	0. 24	0. 158	I 0	1. 02
15. 917	0. 00	0. 24	0. 157	I 0	1. 02
16. 000	0. 00	0. 24	0. 155	I 0	1. 01
16. 083	0. 00	0. 24	0. 154	I 0	1. 00
16. 167	0. 00	0. 24	0. 152	I 0	1. 00
16. 250	0. 00	0. 23	0. 150	I 0	0. 99
16. 333	0. 00	0. 23	0. 149	I 0	0. 98
16. 417	0. 00	0. 23	0. 147	I 0	0. 97
16. 500	0. 00	0. 23	0. 146	I 0	0. 97
16. 583	0. 00	0. 23	0. 144	I 0	0. 96
16. 667	0. 00	0. 23	0. 142	I 0	0. 95
16. 750	0. 00	0. 23	0. 141	I 0	0. 94
16. 833	0. 00	0. 23	0. 139	I 0	0. 94
16. 917	0. 00	0. 23	0. 138	I 0	0. 93
17. 000	0. 00	0. 23	0. 136	I 0	0. 92
17. 083	0. 00	0. 22	0. 135	I 0	0. 92
17. 167	0. 00	0. 22	0. 133	I 0	0. 91

17. 250	0. 00	0. 22	0. 131	IO	0. 90
17. 333	0. 00	0. 22	0. 130	IO	0. 89
17. 417	0. 00	0. 22	0. 128	IO	0. 89
17. 500	0. 00	0. 22	0. 127	IO	0. 88
17. 583	0. 00	0. 22	0. 125	IO	0. 87
17. 667	0. 00	0. 22	0. 124	IO	0. 87
17. 750	0. 00	0. 22	0. 122	IO	0. 86
17. 833	0. 00	0. 22	0. 121	IO	0. 85
17. 917	0. 00	0. 22	0. 119	IO	0. 85
18. 000	0. 00	0. 21	0. 118	IO	0. 84
18. 083	0. 00	0. 21	0. 116	IO	0. 83
18. 167	0. 00	0. 21	0. 115	IO	0. 83
18. 250	0. 00	0. 21	0. 113	IO	0. 82
18. 333	0. 00	0. 21	0. 112	IO	0. 81
18. 417	0. 00	0. 21	0. 111	IO	0. 80
18. 500	0. 00	0. 21	0. 109	IO	0. 80
18. 583	0. 00	0. 21	0. 108	IO	0. 79
18. 667	0. 00	0. 21	0. 106	IO	0. 79
18. 750	0. 00	0. 21	0. 105	IO	0. 78
18. 833	0. 00	0. 21	0. 103	IO	0. 77
18. 917	0. 00	0. 20	0. 102	IO	0. 77
19. 000	0. 00	0. 20	0. 101	IO	0. 76
19. 083	0. 00	0. 20	0. 099	IO	0. 75
19. 167	0. 00	0. 20	0. 098	IO	0. 75
19. 250	0. 00	0. 20	0. 096	IO	0. 74
19. 333	0. 00	0. 20	0. 095	IO	0. 73
19. 417	0. 00	0. 20	0. 094	IO	0. 73
19. 500	0. 00	0. 20	0. 092	IO	0. 72
19. 583	0. 00	0. 20	0. 091	IO	0. 71
19. 667	0. 00	0. 20	0. 090	IO	0. 71
19. 750	0. 00	0. 20	0. 088	IO	0. 70
19. 833	0. 00	0. 20	0. 087	IO	0. 70
19. 917	0. 00	0. 19	0. 085	IO	0. 69
20. 000	0. 00	0. 19	0. 084	IO	0. 68
20. 083	0. 00	0. 19	0. 083	IO	0. 68
20. 167	0. 00	0. 19	0. 081	IO	0. 67
20. 250	0. 00	0. 19	0. 080	IO	0. 67
20. 333	0. 00	0. 19	0. 079	IO	0. 66
20. 417	0. 00	0. 19	0. 078	IO	0. 65
20. 500	0. 00	0. 19	0. 076	IO	0. 65
20. 583	0. 00	0. 19	0. 075	IO	0. 64
20. 667	0. 00	0. 19	0. 074	IO	0. 64
20. 750	0. 00	0. 19	0. 072	IO	0. 63
20. 833	0. 00	0. 19	0. 071	IO	0. 62
20. 917	0. 00	0. 19	0. 070	IO	0. 62
21. 000	0. 00	0. 18	0. 068	IO	0. 61
21. 083	0. 00	0. 18	0. 067	IO	0. 61
21. 167	0. 00	0. 18	0. 066	IO	0. 60
21. 250	0. 00	0. 18	0. 065	IO	0. 59
21. 333	0. 00	0. 18	0. 063	IO	0. 59
21. 417	0. 00	0. 18	0. 062	IO	0. 58
21. 500	0. 00	0. 18	0. 061	IO	0. 57
21. 583	0. 00	0. 18	0. 060	IO	0. 57
21. 667	0. 00	0. 18	0. 059	IO	0. 56
21. 750	0. 00	0. 18	0. 057	IO	0. 56
21. 833	0. 00	0. 18	0. 056	IO	0. 55
21. 917	0. 00	0. 17	0. 055	IO	0. 54
22. 000	0. 00	0. 17	0. 054	IO	0. 54
22. 083	0. 00	0. 17	0. 053	IO	0. 53
22. 167	0. 00	0. 17	0. 051	IO	0. 53
22. 250	0. 00	0. 17	0. 050	IO	0. 52
22. 333	0. 00	0. 17	0. 049	IO	0. 51
22. 417	0. 00	0. 17	0. 048	IO	0. 51
22. 500	0. 00	0. 17	0. 047	IO	0. 50
22. 583	0. 00	0. 17	0. 046	IO	0. 50
22. 667	0. 00	0. 16	0. 044	IO	0. 49
22. 750	0. 00	0. 16	0. 043	IO	0. 48
22. 833	0. 00	0. 16	0. 042	IO	0. 47
22. 917	0. 00	0. 16	0. 041	IO	0. 46
23. 000	0. 00	0. 16	0. 040	IO	0. 46
23. 083	0. 00	0. 16	0. 039	IO	0. 45
23. 167	0. 00	0. 16	0. 038	IO	0. 44

23. 250	0. 00	0. 15	0. 037	IO	0. 43
23. 333	0. 00	0. 15	0. 036	IO	0. 43
23. 417	0. 00	0. 15	0. 035	IO	0. 42
23. 500	0. 00	0. 15	0. 034	IO	0. 41
23. 583	0. 00	0. 15	0. 033	IO	0. 40
23. 667	0. 00	0. 15	0. 032	IO	0. 40
23. 750	0. 00	0. 15	0. 031	IO	0. 39
23. 833	0. 00	0. 14	0. 030	IO	0. 38
23. 917	0. 00	0. 14	0. 029	IO	0. 38
24. 000	0. 00	0. 14	0. 028	IO	0. 37
24. 083	0. 00	0. 14	0. 027	IO	0. 36
24. 167	0. 00	0. 14	0. 026	IO	0. 35
24. 250	0. 00	0. 14	0. 025	IO	0. 35
24. 333	0. 00	0. 14	0. 024	IO	0. 34
24. 417	0. 00	0. 13	0. 023	IO	0. 33
24. 500	0. 00	0. 13	0. 022	IO	0. 33
24. 583	0. 00	0. 13	0. 021	IO	0. 32
24. 667	0. 00	0. 13	0. 020	IO	0. 31
24. 750	0. 00	0. 13	0. 019	IO	0. 31
24. 833	0. 00	0. 13	0. 018	IO	0. 30
24. 917	0. 00	0. 13	0. 017	IO	0. 30
25. 000	0. 00	0. 13	0. 017	IO	0. 29
25. 083	0. 00	0. 12	0. 016	IO	0. 28
25. 167	0. 00	0. 12	0. 015	IO	0. 28
25. 250	0. 00	0. 12	0. 014	0	0. 27
25. 333	0. 00	0. 12	0. 013	0	0. 27
25. 417	0. 00	0. 12	0. 012	0	0. 26
25. 500	0. 00	0. 12	0. 011	0	0. 25
25. 583	0. 00	0. 11	0. 011	0	0. 24
25. 667	0. 00	0. 11	0. 010	0	0. 23
25. 750	0. 00	0. 10	0. 009	0	0. 21
25. 833	0. 00	0. 09	0. 009	0	0. 19
25. 917	0. 00	0. 09	0. 008	0	0. 18
26. 000	0. 00	0. 08	0. 007	0	0. 17
26. 083	0. 00	0. 07	0. 007	0	0. 16
26. 167	0. 00	0. 07	0. 006	0	0. 14
26. 250	0. 00	0. 06	0. 006	0	0. 13
26. 333	0. 00	0. 06	0. 005	0	0. 12
26. 417	0. 00	0. 05	0. 005	0	0. 12
26. 500	0. 00	0. 05	0. 005	0	0. 11
26. 583	0. 00	0. 05	0. 004	0	0. 10
26. 667	0. 00	0. 04	0. 004	0	0. 09
26. 750	0. 00	0. 04	0. 004	0	0. 09
26. 833	0. 00	0. 04	0. 004	0	0. 08
26. 917	0. 00	0. 04	0. 003	0	0. 07
27. 000	0. 00	0. 03	0. 003	0	0. 07
27. 083	0. 00	0. 03	0. 003	0	0. 06
27. 167	0. 00	0. 03	0. 003	0	0. 06
27. 250	0. 00	0. 03	0. 002	0	0. 06
27. 333	0. 00	0. 02	0. 002	0	0. 05
27. 417	0. 00	0. 02	0. 002	0	0. 05
27. 500	0. 00	0. 02	0. 002	0	0. 04
27. 583	0. 00	0. 02	0. 002	0	0. 04
27. 667	0. 00	0. 02	0. 002	0	0. 04
27. 750	0. 00	0. 02	0. 002	0	0. 04
27. 833	0. 00	0. 02	0. 001	0	0. 03
27. 917	0. 00	0. 01	0. 001	0	0. 03
28. 000	0. 00	0. 01	0. 001	0	0. 03
28. 083	0. 00	0. 01	0. 001	0	0. 03
28. 167	0. 00	0. 01	0. 001	0	0. 02
28. 250	0. 00	0. 01	0. 001	0	0. 02
28. 333	0. 00	0. 01	0. 001	0	0. 02
28. 417	0. 00	0. 01	0. 001	0	0. 02
28. 500	0. 00	0. 01	0. 001	0	0. 02
28. 583	0. 00	0. 01	0. 001	0	0. 02
28. 667	0. 00	0. 01	0. 001	0	0. 02
28. 750	0. 00	0. 01	0. 001	0	0. 01
28. 833	0. 00	0. 01	0. 001	0	0. 01
28. 917	0. 00	0. 01	0. 001	0	0. 01
29. 000	0. 00	0. 01	0. 001	0	0. 01
29. 083	0. 00	0. 01	0. 000	0	0. 01
29. 167	0. 00	0. 00	0. 000	0	0. 01

29.250	0.00	0.00	0.000	0					0.01
29.333	0.00	0.00	0.000	0					0.01
29.417	0.00	0.00	0.000	0					0.01
29.500	0.00	0.00	0.000	0					0.01
29.583	0.00	0.00	0.000	0					0.01
29.667	0.00	0.00	0.000	0					0.01
29.750	0.00	0.00	0.000	0					0.01
29.833	0.00	0.00	0.000	0					0.01
29.917	0.00	0.00	0.000	0					0.01
30.000	0.00	0.00	0.000	0					0.00
30.083	0.00	0.00	0.000	0					0.00
30.167	0.00	0.00	0.000	0					0.00
30.250	0.00	0.00	0.000	0					0.00
30.333	0.00	0.00	0.000	0					0.00
30.417	0.00	0.00	0.000	0					0.00
30.500	0.00	0.00	0.000	0					0.00
30.583	0.00	0.00	0.000	0					0.00
30.667	0.00	0.00	0.000	0					0.00
30.750	0.00	0.00	0.000	0					0.00
30.833	0.00	0.00	0.000	0					0.00
30.917	0.00	0.00	0.000	0					0.00
31.000	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 372
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.342 (CFS)
Total volume = 0.498 (Ac. Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac. Ft)	0.000	0.000	0.000	0.000	0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/06/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 140-161
 MITIGATION ANALYSIS
 3-HOUR - 2-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PD0232.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 37
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 4.448 (CFS)
 Total volume = 0.375 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 37
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.011	0.118	0.011	0.011
0.500	0.046	0.167	0.045	0.047
0.600	0.066	0.183	0.065	0.067
1.000	0.153	0.236	0.152	0.154
1.500	0.263	0.289	0.262	0.264
1.810	0.330	0.318	0.329	0.331
2.000	0.373	0.334	0.372	0.374
2.500	0.483	0.374	0.482	0.484
3.000	0.590	0.409	0.589	0.591
3.500	0.694	0.442	0.692	0.696
3.900	0.772	0.467	0.770	0.774
4.000	0.793	0.535	0.791	0.795
4.500	0.882	2.336	0.874	0.890
4.900	0.933	4.305	0.918	0.948
5.000	0.947	4.495	0.932	0.962

5. 500 0. 973 5. 338 0. 955 0. 991
 5. 600 0. 979 5. 490 0. 960 0. 998

 Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	. 0	1. 1	2. 22	3. 34	4. 45	Depth (Ft.)
0. 083	0. 53	0. 02	0. 002	0	I				0. 04
0. 167	0. 70	0. 06	0. 006	0	I				0. 13
0. 250	0. 62	0. 10	0. 010	0	I				0. 22
0. 333	0. 76	0. 12	0. 014	0	I				0. 27
0. 417	0. 81	0. 13	0. 018	0	I				0. 30
0. 500	0. 93	0. 14	0. 023	0	I				0. 34
0. 583	0. 85	0. 14	0. 029	0	I				0. 38
0. 667	0. 93	0. 15	0. 034	0	I				0. 41
0. 750	0. 98	0. 16	0. 039	0	I				0. 45
0. 833	0. 85	0. 16	0. 044	0	I				0. 49
0. 917	0. 85	0. 17	0. 049	0	I				0. 52
1. 000	0. 95	0. 17	0. 054	0	I				0. 54
1. 083	1. 14	0. 18	0. 060	0	I				0. 57
1. 167	1. 19	0. 18	0. 067	0	I				0. 60
1. 250	1. 19	0. 19	0. 074	0	I				0. 64
1. 333	1. 11	0. 19	0. 080	0	I				0. 67
1. 417	1. 33	0. 20	0. 088	0	I				0. 70
1. 500	1. 45	0. 20	0. 096	0	I				0. 74
1. 583	1. 34	0. 21	0. 104	0	I				0. 77
1. 667	1. 42	0. 21	0. 112	0	I				0. 81
1. 750	1. 71	0. 22	0. 121	0	I	I			0. 85
1. 833	1. 71	0. 22	0. 132	0	I	I			0. 90
1. 917	1. 60	0. 23	0. 141	0	I	I			0. 95
2. 000	1. 61	0. 23	0. 151	0	I	I			0. 99
2. 083	1. 67	0. 24	0. 161	0	I	I			1. 03
2. 167	2. 12	0. 25	0. 172	0	I	I			1. 09
2. 250	2. 60	0. 25	0. 186	0	I	I			1. 15
2. 333	2. 10	0. 26	0. 201	0	I	I			1. 22
2. 417	3. 23	0. 27	0. 217	0	I	I			1. 29
2. 500	3. 92	0. 28	0. 240	0	I	I			1. 40
2. 583	4. 45	0. 29	0. 267	0	I	I			1. 52
2. 667	3. 55	0. 30	0. 293	0	I	I			1. 64
2. 750	1. 62	0. 31	0. 308	0	I	I			1. 71
2. 833	1. 00	0. 31	0. 315	0	I	I			1. 74
2. 917	0. 98	0. 31	0. 320	0	I	I			1. 76
3. 000	0. 49	0. 31	0. 323	0	I	I			1. 78
3. 083	0. 08	0. 31	0. 323	I	O				1. 78
3. 167	0. 00	0. 31	0. 321	I	O				1. 77
3. 250	0. 00	0. 31	0. 319	I	O				1. 76
3. 333	0. 00	0. 31	0. 316	I	O				1. 75
3. 417	0. 00	0. 31	0. 314	I	O				1. 74
3. 500	0. 00	0. 31	0. 312	I	O				1. 73
3. 583	0. 00	0. 31	0. 310	I	O				1. 72
3. 667	0. 00	0. 31	0. 308	I	O				1. 71
3. 750	0. 00	0. 31	0. 306	I	O				1. 70
3. 833	0. 00	0. 31	0. 304	I	O				1. 69
3. 917	0. 00	0. 31	0. 301	I	O				1. 68
4. 000	0. 00	0. 30	0. 299	I	O				1. 67
4. 083	0. 00	0. 30	0. 297	I	O				1. 66
4. 167	0. 00	0. 30	0. 295	I	O				1. 65
4. 250	0. 00	0. 30	0. 293	I	O				1. 64
4. 333	0. 00	0. 30	0. 291	I	O				1. 63
4. 417	0. 00	0. 30	0. 289	I	O				1. 62
4. 500	0. 00	0. 30	0. 287	I	O				1. 61
4. 583	0. 00	0. 30	0. 285	I	O				1. 60
4. 667	0. 00	0. 30	0. 283	I	O				1. 59
4. 750	0. 00	0. 30	0. 281	I	O				1. 58
4. 833	0. 00	0. 30	0. 279	I	O				1. 57
4. 917	0. 00	0. 29	0. 277	I	O				1. 56
5. 000	0. 00	0. 29	0. 275	I	O				1. 55
5. 083	0. 00	0. 29	0. 273	I	O				1. 54
5. 167	0. 00	0. 29	0. 271	I	O				1. 54

5. 250	0. 00	0. 29	0. 269	I 0
5. 333	0. 00	0. 29	0. 267	I 0
5. 417	0. 00	0. 29	0. 265	I 0
5. 500	0. 00	0. 29	0. 263	I 0
5. 583	0. 00	0. 29	0. 261	I 0
5. 667	0. 00	0. 29	0. 259	I 0
5. 750	0. 00	0. 29	0. 257	I 0
5. 833	0. 00	0. 29	0. 255	I 0
5. 917	0. 00	0. 28	0. 253	I 0
6. 000	0. 00	0. 28	0. 251	I 0
6. 083	0. 00	0. 28	0. 249	I 0
6. 167	0. 00	0. 28	0. 247	I 0
6. 250	0. 00	0. 28	0. 245	I 0
6. 333	0. 00	0. 28	0. 243	I 0
6. 417	0. 00	0. 28	0. 241	I 0
6. 500	0. 00	0. 28	0. 239	IO
6. 583	0. 00	0. 28	0. 237	IO
6. 667	0. 00	0. 28	0. 235	IO
6. 750	0. 00	0. 27	0. 233	IO
6. 833	0. 00	0. 27	0. 232	IO
6. 917	0. 00	0. 27	0. 230	IO
7. 000	0. 00	0. 27	0. 228	IO
7. 083	0. 00	0. 27	0. 226	IO
7. 167	0. 00	0. 27	0. 224	IO
7. 250	0. 00	0. 27	0. 222	IO
7. 333	0. 00	0. 27	0. 220	IO
7. 417	0. 00	0. 27	0. 219	IO
7. 500	0. 00	0. 27	0. 217	IO
7. 583	0. 00	0. 27	0. 215	IO
7. 667	0. 00	0. 26	0. 213	IO
7. 750	0. 00	0. 26	0. 211	IO
7. 833	0. 00	0. 26	0. 209	IO
7. 917	0. 00	0. 26	0. 208	IO
8. 000	0. 00	0. 26	0. 206	IO
8. 083	0. 00	0. 26	0. 204	IO
8. 167	0. 00	0. 26	0. 202	IO
8. 250	0. 00	0. 26	0. 200	IO
8. 333	0. 00	0. 26	0. 199	IO
8. 417	0. 00	0. 26	0. 197	IO
8. 500	0. 00	0. 26	0. 195	IO
8. 583	0. 00	0. 26	0. 193	IO
8. 667	0. 00	0. 25	0. 192	IO
8. 750	0. 00	0. 25	0. 190	IO
8. 833	0. 00	0. 25	0. 188	IO
8. 917	0. 00	0. 25	0. 186	IO
9. 000	0. 00	0. 25	0. 185	IO
9. 083	0. 00	0. 25	0. 183	IO
9. 167	0. 00	0. 25	0. 181	IO
9. 250	0. 00	0. 25	0. 179	IO
9. 333	0. 00	0. 25	0. 178	IO
9. 417	0. 00	0. 25	0. 176	IO
9. 500	0. 00	0. 25	0. 174	IO
9. 583	0. 00	0. 25	0. 173	IO
9. 667	0. 00	0. 24	0. 171	IO
9. 750	0. 00	0. 24	0. 169	IO
9. 833	0. 00	0. 24	0. 168	IO
9. 917	0. 00	0. 24	0. 166	IO
10. 000	0. 00	0. 24	0. 164	IO
10. 083	0. 00	0. 24	0. 163	IO
10. 167	0. 00	0. 24	0. 161	IO
10. 250	0. 00	0. 24	0. 159	IO
10. 333	0. 00	0. 24	0. 158	IO
10. 417	0. 00	0. 24	0. 156	IO
10. 500	0. 00	0. 24	0. 154	IO
10. 583	0. 00	0. 24	0. 153	IO
10. 667	0. 00	0. 23	0. 151	IO
10. 750	0. 00	0. 23	0. 150	IO
10. 833	0. 00	0. 23	0. 148	IO
10. 917	0. 00	0. 23	0. 146	IO
11. 000	0. 00	0. 23	0. 145	IO
11. 083	0. 00	0. 23	0. 143	IO
11. 167	0. 00	0. 23	0. 142	IO

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11. 250	0. 00	0. 23	0. 140	IO	0. 94
11. 333	0. 00	0. 23	0. 138	IO	0. 93
11. 417	0. 00	0. 23	0. 137	IO	0. 93
11. 500	0. 00	0. 23	0. 135	IO	0. 92
11. 583	0. 00	0. 22	0. 134	IO	0. 91
11. 667	0. 00	0. 22	0. 132	IO	0. 90
11. 750	0. 00	0. 22	0. 131	IO	0. 90
11. 833	0. 00	0. 22	0. 129	IO	0. 89
11. 917	0. 00	0. 22	0. 128	IO	0. 88
12. 000	0. 00	0. 22	0. 126	IO	0. 88
12. 083	0. 00	0. 22	0. 125	IO	0. 87
12. 167	0. 00	0. 22	0. 123	IO	0. 86
12. 250	0. 00	0. 22	0. 122	IO	0. 86
12. 333	0. 00	0. 22	0. 120	IO	0. 85
12. 417	0. 00	0. 22	0. 119	IO	0. 84
12. 500	0. 00	0. 21	0. 117	IO	0. 84
12. 583	0. 00	0. 21	0. 116	IO	0. 83
12. 667	0. 00	0. 21	0. 114	IO	0. 82
12. 750	0. 00	0. 21	0. 113	IO	0. 81
12. 833	0. 00	0. 21	0. 111	IO	0. 81
12. 917	0. 00	0. 21	0. 110	IO	0. 80
13. 000	0. 00	0. 21	0. 108	IO	0. 79
13. 083	0. 00	0. 21	0. 107	IO	0. 79
13. 167	0. 00	0. 21	0. 106	IO	0. 78
13. 250	0. 00	0. 21	0. 104	IO	0. 78
13. 333	0. 00	0. 21	0. 103	IO	0. 77
13. 417	0. 00	0. 20	0. 101	IO	0. 76
13. 500	0. 00	0. 20	0. 100	IO	0. 76
13. 583	0. 00	0. 20	0. 098	IO	0. 75
13. 667	0. 00	0. 20	0. 097	IO	0. 74
13. 750	0. 00	0. 20	0. 096	IO	0. 74
13. 833	0. 00	0. 20	0. 094	IO	0. 73
13. 917	0. 00	0. 20	0. 093	IO	0. 72
14. 000	0. 00	0. 20	0. 092	IO	0. 72
14. 083	0. 00	0. 20	0. 090	IO	0. 71
14. 167	0. 00	0. 20	0. 089	IO	0. 71
14. 250	0. 00	0. 20	0. 088	IO	0. 70
14. 333	0. 00	0. 20	0. 086	IO	0. 69
14. 417	0. 00	0. 19	0. 085	IO	0. 69
14. 500	0. 00	0. 19	0. 083	IO	0. 68
14. 583	0. 00	0. 19	0. 082	IO	0. 67
14. 667	0. 00	0. 19	0. 081	IO	0. 67
14. 750	0. 00	0. 19	0. 079	IO	0. 66
14. 833	0. 00	0. 19	0. 078	IO	0. 66
14. 917	0. 00	0. 19	0. 077	IO	0. 65
15. 000	0. 00	0. 19	0. 076	IO	0. 64
15. 083	0. 00	0. 19	0. 074	IO	0. 64
15. 167	0. 00	0. 19	0. 073	IO	0. 63
15. 250	0. 00	0. 19	0. 072	IO	0. 63
15. 333	0. 00	0. 19	0. 070	IO	0. 62
15. 417	0. 00	0. 18	0. 069	IO	0. 61
15. 500	0. 00	0. 18	0. 068	IO	0. 61
15. 583	0. 00	0. 18	0. 067	IO	0. 60
15. 667	0. 00	0. 18	0. 065	IO	0. 60
15. 750	0. 00	0. 18	0. 064	IO	0. 59
15. 833	0. 00	0. 18	0. 063	IO	0. 58
15. 917	0. 00	0. 18	0. 062	IO	0. 58
16. 000	0. 00	0. 18	0. 060	IO	0. 57
16. 083	0. 00	0. 18	0. 059	IO	0. 57
16. 167	0. 00	0. 18	0. 058	IO	0. 56
16. 250	0. 00	0. 18	0. 057	IO	0. 55
16. 333	0. 00	0. 17	0. 056	IO	0. 55
16. 417	0. 00	0. 17	0. 054	IO	0. 54
16. 500	0. 00	0. 17	0. 053	IO	0. 54
16. 583	0. 00	0. 17	0. 052	IO	0. 53
16. 667	0. 00	0. 17	0. 051	IO	0. 52
16. 750	0. 00	0. 17	0. 050	IO	0. 52
16. 833	0. 00	0. 17	0. 048	IO	0. 51
16. 917	0. 00	0. 17	0. 047	IO	0. 51
17. 000	0. 00	0. 17	0. 046	IO	0. 50
17. 083	0. 00	0. 17	0. 045	IO	0. 49
17. 167	0. 00	0. 16	0. 044	IO	0. 48

17. 250	0. 00	0. 16	0. 043	IO	0. 48
17. 333	0. 00	0. 16	0. 042	IO	0. 47
17. 417	0. 00	0. 16	0. 040	IO	0. 46
17. 500	0. 00	0. 16	0. 039	IO	0. 45
17. 583	0. 00	0. 16	0. 038	IO	0. 45
17. 667	0. 00	0. 15	0. 037	IO	0. 44
17. 750	0. 00	0. 15	0. 036	IO	0. 43
17. 833	0. 00	0. 15	0. 035	IO	0. 42
17. 917	0. 00	0. 15	0. 034	IO	0. 41
18. 000	0. 00	0. 15	0. 033	IO	0. 41
18. 083	0. 00	0. 15	0. 032	IO	0. 40
18. 167	0. 00	0. 15	0. 031	IO	0. 39
18. 250	0. 00	0. 14	0. 030	IO	0. 39
18. 333	0. 00	0. 14	0. 029	IO	0. 38
18. 417	0. 00	0. 14	0. 028	IO	0. 37
18. 500	0. 00	0. 14	0. 027	IO	0. 36
18. 583	0. 00	0. 14	0. 026	IO	0. 36
18. 667	0. 00	0. 14	0. 025	0	0. 35
18. 750	0. 00	0. 14	0. 024	0	0. 34
18. 833	0. 00	0. 14	0. 023	0	0. 34
18. 917	0. 00	0. 13	0. 022	0	0. 33
19. 000	0. 00	0. 13	0. 021	0	0. 32
19. 083	0. 00	0. 13	0. 021	0	0. 32
19. 167	0. 00	0. 13	0. 020	0	0. 31
19. 250	0. 00	0. 13	0. 019	0	0. 31
19. 333	0. 00	0. 13	0. 018	0	0. 30
19. 417	0. 00	0. 13	0. 017	0	0. 29
19. 500	0. 00	0. 13	0. 016	0	0. 29
19. 583	0. 00	0. 12	0. 015	0	0. 28
19. 667	0. 00	0. 12	0. 014	0	0. 27
19. 750	0. 00	0. 12	0. 014	0	0. 27
19. 833	0. 00	0. 12	0. 013	0	0. 26
19. 917	0. 00	0. 12	0. 012	0	0. 26
20. 000	0. 00	0. 12	0. 011	0	0. 25
20. 083	0. 00	0. 11	0. 010	0	0. 23
20. 167	0. 00	0. 10	0. 010	0	0. 22
20. 250	0. 00	0. 10	0. 009	0	0. 20
20. 333	0. 00	0. 09	0. 008	0	0. 19
20. 417	0. 00	0. 08	0. 008	0	0. 17
20. 500	0. 00	0. 08	0. 007	0	0. 16
20. 583	0. 00	0. 07	0. 007	0	0. 15
20. 667	0. 00	0. 07	0. 006	0	0. 14
20. 750	0. 00	0. 06	0. 006	0	0. 13
20. 833	0. 00	0. 06	0. 005	0	0. 12
20. 917	0. 00	0. 05	0. 005	0	0. 11
21. 000	0. 00	0. 05	0. 005	0	0. 10
21. 083	0. 00	0. 05	0. 004	0	0. 10
21. 167	0. 00	0. 04	0. 004	0	0. 09
21. 250	0. 00	0. 04	0. 004	0	0. 08
21. 333	0. 00	0. 04	0. 003	0	0. 08
21. 417	0. 00	0. 03	0. 003	0	0. 07
21. 500	0. 00	0. 03	0. 003	0	0. 07
21. 583	0. 00	0. 03	0. 003	0	0. 06
21. 667	0. 00	0. 03	0. 003	0	0. 06
21. 750	0. 00	0. 03	0. 002	0	0. 05
21. 833	0. 00	0. 02	0. 002	0	0. 05
21. 917	0. 00	0. 02	0. 002	0	0. 05
22. 000	0. 00	0. 02	0. 002	0	0. 04
22. 083	0. 00	0. 02	0. 002	0	0. 04
22. 167	0. 00	0. 02	0. 002	0	0. 04
22. 250	0. 00	0. 02	0. 002	0	0. 03
22. 333	0. 00	0. 02	0. 001	0	0. 03
22. 417	0. 00	0. 01	0. 001	0	0. 03
22. 500	0. 00	0. 01	0. 001	0	0. 03
22. 583	0. 00	0. 01	0. 001	0	0. 03
22. 667	0. 00	0. 01	0. 001	0	0. 02
22. 750	0. 00	0. 01	0. 001	0	0. 02
22. 833	0. 00	0. 01	0. 001	0	0. 02
22. 917	0. 00	0. 01	0. 001	0	0. 02
23. 000	0. 00	0. 01	0. 001	0	0. 02
23. 083	0. 00	0. 01	0. 001	0	0. 02
23. 167	0. 00	0. 01	0. 001	0	0. 02

23.250	0.00	0.01	0.001	0					0.01
23.333	0.00	0.01	0.001	0					0.01
23.417	0.00	0.01	0.001	0					0.01
23.500	0.00	0.01	0.000	0					0.01
23.583	0.00	0.00	0.000	0					0.01
23.667	0.00	0.00	0.000	0					0.01
23.750	0.00	0.00	0.000	0					0.01
23.833	0.00	0.00	0.000	0					0.01
23.917	0.00	0.00	0.000	0					0.01
24.000	0.00	0.00	0.000	0					0.01
24.083	0.00	0.00	0.000	0					0.01
24.167	0.00	0.00	0.000	0					0.01
24.250	0.00	0.00	0.000	0					0.01
24.333	0.00	0.00	0.000	0					0.01
24.417	0.00	0.00	0.000	0					0.01
24.500	0.00	0.00	0.000	0					0.00
24.583	0.00	0.00	0.000	0					0.00
24.667	0.00	0.00	0.000	0					0.00
24.750	0.00	0.00	0.000	0					0.00
24.833	0.00	0.00	0.000	0					0.00
24.917	0.00	0.00	0.000	0					0.00
25.000	0.00	0.00	0.000	0					0.00
25.083	0.00	0.00	0.000	0					0.00
25.167	0.00	0.00	0.000	0					0.00
25.250	0.00	0.00	0.000	0					0.00
25.333	0.00	0.00	0.000	0					0.00
25.417	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****
Number of intervals = 305
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.315 (CFS)
Total volume = 0.375 (Ac. Ft)
Status of hydrographs being held in storage
Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
Peak (CFS) 0.000 0.000 0.000 0.000 0.000
Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/06/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 140-161
 MITIGATION ANALYSIS
 1-HOUR - 2-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PD0212.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 13
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 8.041 (CFS)
 Total volume = 0.232 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 13
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.011	0.118	0.011	0.011
0.500	0.046	0.167	0.045	0.047
0.600	0.066	0.183	0.065	0.067
1.000	0.153	0.236	0.152	0.154
1.500	0.263	0.289	0.262	0.264
1.810	0.330	0.318	0.329	0.331
2.000	0.373	0.334	0.372	0.374
2.500	0.483	0.374	0.482	0.484
3.000	0.590	0.409	0.589	0.591
3.500	0.694	0.442	0.692	0.696
3.900	0.772	0.467	0.770	0.774
4.000	0.793	0.535	0.791	0.795
4.500	0.882	2.336	0.874	0.890
4.900	0.933	4.305	0.918	0.948
5.000	0.947	4.495	0.932	0.962

5. 500 0. 973 5. 338 0. 955 0. 991
 5. 600 0. 979 5. 490 0. 960 0. 998

 Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	0	2. 0	4. 02	6. 03	8. 04	Depth (Ft.)
0. 083	1. 07	0. 04	0. 004	0	I				0. 08
0. 167	1. 46	0. 12	0. 012	0	I				0. 25
0. 250	1. 68	0. 13	0. 022	0	I				0. 33
0. 333	1. 76	0. 15	0. 032	0	I				0. 40
0. 417	1. 83	0. 16	0. 044	0	I				0. 48
0. 500	2. 02	0. 17	0. 056	0	I				0. 55
0. 583	2. 45	0. 19	0. 070	0	I				0. 62
0. 667	2. 86	0. 20	0. 087	0	I				0. 70
0. 750	3. 93	0. 21	0. 109	0		I			0. 80
0. 833	8. 04	0. 23	0. 149	0				I	0. 98
0. 917	4. 29	0. 25	0. 189	0		I			1. 17
1. 000	1. 84	0. 26	0. 209	0	I				1. 25
1. 083	0. 41	0. 27	0. 215	0					1. 28
1. 167	0. 00	0. 27	0. 214	IO					1. 28
1. 250	0. 00	0. 26	0. 212	IO					1. 27
1. 333	0. 00	0. 26	0. 211	IO					1. 26
1. 417	0. 00	0. 26	0. 209	IO					1. 25
1. 500	0. 00	0. 26	0. 207	IO					1. 25
1. 583	0. 00	0. 26	0. 205	IO					1. 24
1. 667	0. 00	0. 26	0. 203	IO					1. 23
1. 750	0. 00	0. 26	0. 202	IO					1. 22
1. 833	0. 00	0. 26	0. 200	IO					1. 21
1. 917	0. 00	0. 26	0. 198	IO					1. 20
2. 000	0. 00	0. 26	0. 196	IO					1. 20
2. 083	0. 00	0. 26	0. 194	IO					1. 19
2. 167	0. 00	0. 26	0. 193	IO					1. 18
2. 250	0. 00	0. 25	0. 191	IO					1. 17
2. 333	0. 00	0. 25	0. 189	IO					1. 16
2. 417	0. 00	0. 25	0. 187	IO					1. 16
2. 500	0. 00	0. 25	0. 186	IO					1. 15
2. 583	0. 00	0. 25	0. 184	0					1. 14
2. 667	0. 00	0. 25	0. 182	0					1. 13
2. 750	0. 00	0. 25	0. 181	0					1. 13
2. 833	0. 00	0. 25	0. 179	0					1. 12
2. 917	0. 00	0. 25	0. 177	0					1. 11
3. 000	0. 00	0. 25	0. 175	0					1. 10
3. 083	0. 00	0. 25	0. 174	0					1. 09
3. 167	0. 00	0. 25	0. 172	0					1. 09
3. 250	0. 00	0. 24	0. 170	0					1. 08
3. 333	0. 00	0. 24	0. 169	0					1. 07
3. 417	0. 00	0. 24	0. 167	0					1. 06
3. 500	0. 00	0. 24	0. 165	0					1. 06
3. 583	0. 00	0. 24	0. 164	0					1. 05
3. 667	0. 00	0. 24	0. 162	0					1. 04
3. 750	0. 00	0. 24	0. 160	0					1. 03
3. 833	0. 00	0. 24	0. 159	0					1. 03
3. 917	0. 00	0. 24	0. 157	0					1. 02
4. 000	0. 00	0. 24	0. 155	0					1. 01
4. 083	0. 00	0. 24	0. 154	0					1. 00
4. 167	0. 00	0. 24	0. 152	0					1. 00
4. 250	0. 00	0. 23	0. 151	0					0. 99
4. 333	0. 00	0. 23	0. 149	0					0. 98
4. 417	0. 00	0. 23	0. 147	0					0. 97
4. 500	0. 00	0. 23	0. 146	0					0. 97
4. 583	0. 00	0. 23	0. 144	0					0. 96
4. 667	0. 00	0. 23	0. 143	0					0. 95
4. 750	0. 00	0. 23	0. 141	0					0. 94
4. 833	0. 00	0. 23	0. 139	0					0. 94
4. 917	0. 00	0. 23	0. 138	0					0. 93
5. 000	0. 00	0. 23	0. 136	0					0. 92
5. 083	0. 00	0. 22	0. 135	0					0. 92
5. 167	0. 00	0. 22	0. 133	0					0. 91

5. 250	0. 00	0. 22	0. 132	0	0. 90
5. 333	0. 00	0. 22	0. 130	0	0. 89
5. 417	0. 00	0. 22	0. 129	0	0. 89
5. 500	0. 00	0. 22	0. 127	0	0. 88
5. 583	0. 00	0. 22	0. 126	0	0. 87
5. 667	0. 00	0. 22	0. 124	0	0. 87
5. 750	0. 00	0. 22	0. 123	0	0. 86
5. 833	0. 00	0. 22	0. 121	0	0. 85
5. 917	0. 00	0. 22	0. 120	0	0. 85
6. 000	0. 00	0. 21	0. 118	0	0. 84
6. 083	0. 00	0. 21	0. 117	0	0. 83
6. 167	0. 00	0. 21	0. 115	0	0. 83
6. 250	0. 00	0. 21	0. 114	0	0. 82
6. 333	0. 00	0. 21	0. 112	0	0. 81
6. 417	0. 00	0. 21	0. 111	0	0. 81
6. 500	0. 00	0. 21	0. 109	0	0. 80
6. 583	0. 00	0. 21	0. 108	0	0. 79
6. 667	0. 00	0. 21	0. 106	0	0. 79
6. 750	0. 00	0. 21	0. 105	0	0. 78
6. 833	0. 00	0. 21	0. 104	0	0. 77
6. 917	0. 00	0. 21	0. 102	0	0. 77
7. 000	0. 00	0. 20	0. 101	0	0. 76
7. 083	0. 00	0. 20	0. 099	0	0. 75
7. 167	0. 00	0. 20	0. 098	0	0. 75
7. 250	0. 00	0. 20	0. 097	0	0. 74
7. 333	0. 00	0. 20	0. 095	0	0. 73
7. 417	0. 00	0. 20	0. 094	0	0. 73
7. 500	0. 00	0. 20	0. 092	0	0. 72
7. 583	0. 00	0. 20	0. 091	0	0. 72
7. 667	0. 00	0. 20	0. 090	0	0. 71
7. 750	0. 00	0. 20	0. 088	0	0. 70
7. 833	0. 00	0. 20	0. 087	0	0. 70
7. 917	0. 00	0. 19	0. 086	0	0. 69
8. 000	0. 00	0. 19	0. 084	0	0. 68
8. 083	0. 00	0. 19	0. 083	0	0. 68
8. 167	0. 00	0. 19	0. 082	0	0. 67
8. 250	0. 00	0. 19	0. 080	0	0. 67
8. 333	0. 00	0. 19	0. 079	0	0. 66
8. 417	0. 00	0. 19	0. 078	0	0. 65
8. 500	0. 00	0. 19	0. 076	0	0. 65
8. 583	0. 00	0. 19	0. 075	0	0. 64
8. 667	0. 00	0. 19	0. 074	0	0. 64
8. 750	0. 00	0. 19	0. 073	0	0. 63
8. 833	0. 00	0. 19	0. 071	0	0. 62
8. 917	0. 00	0. 19	0. 070	0	0. 62
9. 000	0. 00	0. 18	0. 069	0	0. 61
9. 083	0. 00	0. 18	0. 067	0	0. 61
9. 167	0. 00	0. 18	0. 066	0	0. 60
9. 250	0. 00	0. 18	0. 065	0	0. 59
9. 333	0. 00	0. 18	0. 064	0	0. 59
9. 417	0. 00	0. 18	0. 062	0	0. 58
9. 500	0. 00	0. 18	0. 061	0	0. 58
9. 583	0. 00	0. 18	0. 060	0	0. 57
9. 667	0. 00	0. 18	0. 059	0	0. 56
9. 750	0. 00	0. 18	0. 057	0	0. 56
9. 833	0. 00	0. 18	0. 056	0	0. 55
9. 917	0. 00	0. 17	0. 055	0	0. 55
10. 000	0. 00	0. 17	0. 054	0	0. 54
10. 083	0. 00	0. 17	0. 053	0	0. 53
10. 167	0. 00	0. 17	0. 051	0	0. 53
10. 250	0. 00	0. 17	0. 050	0	0. 52
10. 333	0. 00	0. 17	0. 049	0	0. 52
10. 417	0. 00	0. 17	0. 048	0	0. 51
10. 500	0. 00	0. 17	0. 047	0	0. 50
10. 583	0. 00	0. 17	0. 046	0	0. 50
10. 667	0. 00	0. 16	0. 045	0	0. 49
10. 750	0. 00	0. 16	0. 043	0	0. 48
10. 833	0. 00	0. 16	0. 042	0	0. 47
10. 917	0. 00	0. 16	0. 041	0	0. 47
11. 000	0. 00	0. 16	0. 040	0	0. 46
11. 083	0. 00	0. 16	0. 039	0	0. 45
11. 167	0. 00	0. 16	0. 038	0	0. 44

11. 250	0. 00	0. 15	0. 037	0	0. 43
11. 333	0. 00	0. 15	0. 036	0	0. 43
11. 417	0. 00	0. 15	0. 035	0	0. 42
11. 500	0. 00	0. 15	0. 034	0	0. 41
11. 583	0. 00	0. 15	0. 033	0	0. 40
11. 667	0. 00	0. 15	0. 032	0	0. 40
11. 750	0. 00	0. 15	0. 031	0	0. 39
11. 833	0. 00	0. 14	0. 030	0	0. 38
11. 917	0. 00	0. 14	0. 029	0	0. 38
12. 000	0. 00	0. 14	0. 028	0	0. 37
12. 083	0. 00	0. 14	0. 027	0	0. 36
12. 167	0. 00	0. 14	0. 026	0	0. 36
12. 250	0. 00	0. 14	0. 025	0	0. 35
12. 333	0. 00	0. 14	0. 024	0	0. 34
12. 417	0. 00	0. 13	0. 023	0	0. 34
12. 500	0. 00	0. 13	0. 022	0	0. 33
12. 583	0. 00	0. 13	0. 021	0	0. 32
12. 667	0. 00	0. 13	0. 020	0	0. 32
12. 750	0. 00	0. 13	0. 019	0	0. 31
12. 833	0. 00	0. 13	0. 018	0	0. 30
12. 917	0. 00	0. 13	0. 018	0	0. 30
13. 000	0. 00	0. 13	0. 017	0	0. 29
13. 083	0. 00	0. 12	0. 016	0	0. 28
13. 167	0. 00	0. 12	0. 015	0	0. 28
13. 250	0. 00	0. 12	0. 014	0	0. 27
13. 333	0. 00	0. 12	0. 013	0	0. 27
13. 417	0. 00	0. 12	0. 012	0	0. 26
13. 500	0. 00	0. 12	0. 012	0	0. 25
13. 583	0. 00	0. 12	0. 011	0	0. 25
13. 667	0. 00	0. 11	0. 010	0	0. 23
13. 750	0. 00	0. 10	0. 009	0	0. 21
13. 833	0. 00	0. 09	0. 009	0	0. 20
13. 917	0. 00	0. 09	0. 008	0	0. 18
14. 000	0. 00	0. 08	0. 007	0	0. 17
14. 083	0. 00	0. 07	0. 007	0	0. 16
14. 167	0. 00	0. 07	0. 006	0	0. 15
14. 250	0. 00	0. 06	0. 006	0	0. 14
14. 333	0. 00	0. 06	0. 006	0	0. 13
14. 417	0. 00	0. 06	0. 005	0	0. 12
14. 500	0. 00	0. 05	0. 005	0	0. 11
14. 583	0. 00	0. 05	0. 004	0	0. 10
14. 667	0. 00	0. 04	0. 004	0	0. 09
14. 750	0. 00	0. 04	0. 004	0	0. 09
14. 833	0. 00	0. 04	0. 004	0	0. 08
14. 917	0. 00	0. 04	0. 003	0	0. 08
15. 000	0. 00	0. 03	0. 003	0	0. 07
15. 083	0. 00	0. 03	0. 003	0	0. 06
15. 167	0. 00	0. 03	0. 003	0	0. 06
15. 250	0. 00	0. 03	0. 002	0	0. 06
15. 333	0. 00	0. 02	0. 002	0	0. 05
15. 417	0. 00	0. 02	0. 002	0	0. 05
15. 500	0. 00	0. 02	0. 002	0	0. 04
15. 583	0. 00	0. 02	0. 002	0	0. 04
15. 667	0. 00	0. 02	0. 002	0	0. 04
15. 750	0. 00	0. 02	0. 002	0	0. 04
15. 833	0. 00	0. 02	0. 001	0	0. 03
15. 917	0. 00	0. 01	0. 001	0	0. 03
16. 000	0. 00	0. 01	0. 001	0	0. 03
16. 083	0. 00	0. 01	0. 001	0	0. 03
16. 167	0. 00	0. 01	0. 001	0	0. 02
16. 250	0. 00	0. 01	0. 001	0	0. 02
16. 333	0. 00	0. 01	0. 001	0	0. 02
16. 417	0. 00	0. 01	0. 001	0	0. 02
16. 500	0. 00	0. 01	0. 001	0	0. 02
16. 583	0. 00	0. 01	0. 001	0	0. 02
16. 667	0. 00	0. 01	0. 001	0	0. 02
16. 750	0. 00	0. 01	0. 001	0	0. 01
16. 833	0. 00	0. 01	0. 001	0	0. 01
16. 917	0. 00	0. 01	0. 001	0	0. 01
17. 000	0. 00	0. 01	0. 001	0	0. 01
17. 083	0. 00	0. 01	0. 000	0	0. 01
17. 167	0. 00	0. 00	0. 000	0	0. 01

17.250	0.00	0.00	0.000	0					0.01
17.333	0.00	0.00	0.000	0					0.01
17.417	0.00	0.00	0.000	0					0.01
17.500	0.00	0.00	0.000	0					0.01
17.583	0.00	0.00	0.000	0					0.01
17.667	0.00	0.00	0.000	0					0.01
17.750	0.00	0.00	0.000	0					0.01
17.833	0.00	0.00	0.000	0					0.01
17.917	0.00	0.00	0.000	0					0.01
18.000	0.00	0.00	0.000	0					0.00
18.083	0.00	0.00	0.000	0					0.00
18.167	0.00	0.00	0.000	0					0.00
18.250	0.00	0.00	0.000	0					0.00
18.333	0.00	0.00	0.000	0					0.00
18.417	0.00	0.00	0.000	0					0.00
18.500	0.00	0.00	0.000	0					0.00
18.583	0.00	0.00	0.000	0					0.00
18.667	0.00	0.00	0.000	0					0.00
18.750	0.00	0.00	0.000	0					0.00
18.833	0.00	0.00	0.000	0					0.00
18.917	0.00	0.00	0.000	0					0.00
19.000	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 228
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.266 (CFS)
Total volume = 0.231 (Ac. Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac. Ft)	0.000	0.000	0.000	0.000	0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/06/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 140-161
 MITIGATION ANALYSIS
 24-HOUR - 5-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PD05245.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 289
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 2.069 (CFS)
 Total volume = 1.257 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 289
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

 Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.011	0.118	0.011	0.011
0.500	0.046	0.167	0.045	0.047
0.600	0.066	0.183	0.065	0.067
1.000	0.153	0.236	0.152	0.154
1.500	0.263	0.289	0.262	0.264
1.810	0.330	0.318	0.329	0.331
2.000	0.373	0.334	0.372	0.374
2.500	0.483	0.374	0.482	0.484
3.000	0.590	0.409	0.589	0.591
3.500	0.694	0.442	0.692	0.696
3.900	0.772	0.467	0.770	0.774
4.000	0.793	0.535	0.791	0.795
4.500	0.882	2.336	0.874	0.890
4.900	0.933	4.305	0.918	0.948
5.000	0.947	4.495	0.932	0.962

5. 500 0. 973 5. 338 0. 955 0. 991
 5. 600 0. 979 5. 490 0. 960 0. 998

 Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	. 0	0. 5	1. 03	1. 55	2. 07	Depth (Ft.)
0. 083	0. 09	0. 00	0. 000	OI					0. 01
0. 167	0. 12	0. 01	0. 001	OI					0. 02
0. 250	0. 12	0. 02	0. 002	OI					0. 04
0. 333	0. 17	0. 03	0. 003	O I					0. 06
0. 417	0. 18	0. 04	0. 004	O I					0. 08
0. 500	0. 18	0. 05	0. 004	O I					0. 10
0. 583	0. 18	0. 06	0. 005	O I					0. 12
0. 667	0. 18	0. 07	0. 006	OI					0. 14
0. 750	0. 18	0. 07	0. 007	OI					0. 16
0. 833	0. 23	0. 08	0. 008	O I					0. 18
0. 917	0. 24	0. 10	0. 009	O I					0. 20
1. 000	0. 24	0. 11	0. 010	O I					0. 22
1. 083	0. 20	0. 11	0. 011	O I					0. 24
1. 167	0. 18	0. 12	0. 011	OI					0. 25
1. 250	0. 18	0. 12	0. 012	OI					0. 25
1. 333	0. 18	0. 12	0. 012	OI					0. 26
1. 417	0. 18	0. 12	0. 012	OI					0. 26
1. 500	0. 18	0. 12	0. 013	OI					0. 26
1. 583	0. 18	0. 12	0. 013	OI					0. 27
1. 667	0. 18	0. 12	0. 014	OI					0. 27
1. 750	0. 18	0. 12	0. 014	OI					0. 27
1. 833	0. 23	0. 12	0. 015	O I					0. 28
1. 917	0. 24	0. 12	0. 015	O I					0. 28
2. 000	0. 24	0. 13	0. 016	O I					0. 29
2. 083	0. 24	0. 13	0. 017	O I					0. 29
2. 167	0. 24	0. 13	0. 018	O I					0. 30
2. 250	0. 24	0. 13	0. 019	O I					0. 30
2. 333	0. 24	0. 13	0. 019	OI					0. 31
2. 417	0. 24	0. 13	0. 020	OI					0. 32
2. 500	0. 24	0. 13	0. 021	OI					0. 32
2. 583	0. 29	0. 13	0. 022	O I					0. 33
2. 667	0. 30	0. 13	0. 023	O I					0. 34
2. 750	0. 30	0. 14	0. 024	O I					0. 34
2. 833	0. 30	0. 14	0. 025	O I					0. 35
2. 917	0. 30	0. 14	0. 026	O I					0. 36
3. 000	0. 30	0. 14	0. 028	O I					0. 37
3. 083	0. 30	0. 14	0. 029	O I					0. 38
3. 167	0. 30	0. 14	0. 030	O I					0. 38
3. 250	0. 30	0. 15	0. 031	O I					0. 39
3. 333	0. 30	0. 15	0. 032	O I					0. 40
3. 417	0. 30	0. 15	0. 033	O I					0. 41
3. 500	0. 30	0. 15	0. 034	O I					0. 42
3. 583	0. 30	0. 15	0. 035	O I					0. 42
3. 667	0. 30	0. 15	0. 036	O I					0. 43
3. 750	0. 30	0. 15	0. 037	O I					0. 44
3. 833	0. 35	0. 16	0. 038	O I					0. 45
3. 917	0. 37	0. 16	0. 040	O I					0. 46
4. 000	0. 37	0. 16	0. 041	O I					0. 47
4. 083	0. 37	0. 16	0. 043	O I					0. 48
4. 167	0. 37	0. 16	0. 044	O I					0. 49
4. 250	0. 37	0. 17	0. 045	O I					0. 50
4. 333	0. 41	0. 17	0. 047	O I					0. 50
4. 417	0. 43	0. 17	0. 049	O I					0. 51
4. 500	0. 43	0. 17	0. 050	O I					0. 52
4. 583	0. 43	0. 17	0. 052	O I					0. 53
4. 667	0. 43	0. 17	0. 054	O I					0. 54
4. 750	0. 43	0. 17	0. 056	O I					0. 55
4. 833	0. 47	0. 18	0. 058	O I					0. 56
4. 917	0. 49	0. 18	0. 060	O I					0. 57
5. 000	0. 49	0. 18	0. 062	O I					0. 58
5. 083	0. 40	0. 18	0. 064	O I					0. 59
5. 167	0. 37	0. 18	0. 065	O I					0. 59

11. 250	1. 16	0. 33	0. 368	0		I		1. 98
11. 333	1. 16	0. 33	0. 373	0		I		2. 00
11. 417	1. 16	0. 34	0. 379	0		I		2. 03
11. 500	1. 16	0. 34	0. 385	0		I		2. 05
11. 583	1. 07	0. 34	0. 390	0		I		2. 08
11. 667	1. 03	0. 34	0. 395	0		I		2. 10
11. 750	1. 03	0. 34	0. 400	0		I		2. 12
11. 833	1. 08	0. 35	0. 404	0		I		2. 14
11. 917	1. 10	0. 35	0. 410	0		I		2. 17
12. 000	1. 10	0. 35	0. 415	0		I		2. 19
12. 083	1. 41	0. 35	0. 421	0		I		2. 22
12. 167	1. 52	0. 35	0. 429	0		I		2. 25
12. 250	1. 52	0. 36	0. 437	0		I		2. 29
12. 333	1. 57	0. 36	0. 445	0		I		2. 33
12. 417	1. 58	0. 36	0. 453	0		I		2. 36
12. 500	1. 58	0. 37	0. 461	0		I		2. 40
12. 583	1. 67	0. 37	0. 470	0		I		2. 44
12. 667	1. 70	0. 37	0. 479	0		I		2. 48
12. 750	1. 70	0. 38	0. 488	0		I		2. 53
12. 833	1. 75	0. 38	0. 498	0		I		2. 57
12. 917	1. 76	0. 38	0. 507	0		I		2. 61
13. 000	1. 76	0. 39	0. 517	0		I		2. 66
13. 083	1. 99	0. 39	0. 527	0		I		2. 71
13. 167	2. 07	0. 39	0. 538	0		I		2. 76
13. 250	2. 07	0. 40	0. 550	0		I		2. 81
13. 333	2. 07	0. 40	0. 561	0		I		2. 87
13. 417	2. 07	0. 40	0. 573	0		I		2. 92
13. 500	2. 07	0. 41	0. 584	0		I		2. 97
13. 583	1. 57	0. 41	0. 594	0		I		3. 02
13. 667	1. 40	0. 41	0. 601	0		I		3. 05
13. 750	1. 40	0. 41	0. 608	0		I		3. 09
13. 833	1. 40	0. 42	0. 615	0		I		3. 12
13. 917	1. 40	0. 42	0. 622	0		I		3. 15
14. 000	1. 40	0. 42	0. 628	0		I		3. 18
14. 083	1. 58	0. 42	0. 636	0		I		3. 22
14. 167	1. 64	0. 43	0. 644	0		I		3. 26
14. 250	1. 64	0. 43	0. 652	0		I		3. 30
14. 333	1. 60	0. 43	0. 660	0		I		3. 34
14. 417	1. 58	0. 43	0. 668	0		I		3. 38
14. 500	1. 58	0. 44	0. 676	0		I		3. 42
14. 583	1. 58	0. 44	0. 684	0		I		3. 45
14. 667	1. 58	0. 44	0. 692	0		I		3. 49
14. 750	1. 58	0. 44	0. 700	0		I		3. 53
14. 833	1. 54	0. 45	0. 708	0		I		3. 57
14. 917	1. 52	0. 45	0. 715	0		I		3. 61
15. 000	1. 52	0. 45	0. 722	0		I		3. 65
15. 083	1. 48	0. 45	0. 730	0		I		3. 68
15. 167	1. 46	0. 46	0. 737	0		I		3. 72
15. 250	1. 46	0. 46	0. 744	0		I		3. 75
15. 333	1. 41	0. 46	0. 750	0		I		3. 79
15. 417	1. 40	0. 46	0. 757	0		I		3. 82
15. 500	1. 40	0. 46	0. 763	0		I		3. 85
15. 583	1. 22	0. 47	0. 769	0		I		3. 88
15. 667	1. 16	0. 47	0. 774	0		I		3. 91
15. 750	1. 16	0. 49	0. 779	0		I		3. 93
15. 833	1. 16	0. 50	0. 783	0		I		3. 95
15. 917	1. 16	0. 52	0. 788	0		I		3. 97
16. 000	1. 16	0. 53	0. 792	0		I		3. 99
16. 083	0. 48	0. 55	0. 794	10		I		4. 00
16. 167	0. 24	0. 53	0. 793	0	I			4. 00
16. 250	0. 24	0. 53	0. 791	0	I			3. 99
16. 333	0. 24	0. 52	0. 789	0	I			3. 98
16. 417	0. 24	0. 51	0. 787	0	I			3. 97
16. 500	0. 24	0. 51	0. 785	0	I			3. 96
16. 583	0. 20	0. 50	0. 783	0	I			3. 95
16. 667	0. 18	0. 50	0. 781	0	I			3. 94
16. 750	0. 18	0. 49	0. 779	0	I			3. 93
16. 833	0. 18	0. 48	0. 777	0	I			3. 92
16. 917	0. 18	0. 48	0. 775	0	I			3. 91
17. 000	0. 18	0. 47	0. 773	0	I			3. 90
17. 083	0. 27	0. 47	0. 771	0	I			3. 89
17. 167	0. 30	0. 47	0. 770	0	I			3. 89

17. 250	0. 30	0. 47	0. 769	I	0	3. 88
17. 333	0. 30	0. 47	0. 767	I	0	3. 88
17. 417	0. 30	0. 47	0. 766	I	0	3. 87
17. 500	0. 30	0. 46	0. 765	I	0	3. 87
17. 583	0. 30	0. 46	0. 764	I	0	3. 86
17. 667	0. 30	0. 46	0. 763	I	0	3. 85
17. 750	0. 30	0. 46	0. 762	I	0	3. 85
17. 833	0. 26	0. 46	0. 761	I	0	3. 84
17. 917	0. 24	0. 46	0. 759	I	0	3. 83
18. 000	0. 24	0. 46	0. 758	I	0	3. 83
18. 083	0. 24	0. 46	0. 756	I	0	3. 82
18. 167	0. 24	0. 46	0. 755	I	0	3. 81
18. 250	0. 24	0. 46	0. 753	I	0	3. 80
18. 333	0. 24	0. 46	0. 752	I	0	3. 80
18. 417	0. 24	0. 46	0. 750	I	0	3. 79
18. 500	0. 24	0. 46	0. 749	I	0	3. 78
18. 583	0. 20	0. 46	0. 747	I	0	3. 77
18. 667	0. 18	0. 46	0. 745	I	0	3. 76
18. 750	0. 18	0. 46	0. 743	I	0	3. 75
18. 833	0. 14	0. 46	0. 741	I	0	3. 74
18. 917	0. 12	0. 46	0. 739	I	0	3. 73
19. 000	0. 12	0. 46	0. 737	I	0	3. 72
19. 083	0. 17	0. 46	0. 735	I	0	3. 71
19. 167	0. 18	0. 45	0. 733	I	0	3. 70
19. 250	0. 18	0. 45	0. 731	I	0	3. 69
19. 333	0. 23	0. 45	0. 729	I	0	3. 68
19. 417	0. 24	0. 45	0. 728	I	0	3. 67
19. 500	0. 24	0. 45	0. 726	I	0	3. 66
19. 583	0. 20	0. 45	0. 725	I	0	3. 66
19. 667	0. 18	0. 45	0. 723	I	0	3. 65
19. 750	0. 18	0. 45	0. 721	I	0	3. 64
19. 833	0. 14	0. 45	0. 719	I	0	3. 63
19. 917	0. 12	0. 45	0. 717	I	0	3. 62
20. 000	0. 12	0. 45	0. 714	I	0	3. 60
20. 083	0. 17	0. 45	0. 712	I	0	3. 59
20. 167	0. 18	0. 45	0. 710	I	0	3. 58
20. 250	0. 18	0. 45	0. 709	I	0	3. 58
20. 333	0. 18	0. 45	0. 707	I	0	3. 57
20. 417	0. 18	0. 45	0. 705	I	0	3. 56
20. 500	0. 18	0. 44	0. 703	I	0	3. 55
20. 583	0. 18	0. 44	0. 701	I	0	3. 54
20. 667	0. 18	0. 44	0. 700	I	0	3. 53
20. 750	0. 18	0. 44	0. 698	I	0	3. 52
20. 833	0. 14	0. 44	0. 696	I	0	3. 51
20. 917	0. 12	0. 44	0. 694	I	0	3. 50
21. 000	0. 12	0. 44	0. 692	I	0	3. 49
21. 083	0. 17	0. 44	0. 689	I	0	3. 48
21. 167	0. 18	0. 44	0. 688	I	0	3. 47
21. 250	0. 18	0. 44	0. 686	I	0	3. 46
21. 333	0. 14	0. 44	0. 684	I	0	3. 45
21. 417	0. 12	0. 44	0. 682	I	0	3. 44
21. 500	0. 12	0. 44	0. 680	I	0	3. 43
21. 583	0. 17	0. 44	0. 678	I	0	3. 42
21. 667	0. 18	0. 44	0. 676	I	0	3. 41
21. 750	0. 18	0. 44	0. 674	I	0	3. 40
21. 833	0. 14	0. 44	0. 672	I	0	3. 40
21. 917	0. 12	0. 43	0. 670	I	0	3. 38
22. 000	0. 12	0. 43	0. 668	I	0	3. 37
22. 083	0. 17	0. 43	0. 666	I	0	3. 37
22. 167	0. 18	0. 43	0. 664	I	0	3. 36
22. 250	0. 18	0. 43	0. 662	I	0	3. 35
22. 333	0. 14	0. 43	0. 661	I	0	3. 34
22. 417	0. 12	0. 43	0. 658	I	0	3. 33
22. 500	0. 12	0. 43	0. 656	I	0	3. 32
22. 583	0. 12	0. 43	0. 654	I	0	3. 31
22. 667	0. 12	0. 43	0. 652	I	0	3. 30
22. 750	0. 12	0. 43	0. 650	I	0	3. 29
22. 833	0. 12	0. 43	0. 648	I	0	3. 28
22. 917	0. 12	0. 43	0. 646	I	0	3. 27
23. 000	0. 12	0. 43	0. 644	I	0	3. 26
23. 083	0. 12	0. 43	0. 642	I	0	3. 25
23. 167	0. 12	0. 42	0. 640	I	0	3. 24

23. 250	0. 12	0. 42	0. 637	I	0	3. 23
23. 333	0. 12	0. 42	0. 635	I	0	3. 22
23. 417	0. 12	0. 42	0. 633	I	0	3. 21
23. 500	0. 12	0. 42	0. 631	I	0	3. 20
23. 583	0. 12	0. 42	0. 629	I	0	3. 19
23. 667	0. 12	0. 42	0. 627	I	0	3. 18
23. 750	0. 12	0. 42	0. 625	I	0	3. 17
23. 833	0. 12	0. 42	0. 623	I	0	3. 16
23. 917	0. 12	0. 42	0. 621	I	0	3. 15
24. 000	0. 12	0. 42	0. 619	I	0	3. 14
24. 083	0. 03	0. 42	0. 617	I	0	3. 13
24. 167	0. 00	0. 42	0. 614	I	0	3. 11
24. 250	0. 00	0. 42	0. 611	I	0	3. 10
24. 333	0. 00	0. 41	0. 608	I	0	3. 09
24. 417	0. 00	0. 41	0. 605	I	0	3. 07
24. 500	0. 00	0. 41	0. 602	I	0	3. 06
24. 583	0. 00	0. 41	0. 599	I	0	3. 05
24. 667	0. 00	0. 41	0. 597	I	0	3. 03
24. 750	0. 00	0. 41	0. 594	I	0	3. 02
24. 833	0. 00	0. 41	0. 591	I	0	3. 00
24. 917	0. 00	0. 41	0. 588	I	0	2. 99
25. 000	0. 00	0. 41	0. 585	I	0	2. 98
25. 083	0. 00	0. 41	0. 583	I	0	2. 97
25. 167	0. 00	0. 41	0. 580	I	0	2. 95
25. 250	0. 00	0. 40	0. 577	I	0	2. 94
25. 333	0. 00	0. 40	0. 574	I	0	2. 93
25. 417	0. 00	0. 40	0. 571	I	0	2. 91
25. 500	0. 00	0. 40	0. 569	I	0	2. 90
25. 583	0. 00	0. 40	0. 566	I	0	2. 89
25. 667	0. 00	0. 40	0. 563	I	0	2. 87
25. 750	0. 00	0. 40	0. 560	I	0	2. 86
25. 833	0. 00	0. 40	0. 558	I	0	2. 85
25. 917	0. 00	0. 40	0. 555	I	0	2. 84
26. 000	0. 00	0. 40	0. 552	I	0	2. 82
26. 083	0. 00	0. 40	0. 549	I	0	2. 81
26. 167	0. 00	0. 39	0. 547	I	0	2. 80
26. 250	0. 00	0. 39	0. 544	I	0	2. 78
26. 333	0. 00	0. 39	0. 541	I	0	2. 77
26. 417	0. 00	0. 39	0. 539	I	0	2. 76
26. 500	0. 00	0. 39	0. 536	I	0	2. 75
26. 583	0. 00	0. 39	0. 533	I	0	2. 73
26. 667	0. 00	0. 39	0. 530	I	0	2. 72
26. 750	0. 00	0. 39	0. 528	I	0	2. 71
26. 833	0. 00	0. 39	0. 525	I	0	2. 70
26. 917	0. 00	0. 39	0. 522	I	0	2. 68
27. 000	0. 00	0. 39	0. 520	I	0	2. 67
27. 083	0. 00	0. 39	0. 517	I	0	2. 66
27. 167	0. 00	0. 38	0. 515	I	0	2. 65
27. 250	0. 00	0. 38	0. 512	I	0	2. 63
27. 333	0. 00	0. 38	0. 509	I	0	2. 62
27. 417	0. 00	0. 38	0. 507	I	0	2. 61
27. 500	0. 00	0. 38	0. 504	I	0	2. 60
27. 583	0. 00	0. 38	0. 501	I	0	2. 59
27. 667	0. 00	0. 38	0. 499	I	0	2. 57
27. 750	0. 00	0. 38	0. 496	I	0	2. 56
27. 833	0. 00	0. 38	0. 494	I	0	2. 55
27. 917	0. 00	0. 38	0. 491	I	0	2. 54
28. 000	0. 00	0. 38	0. 488	I	0	2. 52
28. 083	0. 00	0. 37	0. 486	I	0	2. 51
28. 167	0. 00	0. 37	0. 483	I	0	2. 50
28. 250	0. 00	0. 37	0. 481	I	0	2. 49
28. 333	0. 00	0. 37	0. 478	I	0	2. 48
28. 417	0. 00	0. 37	0. 475	I	0	2. 47
28. 500	0. 00	0. 37	0. 473	I	0	2. 45
28. 583	0. 00	0. 37	0. 470	I	0	2. 44
28. 667	0. 00	0. 37	0. 468	I	0	2. 43
28. 750	0. 00	0. 37	0. 465	I	0	2. 42
28. 833	0. 00	0. 37	0. 463	I	0	2. 41
28. 917	0. 00	0. 37	0. 460	I	0	2. 40
29. 000	0. 00	0. 36	0. 458	I	0	2. 39
29. 083	0. 00	0. 36	0. 455	I	0	2. 37
29. 167	0. 00	0. 36	0. 453	I	0	2. 36

29.250	0.00	0.36	0.450	I	0	2.35
29.333	0.00	0.36	0.448	I	0	2.34
29.417	0.00	0.36	0.445	I	0	2.33
29.500	0.00	0.36	0.443	I	0	2.32
29.583	0.00	0.36	0.440	I	0	2.31
29.667	0.00	0.36	0.438	I	0	2.29
29.750	0.00	0.36	0.435	I	0	2.28
29.833	0.00	0.36	0.433	I	0	2.27
29.917	0.00	0.35	0.430	I	0	2.26
30.000	0.00	0.35	0.428	I	0	2.25
30.083	0.00	0.35	0.426	I	0	2.24
30.167	0.00	0.35	0.423	I	0	2.23
30.250	0.00	0.35	0.421	I	0	2.22
30.333	0.00	0.35	0.418	I	0	2.21
30.417	0.00	0.35	0.416	I	0	2.20
30.500	0.00	0.35	0.414	I	0	2.18
30.583	0.00	0.35	0.411	I	0	2.17
30.667	0.00	0.35	0.409	I	0	2.16
30.750	0.00	0.35	0.406	I	0	2.15
30.833	0.00	0.35	0.404	I	0	2.14
30.917	0.00	0.34	0.402	I	0	2.13
31.000	0.00	0.34	0.399	I	0	2.12
31.083	0.00	0.34	0.397	I	0	2.11
31.167	0.00	0.34	0.394	I	0	2.10
31.250	0.00	0.34	0.392	I	0	2.09
31.333	0.00	0.34	0.390	I	0	2.08
31.417	0.00	0.34	0.387	I	0	2.07
31.500	0.00	0.34	0.385	I	0	2.06
31.583	0.00	0.34	0.383	I	0	2.04
31.667	0.00	0.34	0.380	I	0	2.03
31.750	0.00	0.34	0.378	I	0	2.02
31.833	0.00	0.34	0.376	I	0	2.01
31.917	0.00	0.33	0.374	I	0	2.00
32.000	0.00	0.33	0.371	I	0	1.99
32.083	0.00	0.33	0.369	I	0	1.98
32.167	0.00	0.33	0.367	I	0	1.97
32.250	0.00	0.33	0.364	I	0	1.96
32.333	0.00	0.33	0.362	I	0	1.95
32.417	0.00	0.33	0.360	I	0	1.94
32.500	0.00	0.33	0.358	I	0	1.93
32.583	0.00	0.33	0.355	I	0	1.92
32.667	0.00	0.33	0.353	I	0	1.91
32.750	0.00	0.33	0.351	I	0	1.90
32.833	0.00	0.32	0.349	I	0	1.89
32.917	0.00	0.32	0.346	I	0	1.88
33.000	0.00	0.32	0.344	I	0	1.87
33.083	0.00	0.32	0.342	I	0	1.86
33.167	0.00	0.32	0.340	I	0	1.85
33.250	0.00	0.32	0.337	I	0	1.84
33.333	0.00	0.32	0.335	I	0	1.83
33.417	0.00	0.32	0.333	I	0	1.82
33.500	0.00	0.32	0.331	I	0	1.81
33.583	0.00	0.32	0.329	I	0	1.80
33.667	0.00	0.32	0.326	I	0	1.79
33.750	0.00	0.32	0.324	I	0	1.78
33.833	0.00	0.31	0.322	I	0	1.77
33.917	0.00	0.31	0.320	I	0	1.76
34.000	0.00	0.31	0.318	I	0	1.75
34.083	0.00	0.31	0.316	I	0	1.74
34.167	0.00	0.31	0.314	I	0	1.73
34.250	0.00	0.31	0.311	I	0	1.72
34.333	0.00	0.31	0.309	I	0	1.71
34.417	0.00	0.31	0.307	I	0	1.70
34.500	0.00	0.31	0.305	I	0	1.69
34.583	0.00	0.31	0.303	I	0	1.68
34.667	0.00	0.31	0.301	I	0	1.67
34.750	0.00	0.30	0.299	I	0	1.67
34.833	0.00	0.30	0.297	I	0	1.66
34.917	0.00	0.30	0.295	I	0	1.65
35.000	0.00	0.30	0.292	I	0	1.64
35.083	0.00	0.30	0.290	I	0	1.63
35.167	0.00	0.30	0.288	I	0	1.62

35.250	0.00	0.30	0.286	I	0	1.61
35.333	0.00	0.30	0.284	I	0	1.60
35.417	0.00	0.30	0.282	I	0	1.59
35.500	0.00	0.30	0.280	I	0	1.58
35.583	0.00	0.30	0.278	I	0	1.57
35.667	0.00	0.29	0.276	I	0	1.56
35.750	0.00	0.29	0.274	I	0	1.55
35.833	0.00	0.29	0.272	I	0	1.54
35.917	0.00	0.29	0.270	I	0	1.53
36.000	0.00	0.29	0.268	I	0	1.52
36.083	0.00	0.29	0.266	I	0	1.51
36.167	0.00	0.29	0.264	I	0	1.50
36.250	0.00	0.29	0.262	I	0	1.50
36.333	0.00	0.29	0.260	I	0	1.49
36.417	0.00	0.29	0.258	I	0	1.48
36.500	0.00	0.29	0.256	I	0	1.47
36.583	0.00	0.28	0.254	I	0	1.46
36.667	0.00	0.28	0.252	I	0	1.45
36.750	0.00	0.28	0.250	I	0	1.44
36.833	0.00	0.28	0.248	I	0	1.43
36.917	0.00	0.28	0.246	I	0	1.42
37.000	0.00	0.28	0.244	I	0	1.42
37.083	0.00	0.28	0.242	I	0	1.41
37.167	0.00	0.28	0.240	I	0	1.40
37.250	0.00	0.28	0.239	I	0	1.39
37.333	0.00	0.28	0.237	I	0	1.38
37.417	0.00	0.28	0.235	I	0	1.37
37.500	0.00	0.27	0.233	I	0	1.36
37.583	0.00	0.27	0.231	I	0	1.35
37.667	0.00	0.27	0.229	I	0	1.35
37.750	0.00	0.27	0.227	I	0	1.34
37.833	0.00	0.27	0.225	I	0	1.33
37.917	0.00	0.27	0.223	I	0	1.32
38.000	0.00	0.27	0.222	I	0	1.31
38.083	0.00	0.27	0.220	I	0	1.30
38.167	0.00	0.27	0.218	I	0	1.30
38.250	0.00	0.27	0.216	I	0	1.29
38.333	0.00	0.27	0.214	I	0	1.28
38.417	0.00	0.26	0.212	I	0	1.27
38.500	0.00	0.26	0.211	I	0	1.26
38.583	0.00	0.26	0.209	I	0	1.25
38.667	0.00	0.26	0.207	I	0	1.25
38.750	0.00	0.26	0.205	I	0	1.24
38.833	0.00	0.26	0.203	I	0	1.23
38.917	0.00	0.26	0.202	I	0	1.22
39.000	0.00	0.26	0.200	I	0	1.21
39.083	0.00	0.26	0.198	I	0	1.20
39.167	0.00	0.26	0.196	I	0	1.20
39.250	0.00	0.26	0.195	I	0	1.19
39.333	0.00	0.26	0.193	I	0	1.18
39.417	0.00	0.25	0.191	I	0	1.17
39.500	0.00	0.25	0.189	I	0	1.16
39.583	0.00	0.25	0.188	I	0	1.16
39.667	0.00	0.25	0.186	I	0	1.15
39.750	0.00	0.25	0.184	I	0	1.14
39.833	0.00	0.25	0.182	I	0	1.13
39.917	0.00	0.25	0.181	I	0	1.13
40.000	0.00	0.25	0.179	I	0	1.12
40.083	0.00	0.25	0.177	I	0	1.11
40.167	0.00	0.25	0.175	I	0	1.10
40.250	0.00	0.25	0.174	I	0	1.09
40.333	0.00	0.25	0.172	I	0	1.09
40.417	0.00	0.24	0.170	I	0	1.08
40.500	0.00	0.24	0.169	I	0	1.07
40.583	0.00	0.24	0.167	I	0	1.06
40.667	0.00	0.24	0.165	I	0	1.06
40.750	0.00	0.24	0.164	I	0	1.05
40.833	0.00	0.24	0.162	I	0	1.04
40.917	0.00	0.24	0.160	I	0	1.03
41.000	0.00	0.24	0.159	I	0	1.03
41.083	0.00	0.24	0.157	I	0	1.02
41.167	0.00	0.24	0.155	I	0	1.01

41. 250	0. 00	0. 24	0. 154	I	0	1. 00
41. 333	0. 00	0. 24	0. 152	I	0	1. 00
41. 417	0. 00	0. 23	0. 151	I	0	0. 99
41. 500	0. 00	0. 23	0. 149	I	0	0. 98
41. 583	0. 00	0. 23	0. 147	I	0	0. 97
41. 667	0. 00	0. 23	0. 146	I	0	0. 97
41. 750	0. 00	0. 23	0. 144	I	0	0. 96
41. 833	0. 00	0. 23	0. 143	I	0	0. 95
41. 917	0. 00	0. 23	0. 141	I	0	0. 94
42. 000	0. 00	0. 23	0. 139	I	0	0. 94
42. 083	0. 00	0. 23	0. 138	I	0	0. 93
42. 167	0. 00	0. 23	0. 136	I	0	0. 92
42. 250	0. 00	0. 22	0. 135	I	0	0. 92
42. 333	0. 00	0. 22	0. 133	I	0	0. 91
42. 417	0. 00	0. 22	0. 132	I	0	0. 90
42. 500	0. 00	0. 22	0. 130	I	0	0. 90
42. 583	0. 00	0. 22	0. 129	I	0	0. 89
42. 667	0. 00	0. 22	0. 127	I	0	0. 88
42. 750	0. 00	0. 22	0. 126	I	0	0. 87
42. 833	0. 00	0. 22	0. 124	I	0	0. 87
42. 917	0. 00	0. 22	0. 123	I	0	0. 86
43. 000	0. 00	0. 22	0. 121	I	0	0. 85
43. 083	0. 00	0. 22	0. 120	I	0	0. 85
43. 167	0. 00	0. 21	0. 118	I	0	0. 84
43. 250	0. 00	0. 21	0. 117	I	0	0. 83
43. 333	0. 00	0. 21	0. 115	I	0	0. 83
43. 417	0. 00	0. 21	0. 114	I	0	0. 82
43. 500	0. 00	0. 21	0. 112	I	0	0. 81
43. 583	0. 00	0. 21	0. 111	I	0	0. 81
43. 667	0. 00	0. 21	0. 109	I	0	0. 80
43. 750	0. 00	0. 21	0. 108	I	0	0. 79
43. 833	0. 00	0. 21	0. 106	I	0	0. 79
43. 917	0. 00	0. 21	0. 105	I	0	0. 78
44. 000	0. 00	0. 21	0. 104	I	0	0. 77
44. 083	0. 00	0. 21	0. 102	I	0	0. 77
44. 167	0. 00	0. 20	0. 101	I	0	0. 76
44. 250	0. 00	0. 20	0. 099	I	0	0. 75
44. 333	0. 00	0. 20	0. 098	I	0	0. 75
44. 417	0. 00	0. 20	0. 097	I	0	0. 74
44. 500	0. 00	0. 20	0. 095	I	0	0. 73
44. 583	0. 00	0. 20	0. 094	I	0	0. 73
44. 667	0. 00	0. 20	0. 092	I	0	0. 72
44. 750	0. 00	0. 20	0. 091	I	0	0. 72
44. 833	0. 00	0. 20	0. 090	I	0	0. 71
44. 917	0. 00	0. 20	0. 088	I	0	0. 70
45. 000	0. 00	0. 20	0. 087	I	0	0. 70
45. 083	0. 00	0. 20	0. 086	I	0	0. 69
45. 167	0. 00	0. 19	0. 084	I	0	0. 68
45. 250	0. 00	0. 19	0. 083	I	0	0. 68
45. 333	0. 00	0. 19	0. 082	I	0	0. 67
45. 417	0. 00	0. 19	0. 080	I	0	0. 67
45. 500	0. 00	0. 19	0. 079	I	0	0. 66
45. 583	0. 00	0. 19	0. 078	I	0	0. 65
45. 667	0. 00	0. 19	0. 076	I	0	0. 65
45. 750	0. 00	0. 19	0. 075	I	0	0. 64
45. 833	0. 00	0. 19	0. 074	I	0	0. 64
45. 917	0. 00	0. 19	0. 073	I	0	0. 63
46. 000	0. 00	0. 19	0. 071	I	0	0. 62
46. 083	0. 00	0. 19	0. 070	I	0	0. 62
46. 167	0. 00	0. 18	0. 069	I	0	0. 61
46. 250	0. 00	0. 18	0. 067	I	0	0. 61
46. 333	0. 00	0. 18	0. 066	I	0	0. 60
46. 417	0. 00	0. 18	0. 065	I	0	0. 59
46. 500	0. 00	0. 18	0. 064	I	0	0. 59
46. 583	0. 00	0. 18	0. 062	I	0	0. 58
46. 667	0. 00	0. 18	0. 061	I	0	0. 58
46. 750	0. 00	0. 18	0. 060	I	0	0. 57
46. 833	0. 00	0. 18	0. 059	I	0	0. 56
46. 917	0. 00	0. 18	0. 058	I	0	0. 56
47. 000	0. 00	0. 18	0. 056	I	0	0. 55
47. 083	0. 00	0. 17	0. 055	I	0	0. 55
47. 167	0. 00	0. 17	0. 054	I	0	0. 54

47.250	0.00	0.17	0.053	I 0	0.53
47.333	0.00	0.17	0.052	I 0	0.53
47.417	0.00	0.17	0.050	I 0	0.52
47.500	0.00	0.17	0.049	I 0	0.52
47.583	0.00	0.17	0.048	I 0	0.51
47.667	0.00	0.17	0.047	I 0	0.50
47.750	0.00	0.17	0.046	I 0	0.50
47.833	0.00	0.16	0.045	I 0	0.49
47.917	0.00	0.16	0.043	I 0	0.48
48.000	0.00	0.16	0.042	I 0	0.47
48.083	0.00	0.16	0.041	I 0	0.47
48.167	0.00	0.16	0.040	I 0	0.46
48.250	0.00	0.16	0.039	I 0	0.45
48.333	0.00	0.16	0.038	I 0	0.44
48.417	0.00	0.15	0.037	I 0	0.43
48.500	0.00	0.15	0.036	I 0	0.43
48.583	0.00	0.15	0.035	I 0	0.42
48.667	0.00	0.15	0.034	I 0	0.41
48.750	0.00	0.15	0.033	I 0	0.41
48.833	0.00	0.15	0.032	I 0	0.40
48.917	0.00	0.15	0.031	I 0	0.39
49.000	0.00	0.14	0.030	I 0	0.38
49.083	0.00	0.14	0.029	I 0	0.38
49.167	0.00	0.14	0.028	I 0	0.37
49.250	0.00	0.14	0.027	I 0	0.36
49.333	0.00	0.14	0.026	I 0	0.36
49.417	0.00	0.14	0.025	I 0	0.35
49.500	0.00	0.14	0.024	I 0	0.34
49.583	0.00	0.13	0.023	I 0	0.34
49.667	0.00	0.13	0.022	I 0	0.33
49.750	0.00	0.13	0.021	I 0	0.32
49.833	0.00	0.13	0.020	I 0	0.32
49.917	0.00	0.13	0.019	I 0	0.31
50.000	0.00	0.13	0.018	IO	0.30
50.083	0.00	0.13	0.018	IO	0.30
50.167	0.00	0.13	0.017	IO	0.29
50.250	0.00	0.12	0.016	IO	0.28
50.333	0.00	0.12	0.015	IO	0.28
50.417	0.00	0.12	0.014	IO	0.27
50.500	0.00	0.12	0.013	IO	0.27
50.583	0.00	0.12	0.012	IO	0.26
50.667	0.00	0.12	0.012	IO	0.25
50.750	0.00	0.12	0.011	IO	0.25
50.833	0.00	0.11	0.010	IO	0.23
50.917	0.00	0.10	0.009	IO	0.21
51.000	0.00	0.09	0.009	IO	0.20
51.083	0.00	0.09	0.008	IO	0.18
51.167	0.00	0.08	0.007	IO	0.17
51.250	0.00	0.07	0.007	IO	0.16
51.333	0.00	0.07	0.006	IO	0.15
51.417	0.00	0.06	0.006	0	0.14
51.500	0.00	0.06	0.006	0	0.13
51.583	0.00	0.06	0.005	0	0.12
51.667	0.00	0.05	0.005	0	0.11
51.750	0.00	0.05	0.004	0	0.10
51.833	0.00	0.04	0.004	0	0.09
51.917	0.00	0.04	0.004	0	0.09
52.000	0.00	0.04	0.004	0	0.08
52.083	0.00	0.04	0.003	0	0.08
52.167	0.00	0.03	0.003	0	0.07
52.250	0.00	0.03	0.003	0	0.07
52.333	0.00	0.03	0.003	0	0.06
52.417	0.00	0.03	0.002	0	0.06
52.500	0.00	0.02	0.002	0	0.05
52.583	0.00	0.02	0.002	0	0.05
52.667	0.00	0.02	0.002	0	0.04
52.750	0.00	0.02	0.002	0	0.04
52.833	0.00	0.02	0.002	0	0.04
52.917	0.00	0.02	0.002	0	0.04
53.000	0.00	0.02	0.001	0	0.03
53.083	0.00	0.01	0.001	0	0.03
53.167	0.00	0.01	0.001	0	0.03

53.250	0.00	0.01	0.001	0					0.03
53.333	0.00	0.01	0.001	0					0.02
53.417	0.00	0.01	0.001	0					0.02
53.500	0.00	0.01	0.001	0					0.02
53.583	0.00	0.01	0.001	0					0.02
53.667	0.00	0.01	0.001	0					0.02
53.750	0.00	0.01	0.001	0					0.02
53.833	0.00	0.01	0.001	0					0.02
53.917	0.00	0.01	0.001	0					0.01
54.000	0.00	0.01	0.001	0					0.01
54.083	0.00	0.01	0.001	0					0.01
54.167	0.00	0.01	0.001	0					0.01
54.250	0.00	0.01	0.000	0					0.01
54.333	0.00	0.00	0.000	0					0.01
54.417	0.00	0.00	0.000	0					0.01
54.500	0.00	0.00	0.000	0					0.01
54.583	0.00	0.00	0.000	0					0.01
54.667	0.00	0.00	0.000	0					0.01
54.750	0.00	0.00	0.000	0					0.01
54.833	0.00	0.00	0.000	0					0.01
54.917	0.00	0.00	0.000	0					0.01
55.000	0.00	0.00	0.000	0					0.01
55.083	0.00	0.00	0.000	0					0.01
55.167	0.00	0.00	0.000	0					0.00
55.250	0.00	0.00	0.000	0					0.00
55.333	0.00	0.00	0.000	0					0.00
55.417	0.00	0.00	0.000	0					0.00
55.500	0.00	0.00	0.000	0					0.00
55.583	0.00	0.00	0.000	0					0.00
55.667	0.00	0.00	0.000	0					0.00
55.750	0.00	0.00	0.000	0					0.00
55.833	0.00	0.00	0.000	0					0.00
55.917	0.00	0.00	0.000	0					0.00
56.000	0.00	0.00	0.000	0					0.00
56.083	0.00	0.00	0.000	0					0.00
56.167	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****
Number of intervals = 674
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.552 (CFS)
Total volume = 1.257 (Ac. Ft)
Status of hydrographs being held in storage
Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
Peak (CFS) 0.000 0.000 0.000 0.000 0.000
Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/06/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 140-161
 MITIGATION ANALYSIS
 6-HOUR - 5-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PD0565.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 73
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 5.576 (CFS)
 Total volume = 0.677 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 73
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.011	0.118	0.011	0.011
0.500	0.046	0.167	0.045	0.047
0.600	0.066	0.183	0.065	0.067
1.000	0.153	0.236	0.152	0.154
1.500	0.263	0.289	0.262	0.264
1.810	0.330	0.318	0.329	0.331
2.000	0.373	0.334	0.372	0.374
2.500	0.483	0.374	0.482	0.484
3.000	0.590	0.409	0.589	0.591
3.500	0.694	0.442	0.692	0.696
3.900	0.772	0.467	0.770	0.774
4.000	0.793	0.535	0.791	0.795
4.500	0.882	2.336	0.874	0.890
4.900	0.933	4.305	0.918	0.948
5.000	0.947	4.495	0.932	0.962

5. 500 0. 973 5. 338 0. 955 0. 991
 5. 600 0. 979 5. 490 0. 960 0. 998

 Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; '0' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	. 0	1. 4	2. 79	4. 18	5. 58	Depth (Ft.)
0. 083	0. 36	0. 01	0. 001	0 I					0. 03
0. 167	0. 56	0. 05	0. 004	0 I					0. 10
0. 250	0. 59	0. 08	0. 008	0 I					0. 18
0. 333	0. 59	0. 12	0. 011	0 I					0. 25
0. 417	0. 59	0. 12	0. 014	0 I					0. 27
0. 500	0. 66	0. 13	0. 018	0 I					0. 30
0. 583	0. 68	0. 13	0. 021	0 I					0. 32
0. 667	0. 68	0. 14	0. 025	0 I					0. 35
0. 750	0. 68	0. 14	0. 029	0 I					0. 38
0. 833	0. 68	0. 15	0. 033	0 I					0. 40
0. 917	0. 68	0. 15	0. 036	0 I					0. 43
1. 000	0. 76	0. 16	0. 040	0 I					0. 46
1. 083	0. 78	0. 16	0. 044	0 I					0. 49
1. 167	0. 78	0. 17	0. 049	0 I					0. 51
1. 250	0. 78	0. 17	0. 053	0 I					0. 53
1. 333	0. 78	0. 18	0. 057	0 I					0. 55
1. 417	0. 78	0. 18	0. 061	0 I					0. 58
1. 500	0. 78	0. 18	0. 065	0 I					0. 60
1. 583	0. 78	0. 19	0. 069	0 I					0. 62
1. 667	0. 78	0. 19	0. 073	0 I					0. 63
1. 750	0. 78	0. 19	0. 078	0 I					0. 65
1. 833	0. 78	0. 19	0. 082	0 I					0. 67
1. 917	0. 78	0. 19	0. 086	0 I					0. 69
2. 000	0. 85	0. 20	0. 090	0 I					0. 71
2. 083	0. 81	0. 20	0. 094	0 I					0. 73
2. 167	0. 85	0. 20	0. 099	0 I					0. 75
2. 250	0. 88	0. 21	0. 103	0 I					0. 77
2. 333	0. 88	0. 21	0. 108	0 I					0. 79
2. 417	0. 88	0. 21	0. 112	0 I					0. 81
2. 500	0. 88	0. 21	0. 117	0 I					0. 83
2. 583	0. 88	0. 22	0. 122	0 I					0. 86
2. 667	0. 88	0. 22	0. 126	0 I					0. 88
2. 750	0. 95	0. 22	0. 131	0 I					0. 90
2. 833	0. 98	0. 23	0. 136	0 I					0. 92
2. 917	0. 98	0. 23	0. 141	0 I					0. 95
3. 000	0. 98	0. 23	0. 146	0 I					0. 97
3. 083	0. 98	0. 24	0. 151	0 I					0. 99
3. 167	1. 05	0. 24	0. 157	0 I					1. 02
3. 250	1. 07	0. 24	0. 162	0 I					1. 04
3. 333	1. 07	0. 24	0. 168	0 I					1. 07
3. 417	1. 15	0. 25	0. 174	0 I					1. 10
3. 500	1. 24	0. 25	0. 181	0 I					1. 13
3. 583	1. 34	0. 25	0. 188	0 I					1. 16
3. 667	1. 37	0. 26	0. 195	0 I					1. 19
3. 750	1. 44	0. 26	0. 203	0 I					1. 23
3. 833	1. 46	0. 26	0. 212	0 I					1. 27
3. 917	1. 54	0. 27	0. 220	0 I					1. 30
4. 000	1. 56	0. 27	0. 229	0 I					1. 34
4. 083	1. 64	0. 28	0. 238	0 I					1. 39
4. 167	1. 73	0. 28	0. 248	0 I					1. 43
4. 250	1. 83	0. 29	0. 258	0 I					1. 48
4. 333	1. 93	0. 29	0. 269	0 I					1. 53
4. 417	2. 03	0. 30	0. 281	0 I					1. 58
4. 500	2. 05	0. 30	0. 292	0 I					1. 64
4. 583	2. 12	0. 31	0. 305	0 I					1. 69
4. 667	2. 22	0. 31	0. 318	0 I					1. 75
4. 750	2. 32	0. 32	0. 331	0 I					1. 81
4. 833	2. 34	0. 32	0. 345	0 I					1. 88
4. 917	2. 42	0. 33	0. 359	0 I					1. 94
5. 000	2. 51	0. 33	0. 374	0 I					2. 00
5. 083	2. 90	0. 34	0. 390	0 I					2. 08
5. 167	3. 39	0. 35	0. 409	0 I					2. 17

5. 250	3. 75	0. 36	0. 432	0					2. 27
5. 333	4. 09	0. 36	0. 456	0			I		2. 38
5. 417	4. 63	0. 37	0. 484	0			I		2. 50
5. 500	5. 58	0. 38	0. 516	0				I	2. 65
5. 583	2. 87	0. 39	0. 542	0					2. 78
5. 667	1. 13	0. 40	0. 553	0	I				2. 83
5. 750	0. 66	0. 40	0. 557	0I					2. 85
5. 833	0. 51	0. 40	0. 558	0					2. 85
5. 917	0. 34	0. 40	0. 558	IO					2. 85
6. 000	0. 22	0. 40	0. 558	IO					2. 85
6. 083	0. 05	0. 40	0. 556	I 0					2. 84
6. 167	0. 00	0. 40	0. 553	I 0					2. 83
6. 250	0. 00	0. 40	0. 550	I 0					2. 82
6. 333	0. 00	0. 40	0. 548	I 0					2. 80
6. 417	0. 00	0. 39	0. 545	I 0					2. 79
6. 500	0. 00	0. 39	0. 542	I 0					2. 78
6. 583	0. 00	0. 39	0. 540	I 0					2. 76
6. 667	0. 00	0. 39	0. 537	I 0					2. 75
6. 750	0. 00	0. 39	0. 534	I 0					2. 74
6. 833	0. 00	0. 39	0. 532	I 0					2. 73
6. 917	0. 00	0. 39	0. 529	I 0					2. 71
7. 000	0. 00	0. 39	0. 526	I 0					2. 70
7. 083	0. 00	0. 39	0. 524	I 0					2. 69
7. 167	0. 00	0. 39	0. 521	I 0					2. 68
7. 250	0. 00	0. 39	0. 518	I 0					2. 66
7. 333	0. 00	0. 38	0. 516	I 0					2. 65
7. 417	0. 00	0. 38	0. 513	I 0					2. 64
7. 500	0. 00	0. 38	0. 510	I 0					2. 63
7. 583	0. 00	0. 38	0. 508	I 0					2. 62
7. 667	0. 00	0. 38	0. 505	I 0					2. 60
7. 750	0. 00	0. 38	0. 502	I 0					2. 59
7. 833	0. 00	0. 38	0. 500	I 0					2. 58
7. 917	0. 00	0. 38	0. 497	I 0					2. 57
8. 000	0. 00	0. 38	0. 495	I 0					2. 55
8. 083	0. 00	0. 38	0. 492	I 0					2. 54
8. 167	0. 00	0. 38	0. 489	I 0					2. 53
8. 250	0. 00	0. 38	0. 487	I 0					2. 52
8. 333	0. 00	0. 37	0. 484	I 0					2. 51
8. 417	0. 00	0. 37	0. 482	I 0					2. 49
8. 500	0. 00	0. 37	0. 479	I 0					2. 48
8. 583	0. 00	0. 37	0. 476	I 0					2. 47
8. 667	0. 00	0. 37	0. 474	I 0					2. 46
8. 750	0. 00	0. 37	0. 471	I 0					2. 45
8. 833	0. 00	0. 37	0. 469	I 0					2. 44
8. 917	0. 00	0. 37	0. 466	I 0					2. 42
9. 000	0. 00	0. 37	0. 464	I 0					2. 41
9. 083	0. 00	0. 37	0. 461	I 0					2. 40
9. 167	0. 00	0. 37	0. 459	I 0					2. 39
9. 250	0. 00	0. 36	0. 456	I 0					2. 38
9. 333	0. 00	0. 36	0. 454	I 0					2. 37
9. 417	0. 00	0. 36	0. 451	I 0					2. 36
9. 500	0. 00	0. 36	0. 449	I 0					2. 34
9. 583	0. 00	0. 36	0. 446	I 0					2. 33
9. 667	0. 00	0. 36	0. 444	I 0					2. 32
9. 750	0. 00	0. 36	0. 441	I 0					2. 31
9. 833	0. 00	0. 36	0. 439	I 0					2. 30
9. 917	0. 00	0. 36	0. 436	I 0					2. 29
10. 000	0. 00	0. 36	0. 434	I 0					2. 28
10. 083	0. 00	0. 36	0. 431	I 0					2. 27
10. 167	0. 00	0. 35	0. 429	I 0					2. 25
10. 250	0. 00	0. 35	0. 427	I 0					2. 24
10. 333	0. 00	0. 35	0. 424	I 0					2. 23
10. 417	0. 00	0. 35	0. 422	I 0					2. 22
10. 500	0. 00	0. 35	0. 419	I 0					2. 21
10. 583	0. 00	0. 35	0. 417	I 0					2. 20
10. 667	0. 00	0. 35	0. 414	I 0					2. 19
10. 750	0. 00	0. 35	0. 412	IO					2. 18
10. 833	0. 00	0. 35	0. 410	IO					2. 17
10. 917	0. 00	0. 35	0. 407	IO					2. 16
11. 000	0. 00	0. 35	0. 405	IO					2. 14
11. 083	0. 00	0. 34	0. 402	IO					2. 13
11. 167	0. 00	0. 34	0. 400	IO					2. 12

11. 250	0. 00	0. 34	0. 398	IO
11. 333	0. 00	0. 34	0. 395	IO
11. 417	0. 00	0. 34	0. 393	IO
11. 500	0. 00	0. 34	0. 391	IO
11. 583	0. 00	0. 34	0. 388	IO
11. 667	0. 00	0. 34	0. 386	IO
11. 750	0. 00	0. 34	0. 384	IO
11. 833	0. 00	0. 34	0. 381	IO
11. 917	0. 00	0. 34	0. 379	IO
12. 000	0. 00	0. 34	0. 377	IO
12. 083	0. 00	0. 33	0. 374	IO
12. 167	0. 00	0. 33	0. 372	IO
12. 250	0. 00	0. 33	0. 370	IO
12. 333	0. 00	0. 33	0. 368	IO
12. 417	0. 00	0. 33	0. 365	IO
12. 500	0. 00	0. 33	0. 363	IO
12. 583	0. 00	0. 33	0. 361	IO
12. 667	0. 00	0. 33	0. 358	IO
12. 750	0. 00	0. 33	0. 356	IO
12. 833	0. 00	0. 33	0. 354	IO
12. 917	0. 00	0. 33	0. 352	IO
13. 000	0. 00	0. 33	0. 349	IO
13. 083	0. 00	0. 32	0. 347	IO
13. 167	0. 00	0. 32	0. 345	IO
13. 250	0. 00	0. 32	0. 343	IO
13. 333	0. 00	0. 32	0. 341	IO
13. 417	0. 00	0. 32	0. 338	IO
13. 500	0. 00	0. 32	0. 336	IO
13. 583	0. 00	0. 32	0. 334	IO
13. 667	0. 00	0. 32	0. 332	IO
13. 750	0. 00	0. 32	0. 330	IO
13. 833	0. 00	0. 32	0. 327	IO
13. 917	0. 00	0. 32	0. 325	IO
14. 000	0. 00	0. 31	0. 323	IO
14. 083	0. 00	0. 31	0. 321	IO
14. 167	0. 00	0. 31	0. 319	IO
14. 250	0. 00	0. 31	0. 317	IO
14. 333	0. 00	0. 31	0. 314	IO
14. 417	0. 00	0. 31	0. 312	IO
14. 500	0. 00	0. 31	0. 310	IO
14. 583	0. 00	0. 31	0. 308	IO
14. 667	0. 00	0. 31	0. 306	IO
14. 750	0. 00	0. 31	0. 304	IO
14. 833	0. 00	0. 31	0. 302	IO
14. 917	0. 00	0. 30	0. 300	IO
15. 000	0. 00	0. 30	0. 297	IO
15. 083	0. 00	0. 30	0. 295	IO
15. 167	0. 00	0. 30	0. 293	IO
15. 250	0. 00	0. 30	0. 291	IO
15. 333	0. 00	0. 30	0. 289	IO
15. 417	0. 00	0. 30	0. 287	IO
15. 500	0. 00	0. 30	0. 285	IO
15. 583	0. 00	0. 30	0. 283	IO
15. 667	0. 00	0. 30	0. 281	IO
15. 750	0. 00	0. 30	0. 279	IO
15. 833	0. 00	0. 29	0. 277	IO
15. 917	0. 00	0. 29	0. 275	IO
16. 000	0. 00	0. 29	0. 273	IO
16. 083	0. 00	0. 29	0. 271	IO
16. 167	0. 00	0. 29	0. 269	IO
16. 250	0. 00	0. 29	0. 267	IO
16. 333	0. 00	0. 29	0. 265	IO
16. 417	0. 00	0. 29	0. 263	IO
16. 500	0. 00	0. 29	0. 261	IO
16. 583	0. 00	0. 29	0. 259	IO
16. 667	0. 00	0. 29	0. 257	IO
16. 750	0. 00	0. 29	0. 255	IO
16. 833	0. 00	0. 28	0. 253	IO
16. 917	0. 00	0. 28	0. 251	IO
17. 000	0. 00	0. 28	0. 249	IO
17. 083	0. 00	0. 28	0. 247	IO
17. 167	0. 00	0. 28	0. 245	IO

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17. 250	0. 00	0. 28	0. 243	IO
17. 333	0. 00	0. 28	0. 241	IO
17. 417	0. 00	0. 28	0. 239	IO
17. 500	0. 00	0. 28	0. 237	IO
17. 583	0. 00	0. 28	0. 236	IO
17. 667	0. 00	0. 27	0. 234	IO
17. 750	0. 00	0. 27	0. 232	IO
17. 833	0. 00	0. 27	0. 230	IO
17. 917	0. 00	0. 27	0. 228	IO
18. 000	0. 00	0. 27	0. 226	IO
18. 083	0. 00	0. 27	0. 224	IO
18. 167	0. 00	0. 27	0. 222	IO
18. 250	0. 00	0. 27	0. 221	IO
18. 333	0. 00	0. 27	0. 219	IO
18. 417	0. 00	0. 27	0. 217	IO
18. 500	0. 00	0. 27	0. 215	IO
18. 583	0. 00	0. 26	0. 213	IO
18. 667	0. 00	0. 26	0. 211	IO
18. 750	0. 00	0. 26	0. 210	IO
18. 833	0. 00	0. 26	0. 208	IO
18. 917	0. 00	0. 26	0. 206	IO
19. 000	0. 00	0. 26	0. 204	IO
19. 083	0. 00	0. 26	0. 202	IO
19. 167	0. 00	0. 26	0. 201	IO
19. 250	0. 00	0. 26	0. 199	IO
19. 333	0. 00	0. 26	0. 197	IO
19. 417	0. 00	0. 26	0. 195	IO
19. 500	0. 00	0. 26	0. 193	IO
19. 583	0. 00	0. 25	0. 192	IO
19. 667	0. 00	0. 25	0. 190	IO
19. 750	0. 00	0. 25	0. 188	IO
19. 833	0. 00	0. 25	0. 186	IO
19. 917	0. 00	0. 25	0. 185	IO
20. 000	0. 00	0. 25	0. 183	IO
20. 083	0. 00	0. 25	0. 181	IO
20. 167	0. 00	0. 25	0. 180	IO
20. 250	0. 00	0. 25	0. 178	IO
20. 333	0. 00	0. 25	0. 176	IO
20. 417	0. 00	0. 25	0. 174	IO
20. 500	0. 00	0. 25	0. 173	IO
20. 583	0. 00	0. 24	0. 171	IO
20. 667	0. 00	0. 24	0. 169	IO
20. 750	0. 00	0. 24	0. 168	IO
20. 833	0. 00	0. 24	0. 166	IO
20. 917	0. 00	0. 24	0. 164	IO
21. 000	0. 00	0. 24	0. 163	IO
21. 083	0. 00	0. 24	0. 161	IO
21. 167	0. 00	0. 24	0. 159	IO
21. 250	0. 00	0. 24	0. 158	IO
21. 333	0. 00	0. 24	0. 156	IO
21. 417	0. 00	0. 24	0. 154	IO
21. 500	0. 00	0. 24	0. 153	IO
21. 583	0. 00	0. 23	0. 151	IO
21. 667	0. 00	0. 23	0. 150	IO
21. 750	0. 00	0. 23	0. 148	IO
21. 833	0. 00	0. 23	0. 146	IO
21. 917	0. 00	0. 23	0. 145	IO
22. 000	0. 00	0. 23	0. 143	IO
22. 083	0. 00	0. 23	0. 142	IO
22. 167	0. 00	0. 23	0. 140	IO
22. 250	0. 00	0. 23	0. 139	IO
22. 333	0. 00	0. 23	0. 137	IO
22. 417	0. 00	0. 23	0. 135	IO
22. 500	0. 00	0. 22	0. 134	IO
22. 583	0. 00	0. 22	0. 132	IO
22. 667	0. 00	0. 22	0. 131	IO
22. 750	0. 00	0. 22	0. 129	IO
22. 833	0. 00	0. 22	0. 128	IO
22. 917	0. 00	0. 22	0. 126	IO
23. 000	0. 00	0. 22	0. 125	IO
23. 083	0. 00	0. 22	0. 123	IO
23. 167	0. 00	0. 22	0. 122	IO

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23.250	0.00	0.22	0.120	IO	0.85
23.333	0.00	0.22	0.119	IO	0.84
23.417	0.00	0.21	0.117	IO	0.84
23.500	0.00	0.21	0.116	IO	0.83
23.583	0.00	0.21	0.114	IO	0.82
23.667	0.00	0.21	0.113	IO	0.82
23.750	0.00	0.21	0.111	IO	0.81
23.833	0.00	0.21	0.110	IO	0.80
23.917	0.00	0.21	0.108	IO	0.80
24.000	0.00	0.21	0.107	IO	0.79
24.083	0.00	0.21	0.106	IO	0.78
24.167	0.00	0.21	0.104	IO	0.78
24.250	0.00	0.21	0.103	IO	0.77
24.333	0.00	0.20	0.101	IO	0.76
24.417	0.00	0.20	0.100	IO	0.76
24.500	0.00	0.20	0.099	IO	0.75
24.583	0.00	0.20	0.097	IO	0.74
24.667	0.00	0.20	0.096	IO	0.74
24.750	0.00	0.20	0.094	IO	0.73
24.833	0.00	0.20	0.093	IO	0.72
24.917	0.00	0.20	0.092	IO	0.72
25.000	0.00	0.20	0.090	IO	0.71
25.083	0.00	0.20	0.089	IO	0.71
25.167	0.00	0.20	0.088	IO	0.70
25.250	0.00	0.20	0.086	IO	0.69
25.333	0.00	0.19	0.085	IO	0.69
25.417	0.00	0.19	0.084	IO	0.68
25.500	0.00	0.19	0.082	IO	0.67
25.583	0.00	0.19	0.081	IO	0.67
25.667	0.00	0.19	0.080	IO	0.66
25.750	0.00	0.19	0.078	IO	0.66
25.833	0.00	0.19	0.077	IO	0.65
25.917	0.00	0.19	0.076	IO	0.64
26.000	0.00	0.19	0.074	IO	0.64
26.083	0.00	0.19	0.073	IO	0.63
26.167	0.00	0.19	0.072	IO	0.63
26.250	0.00	0.19	0.070	IO	0.62
26.333	0.00	0.18	0.069	IO	0.61
26.417	0.00	0.18	0.068	IO	0.61
26.500	0.00	0.18	0.067	IO	0.60
26.583	0.00	0.18	0.065	IO	0.60
26.667	0.00	0.18	0.064	IO	0.59
26.750	0.00	0.18	0.063	IO	0.58
26.833	0.00	0.18	0.062	IO	0.58
26.917	0.00	0.18	0.060	IO	0.57
27.000	0.00	0.18	0.059	IO	0.57
27.083	0.00	0.18	0.058	IO	0.56
27.167	0.00	0.18	0.057	IO	0.55
27.250	0.00	0.17	0.056	IO	0.55
27.333	0.00	0.17	0.054	0	0.54
27.417	0.00	0.17	0.053	0	0.54
27.500	0.00	0.17	0.052	0	0.53
27.583	0.00	0.17	0.051	0	0.52
27.667	0.00	0.17	0.050	0	0.52
27.750	0.00	0.17	0.048	0	0.51
27.833	0.00	0.17	0.047	0	0.51
27.917	0.00	0.17	0.046	0	0.50
28.000	0.00	0.17	0.045	0	0.49
28.083	0.00	0.16	0.044	0	0.48
28.167	0.00	0.16	0.043	0	0.48
28.250	0.00	0.16	0.042	0	0.47
28.333	0.00	0.16	0.041	0	0.46
28.417	0.00	0.16	0.039	0	0.45
28.500	0.00	0.16	0.038	0	0.45
28.583	0.00	0.15	0.037	0	0.44
28.667	0.00	0.15	0.036	0	0.43
28.750	0.00	0.15	0.035	0	0.42
28.833	0.00	0.15	0.034	0	0.42
28.917	0.00	0.15	0.033	0	0.41
29.000	0.00	0.15	0.032	0	0.40
29.083	0.00	0.15	0.031	0	0.39
29.167	0.00	0.14	0.030	0	0.39

29.250	0.00	0.14	0.029	0	0.38
29.333	0.00	0.14	0.028	0	0.37
29.417	0.00	0.14	0.027	0	0.37
29.500	0.00	0.14	0.026	0	0.36
29.583	0.00	0.14	0.025	0	0.35
29.667	0.00	0.14	0.024	0	0.34
29.750	0.00	0.14	0.023	0	0.34
29.833	0.00	0.13	0.022	0	0.33
29.917	0.00	0.13	0.021	0	0.32
30.000	0.00	0.13	0.021	0	0.32
30.083	0.00	0.13	0.020	0	0.31
30.167	0.00	0.13	0.019	0	0.31
30.250	0.00	0.13	0.018	0	0.30
30.333	0.00	0.13	0.017	0	0.29
30.417	0.00	0.13	0.016	0	0.29
30.500	0.00	0.12	0.015	0	0.28
30.583	0.00	0.12	0.014	0	0.27
30.667	0.00	0.12	0.014	0	0.27
30.750	0.00	0.12	0.013	0	0.26
30.833	0.00	0.12	0.012	0	0.26
30.917	0.00	0.12	0.011	0	0.25
31.000	0.00	0.11	0.010	0	0.24
31.083	0.00	0.10	0.010	0	0.22
31.167	0.00	0.10	0.009	0	0.20
31.250	0.00	0.09	0.008	0	0.19
31.333	0.00	0.08	0.008	0	0.17
31.417	0.00	0.08	0.007	0	0.16
31.500	0.00	0.07	0.007	0	0.15
31.583	0.00	0.07	0.006	0	0.14
31.667	0.00	0.06	0.006	0	0.13
31.750	0.00	0.06	0.005	0	0.12
31.833	0.00	0.05	0.005	0	0.11
31.917	0.00	0.05	0.005	0	0.10
32.000	0.00	0.05	0.004	0	0.10
32.083	0.00	0.04	0.004	0	0.09
32.167	0.00	0.04	0.004	0	0.08
32.250	0.00	0.04	0.003	0	0.08
32.333	0.00	0.03	0.003	0	0.07
32.417	0.00	0.03	0.003	0	0.07
32.500	0.00	0.03	0.003	0	0.06
32.583	0.00	0.03	0.003	0	0.06
32.667	0.00	0.03	0.002	0	0.05
32.750	0.00	0.02	0.002	0	0.05
32.833	0.00	0.02	0.002	0	0.05
32.917	0.00	0.02	0.002	0	0.04
33.000	0.00	0.02	0.002	0	0.04
33.083	0.00	0.02	0.002	0	0.04
33.167	0.00	0.02	0.002	0	0.03
33.250	0.00	0.02	0.001	0	0.03
33.333	0.00	0.01	0.001	0	0.03
33.417	0.00	0.01	0.001	0	0.03
33.500	0.00	0.01	0.001	0	0.03
33.583	0.00	0.01	0.001	0	0.02
33.667	0.00	0.01	0.001	0	0.02
33.750	0.00	0.01	0.001	0	0.02
33.833	0.00	0.01	0.001	0	0.02
33.917	0.00	0.01	0.001	0	0.02
34.000	0.00	0.01	0.001	0	0.02
34.083	0.00	0.01	0.001	0	0.02
34.167	0.00	0.01	0.001	0	0.01
34.250	0.00	0.01	0.001	0	0.01
34.333	0.00	0.01	0.001	0	0.01
34.417	0.00	0.01	0.000	0	0.01
34.500	0.00	0.00	0.000	0	0.01
34.583	0.00	0.00	0.000	0	0.01
34.667	0.00	0.00	0.000	0	0.01
34.750	0.00	0.00	0.000	0	0.01
34.833	0.00	0.00	0.000	0	0.01
34.917	0.00	0.00	0.000	0	0.01
35.000	0.00	0.00	0.000	0	0.01
35.083	0.00	0.00	0.000	0	0.01
35.167	0.00	0.00	0.000	0	0.01

35.250	0.00	0.00	0.000	0					0.01
35.333	0.00	0.00	0.000	0					0.01
35.417	0.00	0.00	0.000	0					0.00
35.500	0.00	0.00	0.000	0					0.00
35.583	0.00	0.00	0.000	0					0.00
35.667	0.00	0.00	0.000	0					0.00
35.750	0.00	0.00	0.000	0					0.00
35.833	0.00	0.00	0.000	0					0.00
35.917	0.00	0.00	0.000	0					0.00
36.000	0.00	0.00	0.000	0					0.00
36.083	0.00	0.00	0.000	0					0.00
36.167	0.00	0.00	0.000	0					0.00
36.250	0.00	0.00	0.000	0					0.00
36.333	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 436
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 0.399 (CFS)
 Total volume = 0.677 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/06/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 140-161
 MITIGATION ANALYSIS
 3-HOUR - 5-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PD0535.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 37
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 6.436 (CFS)
 Total volume = 0.523 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 37
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.011	0.118	0.011	0.011
0.500	0.046	0.167	0.045	0.047
0.600	0.066	0.183	0.065	0.067
1.000	0.153	0.236	0.152	0.154
1.500	0.263	0.289	0.262	0.264
1.810	0.330	0.318	0.329	0.331
2.000	0.373	0.334	0.372	0.374
2.500	0.483	0.374	0.482	0.484
3.000	0.590	0.409	0.589	0.591
3.500	0.694	0.442	0.692	0.696
3.900	0.772	0.467	0.770	0.774
4.000	0.793	0.535	0.791	0.795
4.500	0.882	2.336	0.874	0.890
4.900	0.933	4.305	0.918	0.948
5.000	0.947	4.495	0.932	0.962

5. 500 0. 973 5. 338 0. 955 0. 991
 5. 600 0. 979 5. 490 0. 960 0. 998

 Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	0	1. 6	3. 22	4. 83	6. 44	Depth (Ft.)
0. 083	0. 72	0. 03	0. 002	0	I				0. 05
0. 167	0. 97	0. 08	0. 008	0	I				0. 18
0. 250	0. 86	0. 12	0. 013	0	I				0. 27
0. 333	1. 04	0. 13	0. 019	0	I				0. 31
0. 417	1. 12	0. 14	0. 026	0	I				0. 35
0. 500	1. 29	0. 15	0. 033	0	I				0. 41
0. 583	1. 18	0. 16	0. 040	0	I				0. 46
0. 667	1. 29	0. 17	0. 048	0	I				0. 51
0. 750	1. 34	0. 17	0. 056	0	I				0. 55
0. 833	1. 18	0. 18	0. 063	0	I				0. 59
0. 917	1. 18	0. 19	0. 070	0	I				0. 62
1. 000	1. 31	0. 19	0. 077	0	I				0. 65
1. 083	1. 57	0. 20	0. 086	0	I				0. 69
1. 167	1. 64	0. 20	0. 095	0	I				0. 74
1. 250	1. 64	0. 21	0. 105	0	I				0. 78
1. 333	1. 53	0. 21	0. 115	0	I				0. 82
1. 417	1. 83	0. 22	0. 125	0	I				0. 87
1. 500	2. 00	0. 23	0. 137	0	I				0. 92
1. 583	1. 85	0. 23	0. 148	0	I				0. 98
1. 667	1. 96	0. 24	0. 160	0	I				1. 03
1. 750	2. 35	0. 25	0. 173	0	I				1. 09
1. 833	2. 35	0. 25	0. 187	0	I				1. 16
1. 917	2. 20	0. 26	0. 201	0	I				1. 22
2. 000	2. 22	0. 27	0. 215	0	I				1. 28
2. 083	2. 30	0. 27	0. 228	0	I				1. 34
2. 167	2. 93	0. 28	0. 244	0	I	I			1. 42
2. 250	3. 58	0. 29	0. 265	0	I	I			1. 51
2. 333	2. 90	0. 30	0. 285	0	I	I			1. 60
2. 417	4. 67	0. 31	0. 309	0	I		I		1. 71
2. 500	5. 71	0. 32	0. 343	0	I		I		1. 87
2. 583	6. 44	0. 34	0. 382	0	I		I	I	2. 04
2. 667	5. 08	0. 35	0. 420	0	I		I	I	2. 21
2. 750	2. 27	0. 36	0. 442	0	I		I	I	2. 32
2. 833	1. 38	0. 36	0. 453	0	I		I	I	2. 36
2. 917	1. 34	0. 37	0. 459	0	I		I	I	2. 39
3. 000	0. 68	0. 37	0. 464	0	I		I	I	2. 41
3. 083	0. 11	0. 37	0. 464	10					2. 41
3. 167	0. 00	0. 37	0. 462	10					2. 40
3. 250	0. 00	0. 37	0. 459	10					2. 39
3. 333	0. 00	0. 36	0. 457	10					2. 38
3. 417	0. 00	0. 36	0. 454	10					2. 37
3. 500	0. 00	0. 36	0. 452	10					2. 36
3. 583	0. 00	0. 36	0. 449	10					2. 35
3. 667	0. 00	0. 36	0. 447	10					2. 34
3. 750	0. 00	0. 36	0. 444	10					2. 32
3. 833	0. 00	0. 36	0. 442	10					2. 31
3. 917	0. 00	0. 36	0. 439	10					2. 30
4. 000	0. 00	0. 36	0. 437	10					2. 29
4. 083	0. 00	0. 36	0. 435	10					2. 28
4. 167	0. 00	0. 36	0. 432	10					2. 27
4. 250	0. 00	0. 35	0. 430	10					2. 26
4. 333	0. 00	0. 35	0. 427	10					2. 25
4. 417	0. 00	0. 35	0. 425	10					2. 24
4. 500	0. 00	0. 35	0. 422	10					2. 22
4. 583	0. 00	0. 35	0. 420	10					2. 21
4. 667	0. 00	0. 35	0. 417	10					2. 20
4. 750	0. 00	0. 35	0. 415	10					2. 19
4. 833	0. 00	0. 35	0. 413	10					2. 18
4. 917	0. 00	0. 35	0. 410	10					2. 17
5. 000	0. 00	0. 35	0. 408	10					2. 16
5. 083	0. 00	0. 35	0. 405	10					2. 15
5. 167	0. 00	0. 34	0. 403	10					2. 14

5. 250	0. 00	0. 34	0. 401	IO
5. 333	0. 00	0. 34	0. 398	IO
5. 417	0. 00	0. 34	0. 396	IO
5. 500	0. 00	0. 34	0. 394	IO
5. 583	0. 00	0. 34	0. 391	IO
5. 667	0. 00	0. 34	0. 389	IO
5. 750	0. 00	0. 34	0. 387	IO
5. 833	0. 00	0. 34	0. 384	IO
5. 917	0. 00	0. 34	0. 382	IO
6. 000	0. 00	0. 34	0. 380	IO
6. 083	0. 00	0. 34	0. 377	IO
6. 167	0. 00	0. 33	0. 375	IO
6. 250	0. 00	0. 33	0. 373	IO
6. 333	0. 00	0. 33	0. 370	IO
6. 417	0. 00	0. 33	0. 368	IO
6. 500	0. 00	0. 33	0. 366	IO
6. 583	0. 00	0. 33	0. 364	IO
6. 667	0. 00	0. 33	0. 361	IO
6. 750	0. 00	0. 33	0. 359	IO
6. 833	0. 00	0. 33	0. 357	IO
6. 917	0. 00	0. 33	0. 355	IO
7. 000	0. 00	0. 33	0. 352	IO
7. 083	0. 00	0. 33	0. 350	IO
7. 167	0. 00	0. 32	0. 348	IO
7. 250	0. 00	0. 32	0. 346	IO
7. 333	0. 00	0. 32	0. 343	IO
7. 417	0. 00	0. 32	0. 341	IO
7. 500	0. 00	0. 32	0. 339	IO
7. 583	0. 00	0. 32	0. 337	IO
7. 667	0. 00	0. 32	0. 334	IO
7. 750	0. 00	0. 32	0. 332	IO
7. 833	0. 00	0. 32	0. 330	IO
7. 917	0. 00	0. 32	0. 328	IO
8. 000	0. 00	0. 32	0. 326	IO
8. 083	0. 00	0. 32	0. 324	IO
8. 167	0. 00	0. 31	0. 321	IO
8. 250	0. 00	0. 31	0. 319	IO
8. 333	0. 00	0. 31	0. 317	IO
8. 417	0. 00	0. 31	0. 315	IO
8. 500	0. 00	0. 31	0. 313	IO
8. 583	0. 00	0. 31	0. 311	IO
8. 667	0. 00	0. 31	0. 309	IO
8. 750	0. 00	0. 31	0. 306	IO
8. 833	0. 00	0. 31	0. 304	IO
8. 917	0. 00	0. 31	0. 302	IO
9. 000	0. 00	0. 31	0. 300	IO
9. 083	0. 00	0. 30	0. 298	IO
9. 167	0. 00	0. 30	0. 296	IO
9. 250	0. 00	0. 30	0. 294	IO
9. 333	0. 00	0. 30	0. 292	IO
9. 417	0. 00	0. 30	0. 290	IO
9. 500	0. 00	0. 30	0. 288	IO
9. 583	0. 00	0. 30	0. 286	IO
9. 667	0. 00	0. 30	0. 283	IO
9. 750	0. 00	0. 30	0. 281	IO
9. 833	0. 00	0. 30	0. 279	IO
9. 917	0. 00	0. 30	0. 277	IO
10. 000	0. 00	0. 29	0. 275	IO
10. 083	0. 00	0. 29	0. 273	IO
10. 167	0. 00	0. 29	0. 271	IO
10. 250	0. 00	0. 29	0. 269	IO
10. 333	0. 00	0. 29	0. 267	IO
10. 417	0. 00	0. 29	0. 265	IO
10. 500	0. 00	0. 29	0. 263	IO
10. 583	0. 00	0. 29	0. 261	IO
10. 667	0. 00	0. 29	0. 259	IO
10. 750	0. 00	0. 29	0. 257	IO
10. 833	0. 00	0. 29	0. 255	IO
10. 917	0. 00	0. 28	0. 253	IO
11. 000	0. 00	0. 28	0. 251	IO
11. 083	0. 00	0. 28	0. 249	IO
11. 167	0. 00	0. 28	0. 248	IO

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11. 250	0. 00	0. 28	0. 246	IO
11. 333	0. 00	0. 28	0. 244	IO
11. 417	0. 00	0. 28	0. 242	IO
11. 500	0. 00	0. 28	0. 240	IO
11. 583	0. 00	0. 28	0. 238	IO
11. 667	0. 00	0. 28	0. 236	IO
11. 750	0. 00	0. 28	0. 234	IO
11. 833	0. 00	0. 27	0. 232	IO
11. 917	0. 00	0. 27	0. 230	IO
12. 000	0. 00	0. 27	0. 228	IO
12. 083	0. 00	0. 27	0. 227	IO
12. 167	0. 00	0. 27	0. 225	IO
12. 250	0. 00	0. 27	0. 223	IO
12. 333	0. 00	0. 27	0. 221	IO
12. 417	0. 00	0. 27	0. 219	IO
12. 500	0. 00	0. 27	0. 217	IO
12. 583	0. 00	0. 27	0. 215	IO
12. 667	0. 00	0. 27	0. 214	IO
12. 750	0. 00	0. 26	0. 212	IO
12. 833	0. 00	0. 26	0. 210	IO
12. 917	0. 00	0. 26	0. 208	IO
13. 000	0. 00	0. 26	0. 206	IO
13. 083	0. 00	0. 26	0. 205	IO
13. 167	0. 00	0. 26	0. 203	IO
13. 250	0. 00	0. 26	0. 201	IO
13. 333	0. 00	0. 26	0. 199	IO
13. 417	0. 00	0. 26	0. 197	IO
13. 500	0. 00	0. 26	0. 196	IO
13. 583	0. 00	0. 26	0. 194	IO
13. 667	0. 00	0. 25	0. 192	IO
13. 750	0. 00	0. 25	0. 190	IO
13. 833	0. 00	0. 25	0. 189	IO
13. 917	0. 00	0. 25	0. 187	IO
14. 000	0. 00	0. 25	0. 185	IO
14. 083	0. 00	0. 25	0. 183	IO
14. 167	0. 00	0. 25	0. 182	IO
14. 250	0. 00	0. 25	0. 180	IO
14. 333	0. 00	0. 25	0. 178	IO
14. 417	0. 00	0. 25	0. 177	IO
14. 500	0. 00	0. 25	0. 175	IO
14. 583	0. 00	0. 25	0. 173	IO
14. 667	0. 00	0. 24	0. 172	IO
14. 750	0. 00	0. 24	0. 170	IO
14. 833	0. 00	0. 24	0. 168	IO
14. 917	0. 00	0. 24	0. 166	IO
15. 000	0. 00	0. 24	0. 165	IO
15. 083	0. 00	0. 24	0. 163	IO
15. 167	0. 00	0. 24	0. 161	IO
15. 250	0. 00	0. 24	0. 160	IO
15. 333	0. 00	0. 24	0. 158	IO
15. 417	0. 00	0. 24	0. 157	IO
15. 500	0. 00	0. 24	0. 155	IO
15. 583	0. 00	0. 24	0. 153	IO
15. 667	0. 00	0. 24	0. 152	IO
15. 750	0. 00	0. 23	0. 150	IO
15. 833	0. 00	0. 23	0. 148	IO
15. 917	0. 00	0. 23	0. 147	IO
16. 000	0. 00	0. 23	0. 145	IO
16. 083	0. 00	0. 23	0. 144	IO
16. 167	0. 00	0. 23	0. 142	IO
16. 250	0. 00	0. 23	0. 140	IO
16. 333	0. 00	0. 23	0. 139	IO
16. 417	0. 00	0. 23	0. 137	IO
16. 500	0. 00	0. 23	0. 136	IO
16. 583	0. 00	0. 22	0. 134	IO
16. 667	0. 00	0. 22	0. 133	IO
16. 750	0. 00	0. 22	0. 131	IO
16. 833	0. 00	0. 22	0. 130	IO
16. 917	0. 00	0. 22	0. 128	IO
17. 000	0. 00	0. 22	0. 127	IO
17. 083	0. 00	0. 22	0. 125	IO
17. 167	0. 00	0. 22	0. 124	IO

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17. 250	0. 00	0. 22	0. 122	IO	0. 86
17. 333	0. 00	0. 22	0. 121	IO	0. 85
17. 417	0. 00	0. 22	0. 119	IO	0. 84
17. 500	0. 00	0. 21	0. 118	IO	0. 84
17. 583	0. 00	0. 21	0. 116	IO	0. 83
17. 667	0. 00	0. 21	0. 115	IO	0. 82
17. 750	0. 00	0. 21	0. 113	IO	0. 82
17. 833	0. 00	0. 21	0. 112	IO	0. 81
17. 917	0. 00	0. 21	0. 110	IO	0. 80
18. 000	0. 00	0. 21	0. 109	IO	0. 80
18. 083	0. 00	0. 21	0. 107	IO	0. 79
18. 167	0. 00	0. 21	0. 106	IO	0. 78
18. 250	0. 00	0. 21	0. 105	IO	0. 78
18. 333	0. 00	0. 21	0. 103	IO	0. 77
18. 417	0. 00	0. 20	0. 102	IO	0. 76
18. 500	0. 00	0. 20	0. 100	IO	0. 76
18. 583	0. 00	0. 20	0. 099	IO	0. 75
18. 667	0. 00	0. 20	0. 098	IO	0. 75
18. 750	0. 00	0. 20	0. 096	IO	0. 74
18. 833	0. 00	0. 20	0. 095	0	0. 73
18. 917	0. 00	0. 20	0. 093	0	0. 73
19. 000	0. 00	0. 20	0. 092	0	0. 72
19. 083	0. 00	0. 20	0. 091	0	0. 71
19. 167	0. 00	0. 20	0. 089	0	0. 71
19. 250	0. 00	0. 20	0. 088	0	0. 70
19. 333	0. 00	0. 20	0. 087	0	0. 69
19. 417	0. 00	0. 19	0. 085	0	0. 69
19. 500	0. 00	0. 19	0. 084	0	0. 68
19. 583	0. 00	0. 19	0. 083	0	0. 68
19. 667	0. 00	0. 19	0. 081	0	0. 67
19. 750	0. 00	0. 19	0. 080	0	0. 66
19. 833	0. 00	0. 19	0. 079	0	0. 66
19. 917	0. 00	0. 19	0. 077	0	0. 65
20. 000	0. 00	0. 19	0. 076	0	0. 65
20. 083	0. 00	0. 19	0. 075	0	0. 64
20. 167	0. 00	0. 19	0. 073	0	0. 63
20. 250	0. 00	0. 19	0. 072	0	0. 63
20. 333	0. 00	0. 19	0. 071	0	0. 62
20. 417	0. 00	0. 19	0. 070	0	0. 62
20. 500	0. 00	0. 18	0. 068	0	0. 61
20. 583	0. 00	0. 18	0. 067	0	0. 60
20. 667	0. 00	0. 18	0. 066	0	0. 60
20. 750	0. 00	0. 18	0. 064	0	0. 59
20. 833	0. 00	0. 18	0. 063	0	0. 59
20. 917	0. 00	0. 18	0. 062	0	0. 58
21. 000	0. 00	0. 18	0. 061	0	0. 57
21. 083	0. 00	0. 18	0. 060	0	0. 57
21. 167	0. 00	0. 18	0. 058	0	0. 56
21. 250	0. 00	0. 18	0. 057	0	0. 56
21. 333	0. 00	0. 17	0. 056	0	0. 55
21. 417	0. 00	0. 17	0. 055	0	0. 54
21. 500	0. 00	0. 17	0. 053	0	0. 54
21. 583	0. 00	0. 17	0. 052	0	0. 53
21. 667	0. 00	0. 17	0. 051	0	0. 53
21. 750	0. 00	0. 17	0. 050	0	0. 52
21. 833	0. 00	0. 17	0. 049	0	0. 51
21. 917	0. 00	0. 17	0. 048	0	0. 51
22. 000	0. 00	0. 17	0. 046	0	0. 50
22. 083	0. 00	0. 17	0. 045	0	0. 50
22. 167	0. 00	0. 16	0. 044	0	0. 49
22. 250	0. 00	0. 16	0. 043	0	0. 48
22. 333	0. 00	0. 16	0. 042	0	0. 47
22. 417	0. 00	0. 16	0. 041	0	0. 46
22. 500	0. 00	0. 16	0. 040	0	0. 46
22. 583	0. 00	0. 16	0. 039	0	0. 45
22. 667	0. 00	0. 16	0. 038	0	0. 44
22. 750	0. 00	0. 15	0. 037	0	0. 43
22. 833	0. 00	0. 15	0. 035	0	0. 42
22. 917	0. 00	0. 15	0. 034	0	0. 42
23. 000	0. 00	0. 15	0. 033	0	0. 41
23. 083	0. 00	0. 15	0. 032	0	0. 40
23. 167	0. 00	0. 15	0. 031	0	0. 40

23.250	0.00	0.15	0.030	0	0.39
23.333	0.00	0.14	0.029	0	0.38
23.417	0.00	0.14	0.028	0	0.37
23.500	0.00	0.14	0.027	0	0.37
23.583	0.00	0.14	0.026	0	0.36
23.667	0.00	0.14	0.025	0	0.35
23.750	0.00	0.14	0.025	0	0.35
23.833	0.00	0.14	0.024	0	0.34
23.917	0.00	0.13	0.023	0	0.33
24.000	0.00	0.13	0.022	0	0.33
24.083	0.00	0.13	0.021	0	0.32
24.167	0.00	0.13	0.020	0	0.31
24.250	0.00	0.13	0.019	0	0.31
24.333	0.00	0.13	0.018	0	0.30
24.417	0.00	0.13	0.017	0	0.29
24.500	0.00	0.13	0.016	0	0.29
24.583	0.00	0.12	0.016	0	0.28
24.667	0.00	0.12	0.015	0	0.28
24.750	0.00	0.12	0.014	0	0.27
24.833	0.00	0.12	0.013	0	0.26
24.917	0.00	0.12	0.012	0	0.26
25.000	0.00	0.12	0.011	0	0.25
25.083	0.00	0.11	0.011	0	0.24
25.167	0.00	0.11	0.010	0	0.22
25.250	0.00	0.10	0.009	0	0.21
25.333	0.00	0.09	0.008	0	0.19
25.417	0.00	0.08	0.008	0	0.18
25.500	0.00	0.08	0.007	0	0.17
25.583	0.00	0.07	0.007	0	0.15
25.667	0.00	0.07	0.006	0	0.14
25.750	0.00	0.06	0.006	0	0.13
25.833	0.00	0.06	0.005	0	0.12
25.917	0.00	0.05	0.005	0	0.11
26.000	0.00	0.05	0.005	0	0.11
26.083	0.00	0.05	0.004	0	0.10
26.167	0.00	0.04	0.004	0	0.09
26.250	0.00	0.04	0.004	0	0.09
26.333	0.00	0.04	0.003	0	0.08
26.417	0.00	0.03	0.003	0	0.07
26.500	0.00	0.03	0.003	0	0.07
26.583	0.00	0.03	0.003	0	0.06
26.667	0.00	0.03	0.003	0	0.06
26.750	0.00	0.03	0.002	0	0.05
26.833	0.00	0.02	0.002	0	0.05
26.917	0.00	0.02	0.002	0	0.05
27.000	0.00	0.02	0.002	0	0.04
27.083	0.00	0.02	0.002	0	0.04
27.167	0.00	0.02	0.002	0	0.04
27.250	0.00	0.02	0.002	0	0.04
27.333	0.00	0.02	0.001	0	0.03
27.417	0.00	0.01	0.001	0	0.03
27.500	0.00	0.01	0.001	0	0.03
27.583	0.00	0.01	0.001	0	0.03
27.667	0.00	0.01	0.001	0	0.02
27.750	0.00	0.01	0.001	0	0.02
27.833	0.00	0.01	0.001	0	0.02
27.917	0.00	0.01	0.001	0	0.02
28.000	0.00	0.01	0.001	0	0.02
28.083	0.00	0.01	0.001	0	0.02
28.167	0.00	0.01	0.001	0	0.02
28.250	0.00	0.01	0.001	0	0.01
28.333	0.00	0.01	0.001	0	0.01
28.417	0.00	0.01	0.001	0	0.01
28.500	0.00	0.01	0.001	0	0.01
28.583	0.00	0.01	0.000	0	0.01
28.667	0.00	0.00	0.000	0	0.01
28.750	0.00	0.00	0.000	0	0.01
28.833	0.00	0.00	0.000	0	0.01
28.917	0.00	0.00	0.000	0	0.01
29.000	0.00	0.00	0.000	0	0.01
29.083	0.00	0.00	0.000	0	0.01
29.167	0.00	0.00	0.000	0	0.01

29.250	0.00	0.00	0.000	0					0.01
29.333	0.00	0.00	0.000	0					0.01
29.417	0.00	0.00	0.000	0					0.01
29.500	0.00	0.00	0.000	0					0.00
29.583	0.00	0.00	0.000	0					0.00
29.667	0.00	0.00	0.000	0					0.00
29.750	0.00	0.00	0.000	0					0.00
29.833	0.00	0.00	0.000	0					0.00
29.917	0.00	0.00	0.000	0					0.00
30.000	0.00	0.00	0.000	0					0.00
30.083	0.00	0.00	0.000	0					0.00
30.167	0.00	0.00	0.000	0					0.00
30.250	0.00	0.00	0.000	0					0.00
30.333	0.00	0.00	0.000	0					0.00
30.417	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 365
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 0.367 (CFS)
 Total volume = 0.523 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/06/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 140-161
 MITIGATION ANALYSIS
 1-HOUR - 5-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PD0515.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 13
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 11.192 (CFS)
 Total volume = 0.318 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 13
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.011	0.118	0.011	0.011
0.500	0.046	0.167	0.045	0.047
0.600	0.066	0.183	0.065	0.067
1.000	0.153	0.236	0.152	0.154
1.500	0.263	0.289	0.262	0.264
1.810	0.330	0.318	0.329	0.331
2.000	0.373	0.334	0.372	0.374
2.500	0.483	0.374	0.482	0.484
3.000	0.590	0.409	0.589	0.591
3.500	0.694	0.442	0.692	0.696
3.900	0.772	0.467	0.770	0.774
4.000	0.793	0.535	0.791	0.795
4.500	0.882	2.336	0.874	0.890
4.900	0.933	4.305	0.918	0.948
5.000	0.947	4.495	0.932	0.962

5. 500 0. 973 5. 338 0. 955 0. 991
 5. 600 0. 979 5. 490 0. 960 0. 998

 Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	. 0	2. 8	5. 60	8. 39	11. 19	Depth (Ft.)
0. 083	1. 45	0. 05	0. 005	0	I				0. 11
0. 167	1. 97	0. 12	0. 016	0	I				0. 29
0. 250	2. 28	0. 14	0. 030	0	I				0. 38
0. 333	2. 38	0. 17	0. 045	0	I				0. 49
0. 417	2. 48	0. 18	0. 060	0	I				0. 57
0. 500	2. 74	0. 19	0. 077	0	I				0. 65
0. 583	3. 31	0. 20	0. 096	0	I				0. 74
0. 667	3. 92	0. 22	0. 120	0	I				0. 85
0. 750	5. 55	0. 23	0. 151	0		I			0. 99
0. 833	11. 19	0. 26	0. 207	0				I	1. 25
0. 917	5. 89	0. 29	0. 264	0		I			1. 50
1. 000	2. 50	0. 30	0. 291	0	I				1. 63
1. 083	0. 55	0. 30	0. 299	0I					1. 67
1. 167	0. 00	0. 30	0. 299	0					1. 67
1. 250	0. 00	0. 30	0. 297	0					1. 66
1. 333	0. 00	0. 30	0. 295	0					1. 65
1. 417	0. 00	0. 30	0. 293	0					1. 64
1. 500	0. 00	0. 30	0. 291	0					1. 63
1. 583	0. 00	0. 30	0. 289	0					1. 62
1. 667	0. 00	0. 30	0. 286	0					1. 61
1. 750	0. 00	0. 30	0. 284	0					1. 60
1. 833	0. 00	0. 30	0. 282	0					1. 59
1. 917	0. 00	0. 30	0. 280	0					1. 58
2. 000	0. 00	0. 30	0. 278	0					1. 57
2. 083	0. 00	0. 29	0. 276	0					1. 56
2. 167	0. 00	0. 29	0. 274	0					1. 55
2. 250	0. 00	0. 29	0. 272	0					1. 54
2. 333	0. 00	0. 29	0. 270	0					1. 53
2. 417	0. 00	0. 29	0. 268	0					1. 52
2. 500	0. 00	0. 29	0. 266	0					1. 51
2. 583	0. 00	0. 29	0. 264	0					1. 51
2. 667	0. 00	0. 29	0. 262	0					1. 50
2. 750	0. 00	0. 29	0. 260	0					1. 49
2. 833	0. 00	0. 29	0. 258	0					1. 48
2. 917	0. 00	0. 29	0. 256	0					1. 47
3. 000	0. 00	0. 28	0. 254	0					1. 46
3. 083	0. 00	0. 28	0. 252	0					1. 45
3. 167	0. 00	0. 28	0. 250	0					1. 44
3. 250	0. 00	0. 28	0. 248	0					1. 43
3. 333	0. 00	0. 28	0. 246	0					1. 42
3. 417	0. 00	0. 28	0. 245	0					1. 42
3. 500	0. 00	0. 28	0. 243	0					1. 41
3. 583	0. 00	0. 28	0. 241	0					1. 40
3. 667	0. 00	0. 28	0. 239	0					1. 39
3. 750	0. 00	0. 28	0. 237	0					1. 38
3. 833	0. 00	0. 28	0. 235	0					1. 37
3. 917	0. 00	0. 27	0. 233	0					1. 36
4. 000	0. 00	0. 27	0. 231	0					1. 36
4. 083	0. 00	0. 27	0. 229	0					1. 35
4. 167	0. 00	0. 27	0. 227	0					1. 34
4. 250	0. 00	0. 27	0. 226	0					1. 33
4. 333	0. 00	0. 27	0. 224	0					1. 32
4. 417	0. 00	0. 27	0. 222	0					1. 31
4. 500	0. 00	0. 27	0. 220	0					1. 30
4. 583	0. 00	0. 27	0. 218	0					1. 30
4. 667	0. 00	0. 27	0. 216	0					1. 29
4. 750	0. 00	0. 27	0. 214	0					1. 28
4. 833	0. 00	0. 26	0. 213	0					1. 27
4. 917	0. 00	0. 26	0. 211	0					1. 26
5. 000	0. 00	0. 26	0. 209	0					1. 25
5. 083	0. 00	0. 26	0. 207	0					1. 25
5. 167	0. 00	0. 26	0. 205	0					1. 24

5. 250	0. 00	0. 26	0. 204	0	1. 23
5. 333	0. 00	0. 26	0. 202	0	1. 22
5. 417	0. 00	0. 26	0. 200	0	1. 21
5. 500	0. 00	0. 26	0. 198	0	1. 21
5. 583	0. 00	0. 26	0. 196	0	1. 20
5. 667	0. 00	0. 26	0. 195	0	1. 19
5. 750	0. 00	0. 26	0. 193	0	1. 18
5. 833	0. 00	0. 25	0. 191	0	1. 17
5. 917	0. 00	0. 25	0. 189	0	1. 17
6. 000	0. 00	0. 25	0. 188	0	1. 16
6. 083	0. 00	0. 25	0. 186	0	1. 15
6. 167	0. 00	0. 25	0. 184	0	1. 14
6. 250	0. 00	0. 25	0. 183	0	1. 13
6. 333	0. 00	0. 25	0. 181	0	1. 13
6. 417	0. 00	0. 25	0. 179	0	1. 12
6. 500	0. 00	0. 25	0. 177	0	1. 11
6. 583	0. 00	0. 25	0. 176	0	1. 10
6. 667	0. 00	0. 25	0. 174	0	1. 10
6. 750	0. 00	0. 25	0. 172	0	1. 09
6. 833	0. 00	0. 24	0. 171	0	1. 08
6. 917	0. 00	0. 24	0. 169	0	1. 07
7. 000	0. 00	0. 24	0. 167	0	1. 06
7. 083	0. 00	0. 24	0. 166	0	1. 06
7. 167	0. 00	0. 24	0. 164	0	1. 05
7. 250	0. 00	0. 24	0. 162	0	1. 04
7. 333	0. 00	0. 24	0. 161	0	1. 03
7. 417	0. 00	0. 24	0. 159	0	1. 03
7. 500	0. 00	0. 24	0. 157	0	1. 02
7. 583	0. 00	0. 24	0. 156	0	1. 01
7. 667	0. 00	0. 24	0. 154	0	1. 00
7. 750	0. 00	0. 24	0. 152	0	1. 00
7. 833	0. 00	0. 23	0. 151	0	0. 99
7. 917	0. 00	0. 23	0. 149	0	0. 98
8. 000	0. 00	0. 23	0. 148	0	0. 98
8. 083	0. 00	0. 23	0. 146	0	0. 97
8. 167	0. 00	0. 23	0. 144	0	0. 96
8. 250	0. 00	0. 23	0. 143	0	0. 95
8. 333	0. 00	0. 23	0. 141	0	0. 95
8. 417	0. 00	0. 23	0. 140	0	0. 94
8. 500	0. 00	0. 23	0. 138	0	0. 93
8. 583	0. 00	0. 23	0. 137	0	0. 92
8. 667	0. 00	0. 23	0. 135	0	0. 92
8. 750	0. 00	0. 22	0. 133	0	0. 91
8. 833	0. 00	0. 22	0. 132	0	0. 90
8. 917	0. 00	0. 22	0. 130	0	0. 90
9. 000	0. 00	0. 22	0. 129	0	0. 89
9. 083	0. 00	0. 22	0. 127	0	0. 88
9. 167	0. 00	0. 22	0. 126	0	0. 87
9. 250	0. 00	0. 22	0. 124	0	0. 87
9. 333	0. 00	0. 22	0. 123	0	0. 86
9. 417	0. 00	0. 22	0. 121	0	0. 85
9. 500	0. 00	0. 22	0. 120	0	0. 85
9. 583	0. 00	0. 21	0. 118	0	0. 84
9. 667	0. 00	0. 21	0. 117	0	0. 83
9. 750	0. 00	0. 21	0. 115	0	0. 83
9. 833	0. 00	0. 21	0. 114	0	0. 82
9. 917	0. 00	0. 21	0. 112	0	0. 81
10. 000	0. 00	0. 21	0. 111	0	0. 81
10. 083	0. 00	0. 21	0. 110	0	0. 80
10. 167	0. 00	0. 21	0. 108	0	0. 79
10. 250	0. 00	0. 21	0. 107	0	0. 79
10. 333	0. 00	0. 21	0. 105	0	0. 78
10. 417	0. 00	0. 21	0. 104	0	0. 77
10. 500	0. 00	0. 21	0. 102	0	0. 77
10. 583	0. 00	0. 20	0. 101	0	0. 76
10. 667	0. 00	0. 20	0. 100	0	0. 75
10. 750	0. 00	0. 20	0. 098	0	0. 75
10. 833	0. 00	0. 20	0. 097	0	0. 74
10. 917	0. 00	0. 20	0. 095	0	0. 74
11. 000	0. 00	0. 20	0. 094	0	0. 73
11. 083	0. 00	0. 20	0. 093	0	0. 72
11. 167	0. 00	0. 20	0. 091	0	0. 72

11. 250	0. 00	0. 20	0. 090	0	0. 71
11. 333	0. 00	0. 20	0. 089	0	0. 70
11. 417	0. 00	0. 20	0. 087	0	0. 70
11. 500	0. 00	0. 20	0. 086	0	0. 69
11. 583	0. 00	0. 19	0. 085	0	0. 69
11. 667	0. 00	0. 19	0. 083	0	0. 68
11. 750	0. 00	0. 19	0. 082	0	0. 67
11. 833	0. 00	0. 19	0. 081	0	0. 67
11. 917	0. 00	0. 19	0. 079	0	0. 66
12. 000	0. 00	0. 19	0. 078	0	0. 65
12. 083	0. 00	0. 19	0. 077	0	0. 65
12. 167	0. 00	0. 19	0. 075	0	0. 64
12. 250	0. 00	0. 19	0. 074	0	0. 64
12. 333	0. 00	0. 19	0. 073	0	0. 63
12. 417	0. 00	0. 19	0. 071	0	0. 62
12. 500	0. 00	0. 19	0. 070	0	0. 62
12. 583	0. 00	0. 18	0. 069	0	0. 61
12. 667	0. 00	0. 18	0. 068	0	0. 61
12. 750	0. 00	0. 18	0. 066	0	0. 60
12. 833	0. 00	0. 18	0. 065	0	0. 60
12. 917	0. 00	0. 18	0. 064	0	0. 59
13. 000	0. 00	0. 18	0. 063	0	0. 58
13. 083	0. 00	0. 18	0. 061	0	0. 58
13. 167	0. 00	0. 18	0. 060	0	0. 57
13. 250	0. 00	0. 18	0. 059	0	0. 56
13. 333	0. 00	0. 18	0. 058	0	0. 56
13. 417	0. 00	0. 18	0. 056	0	0. 55
13. 500	0. 00	0. 17	0. 055	0	0. 55
13. 583	0. 00	0. 17	0. 054	0	0. 54
13. 667	0. 00	0. 17	0. 053	0	0. 53
13. 750	0. 00	0. 17	0. 052	0	0. 53
13. 833	0. 00	0. 17	0. 050	0	0. 52
13. 917	0. 00	0. 17	0. 049	0	0. 52
14. 000	0. 00	0. 17	0. 048	0	0. 51
14. 083	0. 00	0. 17	0. 047	0	0. 51
14. 167	0. 00	0. 17	0. 046	0	0. 50
14. 250	0. 00	0. 17	0. 045	0	0. 49
14. 333	0. 00	0. 16	0. 044	0	0. 48
14. 417	0. 00	0. 16	0. 042	0	0. 47
14. 500	0. 00	0. 16	0. 041	0	0. 47
14. 583	0. 00	0. 16	0. 040	0	0. 46
14. 667	0. 00	0. 16	0. 039	0	0. 45
14. 750	0. 00	0. 16	0. 038	0	0. 44
14. 833	0. 00	0. 15	0. 037	0	0. 44
14. 917	0. 00	0. 15	0. 036	0	0. 43
15. 000	0. 00	0. 15	0. 035	0	0. 42
15. 083	0. 00	0. 15	0. 034	0	0. 41
15. 167	0. 00	0. 15	0. 033	0	0. 41
15. 250	0. 00	0. 15	0. 032	0	0. 40
15. 333	0. 00	0. 15	0. 031	0	0. 39
15. 417	0. 00	0. 14	0. 030	0	0. 38
15. 500	0. 00	0. 14	0. 029	0	0. 38
15. 583	0. 00	0. 14	0. 028	0	0. 37
15. 667	0. 00	0. 14	0. 027	0	0. 36
15. 750	0. 00	0. 14	0. 026	0	0. 36
15. 833	0. 00	0. 14	0. 025	0	0. 35
15. 917	0. 00	0. 14	0. 024	0	0. 34
16. 000	0. 00	0. 13	0. 023	0	0. 34
16. 083	0. 00	0. 13	0. 022	0	0. 33
16. 167	0. 00	0. 13	0. 021	0	0. 32
16. 250	0. 00	0. 13	0. 020	0	0. 32
16. 333	0. 00	0. 13	0. 019	0	0. 31
16. 417	0. 00	0. 13	0. 019	0	0. 30
16. 500	0. 00	0. 13	0. 018	0	0. 30
16. 583	0. 00	0. 13	0. 017	0	0. 29
16. 667	0. 00	0. 12	0. 016	0	0. 29
16. 750	0. 00	0. 12	0. 015	0	0. 28
16. 833	0. 00	0. 12	0. 014	0	0. 27
16. 917	0. 00	0. 12	0. 013	0	0. 27
17. 000	0. 00	0. 12	0. 013	0	0. 26
17. 083	0. 00	0. 12	0. 012	0	0. 26
17. 167	0. 00	0. 12	0. 011	0	0. 25

17. 250	0. 00	0. 11	0. 010	0	0. 23
17. 333	0. 00	0. 10	0. 009	0	0. 21
17. 417	0. 00	0. 09	0. 009	0	0. 20
17. 500	0. 00	0. 09	0. 008	0	0. 18
17. 583	0. 00	0. 08	0. 008	0	0. 17
17. 667	0. 00	0. 08	0. 007	0	0. 16
17. 750	0. 00	0. 07	0. 007	0	0. 15
17. 833	0. 00	0. 06	0. 006	0	0. 14
17. 917	0. 00	0. 06	0. 006	0	0. 13
18. 000	0. 00	0. 06	0. 005	0	0. 12
18. 083	0. 00	0. 05	0. 005	0	0. 11
18. 167	0. 00	0. 05	0. 004	0	0. 10
18. 250	0. 00	0. 04	0. 004	0	0. 09
18. 333	0. 00	0. 04	0. 004	0	0. 09
18. 417	0. 00	0. 04	0. 004	0	0. 08
18. 500	0. 00	0. 04	0. 003	0	0. 08
18. 583	0. 00	0. 03	0. 003	0	0. 07
18. 667	0. 00	0. 03	0. 003	0	0. 07
18. 750	0. 00	0. 03	0. 003	0	0. 06
18. 833	0. 00	0. 03	0. 002	0	0. 06
18. 917	0. 00	0. 02	0. 002	0	0. 05
19. 000	0. 00	0. 02	0. 002	0	0. 05
19. 083	0. 00	0. 02	0. 002	0	0. 05
19. 167	0. 00	0. 02	0. 002	0	0. 04
19. 250	0. 00	0. 02	0. 002	0	0. 04
19. 333	0. 00	0. 02	0. 002	0	0. 04
19. 417	0. 00	0. 02	0. 001	0	0. 03
19. 500	0. 00	0. 01	0. 001	0	0. 03
19. 583	0. 00	0. 01	0. 001	0	0. 03
19. 667	0. 00	0. 01	0. 001	0	0. 03
19. 750	0. 00	0. 01	0. 001	0	0. 03
19. 833	0. 00	0. 01	0. 001	0	0. 02
19. 917	0. 00	0. 01	0. 001	0	0. 02
20. 000	0. 00	0. 01	0. 001	0	0. 02
20. 083	0. 00	0. 01	0. 001	0	0. 02
20. 167	0. 00	0. 01	0. 001	0	0. 02
20. 250	0. 00	0. 01	0. 001	0	0. 02
20. 333	0. 00	0. 01	0. 001	0	0. 01
20. 417	0. 00	0. 01	0. 001	0	0. 01
20. 500	0. 00	0. 01	0. 001	0	0. 01
20. 583	0. 00	0. 01	0. 001	0	0. 01
20. 667	0. 00	0. 01	0. 000	0	0. 01
20. 750	0. 00	0. 00	0. 000	0	0. 01
20. 833	0. 00	0. 00	0. 000	0	0. 01
20. 917	0. 00	0. 00	0. 000	0	0. 01
21. 000	0. 00	0. 00	0. 000	0	0. 01
21. 083	0. 00	0. 00	0. 000	0	0. 01
21. 167	0. 00	0. 00	0. 000	0	0. 01
21. 250	0. 00	0. 00	0. 000	0	0. 01
21. 333	0. 00	0. 00	0. 000	0	0. 01
21. 417	0. 00	0. 00	0. 000	0	0. 01
21. 500	0. 00	0. 00	0. 000	0	0. 01
21. 583	0. 00	0. 00	0. 000	0	0. 00
21. 667	0. 00	0. 00	0. 000	0	0. 00
21. 750	0. 00	0. 00	0. 000	0	0. 00
21. 833	0. 00	0. 00	0. 000	0	0. 00
21. 917	0. 00	0. 00	0. 000	0	0. 00
22. 000	0. 00	0. 00	0. 000	0	0. 00
22. 083	0. 00	0. 00	0. 000	0	0. 00
22. 167	0. 00	0. 00	0. 000	0	0. 00
22. 250	0. 00	0. 00	0. 000	0	0. 00
22. 333	0. 00	0. 00	0. 000	0	0. 00
22. 417	0. 00	0. 00	0. 000	0	0. 00
22. 500	0. 00	0. 00	0. 000	0	0. 00
22. 583	0. 00	0. 00	0. 000	0	0. 00

*****HYDROGRAPH DATA*****

Number of intervals = 271
Time interval = 5. 0 (Mi n.)
Maximum/Peak flow rate = 0. 305 (CFS)
Total volume = 0. 318 (Ac. Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac. Ft)	0.000	0.000	0.000	0.000	0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/06/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 140-161
 MITIGATION ANALYSIS
 24-HOUR - 10-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PD102410.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 289
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 2.662 (CFS)
 Total volume = 1.583 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 289
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.011	0.118	0.011	0.011
0.500	0.046	0.167	0.045	0.047
0.600	0.066	0.183	0.065	0.067
1.000	0.153	0.236	0.152	0.154
1.500	0.263	0.289	0.262	0.264
1.810	0.330	0.318	0.329	0.331
2.000	0.373	0.334	0.372	0.374
2.500	0.483	0.374	0.482	0.484
3.000	0.590	0.409	0.589	0.591
3.500	0.694	0.442	0.692	0.696
3.900	0.772	0.467	0.770	0.774
4.000	0.793	0.535	0.791	0.795
4.500	0.882	2.336	0.874	0.890
4.900	0.933	4.305	0.918	0.948
5.000	0.947	4.495	0.932	0.962

5. 500 0. 973 5. 338 0. 955 0. 991
 5. 600 0. 979 5. 490 0. 960 0. 998

 Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	. 0	0. 7	1. 33	2. 00	2. 66	Depth (Ft.)
0. 083	0. 11	0. 00	0. 000	O I					0. 01
0. 167	0. 15	0. 01	0. 001	O I					0. 03
0. 250	0. 15	0. 02	0. 002	O I					0. 05
0. 333	0. 21	0. 03	0. 003	O I					0. 07
0. 417	0. 23	0. 05	0. 004	O I					0. 10
0. 500	0. 23	0. 06	0. 006	O I					0. 13
0. 583	0. 23	0. 07	0. 007	O I					0. 15
0. 667	0. 23	0. 08	0. 008	O I					0. 18
0. 750	0. 23	0. 09	0. 009	O I					0. 20
0. 833	0. 29	0. 11	0. 010	O I					0. 22
0. 917	0. 31	0. 12	0. 011	O I					0. 25
1. 000	0. 31	0. 12	0. 012	O I					0. 26
1. 083	0. 25	0. 12	0. 014	O I					0. 27
1. 167	0. 23	0. 12	0. 014	O I					0. 27
1. 250	0. 23	0. 12	0. 015	O I					0. 28
1. 333	0. 23	0. 12	0. 016	O I					0. 28
1. 417	0. 23	0. 13	0. 016	O I					0. 29
1. 500	0. 23	0. 13	0. 017	O I					0. 29
1. 583	0. 23	0. 13	0. 018	O I					0. 30
1. 667	0. 23	0. 13	0. 019	O I					0. 30
1. 750	0. 23	0. 13	0. 019	O I					0. 31
1. 833	0. 29	0. 13	0. 020	O I					0. 32
1. 917	0. 31	0. 13	0. 021	O I					0. 32
2. 000	0. 31	0. 13	0. 022	O I					0. 33
2. 083	0. 31	0. 14	0. 024	O I					0. 34
2. 167	0. 31	0. 14	0. 025	O I					0. 35
2. 250	0. 31	0. 14	0. 026	O I					0. 36
2. 333	0. 31	0. 14	0. 027	O I					0. 37
2. 417	0. 31	0. 14	0. 028	O I					0. 37
2. 500	0. 31	0. 14	0. 029	O I					0. 38
2. 583	0. 36	0. 15	0. 031	O I					0. 39
2. 667	0. 38	0. 15	0. 032	O I					0. 40
2. 750	0. 38	0. 15	0. 034	O I					0. 41
2. 833	0. 38	0. 15	0. 035	O I					0. 42
2. 917	0. 38	0. 15	0. 037	O I					0. 44
3. 000	0. 38	0. 16	0. 039	O I					0. 45
3. 083	0. 38	0. 16	0. 040	O I					0. 46
3. 167	0. 38	0. 16	0. 042	O I					0. 47
3. 250	0. 38	0. 16	0. 043	O I					0. 48
3. 333	0. 38	0. 17	0. 045	O I					0. 49
3. 417	0. 38	0. 17	0. 046	O I					0. 50
3. 500	0. 38	0. 17	0. 048	O I					0. 51
3. 583	0. 38	0. 17	0. 049	O I					0. 52
3. 667	0. 38	0. 17	0. 051	O I					0. 52
3. 750	0. 38	0. 17	0. 052	O I					0. 53
3. 833	0. 44	0. 17	0. 054	O I					0. 54
3. 917	0. 46	0. 17	0. 056	O I					0. 55
4. 000	0. 46	0. 18	0. 058	O I					0. 56
4. 083	0. 46	0. 18	0. 059	O I					0. 57
4. 167	0. 46	0. 18	0. 061	O I					0. 58
4. 250	0. 46	0. 18	0. 063	O I					0. 59
4. 333	0. 52	0. 18	0. 065	O I					0. 60
4. 417	0. 54	0. 18	0. 068	O I					0. 61
4. 500	0. 54	0. 19	0. 070	O I					0. 62
4. 583	0. 54	0. 19	0. 073	O I					0. 63
4. 667	0. 54	0. 19	0. 075	O I					0. 64
4. 750	0. 54	0. 19	0. 077	O I					0. 65
4. 833	0. 59	0. 19	0. 080	O I					0. 66
4. 917	0. 61	0. 19	0. 083	O I					0. 68
5. 000	0. 61	0. 19	0. 086	O I					0. 69
5. 083	0. 50	0. 20	0. 088	O I					0. 70
5. 167	0. 46	0. 20	0. 090	O I					0. 71

5. 250	0. 46	0. 20	0. 092	0	I					0. 72
5. 333	0. 52	0. 20	0. 094	0	I					0. 73
5. 417	0. 54	0. 20	0. 096	0	I					0. 74
5. 500	0. 54	0. 20	0. 098	0	I					0. 75
5. 583	0. 59	0. 20	0. 101	0		I				0. 76
5. 667	0. 61	0. 21	0. 104	0		I				0. 77
5. 750	0. 61	0. 21	0. 106	0		I				0. 79
5. 833	0. 61	0. 21	0. 109	0		I				0. 80
5. 917	0. 61	0. 21	0. 112	0		I				0. 81
6. 000	0. 61	0. 21	0. 115	0		I				0. 82
6. 083	0. 67	0. 21	0. 118	0			I			0. 84
6. 167	0. 69	0. 22	0. 121	0			I			0. 85
6. 250	0. 69	0. 22	0. 124	0			I			0. 87
6. 333	0. 69	0. 22	0. 127	0			I			0. 88
6. 417	0. 69	0. 22	0. 131	0			I			0. 90
6. 500	0. 69	0. 22	0. 134	0			I			0. 91
6. 583	0. 75	0. 23	0. 137	0			I			0. 93
6. 667	0. 76	0. 23	0. 141	0			I			0. 94
6. 750	0. 76	0. 23	0. 144	0			I			0. 96
6. 833	0. 76	0. 23	0. 148	0			I			0. 98
6. 917	0. 76	0. 24	0. 152	0			I			0. 99
7. 000	0. 76	0. 24	0. 155	0			I			1. 01
7. 083	0. 76	0. 24	0. 159	0			I			1. 03
7. 167	0. 76	0. 24	0. 163	0			I			1. 04
7. 250	0. 76	0. 24	0. 166	0			I			1. 06
7. 333	0. 82	0. 24	0. 170	0			I			1. 08
7. 417	0. 84	0. 25	0. 174	0			I			1. 10
7. 500	0. 84	0. 25	0. 178	0			I			1. 11
7. 583	0. 90	0. 25	0. 182	0			I			1. 13
7. 667	0. 92	0. 25	0. 187	0			I			1. 15
7. 750	0. 92	0. 25	0. 192	0			I			1. 18
7. 833	0. 97	0. 26	0. 196	0			I			1. 20
7. 917	0. 99	0. 26	0. 201	0			I			1. 22
8. 000	0. 99	0. 26	0. 206	0			I			1. 24
8. 083	1. 11	0. 26	0. 212	0				I		1. 27
8. 167	1. 15	0. 27	0. 218	0				I		1. 29
8. 250	1. 15	0. 27	0. 224	0				I		1. 32
8. 333	1. 15	0. 27	0. 230	0				I		1. 35
8. 417	1. 15	0. 28	0. 236	0				I		1. 38
8. 500	1. 15	0. 28	0. 242	0				I		1. 40
8. 583	1. 20	0. 28	0. 248	0				I		1. 43
8. 667	1. 22	0. 28	0. 254	0				I		1. 46
8. 750	1. 22	0. 29	0. 261	0				I		1. 49
8. 833	1. 28	0. 29	0. 267	0				I		1. 52
8. 917	1. 30	0. 29	0. 274	0				I		1. 55
9. 000	1. 30	0. 30	0. 281	0				I		1. 58
9. 083	1. 41	0. 30	0. 289	0					I	1. 62
9. 167	1. 45	0. 30	0. 296	0					I	1. 65
9. 250	1. 45	0. 31	0. 304	0					I	1. 69
9. 333	1. 51	0. 31	0. 312	0					I	1. 73
9. 417	1. 53	0. 31	0. 321	0					I	1. 77
9. 500	1. 53	0. 32	0. 329	0					I	1. 81
9. 583	1. 59	0. 32	0. 338	0					I	1. 84
9. 667	1. 61	0. 32	0. 346	0					I	1. 88
9. 750	1. 61	0. 33	0. 355	0					I	1. 92
9. 833	1. 66	0. 33	0. 364	0					I	1. 96
9. 917	1. 68	0. 33	0. 373	0					I	2. 00
10. 000	1. 68	0. 34	0. 383	0					I	2. 04
10. 083	1. 28	0. 34	0. 391	0					I	2. 08
10. 167	1. 15	0. 34	0. 397	0					I	2. 11
10. 250	1. 15	0. 34	0. 402	0					I	2. 13
10. 333	1. 15	0. 35	0. 408	0					I	2. 16
10. 417	1. 15	0. 35	0. 413	0					I	2. 18
10. 500	1. 15	0. 35	0. 419	0					I	2. 21
10. 583	1. 43	0. 35	0. 425	0					I	2. 24
10. 667	1. 53	0. 36	0. 433	0					I	2. 27
10. 750	1. 53	0. 36	0. 441	0					I	2. 31
10. 833	1. 53	0. 36	0. 449	0					I	2. 35
10. 917	1. 53	0. 36	0. 457	0					I	2. 38
11. 000	1. 53	0. 37	0. 465	0					I	2. 42
11. 083	1. 47	0. 37	0. 473	0					I	2. 45
11. 167	1. 45	0. 37	0. 480	0					I	2. 49

17. 250	0. 38	0. 52	0. 789	I 0	3. 98
17. 333	0. 38	0. 52	0. 788	I 0	3. 98
17. 417	0. 38	0. 52	0. 787	I 0	3. 97
17. 500	0. 38	0. 51	0. 786	I 0	3. 97
17. 583	0. 38	0. 51	0. 786	I 0	3. 96
17. 667	0. 38	0. 51	0. 785	I 0	3. 96
17. 750	0. 38	0. 51	0. 784	I 0	3. 96
17. 833	0. 33	0. 50	0. 783	I 0	3. 95
17. 917	0. 31	0. 50	0. 782	I 0	3. 95
18. 000	0. 31	0. 49	0. 780	I 0	3. 94
18. 083	0. 31	0. 49	0. 779	I 0	3. 93
18. 167	0. 31	0. 49	0. 778	I 0	3. 93
18. 250	0. 31	0. 48	0. 777	I 0	3. 92
18. 333	0. 31	0. 48	0. 775	I 0	3. 92
18. 417	0. 31	0. 47	0. 774	I 0	3. 91
18. 500	0. 31	0. 47	0. 773	I 0	3. 90
18. 583	0. 25	0. 47	0. 772	I 0	3. 90
18. 667	0. 23	0. 47	0. 770	I 0	3. 89
18. 750	0. 23	0. 47	0. 768	I 0	3. 88
18. 833	0. 17	0. 47	0. 767	I 0	3. 87
18. 917	0. 15	0. 46	0. 765	I 0	3. 86
19. 000	0. 15	0. 46	0. 762	I 0	3. 85
19. 083	0. 21	0. 46	0. 760	I 0	3. 84
19. 167	0. 23	0. 46	0. 759	I 0	3. 83
19. 250	0. 23	0. 46	0. 757	I 0	3. 82
19. 333	0. 29	0. 46	0. 756	I 0	3. 82
19. 417	0. 31	0. 46	0. 755	I 0	3. 81
19. 500	0. 31	0. 46	0. 754	I 0	3. 81
19. 583	0. 25	0. 46	0. 752	I 0	3. 80
19. 667	0. 23	0. 46	0. 751	I 0	3. 79
19. 750	0. 23	0. 46	0. 749	I 0	3. 78
19. 833	0. 17	0. 46	0. 747	I 0	3. 77
19. 917	0. 15	0. 46	0. 745	I 0	3. 76
20. 000	0. 15	0. 46	0. 743	I 0	3. 75
20. 083	0. 21	0. 46	0. 741	I 0	3. 74
20. 167	0. 23	0. 46	0. 740	I 0	3. 73
20. 250	0. 23	0. 46	0. 738	I 0	3. 73
20. 333	0. 23	0. 46	0. 737	I 0	3. 72
20. 417	0. 23	0. 46	0. 735	I 0	3. 71
20. 500	0. 23	0. 45	0. 734	I 0	3. 70
20. 583	0. 23	0. 45	0. 732	I 0	3. 69
20. 667	0. 23	0. 45	0. 730	I 0	3. 69
20. 750	0. 23	0. 45	0. 729	I 0	3. 68
20. 833	0. 17	0. 45	0. 727	I 0	3. 67
20. 917	0. 15	0. 45	0. 725	I 0	3. 66
21. 000	0. 15	0. 45	0. 723	I 0	3. 65
21. 083	0. 21	0. 45	0. 721	I 0	3. 64
21. 167	0. 23	0. 45	0. 720	I 0	3. 63
21. 250	0. 23	0. 45	0. 718	I 0	3. 62
21. 333	0. 17	0. 45	0. 716	I 0	3. 62
21. 417	0. 15	0. 45	0. 714	I 0	3. 60
21. 500	0. 15	0. 45	0. 712	I 0	3. 59
21. 583	0. 21	0. 45	0. 711	I 0	3. 59
21. 667	0. 23	0. 45	0. 709	I 0	3. 58
21. 750	0. 23	0. 45	0. 708	I 0	3. 57
21. 833	0. 17	0. 45	0. 706	I 0	3. 56
21. 917	0. 15	0. 45	0. 704	I 0	3. 55
22. 000	0. 15	0. 44	0. 702	I 0	3. 54
22. 083	0. 21	0. 44	0. 700	I 0	3. 53
22. 167	0. 23	0. 44	0. 699	I 0	3. 52
22. 250	0. 23	0. 44	0. 697	I 0	3. 52
22. 333	0. 17	0. 44	0. 695	I 0	3. 51
22. 417	0. 15	0. 44	0. 693	I 0	3. 50
22. 500	0. 15	0. 44	0. 691	I 0	3. 49
22. 583	0. 15	0. 44	0. 690	I 0	3. 48
22. 667	0. 15	0. 44	0. 688	I 0	3. 47
22. 750	0. 15	0. 44	0. 686	I 0	3. 46
22. 833	0. 15	0. 44	0. 684	I 0	3. 45
22. 917	0. 15	0. 44	0. 682	I 0	3. 44
23. 000	0. 15	0. 44	0. 680	I 0	3. 43
23. 083	0. 15	0. 44	0. 678	I 0	3. 42
23. 167	0. 15	0. 44	0. 676	I 0	3. 41

23. 250	0. 15	0. 44	0. 674	I	0	3. 40
23. 333	0. 15	0. 43	0. 672	I	0	3. 39
23. 417	0. 15	0. 43	0. 670	I	0	3. 38
23. 500	0. 15	0. 43	0. 668	I	0	3. 37
23. 583	0. 15	0. 43	0. 666	I	0	3. 37
23. 667	0. 15	0. 43	0. 664	I	0	3. 36
23. 750	0. 15	0. 43	0. 662	I	0	3. 35
23. 833	0. 15	0. 43	0. 660	I	0	3. 34
23. 917	0. 15	0. 43	0. 658	I	0	3. 33
24. 000	0. 15	0. 43	0. 656	I	0	3. 32
24. 083	0. 04	0. 43	0. 654	I	0	3. 31
24. 167	0. 00	0. 43	0. 651	I	0	3. 29
24. 250	0. 00	0. 43	0. 648	I	0	3. 28
24. 333	0. 00	0. 43	0. 645	I	0	3. 27
24. 417	0. 00	0. 43	0. 643	I	0	3. 25
24. 500	0. 00	0. 42	0. 640	I	0	3. 24
24. 583	0. 00	0. 42	0. 637	I	0	3. 22
24. 667	0. 00	0. 42	0. 634	I	0	3. 21
24. 750	0. 00	0. 42	0. 631	I	0	3. 20
24. 833	0. 00	0. 42	0. 628	I	0	3. 18
24. 917	0. 00	0. 42	0. 625	I	0	3. 17
25. 000	0. 00	0. 42	0. 622	I	0	3. 15
25. 083	0. 00	0. 42	0. 619	I	0	3. 14
25. 167	0. 00	0. 42	0. 616	I	0	3. 13
25. 250	0. 00	0. 42	0. 614	I	0	3. 11
25. 333	0. 00	0. 42	0. 611	I	0	3. 10
25. 417	0. 00	0. 41	0. 608	I	0	3. 09
25. 500	0. 00	0. 41	0. 605	I	0	3. 07
25. 583	0. 00	0. 41	0. 602	I	0	3. 06
25. 667	0. 00	0. 41	0. 599	I	0	3. 04
25. 750	0. 00	0. 41	0. 596	I	0	3. 03
25. 833	0. 00	0. 41	0. 594	I	0	3. 02
25. 917	0. 00	0. 41	0. 591	I	0	3. 00
26. 000	0. 00	0. 41	0. 588	I	0	2. 99
26. 083	0. 00	0. 41	0. 585	I	0	2. 98
26. 167	0. 00	0. 41	0. 582	I	0	2. 96
26. 250	0. 00	0. 41	0. 580	I	0	2. 95
26. 333	0. 00	0. 40	0. 577	I	0	2. 94
26. 417	0. 00	0. 40	0. 574	I	0	2. 93
26. 500	0. 00	0. 40	0. 571	I	0	2. 91
26. 583	0. 00	0. 40	0. 568	I	0	2. 90
26. 667	0. 00	0. 40	0. 566	I	0	2. 89
26. 750	0. 00	0. 40	0. 563	I	0	2. 87
26. 833	0. 00	0. 40	0. 560	I	0	2. 86
26. 917	0. 00	0. 40	0. 557	I	0	2. 85
27. 000	0. 00	0. 40	0. 555	I	0	2. 83
27. 083	0. 00	0. 40	0. 552	I	0	2. 82
27. 167	0. 00	0. 40	0. 549	I	0	2. 81
27. 250	0. 00	0. 39	0. 546	I	0	2. 80
27. 333	0. 00	0. 39	0. 544	I	0	2. 78
27. 417	0. 00	0. 39	0. 541	I	0	2. 77
27. 500	0. 00	0. 39	0. 538	I	0	2. 76
27. 583	0. 00	0. 39	0. 536	I	0	2. 75
27. 667	0. 00	0. 39	0. 533	I	0	2. 73
27. 750	0. 00	0. 39	0. 530	I	0	2. 72
27. 833	0. 00	0. 39	0. 528	I	0	2. 71
27. 917	0. 00	0. 39	0. 525	I	0	2. 70
28. 000	0. 00	0. 39	0. 522	I	0	2. 68
28. 083	0. 00	0. 39	0. 520	I	0	2. 67
28. 167	0. 00	0. 39	0. 517	I	0	2. 66
28. 250	0. 00	0. 38	0. 514	I	0	2. 65
28. 333	0. 00	0. 38	0. 512	I	0	2. 63
28. 417	0. 00	0. 38	0. 509	I	0	2. 62
28. 500	0. 00	0. 38	0. 506	I	0	2. 61
28. 583	0. 00	0. 38	0. 504	I	0	2. 60
28. 667	0. 00	0. 38	0. 501	I	0	2. 58
28. 750	0. 00	0. 38	0. 499	I	0	2. 57
28. 833	0. 00	0. 38	0. 496	I	0	2. 56
28. 917	0. 00	0. 38	0. 493	I	0	2. 55
29. 000	0. 00	0. 38	0. 491	I	0	2. 54
29. 083	0. 00	0. 38	0. 488	I	0	2. 52
29. 167	0. 00	0. 37	0. 486	I	0	2. 51

29.250	0.00	0.37	0.483	I	0
29.333	0.00	0.37	0.480	I	0
29.417	0.00	0.37	0.478	I	0
29.500	0.00	0.37	0.475	I	0
29.583	0.00	0.37	0.473	I	0
29.667	0.00	0.37	0.470	I	0
29.750	0.00	0.37	0.468	I	0
29.833	0.00	0.37	0.465	I	0
29.917	0.00	0.37	0.463	I	0
30.000	0.00	0.37	0.460	I	0
30.083	0.00	0.36	0.458	I	0
30.167	0.00	0.36	0.455	I	0
30.250	0.00	0.36	0.453	I	0
30.333	0.00	0.36	0.450	I	0
30.417	0.00	0.36	0.448	I	0
30.500	0.00	0.36	0.445	I	0
30.583	0.00	0.36	0.443	I	0
30.667	0.00	0.36	0.440	I	0
30.750	0.00	0.36	0.438	I	0
30.833	0.00	0.36	0.435	I	0
30.917	0.00	0.36	0.433	I	0
31.000	0.00	0.35	0.430	I	0
31.083	0.00	0.35	0.428	I	0
31.167	0.00	0.35	0.425	I	0
31.250	0.00	0.35	0.423	I	0
31.333	0.00	0.35	0.421	I	0
31.417	0.00	0.35	0.418	I	0
31.500	0.00	0.35	0.416	I	0
31.583	0.00	0.35	0.413	I	0
31.667	0.00	0.35	0.411	I	0
31.750	0.00	0.35	0.409	I	0
31.833	0.00	0.35	0.406	I	0
31.917	0.00	0.35	0.404	I	0
32.000	0.00	0.34	0.401	I	0
32.083	0.00	0.34	0.399	I	0
32.167	0.00	0.34	0.397	I	0
32.250	0.00	0.34	0.394	I	0
32.333	0.00	0.34	0.392	I	0
32.417	0.00	0.34	0.390	I	0
32.500	0.00	0.34	0.387	I	0
32.583	0.00	0.34	0.385	I	0
32.667	0.00	0.34	0.383	I	0
32.750	0.00	0.34	0.380	I	0
32.833	0.00	0.34	0.378	I	0
32.917	0.00	0.33	0.376	I	0
33.000	0.00	0.33	0.373	I	0
33.083	0.00	0.33	0.371	I	0
33.167	0.00	0.33	0.369	I	0
33.250	0.00	0.33	0.366	I	0
33.333	0.00	0.33	0.364	I	0
33.417	0.00	0.33	0.362	I	0
33.500	0.00	0.33	0.360	I	0
33.583	0.00	0.33	0.357	I	0
33.667	0.00	0.33	0.355	I	0
33.750	0.00	0.33	0.353	I	0
33.833	0.00	0.33	0.351	I	0
33.917	0.00	0.32	0.348	I	0
34.000	0.00	0.32	0.346	I	0
34.083	0.00	0.32	0.344	I	0
34.167	0.00	0.32	0.342	I	0
34.250	0.00	0.32	0.339	I	0
34.333	0.00	0.32	0.337	I	0
34.417	0.00	0.32	0.335	I	0
34.500	0.00	0.32	0.333	I	0
34.583	0.00	0.32	0.331	I	0
34.667	0.00	0.32	0.328	I	0
34.750	0.00	0.32	0.326	I	0
34.833	0.00	0.32	0.324	I	0
34.917	0.00	0.31	0.322	I	0
35.000	0.00	0.31	0.320	I	0
35.083	0.00	0.31	0.318	I	0
35.167	0.00	0.31	0.315	I	0

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35.250	0.00	0.31	0.313	I	0	1.73
35.333	0.00	0.31	0.311	I	0	1.72
35.417	0.00	0.31	0.309	I	0	1.71
35.500	0.00	0.31	0.307	I	0	1.70
35.583	0.00	0.31	0.305	I	0	1.69
35.667	0.00	0.31	0.303	I	0	1.68
35.750	0.00	0.31	0.301	I	0	1.67
35.833	0.00	0.30	0.299	I	0	1.66
35.917	0.00	0.30	0.296	I	0	1.65
36.000	0.00	0.30	0.294	I	0	1.64
36.083	0.00	0.30	0.292	I	0	1.64
36.167	0.00	0.30	0.290	I	0	1.63
36.250	0.00	0.30	0.288	I	0	1.62
36.333	0.00	0.30	0.286	I	0	1.61
36.417	0.00	0.30	0.284	I	0	1.60
36.500	0.00	0.30	0.282	I	0	1.59
36.583	0.00	0.30	0.280	I	0	1.58
36.667	0.00	0.30	0.278	I	0	1.57
36.750	0.00	0.29	0.276	I	0	1.56
36.833	0.00	0.29	0.274	I	0	1.55
36.917	0.00	0.29	0.272	I	0	1.54
37.000	0.00	0.29	0.270	I	0	1.53
37.083	0.00	0.29	0.268	I	0	1.52
37.167	0.00	0.29	0.266	I	0	1.51
37.250	0.00	0.29	0.264	I	0	1.50
37.333	0.00	0.29	0.262	I	0	1.49
37.417	0.00	0.29	0.260	I	0	1.49
37.500	0.00	0.29	0.258	I	0	1.48
37.583	0.00	0.29	0.256	I	0	1.47
37.667	0.00	0.28	0.254	I	0	1.46
37.750	0.00	0.28	0.252	I	0	1.45
37.833	0.00	0.28	0.250	I	0	1.44
37.917	0.00	0.28	0.248	I	0	1.43
38.000	0.00	0.28	0.246	I	0	1.42
38.083	0.00	0.28	0.244	I	0	1.41
38.167	0.00	0.28	0.242	I	0	1.41
38.250	0.00	0.28	0.240	I	0	1.40
38.333	0.00	0.28	0.238	I	0	1.39
38.417	0.00	0.28	0.237	I	0	1.38
38.500	0.00	0.28	0.235	I	0	1.37
38.583	0.00	0.27	0.233	I	0	1.36
38.667	0.00	0.27	0.231	I	0	1.35
38.750	0.00	0.27	0.229	I	0	1.35
38.833	0.00	0.27	0.227	I	0	1.34
38.917	0.00	0.27	0.225	I	0	1.33
39.000	0.00	0.27	0.223	I	0	1.32
39.083	0.00	0.27	0.221	I	0	1.31
39.167	0.00	0.27	0.220	I	0	1.30
39.250	0.00	0.27	0.218	I	0	1.29
39.333	0.00	0.27	0.216	I	0	1.29
39.417	0.00	0.27	0.214	I	0	1.28
39.500	0.00	0.26	0.212	I	0	1.27
39.583	0.00	0.26	0.210	I	0	1.26
39.667	0.00	0.26	0.209	I	0	1.25
39.750	0.00	0.26	0.207	I	0	1.24
39.833	0.00	0.26	0.205	I	0	1.24
39.917	0.00	0.26	0.203	I	0	1.23
40.000	0.00	0.26	0.201	I	0	1.22
40.083	0.00	0.26	0.200	I	0	1.21
40.167	0.00	0.26	0.198	I	0	1.20
40.250	0.00	0.26	0.196	I	0	1.20
40.333	0.00	0.26	0.194	I	0	1.19
40.417	0.00	0.26	0.193	I	0	1.18
40.500	0.00	0.25	0.191	I	0	1.17
40.583	0.00	0.25	0.189	I	0	1.16
40.667	0.00	0.25	0.187	I	0	1.16
40.750	0.00	0.25	0.186	I	0	1.15
40.833	0.00	0.25	0.184	I	0	1.14
40.917	0.00	0.25	0.182	I	0	1.13
41.000	0.00	0.25	0.180	I	0	1.12
41.083	0.00	0.25	0.179	I	0	1.12
41.167	0.00	0.25	0.177	I	0	1.11

41. 250	0. 00	0. 25	0. 175	I 0	1. 10
41. 333	0. 00	0. 25	0. 174	I 0	1. 09
41. 417	0. 00	0. 25	0. 172	I 0	1. 09
41. 500	0. 00	0. 24	0. 170	I 0	1. 08
41. 583	0. 00	0. 24	0. 169	I 0	1. 07
41. 667	0. 00	0. 24	0. 167	I 0	1. 06
41. 750	0. 00	0. 24	0. 165	I 0	1. 06
41. 833	0. 00	0. 24	0. 164	I 0	1. 05
41. 917	0. 00	0. 24	0. 162	I 0	1. 04
42. 000	0. 00	0. 24	0. 160	I 0	1. 03
42. 083	0. 00	0. 24	0. 159	I 0	1. 03
42. 167	0. 00	0. 24	0. 157	I 0	1. 02
42. 250	0. 00	0. 24	0. 155	I 0	1. 01
42. 333	0. 00	0. 24	0. 154	I 0	1. 00
42. 417	0. 00	0. 24	0. 152	I 0	1. 00
42. 500	0. 00	0. 23	0. 150	I 0	0. 99
42. 583	0. 00	0. 23	0. 149	I 0	0. 98
42. 667	0. 00	0. 23	0. 147	I 0	0. 97
42. 750	0. 00	0. 23	0. 146	I 0	0. 97
42. 833	0. 00	0. 23	0. 144	I 0	0. 96
42. 917	0. 00	0. 23	0. 142	I 0	0. 95
43. 000	0. 00	0. 23	0. 141	I 0	0. 94
43. 083	0. 00	0. 23	0. 139	I 0	0. 94
43. 167	0. 00	0. 23	0. 138	I 0	0. 93
43. 250	0. 00	0. 23	0. 136	I 0	0. 92
43. 333	0. 00	0. 22	0. 135	I 0	0. 92
43. 417	0. 00	0. 22	0. 133	I 0	0. 91
43. 500	0. 00	0. 22	0. 132	I 0	0. 90
43. 583	0. 00	0. 22	0. 130	I 0	0. 89
43. 667	0. 00	0. 22	0. 129	I 0	0. 89
43. 750	0. 00	0. 22	0. 127	I 0	0. 88
43. 833	0. 00	0. 22	0. 125	I 0	0. 87
43. 917	0. 00	0. 22	0. 124	I 0	0. 87
44. 000	0. 00	0. 22	0. 122	I 0	0. 86
44. 083	0. 00	0. 22	0. 121	I 0	0. 85
44. 167	0. 00	0. 22	0. 119	I 0	0. 85
44. 250	0. 00	0. 21	0. 118	I 0	0. 84
44. 333	0. 00	0. 21	0. 117	I 0	0. 83
44. 417	0. 00	0. 21	0. 115	I 0	0. 83
44. 500	0. 00	0. 21	0. 114	I 0	0. 82
44. 583	0. 00	0. 21	0. 112	I 0	0. 81
44. 667	0. 00	0. 21	0. 111	I 0	0. 81
44. 750	0. 00	0. 21	0. 109	I 0	0. 80
44. 833	0. 00	0. 21	0. 108	I 0	0. 79
44. 917	0. 00	0. 21	0. 106	I 0	0. 79
45. 000	0. 00	0. 21	0. 105	I 0	0. 78
45. 083	0. 00	0. 21	0. 104	I 0	0. 77
45. 167	0. 00	0. 21	0. 102	I 0	0. 77
45. 250	0. 00	0. 20	0. 101	I 0	0. 76
45. 333	0. 00	0. 20	0. 099	I 0	0. 75
45. 417	0. 00	0. 20	0. 098	I 0	0. 75
45. 500	0. 00	0. 20	0. 097	I 0	0. 74
45. 583	0. 00	0. 20	0. 095	I 0	0. 73
45. 667	0. 00	0. 20	0. 094	I 0	0. 73
45. 750	0. 00	0. 20	0. 092	I 0	0. 72
45. 833	0. 00	0. 20	0. 091	I 0	0. 71
45. 917	0. 00	0. 20	0. 090	I 0	0. 71
46. 000	0. 00	0. 20	0. 088	I 0	0. 70
46. 083	0. 00	0. 20	0. 087	I 0	0. 70
46. 167	0. 00	0. 19	0. 086	I 0	0. 69
46. 250	0. 00	0. 19	0. 084	I 0	0. 68
46. 333	0. 00	0. 19	0. 083	I 0	0. 68
46. 417	0. 00	0. 19	0. 082	I 0	0. 67
46. 500	0. 00	0. 19	0. 080	I 0	0. 67
46. 583	0. 00	0. 19	0. 079	I 0	0. 66
46. 667	0. 00	0. 19	0. 078	I 0	0. 65
46. 750	0. 00	0. 19	0. 076	I 0	0. 65
46. 833	0. 00	0. 19	0. 075	I 0	0. 64
46. 917	0. 00	0. 19	0. 074	I 0	0. 64
47. 000	0. 00	0. 19	0. 072	I 0	0. 63
47. 083	0. 00	0. 19	0. 071	I 0	0. 62
47. 167	0. 00	0. 19	0. 070	I 0	0. 62

47.250	0.00	0.18	0.069	I 0	0.61
47.333	0.00	0.18	0.067	I 0	0.61
47.417	0.00	0.18	0.066	I 0	0.60
47.500	0.00	0.18	0.065	I 0	0.59
47.583	0.00	0.18	0.064	I 0	0.59
47.667	0.00	0.18	0.062	I 0	0.58
47.750	0.00	0.18	0.061	I 0	0.58
47.833	0.00	0.18	0.060	I 0	0.57
47.917	0.00	0.18	0.059	I 0	0.56
48.000	0.00	0.18	0.057	I 0	0.56
48.083	0.00	0.18	0.056	I 0	0.55
48.167	0.00	0.17	0.055	I 0	0.55
48.250	0.00	0.17	0.054	I 0	0.54
48.333	0.00	0.17	0.053	I 0	0.53
48.417	0.00	0.17	0.051	I 0	0.53
48.500	0.00	0.17	0.050	I 0	0.52
48.583	0.00	0.17	0.049	I 0	0.52
48.667	0.00	0.17	0.048	I 0	0.51
48.750	0.00	0.17	0.047	I 0	0.50
48.833	0.00	0.17	0.046	I 0	0.50
48.917	0.00	0.16	0.044	IO	0.49
49.000	0.00	0.16	0.043	IO	0.48
49.083	0.00	0.16	0.042	IO	0.47
49.167	0.00	0.16	0.041	IO	0.47
49.250	0.00	0.16	0.040	IO	0.46
49.333	0.00	0.16	0.039	IO	0.45
49.417	0.00	0.16	0.038	IO	0.44
49.500	0.00	0.15	0.037	IO	0.43
49.583	0.00	0.15	0.036	IO	0.43
49.667	0.00	0.15	0.035	IO	0.42
49.750	0.00	0.15	0.034	IO	0.41
49.833	0.00	0.15	0.033	IO	0.40
49.917	0.00	0.15	0.032	IO	0.40
50.000	0.00	0.15	0.031	IO	0.39
50.083	0.00	0.14	0.030	IO	0.38
50.167	0.00	0.14	0.029	IO	0.38
50.250	0.00	0.14	0.028	IO	0.37
50.333	0.00	0.14	0.027	IO	0.36
50.417	0.00	0.14	0.026	IO	0.36
50.500	0.00	0.14	0.025	IO	0.35
50.583	0.00	0.14	0.024	IO	0.34
50.667	0.00	0.13	0.023	IO	0.33
50.750	0.00	0.13	0.022	IO	0.33
50.833	0.00	0.13	0.021	IO	0.32
50.917	0.00	0.13	0.020	IO	0.32
51.000	0.00	0.13	0.019	IO	0.31
51.083	0.00	0.13	0.018	IO	0.30
51.167	0.00	0.13	0.017	IO	0.30
51.250	0.00	0.13	0.017	IO	0.29
51.333	0.00	0.12	0.016	IO	0.28
51.417	0.00	0.12	0.015	IO	0.28
51.500	0.00	0.12	0.014	IO	0.27
51.583	0.00	0.12	0.013	IO	0.27
51.667	0.00	0.12	0.012	IO	0.26
51.750	0.00	0.12	0.012	IO	0.25
51.833	0.00	0.12	0.011	IO	0.24
51.917	0.00	0.11	0.010	IO	0.23
52.000	0.00	0.10	0.009	IO	0.21
52.083	0.00	0.09	0.009	IO	0.20
52.167	0.00	0.09	0.008	IO	0.18
52.250	0.00	0.08	0.007	0	0.17
52.333	0.00	0.07	0.007	0	0.16
52.417	0.00	0.07	0.006	0	0.15
52.500	0.00	0.06	0.006	0	0.14
52.583	0.00	0.06	0.006	0	0.13
52.667	0.00	0.06	0.005	0	0.12
52.750	0.00	0.05	0.005	0	0.11
52.833	0.00	0.05	0.004	0	0.10
52.917	0.00	0.04	0.004	0	0.09
53.000	0.00	0.04	0.004	0	0.09
53.083	0.00	0.04	0.004	0	0.08
53.167	0.00	0.04	0.003	0	0.07

53.250	0.00	0.03	0.003	0					0.07
53.333	0.00	0.03	0.003	0					0.06
53.417	0.00	0.03	0.003	0					0.06
53.500	0.00	0.03	0.002	0					0.06
53.583	0.00	0.02	0.002	0					0.05
53.667	0.00	0.02	0.002	0					0.05
53.750	0.00	0.02	0.002	0					0.04
53.833	0.00	0.02	0.002	0					0.04
53.917	0.00	0.02	0.002	0					0.04
54.000	0.00	0.02	0.002	0					0.04
54.083	0.00	0.02	0.001	0					0.03
54.167	0.00	0.01	0.001	0					0.03
54.250	0.00	0.01	0.001	0					0.03
54.333	0.00	0.01	0.001	0					0.03
54.417	0.00	0.01	0.001	0					0.02
54.500	0.00	0.01	0.001	0					0.02
54.583	0.00	0.01	0.001	0					0.02
54.667	0.00	0.01	0.001	0					0.02
54.750	0.00	0.01	0.001	0					0.02
54.833	0.00	0.01	0.001	0					0.02
54.917	0.00	0.01	0.001	0					0.02
55.000	0.00	0.01	0.001	0					0.01
55.083	0.00	0.01	0.001	0					0.01
55.167	0.00	0.01	0.001	0					0.01
55.250	0.00	0.01	0.001	0					0.01
55.333	0.00	0.01	0.000	0					0.01
55.417	0.00	0.00	0.000	0					0.01
55.500	0.00	0.00	0.000	0					0.01
55.583	0.00	0.00	0.000	0					0.01
55.667	0.00	0.00	0.000	0					0.01
55.750	0.00	0.00	0.000	0					0.01
55.833	0.00	0.00	0.000	0					0.01
55.917	0.00	0.00	0.000	0					0.01
56.000	0.00	0.00	0.000	0					0.01
56.083	0.00	0.00	0.000	0					0.01
56.167	0.00	0.00	0.000	0					0.01
56.250	0.00	0.00	0.000	0					0.00
56.333	0.00	0.00	0.000	0					0.00
56.417	0.00	0.00	0.000	0					0.00
56.500	0.00	0.00	0.000	0					0.00
56.583	0.00	0.00	0.000	0					0.00
56.667	0.00	0.00	0.000	0					0.00
56.750	0.00	0.00	0.000	0					0.00
56.833	0.00	0.00	0.000	0					0.00
56.917	0.00	0.00	0.000	0					0.00
57.000	0.00	0.00	0.000	0					0.00
57.083	0.00	0.00	0.000	0					0.00
57.167	0.00	0.00	0.000	0					0.00
57.250	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 687
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 1.815 (CFS)
 Total volume = 1.583 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/06/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 140-161
 MITIGATION ANALYSIS
 6-HOUR - 10-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PD10610.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 73
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 7.061 (CFS)
 Total volume = 0.826 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 73
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.011	0.118	0.011	0.011
0.500	0.046	0.167	0.045	0.047
0.600	0.066	0.183	0.065	0.067
1.000	0.153	0.236	0.152	0.154
1.500	0.263	0.289	0.262	0.264
1.810	0.330	0.318	0.329	0.331
2.000	0.373	0.334	0.372	0.374
2.500	0.483	0.374	0.482	0.484
3.000	0.590	0.409	0.589	0.591
3.500	0.694	0.442	0.692	0.696
3.900	0.772	0.467	0.770	0.774
4.000	0.793	0.535	0.791	0.795
4.500	0.882	2.336	0.874	0.890
4.900	0.933	4.305	0.918	0.948
5.000	0.947	4.495	0.932	0.962

5. 500 0. 973 5. 338 0. 955 0. 991
 5. 600 0. 979 5. 490 0. 960 0. 998

 Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; '0' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	. 0	1. 8	3. 53	5. 30	7. 06	Depth (Ft.)
0. 083	0. 44	0. 02	0. 001	0I					0. 03
0. 167	0. 67	0. 05	0. 005	0 I					0. 11
0. 250	0. 70	0. 10	0. 009	0 I					0. 21
0. 333	0. 70	0. 12	0. 013	0 I					0. 27
0. 417	0. 70	0. 13	0. 017	0 I					0. 29
0. 500	0. 79	0. 13	0. 022	0 I					0. 33
0. 583	0. 82	0. 14	0. 026	0 I					0. 36
0. 667	0. 82	0. 15	0. 031	0 I					0. 39
0. 750	0. 82	0. 15	0. 035	0 I					0. 42
0. 833	0. 82	0. 16	0. 040	0 I					0. 46
0. 917	0. 82	0. 16	0. 044	0 I					0. 49
1. 000	0. 91	0. 17	0. 049	0 I					0. 52
1. 083	0. 93	0. 17	0. 054	0 I					0. 54
1. 167	0. 93	0. 18	0. 060	0 I					0. 57
1. 250	0. 93	0. 18	0. 065	0 I					0. 59
1. 333	0. 93	0. 19	0. 070	0 I					0. 62
1. 417	0. 93	0. 19	0. 075	0 I					0. 64
1. 500	0. 93	0. 19	0. 080	0 I					0. 67
1. 583	0. 93	0. 19	0. 085	0 I					0. 69
1. 667	0. 93	0. 20	0. 090	0 I					0. 71
1. 750	0. 93	0. 20	0. 096	0 I					0. 74
1. 833	0. 93	0. 20	0. 101	0 I					0. 76
1. 917	0. 93	0. 21	0. 106	0 I					0. 78
2. 000	1. 02	0. 21	0. 111	0 I					0. 81
2. 083	0. 96	0. 21	0. 116	0 I					0. 83
2. 167	1. 02	0. 22	0. 122	0 I					0. 86
2. 250	1. 05	0. 22	0. 127	0 I					0. 88
2. 333	1. 05	0. 22	0. 133	0 I					0. 91
2. 417	1. 05	0. 23	0. 139	0 I					0. 93
2. 500	1. 05	0. 23	0. 144	0 I					0. 96
2. 583	1. 05	0. 23	0. 150	0 I					0. 99
2. 667	1. 05	0. 24	0. 156	0 I					1. 01
2. 750	1. 14	0. 24	0. 162	0 I					1. 04
2. 833	1. 17	0. 24	0. 168	0 I					1. 07
2. 917	1. 17	0. 25	0. 174	0 I					1. 10
3. 000	1. 17	0. 25	0. 180	0 I					1. 12
3. 083	1. 17	0. 25	0. 187	0 I					1. 15
3. 167	1. 26	0. 26	0. 193	0 I					1. 18
3. 250	1. 29	0. 26	0. 200	0 I					1. 22
3. 333	1. 29	0. 26	0. 207	0 I					1. 25
3. 417	1. 37	0. 27	0. 215	0 I					1. 28
3. 500	1. 49	0. 27	0. 223	0 I					1. 32
3. 583	1. 61	0. 27	0. 232	0 I					1. 36
3. 667	1. 64	0. 28	0. 241	0 I					1. 40
3. 750	1. 72	0. 28	0. 250	0 I					1. 44
3. 833	1. 75	0. 29	0. 261	0 I					1. 49
3. 917	1. 84	0. 29	0. 271	0 I					1. 54
4. 000	1. 87	0. 30	0. 282	0 I					1. 59
4. 083	1. 96	0. 30	0. 293	0 I					1. 64
4. 167	2. 07	0. 31	0. 305	0 I					1. 69
4. 250	2. 19	0. 31	0. 317	0 I					1. 75
4. 333	2. 31	0. 32	0. 330	0 I					1. 81
4. 417	2. 42	0. 32	0. 344	0 I					1. 87
4. 500	2. 45	0. 33	0. 359	0 I					1. 94
4. 583	2. 54	0. 33	0. 374	0 I					2. 00
4. 667	2. 66	0. 34	0. 390	0 I					2. 08
4. 750	2. 79	0. 35	0. 406	0 I					2. 15
4. 833	2. 83	0. 35	0. 423	0 I					2. 23
4. 917	2. 93	0. 36	0. 440	0 I					2. 31
5. 000	3. 08	0. 37	0. 458	0 I					2. 39
5. 083	3. 64	0. 37	0. 479	0 I					2. 48
5. 167	4. 36	0. 38	0. 504	0 I					2. 60

5. 250	4. 86	0. 39	0. 533	0					2. 73
5. 333	5. 28	0. 40	0. 565	0					2. 88
5. 417	5. 92	0. 41	0. 601	0					3. 05
5. 500	7. 06	0. 43	0. 643	0					3. 25
5. 583	3. 53	0. 44	0. 676	0					3. 42
5. 667	1. 35	0. 44	0. 690	0					3. 48
5. 750	0. 79	0. 44	0. 695	0					3. 50
5. 833	0. 61	0. 44	0. 696	0					3. 51
5. 917	0. 41	0. 44	0. 697	0					3. 51
6. 000	0. 26	0. 44	0. 696	0					3. 51
6. 083	0. 06	0. 44	0. 694	0					3. 50
6. 167	0. 00	0. 44	0. 691	0					3. 49
6. 250	0. 00	0. 44	0. 688	0					3. 47
6. 333	0. 00	0. 44	0. 685	0					3. 46
6. 417	0. 00	0. 44	0. 682	0					3. 44
6. 500	0. 00	0. 44	0. 679	0					3. 43
6. 583	0. 00	0. 44	0. 676	0					3. 41
6. 667	0. 00	0. 44	0. 673	0					3. 40
6. 750	0. 00	0. 43	0. 670	0					3. 39
6. 833	0. 00	0. 43	0. 667	0					3. 37
6. 917	0. 00	0. 43	0. 664	0					3. 36
7. 000	0. 00	0. 43	0. 661	0					3. 34
7. 083	0. 00	0. 43	0. 658	0					3. 33
7. 167	0. 00	0. 43	0. 655	0					3. 31
7. 250	0. 00	0. 43	0. 652	0					3. 30
7. 333	0. 00	0. 43	0. 649	0					3. 29
7. 417	0. 00	0. 43	0. 646	0					3. 27
7. 500	0. 00	0. 43	0. 644	0					3. 26
7. 583	0. 00	0. 43	0. 641	0					3. 24
7. 667	0. 00	0. 42	0. 638	0					3. 23
7. 750	0. 00	0. 42	0. 635	0					3. 22
7. 833	0. 00	0. 42	0. 632	0					3. 20
7. 917	0. 00	0. 42	0. 629	0					3. 19
8. 000	0. 00	0. 42	0. 626	0					3. 17
8. 083	0. 00	0. 42	0. 623	0					3. 16
8. 167	0. 00	0. 42	0. 620	0					3. 15
8. 250	0. 00	0. 42	0. 617	0					3. 13
8. 333	0. 00	0. 42	0. 614	0					3. 12
8. 417	0. 00	0. 42	0. 612	0					3. 10
8. 500	0. 00	0. 41	0. 609	0					3. 09
8. 583	0. 00	0. 41	0. 606	0					3. 08
8. 667	0. 00	0. 41	0. 603	0					3. 06
8. 750	0. 00	0. 41	0. 600	0					3. 05
8. 833	0. 00	0. 41	0. 597	0					3. 04
8. 917	0. 00	0. 41	0. 595	0					3. 02
9. 000	0. 00	0. 41	0. 592	0					3. 01
9. 083	0. 00	0. 41	0. 589	0					2. 99
9. 167	0. 00	0. 41	0. 586	0					2. 98
9. 250	0. 00	0. 41	0. 583	0					2. 97
9. 333	0. 00	0. 41	0. 580	0					2. 96
9. 417	0. 00	0. 40	0. 578	0					2. 94
9. 500	0. 00	0. 40	0. 575	0					2. 93
9. 583	0. 00	0. 40	0. 572	0					2. 92
9. 667	0. 00	0. 40	0. 569	0					2. 90
9. 750	0. 00	0. 40	0. 567	0					2. 89
9. 833	0. 00	0. 40	0. 564	0					2. 88
9. 917	0. 00	0. 40	0. 561	0					2. 86
10. 000	0. 00	0. 40	0. 558	0					2. 85
10. 083	0. 00	0. 40	0. 556	0					2. 84
10. 167	0. 00	0. 40	0. 553	0					2. 83
10. 250	0. 00	0. 40	0. 550	0					2. 81
10. 333	0. 00	0. 40	0. 547	0					2. 80
10. 417	0. 00	0. 39	0. 545	0					2. 79
10. 500	0. 00	0. 39	0. 542	0					2. 78
10. 583	0. 00	0. 39	0. 539	0					2. 76
10. 667	0. 00	0. 39	0. 537	0					2. 75
10. 750	0. 00	0. 39	0. 534	0					2. 74
10. 833	0. 00	0. 39	0. 531	0					2. 73
10. 917	0. 00	0. 39	0. 529	0					2. 71
11. 000	0. 00	0. 39	0. 526	0					2. 70
11. 083	0. 00	0. 39	0. 523	0					2. 69
11. 167	0. 00	0. 39	0. 520	0					2. 68

11. 250	0. 00	0. 39	0. 518	IO
11. 333	0. 00	0. 38	0. 515	IO
11. 417	0. 00	0. 38	0. 513	IO
11. 500	0. 00	0. 38	0. 510	IO
11. 583	0. 00	0. 38	0. 507	IO
11. 667	0. 00	0. 38	0. 505	IO
11. 750	0. 00	0. 38	0. 502	IO
11. 833	0. 00	0. 38	0. 499	IO
11. 917	0. 00	0. 38	0. 497	IO
12. 000	0. 00	0. 38	0. 494	IO
12. 083	0. 00	0. 38	0. 492	IO
12. 167	0. 00	0. 38	0. 489	IO
12. 250	0. 00	0. 38	0. 486	IO
12. 333	0. 00	0. 37	0. 484	IO
12. 417	0. 00	0. 37	0. 481	IO
12. 500	0. 00	0. 37	0. 479	IO
12. 583	0. 00	0. 37	0. 476	IO
12. 667	0. 00	0. 37	0. 474	IO
12. 750	0. 00	0. 37	0. 471	IO
12. 833	0. 00	0. 37	0. 468	IO
12. 917	0. 00	0. 37	0. 466	IO
13. 000	0. 00	0. 37	0. 463	IO
13. 083	0. 00	0. 37	0. 461	IO
13. 167	0. 00	0. 37	0. 458	IO
13. 250	0. 00	0. 36	0. 456	IO
13. 333	0. 00	0. 36	0. 453	IO
13. 417	0. 00	0. 36	0. 451	IO
13. 500	0. 00	0. 36	0. 448	IO
13. 583	0. 00	0. 36	0. 446	IO
13. 667	0. 00	0. 36	0. 443	IO
13. 750	0. 00	0. 36	0. 441	IO
13. 833	0. 00	0. 36	0. 438	IO
13. 917	0. 00	0. 36	0. 436	IO
14. 000	0. 00	0. 36	0. 434	IO
14. 083	0. 00	0. 36	0. 431	IO
14. 167	0. 00	0. 35	0. 429	IO
14. 250	0. 00	0. 35	0. 426	IO
14. 333	0. 00	0. 35	0. 424	IO
14. 417	0. 00	0. 35	0. 421	IO
14. 500	0. 00	0. 35	0. 419	IO
14. 583	0. 00	0. 35	0. 417	IO
14. 667	0. 00	0. 35	0. 414	IO
14. 750	0. 00	0. 35	0. 412	IO
14. 833	0. 00	0. 35	0. 409	IO
14. 917	0. 00	0. 35	0. 407	IO
15. 000	0. 00	0. 35	0. 405	IO
15. 083	0. 00	0. 34	0. 402	IO
15. 167	0. 00	0. 34	0. 400	IO
15. 250	0. 00	0. 34	0. 397	IO
15. 333	0. 00	0. 34	0. 395	IO
15. 417	0. 00	0. 34	0. 393	IO
15. 500	0. 00	0. 34	0. 390	IO
15. 583	0. 00	0. 34	0. 388	IO
15. 667	0. 00	0. 34	0. 386	IO
15. 750	0. 00	0. 34	0. 383	IO
15. 833	0. 00	0. 34	0. 381	IO
15. 917	0. 00	0. 34	0. 379	IO
16. 000	0. 00	0. 34	0. 376	IO
16. 083	0. 00	0. 33	0. 374	IO
16. 167	0. 00	0. 33	0. 372	IO
16. 250	0. 00	0. 33	0. 370	IO
16. 333	0. 00	0. 33	0. 367	IO
16. 417	0. 00	0. 33	0. 365	IO
16. 500	0. 00	0. 33	0. 363	IO
16. 583	0. 00	0. 33	0. 360	IO
16. 667	0. 00	0. 33	0. 358	IO
16. 750	0. 00	0. 33	0. 356	IO
16. 833	0. 00	0. 33	0. 354	IO
16. 917	0. 00	0. 33	0. 351	IO
17. 000	0. 00	0. 33	0. 349	IO
17. 083	0. 00	0. 32	0. 347	IO
17. 167	0. 00	0. 32	0. 345	IO

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17. 250	0. 00	0. 32	0. 342	IO
17. 333	0. 00	0. 32	0. 340	IO
17. 417	0. 00	0. 32	0. 338	IO
17. 500	0. 00	0. 32	0. 336	IO
17. 583	0. 00	0. 32	0. 334	IO
17. 667	0. 00	0. 32	0. 331	IO
17. 750	0. 00	0. 32	0. 329	IO
17. 833	0. 00	0. 32	0. 327	IO
17. 917	0. 00	0. 32	0. 325	IO
18. 000	0. 00	0. 31	0. 323	IO
18. 083	0. 00	0. 31	0. 321	IO
18. 167	0. 00	0. 31	0. 318	IO
18. 250	0. 00	0. 31	0. 316	IO
18. 333	0. 00	0. 31	0. 314	IO
18. 417	0. 00	0. 31	0. 312	IO
18. 500	0. 00	0. 31	0. 310	IO
18. 583	0. 00	0. 31	0. 308	IO
18. 667	0. 00	0. 31	0. 306	IO
18. 750	0. 00	0. 31	0. 303	IO
18. 833	0. 00	0. 31	0. 301	IO
18. 917	0. 00	0. 30	0. 299	IO
19. 000	0. 00	0. 30	0. 297	IO
19. 083	0. 00	0. 30	0. 295	IO
19. 167	0. 00	0. 30	0. 293	IO
19. 250	0. 00	0. 30	0. 291	IO
19. 333	0. 00	0. 30	0. 289	IO
19. 417	0. 00	0. 30	0. 287	IO
19. 500	0. 00	0. 30	0. 285	IO
19. 583	0. 00	0. 30	0. 283	IO
19. 667	0. 00	0. 30	0. 281	IO
19. 750	0. 00	0. 30	0. 279	IO
19. 833	0. 00	0. 29	0. 277	IO
19. 917	0. 00	0. 29	0. 274	IO
20. 000	0. 00	0. 29	0. 272	IO
20. 083	0. 00	0. 29	0. 270	IO
20. 167	0. 00	0. 29	0. 268	IO
20. 250	0. 00	0. 29	0. 266	IO
20. 333	0. 00	0. 29	0. 264	IO
20. 417	0. 00	0. 29	0. 262	IO
20. 500	0. 00	0. 29	0. 260	IO
20. 583	0. 00	0. 29	0. 258	IO
20. 667	0. 00	0. 29	0. 257	IO
20. 750	0. 00	0. 28	0. 255	IO
20. 833	0. 00	0. 28	0. 253	IO
20. 917	0. 00	0. 28	0. 251	IO
21. 000	0. 00	0. 28	0. 249	IO
21. 083	0. 00	0. 28	0. 247	IO
21. 167	0. 00	0. 28	0. 245	IO
21. 250	0. 00	0. 28	0. 243	IO
21. 333	0. 00	0. 28	0. 241	IO
21. 417	0. 00	0. 28	0. 239	IO
21. 500	0. 00	0. 28	0. 237	IO
21. 583	0. 00	0. 28	0. 235	IO
21. 667	0. 00	0. 27	0. 233	IO
21. 750	0. 00	0. 27	0. 231	IO
21. 833	0. 00	0. 27	0. 230	IO
21. 917	0. 00	0. 27	0. 228	IO
22. 000	0. 00	0. 27	0. 226	IO
22. 083	0. 00	0. 27	0. 224	IO
22. 167	0. 00	0. 27	0. 222	IO
22. 250	0. 00	0. 27	0. 220	IO
22. 333	0. 00	0. 27	0. 218	IO
22. 417	0. 00	0. 27	0. 217	IO
22. 500	0. 00	0. 27	0. 215	IO
22. 583	0. 00	0. 26	0. 213	IO
22. 667	0. 00	0. 26	0. 211	IO
22. 750	0. 00	0. 26	0. 209	IO
22. 833	0. 00	0. 26	0. 207	IO
22. 917	0. 00	0. 26	0. 206	IO
23. 000	0. 00	0. 26	0. 204	IO
23. 083	0. 00	0. 26	0. 202	IO
23. 167	0. 00	0. 26	0. 200	IO

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23.250	0.00	0.26	0.199	IO	1.21
23.333	0.00	0.26	0.197	IO	1.20
23.417	0.00	0.26	0.195	IO	1.19
23.500	0.00	0.26	0.193	IO	1.18
23.583	0.00	0.25	0.191	IO	1.17
23.667	0.00	0.25	0.190	IO	1.17
23.750	0.00	0.25	0.188	IO	1.16
23.833	0.00	0.25	0.186	IO	1.15
23.917	0.00	0.25	0.184	IO	1.14
24.000	0.00	0.25	0.183	IO	1.14
24.083	0.00	0.25	0.181	IO	1.13
24.167	0.00	0.25	0.179	IO	1.12
24.250	0.00	0.25	0.178	IO	1.11
24.333	0.00	0.25	0.176	IO	1.10
24.417	0.00	0.25	0.174	IO	1.10
24.500	0.00	0.25	0.173	IO	1.09
24.583	0.00	0.24	0.171	IO	1.08
24.667	0.00	0.24	0.169	IO	1.07
24.750	0.00	0.24	0.167	IO	1.07
24.833	0.00	0.24	0.166	IO	1.06
24.917	0.00	0.24	0.164	IO	1.05
25.000	0.00	0.24	0.162	IO	1.04
25.083	0.00	0.24	0.161	IO	1.04
25.167	0.00	0.24	0.159	IO	1.03
25.250	0.00	0.24	0.158	IO	1.02
25.333	0.00	0.24	0.156	IO	1.01
25.417	0.00	0.24	0.154	IO	1.01
25.500	0.00	0.24	0.153	IO	1.00
25.583	0.00	0.23	0.151	IO	0.99
25.667	0.00	0.23	0.149	IO	0.98
25.750	0.00	0.23	0.148	IO	0.98
25.833	0.00	0.23	0.146	IO	0.97
25.917	0.00	0.23	0.145	IO	0.96
26.000	0.00	0.23	0.143	IO	0.95
26.083	0.00	0.23	0.141	IO	0.95
26.167	0.00	0.23	0.140	IO	0.94
26.250	0.00	0.23	0.138	IO	0.93
26.333	0.00	0.23	0.137	IO	0.93
26.417	0.00	0.23	0.135	IO	0.92
26.500	0.00	0.22	0.134	IO	0.91
26.583	0.00	0.22	0.132	IO	0.90
26.667	0.00	0.22	0.131	IO	0.90
26.750	0.00	0.22	0.129	IO	0.89
26.833	0.00	0.22	0.128	0	0.88
26.917	0.00	0.22	0.126	0	0.88
27.000	0.00	0.22	0.124	0	0.87
27.083	0.00	0.22	0.123	0	0.86
27.167	0.00	0.22	0.121	0	0.86
27.250	0.00	0.22	0.120	0	0.85
27.333	0.00	0.21	0.119	0	0.84
27.417	0.00	0.21	0.117	0	0.83
27.500	0.00	0.21	0.116	0	0.83
27.583	0.00	0.21	0.114	0	0.82
27.667	0.00	0.21	0.113	0	0.81
27.750	0.00	0.21	0.111	0	0.81
27.833	0.00	0.21	0.110	0	0.80
27.917	0.00	0.21	0.108	0	0.79
28.000	0.00	0.21	0.107	0	0.79
28.083	0.00	0.21	0.105	0	0.78
28.167	0.00	0.21	0.104	0	0.77
28.250	0.00	0.21	0.103	0	0.77
28.333	0.00	0.20	0.101	0	0.76
28.417	0.00	0.20	0.100	0	0.76
28.500	0.00	0.20	0.098	0	0.75
28.583	0.00	0.20	0.097	0	0.74
28.667	0.00	0.20	0.096	0	0.74
28.750	0.00	0.20	0.094	0	0.73
28.833	0.00	0.20	0.093	0	0.72
28.917	0.00	0.20	0.091	0	0.72
29.000	0.00	0.20	0.090	0	0.71
29.083	0.00	0.20	0.089	0	0.70
29.167	0.00	0.20	0.087	0	0.70

29.250	0.00	0.20	0.086	0	0.69
29.333	0.00	0.19	0.085	0	0.69
29.417	0.00	0.19	0.083	0	0.68
29.500	0.00	0.19	0.082	0	0.67
29.583	0.00	0.19	0.081	0	0.67
29.667	0.00	0.19	0.079	0	0.66
29.750	0.00	0.19	0.078	0	0.66
29.833	0.00	0.19	0.077	0	0.65
29.917	0.00	0.19	0.075	0	0.64
30.000	0.00	0.19	0.074	0	0.64
30.083	0.00	0.19	0.073	0	0.63
30.167	0.00	0.19	0.072	0	0.63
30.250	0.00	0.19	0.070	0	0.62
30.333	0.00	0.18	0.069	0	0.61
30.417	0.00	0.18	0.068	0	0.61
30.500	0.00	0.18	0.067	0	0.60
30.583	0.00	0.18	0.065	0	0.60
30.667	0.00	0.18	0.064	0	0.59
30.750	0.00	0.18	0.063	0	0.58
30.833	0.00	0.18	0.062	0	0.58
30.917	0.00	0.18	0.060	0	0.57
31.000	0.00	0.18	0.059	0	0.57
31.083	0.00	0.18	0.058	0	0.56
31.167	0.00	0.18	0.057	0	0.55
31.250	0.00	0.17	0.055	0	0.55
31.333	0.00	0.17	0.054	0	0.54
31.417	0.00	0.17	0.053	0	0.54
31.500	0.00	0.17	0.052	0	0.53
31.583	0.00	0.17	0.051	0	0.52
31.667	0.00	0.17	0.049	0	0.52
31.750	0.00	0.17	0.048	0	0.51
31.833	0.00	0.17	0.047	0	0.51
31.917	0.00	0.17	0.046	0	0.50
32.000	0.00	0.17	0.045	0	0.49
32.083	0.00	0.16	0.044	0	0.48
32.167	0.00	0.16	0.043	0	0.48
32.250	0.00	0.16	0.041	0	0.47
32.333	0.00	0.16	0.040	0	0.46
32.417	0.00	0.16	0.039	0	0.45
32.500	0.00	0.16	0.038	0	0.44
32.583	0.00	0.15	0.037	0	0.44
32.667	0.00	0.15	0.036	0	0.43
32.750	0.00	0.15	0.035	0	0.42
32.833	0.00	0.15	0.034	0	0.41
32.917	0.00	0.15	0.033	0	0.41
33.000	0.00	0.15	0.032	0	0.40
33.083	0.00	0.15	0.031	0	0.39
33.167	0.00	0.14	0.030	0	0.39
33.250	0.00	0.14	0.029	0	0.38
33.333	0.00	0.14	0.028	0	0.37
33.417	0.00	0.14	0.027	0	0.36
33.500	0.00	0.14	0.026	0	0.36
33.583	0.00	0.14	0.025	0	0.35
33.667	0.00	0.14	0.024	0	0.34
33.750	0.00	0.14	0.023	0	0.34
33.833	0.00	0.13	0.022	0	0.33
33.917	0.00	0.13	0.021	0	0.32
34.000	0.00	0.13	0.020	0	0.32
34.083	0.00	0.13	0.020	0	0.31
34.167	0.00	0.13	0.019	0	0.30
34.250	0.00	0.13	0.018	0	0.30
34.333	0.00	0.13	0.017	0	0.29
34.417	0.00	0.13	0.016	0	0.29
34.500	0.00	0.12	0.015	0	0.28
34.583	0.00	0.12	0.014	0	0.27
34.667	0.00	0.12	0.013	0	0.27
34.750	0.00	0.12	0.013	0	0.26
34.833	0.00	0.12	0.012	0	0.26
34.917	0.00	0.12	0.011	0	0.25
35.000	0.00	0.11	0.010	0	0.23
35.083	0.00	0.10	0.010	0	0.22
35.167	0.00	0.09	0.009	0	0.20

35.250	0.00	0.09	0.008	0					0.19
35.333	0.00	0.08	0.008	0					0.17
35.417	0.00	0.08	0.007	0					0.16
35.500	0.00	0.07	0.007	0					0.15
35.583	0.00	0.07	0.006	0					0.14
35.667	0.00	0.06	0.006	0					0.13
35.750	0.00	0.06	0.005	0					0.12
35.833	0.00	0.05	0.005	0					0.11
35.917	0.00	0.05	0.005	0					0.10
36.000	0.00	0.05	0.004	0					0.10
36.083	0.00	0.04	0.004	0					0.09
36.167	0.00	0.04	0.004	0					0.08
36.250	0.00	0.04	0.003	0					0.08
36.333	0.00	0.03	0.003	0					0.07
36.417	0.00	0.03	0.003	0					0.07
36.500	0.00	0.03	0.003	0					0.06
36.583	0.00	0.03	0.003	0					0.06
36.667	0.00	0.03	0.002	0					0.05
36.750	0.00	0.02	0.002	0					0.05
36.833	0.00	0.02	0.002	0					0.05
36.917	0.00	0.02	0.002	0					0.04
37.000	0.00	0.02	0.002	0					0.04
37.083	0.00	0.02	0.002	0					0.04
37.167	0.00	0.02	0.001	0					0.03
37.250	0.00	0.01	0.001	0					0.03
37.333	0.00	0.01	0.001	0					0.03
37.417	0.00	0.01	0.001	0					0.03
37.500	0.00	0.01	0.001	0					0.03
37.583	0.00	0.01	0.001	0					0.02
37.667	0.00	0.01	0.001	0					0.02
37.750	0.00	0.01	0.001	0					0.02
37.833	0.00	0.01	0.001	0					0.02
37.917	0.00	0.01	0.001	0					0.02
38.000	0.00	0.01	0.001	0					0.02
38.083	0.00	0.01	0.001	0					0.02
38.167	0.00	0.01	0.001	0					0.01
38.250	0.00	0.01	0.001	0					0.01
38.333	0.00	0.01	0.001	0					0.01
38.417	0.00	0.01	0.000	0					0.01
38.500	0.00	0.00	0.000	0					0.01
38.583	0.00	0.00	0.000	0					0.01
38.667	0.00	0.00	0.000	0					0.01
38.750	0.00	0.00	0.000	0					0.01
38.833	0.00	0.00	0.000	0					0.01
38.917	0.00	0.00	0.000	0					0.01
39.000	0.00	0.00	0.000	0					0.01
39.083	0.00	0.00	0.000	0					0.01
39.167	0.00	0.00	0.000	0					0.01
39.250	0.00	0.00	0.000	0					0.01
39.333	0.00	0.00	0.000	0					0.00
39.417	0.00	0.00	0.000	0					0.00
39.500	0.00	0.00	0.000	0					0.00
39.583	0.00	0.00	0.000	0					0.00
39.667	0.00	0.00	0.000	0					0.00
39.750	0.00	0.00	0.000	0					0.00
39.833	0.00	0.00	0.000	0					0.00
39.917	0.00	0.00	0.000	0					0.00
40.000	0.00	0.00	0.000	0					0.00
40.083	0.00	0.00	0.000	0					0.00
40.167	0.00	0.00	0.000	0					0.00
40.250	0.00	0.00	0.000	0					0.00
40.333	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****

Number of intervals = 484
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 0.443 (CFS)
 Total volume = 0.826 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/06/23

TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 140-161
 MITIGATION ANALYSIS
 3-HOUR - 10-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PD10310.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 37
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 8.167 (CFS)
 Total volume = 0.648 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

+++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 37
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.011	0.118	0.011	0.011
0.500	0.046	0.167	0.045	0.047
0.600	0.066	0.183	0.065	0.067
1.000	0.153	0.236	0.152	0.154
1.500	0.263	0.289	0.262	0.264
1.810	0.330	0.318	0.329	0.331
2.000	0.373	0.334	0.372	0.374
2.500	0.483	0.374	0.482	0.484
3.000	0.590	0.409	0.589	0.591
3.500	0.694	0.442	0.692	0.696
3.900	0.772	0.467	0.770	0.774
4.000	0.793	0.535	0.791	0.795
4.500	0.882	2.336	0.874	0.890
4.900	0.933	4.305	0.918	0.948
5.000	0.947	4.495	0.932	0.962

5. 500 0. 973 5. 338 0. 955 0. 991
 5. 600 0. 979 5. 490 0. 960 0. 998

 Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	0	2. 0	4. 08	6. 13	8. 17	Depth (Ft.)
0. 083	0. 87	0. 03	0. 003	0	I				0. 07
0. 167	1. 17	0. 10	0. 009	0	I				0. 22
0. 250	1. 04	0. 13	0. 016	0	I				0. 29
0. 333	1. 26	0. 14	0. 023	0	I				0. 34
0. 417	1. 35	0. 15	0. 031	0	I				0. 40
0. 500	1. 55	0. 16	0. 040	0	I				0. 46
0. 583	1. 42	0. 17	0. 049	0	I				0. 52
0. 667	1. 55	0. 18	0. 058	0	I				0. 56
0. 750	1. 62	0. 18	0. 068	0	I				0. 61
0. 833	1. 42	0. 19	0. 077	0	I				0. 65
0. 917	1. 42	0. 20	0. 086	0	I				0. 69
1. 000	1. 58	0. 20	0. 095	0	I				0. 73
1. 083	1. 89	0. 21	0. 105	0	I				0. 78
1. 167	1. 98	0. 21	0. 117	0	I				0. 84
1. 250	1. 98	0. 22	0. 129	0	I				0. 89
1. 333	1. 85	0. 23	0. 141	0	I				0. 94
1. 417	2. 21	0. 24	0. 153	0	I				1. 00
1. 500	2. 41	0. 24	0. 168	0	I				1. 07
1. 583	2. 23	0. 25	0. 182	0	I				1. 13
1. 667	2. 36	0. 26	0. 196	0	I				1. 20
1. 750	2. 88	0. 26	0. 212	0	I	I			1. 27
1. 833	2. 87	0. 27	0. 230	0	I	I			1. 35
1. 917	2. 66	0. 28	0. 247	0	I	I			1. 43
2. 000	2. 68	0. 29	0. 264	0	I	I			1. 50
2. 083	2. 79	0. 30	0. 281	0	I	I			1. 58
2. 167	3. 71	0. 31	0. 301	0	I	I			1. 68
2. 250	4. 68	0. 32	0. 328	0	I	I			1. 80
2. 333	3. 67	0. 33	0. 354	0	I	I			1. 92
2. 417	5. 96	0. 34	0. 385	0	I	I			2. 05
2. 500	7. 29	0. 35	0. 428	0	I	I			2. 25
2. 583	8. 17	0. 37	0. 479	0	I	I			2. 48
2. 667	6. 53	0. 39	0. 527	0	I	I			2. 71
2. 750	2. 84	0. 40	0. 557	0	I	I			2. 84
2. 833	1. 67	0. 40	0. 569	0	I	I			2. 90
2. 917	1. 62	0. 41	0. 578	0	I	I			2. 94
3. 000	0. 82	0. 41	0. 584	0	I	I			2. 97
3. 083	0. 14	0. 41	0. 584	10					2. 97
3. 167	0. 00	0. 41	0. 582	10					2. 96
3. 250	0. 00	0. 41	0. 579	10					2. 95
3. 333	0. 00	0. 40	0. 576	10					2. 93
3. 417	0. 00	0. 40	0. 573	10					2. 92
3. 500	0. 00	0. 40	0. 571	10					2. 91
3. 583	0. 00	0. 40	0. 568	10					2. 90
3. 667	0. 00	0. 40	0. 565	10					2. 88
3. 750	0. 00	0. 40	0. 562	10					2. 87
3. 833	0. 00	0. 40	0. 559	10					2. 86
3. 917	0. 00	0. 40	0. 557	10					2. 84
4. 000	0. 00	0. 40	0. 554	10					2. 83
4. 083	0. 00	0. 40	0. 551	10					2. 82
4. 167	0. 00	0. 40	0. 549	10					2. 81
4. 250	0. 00	0. 39	0. 546	10					2. 79
4. 333	0. 00	0. 39	0. 543	10					2. 78
4. 417	0. 00	0. 39	0. 540	10					2. 77
4. 500	0. 00	0. 39	0. 538	10					2. 76
4. 583	0. 00	0. 39	0. 535	10					2. 74
4. 667	0. 00	0. 39	0. 532	10					2. 73
4. 750	0. 00	0. 39	0. 530	10					2. 72
4. 833	0. 00	0. 39	0. 527	10					2. 71
4. 917	0. 00	0. 39	0. 524	10					2. 69
5. 000	0. 00	0. 39	0. 522	10					2. 68
5. 083	0. 00	0. 39	0. 519	10					2. 67
5. 167	0. 00	0. 38	0. 516	10					2. 66

5. 250	0. 00	0. 38	0. 514	IO
5. 333	0. 00	0. 38	0. 511	IO
5. 417	0. 00	0. 38	0. 508	IO
5. 500	0. 00	0. 38	0. 506	IO
5. 583	0. 00	0. 38	0. 503	IO
5. 667	0. 00	0. 38	0. 500	IO
5. 750	0. 00	0. 38	0. 498	IO
5. 833	0. 00	0. 38	0. 495	IO
5. 917	0. 00	0. 38	0. 493	IO
6. 000	0. 00	0. 38	0. 490	IO
6. 083	0. 00	0. 38	0. 487	IO
6. 167	0. 00	0. 37	0. 485	IO
6. 250	0. 00	0. 37	0. 482	IO
6. 333	0. 00	0. 37	0. 480	IO
6. 417	0. 00	0. 37	0. 477	IO
6. 500	0. 00	0. 37	0. 475	IO
6. 583	0. 00	0. 37	0. 472	IO
6. 667	0. 00	0. 37	0. 470	IO
6. 750	0. 00	0. 37	0. 467	IO
6. 833	0. 00	0. 37	0. 464	IO
6. 917	0. 00	0. 37	0. 462	IO
7. 000	0. 00	0. 37	0. 459	IO
7. 083	0. 00	0. 36	0. 457	IO
7. 167	0. 00	0. 36	0. 454	IO
7. 250	0. 00	0. 36	0. 452	IO
7. 333	0. 00	0. 36	0. 449	IO
7. 417	0. 00	0. 36	0. 447	IO
7. 500	0. 00	0. 36	0. 444	IO
7. 583	0. 00	0. 36	0. 442	IO
7. 667	0. 00	0. 36	0. 439	IO
7. 750	0. 00	0. 36	0. 437	IO
7. 833	0. 00	0. 36	0. 435	IO
7. 917	0. 00	0. 36	0. 432	IO
8. 000	0. 00	0. 35	0. 430	IO
8. 083	0. 00	0. 35	0. 427	IO
8. 167	0. 00	0. 35	0. 425	IO
8. 250	0. 00	0. 35	0. 422	IO
8. 333	0. 00	0. 35	0. 420	IO
8. 417	0. 00	0. 35	0. 418	IO
8. 500	0. 00	0. 35	0. 415	IO
8. 583	0. 00	0. 35	0. 413	IO
8. 667	0. 00	0. 35	0. 410	IO
8. 750	0. 00	0. 35	0. 408	IO
8. 833	0. 00	0. 35	0. 406	IO
8. 917	0. 00	0. 34	0. 403	IO
9. 000	0. 00	0. 34	0. 401	IO
9. 083	0. 00	0. 34	0. 398	IO
9. 167	0. 00	0. 34	0. 396	IO
9. 250	0. 00	0. 34	0. 394	IO
9. 333	0. 00	0. 34	0. 391	IO
9. 417	0. 00	0. 34	0. 389	IO
9. 500	0. 00	0. 34	0. 387	IO
9. 583	0. 00	0. 34	0. 384	IO
9. 667	0. 00	0. 34	0. 382	IO
9. 750	0. 00	0. 34	0. 380	IO
9. 833	0. 00	0. 34	0. 377	IO
9. 917	0. 00	0. 33	0. 375	IO
10. 000	0. 00	0. 33	0. 373	IO
10. 083	0. 00	0. 33	0. 370	IO
10. 167	0. 00	0. 33	0. 368	IO
10. 250	0. 00	0. 33	0. 366	IO
10. 333	0. 00	0. 33	0. 364	IO
10. 417	0. 00	0. 33	0. 361	IO
10. 500	0. 00	0. 33	0. 359	IO
10. 583	0. 00	0. 33	0. 357	IO
10. 667	0. 00	0. 33	0. 355	IO
10. 750	0. 00	0. 33	0. 352	IO
10. 833	0. 00	0. 33	0. 350	IO
10. 917	0. 00	0. 32	0. 348	IO
11. 000	0. 00	0. 32	0. 346	IO
11. 083	0. 00	0. 32	0. 343	IO
11. 167	0. 00	0. 32	0. 341	IO

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11. 250	0. 00	0. 32	0. 339	IO
11. 333	0. 00	0. 32	0. 337	IO
11. 417	0. 00	0. 32	0. 335	IO
11. 500	0. 00	0. 32	0. 332	IO
11. 583	0. 00	0. 32	0. 330	IO
11. 667	0. 00	0. 32	0. 328	IO
11. 750	0. 00	0. 32	0. 326	IO
11. 833	0. 00	0. 32	0. 324	IO
11. 917	0. 00	0. 31	0. 321	IO
12. 000	0. 00	0. 31	0. 319	IO
12. 083	0. 00	0. 31	0. 317	IO
12. 167	0. 00	0. 31	0. 315	IO
12. 250	0. 00	0. 31	0. 313	IO
12. 333	0. 00	0. 31	0. 311	IO
12. 417	0. 00	0. 31	0. 309	IO
12. 500	0. 00	0. 31	0. 306	IO
12. 583	0. 00	0. 31	0. 304	IO
12. 667	0. 00	0. 31	0. 302	IO
12. 750	0. 00	0. 31	0. 300	IO
12. 833	0. 00	0. 30	0. 298	IO
12. 917	0. 00	0. 30	0. 296	IO
13. 000	0. 00	0. 30	0. 294	IO
13. 083	0. 00	0. 30	0. 292	IO
13. 167	0. 00	0. 30	0. 290	IO
13. 250	0. 00	0. 30	0. 288	IO
13. 333	0. 00	0. 30	0. 286	IO
13. 417	0. 00	0. 30	0. 283	IO
13. 500	0. 00	0. 30	0. 281	IO
13. 583	0. 00	0. 30	0. 279	IO
13. 667	0. 00	0. 30	0. 277	IO
13. 750	0. 00	0. 29	0. 275	IO
13. 833	0. 00	0. 29	0. 273	IO
13. 917	0. 00	0. 29	0. 271	IO
14. 000	0. 00	0. 29	0. 269	IO
14. 083	0. 00	0. 29	0. 267	IO
14. 167	0. 00	0. 29	0. 265	IO
14. 250	0. 00	0. 29	0. 263	IO
14. 333	0. 00	0. 29	0. 261	IO
14. 417	0. 00	0. 29	0. 259	IO
14. 500	0. 00	0. 29	0. 257	IO
14. 583	0. 00	0. 29	0. 255	IO
14. 667	0. 00	0. 28	0. 253	IO
14. 750	0. 00	0. 28	0. 251	IO
14. 833	0. 00	0. 28	0. 250	IO
14. 917	0. 00	0. 28	0. 248	IO
15. 000	0. 00	0. 28	0. 246	IO
15. 083	0. 00	0. 28	0. 244	IO
15. 167	0. 00	0. 28	0. 242	IO
15. 250	0. 00	0. 28	0. 240	IO
15. 333	0. 00	0. 28	0. 238	IO
15. 417	0. 00	0. 28	0. 236	IO
15. 500	0. 00	0. 28	0. 234	IO
15. 583	0. 00	0. 27	0. 232	IO
15. 667	0. 00	0. 27	0. 230	IO
15. 750	0. 00	0. 27	0. 228	IO
15. 833	0. 00	0. 27	0. 227	IO
15. 917	0. 00	0. 27	0. 225	IO
16. 000	0. 00	0. 27	0. 223	IO
16. 083	0. 00	0. 27	0. 221	IO
16. 167	0. 00	0. 27	0. 219	IO
16. 250	0. 00	0. 27	0. 217	IO
16. 333	0. 00	0. 27	0. 216	IO
16. 417	0. 00	0. 27	0. 214	IO
16. 500	0. 00	0. 26	0. 212	IO
16. 583	0. 00	0. 26	0. 210	IO
16. 667	0. 00	0. 26	0. 208	IO
16. 750	0. 00	0. 26	0. 206	IO
16. 833	0. 00	0. 26	0. 205	IO
16. 917	0. 00	0. 26	0. 203	IO
17. 000	0. 00	0. 26	0. 201	IO
17. 083	0. 00	0. 26	0. 199	IO
17. 167	0. 00	0. 26	0. 197	IO

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17. 250	0. 00	0. 26	0. 196	I0
17. 333	0. 00	0. 26	0. 194	I0
17. 417	0. 00	0. 25	0. 192	0
17. 500	0. 00	0. 25	0. 190	0
17. 583	0. 00	0. 25	0. 189	0
17. 667	0. 00	0. 25	0. 187	0
17. 750	0. 00	0. 25	0. 185	0
17. 833	0. 00	0. 25	0. 183	0
17. 917	0. 00	0. 25	0. 182	0
18. 000	0. 00	0. 25	0. 180	0
18. 083	0. 00	0. 25	0. 178	0
18. 167	0. 00	0. 25	0. 177	0
18. 250	0. 00	0. 25	0. 175	0
18. 333	0. 00	0. 25	0. 173	0
18. 417	0. 00	0. 24	0. 172	0
18. 500	0. 00	0. 24	0. 170	0
18. 583	0. 00	0. 24	0. 168	0
18. 667	0. 00	0. 24	0. 167	0
18. 750	0. 00	0. 24	0. 165	0
18. 833	0. 00	0. 24	0. 163	0
18. 917	0. 00	0. 24	0. 162	0
19. 000	0. 00	0. 24	0. 160	0
19. 083	0. 00	0. 24	0. 158	0
19. 167	0. 00	0. 24	0. 157	0
19. 250	0. 00	0. 24	0. 155	0
19. 333	0. 00	0. 24	0. 153	0
19. 417	0. 00	0. 24	0. 152	0
19. 500	0. 00	0. 23	0. 150	0
19. 583	0. 00	0. 23	0. 148	0
19. 667	0. 00	0. 23	0. 147	0
19. 750	0. 00	0. 23	0. 145	0
19. 833	0. 00	0. 23	0. 144	0
19. 917	0. 00	0. 23	0. 142	0
20. 000	0. 00	0. 23	0. 141	0
20. 083	0. 00	0. 23	0. 139	0
20. 167	0. 00	0. 23	0. 137	0
20. 250	0. 00	0. 23	0. 136	0
20. 333	0. 00	0. 22	0. 134	0
20. 417	0. 00	0. 22	0. 133	0
20. 500	0. 00	0. 22	0. 131	0
20. 583	0. 00	0. 22	0. 130	0
20. 667	0. 00	0. 22	0. 128	0
20. 750	0. 00	0. 22	0. 127	0
20. 833	0. 00	0. 22	0. 125	0
20. 917	0. 00	0. 22	0. 124	0
21. 000	0. 00	0. 22	0. 122	0
21. 083	0. 00	0. 22	0. 121	0
21. 167	0. 00	0. 22	0. 119	0
21. 250	0. 00	0. 21	0. 118	0
21. 333	0. 00	0. 21	0. 116	0
21. 417	0. 00	0. 21	0. 115	0
21. 500	0. 00	0. 21	0. 113	0
21. 583	0. 00	0. 21	0. 112	0
21. 667	0. 00	0. 21	0. 110	0
21. 750	0. 00	0. 21	0. 109	0
21. 833	0. 00	0. 21	0. 107	0
21. 917	0. 00	0. 21	0. 106	0
22. 000	0. 00	0. 21	0. 105	0
22. 083	0. 00	0. 21	0. 103	0
22. 167	0. 00	0. 20	0. 102	0
22. 250	0. 00	0. 20	0. 100	0
22. 333	0. 00	0. 20	0. 099	0
22. 417	0. 00	0. 20	0. 098	0
22. 500	0. 00	0. 20	0. 096	0
22. 583	0. 00	0. 20	0. 095	0
22. 667	0. 00	0. 20	0. 093	0
22. 750	0. 00	0. 20	0. 092	0
22. 833	0. 00	0. 20	0. 091	0
22. 917	0. 00	0. 20	0. 089	0
23. 000	0. 00	0. 20	0. 088	0
23. 083	0. 00	0. 20	0. 087	0
23. 167	0. 00	0. 19	0. 085	0

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23.250	0.00	0.19	0.084	0	0.68
23.333	0.00	0.19	0.083	0	0.68
23.417	0.00	0.19	0.081	0	0.67
23.500	0.00	0.19	0.080	0	0.66
23.583	0.00	0.19	0.079	0	0.66
23.667	0.00	0.19	0.077	0	0.65
23.750	0.00	0.19	0.076	0	0.65
23.833	0.00	0.19	0.075	0	0.64
23.917	0.00	0.19	0.073	0	0.63
24.000	0.00	0.19	0.072	0	0.63
24.083	0.00	0.19	0.071	0	0.62
24.167	0.00	0.19	0.070	0	0.62
24.250	0.00	0.18	0.068	0	0.61
24.333	0.00	0.18	0.067	0	0.60
24.417	0.00	0.18	0.066	0	0.60
24.500	0.00	0.18	0.065	0	0.59
24.583	0.00	0.18	0.063	0	0.59
24.667	0.00	0.18	0.062	0	0.58
24.750	0.00	0.18	0.061	0	0.57
24.833	0.00	0.18	0.060	0	0.57
24.917	0.00	0.18	0.058	0	0.56
25.000	0.00	0.18	0.057	0	0.56
25.083	0.00	0.17	0.056	0	0.55
25.167	0.00	0.17	0.055	0	0.54
25.250	0.00	0.17	0.054	0	0.54
25.333	0.00	0.17	0.052	0	0.53
25.417	0.00	0.17	0.051	0	0.53
25.500	0.00	0.17	0.050	0	0.52
25.583	0.00	0.17	0.049	0	0.51
25.667	0.00	0.17	0.048	0	0.51
25.750	0.00	0.17	0.046	0	0.50
25.833	0.00	0.17	0.045	0	0.50
25.917	0.00	0.16	0.044	0	0.49
26.000	0.00	0.16	0.043	0	0.48
26.083	0.00	0.16	0.042	0	0.47
26.167	0.00	0.16	0.041	0	0.46
26.250	0.00	0.16	0.040	0	0.46
26.333	0.00	0.16	0.039	0	0.45
26.417	0.00	0.16	0.038	0	0.44
26.500	0.00	0.15	0.037	0	0.43
26.583	0.00	0.15	0.035	0	0.42
26.667	0.00	0.15	0.034	0	0.42
26.750	0.00	0.15	0.033	0	0.41
26.833	0.00	0.15	0.032	0	0.40
26.917	0.00	0.15	0.031	0	0.40
27.000	0.00	0.15	0.030	0	0.39
27.083	0.00	0.14	0.029	0	0.38
27.167	0.00	0.14	0.028	0	0.37
27.250	0.00	0.14	0.027	0	0.37
27.333	0.00	0.14	0.026	0	0.36
27.417	0.00	0.14	0.025	0	0.35
27.500	0.00	0.14	0.025	0	0.35
27.583	0.00	0.14	0.024	0	0.34
27.667	0.00	0.13	0.023	0	0.33
27.750	0.00	0.13	0.022	0	0.33
27.833	0.00	0.13	0.021	0	0.32
27.917	0.00	0.13	0.020	0	0.31
28.000	0.00	0.13	0.019	0	0.31
28.083	0.00	0.13	0.018	0	0.30
28.167	0.00	0.13	0.017	0	0.29
28.250	0.00	0.13	0.016	0	0.29
28.333	0.00	0.12	0.016	0	0.28
28.417	0.00	0.12	0.015	0	0.28
28.500	0.00	0.12	0.014	0	0.27
28.583	0.00	0.12	0.013	0	0.26
28.667	0.00	0.12	0.012	0	0.26
28.750	0.00	0.12	0.011	0	0.25
28.833	0.00	0.11	0.011	0	0.24
28.917	0.00	0.11	0.010	0	0.22
29.000	0.00	0.10	0.009	0	0.21
29.083	0.00	0.09	0.008	0	0.19
29.167	0.00	0.08	0.008	0	0.18

29.250	0.00	0.08	0.007	0					0.17
29.333	0.00	0.07	0.007	0					0.15
29.417	0.00	0.07	0.006	0					0.14
29.500	0.00	0.06	0.006	0					0.13
29.583	0.00	0.06	0.005	0					0.12
29.667	0.00	0.05	0.005	0					0.11
29.750	0.00	0.05	0.005	0					0.11
29.833	0.00	0.05	0.004	0					0.10
29.917	0.00	0.04	0.004	0					0.09
30.000	0.00	0.04	0.004	0					0.09
30.083	0.00	0.04	0.003	0					0.08
30.167	0.00	0.03	0.003	0					0.07
30.250	0.00	0.03	0.003	0					0.07
30.333	0.00	0.03	0.003	0					0.06
30.417	0.00	0.03	0.003	0					0.06
30.500	0.00	0.03	0.002	0					0.05
30.583	0.00	0.02	0.002	0					0.05
30.667	0.00	0.02	0.002	0					0.05
30.750	0.00	0.02	0.002	0					0.04
30.833	0.00	0.02	0.002	0					0.04
30.917	0.00	0.02	0.002	0					0.04
31.000	0.00	0.02	0.002	0					0.04
31.083	0.00	0.02	0.001	0					0.03
31.167	0.00	0.01	0.001	0					0.03
31.250	0.00	0.01	0.001	0					0.03
31.333	0.00	0.01	0.001	0					0.03
31.417	0.00	0.01	0.001	0					0.02
31.500	0.00	0.01	0.001	0					0.02
31.583	0.00	0.01	0.001	0					0.02
31.667	0.00	0.01	0.001	0					0.02
31.750	0.00	0.01	0.001	0					0.02
31.833	0.00	0.01	0.001	0					0.02
31.917	0.00	0.01	0.001	0					0.02
32.000	0.00	0.01	0.001	0					0.01
32.083	0.00	0.01	0.001	0					0.01
32.167	0.00	0.01	0.001	0					0.01
32.250	0.00	0.01	0.001	0					0.01
32.333	0.00	0.01	0.000	0					0.01
32.417	0.00	0.00	0.000	0					0.01
32.500	0.00	0.00	0.000	0					0.01
32.583	0.00	0.00	0.000	0					0.01
32.667	0.00	0.00	0.000	0					0.01
32.750	0.00	0.00	0.000	0					0.01
32.833	0.00	0.00	0.000	0					0.01
32.917	0.00	0.00	0.000	0					0.01
33.000	0.00	0.00	0.000	0					0.01
33.083	0.00	0.00	0.000	0					0.01
33.167	0.00	0.00	0.000	0					0.01
33.250	0.00	0.00	0.000	0					0.00
33.333	0.00	0.00	0.000	0					0.00
33.417	0.00	0.00	0.000	0					0.00
33.500	0.00	0.00	0.000	0					0.00
33.583	0.00	0.00	0.000	0					0.00
33.667	0.00	0.00	0.000	0					0.00
33.750	0.00	0.00	0.000	0					0.00
33.833	0.00	0.00	0.000	0					0.00
33.917	0.00	0.00	0.000	0					0.00
34.000	0.00	0.00	0.000	0					0.00
34.083	0.00	0.00	0.000	0					0.00
34.167	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****
Number of intervals = 410
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.407 (CFS)
Total volume = 0.648 (Ac. Ft)
Status of hydrographs being held in storage
Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
Peak (CFS) 0.000 0.000 0.000 0.000 0.000
Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

FLOOD HYDROGRAPH ROUTING PROGRAM
 Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2012
 Study date: 01/06/23

 TEMESCAL CANYON SELF STORAGE - RIVERSIDE COUNTY
 PROPOSED CONDITION - NODES 140-161
 MITIGATION ANALYSIS
 1-HOUR - 10-YEAR

Program License Serial Number 6310

***** HYDROGRAPH INFORMATION *****

From study/file name: 2216PD10110.rte
 *****HYDROGRAPH DATA*****
 Number of intervals = 13
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 13.804 (CFS)
 Total volume = 0.396 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

++++++
 Process from Point/Station 0.000 to Point/Station 0.000
 **** RETARDING BASIN ROUTING ****

 User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 13
 Hydrograph time unit = 5.000 (Min.)
 Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
 Initial basin storage = 0.00 (Ac. Ft)
 Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac. Ft)	Outflow (CFS)	(S-0*dt/2) (Ac. Ft)	(S+0*dt/2) (Ac. Ft)
0.000	0.000	0.000	0.000	0.000
0.250	0.011	0.118	0.011	0.011
0.500	0.046	0.167	0.045	0.047
0.600	0.066	0.183	0.065	0.067
1.000	0.153	0.236	0.152	0.154
1.500	0.263	0.289	0.262	0.264
1.810	0.330	0.318	0.329	0.331
2.000	0.373	0.334	0.372	0.374
2.500	0.483	0.374	0.482	0.484
3.000	0.590	0.409	0.589	0.591
3.500	0.694	0.442	0.692	0.696
3.900	0.772	0.467	0.770	0.774
4.000	0.793	0.535	0.791	0.795
4.500	0.882	2.336	0.874	0.890
4.900	0.933	4.305	0.918	0.948
5.000	0.947	4.495	0.932	0.962

5. 500 0. 973 5. 338 0. 955 0. 991
 5. 600 0. 979 5. 490 0. 960 0. 998

 Hydrograph Detention Basin Routing

Graph values: 'I' = unit inflow; 'O' = outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac. Ft)	. 0	3. 5	6. 90	10. 35	13. 80	Depth (Ft.)
0. 083	1. 73	0. 06	0. 006	0	I				0. 13
0. 167	2. 36	0. 13	0. 019	0	I				0. 31
0. 250	2. 76	0. 15	0. 036	0	I				0. 43
0. 333	2. 89	0. 17	0. 054	0	I				0. 54
0. 417	3. 03	0. 19	0. 073	0	I				0. 63
0. 500	3. 42	0. 20	0. 094	0	I				0. 73
0. 583	4. 25	0. 22	0. 119	0	I				0. 84
0. 667	5. 07	0. 23	0. 150	0	I				0. 98
0. 750	7. 05	0. 25	0. 190	0		I			1. 17
0. 833	13. 80	0. 29	0. 260	0				I	1. 48
0. 917	7. 40	0. 32	0. 331	0		I			1. 81
1. 000	3. 07	0. 33	0. 364	0	I				1. 96
1. 083	0. 66	0. 33	0. 375	0I					2. 01
1. 167	0. 00	0. 33	0. 375	0					2. 01
1. 250	0. 00	0. 33	0. 373	0					2. 00
1. 333	0. 00	0. 33	0. 370	0					1. 99
1. 417	0. 00	0. 33	0. 368	0					1. 98
1. 500	0. 00	0. 33	0. 366	0					1. 97
1. 583	0. 00	0. 33	0. 363	0					1. 96
1. 667	0. 00	0. 33	0. 361	0					1. 95
1. 750	0. 00	0. 33	0. 359	0					1. 94
1. 833	0. 00	0. 33	0. 357	0					1. 93
1. 917	0. 00	0. 33	0. 354	0					1. 92
2. 000	0. 00	0. 33	0. 352	0					1. 91
2. 083	0. 00	0. 33	0. 350	0					1. 90
2. 167	0. 00	0. 32	0. 348	0					1. 89
2. 250	0. 00	0. 32	0. 345	0					1. 88
2. 333	0. 00	0. 32	0. 343	0					1. 87
2. 417	0. 00	0. 32	0. 341	0					1. 86
2. 500	0. 00	0. 32	0. 339	0					1. 85
2. 583	0. 00	0. 32	0. 337	0					1. 84
2. 667	0. 00	0. 32	0. 334	0					1. 83
2. 750	0. 00	0. 32	0. 332	0					1. 82
2. 833	0. 00	0. 32	0. 330	0					1. 81
2. 917	0. 00	0. 32	0. 328	0					1. 80
3. 000	0. 00	0. 32	0. 326	0					1. 79
3. 083	0. 00	0. 32	0. 323	0					1. 78
3. 167	0. 00	0. 31	0. 321	0					1. 77
3. 250	0. 00	0. 31	0. 319	0					1. 76
3. 333	0. 00	0. 31	0. 317	0					1. 75
3. 417	0. 00	0. 31	0. 315	0					1. 74
3. 500	0. 00	0. 31	0. 313	0					1. 73
3. 583	0. 00	0. 31	0. 311	0					1. 72
3. 667	0. 00	0. 31	0. 308	0					1. 71
3. 750	0. 00	0. 31	0. 306	0					1. 70
3. 833	0. 00	0. 31	0. 304	0					1. 69
3. 917	0. 00	0. 31	0. 302	0					1. 68
4. 000	0. 00	0. 31	0. 300	0					1. 67
4. 083	0. 00	0. 30	0. 298	0					1. 66
4. 167	0. 00	0. 30	0. 296	0					1. 65
4. 250	0. 00	0. 30	0. 294	0					1. 64
4. 333	0. 00	0. 30	0. 292	0					1. 63
4. 417	0. 00	0. 30	0. 290	0					1. 62
4. 500	0. 00	0. 30	0. 287	0					1. 61
4. 583	0. 00	0. 30	0. 285	0					1. 60
4. 667	0. 00	0. 30	0. 283	0					1. 59
4. 750	0. 00	0. 30	0. 281	0					1. 58
4. 833	0. 00	0. 30	0. 279	0					1. 58
4. 917	0. 00	0. 30	0. 277	0					1. 57
5. 000	0. 00	0. 29	0. 275	0					1. 56
5. 083	0. 00	0. 29	0. 273	0					1. 55
5. 167	0. 00	0. 29	0. 271	0					1. 54

5. 250	0. 00	0. 29	0. 269	0	1. 53
5. 333	0. 00	0. 29	0. 267	0	1. 52
5. 417	0. 00	0. 29	0. 265	0	1. 51
5. 500	0. 00	0. 29	0. 263	0	1. 50
5. 583	0. 00	0. 29	0. 261	0	1. 49
5. 667	0. 00	0. 29	0. 259	0	1. 48
5. 750	0. 00	0. 29	0. 257	0	1. 47
5. 833	0. 00	0. 29	0. 255	0	1. 46
5. 917	0. 00	0. 28	0. 253	0	1. 46
6. 000	0. 00	0. 28	0. 251	0	1. 45
6. 083	0. 00	0. 28	0. 249	0	1. 44
6. 167	0. 00	0. 28	0. 247	0	1. 43
6. 250	0. 00	0. 28	0. 246	0	1. 42
6. 333	0. 00	0. 28	0. 244	0	1. 41
6. 417	0. 00	0. 28	0. 242	0	1. 40
6. 500	0. 00	0. 28	0. 240	0	1. 39
6. 583	0. 00	0. 28	0. 238	0	1. 39
6. 667	0. 00	0. 28	0. 236	0	1. 38
6. 750	0. 00	0. 28	0. 234	0	1. 37
6. 833	0. 00	0. 27	0. 232	0	1. 36
6. 917	0. 00	0. 27	0. 230	0	1. 35
7. 000	0. 00	0. 27	0. 228	0	1. 34
7. 083	0. 00	0. 27	0. 226	0	1. 33
7. 167	0. 00	0. 27	0. 225	0	1. 33
7. 250	0. 00	0. 27	0. 223	0	1. 32
7. 333	0. 00	0. 27	0. 221	0	1. 31
7. 417	0. 00	0. 27	0. 219	0	1. 30
7. 500	0. 00	0. 27	0. 217	0	1. 29
7. 583	0. 00	0. 27	0. 215	0	1. 28
7. 667	0. 00	0. 27	0. 214	0	1. 28
7. 750	0. 00	0. 26	0. 212	0	1. 27
7. 833	0. 00	0. 26	0. 210	0	1. 26
7. 917	0. 00	0. 26	0. 208	0	1. 25
8. 000	0. 00	0. 26	0. 206	0	1. 24
8. 083	0. 00	0. 26	0. 205	0	1. 23
8. 167	0. 00	0. 26	0. 203	0	1. 23
8. 250	0. 00	0. 26	0. 201	0	1. 22
8. 333	0. 00	0. 26	0. 199	0	1. 21
8. 417	0. 00	0. 26	0. 197	0	1. 20
8. 500	0. 00	0. 26	0. 196	0	1. 19
8. 583	0. 00	0. 26	0. 194	0	1. 19
8. 667	0. 00	0. 25	0. 192	0	1. 18
8. 750	0. 00	0. 25	0. 190	0	1. 17
8. 833	0. 00	0. 25	0. 189	0	1. 16
8. 917	0. 00	0. 25	0. 187	0	1. 15
9. 000	0. 00	0. 25	0. 185	0	1. 15
9. 083	0. 00	0. 25	0. 183	0	1. 14
9. 167	0. 00	0. 25	0. 182	0	1. 13
9. 250	0. 00	0. 25	0. 180	0	1. 12
9. 333	0. 00	0. 25	0. 178	0	1. 11
9. 417	0. 00	0. 25	0. 177	0	1. 11
9. 500	0. 00	0. 25	0. 175	0	1. 10
9. 583	0. 00	0. 25	0. 173	0	1. 09
9. 667	0. 00	0. 24	0. 171	0	1. 08
9. 750	0. 00	0. 24	0. 170	0	1. 08
9. 833	0. 00	0. 24	0. 168	0	1. 07
9. 917	0. 00	0. 24	0. 166	0	1. 06
10. 000	0. 00	0. 24	0. 165	0	1. 05
10. 083	0. 00	0. 24	0. 163	0	1. 05
10. 167	0. 00	0. 24	0. 161	0	1. 04
10. 250	0. 00	0. 24	0. 160	0	1. 03
10. 333	0. 00	0. 24	0. 158	0	1. 02
10. 417	0. 00	0. 24	0. 156	0	1. 02
10. 500	0. 00	0. 24	0. 155	0	1. 01
10. 583	0. 00	0. 24	0. 153	0	1. 00
10. 667	0. 00	0. 24	0. 152	0	0. 99
10. 750	0. 00	0. 23	0. 150	0	0. 99
10. 833	0. 00	0. 23	0. 148	0	0. 98
10. 917	0. 00	0. 23	0. 147	0	0. 97
11. 000	0. 00	0. 23	0. 145	0	0. 96
11. 083	0. 00	0. 23	0. 144	0	0. 96
11. 167	0. 00	0. 23	0. 142	0	0. 95

11. 250	0. 00	0. 23	0. 140	0	0. 94
11. 333	0. 00	0. 23	0. 139	0	0. 93
11. 417	0. 00	0. 23	0. 137	0	0. 93
11. 500	0. 00	0. 23	0. 136	0	0. 92
11. 583	0. 00	0. 22	0. 134	0	0. 91
11. 667	0. 00	0. 22	0. 133	0	0. 91
11. 750	0. 00	0. 22	0. 131	0	0. 90
11. 833	0. 00	0. 22	0. 130	0	0. 89
11. 917	0. 00	0. 22	0. 128	0	0. 89
12. 000	0. 00	0. 22	0. 127	0	0. 88
12. 083	0. 00	0. 22	0. 125	0	0. 87
12. 167	0. 00	0. 22	0. 124	0	0. 86
12. 250	0. 00	0. 22	0. 122	0	0. 86
12. 333	0. 00	0. 22	0. 121	0	0. 85
12. 417	0. 00	0. 22	0. 119	0	0. 84
12. 500	0. 00	0. 21	0. 118	0	0. 84
12. 583	0. 00	0. 21	0. 116	0	0. 83
12. 667	0. 00	0. 21	0. 115	0	0. 82
12. 750	0. 00	0. 21	0. 113	0	0. 82
12. 833	0. 00	0. 21	0. 112	0	0. 81
12. 917	0. 00	0. 21	0. 110	0	0. 80
13. 000	0. 00	0. 21	0. 109	0	0. 80
13. 083	0. 00	0. 21	0. 107	0	0. 79
13. 167	0. 00	0. 21	0. 106	0	0. 78
13. 250	0. 00	0. 21	0. 105	0	0. 78
13. 333	0. 00	0. 21	0. 103	0	0. 77
13. 417	0. 00	0. 20	0. 102	0	0. 76
13. 500	0. 00	0. 20	0. 100	0	0. 76
13. 583	0. 00	0. 20	0. 099	0	0. 75
13. 667	0. 00	0. 20	0. 097	0	0. 74
13. 750	0. 00	0. 20	0. 096	0	0. 74
13. 833	0. 00	0. 20	0. 095	0	0. 73
13. 917	0. 00	0. 20	0. 093	0	0. 73
14. 000	0. 00	0. 20	0. 092	0	0. 72
14. 083	0. 00	0. 20	0. 091	0	0. 71
14. 167	0. 00	0. 20	0. 089	0	0. 71
14. 250	0. 00	0. 20	0. 088	0	0. 70
14. 333	0. 00	0. 20	0. 087	0	0. 69
14. 417	0. 00	0. 19	0. 085	0	0. 69
14. 500	0. 00	0. 19	0. 084	0	0. 68
14. 583	0. 00	0. 19	0. 083	0	0. 68
14. 667	0. 00	0. 19	0. 081	0	0. 67
14. 750	0. 00	0. 19	0. 080	0	0. 66
14. 833	0. 00	0. 19	0. 079	0	0. 66
14. 917	0. 00	0. 19	0. 077	0	0. 65
15. 000	0. 00	0. 19	0. 076	0	0. 65
15. 083	0. 00	0. 19	0. 075	0	0. 64
15. 167	0. 00	0. 19	0. 073	0	0. 63
15. 250	0. 00	0. 19	0. 072	0	0. 63
15. 333	0. 00	0. 19	0. 071	0	0. 62
15. 417	0. 00	0. 19	0. 069	0	0. 62
15. 500	0. 00	0. 18	0. 068	0	0. 61
15. 583	0. 00	0. 18	0. 067	0	0. 60
15. 667	0. 00	0. 18	0. 066	0	0. 60
15. 750	0. 00	0. 18	0. 064	0	0. 59
15. 833	0. 00	0. 18	0. 063	0	0. 59
15. 917	0. 00	0. 18	0. 062	0	0. 58
16. 000	0. 00	0. 18	0. 061	0	0. 57
16. 083	0. 00	0. 18	0. 059	0	0. 57
16. 167	0. 00	0. 18	0. 058	0	0. 56
16. 250	0. 00	0. 18	0. 057	0	0. 56
16. 333	0. 00	0. 17	0. 056	0	0. 55
16. 417	0. 00	0. 17	0. 055	0	0. 54
16. 500	0. 00	0. 17	0. 053	0	0. 54
16. 583	0. 00	0. 17	0. 052	0	0. 53
16. 667	0. 00	0. 17	0. 051	0	0. 53
16. 750	0. 00	0. 17	0. 050	0	0. 52
16. 833	0. 00	0. 17	0. 049	0	0. 51
16. 917	0. 00	0. 17	0. 048	0	0. 51
17. 000	0. 00	0. 17	0. 046	0	0. 50
17. 083	0. 00	0. 17	0. 045	0	0. 49
17. 167	0. 00	0. 16	0. 044	0	0. 49

17. 250	0. 00	0. 16	0. 043	0	0. 48
17. 333	0. 00	0. 16	0. 042	0	0. 47
17. 417	0. 00	0. 16	0. 041	0	0. 46
17. 500	0. 00	0. 16	0. 040	0	0. 45
17. 583	0. 00	0. 16	0. 039	0	0. 45
17. 667	0. 00	0. 16	0. 038	0	0. 44
17. 750	0. 00	0. 15	0. 036	0	0. 43
17. 833	0. 00	0. 15	0. 035	0	0. 42
17. 917	0. 00	0. 15	0. 034	0	0. 42
18. 000	0. 00	0. 15	0. 033	0	0. 41
18. 083	0. 00	0. 15	0. 032	0	0. 40
18. 167	0. 00	0. 15	0. 031	0	0. 40
18. 250	0. 00	0. 15	0. 030	0	0. 39
18. 333	0. 00	0. 14	0. 029	0	0. 38
18. 417	0. 00	0. 14	0. 028	0	0. 37
18. 500	0. 00	0. 14	0. 027	0	0. 37
18. 583	0. 00	0. 14	0. 026	0	0. 36
18. 667	0. 00	0. 14	0. 025	0	0. 35
18. 750	0. 00	0. 14	0. 024	0	0. 35
18. 833	0. 00	0. 14	0. 024	0	0. 34
18. 917	0. 00	0. 13	0. 023	0	0. 33
19. 000	0. 00	0. 13	0. 022	0	0. 33
19. 083	0. 00	0. 13	0. 021	0	0. 32
19. 167	0. 00	0. 13	0. 020	0	0. 31
19. 250	0. 00	0. 13	0. 019	0	0. 31
19. 333	0. 00	0. 13	0. 018	0	0. 30
19. 417	0. 00	0. 13	0. 017	0	0. 29
19. 500	0. 00	0. 13	0. 016	0	0. 29
19. 583	0. 00	0. 12	0. 015	0	0. 28
19. 667	0. 00	0. 12	0. 015	0	0. 28
19. 750	0. 00	0. 12	0. 014	0	0. 27
19. 833	0. 00	0. 12	0. 013	0	0. 26
19. 917	0. 00	0. 12	0. 012	0	0. 26
20. 000	0. 00	0. 12	0. 011	0	0. 25
20. 083	0. 00	0. 11	0. 011	0	0. 24
20. 167	0. 00	0. 10	0. 010	0	0. 22
20. 250	0. 00	0. 10	0. 009	0	0. 21
20. 333	0. 00	0. 09	0. 008	0	0. 19
20. 417	0. 00	0. 08	0. 008	0	0. 18
20. 500	0. 00	0. 08	0. 007	0	0. 17
20. 583	0. 00	0. 07	0. 007	0	0. 15
20. 667	0. 00	0. 07	0. 006	0	0. 14
20. 750	0. 00	0. 06	0. 006	0	0. 13
20. 833	0. 00	0. 06	0. 005	0	0. 12
20. 917	0. 00	0. 05	0. 005	0	0. 11
21. 000	0. 00	0. 05	0. 005	0	0. 11
21. 083	0. 00	0. 05	0. 004	0	0. 10
21. 167	0. 00	0. 04	0. 004	0	0. 09
21. 250	0. 00	0. 04	0. 004	0	0. 08
21. 333	0. 00	0. 04	0. 003	0	0. 08
21. 417	0. 00	0. 03	0. 003	0	0. 07
21. 500	0. 00	0. 03	0. 003	0	0. 07
21. 583	0. 00	0. 03	0. 003	0	0. 06
21. 667	0. 00	0. 03	0. 003	0	0. 06
21. 750	0. 00	0. 03	0. 002	0	0. 05
21. 833	0. 00	0. 02	0. 002	0	0. 05
21. 917	0. 00	0. 02	0. 002	0	0. 05
22. 000	0. 00	0. 02	0. 002	0	0. 04
22. 083	0. 00	0. 02	0. 002	0	0. 04
22. 167	0. 00	0. 02	0. 002	0	0. 04
22. 250	0. 00	0. 02	0. 002	0	0. 03
22. 333	0. 00	0. 02	0. 001	0	0. 03
22. 417	0. 00	0. 01	0. 001	0	0. 03
22. 500	0. 00	0. 01	0. 001	0	0. 03
22. 583	0. 00	0. 01	0. 001	0	0. 03
22. 667	0. 00	0. 01	0. 001	0	0. 02
22. 750	0. 00	0. 01	0. 001	0	0. 02
22. 833	0. 00	0. 01	0. 001	0	0. 02
22. 917	0. 00	0. 01	0. 001	0	0. 02
23. 000	0. 00	0. 01	0. 001	0	0. 02
23. 083	0. 00	0. 01	0. 001	0	0. 02
23. 167	0. 00	0. 01	0. 001	0	0. 02

23.250	0.00	0.01	0.001	0					0.01
23.333	0.00	0.01	0.001	0					0.01
23.417	0.00	0.01	0.001	0					0.01
23.500	0.00	0.01	0.001	0					0.01
23.583	0.00	0.01	0.000	0					0.01
23.667	0.00	0.00	0.000	0					0.01
23.750	0.00	0.00	0.000	0					0.01
23.833	0.00	0.00	0.000	0					0.01
23.917	0.00	0.00	0.000	0					0.01
24.000	0.00	0.00	0.000	0					0.01
24.083	0.00	0.00	0.000	0					0.01
24.167	0.00	0.00	0.000	0					0.01
24.250	0.00	0.00	0.000	0					0.01
24.333	0.00	0.00	0.000	0					0.01
24.417	0.00	0.00	0.000	0					0.01
24.500	0.00	0.00	0.000	0					0.00
24.583	0.00	0.00	0.000	0					0.00
24.667	0.00	0.00	0.000	0					0.00
24.750	0.00	0.00	0.000	0					0.00
24.833	0.00	0.00	0.000	0					0.00
24.917	0.00	0.00	0.000	0					0.00
25.000	0.00	0.00	0.000	0					0.00
25.083	0.00	0.00	0.000	0					0.00
25.167	0.00	0.00	0.000	0					0.00
25.250	0.00	0.00	0.000	0					0.00
25.333	0.00	0.00	0.000	0					0.00
25.417	0.00	0.00	0.000	0					0.00

*****HYDROGRAPH DATA*****
 Number of intervals = 305
 Time interval = 5.0 (Min.)
 Maximum/Peak flow rate = 0.335 (CFS)
 Total volume = 0.396 (Ac. Ft)
 Status of hydrographs being held in storage
 Stream 1 Stream 2 Stream 3 Stream 4 Stream 5
 Peak (CFS) 0.000 0.000 0.000 0.000 0.000
 Vol (Ac. Ft) 0.000 0.000 0.000 0.000 0.000

Appendix 8: Source Control

Pollutant Sources/Source Control Checklist

EXHIBIT B—STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

How to use this worksheet (also see instructions on page 38 of the WQMP):

1. Review Column 1 and identify which of these potential sources of stormwater pollutants apply to your site. Check each box that applies.
2. Review Column 2 and incorporate all of the corresponding applicable BMPs in your WQMP Exhibit.
3. Review Columns 3 and 4 and incorporate all of the corresponding applicable permanent controls and operational BMPs in a table in your WQMP. Use the format shown in Table 3-1 on page 33 of the WQMP. Describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternative BMPs for those shown here.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input checked="" type="checkbox"/> A. On-site storm drain inlets	<input checked="" type="checkbox"/> Locations of inlets.	<input checked="" type="checkbox"/> Mark all inlets with the words “Only Rain Down the Storm Drain” or similar. Catch Basin Markers may be available from the Riverside County Flood Control and Water Conservation District, call 951.955.1200 to verify.	<input checked="" type="checkbox"/> Maintain and periodically repaint or replace inlet markings. <input checked="" type="checkbox"/> Provide stormwater pollution prevention information to new site owners, lessees, or operators. <input checked="" type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-44, “Drainage System Maintenance,” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com <input checked="" type="checkbox"/> Include the following in lease agreements: “Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains.”
<input type="checkbox"/> B. Interior floor drains and elevator shaft sump pumps		<input type="checkbox"/> State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	<input type="checkbox"/> Inspect and maintain drains to prevent blockages and overflow.
<input type="checkbox"/> C. Interior parking garages		<input type="checkbox"/> State that parking garage floor drains will be plumbed to the sanitary sewer.	<input type="checkbox"/> Inspect and maintain drains to prevent blockages and overflow.

EXHIBIT B—STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> D1. Need for future indoor & structural pest control		<input type="checkbox"/> Note building design features that discourage entry of pests.	<input type="checkbox"/> Provide Integrated Pest Management information to owners, lessees, and operators.
<input checked="" type="checkbox"/> D2. Landscape/ Outdoor Pesticide Use	<input type="checkbox"/> Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. <input type="checkbox"/> Show self-retaining landscape areas, if any. <input checked="" type="checkbox"/> Show stormwater treatment and hydrograph modification management BMPs. (See instructions in Chapter 3, Step 5 and guidance in Chapter 5.)	<p>State that final landscape plans will accomplish all of the following.</p> <input checked="" type="checkbox"/> Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. <input checked="" type="checkbox"/> Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. <input type="checkbox"/> Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. <input checked="" type="checkbox"/> Consider using pest-resistant plants, especially adjacent to hardscape. <p>To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.</p>	<input checked="" type="checkbox"/> Maintain landscaping using minimum or no pesticides. <input checked="" type="checkbox"/> See applicable operational BMPs in “What you should know for.....Landscape and Gardening” at https://rcwatershed.org/wp-content/uploads/2020/09/Landscaping-and-Gardening-Guide.pdf <input checked="" type="checkbox"/> Provide IPM information to new owners, lessees and operators.

EXHIBIT B—STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> E. Pools, spas, ponds, decorative fountains, and other water features.	<input type="checkbox"/> Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet. (Exception: Public pools must be plumbed according to County Department of Environmental Health Guidelines.)	If the Co-Permittee requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements.	<input type="checkbox"/> See applicable operational BMPs in “Guidelines for Maintaining Your Swimming Pool, Jacuzzi and Garden Fountain” at http://rcflood.org/stormwater/
<input type="checkbox"/> F. Food service	<input type="checkbox"/> For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment. <input type="checkbox"/> On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.	<input type="checkbox"/> Describe the location and features of the designated cleaning area. <input type="checkbox"/> Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.	<input type="checkbox"/> See the brochure, “The Food Service Industry Best Management Practices for: Restaurants, Grocery Stores, Delicatessens and Bakeries” at http://rcflood.org/stormwater/ Provide this brochure to new site owners, lessees, and operators.
<input checked="" type="checkbox"/> G. Refuse areas	<input checked="" type="checkbox"/> Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. <input checked="" type="checkbox"/> If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area. <input type="checkbox"/> Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.	<input checked="" type="checkbox"/> State how site refuse will be handled and provide supporting detail to what is shown on plans. <input checked="" type="checkbox"/> State that signs will be posted on or near dumpsters with the words “Do not dump hazardous materials here” or similar.	<input checked="" type="checkbox"/> State how the following will be implemented: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post “no hazardous materials” signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, “Waste Handling and Disposal” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

EXHIBIT B—STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<input type="checkbox"/> H. Industrial processes.	<input type="checkbox"/> Show process area.	<input type="checkbox"/> If industrial processes are to be located on site, state: “All process activities to be performed indoors. No processes to drain to exterior or to storm drain system.”	<input type="checkbox"/> See Fact Sheet SC-10, “Non-Stormwater Discharges” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com See the brochure “Industrial & Commercial Facilities Best Management Practices for: Industrial, Commercial Facilities” at http://rcflood.org/stormwater/

EXHIBIT B—STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<p><input type="checkbox"/> I. Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)</p>	<p><input type="checkbox"/> Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area.</p> <p><input type="checkbox"/> Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults.</p> <p><input type="checkbox"/> Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.</p>	<p>Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains.</p> <p>Where appropriate, reference documentation of compliance with the requirements of Hazardous Materials Programs for:</p> <ul style="list-style-type: none"> ▪ Hazardous Waste Generation ▪ Hazardous Materials Release Response and Inventory ▪ California Accidental Release (CalARP) ▪ Aboveground Storage Tank ▪ Uniform Fire Code Article 80 Section 103(b) & (c) 1991 ▪ Underground Storage Tank <p>www.cchealth.org/groups/hazmat/</p>	<p><input type="checkbox"/> See the Fact Sheets SC-31, “Outdoor Liquid Container Storage” and SC-33, “Outdoor Storage of Raw Materials ” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com</p>

EXHIBIT B—STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
<p><input type="checkbox"/> J. Vehicle and Equipment Cleaning</p>	<p><input type="checkbox"/> Show on drawings as appropriate:</p> <p>(1) Commercial/industrial facilities having vehicle/equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses.</p> <p>(2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use).</p> <p>(3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer.</p> <p>(4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.</p>	<p><input type="checkbox"/> If a car wash area is not provided, describe any measures taken to discourage on-site car washing and explain how these will be enforced.</p>	<p>Describe operational measures to implement the following (if applicable):</p> <p><input type="checkbox"/> Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system. Refer to “Outdoor Cleaning Activities and Professional Mobile Service Providers” for many of the Potential Sources of Runoff Pollutants categories below. Brochure can be found at http://rcflood.org/stormwater/</p> <p><input type="checkbox"/> Car dealerships and similar may rinse cars with water only.</p>

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<p><input type="checkbox"/> K. Vehicle/Equipment Repair and Maintenance</p>	<p><input type="checkbox"/> Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of stormwater.</p> <p><input type="checkbox"/> Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas.</p> <p><input type="checkbox"/> Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.</p>	<p><input type="checkbox"/> State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area.</p> <p><input type="checkbox"/> State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency’s requirements.</p> <p><input type="checkbox"/> State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency’s requirements.</p>	<p>In the Stormwater Control Plan, note that all of the following restrictions apply to use the site:</p> <p><input type="checkbox"/> No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains.</p> <p><input type="checkbox"/> No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately.</p> <p><input type="checkbox"/> No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.</p> <p>Refer to “Automotive Maintenance & Car Care Best Management Practices for Auto Body Shops, Auto Repair Shops, Car Dealerships, Gas Stations and Fleet Service Operations”. Brochure can be found at http://rcflood.org/stormwater/</p> <p>Refer to Outdoor Cleaning Activities and Professional Mobile Service Providers for many of the Potential Sources of Runoff Pollutants categories below. Brochure can be found at http://rcflood.org/stormwater/</p>

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<input type="checkbox"/> L. Fuel Dispensing Areas	<input type="checkbox"/> Fueling areas ⁶ shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable. <input type="checkbox"/> Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover’s minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area ¹ .] The canopy [or cover] shall not drain onto the fueling area.		<input type="checkbox"/> The property owner shall dry sweep the fueling area routinely. <input type="checkbox"/> See the Fact Sheet SD-30 , “Fueling Areas” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

⁶ The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.

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<p><input checked="" type="checkbox"/> M. Loading Docks</p>	<p><input checked="" type="checkbox"/> Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas shall be drained to the sanitary sewer, or diverted and collected for ultimate discharge to the sanitary sewer.</p> <p><input type="checkbox"/> Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation.</p> <p><input checked="" type="checkbox"/> Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer.</p>		<p><input checked="" type="checkbox"/> Move loaded and unloaded items indoors as soon as possible.</p> <p><input checked="" type="checkbox"/> See Fact Sheet SC-30, “Outdoor Loading and Unloading,” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com</p>

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IF THESE SOURCES WILL BE ON THE PROJECT SITE THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
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<input checked="" type="checkbox"/> N. Fire Sprinkler Test Water		<input checked="" type="checkbox"/> Provide a means to drain fire sprinkler test water to the sanitary sewer.	<input checked="" type="checkbox"/> See the note in Fact Sheet SC-41, “Building and Grounds Maintenance,” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
<p>O. Miscellaneous Drain or Wash Water or Other Sources</p> <input checked="" type="checkbox"/> Boiler drain lines <input checked="" type="checkbox"/> Condensate drain lines <input checked="" type="checkbox"/> Rooftop equipment <input type="checkbox"/> Drainage sumps <input checked="" type="checkbox"/> Roofing, gutters, and trim. <input type="checkbox"/> Other sources		<input checked="" type="checkbox"/> Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. <input checked="" type="checkbox"/> Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment. <input checked="" type="checkbox"/> Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water. <input type="checkbox"/> Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff. Include controls for other sources as specified by local reviewer.	

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<input checked="" type="checkbox"/> P. Plazas, sidewalks, and parking lots.			<input checked="" type="checkbox"/> Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.

Appendix 9: O&M

Operation and Maintenance Plan and Documentation of Finance, Maintenance and Recording Mechanisms

Operation and Maintenance (O&M) Plan

Project Name Palisade Temescal Canyon
Project Address 22740 Temescal Canyon, Corona, CA 92883

Owner 22740 Temescal Canyon Road, LLC
1330 Factory Place #105, Los Angeles, CA 90013
(310) 343-1831

Responsible Party 22740 Temescal Canyon Road, LLC
1330 Factory Place #105, Los Angeles, CA 90013
(310) 343-1831

Funding for BMP Maintenance including Replacement Cost

22740 Temescal Canyon Road, LLC will be responsible for the funding and proposed annual operating budget.

Acceptance of Responsibility

22740 Temescal Canyon Road, LLC accepts the responsibility for maintenance from the time the BMPs are constructed until the responsibility for operation and maintenance is legally transferred.

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Source Control BMPs			
Yes	<p>A. On-site Storm Drain Inlets</p> <p>1. Mark all inlets with the words "Only Rain Down this Storm Drain" or similar. Catch basin markers may be available from the Riverside County Flood Control and Water Conservation District, call 951.955.1200 to verify.</p> <p>2. Maintain and periodically repaint or replace inlet markings.</p> <p>3. Provide stormwater pollution prevention information to new site owners, lessees, or operators.</p> <p>4. Indicate in the lease agreement that "tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drain".</p> <p>5. Refer to Fact Sheet SC-44, "Drainage System Maintenance", and Fact Sheet SD-13, "Storm Drain Signage", in Appendix 10 for more details.</p>	Inspect legibility of the storm drain inlet stenciling annually and replace immediately when necessary.	<p>22740 Temescal Canyon Road, LLC 1330 Factory Place #105, Los Angeles, CA 90013 (310) 343- 1831</p>
No	<p>B. Interior Floor Drains and Elevator Shaft Sump Pumps</p> <p>Inspect and maintain drains to prevent blockage and overflow.</p>	N/A	N/A
No	<p>C. Interior Parking Garages</p> <p>Inspect and maintain drains to prevent blockages and overflow.</p>	N/A	N/A
No	<p>D1. Need for Future Indoor & Outdoor Pesticide Use</p> <p>Provide Integrated Pest Management (IPM) information to owners, lessees, and operators.</p>	N/A	N/A

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
<p>Yes</p>	<p>D2. Landscape/Outdoor Pesticide Use 1. Maintain landscaping using minimum or no pesticides. 2. Provide IPM information to new owners, lessees, and operators. 3. See educational materials in Appendix 10 for more details.</p>	<p>Weekly</p>	<p>22740 Temescal Canyon Road, LLC 1330 Factory Place #105, Los Angeles, CA 90013 (310) 343-1831</p>
<p>No</p>	<p>E. Pools, Spas, Ponds, Decorative Fountains, and Other Water Features See applicable operational BMPs in "Guidelines for Maintaining Your Swimming Pool, Jacuzzi and Garden Fountain" at http://reflood.org/stormwater</p>	<p>N/A</p>	<p>N/A</p>
<p>No</p>	<p>F. Food Service 1. Provide educational brochure to new site owners, lessees, and operators. 2. See educational materials in Appendix 10 for more details.</p>	<p>N/A</p>	<p>N/A</p>
<p>Yes</p>	<p>G. Refuse Areas 1. Provide adequate number of receptacles. 2. Inspect receptacles regularly; repair or replace leaky receptacles. 3. Keep receptacles covered. 4. Prohibit/prevent dumping of liquid or hazardous wastes. Post 5. Keep spill control materials available on-site. 6. See Fact Sheet SC-34, "Waste Handling and Disposal" in Appendix 10 for more details.</p>	<p>Inspect and pick up litter daily and clean up spills immediately.</p>	<p>22740 Temescal Canyon Road, LLC 1330 Factory Place #105, Los Angeles, CA 90013 (310) 343-1831</p>
<p>No</p>	<p>H. Industrial Processes 1. All process activities to be performed indoors. No processes to drain to storm drain system. 2. See Fact Sheet SC-10, "Non-Stormwater Discharges", in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com</p>	<p>N/A</p>	<p>N/A</p>

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
No	<p>I. Outdoor Storage of Equipment or Materials See Fact Sheet SC-31, "Outdoor Liquid Container Storage" and SC-33, "Outdoor Storage of Raw Materials", in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com</p>	N/A	N/A
No	<p>J. Vehicle and Equipment Cleaning Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system.</p>	N/A	N/A
No	<p>K. Vehicle/Equipment Repair and Maintenance</p> <p>1. No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains.</p> <p>2. No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately.</p> <p>3. No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.</p>	N/A	N/A
No	<p>L. Fuel Dispensing Areas</p> <p>1. The property owner shall dry sweep the fueling area routinely.</p> <p>2. See Fact Sheet SD-30, "Fueling Areas", in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com</p>	N/A	N/A

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
No	<p>M. Loading Docks</p> <p>1. Move loaded and unloaded items indoors as soon as possible.</p> <p>2. See Fact Sheet SD-30, "Outdoor Loading and Unloading", in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com</p>	N/A	N/A
Yes	<p>N. Fire Sprinkler Test Water</p> <p>See Fact Sheet SC-41, "Building and Grounds Maintenance", in Appendix 10 for more details.</p>	Ongoing	<p>22740 Temescal Canyon Road, LLC 1330 Factory Place #105, Los Angeles, CA 90013 (310) 343-1831</p>
Yes	<p>O. Miscellaneous Drain or Wash Water or Other Sources</p> <p>Boiler Drain Lines: Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not be discharged to the storm drain system.</p> <p>Condensate Drain Lines: Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system.</p> <p>Roofing, Gutters, and Trim: Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.</p>	Inspect weekly for drain line leaks and repair immediately	<p>22740 Temescal Canyon Road, LLC 1330 Factory Place #105, Los Angeles, CA 90013 (310) 343-1831</p>
Yes	<p>P. Plazas, Sidewalks, and Parking Lots</p> <p>1. Sweep plazas, sidewalks, and parking lot regularly to prevent accumulation of litter and debris.</p> <p>2. Collect debris from pressure washing to prevent entry into the storm drain system.</p> <p>3. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.</p>	Sweep paved areas daily to collect loose particles, and wipe up spills with rags and other absorbent material immediately. Do not hose down the area to a storm drain.	<p>22740 Temescal Canyon Road, LLC 1330 Factory Place #105, Los Angeles, CA 90013 (310) 343-1831</p>

BMP Name	BMP Implementation, Maintenance, and Inspection Procedures and Frequency	Person or Entity with Operation & Maintenance Responsibility
<p>Biotreatment, Modular Wetland System or MWS (BIO-1)</p> <p>Proprietary biotreatment devices are devices that are manufactured to mimic natural systems such as bioretention areas by incorporating plants, soil, and microbes engineered to provide treatment at higher flow rates or volumes and with smaller footprints than their natural counterparts. The MWS - Linear can be used as space saving alternative to grass/vegetated swales, turf block paving areas, and bio-retention areas. The bio-treatment component to the system makes use of the project's landscaping area and utilizes that area to provide natural treatment of stormwater.</p>	<p>The system shall be maintained at least once a year.</p> <p>[Screening Device] 1. Remove grate or manhole cover to gain access to the screening device in the pre-treatment chamber. 2. Remove all pollutants collected by the screening device. Removal can be done manually or with the use of a vacuum truck. 3. Remove screening device from the pre-treatment chamber to gain access to separation chamber and media filters below. Replace grate or manhole cover when completed.</p> <p>[Separation Chamber] 1. Maintain the screening device before maintaining the separation chamber. 2. Spray down pollutants accumulated on walls and cartridge filters with a pressure washer. 3. Vacuum out separation chamber and remove all accumulated pollutants. Replace screening device, grate or manhole cover when completed.</p>	<p>22740 Temescal Canyon Road, LLC 1330 Factory Place #105, Los Angeles, CA 90013 (310) 343-1831</p>

BMP Name	BMP Implementation, Maintenance, and Inspection Procedures and Frequency	Person or Entity with Operation & Maintenance Responsibility
	<p>[Cartridge Filters] 1. Perform maintenance procedures on screening device and separation chamber before maintaining cartridge filters. 2. Enter separation chamber. 3. Unscrew the two bolts holding the lid on each cartridge filter and remove lid. 4. Remove each of 4 to 8 media cages holding the media in place. 5. Spray down the cartridge filter to remove any accumulated pollutants. 6. Vacuum out old media and accumulated pollutants. 7. Reinstall media cages and fill with new media from manufacturer or outside supplier. Manufacturer will provide specification of media and sources to purchase. 8. Replace the lid and tighten down bolts. Replace screening device, grate or manhole cover when completed.</p>	

Appendix 10: Educational Materials

BMP Fact Sheets, Maintenance Guidelines and Other End-User BMP Information