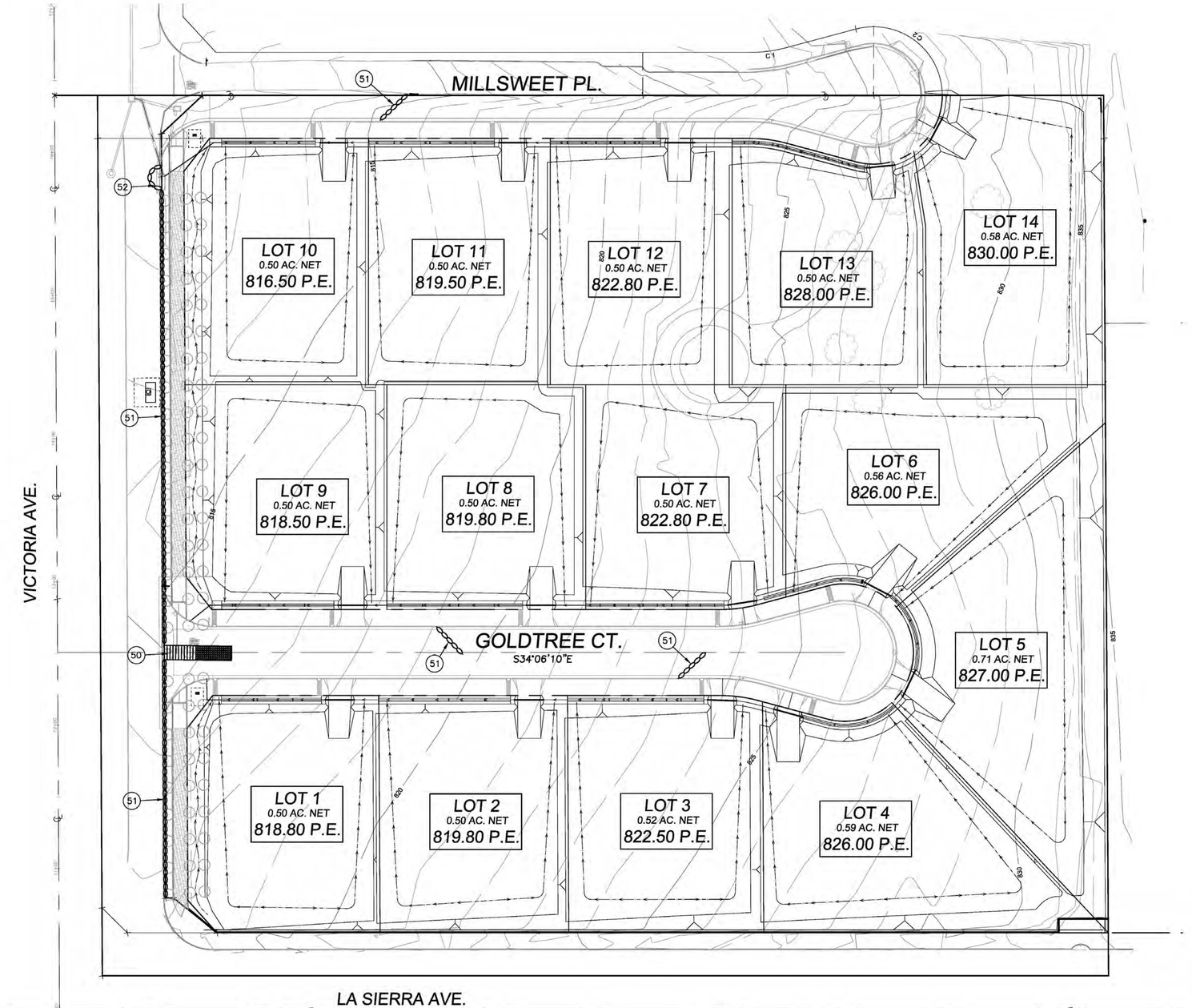


EROSION CONTROL NOTES

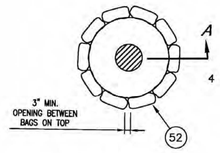
1. IN CASE OF EMERGENCY, CALL: HITESH PATEL
   WORK: (760) 963-3475
   EMAIL: _____
2. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
3. DEVICES SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE ENGINEERING DEPARTMENT.
4. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 40%.
5. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK BERMS AND DESILTING BASINS, AND THE BASINS PUMPED DRY.
6. GRADED AREAS AROUND THE TRACT PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
7. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
8. GRAVEL BAG LAYOUT SHALL BE INSTALLED AS SHOWN PER PLAN OR AS DIRECTED BY THE CITY INSPECTOR.

SITE PREPARATION:

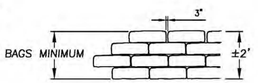
1 THE EMBANKMENT FOUNDATION AREA SHALL BE CLEARED OF ALL TREES, ROOTS, BRUSH, BOULDERS, SOD, AND DEBRIS.

2 ALL TOPSOIL CONTAINING EXCESSIVE AMOUNTS OF ORGANIC MATTER SHALL BE REMOVED.

3 ALL STORM DRAIN INLETS SHALL BE CAPPED AND/OR CATCH BASINS SHALL BE PROTECTED W/FILTER FABRIC HELD DOWN BY SANDBAGS AROUND BASINS.

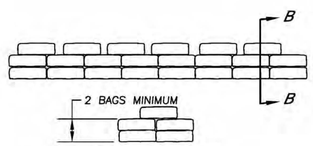


DETAIL "A"
N.T.S.



SECTION "A-A"
N.T.S.

GRAVELBAG DRAIN PROTECTION (52)
N.T.S.



SECTION "B-B"
N.T.S.

GRAVELBAG INSTALLATION (51)
N.T.S.

CONSTRUCTION NOTES:

(50) — CONST. STABILIZED ENTRANCE PER DETAIL ON SHT. 5

(51) — INSTALL GRAVEL BAGS PER DETAIL HEREON

(52) — INSTALL GRAVELBAG DRAIN PROTECTION PER DETAIL HEREON

N

40 0 40 80 120 160

SCALE: 1"=40'

DIG ALERT
TOLL FREE
1-800-227-2600
48 HOURS BEFORE YOU DIG

BENCHMARK:

CITY OF RIVERSIDE BM# E2P2; CHISEL SQUARE IN TOP CORB AT THE SE CORNER OF INDIANA AVE. & FILLMORE ST.

ELEV = 738.41'

CITY OF RIVERSIDE, CALIFORNIA
PLANNING DIVISION
APPROVED BY

DATE _____

CITY OF RIVERSIDE BUSINESS TAX ACCOUNT #74172 EXP. 7/30/18

SAKE ENGINEERS, INC.
www.sakeengineers.com
ENGINEERING ● SURVEYING ● LAND DEVELOPMENT
400 S. RAMONA AVE., STE. 202
CORONA, CALIFORNIA 92879
(951) 279-4041 FAX: (951) 279-2830

REGISTERED PROFESSIONAL ENGINEER
SAM AKBARPOUR
C053038
CIVIL
STATE OF CALIFORNIA

R.C.E. No. _____ DATE _____

MARK	REVISIONS	APPROVED	DATE

WDID #8 33C379764

PW17-0496

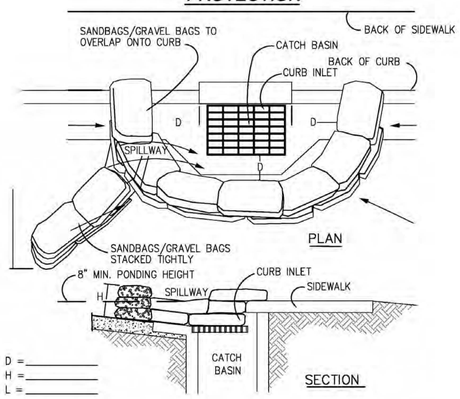
EROSION CONTROL PLAN
TRACT 37764

SCALE: 1"=40'	DRAWN: RL	CITY OF RIVERSIDE	
DATE: 7-9-2019	DESIGNED: RL	DEPARTMENT OF PUBLIC WORKS	
JOB NO.: JN3053	CHECKED: SA		
CAME PG. XX-X M.P. X	520-769200-470701	W	SHEET 4 of 5

PR-2024-001656 (TM) Exhibit 8 - MND and Technical Studies

\\SERVER\projects\CI RIVERSIDE_JN3053 Hitesh\Civil\ROP.dwg, 7/9/2019 9:55:01 AM, 1:40

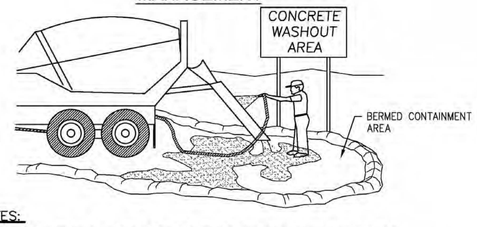
A
CATCH BASIN/INLET PROTECTION



NOTES:

1. CATCH BASIN/INLET PROTECTION SHALL BE INSTALLED WHEREVER THERE IS A POTENTIAL OF STORMWATER OR NON-STORMWATER BEING DISCHARGED INTO IT.
2. INLET PROTECTION IS REQUIRED ALONG WITH OTHER POLLUTION PREVENTION MEASURES SUCH AS; EROSION CONTROL, SOIL STABILIZATION, AND MEASURES TO PREVENT TRACKING ONTO PAVED SURFACES.
3. MODIFY INLET PROTECTION AS NEEDED TO AVOID CREATING TRAFFIC HAZARDS.
4. INCLUDE INLET PROTECTION MEASURES AT HILLSIDE V-DITCHES AND MISC. DRAINAGE SWALES.
5. INLET PROTECTION SHALL BE INSPECTED AND ACCUMULATED SEDIMENTS REMOVED. SEDIMENT SHALL BE DISPOSED OF PROPERLY AND IN A MANNER THAT ASSURES THAT THE SEDIMENT DOES NOT ENTER THE STORM DRAIN SYSTEM
6. DAMAGED BAGS SHALL BE REPLACED IMMEDIATELY.
7. ADDITIONAL SANDBAG SEDIMENT TRAPS SHALL BE PLACED AT INTERVALS AS INDICATED ON SITE PLAN.

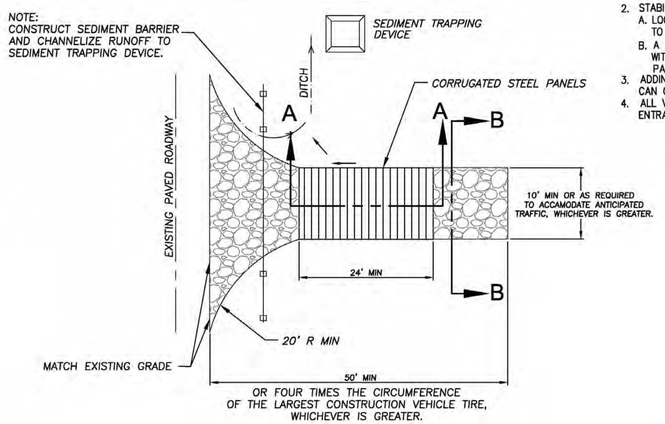
B
CONCRETE WASTE MANAGEMENT



NOTES:

1. EXCESS AND WASTE CONCRETE SHALL NOT BE WASHED INTO THE STREET OR INTO A DRAINAGE SYSTEM.
2. FOR WASHOUT OF CONCRETE AND MORTAR PRODUCTS, A DESIGNATED CONTAINMENT FACILITY OF SUFFICIENT CAPACITY TO RETAIN LIQUID AND SOLID WASTE SHALL BE PROVIDED ON SITE.
3. SLURRY FROM CONCRETE AND ASPHALT SAW CUTTING SHALL BE VACUUMED OR CONTAINED, DRIED, PICKED UP AND DISPOSED OF PROPERLY.

C
STABILIZED CONSTRUCTION ENTRANCE / EXIT TC1

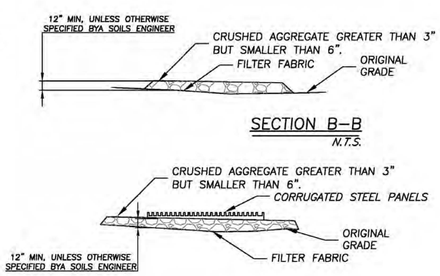


STREET MAINTENANCE

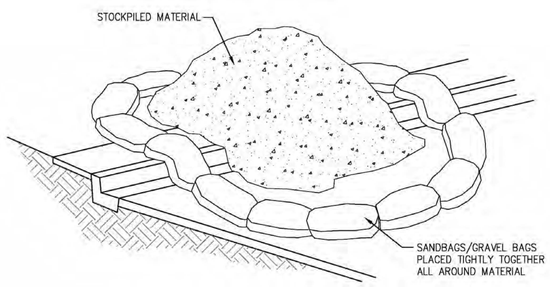
1. REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IMMEDIATELY.
2. SWEEP PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT BECOMES VISIBLE.
3. PAVEMENT WASHING WITH WATER IS PROHIBITED IF IT RESULTS IN A DISCHARGE TO THE STORM DRAIN SYSTEM.

NOTES:

1. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC ROADS. DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM.
2. STABILIZED CONSTRUCTION ENTRANCE SHALL BE:
   A. LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT OF WAY, STREET, ALLEY, AND SIDEWALK OR PARKING AREA.
   B. A SERIES OF STEEL PLATES WITH "RUMBLE STRIPS", AND/OR MIN 4" COARSE AGGREGATE WITH LENGTH, WIDTH & THICKNESS AS NEEDED TO ADEQUATELY PREVENT ANY TRACKING ONTO PAVED SURFACES.
3. ADDING A WASH RACK WITH A SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH WATER CAN GREATLY IMPROVE EFFICIENCY.
4. ALL VEHICLES ACCESSING THE CONSTRUCTION SITE SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE SITES.



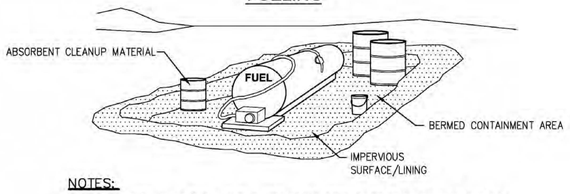
D
MATERIAL STORAGE



NOTES:

1. DIRT AND OTHER CONSTRUCTION RELATED MATERIALS PLACED IN THE STREET OR ON OTHER IMPERVIOUS SURFACES MUST BE CONTAINED WITH SANDBAGS OR OTHER MEASURES TO PREVENT TRANSPORT TO THE STORMDRAIN SYSTEM.
2. ANY CONSTRUCTION MATERIAL STORED OR STOCKPILED ON-SITE SHALL BE PROTECTED FROM BEING TRANSPORTED BY THE FORCE OF WIND OR WATER.

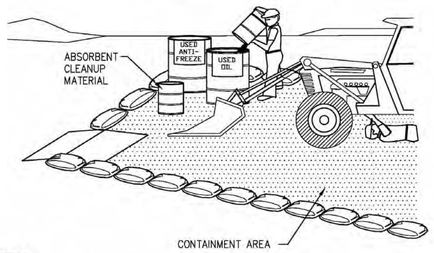
E
VEHICLE/EQUIPMENT FUELING



NOTES:

1. FUELING SHALL BE PERFORMED IN A DESIGNATED AREA, AWAY FROM DRAINAGE COURSES.
2. ABSORBENT CLEANUP MATERIAL SHALL BE ON SITE AND USED IMMEDIATELY IN THE EVENT OF A SPILL.

F
EQUIPMENT REPAIR/MAINTENANCE



NOTES:

1. LEAKING VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED ON-SITE. EQUIPMENT AND VEHICLES SHALL BE INSPECTED FREQUENTLY FOR LEAKS AND SHALL BE REPAIRED IMMEDIATELY. CLEAN UP SPILLS AND LEAKS PROMPTLY WITH ABSORBENT MATERIALS; DO NOT FLUSH WITH WATER.
2. VEHICLES AND EQUIPMENT SHALL BE MAINTAINED, AND REPAIRED ON-SITE ONLY IN DESIGNATED AREAS. PREVENT RUN-ON AND RUN-OFF FROM DESIGNATED AREAS. CONTAINMENT DEVICES SHALL BE PROVIDED AND AREAS SHALL BE COVERED IF NECESSARY.
3. DESIGNATE ON-SITE VEHICLE AND EQUIPMENT MAINTENANCE AREAS, AWAY FROM STORM DRAIN INLETS AND WATERCOURSES.
4. ALWAYS USE SECONDARY CONTAINMENT, SUCH AS A DRAIN PAN OR DROP CLOTH, TO CATCH SPILLS AND LEAKS WHEN REMOVING OR CHANGING FLUIDS.
5. LEGALLY DISPOSE OF USED OILS, FLUIDS, AND LUBRICANTS.
6. PROVIDE SPILL CONTAINMENT DIKES OR SECONDARY CONTAINMENT AROUND STORED OIL, FUEL, AND CHEMICAL DRUMS.
7. MAINTAIN AN ADEQUATE SUPPLY OF ABSORBENT SPILL CLEANUP MATERIALS IN DESIGNATED AREA.

STORMWATER POLLUTION CONTROL PLAN

GENERAL NOTES

1. BEST MANAGEMENT PRACTICES (BMP'S) CONTAINED HEREIN REFLECT MINIMUM REQUIREMENTS. FOR ADDITIONAL BMP'S REFER TO CALIFORNIA STORMWATER BMP HANDBOOKS.
2. ALL CONSTRUCTION ACTIVITY SHALL BE PERFORMED IN ACCORDANCE WITH A STORMWATER POLLUTION CONTROL PLAN (SWPCP) DEVELOPED AND IMPLEMENTED IN COMPLIANCE WITH REQUIREMENTS OF THE ORANGE COUNTYWIDE STORMWATER QUALITY MANAGEMENT PROGRAM, NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT NO. _____
3. THE SWPCP SHALL:
   A. IDENTIFY POTENTIAL POLLUTANT SOURCES AND INCLUDE THE DESIGN AND PLACEMENT OF BMP'S TO EFFECTIVELY PROHIBIT THE ENTRY OF POLLUTANTS FROM THE CONSTRUCTION SITE INTO AND ONTO THE STREET AND STORM DRAIN SYSTEM DURING CONSTRUCTION.
   B. BE KEPT ON SITE AND AMENDED TO REFLECT CHANGING CONDITIONS THROUGHOUT THE COARSE OF CONSTRUCTION.
   C. BE KEPT UP TO DATE. ANY ADDITIONAL UPDATES REQUESTED BY AGENCY REPRESENTATIVES ARE TO BE MADE IMMEDIATELY.
4. NON-STORMWATER DISCHARGES ARE PROHIBITED FROM ENTERING ANY STORM DRAIN SYSTEM AND/OR STREET.
5. DISCHARGES OF PUMPED GROUND WATER REQUIRE A DISCHARGE PERMIT FROM THE STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (RWQCB).
6. POLLUTANTS SHALL BE REMOVED FROM STORMWATER DISCHARGES TO THE MAXIMUM EXTENT PRACTICABLE (MEP) THROUGH DESIGN & IMPLEMENTATION OF THE SWPCP.
7. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON (NOV. 1 TO APR. 15). NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.
8. PORTABLE SANITARY FACILITIES SHALL BE LOCATED ON RELATIVELY LEVEL GROUND AWAY FROM TRAFFIC AREAS, DRAINAGE COURSES, AND STORM DRAIN INLETS.
9. EMPLOYEES, SUBCONTRACTORS AND SUPPLIERS SHALL BE EDUCATED ON ALL BMP'S INCLUDING CONCRETE WASTE STORAGE AND DISPOSAL PROCEDURES.
10. SEDIMENT CONTROL PRACTICES SHALL EFFECTIVELY PREVENT A NET INCREASE OF SEDIMENT LOAD IN STORMWATER DISCHARGE.

DIG ALER
TOLL FREE
1-800-227-2600
48 HOURS BEFORE YOU DIG

CITY OF RIVERSIDE BUSINESS TAX ACCOUNT #74172 EXP. 7/30/18

CITY OF RIVERSIDE, CALIFORNIA
PLANNING DIVISION
APPROVED BY _____
DATE _____

SAKE ENGINEERS, INC.
www.sakeengineers.com
ENGINEERING ● SURVEYING ● LAND DEVELOPMENT
400 S. RAMONA AVE., STE. 202
CORONA, CALIFORNIA 92879
(951) 279-4041 FAX: (951) 279-2830

REGISTERED PROFESSIONAL ENGINEER
SAM AKBARROUR
C053038
CIVIL
STATE OF CALIFORNIA
R.C.E. No. _____ DATE _____

MARK	REVISIONS	APPROVED	DATE

WDID #8 33C379764

PW17-0496

BEST MANAGEMENT PRACTICE
TRACT 37764

SCALE: 1"=40'	DRAWN: RL	CITY OF RIVERSIDE DEPARTMENT OF PUBLIC UTILITIES	
DATE: 7-9-2019	DESIGNED: RL		
JOB NO.: JN3053	CHECKED: SA	W	
CAME PG. XX-X M.P. X	520-769200-470701		SHEET 5 of 5

Kevin Ballesteros | Phase I Project Manager

5261 West Imperial Highway, Los Angeles, California 90045 *301-854-6300*
Kevin.Ballesteros@efiglobal.com

Professional Summary:

Mr. Ballesteros has been in the environmental industry since 2016. Mr. Ballesteros started his career in the environmental industry researching human impacts on climate change using remote sensing technologies. Currently, Mr. Ballesteros conducts historical research and works with regulatory bodies to investigate historical and current uses of properties as part of the Phase I Environmental Site Assessment. Mr. Ballesteros's experience includes management of all stages of environmental projects including Phase I Environmental Site Assessments, Transaction Screen Assessments, and Database Reviews.

Licenses and Certifications:

OSHA 40-Hour Hazardous Waste Operations Certified, Safety Unlimited, CA #1605141167706

State of California Department of Public Health Lead-Related Construction Certificate ID#32017

Project Experience:

Phase I ESA at Montclair, California - Served as the Project Manager of a Phase I ESA for the entire 60-acre Montclair Plaza Shopping Mall, with several closed unauthorized release cases. This site included retail shops, offices, restaurants, a former automotive repair facility, and two former gasoline service stations. After extensive historical and regulatory agency research, EFI Global, Inc. was able to determine several concerns for the subject property which included: lack of removal and sampling associated with the first generation underground storage tanks of one of the former gasoline station operation, a former dry cleaners operated inside the mall, another automotive repair facility occupied the site, and lack of sampling performed on the automotive repair facility. EFI Global, Inc. was able to advise the property owner of the aforementioned concerns and that additional investigations were warranted prior to redevelopment of the site.

Phase I ESA at Vernon, California - Served as the Project Manager of a Phase I ESA for a vacant industrial property with a closed unauthorized release case issued by the City of Vernon, which was formerly part of a larger plastic bottle manufacturing operation. The former industrial facility had undergone numerous subsurface assessments and remedial cleanups dating back to 2008. Thorough historical and regulatory agency research indicated that one 10,000-gallon underground storage tank of unknown content was installed on the subject property. EFI Global, Inc. was able to advise the property buyer that the lack of documentation regarding the removal or sampling of the underground storage tanks was a concern and additional remediation work was warranted prior to redevelopment of the site.

Phase I ESA at Whittier, California - Served as the Project Manager of a Phase I ESA for a car wash and automotive repair facility, with former gasoline service station operations and a closed unauthorized release case. During initial project set up and conversations with the property owner during the site reconnaissance, it was believed that no concerns existed on the property. However, historical and regulatory agency research revealed that the property was occupied with four generations of gasoline stations. EFI Global, Inc. was able to advise the property owner that the lack of documentation

regarding the removal or sampling associated with the early generation underground storage tanks at the former gasoline stations were concerns and additional investigations was warranted at the time.

Professional Experience:

Andersen Environmental an EFI Global company, Los Angeles, CA, Environmental Specialist, 2016 – Present

University of California Los Angeles Institute of the Environmental and Sustainability, Los Angeles, CA, Research Assistant 2013 – 2015

Specialized Education:

Bachelor's Degree in Environmental Studies, University of California Los Angeles, Los Angeles, CA, 2015

References:

Nicole Rivera - EFI Global, Inc. - 5261 West Imperial Highway, Los Angeles, CA 90045 - 310.854.6300

Matthew Rodda - EFI Global, Inc. - 5261 West Imperial Highway, Los Angeles, CA 90045 - 310.854.6300

Raul Gaina | Project Manager, Certification

5261 West Imperial Highway, Los Angeles, California 90045 *(310) 854-6300*
Raul_Gaina@efiglobal.com

Professional Summary:

Raul Gaina has been engaged in the environmental sector since 2013 with experience in environmental consulting, environmental fieldwork, environmental education, environmental remediation, and water/wastewater treatment. Mr. Gaina has worked directly with clients and regulatory bodies to investigate historical and current site use and help clients achieve compliance with federal regulations for residential and commercial properties. Mr. Gaina's experience includes management of all stages of environmental projects including Phase I Environmental Site Assessments, Transaction Screen Assessments, and Database Reviews. In addition, Mr. Gaina has provided project oversight of various stages of site characterization and remediation projects including, soil investigation, groundwater monitoring well installation, monitoring well, and underground storage tank abandonment.

Licenses and Certifications:

Engineer in Training (EIT), Board for Professional Engineers, Land Surveyors, and Geologists Certificate No. 479387

OSHA 40-Hour Hazardous Waste Operations and Emergency Response Certified, Safety Unlimited, California, Certificate No. 1703145194159

Project Experience:

JP Morgan Chase Bank, N.A., Dallas, Tx
Phase I Environmental Site Assessment - Henderson, Nevada
Served as the Project Manager of a Phase I ESA for a commercial unit located within larger industrial park. During initial project set up, only the existing subject property address was identified and researched, which did not reveal any items of concern. However, during our site reconnaissance, a groundwater monitoring well was observed within the parking lot area of the subject property, which is indicative of a potential impacted resources at the subject property. Additional historical aerial photograph research revealed that prior to the current development, the subject property and immediately surrounding areas were formerly part of a larger industrial complex with multiple building and above ground storage tanks. After consulting with multiple regulatory agencies, including the Nevada Department of Environmental Protection (NDEP), it was determined that the historical facility was a former manufacturer of ammonium perchlorate – an oxidizer used as a component of solid propellant for rocket fuel. An explosion which destroyed the facility in 1988 resulted in an unauthorized release of perchlorate which impacted groundwater at the subject property and immediately surrounding areas. EFI Global reviewed multiple records, incident reports, correspondence, newspaper clippings, and groundwater monitoring reports on file at the NDEP, Southern Nevada Health Department (SNHD), and Clark County Department of Air Quality (CCDAQ). Based on information obtained from the most recent groundwater monitoring report, EFI Global determined that the concentrations of perchlorate at the subject property were above regulatory standards, which

constituted a Recognized Environmental Condition. However, based on the identification of the responsible party, ongoing remediation activities under the jurisdiction of the NDEP, and low potential for threat to human health due to confinement of the contamination to the groundwater, no further environmental investigation was recommended, and the client was solely advised to continue to adhere to NDEP recommendations and guidance until regulatory closure is obtained.

Pacific Premier Bank, Irvine, California
Phase I Environmental Site Assessment - Westminster, California
Served as the Project Manager for Phase I ESAs for two multi-tenant auto repair facilities. The facilities were both built in the 1960s and have been used for machine shop, spray painting, and auto repair purposes through the present. No records indicating tenants names, property usage, and/or hazardous materials records were available for the properties for the period 1960-1990. Based on the potential use of chlorinated solvents / petroleum hydrocarbons, and storage/handling of hazardous materials, the historical industrial shop, machine shop, and auto repair operations during a period of less stringent regulatory oversight (1965-1990). Additionally, EFI Global determined that an unauthorized release of petroleum hydrocarbons was reported at an adjoining property which bounded both sites. Upon review of the regulatory agency records, it was determined that the contamination on the adjoining site was concentrated in the vicinity of only one of the subject properties and had the potential of only impacting this site. By going above and beyond, review multiple groundwater, sampling, and remediation reports for adjoining properties, EFI Global was able to advise the client of the need to assess the potential impact from this adjoining site to only one of the subject properties instead of both.

Professional Experience:

EFI Global, Inc., Phase I Project Manager, 2017 – present
Smith-Emery GeoServices, Phase I and Phase II Project Manager, 2015 – 2017
Smith-Emery GeoServices, Senior Environmental Specialist, 2014 – 2015
Smith-Emery GeoServices, Environmental Specialist, 2013 – 2014

Education:

Master of Science, Civil and Environmental Engineering, University of California, Los Angeles, California, 2013
Bachelor of Science, Environmental Science, with a Minor in Environmental Engineering, University of California, Los Angeles, California, 2012

References:

Nicole Rivera - EFI Global, Inc. - 5261 West Imperial Highway, Los Angeles, CA 90045 – 310.854.6300
Matthew Rodda - EFI Global, Inc. - 5261 West Imperial Highway, Los Angeles, CA 90045 – 310.854.6300

Brian R. Brennan | Senior Project Manager

5909 Sea Lion Drive, Unit H, Carlsbad, California 92010 *760-473-5695*
brian.brennan@efiglobal.com

Professional Summary:

Mr. Brennan has over 20 years of environmental consulting experience. Mr. Brennan qualifies as an Environmental Professional with experience that includes preparing, reviewing and managing all aspects of Phase I and II Environmental Site Assessment (ESA) in commercial real estate transactions and large-scale residential developments following ASTM E 1527-13 and 40 CFR Part 312 (AAI) guidelines. Mr. Brennan has proven skills in planning, managing and executing all phases of small to large scale projects involving soil, soil gas and groundwater investigation and remediation at sites impacted by petroleum hydrocarbons, heavy metals, pesticides, and chlorinated solvents. Mr. Brennan's technical skills include developing, maintaining and meeting project scope and financial responsibilities; coordinating and managing professional staff and subcontractors; reviewing and evaluating environmental data and risk assessment; preparing technical writing documents; and communicating to senior and junior staff, regulatory agencies and clients. Mr. Brennan is an experienced project manager with the ability to oversee professional staff in multiple disciplines and geographic locations; tracking and maintaining schedules, budgets and deliverables; and maintaining current clients, while conducting future business development and marketing. Areas of expertise include:

Phase I/II Environmental Site Assessment

Environmental Site Assessment and Mitigation

Project Management

Data Evaluation

Third Party Review

Licenses and Certifications:

OSHA 40-Hour Hazardous Waste Operations Certified

OSHA 8-Hour HAWOPER Annual Refresher

Environmental Professional, per the CFR Title 40, Chapter I, Subchapter J, Part 312, Subpart C, Section 312.21

California Registered Environmental Assessor II (REA-II) No. 07920

Project Experience:

County of Riverside, Economic Development Agency. Former Riverside General Hospital, Riverside, CA. Leaking Underground Storage Tank (LUST) Site Investigation, Remediation and Regulatory Agency (Riverside County DEH) Case Closure.

Gannett Fleming. Former Exide Technologies Facility, City of Industry, CA. Lead-impacted Soil Investigation and Mitigation, and Regulatory Agency (LA County Fire Department) Case Closure.

Standard Pacific Homes. Harmony Gove Village, Master-Planned Community, Escondido, CA. Phase I ESA, Site Investigation, Environmental Monitoring and Sampling, and Regulatory Agency (County of San Diego DEH) Case Closure Associated with Master Planned Community.

KB Home Coastal Inc. Magnolia Trails, Single-family Residential Development, El Cajon, CA. Phase I ESA, Pesticide-Soil Investigation, Remedial Excavation, and Regulatory Agency (County of San Diego DEH) Case Closure.

Dynamic Development Corporation. Proposed Dollar General Store, Imperial, CA. Historical Phase I/II ESA review; LUST Site Investigation and Remediation; and Regulatory Agency (Colorado River Basin Water Quality Control Board) Case Closure.

Heslin Holdings, LLC. Former Mr. Best Cleaners, Oceanside, CA. Former Dry Cleaner Release Site; Chlorinated Solvent Investigation and Mitigation; and Regulatory Agency (County of San Diego) Oversight (closure in-progress).

California Bank & Trust Facility. Commercial Bank Property, Escondido, CA. Site Assessment, Mitigation and Environmental Monitoring, during Redevelopment; and Regulatory Agency (County of San Diego DEH) Case Closure.

Standard Pacific Homes/CalAtlantic Homes/Lennar. Multiple Locations, Southern California. Provided numerous Phase I and II ESA technical services, review and evaluation of previous consultant environmental site assessment and mitigation, soil remediation, and environmental field services related to various Southern California property acquisitions.

KB Home Coastal, Inc. Multiple Locations, Southern California. Provided numerous Phase I and II ESA technical services, review and evaluation of previous consultant environmental site assessment and mitigation, soil remediation, and environmental field services related to various Southern California property acquisitions.

County of Riverside, Economic Development Agency. Multiple Locations, Riverside County. Provided numerous Phase I and II ESA technical services, review and evaluation of previous consultant environmental site assessment and mitigation, soil remediation, and environmental field services throughout the County.

Court Qualifications/ Depositions:

Superior Court of California, County of Riverside / County of Riverside v. Alvin C. Assink, et al., Case No. RIC 512629, July 16, 2012.

Superior Court of California, County of San Diego / Shirey Falls, LP v. Guadalupe and Evangeline Hernandez, Case No. 37-2014-00006580, October 27, 2015.

Professional Experience:

EFI Global, Environmental Senior Project Manager, 2019-Present

EFI Global, Environmental Field Professional, 2018-2019

Environmental Professional/Independent Consultant/Contrator, 2011-2018

EEI, Director, Environmental Services/Senior Project Manager, 2014-2019

Terraphase Environmental Engineering, Senior Project Manager, 2014

EEI, Environmental Senior Project Manager, 2008-2014

EEI, Environmental Project Manager, 2004-2008

EEI, Environmental Staff Scientist, 2000-2004

United States Department of Interior, Yellowstone National Park, Visitor Use Assistance/Wildland Firefighter/GIS Analyst, 2001

City of San Diego, Parks and Recreation, GIS and Environmental Services, Intern, 1999

Specialized Education:

Geographic Information Systems (GIS), ArcGIS , San Diego State University, 2000

The Groundwater Pollution and Hydrology Course, Princeton Groundwater, Inc., 2003

The Remediation Class, Princeton Groundwater, Inc., 2005

Natural Attenuation, Risk Assessment, and Risk-Based Corrective Action (RBCA) Through Applied Groundwater Modeling, National Groundwater Association (NGWA), 2007

California Environmental Quality Act**,** University of California, San Diego, 2008

Education:

Master of Science, Environmental Engineering, National University, San Diego, California, 2008

Bachelor of Arts, Geography and Environmental Analysis, San Diego State University, San Diego, California, 2000

Hydrology Report

for

TR 38921

Located in the City of Riverside
County of Riverside
APN: 136-220-016

Prepared For:

Warmington RESIDENTIAL

3090 Pullman Street
Costa Mesa, CA 92626

Prepared by:

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Job No. 10574
February 26, 2024

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Table of Contents

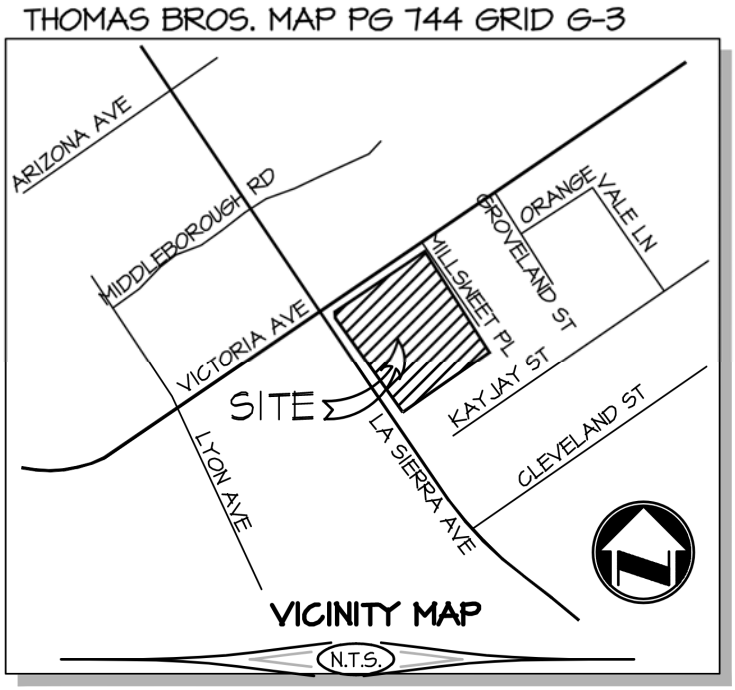
1. Purpose

The purpose of this study is to substantiate the hydrology design of Tract 38921 for the purposes of Entitlement Approval. Adkan Engineers has prepared this study to ensure that adequate size and proper operation of drainage facilities are incorporated into the Post-Development project site.

2. Project Description

Tract 38921 is located in the City of Riverside at the northeast corner of Victoria Avenue and La Sierra Avenue. The planned development will consist of 49 single family residential lots and 2 open space lots on 7.9+/- acres. The site will treat the 2 year 24 hour storm event through the use of an infiltration basin with an additional gravel layer beneath it. Since site flows are tributary to the Arizona Channel, all other storm events (5, 10 & 100 year) are not required to be analyzed.

A. Vicinity Map



SEC. 24 T.3S. R.6W

3. Pre-Development Hydrology

The site is currently a functioning orange grove and there are no existing storm drain facilities on site. Onsite runoff sheet flows to the south west corner of Millsweet Place and Victoria Ave to an existing drop inlet structure that feeds site flows to City SD tributary to the Arizona Channel.

4. Post-Development Hydrology

Onsite flows are being directed towards the north east corner via a series of gutters throughout the project site. Surface flows in these proposed gutters will be captured via drop inlets and conveyed via an onsite storm drain

system to an infiltration basin located in the north east corner of the site. The infiltration basin will have an additional gravel layer beneath to mitigate the 2 year 24 hour storm flows.

Basin Storage Volume Calculations	
Infiltration Basin Bottom Area (sf)	3674
Basin Top Area (sf)	4899
Depth of Basin (ft)	2.5
Open Basin Volume Provided (cf)	10716
Rock Storage depth (ft)	4.6
Rock Storage Volume (40% void) (cf)	6755
Total Flood Volume Stored	**17472**
Ex. 2-yr 24-hr Storm Volume (cf)	8233
Prop. 2-yr 24-hr Storm Volume (cf)	26528
Allowable 2-yr 24-hr Storm Volume (mitigated to 110% of existing) (cf)	**9056**
Prop. 2-yr 24-hr Storm Volume (cf)	26528
Total Flood Volume Stored	17472
Remaining Storm Volume	**9056**

5. Method of Analysis

The site hydrology was based upon Riverside County Flood Control and Water Conversation District Hydrology Manual, from which pertinent soil and rainfall information was obtained.

Storm flows were determined by the "RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM", Riverside County Flood Control & Water Conservation District 1978 Hydrology Manual, produced by Bondamin Engineering.

The site was also analyzed by the "SYNTHETIC UNIT HYDROLOGY METHOD COMPUTER PROGRAM", Riverside County Flood Control & Water Conservation District 1978 Hydrology Manual, produced by Bondamin Engineering.

6. Conclusion

The hydrologic calculations provided herein substantiate the design of the Post-Development project and indicate the following:

- The Post-Development facilities demonstrate the ability to limit flow discharge from the project site to no greater than 110% of the pre-development 2-year peak flow.

Since site flows are tributary to the Arizona Channel, no other storm events need to be mitigated/analyzed.

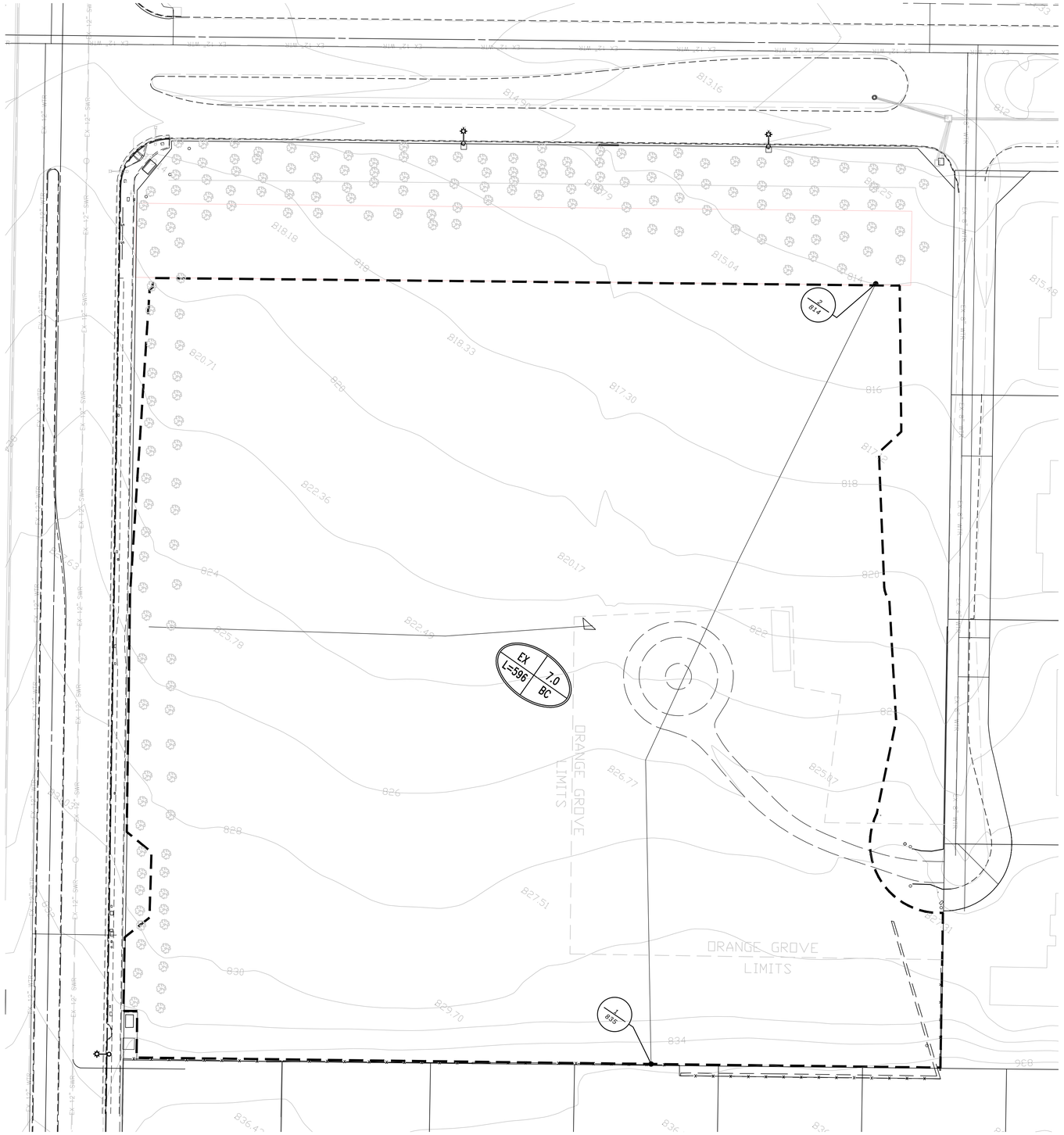
Therefore, it is our conclusion this project **does not** negatively impact the local community or watershed goals.

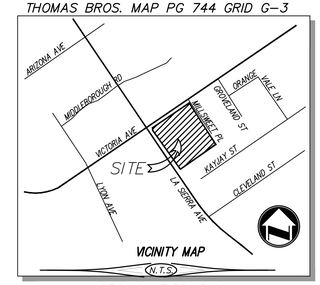
Section 1

Pre-Development Unit Hydrograph

IN THE COMMUNITY OF WINCHESTER, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

PRE DEVELOPMENT UNIT HYDROGRAPH





SEC. 24 T.3S. R.6W

0 40 120

20 80 160

SCALE: 1" = 40'

PLANS PREPARED BY:
adkan ENGINEERS
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```
        U n i t   H y d r o g r a p h   A n a l y s i s

        Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
                Study date  02/22/24 File: EX2YR242.out

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
------------------------------------------------------------------------------

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


Program License Serial Number 5006

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

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =       7.00(Ac.)  =      0.011 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =       7.00(Ac.)  =      0.011 Sq. Mi.
Length along longest watercourse =     596.00(Ft.)
Length along longest watercourse measured to centroid =     300.00(Ft.)
Length along longest watercourse =      0.113 Mi.
Length along longest watercourse measured to centroid =      0.057 Mi.
Difference in elevation =      26.00(Ft.)
Slope along watercourse =    230.3356 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time =    0.038 Hr.
Lag time =     2.26 Min.
25% of lag time =     0.56 Min.
40% of lag time =     0.90 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]
        7.00            1.80                 12.60

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        7.00            6.00                 42.00

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.800(In)
Area Averaged 100-Year Rainfall =    6.000(In)

Point rain (area averaged) =    1.800(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    1.800(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
     7.000           72.00          0.100
 Total Area Entered =      7.00(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
72.0  53.4      0.537     0.100        0.489       1.000      0.489
                                                 Sum (F) =    0.489
Area averaged mean soil loss (F) (In/Hr) =  0.489
Minimum soil loss rate ((In/Hr)) =  0.244
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.820
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
```

1	0.083	221.634	46.905	3.309
2	0.167	443.269	41.886	2.955
3	0.250	664.903	7.981	0.563
4	0.333	886.537	3.228	0.228
			Sum = 100.000 Sum=	7.055

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	0.07	0.014	(0.867)	0.012	0.003
2	0.17	0.07	0.014	(0.863)	0.012	0.003
3	0.25	0.07	0.014	(0.860)	0.012	0.003
4	0.33	0.10	0.022	(0.857)	0.018	0.004
5	0.42	0.10	0.022	(0.853)	0.018	0.004
6	0.50	0.10	0.022	(0.850)	0.018	0.004
7	0.58	0.10	0.022	(0.847)	0.018	0.004
8	0.67	0.10	0.022	(0.843)	0.018	0.004
9	0.75	0.10	0.022	(0.840)	0.018	0.004
10	0.83	0.13	0.029	(0.837)	0.024	0.005
11	0.92	0.13	0.029	(0.834)	0.024	0.005
12	1.00	0.13	0.029	(0.830)	0.024	0.005
13	1.08	0.10	0.022	(0.827)	0.018	0.004
14	1.17	0.10	0.022	(0.824)	0.018	0.004
15	1.25	0.10	0.022	(0.820)	0.018	0.004
16	1.33	0.10	0.022	(0.817)	0.018	0.004
17	1.42	0.10	0.022	(0.814)	0.018	0.004
18	1.50	0.10	0.022	(0.811)	0.018	0.004
19	1.58	0.10	0.022	(0.807)	0.018	0.004
20	1.67	0.10	0.022	(0.804)	0.018	0.004
21	1.75	0.10	0.022	(0.801)	0.018	0.004
22	1.83	0.13	0.029	(0.798)	0.024	0.005
23	1.92	0.13	0.029	(0.795)	0.024	0.005
24	2.00	0.13	0.029	(0.791)	0.024	0.005
25	2.08	0.13	0.029	(0.788)	0.024	0.005
26	2.17	0.13	0.029	(0.785)	0.024	0.005
27	2.25	0.13	0.029	(0.782)	0.024	0.005
28	2.33	0.13	0.029	(0.779)	0.024	0.005
29	2.42	0.13	0.029	(0.775)	0.024	0.005
30	2.50	0.13	0.029	(0.772)	0.024	0.005
31	2.58	0.17	0.036	(0.769)	0.030	0.006
32	2.67	0.17	0.036	(0.766)	0.030	0.006
33	2.75	0.17	0.036	(0.763)	0.030	0.006
34	2.83	0.17	0.036	(0.760)	0.030	0.006
35	2.92	0.17	0.036	(0.756)	0.030	0.006
36	3.00	0.17	0.036	(0.753)	0.030	0.006
37	3.08	0.17	0.036	(0.750)	0.030	0.006
38	3.17	0.17	0.036	(0.747)	0.030	0.006
39	3.25	0.17	0.036	(0.744)	0.030	0.006
40	3.33	0.17	0.036	(0.741)	0.030	0.006
41	3.42	0.17	0.036	(0.738)	0.030	0.006
42	3.50	0.17	0.036	(0.735)	0.030	0.006
43	3.58	0.17	0.036	(0.732)	0.030	0.006
44	3.67	0.17	0.036	(0.729)	0.030	0.006
45	3.75	0.17	0.036	(0.726)	0.030	0.006
46	3.83	0.20	0.043	(0.722)	0.035	0.008
47	3.92	0.20	0.043	(0.719)	0.035	0.008
48	4.00	0.20	0.043	(0.716)	0.035	0.008
49	4.08	0.20	0.043	(0.713)	0.035	0.008
50	4.17	0.20	0.043	(0.710)	0.035	0.008
51	4.25	0.20	0.043	(0.707)	0.035	0.008
52	4.33	0.23	0.050	(0.704)	0.041	0.009
53	4.42	0.23	0.050	(0.701)	0.041	0.009
54	4.50	0.23	0.050	(0.698)	0.041	0.009
55	4.58	0.23	0.050	(0.695)	0.041	0.009
56	4.67	0.23	0.050	(0.692)	0.041	0.009
57	4.75	0.23	0.050	(0.689)	0.041	0.009
58	4.83	0.27	0.058	(0.686)	0.047	0.010
59	4.92	0.27	0.058	(0.683)	0.047	0.010
60	5.00	0.27	0.058	(0.680)	0.047	0.010
61	5.08	0.20	0.043	(0.677)	0.035	0.008
62	5.17	0.20	0.043	(0.674)	0.035	0.008
63	5.25	0.20	0.043	(0.672)	0.035	0.008
64	5.33	0.23	0.050	(0.669)	0.041	0.009
65	5.42	0.23	0.050	(0.666)	0.041	0.009
66	5.50	0.23	0.050	(0.663)	0.041	0.009
67	5.58	0.27	0.058	(0.660)	0.047	0.010
68	5.67	0.27	0.058	(0.657)	0.047	0.010
69	5.75	0.27	0.058	(0.654)	0.047	0.010
70	5.83	0.27	0.058	(0.651)	0.047	0.010
71	5.92	0.27	0.058	(0.648)	0.047	0.010
72	6.00	0.27	0.058	(0.645)	0.047	0.010

73	6.08	0.30	0.065	(0.643)	0.053	0.012
74	6.17	0.30	0.065	(0.640)	0.053	0.012
75	6.25	0.30	0.065	(0.637)	0.053	0.012
76	6.33	0.30	0.065	(0.634)	0.053	0.012
77	6.42	0.30	0.065	(0.631)	0.053	0.012
78	6.50	0.30	0.065	(0.628)	0.053	0.012
79	6.58	0.33	0.072	(0.626)	0.059	0.013
80	6.67	0.33	0.072	(0.623)	0.059	0.013
81	6.75	0.33	0.072	(0.620)	0.059	0.013
82	6.83	0.33	0.072	(0.617)	0.059	0.013
83	6.92	0.33	0.072	(0.614)	0.059	0.013
84	7.00	0.33	0.072	(0.612)	0.059	0.013
85	7.08	0.33	0.072	(0.609)	0.059	0.013
86	7.17	0.33	0.072	(0.606)	0.059	0.013
87	7.25	0.33	0.072	(0.603)	0.059	0.013
88	7.33	0.37	0.079	(0.600)	0.065	0.014
89	7.42	0.37	0.079	(0.598)	0.065	0.014
90	7.50	0.37	0.079	(0.595)	0.065	0.014
91	7.58	0.40	0.086	(0.592)	0.071	0.016
92	7.67	0.40	0.086	(0.589)	0.071	0.016
93	7.75	0.40	0.086	(0.587)	0.071	0.016
94	7.83	0.43	0.094	(0.584)	0.077	0.017
95	7.92	0.43	0.094	(0.581)	0.077	0.017
96	8.00	0.43	0.094	(0.579)	0.077	0.017
97	8.08	0.50	0.108	(0.576)	0.089	0.019
98	8.17	0.50	0.108	(0.573)	0.089	0.019
99	8.25	0.50	0.108	(0.571)	0.089	0.019
100	8.33	0.50	0.108	(0.568)	0.089	0.019
101	8.42	0.50	0.108	(0.565)	0.089	0.019
102	8.50	0.50	0.108	(0.563)	0.089	0.019
103	8.58	0.53	0.115	(0.560)	0.094	0.021
104	8.67	0.53	0.115	(0.557)	0.094	0.021
105	8.75	0.53	0.115	(0.555)	0.094	0.021
106	8.83	0.57	0.122	(0.552)	0.100	0.022
107	8.92	0.57	0.122	(0.550)	0.100	0.022
108	9.00	0.57	0.122	(0.547)	0.100	0.022
109	9.08	0.63	0.137	(0.544)	0.112	0.025
110	9.17	0.63	0.137	(0.542)	0.112	0.025
111	9.25	0.63	0.137	(0.539)	0.112	0.025
112	9.33	0.67	0.144	(0.537)	0.118	0.026
113	9.42	0.67	0.144	(0.534)	0.118	0.026
114	9.50	0.67	0.144	(0.531)	0.118	0.026
115	9.58	0.70	0.151	(0.529)	0.124	0.027
116	9.67	0.70	0.151	(0.526)	0.124	0.027
117	9.75	0.70	0.151	(0.524)	0.124	0.027
118	9.83	0.73	0.158	(0.521)	0.130	0.029
119	9.92	0.73	0.158	(0.519)	0.130	0.029
120	10.00	0.73	0.158	(0.516)	0.130	0.029
121	10.08	0.50	0.108	(0.514)	0.089	0.019
122	10.17	0.50	0.108	(0.511)	0.089	0.019
123	10.25	0.50	0.108	(0.509)	0.089	0.019
124	10.33	0.50	0.108	(0.506)	0.089	0.019
125	10.42	0.50	0.108	(0.504)	0.089	0.019
126	10.50	0.50	0.108	(0.501)	0.089	0.019
127	10.58	0.67	0.144	(0.499)	0.118	0.026
128	10.67	0.67	0.144	(0.497)	0.118	0.026
129	10.75	0.67	0.144	(0.494)	0.118	0.026
130	10.83	0.67	0.144	(0.492)	0.118	0.026
131	10.92	0.67	0.144	(0.489)	0.118	0.026
132	11.00	0.67	0.144	(0.487)	0.118	0.026
133	11.08	0.63	0.137	(0.485)	0.112	0.025
134	11.17	0.63	0.137	(0.482)	0.112	0.025
135	11.25	0.63	0.137	(0.480)	0.112	0.025
136	11.33	0.63	0.137	(0.477)	0.112	0.025
137	11.42	0.63	0.137	(0.475)	0.112	0.025
138	11.50	0.63	0.137	(0.473)	0.112	0.025
139	11.58	0.57	0.122	(0.470)	0.100	0.022
140	11.67	0.57	0.122	(0.468)	0.100	0.022
141	11.75	0.57	0.122	(0.466)	0.100	0.022
142	11.83	0.60	0.130	(0.463)	0.106	0.023
143	11.92	0.60	0.130	(0.461)	0.106	0.023
144	12.00	0.60	0.130	(0.459)	0.106	0.023
145	12.08	0.83	0.180	(0.456)	0.148	0.032
146	12.17	0.83	0.180	(0.454)	0.148	0.032
147	12.25	0.83	0.180	(0.452)	0.148	0.032
148	12.33	0.87	0.187	(0.450)	0.154	0.034
149	12.42	0.87	0.187	(0.447)	0.154	0.034
150	12.50	0.87	0.187	(0.445)	0.154	0.034
151	12.58	0.93	0.202	(0.443)	0.165	0.036
152	12.67	0.93	0.202	(0.441)	0.165	0.036
153	12.75	0.93	0.202	(0.438)	0.165	0.036
154	12.83	0.97	0.209	(0.436)	0.171	0.038
155	12.92	0.97	0.209	(0.434)	0.171	0.038
156	13.00	0.97	0.209	(0.432)	0.171	0.038
157	13.08	1.13	0.245	(0.430)	0.201	0.044
158	13.17	1.13	0.245	(0.427)	0.201	0.044

159	13.25	1.13	0.245	(0.425)	0.201	0.044
160	13.33	1.13	0.245	(0.423)	0.201	0.044
161	13.42	1.13	0.245	(0.421)	0.201	0.044
162	13.50	1.13	0.245	(0.419)	0.201	0.044
163	13.58	0.77	0.166	(0.417)	0.136	0.030
164	13.67	0.77	0.166	(0.415)	0.136	0.030
165	13.75	0.77	0.166	(0.412)	0.136	0.030
166	13.83	0.77	0.166	(0.410)	0.136	0.030
167	13.92	0.77	0.166	(0.408)	0.136	0.030
168	14.00	0.77	0.166	(0.406)	0.136	0.030
169	14.08	0.90	0.194	(0.404)	0.159	0.035
170	14.17	0.90	0.194	(0.402)	0.159	0.035
171	14.25	0.90	0.194	(0.400)	0.159	0.035
172	14.33	0.87	0.187	(0.398)	0.154	0.034
173	14.42	0.87	0.187	(0.396)	0.154	0.034
174	14.50	0.87	0.187	(0.394)	0.154	0.034
175	14.58	0.87	0.187	(0.392)	0.154	0.034
176	14.67	0.87	0.187	(0.390)	0.154	0.034
177	14.75	0.87	0.187	(0.388)	0.154	0.034
178	14.83	0.83	0.180	(0.386)	0.148	0.032
179	14.92	0.83	0.180	(0.384)	0.148	0.032
180	15.00	0.83	0.180	(0.382)	0.148	0.032
181	15.08	0.80	0.173	(0.380)	0.142	0.031
182	15.17	0.80	0.173	(0.378)	0.142	0.031
183	15.25	0.80	0.173	(0.376)	0.142	0.031
184	15.33	0.77	0.166	(0.374)	0.136	0.030
185	15.42	0.77	0.166	(0.372)	0.136	0.030
186	15.50	0.77	0.166	(0.370)	0.136	0.030
187	15.58	0.63	0.137	(0.368)	0.112	0.025
188	15.67	0.63	0.137	(0.367)	0.112	0.025
189	15.75	0.63	0.137	(0.365)	0.112	0.025
190	15.83	0.63	0.137	(0.363)	0.112	0.025
191	15.92	0.63	0.137	(0.361)	0.112	0.025
192	16.00	0.63	0.137	(0.359)	0.112	0.025
193	16.08	0.13	0.029	(0.357)	0.024	0.005
194	16.17	0.13	0.029	(0.355)	0.024	0.005
195	16.25	0.13	0.029	(0.354)	0.024	0.005
196	16.33	0.13	0.029	(0.352)	0.024	0.005
197	16.42	0.13	0.029	(0.350)	0.024	0.005
198	16.50	0.13	0.029	(0.348)	0.024	0.005
199	16.58	0.10	0.022	(0.346)	0.018	0.004
200	16.67	0.10	0.022	(0.345)	0.018	0.004
201	16.75	0.10	0.022	(0.343)	0.018	0.004
202	16.83	0.10	0.022	(0.341)	0.018	0.004
203	16.92	0.10	0.022	(0.339)	0.018	0.004
204	17.00	0.10	0.022	(0.338)	0.018	0.004
205	17.08	0.17	0.036	(0.336)	0.030	0.006
206	17.17	0.17	0.036	(0.334)	0.030	0.006
207	17.25	0.17	0.036	(0.333)	0.030	0.006
208	17.33	0.17	0.036	(0.331)	0.030	0.006
209	17.42	0.17	0.036	(0.329)	0.030	0.006
210	17.50	0.17	0.036	(0.328)	0.030	0.006
211	17.58	0.17	0.036	(0.326)	0.030	0.006
212	17.67	0.17	0.036	(0.324)	0.030	0.006
213	17.75	0.17	0.036	(0.323)	0.030	0.006
214	17.83	0.13	0.029	(0.321)	0.024	0.005
215	17.92	0.13	0.029	(0.320)	0.024	0.005
216	18.00	0.13	0.029	(0.318)	0.024	0.005
217	18.08	0.13	0.029	(0.316)	0.024	0.005
218	18.17	0.13	0.029	(0.315)	0.024	0.005
219	18.25	0.13	0.029	(0.313)	0.024	0.005
220	18.33	0.13	0.029	(0.312)	0.024	0.005
221	18.42	0.13	0.029	(0.310)	0.024	0.005
222	18.50	0.13	0.029	(0.309)	0.024	0.005
223	18.58	0.10	0.022	(0.307)	0.018	0.004
224	18.67	0.10	0.022	(0.306)	0.018	0.004
225	18.75	0.10	0.022	(0.304)	0.018	0.004
226	18.83	0.07	0.014	(0.303)	0.012	0.003
227	18.92	0.07	0.014	(0.301)	0.012	0.003
228	19.00	0.07	0.014	(0.300)	0.012	0.003
229	19.08	0.10	0.022	(0.299)	0.018	0.004
230	19.17	0.10	0.022	(0.297)	0.018	0.004
231	19.25	0.10	0.022	(0.296)	0.018	0.004
232	19.33	0.13	0.029	(0.294)	0.024	0.005
233	19.42	0.13	0.029	(0.293)	0.024	0.005
234	19.50	0.13	0.029	(0.292)	0.024	0.005
235	19.58	0.10	0.022	(0.290)	0.018	0.004
236	19.67	0.10	0.022	(0.289)	0.018	0.004
237	19.75	0.10	0.022	(0.288)	0.018	0.004
238	19.83	0.07	0.014	(0.286)	0.012	0.003
239	19.92	0.07	0.014	(0.285)	0.012	0.003
240	20.00	0.07	0.014	(0.284)	0.012	0.003
241	20.08	0.10	0.022	(0.283)	0.018	0.004
242	20.17	0.10	0.022	(0.281)	0.018	0.004
243	20.25	0.10	0.022	(0.280)	0.018	0.004
244	20.33	0.10	0.022	(0.279)	0.018	0.004

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245  20.42     0.10      0.022       (  0.278)       0.018        0.004
246  20.50     0.10      0.022       (  0.277)       0.018        0.004
247  20.58     0.10      0.022       (  0.275)       0.018        0.004
248  20.67     0.10      0.022       (  0.274)       0.018        0.004
249  20.75     0.10      0.022       (  0.273)       0.018        0.004
250  20.83     0.07      0.014       (  0.272)       0.012        0.003
251  20.92     0.07      0.014       (  0.271)       0.012        0.003
252  21.00     0.07      0.014       (  0.270)       0.012        0.003
253  21.08     0.10      0.022       (  0.269)       0.018        0.004
254  21.17     0.10      0.022       (  0.268)       0.018        0.004
255  21.25     0.10      0.022       (  0.267)       0.018        0.004
256  21.33     0.07      0.014       (  0.266)       0.012        0.003
257  21.42     0.07      0.014       (  0.265)       0.012        0.003
258  21.50     0.07      0.014       (  0.264)       0.012        0.003
259  21.58     0.10      0.022       (  0.263)       0.018        0.004
260  21.67     0.10      0.022       (  0.262)       0.018        0.004
261  21.75     0.10      0.022       (  0.261)       0.018        0.004
262  21.83     0.07      0.014       (  0.260)       0.012        0.003
263  21.92     0.07      0.014       (  0.259)       0.012        0.003
264  22.00     0.07      0.014       (  0.258)       0.012        0.003
265  22.08     0.10      0.022       (  0.257)       0.018        0.004
266  22.17     0.10      0.022       (  0.256)       0.018        0.004
267  22.25     0.10      0.022       (  0.256)       0.018        0.004
268  22.33     0.07      0.014       (  0.255)       0.012        0.003
269  22.42     0.07      0.014       (  0.254)       0.012        0.003
270  22.50     0.07      0.014       (  0.253)       0.012        0.003
271  22.58     0.07      0.014       (  0.253)       0.012        0.003
272  22.67     0.07      0.014       (  0.252)       0.012        0.003
273  22.75     0.07      0.014       (  0.251)       0.012        0.003
274  22.83     0.07      0.014       (  0.251)       0.012        0.003
275  22.92     0.07      0.014       (  0.250)       0.012        0.003
276  23.00     0.07      0.014       (  0.249)       0.012        0.003
277  23.08     0.07      0.014       (  0.249)       0.012        0.003
278  23.17     0.07      0.014       (  0.248)       0.012        0.003
279  23.25     0.07      0.014       (  0.248)       0.012        0.003
280  23.33     0.07      0.014       (  0.247)       0.012        0.003
281  23.42     0.07      0.014       (  0.247)       0.012        0.003
282  23.50     0.07      0.014       (  0.246)       0.012        0.003
283  23.58     0.07      0.014       (  0.246)       0.012        0.003
284  23.67     0.07      0.014       (  0.245)       0.012        0.003
285  23.75     0.07      0.014       (  0.245)       0.012        0.003
286  23.83     0.07      0.014       (  0.245)       0.012        0.003
287  23.92     0.07      0.014       (  0.245)       0.012        0.003
288  24.00     0.07      0.014       (  0.245)       0.012        0.003
                (Loss Rate Not Used)
    Sum =     100.0                                  Sum =      3.9
      Flood volume = Effective rainfall      0.32(In)
       times area       7.0(Ac.)/[(In)/(Ft.)] =       0.2(Ac.Ft)
      Total soil loss =      1.48(In)
      Total soil loss =     0.861(Ac.Ft)
      Total rainfall =      1.80(In)
      Flood volume =        8232.7 Cubic Feet
      Total soil loss =       37504.6 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      0.311(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - 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      0.01  Q          |         |         |         |
   0+10       0.0002      0.02  Q          |         |         |         |
   0+15       0.0003      0.02  Q          |         |         |         |
   0+20       0.0004      0.02  Q          |         |         |         |
   0+25       0.0006      0.03  Q          |         |         |         |
   0+30       0.0008      0.03  Q          |         |         |         |
   0+35       0.0010      0.03  Q          |         |         |         |
   0+40       0.0012      0.03  Q          |         |         |         |
   0+45       0.0014      0.03  Q          |         |         |         |
   0+50       0.0016      0.03  Q          |         |         |         |
   0+55       0.0018      0.04  Q          |         |         |         |
   1+ 0       0.0021      0.04  Q          |         |         |         |
   1+ 5       0.0023      0.03  Q          |         |         |         |
   1+10       0.0025      0.03  Q          |         |         |         |
   1+15       0.0027      0.03  Q          |         |         |         |
   1+20       0.0029      0.03  Q          |         |         |         |
   1+25       0.0031      0.03  Q          |         |         |         |
   1+30       0.0033      0.03  Q          |         |         |         |
   1+35       0.0035      0.03  Q          |         |         |         |
   1+40       0.0037      0.03  Q          |         |         |         |
   1+45       0.0038      0.03  Q          |         |         |         |
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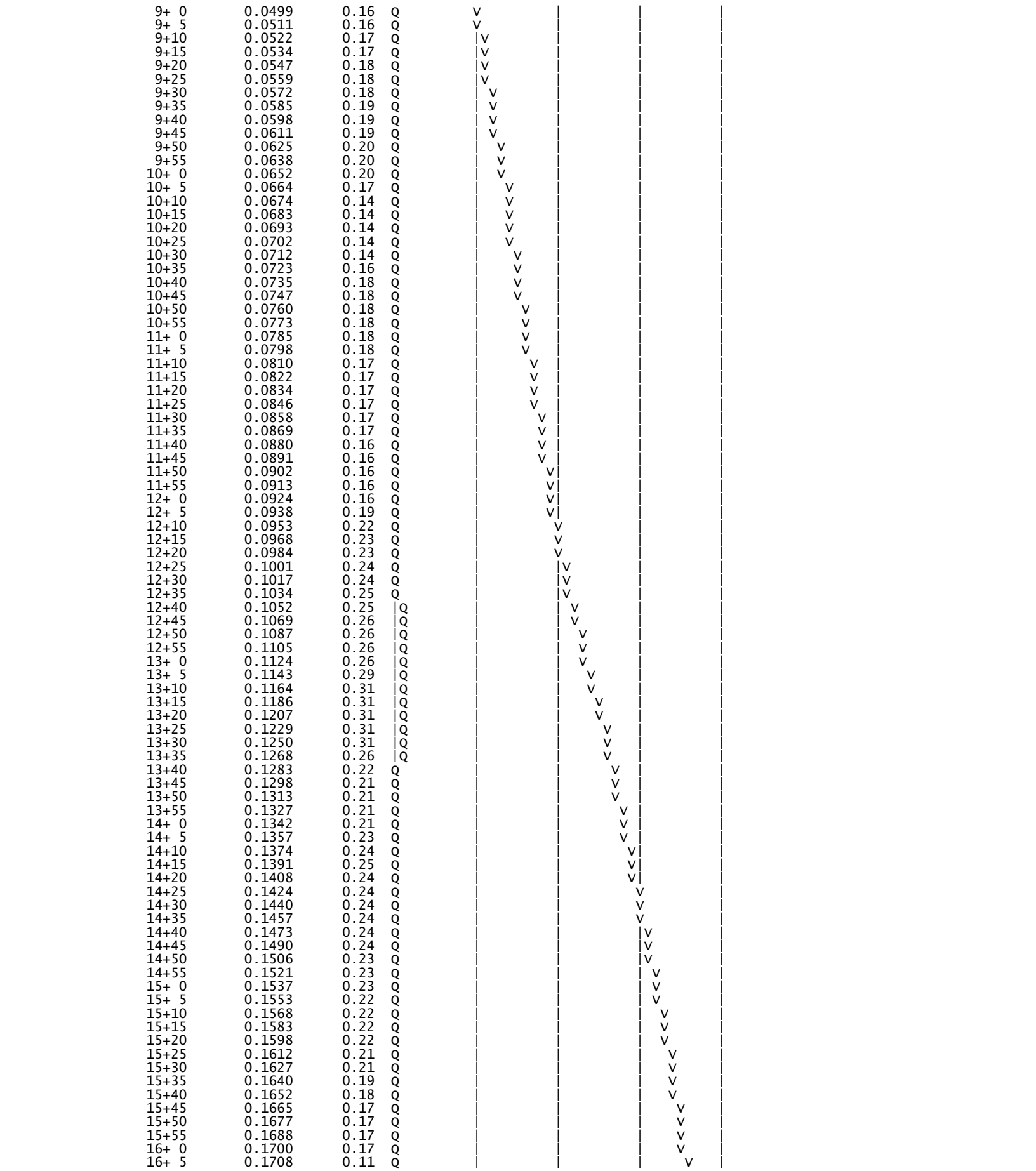
1+50       0.0041      0.03  Q          |          |          |          |
1+55       0.0043      0.04  Q          |          |          |          |
2+ 0       0.0046      0.04  Q          |          |          |          |
2+ 5       0.0048      0.04  QV         |          |          |          |
2+10       0.0051      0.04  QV         |          |          |          |
2+15       0.0053      0.04  QV         |          |          |          |
2+20       0.0056      0.04  QV         |          |          |          |
2+25       0.0058      0.04  QV         |          |          |          |
2+30       0.0061      0.04  QV         |          |          |          |
2+35       0.0063      0.04  QV         |          |          |          |
2+40       0.0067      0.04  QV         |          |          |          |
2+45       0.0070      0.05  QV         |          |          |          |
2+50       0.0073      0.05  QV         |          |          |          |
2+55       0.0076      0.05  QV         |          |          |          |
3+ 0       0.0079      0.05  QV         |          |          |          |
3+ 5       0.0082      0.05  QV         |          |          |          |
3+10       0.0085      0.05  QV         |          |          |          |
3+15       0.0089      0.05  QV         |          |          |          |
3+20       0.0092      0.05  QV         |          |          |          |
3+25       0.0095      0.05  Q V        |          |          |          |
3+30       0.0098      0.05  Q V        |          |          |          |
3+35       0.0101      0.05  Q V        |          |          |          |
3+40       0.0104      0.05  Q V        |          |          |          |
3+45       0.0107      0.05  Q V        |          |          |          |
3+50       0.0111      0.05  Q V        |          |          |          |
3+55       0.0115      0.05  Q V        |          |          |          |
4+ 0       0.0118      0.05  Q V        |          |          |          |
4+ 5       0.0122      0.05  Q V        |          |          |          |
4+10       0.0126      0.05  Q V        |          |          |          |
4+15       0.0130      0.05  Q V        |          |          |          |
4+20       0.0134      0.06  Q V        |          |          |          |
4+25       0.0138      0.06  Q V        |          |          |          |
4+30       0.0143      0.06  Q  V       |          |          |          |
4+35       0.0147      0.06  Q  V       |          |          |          |
4+40       0.0151      0.06  Q  V       |          |          |          |
4+45       0.0156      0.06  Q  V       |          |          |          |
4+50       0.0160      0.07  Q  V       |          |          |          |
4+55       0.0165      0.07  Q  V       |          |          |          |
5+ 0       0.0170      0.07  Q  V       |          |          |          |
5+ 5       0.0175      0.06  Q  V       |          |          |          |
5+10       0.0179      0.06  Q  V       |          |          |          |
5+15       0.0183      0.06  Q  V       |          |          |          |
5+20       0.0187      0.06  Q  V       |          |          |          |
5+25       0.0191      0.06  Q   V      |          |          |          |
5+30       0.0195      0.06  Q   V      |          |          |          |
5+35       0.0200      0.07  Q   V      |          |          |          |
5+40       0.0205      0.07  Q   V      |          |          |          |
5+45       0.0210      0.07  Q   V      |          |          |          |
5+50       0.0215      0.07  Q   V      |          |          |          |
5+55       0.0220      0.07  Q   V      |          |          |          |
6+ 0       0.0225      0.07  Q   V      |          |          |          |
6+ 5       0.0231      0.08  Q   V      |          |          |          |
6+10       0.0236      0.08  Q   V      |          |          |          |
6+15       0.0242      0.08  Q    V     |          |          |          |
6+20       0.0248      0.08  Q    V     |          |          |          |
6+25       0.0253      0.08  Q    V     |          |          |          |
6+30       0.0259      0.08  Q    V     |          |          |          |
6+35       0.0265      0.09  Q    V     |          |          |          |
6+40       0.0271      0.09  Q    V     |          |          |          |
6+45       0.0277      0.09  Q    V     |          |          |          |
6+50       0.0284      0.09  Q     V    |          |          |          |
6+55       0.0290      0.09  Q     V    |          |          |          |
7+ 0       0.0296      0.09  Q     V    |          |          |          |
7+ 5       0.0303      0.09  Q     V    |          |          |          |
7+10       0.0309      0.09  Q     V    |          |          |          |
7+15       0.0315      0.09  Q     V    |          |          |          |
7+20       0.0322      0.10  Q     V    |          |          |          |
7+25       0.0329      0.10  Q     V    |          |          |          |
7+30       0.0336      0.10  Q      V   |          |          |          |
7+35       0.0343      0.10  Q      V   |          |          |          |
7+40       0.0350      0.11  Q      V   |          |          |          |
7+45       0.0358      0.11  Q      V   |          |          |          |
7+50       0.0366      0.11  Q      V   |          |          |          |
7+55       0.0374      0.12  Q      V   |          |          |          |
8+ 0       0.0382      0.12  Q       V  |          |          |          |
8+ 5       0.0391      0.13  Q       V  |          |          |          |
8+10       0.0400      0.14  Q       V  |          |          |          |
8+15       0.0409      0.14  Q       V  |          |          |          |
8+20       0.0419      0.14  Q       V  |          |          |          |
8+25       0.0428      0.14  Q        V |          |          |          |
8+30       0.0438      0.14  Q        V |          |          |          |
8+35       0.0448      0.14  Q        V |          |          |          |
8+40       0.0458      0.15  Q        V |          |          |          |
8+45       0.0468      0.15  Q        V |          |          |          |
8+50       0.0478      0.15  Q         V          |          |          |
8+55       0.0489      0.15  Q         V          |          |          |
```


9+ 0 0.0499 0.16 Q
9+ 5 0.0511 0.16 Q
9+10 0.0522 0.17 Q
9+15 0.0534 0.17 Q
9+20 0.0547 0.18 Q
9+25 0.0559 0.18 Q
9+30 0.0572 0.18 Q
9+35 0.0585 0.19 Q
9+40 0.0598 0.19 Q
9+45 0.0611 0.19 Q
9+50 0.0625 0.20 Q
9+55 0.0638 0.20 Q
10+ 0 0.0652 0.20 Q
10+ 5 0.0664 0.17 Q
10+10 0.0674 0.14 Q
10+15 0.0683 0.14 Q
10+20 0.0693 0.14 Q
10+25 0.0702 0.14 Q
10+30 0.0712 0.14 Q
10+35 0.0723 0.16 Q
10+40 0.0735 0.18 Q
10+45 0.0747 0.18 Q
10+50 0.0760 0.18 Q
10+55 0.0773 0.18 Q
11+ 0 0.0785 0.18 Q
11+ 5 0.0798 0.18 Q
11+10 0.0810 0.17 Q
11+15 0.0822 0.17 Q
11+20 0.0834 0.17 Q
11+25 0.0846 0.17 Q
11+30 0.0858 0.17 Q
11+35 0.0869 0.17 Q
11+40 0.0880 0.16 Q
11+45 0.0891 0.16 Q
11+50 0.0902 0.16 Q
11+55 0.0913 0.16 Q
12+ 0 0.0924 0.16 Q
12+ 5 0.0938 0.19 Q
12+10 0.0953 0.22 Q
12+15 0.0968 0.23 Q
12+20 0.0984 0.23 Q
12+25 0.1001 0.24 Q
12+30 0.1017 0.24 Q
12+35 0.1034 0.25 Q
12+40 0.1052 0.25 Q
12+45 0.1069 0.26 Q
12+50 0.1087 0.26 Q
12+55 0.1105 0.26 Q
13+ 0 0.1124 0.26 Q
13+ 5 0.1143 0.29 Q
13+10 0.1164 0.31 Q
13+15 0.1186 0.31 Q
13+20 0.1207 0.31 Q
13+25 0.1229 0.31 Q
13+30 0.1250 0.31 Q
13+35 0.1268 0.26 Q
13+40 0.1283 0.22 Q
13+45 0.1298 0.21 Q
13+50 0.1313 0.21 Q
13+55 0.1327 0.21 Q
14+ 0 0.1342 0.21 Q
14+ 5 0.1357 0.23 Q
14+10 0.1374 0.24 Q
14+15 0.1391 0.25 Q
14+20 0.1408 0.24 Q
14+25 0.1424 0.24 Q
14+30 0.1440 0.24 Q
14+35 0.1457 0.24 Q
14+40 0.1473 0.24 Q
14+45 0.1490 0.24 Q
14+50 0.1506 0.23 Q
14+55 0.1521 0.23 Q
15+ 0 0.1537 0.23 Q
15+ 5 0.1553 0.22 Q
15+10 0.1568 0.22 Q
15+15 0.1583 0.22 Q
15+20 0.1598 0.22 Q
15+25 0.1612 0.21 Q
15+30 0.1627 0.21 Q
15+35 0.1640 0.19 Q
15+40 0.1652 0.18 Q
15+45 0.1665 0.17 Q
15+50 0.1677 0.17 Q
15+55 0.1688 0.17 Q
16+ 0 0.1700 0.17 Q
16+ 5 0.1708 0.11 Q

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16+10       0.1712      0.05  Q        |          |          |      V   |
16+15       0.1714      0.04  Q        |          |          |      V   |
16+20       0.1717      0.04  Q        |          |          |      V   |
16+25       0.1719      0.04  Q        |          |          |      V   |
16+30       0.1722      0.04  Q        |          |          |      V   |
16+35       0.1724      0.03  Q        |          |          |      V   |
16+40       0.1726      0.03  Q        |          |          |      V   |
16+45       0.1728      0.03  Q        |          |          |      V   |
16+50       0.1730      0.03  Q        |          |          |      V   |
16+55       0.1732      0.03  Q        |          |          |      V   |
17+ 0       0.1734      0.03  Q        |          |          |      V   |
17+ 5       0.1736      0.04  Q        |          |          |      V   |
17+10       0.1739      0.04  Q        |          |          |      V   |
17+15       0.1742      0.05  Q        |          |          |      V   |
17+20       0.1745      0.05  Q        |          |          |      V   |
17+25       0.1749      0.05  Q        |          |          |       V  |
17+30       0.1752      0.05  Q        |          |          |       V  |
17+35       0.1755      0.05  Q        |          |          |       V  |
17+40       0.1758      0.05  Q        |          |          |       V  |
17+45       0.1761      0.05  Q        |          |          |       V  |
17+50       0.1764      0.04  Q        |          |          |       V  |
17+55       0.1767      0.04  Q        |          |          |       V  |
18+ 0       0.1769      0.04  Q        |          |          |       V  |
18+ 5       0.1772      0.04  Q        |          |          |       V  |
18+10       0.1774      0.04  Q        |          |          |       V  |
18+15       0.1777      0.04  Q        |          |          |       V  |
18+20       0.1779      0.04  Q        |          |          |       V  |
18+25       0.1782      0.04  Q        |          |          |       V  |
18+30       0.1784      0.04  Q        |          |          |       V  |
18+35       0.1787      0.03  Q        |          |          |       V  |
18+40       0.1789      0.03  Q        |          |          |       V  |
18+45       0.1790      0.03  Q        |          |          |       V  |
18+50       0.1792      0.02  Q        |          |          |       V  |
18+55       0.1793      0.02  Q        |          |          |       V  |
19+ 0       0.1795      0.02  Q        |          |          |       V  |
19+ 5       0.1796      0.02  Q        |          |          |        V |
19+10       0.1798      0.03  Q        |          |          |        V |
19+15       0.1800      0.03  Q        |          |          |        V |
19+20       0.1802      0.03  Q        |          |          |        V |
19+25       0.1805      0.04  Q        |          |          |        V |
19+30       0.1807      0.04  Q        |          |          |        V |
19+35       0.1809      0.03  Q        |          |          |        V |
19+40       0.1811      0.03  Q        |          |          |        V |
19+45       0.1813      0.03  Q        |          |          |        V |
19+50       0.1815      0.02  Q        |          |          |        V |
19+55       0.1816      0.02  Q        |          |          |        V |
20+ 0       0.1817      0.02  Q        |          |          |        V |
20+ 5       0.1819      0.02  Q        |          |          |        V |
20+10       0.1821      0.03  Q        |          |          |        V |
20+15       0.1823      0.03  Q        |          |          |        V |
20+20       0.1824      0.03  Q        |          |          |        V |
20+25       0.1826      0.03  Q        |          |          |        V |
20+30       0.1828      0.03  Q        |          |          |        V |
20+35       0.1830      0.03  Q        |          |          |        V |
20+40       0.1832      0.03  Q        |          |          |        V |
20+45       0.1834      0.03  Q        |          |          |        V |
20+50       0.1835      0.02  Q        |          |          |        V |
20+55       0.1837      0.02  Q        |          |          |        V |
21+ 0       0.1838      0.02  Q        |          |          |        V |
21+ 5       0.1840      0.02  Q        |          |          |        V |
21+10       0.1841      0.03  Q        |          |          |        V |
21+15       0.1843      0.03  Q        |          |          |         V|
21+20       0.1845      0.02  Q        |          |          |         V|
21+25       0.1846      0.02  Q        |          |          |         V|
21+30       0.1848      0.02  Q        |          |          |         V|
21+35       0.1849      0.02  Q        |          |          |         V|
21+40       0.1851      0.03  Q        |          |          |         V|
21+45       0.1853      0.03  Q        |          |          |         V|
21+50       0.1854      0.02  Q        |          |          |         V|
21+55       0.1856      0.02  Q        |          |          |         V|
22+ 0       0.1857      0.02  Q        |          |          |         V|
22+ 5       0.1859      0.02  Q        |          |          |         V|
22+10       0.1860      0.03  Q        |          |          |         V|
22+15       0.1862      0.03  Q        |          |          |         V|
22+20       0.1864      0.02  Q        |          |          |         V|
22+25       0.1865      0.02  Q        |          |          |         V|
22+30       0.1866      0.02  Q        |          |          |         V|
22+35       0.1868      0.02  Q        |          |          |         V|
22+40       0.1869      0.02  Q        |          |          |         V|
22+45       0.1870      0.02  Q        |          |          |         V|
22+50       0.1871      0.02  Q        |          |          |         V|
22+55       0.1873      0.02  Q        |          |          |         V|
23+ 0       0.1874      0.02  Q        |          |          |         V|
23+ 5       0.1875      0.02  Q        |          |          |         V|
23+10       0.1877      0.02  Q        |          |          |         V|
23+15       0.1878      0.02  Q        |          |          |         V|
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   23+20       0.1879      0.02  Q          |          |          |          v|
   23+25       0.1880      0.02  Q          |          |          |          v|
   23+30       0.1882      0.02  Q          |          |          |          v|
   23+35       0.1883      0.02  Q          |          |          |          v|
   23+40       0.1884      0.02  Q          |          |          |          v|
   23+45       0.1885      0.02  Q          |          |          |          v|
   23+50       0.1887      0.02  Q          |          |          |          v|
   23+55       0.1888      0.02  Q          |          |          |          v|
   24+ 0       0.1889      0.02  Q          |          |          |          v|
   24+ 5       0.1890      0.01  Q          |          |          |          v|
   24+10       0.1890      0.00  Q          |          |          |          v|
   24+15       0.1890      0.00  Q          |          |          |          v|
-------------------------------------------------------------------------------
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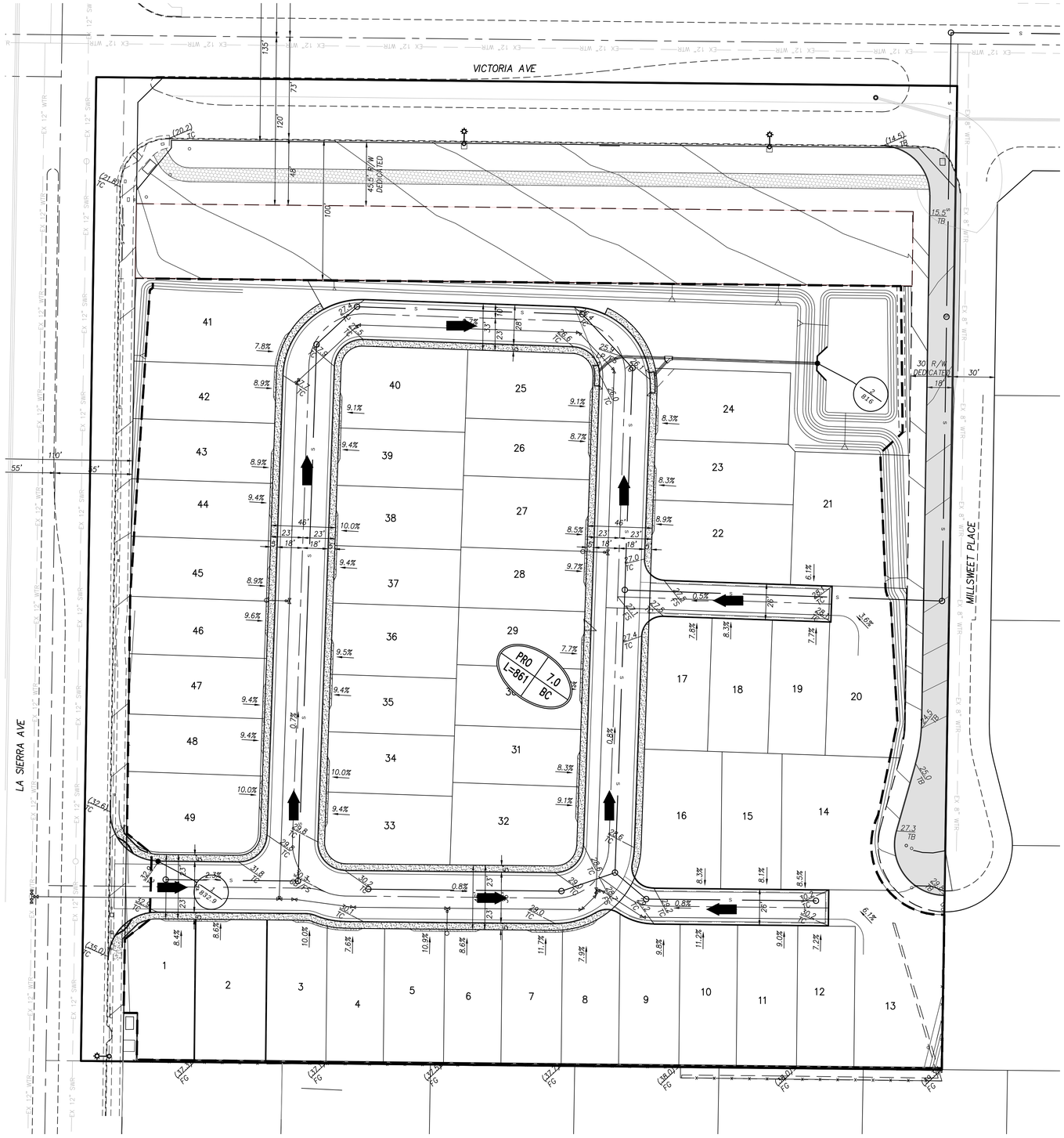
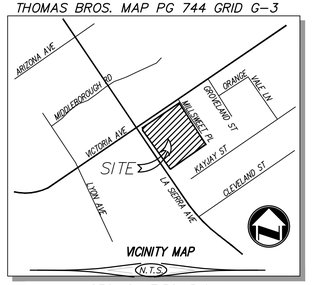
Section 2

Post-Development Unit Hydrograph

IN THE COMMUNITY OF WINCHESTER, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

POST DEVELOPMENT UNIT HYDROGRAPH





SEC. 24 T.3S. R.6W

PLANS PREPARED BY:
adkan ENGINEERS
Civil Engineering • Surveying • Planning
6879 Airport Drive, Riverside, CA 92504
Tel:(951) 688-0241 • Fax:(951) 688-0599

```
        U n i t   H y d r o g r a p h   A n a l y s i s

        Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
               Study date  02/22/24 File: 2YR242.out

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


Program License Serial Number 5006

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

 English Units used in output format



------------------------------------------------------------------------
------------------------------------------------------------------------
Drainage Area =       7.00(Ac.)  =      0.011 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =       7.00(Ac.)  =      0.011 Sq. Mi.
Length along longest watercourse =     861.00(Ft.)
Length along longest watercourse measured to centroid =     430.00(Ft.)
Length along longest watercourse =      0.163 Mi.
Length along longest watercourse measured to centroid =      0.081 Mi.
Difference in elevation =      16.90(Ft.)
Slope along watercourse =    103.6376 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time =    0.029 Hr.
Lag time =     1.73 Min.
25% of lag time =     0.43 Min.
40% of lag time =     0.69 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]
        7.00            1.80                 12.60

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        7.00            6.00                 42.00

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.800(In)
Area Averaged 100-Year Rainfall =    6.000(In)

Point rain (area averaged) =    1.800(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    1.800(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
     7.000           69.00          0.600
 Total Area Entered =      7.00(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
69.0  49.8      0.574     0.600        0.264       1.000      0.264
                                                 Sum (F) =   0.264
Area averaged mean soil loss (F) (In/Hr) =  0.264
Minimum soil loss rate ((In/Hr)) =  0.132
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.420
------------------------------------------------------------------------

               U n i t  H y d r o g r a p h
                      VALLEY S-Curve
------------------------------------------------------------------
               Unit Hydrograph Data
------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
```

1	0.083	288.833	55.504		3.916
2	0.167	577.666	37.752		2.663
3	0.250	866.500	6.744		0.476
			Sum = 100.000	Sum=	7.055

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	0.07	0.014	(0.468)	0.006	0.008
2	0.17	0.07	0.014	(0.466)	0.006	0.008
3	0.25	0.07	0.014	(0.464)	0.006	0.008
4	0.33	0.10	0.022	(0.463)	0.009	0.013
5	0.42	0.10	0.022	(0.461)	0.009	0.013
6	0.50	0.10	0.022	(0.459)	0.009	0.013
7	0.58	0.10	0.022	(0.457)	0.009	0.013
8	0.67	0.10	0.022	(0.455)	0.009	0.013
9	0.75	0.10	0.022	(0.454)	0.009	0.013
10	0.83	0.13	0.029	(0.452)	0.012	0.017
11	0.92	0.13	0.029	(0.450)	0.012	0.017
12	1.00	0.13	0.029	(0.448)	0.012	0.017
13	1.08	0.10	0.022	(0.447)	0.009	0.013
14	1.17	0.10	0.022	(0.445)	0.009	0.013
15	1.25	0.10	0.022	(0.443)	0.009	0.013
16	1.33	0.10	0.022	(0.441)	0.009	0.013
17	1.42	0.10	0.022	(0.439)	0.009	0.013
18	1.50	0.10	0.022	(0.438)	0.009	0.013
19	1.58	0.10	0.022	(0.436)	0.009	0.013
20	1.67	0.10	0.022	(0.434)	0.009	0.013
21	1.75	0.10	0.022	(0.433)	0.009	0.013
22	1.83	0.13	0.029	(0.431)	0.012	0.017
23	1.92	0.13	0.029	(0.429)	0.012	0.017
24	2.00	0.13	0.029	(0.427)	0.012	0.017
25	2.08	0.13	0.029	(0.426)	0.012	0.017
26	2.17	0.13	0.029	(0.424)	0.012	0.017
27	2.25	0.13	0.029	(0.422)	0.012	0.017
28	2.33	0.13	0.029	(0.420)	0.012	0.017
29	2.42	0.13	0.029	(0.419)	0.012	0.017
30	2.50	0.13	0.029	(0.417)	0.012	0.017
31	2.58	0.17	0.036	(0.415)	0.015	0.021
32	2.67	0.17	0.036	(0.414)	0.015	0.021
33	2.75	0.17	0.036	(0.412)	0.015	0.021
34	2.83	0.17	0.036	(0.410)	0.015	0.021
35	2.92	0.17	0.036	(0.408)	0.015	0.021
36	3.00	0.17	0.036	(0.407)	0.015	0.021
37	3.08	0.17	0.036	(0.405)	0.015	0.021
38	3.17	0.17	0.036	(0.403)	0.015	0.021
39	3.25	0.17	0.036	(0.402)	0.015	0.021
40	3.33	0.17	0.036	(0.400)	0.015	0.021
41	3.42	0.17	0.036	(0.398)	0.015	0.021
42	3.50	0.17	0.036	(0.397)	0.015	0.021
43	3.58	0.17	0.036	(0.395)	0.015	0.021
44	3.67	0.17	0.036	(0.393)	0.015	0.021
45	3.75	0.17	0.036	(0.392)	0.015	0.021
46	3.83	0.20	0.043	(0.390)	0.018	0.025
47	3.92	0.20	0.043	(0.388)	0.018	0.025
48	4.00	0.20	0.043	(0.387)	0.018	0.025
49	4.08	0.20	0.043	(0.385)	0.018	0.025
50	4.17	0.20	0.043	(0.384)	0.018	0.025
51	4.25	0.20	0.043	(0.382)	0.018	0.025
52	4.33	0.23	0.050	(0.380)	0.021	0.029
53	4.42	0.23	0.050	(0.379)	0.021	0.029
54	4.50	0.23	0.050	(0.377)	0.021	0.029
55	4.58	0.23	0.050	(0.375)	0.021	0.029
56	4.67	0.23	0.050	(0.374)	0.021	0.029
57	4.75	0.23	0.050	(0.372)	0.021	0.029
58	4.83	0.27	0.058	(0.371)	0.024	0.033
59	4.92	0.27	0.058	(0.369)	0.024	0.033
60	5.00	0.27	0.058	(0.367)	0.024	0.033
61	5.08	0.20	0.043	(0.366)	0.018	0.025
62	5.17	0.20	0.043	(0.364)	0.018	0.025
63	5.25	0.20	0.043	(0.363)	0.018	0.025
64	5.33	0.23	0.050	(0.361)	0.021	0.029
65	5.42	0.23	0.050	(0.359)	0.021	0.029
66	5.50	0.23	0.050	(0.358)	0.021	0.029
67	5.58	0.27	0.058	(0.356)	0.024	0.033
68	5.67	0.27	0.058	(0.355)	0.024	0.033
69	5.75	0.27	0.058	(0.353)	0.024	0.033
70	5.83	0.27	0.058	(0.352)	0.024	0.033
71	5.92	0.27	0.058	(0.350)	0.024	0.033
72	6.00	0.27	0.058	(0.349)	0.024	0.033
73	6.08	0.30	0.065	(0.347)	0.027	0.038

74	6.17	0.30	0.065	(0.345)	0.027	0.038
75	6.25	0.30	0.065	(0.344)	0.027	0.038
76	6.33	0.30	0.065	(0.342)	0.027	0.038
77	6.42	0.30	0.065	(0.341)	0.027	0.038
78	6.50	0.30	0.065	(0.339)	0.027	0.038
79	6.58	0.33	0.072	(0.338)	0.030	0.042
80	6.67	0.33	0.072	(0.336)	0.030	0.042
81	6.75	0.33	0.072	(0.335)	0.030	0.042
82	6.83	0.33	0.072	(0.333)	0.030	0.042
83	6.92	0.33	0.072	(0.332)	0.030	0.042
84	7.00	0.33	0.072	(0.330)	0.030	0.042
85	7.08	0.33	0.072	(0.329)	0.030	0.042
86	7.17	0.33	0.072	(0.327)	0.030	0.042
87	7.25	0.33	0.072	(0.326)	0.030	0.042
88	7.33	0.37	0.079	(0.324)	0.033	0.046
89	7.42	0.37	0.079	(0.323)	0.033	0.046
90	7.50	0.37	0.079	(0.321)	0.033	0.046
91	7.58	0.40	0.086	(0.320)	0.036	0.050
92	7.67	0.40	0.086	(0.318)	0.036	0.050
93	7.75	0.40	0.086	(0.317)	0.036	0.050
94	7.83	0.43	0.094	(0.315)	0.039	0.054
95	7.92	0.43	0.094	(0.314)	0.039	0.054
96	8.00	0.43	0.094	(0.312)	0.039	0.054
97	8.08	0.50	0.108	(0.311)	0.045	0.063
98	8.17	0.50	0.108	(0.310)	0.045	0.063
99	8.25	0.50	0.108	(0.308)	0.045	0.063
100	8.33	0.50	0.108	(0.307)	0.045	0.063
101	8.42	0.50	0.108	(0.305)	0.045	0.063
102	8.50	0.50	0.108	(0.304)	0.045	0.063
103	8.58	0.53	0.115	(0.302)	0.048	0.067
104	8.67	0.53	0.115	(0.301)	0.048	0.067
105	8.75	0.53	0.115	(0.300)	0.048	0.067
106	8.83	0.57	0.122	(0.298)	0.051	0.071
107	8.92	0.57	0.122	(0.297)	0.051	0.071
108	9.00	0.57	0.122	(0.295)	0.051	0.071
109	9.08	0.63	0.137	(0.294)	0.057	0.079
110	9.17	0.63	0.137	(0.293)	0.057	0.079
111	9.25	0.63	0.137	(0.291)	0.057	0.079
112	9.33	0.67	0.144	(0.290)	0.060	0.084
113	9.42	0.67	0.144	(0.288)	0.060	0.084
114	9.50	0.67	0.144	(0.287)	0.060	0.084
115	9.58	0.70	0.151	(0.286)	0.064	0.088
116	9.67	0.70	0.151	(0.284)	0.064	0.088
117	9.75	0.70	0.151	(0.283)	0.064	0.088
118	9.83	0.73	0.158	(0.282)	0.067	0.092
119	9.92	0.73	0.158	(0.280)	0.067	0.092
120	10.00	0.73	0.158	(0.279)	0.067	0.092
121	10.08	0.50	0.108	(0.277)	0.045	0.063
122	10.17	0.50	0.108	(0.276)	0.045	0.063
123	10.25	0.50	0.108	(0.275)	0.045	0.063
124	10.33	0.50	0.108	(0.273)	0.045	0.063
125	10.42	0.50	0.108	(0.272)	0.045	0.063
126	10.50	0.50	0.108	(0.271)	0.045	0.063
127	10.58	0.67	0.144	(0.269)	0.060	0.084
128	10.67	0.67	0.144	(0.268)	0.060	0.084
129	10.75	0.67	0.144	(0.267)	0.060	0.084
130	10.83	0.67	0.144	(0.266)	0.060	0.084
131	10.92	0.67	0.144	(0.264)	0.060	0.084
132	11.00	0.67	0.144	(0.263)	0.060	0.084
133	11.08	0.63	0.137	(0.262)	0.057	0.079
134	11.17	0.63	0.137	(0.260)	0.057	0.079
135	11.25	0.63	0.137	(0.259)	0.057	0.079
136	11.33	0.63	0.137	(0.258)	0.057	0.079
137	11.42	0.63	0.137	(0.256)	0.057	0.079
138	11.50	0.63	0.137	(0.255)	0.057	0.079
139	11.58	0.57	0.122	(0.254)	0.051	0.071
140	11.67	0.57	0.122	(0.253)	0.051	0.071
141	11.75	0.57	0.122	(0.251)	0.051	0.071
142	11.83	0.60	0.130	(0.250)	0.054	0.075
143	11.92	0.60	0.130	(0.249)	0.054	0.075
144	12.00	0.60	0.130	(0.248)	0.054	0.075
145	12.08	0.83	0.180	(0.246)	0.076	0.104
146	12.17	0.83	0.180	(0.245)	0.076	0.104
147	12.25	0.83	0.180	(0.244)	0.076	0.104
148	12.33	0.87	0.187	(0.243)	0.079	0.109
149	12.42	0.87	0.187	(0.242)	0.079	0.109
150	12.50	0.87	0.187	(0.240)	0.079	0.109
151	12.58	0.93	0.202	(0.239)	0.085	0.117
152	12.67	0.93	0.202	(0.238)	0.085	0.117
153	12.75	0.93	0.202	(0.237)	0.085	0.117
154	12.83	0.97	0.209	(0.236)	0.088	0.121
155	12.92	0.97	0.209	(0.234)	0.088	0.121
156	13.00	0.97	0.209	(0.233)	0.088	0.121
157	13.08	1.13	0.245	(0.232)	0.103	0.142
158	13.17	1.13	0.245	(0.231)	0.103	0.142
159	13.25	1.13	0.245	(0.230)	0.103	0.142

160	13.33	1.13	0.245	(0.228)	0.103	0.142
161	13.42	1.13	0.245	(0.227)	0.103	0.142
162	13.50	1.13	0.245	(0.226)	0.103	0.142
163	13.58	0.77	0.166	(0.225)	0.070	0.096
164	13.67	0.77	0.166	(0.224)	0.070	0.096
165	13.75	0.77	0.166	(0.223)	0.070	0.096
166	13.83	0.77	0.166	(0.222)	0.070	0.096
167	13.92	0.77	0.166	(0.220)	0.070	0.096
168	14.00	0.77	0.166	(0.219)	0.070	0.096
169	14.08	0.90	0.194	(0.218)	0.082	0.113
170	14.17	0.90	0.194	(0.217)	0.082	0.113
171	14.25	0.90	0.194	(0.216)	0.082	0.113
172	14.33	0.87	0.187	(0.215)	0.079	0.109
173	14.42	0.87	0.187	(0.214)	0.079	0.109
174	14.50	0.87	0.187	(0.213)	0.079	0.109
175	14.58	0.87	0.187	(0.212)	0.079	0.109
176	14.67	0.87	0.187	(0.210)	0.079	0.109
177	14.75	0.87	0.187	(0.209)	0.079	0.109
178	14.83	0.83	0.180	(0.208)	0.076	0.104
179	14.92	0.83	0.180	(0.207)	0.076	0.104
180	15.00	0.83	0.180	(0.206)	0.076	0.104
181	15.08	0.80	0.173	(0.205)	0.073	0.100
182	15.17	0.80	0.173	(0.204)	0.073	0.100
183	15.25	0.80	0.173	(0.203)	0.073	0.100
184	15.33	0.77	0.166	(0.202)	0.070	0.096
185	15.42	0.77	0.166	(0.201)	0.070	0.096
186	15.50	0.77	0.166	(0.200)	0.070	0.096
187	15.58	0.63	0.137	(0.199)	0.057	0.079
188	15.67	0.63	0.137	(0.198)	0.057	0.079
189	15.75	0.63	0.137	(0.197)	0.057	0.079
190	15.83	0.63	0.137	(0.196)	0.057	0.079
191	15.92	0.63	0.137	(0.195)	0.057	0.079
192	16.00	0.63	0.137	(0.194)	0.057	0.079
193	16.08	0.13	0.029	(0.193)	0.012	0.017
194	16.17	0.13	0.029	(0.192)	0.012	0.017
195	16.25	0.13	0.029	(0.191)	0.012	0.017
196	16.33	0.13	0.029	(0.190)	0.012	0.017
197	16.42	0.13	0.029	(0.189)	0.012	0.017
198	16.50	0.13	0.029	(0.188)	0.012	0.017
199	16.58	0.10	0.022	(0.187)	0.009	0.013
200	16.67	0.10	0.022	(0.186)	0.009	0.013
201	16.75	0.10	0.022	(0.185)	0.009	0.013
202	16.83	0.10	0.022	(0.184)	0.009	0.013
203	16.92	0.10	0.022	(0.183)	0.009	0.013
204	17.00	0.10	0.022	(0.182)	0.009	0.013
205	17.08	0.17	0.036	(0.181)	0.015	0.021
206	17.17	0.17	0.036	(0.181)	0.015	0.021
207	17.25	0.17	0.036	(0.180)	0.015	0.021
208	17.33	0.17	0.036	(0.179)	0.015	0.021
209	17.42	0.17	0.036	(0.178)	0.015	0.021
210	17.50	0.17	0.036	(0.177)	0.015	0.021
211	17.58	0.17	0.036	(0.176)	0.015	0.021
212	17.67	0.17	0.036	(0.175)	0.015	0.021
213	17.75	0.17	0.036	(0.174)	0.015	0.021
214	17.83	0.13	0.029	(0.173)	0.012	0.017
215	17.92	0.13	0.029	(0.173)	0.012	0.017
216	18.00	0.13	0.029	(0.172)	0.012	0.017
217	18.08	0.13	0.029	(0.171)	0.012	0.017
218	18.17	0.13	0.029	(0.170)	0.012	0.017
219	18.25	0.13	0.029	(0.169)	0.012	0.017
220	18.33	0.13	0.029	(0.168)	0.012	0.017
221	18.42	0.13	0.029	(0.168)	0.012	0.017
222	18.50	0.13	0.029	(0.167)	0.012	0.017
223	18.58	0.10	0.022	(0.166)	0.009	0.013
224	18.67	0.10	0.022	(0.165)	0.009	0.013
225	18.75	0.10	0.022	(0.164)	0.009	0.013
226	18.83	0.07	0.014	(0.164)	0.006	0.008
227	18.92	0.07	0.014	(0.163)	0.006	0.008
228	19.00	0.07	0.014	(0.162)	0.006	0.008
229	19.08	0.10	0.022	(0.161)	0.009	0.013
230	19.17	0.10	0.022	(0.160)	0.009	0.013
231	19.25	0.10	0.022	(0.160)	0.009	0.013
232	19.33	0.13	0.029	(0.159)	0.012	0.017
233	19.42	0.13	0.029	(0.158)	0.012	0.017
234	19.50	0.13	0.029	(0.158)	0.012	0.017
235	19.58	0.10	0.022	(0.157)	0.009	0.013
236	19.67	0.10	0.022	(0.156)	0.009	0.013
237	19.75	0.10	0.022	(0.155)	0.009	0.013
238	19.83	0.07	0.014	(0.155)	0.006	0.008
239	19.92	0.07	0.014	(0.154)	0.006	0.008
240	20.00	0.07	0.014	(0.153)	0.006	0.008
241	20.08	0.10	0.022	(0.153)	0.009	0.013
242	20.17	0.10	0.022	(0.152)	0.009	0.013
243	20.25	0.10	0.022	(0.151)	0.009	0.013
244	20.33	0.10	0.022	(0.151)	0.009	0.013
245	20.42	0.10	0.022	(0.150)	0.009	0.013

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246  20.50     0.10      0.022       (  0.149)       0.009        0.013
247  20.58     0.10      0.022       (  0.149)       0.009        0.013
248  20.67     0.10      0.022       (  0.148)       0.009        0.013
249  20.75     0.10      0.022       (  0.148)       0.009        0.013
250  20.83     0.07      0.014       (  0.147)       0.006        0.008
251  20.92     0.07      0.014       (  0.146)       0.006        0.008
252  21.00     0.07      0.014       (  0.146)       0.006        0.008
253  21.08     0.10      0.022       (  0.145)       0.009        0.013
254  21.17     0.10      0.022       (  0.145)       0.009        0.013
255  21.25     0.10      0.022       (  0.144)       0.009        0.013
256  21.33     0.07      0.014       (  0.143)       0.006        0.008
257  21.42     0.07      0.014       (  0.143)       0.006        0.008
258  21.50     0.07      0.014       (  0.142)       0.006        0.008
259  21.58     0.10      0.022       (  0.142)       0.009        0.013
260  21.67     0.10      0.022       (  0.141)       0.009        0.013
261  21.75     0.10      0.022       (  0.141)       0.009        0.013
262  21.83     0.07      0.014       (  0.140)       0.006        0.008
263  21.92     0.07      0.014       (  0.140)       0.006        0.008
264  22.00     0.07      0.014       (  0.139)       0.006        0.008
265  22.08     0.10      0.022       (  0.139)       0.009        0.013
266  22.17     0.10      0.022       (  0.138)       0.009        0.013
267  22.25     0.10      0.022       (  0.138)       0.009        0.013
268  22.33     0.07      0.014       (  0.138)       0.006        0.008
269  22.42     0.07      0.014       (  0.137)       0.006        0.008
270  22.50     0.07      0.014       (  0.137)       0.006        0.008
271  22.58     0.07      0.014       (  0.136)       0.006        0.008
272  22.67     0.07      0.014       (  0.136)       0.006        0.008
273  22.75     0.07      0.014       (  0.136)       0.006        0.008
274  22.83     0.07      0.014       (  0.135)       0.006        0.008
275  22.92     0.07      0.014       (  0.135)       0.006        0.008
276  23.00     0.07      0.014       (  0.135)       0.006        0.008
277  23.08     0.07      0.014       (  0.134)       0.006        0.008
278  23.17     0.07      0.014       (  0.134)       0.006        0.008
279  23.25     0.07      0.014       (  0.134)       0.006        0.008
280  23.33     0.07      0.014       (  0.133)       0.006        0.008
281  23.42     0.07      0.014       (  0.133)       0.006        0.008
282  23.50     0.07      0.014       (  0.133)       0.006        0.008
283  23.58     0.07      0.014       (  0.133)       0.006        0.008
284  23.67     0.07      0.014       (  0.133)       0.006        0.008
285  23.75     0.07      0.014       (  0.132)       0.006        0.008
286  23.83     0.07      0.014       (  0.132)       0.006        0.008
287  23.92     0.07      0.014       (  0.132)       0.006        0.008
288  24.00     0.07      0.014       (  0.132)       0.006        0.008
              (Loss Rate Not Used)
    Sum =     100.0                                  Sum =    12.5
      Flood volume = Effective rainfall      1.04(In)
       times area       7.0(Ac.)/[(In)/(Ft.)] =       0.6(Ac.Ft)
      Total soil loss =      0.76(In)
      Total soil loss =     0.441(Ac.Ft)
      Total rainfall =      1.80(In)
      Flood volume =       26527.7 Cubic Feet
      Total soil loss =       19209.7 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      1.002(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                        24 - 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       0.0006      0.05  Q          |         |         |         |
   0+15       0.0010      0.06  Q          |         |         |         |
   0+20       0.0015      0.08  Q          |         |         |         |
   0+25       0.0021      0.09  Q          |         |         |         |
   0+30       0.0027      0.09  Q          |         |         |         |
   0+35       0.0033      0.09  Q          |         |         |         |
   0+40       0.0040      0.09  Q          |         |         |         |
   0+45       0.0046      0.09  Q          |         |         |         |
   0+50       0.0053      0.10  Q          |         |         |         |
   0+55       0.0061      0.12  Q          |         |         |         |
   1+ 0       0.0069      0.12  Q          |         |         |         |
   1+ 5       0.0076      0.10  Q          |         |         |         |
   1+10       0.0082      0.09  Q          |         |         |         |
   1+15       0.0088      0.09  Q          |         |         |         |
   1+20       0.0094      0.09  Q          |         |         |         |
   1+25       0.0100      0.09  Q          |         |         |         |
   1+30       0.0106      0.09  Q          |         |         |         |
   1+35       0.0113      0.09  Q          |         |         |         |
   1+40       0.0119      0.09  Q          |         |         |         |
   1+45       0.0125      0.09  Q          |         |         |         |
   1+50       0.0132      0.10  Q          |         |         |         |
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1+55      0.0140      0.12  Q          |          |          |          |
2+ 0      0.0148      0.12  Q          |          |          |          |
2+ 5      0.0156      0.12  QV         |          |          |          |
2+10      0.0164      0.12  QV         |          |          |          |
2+15      0.0172      0.12  QV         |          |          |          |
2+20      0.0181      0.12  QV         |          |          |          |
2+25      0.0189      0.12  QV         |          |          |          |
2+30      0.0197      0.12  QV         |          |          |          |
2+35      0.0206      0.13  QV         |          |          |          |
2+40      0.0216      0.15  QV         |          |          |          |
2+45      0.0226      0.15  QV         |          |          |          |
2+50      0.0236      0.15  QV         |          |          |          |
2+55      0.0247      0.15  QV         |          |          |          |
3+ 0      0.0257      0.15  QV         |          |          |          |
3+ 5      0.0267      0.15  QV         |          |          |          |
3+10      0.0277      0.15  QV         |          |          |          |
3+15      0.0287      0.15  QV         |          |          |          |
3+20      0.0297      0.15  QV         |          |          |          |
3+25      0.0307      0.15  Q V        |          |          |          |
3+30      0.0318      0.15  Q V        |          |          |          |
3+35      0.0328      0.15  Q V        |          |          |          |
3+40      0.0338      0.15  Q V        |          |          |          |
3+45      0.0348      0.15  Q V        |          |          |          |
3+50      0.0359      0.16  Q V        |          |          |          |
3+55      0.0371      0.17  Q V        |          |          |          |
4+ 0      0.0384      0.18  Q V        |          |          |          |
4+ 5      0.0396      0.18  Q V        |          |          |          |
4+10      0.0408      0.18  Q V        |          |          |          |
4+15      0.0420      0.18  Q V        |          |          |          |
4+20      0.0433      0.19  Q V        |          |          |          |
4+25      0.0447      0.20  Q V        |          |          |          |
4+30      0.0462      0.21  Q  V       |          |          |          |
4+35      0.0476      0.21  Q  V       |          |          |          |
4+40      0.0490      0.21  Q  V       |          |          |          |
4+45      0.0504      0.21  Q  V       |          |          |          |
4+50      0.0520      0.22  Q  V       |          |          |          |
4+55      0.0536      0.23  Q  V       |          |          |          |
5+ 0      0.0552      0.24  Q  V       |          |          |          |
5+ 5      0.0566      0.20  Q  V       |          |          |          |
5+10      0.0578      0.18  Q  V       |          |          |          |
5+15      0.0591      0.18  Q  V       |          |          |          |
5+20      0.0604      0.19  Q  V       |          |          |          |
5+25      0.0618      0.20  Q   V      |          |          |          |
5+30      0.0632      0.21  Q   V      |          |          |          |
5+35      0.0647      0.22  Q   V      |          |          |          |
5+40      0.0664      0.23  Q   V      |          |          |          |
5+45      0.0680      0.24  Q   V      |          |          |          |
5+50      0.0696      0.24  Q   V      |          |          |          |
5+55      0.0712      0.24  Q   V      |          |          |          |
6+ 0      0.0729      0.24  Q   V      |          |          |          |
6+ 5      0.0746      0.25  |Q  V       |          |          |          |
6+10      0.0764      0.26  |Q   V      |          |          |          |
6+15      0.0782      0.27  |Q   V      |          |          |          |
6+20      0.0801      0.27  |Q   V      |          |          |          |
6+25      0.0819      0.27  |Q   V      |          |          |          |
6+30      0.0837      0.27  |Q   V      |          |          |          |
6+35      0.0857      0.28  |Q   V      |          |          |          |
6+40      0.0877      0.29  |Q   V      |          |          |          |
6+45      0.0897      0.29  |Q   V      |          |          |          |
6+50      0.0917      0.29  |Q    V     |          |          |          |
6+55      0.0938      0.29  |Q    V     |          |          |          |
7+ 0      0.0958      0.29  |Q    V     |          |          |          |
7+ 5      0.0978      0.29  |Q    V     |          |          |          |
7+10      0.0998      0.29  |Q    V     |          |          |          |
7+15      0.1019      0.29  |Q    V     |          |          |          |
7+20      0.1040      0.31  |Q    V     |          |          |          |
7+25      0.1062      0.32  |Q    V     |          |          |          |
7+30      0.1085      0.32  |Q     V    |          |          |          |
7+35      0.1108      0.34  |Q     V    |          |          |          |
7+40      0.1132      0.35  |Q     V    |          |          |          |
7+45      0.1157      0.35  |Q     V    |          |          |          |
7+50      0.1182      0.37  |Q     V    |          |          |          |
7+55      0.1209      0.38  |Q     V    |          |          |          |
8+ 0      0.1235      0.38  |Q      V   |          |          |          |
8+ 5      0.1264      0.42  |Q      V   |          |          |          |
8+10      0.1294      0.44  |Q      V   |          |          |          |
8+15      0.1324      0.44  |Q      V   |          |          |          |
8+20      0.1355      0.44  |Q      V   |          |          |          |
8+25      0.1385      0.44  |Q       V  |          |          |          |
8+30      0.1416      0.44  |Q       V  |          |          |          |
8+35      0.1447      0.46  |Q       V  |          |          |          |
8+40      0.1479      0.47  |Q       V  |          |          |          |
8+45      0.1512      0.47  |Q       V  |          |          |          |
8+50      0.1546      0.49  |Q        V  |          |          |          |
8+55      0.1580      0.50  |Q        V  |          |          |          |
9+ 0      0.1614      0.50  | Q       V  |          |          |          |
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 9+ 5       0.1651      0.53  | Q       V          |          |          |
 9+10       0.1689      0.56  | Q       |V         |          |          |
 9+15       0.1728      0.56  | Q       |V         |          |          |
 9+20       0.1768      0.58  | Q       |V         |          |          |
 9+25       0.1808      0.59  | Q       |V         |          |          |
 9+30       0.1849      0.59  | Q       | V        |          |          |
 9+35       0.1891      0.61  | Q       | V        |          |          |
 9+40       0.1933      0.62  | Q       | V        |          |          |
 9+45       0.1976      0.62  | Q       | V        |          |          |
 9+50       0.2019      0.64  | Q       |  V       |          |          |
 9+55       0.2064      0.65  | Q       |  V       |          |          |
10+ 0       0.2109      0.65  | Q       |  V       |          |          |
10+ 5       0.2145      0.53  | Q       |   V      |          |          |
10+10       0.2177      0.46  |Q        |   V      |          |          |
10+15       0.2207      0.44  |Q        |   V      |          |          |
10+20       0.2238      0.44  |Q        |   V      |          |          |
10+25       0.2268      0.44  |Q        |   V      |          |          |
10+30       0.2299      0.44  |Q        |    V     |          |          |
10+35       0.2335      0.52  | Q       |    V     |          |          |
10+40       0.2375      0.58  | Q       |    V     |          |          |
10+45       0.2415      0.59  | Q       |    V     |          |          |
10+50       0.2456      0.59  | Q       |     V    |          |          |
10+55       0.2496      0.59  | Q       |     V    |          |          |
11+ 0       0.2537      0.59  | Q       |     V    |          |          |
11+ 5       0.2576      0.57  | Q       |     V    |          |          |
11+10       0.2615      0.56  | Q       |      V   |          |          |
11+15       0.2654      0.56  | Q       |      V   |          |          |
11+20       0.2692      0.56  | Q       |      V   |          |          |
11+25       0.2731      0.56  | Q       |      V   |          |          |
11+30       0.2769      0.56  | Q       |       V  |          |          |
11+35       0.2806      0.53  | Q       |       V  |          |          |
11+40       0.2841      0.51  | Q       |       V  |          |          |
11+45       0.2875      0.50  | Q       |       V  |          |          |
11+50       0.2911      0.52  | Q       |        V |          |          |
11+55       0.2947      0.53  | Q       |        V |          |          |
12+ 0       0.2984      0.53  | Q       |        V |          |          |
12+ 5       0.3028      0.65  | Q       |        V |          |          |
12+10       0.3078      0.72  | Q       |         V          |          |
12+15       0.3129      0.74  | Q       |         V          |          |
12+20       0.3180      0.75  |  Q      |         V          |          |
12+25       0.3233      0.76  |  Q      |          V         |          |
12+30       0.3286      0.77  |  Q      |          V         |          |
12+35       0.3341      0.80  |  Q      |          V         |          |
12+40       0.3397      0.82  |  Q      |           V        |          |
12+45       0.3454      0.83  |  Q      |           V        |          |
12+50       0.3512      0.84  |  Q      |            V       |          |
12+55       0.3571      0.85  |  Q      |            V       |          |
13+ 0       0.3630      0.85  |  Q      |            V       |          |
13+ 5       0.3694      0.94  |  Q      |             V      |          |
13+10       0.3763      0.99  |  Q      |             V      |          |
13+15       0.3832      1.00  |   Q     |              V     |          |
13+20       0.3901      1.00  |   Q     |              V     |          |
13+25       0.3970      1.00  |   Q     |               V    |          |
13+30       0.4039      1.00  |   Q     |               V    |          |
13+35       0.4095      0.82  |  Q      |               V    |          |
13+40       0.4144      0.70  | Q       |                V   |          |
13+45       0.4190      0.68  | Q       |                V   |          |
13+50       0.4237      0.68  | Q       |                V   |          |
13+55       0.4284      0.68  | Q       |                 V  |          |
14+ 0       0.4330      0.68  | Q       |                 V  |          |
14+ 5       0.4382      0.74  | Q       |                 V  |          |
14+10       0.4436      0.79  |  Q      |                  V |          |
14+15       0.4491      0.80  |  Q      |                  V |          |
14+20       0.4544      0.78  |  Q      |                  V |          |
14+25       0.4597      0.77  |  Q      |                   V          |
14+30       0.4650      0.77  |  Q      |                   V          |
14+35       0.4703      0.77  |  Q      |                   V          |
14+40       0.4756      0.77  |  Q      |                    V         |
14+45       0.4808      0.77  |  Q      |                    V         |
14+50       0.4860      0.75  | Q       |                    V         |
14+55       0.4911      0.74  | Q       |                     V        |
15+ 0       0.4962      0.74  | Q       |                     V        |
15+ 5       0.5011      0.72  | Q       |                     V        |
15+10       0.5060      0.71  | Q       |                      V       |
15+15       0.5109      0.71  | Q       |                      V       |
15+20       0.5156      0.69  | Q       |                      V       |
15+25       0.5203      0.68  | Q       |                       V      |
15+30       0.5250      0.68  | Q       |                       V      |
15+35       0.5292      0.61  | Q       |                       V      |
15+40       0.5331      0.57  | Q       |                        V     |
15+45       0.5370      0.56  | Q       |                        V     |
15+50       0.5408      0.56  | Q       |                        V     |
15+55       0.5447      0.56  | Q       |                        V     |
16+ 0       0.5486      0.56  | Q       |                         V    |
16+ 5       0.5507      0.31  |Q        |                         V    |
16+10       0.5517      0.15  Q         |                         V    |
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16+15       0.5525      0.12  Q        |          |          |      V   |
16+20       0.5534      0.12  Q        |          |          |      V   |
16+25       0.5542      0.12  Q        |          |          |      V   |
16+30       0.5550      0.12  Q        |          |          |      V   |
16+35       0.5557      0.10  Q        |          |          |      V   |
16+40       0.5563      0.09  Q        |          |          |      V   |
16+45       0.5569      0.09  Q        |          |          |      V   |
16+50       0.5575      0.09  Q        |          |          |      V   |
16+55       0.5581      0.09  Q        |          |          |      V   |
17+ 0       0.5587      0.09  Q        |          |          |      V   |
17+ 5       0.5596      0.12  Q        |          |          |      V   |
17+10       0.5606      0.14  Q        |          |          |      V   |
17+15       0.5616      0.15  Q        |          |          |      V   |
17+20       0.5626      0.15  Q        |          |          |      V   |
17+25       0.5636      0.15  Q        |          |          |       V  |
17+30       0.5646      0.15  Q        |          |          |       V  |
17+35       0.5656      0.15  Q        |          |          |       V  |
17+40       0.5667      0.15  Q        |          |          |       V  |
17+45       0.5677      0.15  Q        |          |          |       V  |
17+50       0.5686      0.13  Q        |          |          |       V  |
17+55       0.5694      0.12  Q        |          |          |       V  |
18+ 0       0.5702      0.12  Q        |          |          |       V  |
18+ 5       0.5710      0.12  Q        |          |          |       V  |
18+10       0.5718      0.12  Q        |          |          |       V  |
18+15       0.5726      0.12  Q        |          |          |       V  |
18+20       0.5735      0.12  Q        |          |          |       V  |
18+25       0.5743      0.12  Q        |          |          |       V  |
18+30       0.5751      0.12  Q        |          |          |       V  |
18+35       0.5758      0.10  Q        |          |          |       V  |
18+40       0.5764      0.09  Q        |          |          |       V  |
18+45       0.5770      0.09  Q        |          |          |       V  |
18+50       0.5775      0.07  Q        |          |          |       V  |
18+55       0.5779      0.06  Q        |          |          |       V  |
19+ 0       0.5783      0.06  Q        |          |          |       V  |
19+ 5       0.5789      0.08  Q        |          |          |        V |
19+10       0.5794      0.09  Q        |          |          |        V |
19+15       0.5801      0.09  Q        |          |          |        V |
19+20       0.5808      0.10  Q        |          |          |        V |
19+25       0.5816      0.12  Q        |          |          |        V |
19+30       0.5824      0.12  Q        |          |          |        V |
19+35       0.5831      0.10  Q        |          |          |        V |
19+40       0.5837      0.09  Q        |          |          |        V |
19+45       0.5843      0.09  Q        |          |          |        V |
19+50       0.5848      0.07  Q        |          |          |        V |
19+55       0.5852      0.06  Q        |          |          |        V |
20+ 0       0.5856      0.06  Q        |          |          |        V |
20+ 5       0.5862      0.08  Q        |          |          |        V |
20+10       0.5868      0.09  Q        |          |          |        V |
20+15       0.5874      0.09  Q        |          |          |        V |
20+20       0.5880      0.09  Q        |          |          |        V |
20+25       0.5886      0.09  Q        |          |          |        V |
20+30       0.5892      0.09  Q        |          |          |        V |
20+35       0.5898      0.09  Q        |          |          |        V |
20+40       0.5904      0.09  Q        |          |          |        V |
20+45       0.5910      0.09  Q        |          |          |        V |
20+50       0.5915      0.07  Q        |          |          |        V |
20+55       0.5919      0.06  Q        |          |          |        V |
21+ 0       0.5923      0.06  Q        |          |          |        V |
21+ 5       0.5929      0.08  Q        |          |          |        V |
21+10       0.5935      0.09  Q        |          |          |        V |
21+15       0.5941      0.09  Q        |          |          |         V|
21+20       0.5946      0.07  Q        |          |          |         V|
21+25       0.5950      0.06  Q        |          |          |         V|
21+30       0.5954      0.06  Q        |          |          |         V|
21+35       0.5959      0.08  Q        |          |          |         V|
21+40       0.5965      0.09  Q        |          |          |         V|
21+45       0.5971      0.09  Q        |          |          |         V|
21+50       0.5976      0.07  Q        |          |          |         V|
21+55       0.5980      0.06  Q        |          |          |         V|
22+ 0       0.5984      0.06  Q        |          |          |         V|
22+ 5       0.5989      0.08  Q        |          |          |         V|
22+10       0.5995      0.09  Q        |          |          |         V|
22+15       0.6002      0.09  Q        |          |          |         V|
22+20       0.6007      0.07  Q        |          |          |         V|
22+25       0.6011      0.06  Q        |          |          |         V|
22+30       0.6015      0.06  Q        |          |          |         V|
22+35       0.6019      0.06  Q        |          |          |         V|
22+40       0.6023      0.06  Q        |          |          |         V|
22+45       0.6027      0.06  Q        |          |          |         V|
22+50       0.6031      0.06  Q        |          |          |         V|
22+55       0.6035      0.06  Q        |          |          |         V|
23+ 0       0.6039      0.06  Q        |          |          |         V|
23+ 5       0.6043      0.06  Q        |          |          |         V|
23+10       0.6047      0.06  Q        |          |          |         V|
23+15       0.6051      0.06  Q        |          |          |         V|
23+20       0.6055      0.06  Q        |          |          |         V|
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   23+25       0.6059      0.06  Q         |         |         |         v|
   23+30       0.6063      0.06  Q         |         |         |         v|
   23+35       0.6068      0.06  Q         |         |         |         v|
   23+40       0.6072      0.06  Q         |         |         |         v|
   23+45       0.6076      0.06  Q         |         |         |         v|
   23+50       0.6080      0.06  Q         |         |         |         v|
   23+55       0.6084      0.06  Q         |         |         |         v|
   24+ 0       0.6088      0.06  Q         |         |         |         v|
   24+ 5       0.6090      0.03  Q         |         |         |         v|
   24+10       0.6090      0.00  Q         |         |         |         v|
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Section 3

Riverside County Plates