

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

March 14, 2022

Scott Eddings
Huitt-Zollars
333 Rio Rancho Blvd.
Rio Rancho, NM 87124

**RE: Mesa Del Sol Innovation Park
Montage Unit 5 & 6
Grading and Drainage Plan / Report
Engineers Stamp Date: 1/24/22
(R16D003C)**

Mr. Eddings,

Based upon the information provided in your resubmittal received 3/8/2022, this plan is approved for Preliminary Plat.

PO Box 1293

Albuquerque

If you have any questions, please contact me at 924-3986 or earmijo@cabq.gov.

NM 87103

Sincerely,

www.cabq.gov

Ernest Armijo, P.E.
Principal Engineer, Planning Dept.
Development Review Services



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Montage Units 5 & 6 **Building Permit #:** _____ **Hydrology File #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: Tracts A-1-A-2 and A-1-A-3 Mesa del Sol Innovation Park
City Address: Vacant Land

Applicant: Cuesta Arriba LLC **Contact:** Tim McNaney
Address: 1301 Cuesta Arriba Ct NE, Suite A
Phone#: 505-433-5862 **Fax#:** _____ **E-mail:** tmcnaney@twilighthomesnm.com

Other Contact: Huitt-Zollars, Inc. **Contact:** Scott Eddings
Address: 333 Rio Rancho Blvd, Rio Rancho, NM 87124
Phone#: 505-235-7211 **Fax#:** _____ **E-mail:** seddings@huitt-zollars.com

TYPE OF DEVELOPMENT: X (260) PLAT (# of lots) _____ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL? X Yes _____ No

DEPARTMENT _____ TRANSPORTATION X HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
- ☐ GRADING PLAN
- ☒ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ OTHER (SPECIFY) _____
- ☐ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☒ PRELIMINARY PLAT APPROVAL
- ☐ SITE PLAN FOR SUB'D APPROVAL
- ☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ SO-19 APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ GRADING/ PAD CERTIFICATION
- ☐ WORK ORDER APPROVAL
- ☐ CLOMR/LOMR
- ☐ FLOODPLAIN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) _____

DATE SUBMITTED: December 30, 2021 **By:** Scott Eddings

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



**DRAINAGE STUDY
FOR
MONTAGE UNITS 5 & 6 DEVELOPMENT**

CITY OF ALBUQUERQUE

PREPARED FOR:



PREPARED BY:

HUITT-ZOLIARS

**333 RIO RANCHO BLVD., SUITE 101
RIO RANCHO, NEW MEXICO 87124**

DECEMBER 2021

HZI Project No. R313015.01



Drainage Study FOR Montage Units 5 & 6 Development

I, Kevin K. Banks, being first duly sworn upon my oath, state that I am a registered professional engineer, qualified in civil engineering and that the accompanying report was prepared by me or under my supervision and is true and correct to the best of my knowledge and belief.





Introduction.....	1
Flood Hazard Zone.....	1
Related Reports	1
Methodology	1
Existing Conditions	1
Proposed Conditions Hydrology.....	2
Proposed Conditions Hydraulics	2
Stormwater Quality	3
Conclusion	3

APPENDICES

Appendix A – FEMA Flood Insurance Rate Map.....	A
Appendix B – NOAA Atlas Point Precipitation Frequency Estimates and AHYMO Files	B
Appendix C – AHYMO Schematics, Input files, input information and summary files.....	C
Appendix D – Street Capacity Calculations	D
Appendix E – Basin Maps.....	E
Appendix F – StormCad Output	F



INTRODUCTION

This drainage report addresses the proposed infrastructure required to convey the storm water runoff from the proposed development of Montage Units 5 and 6 located south west of the Bobby Foster Road and University Boulevard intersection. This project will create a residential development in sub basins S, T, U, V, and J as shown on Exhibit 3 (Appendix E). Existing and proposed conditions have been analyzed to determine infrastructure requirements for the proposed development see Appendix C for calculations.

FLOOD HAZARD ZONE

The proposed site does not lie within a flood zone as shown on Flood Insurance Rate Map Number 35001C0555H, dated August 16, 2012. See Appendix A for the FEMA Flood Insurance Rate Map Firmette.

RELATED REPORTS

This report references the Drainage Report for Mesa del Sol Residential Montage Unit 1 and 2 by Bohannon Huston, Inc., dated January 14, 2011 (MDS). That report provided analysis for this project site and the surrounding area. All hydrology calculations were completed for the 100-year, 6-hour storm.

JURISDICTIONS OF PUBLIC AGENCIES

This project is located entirely within the City of Albuquerque (CoA) Municipal Limits and is therefore within their jurisdiction and must comply with the City's development requirements.

METHODOLOGY

This drainage report follows procedures outlined in the Development Process Manual, by City of Albuquerque (DPM). This report will utilize AHYMO for hydrology modeling to match modeling from the MDS report. See Appendix C for the AHYMO input and output files. The precipitation data has been updated according to NOAA Atlas Point Precipitation Frequency Estimates (Appendix B).

EXISTING CONDITIONS

The project site is currently undeveloped and generally slopes from northwest to southeast towards an existing playa. A portion of Bobby Foster Road drains toward the project site. University Boulevard drains south towards the playa. Refer to the Proposed Conditions Basin Map in Appendix E for existing and proposed flow patterns.

A series of retention ponds exists at the eastern boundary of this project site to capture flows from the west. A series of detention ponds exists within the project site to capture developed flows from an existing residential subdivision and the proposed developments of this project.



PROPOSED CONDITIONS HYDROLOGY

The project site is proposed for residential development. Please refer to the Basin Map in Appendix E for basin maps, Appendix C for characteristics including land treatment percentages, type of development, peak flows, and Appendix D inlet capacity calculations.

This project is located in MDS Basins S, T, U, V and is proposed to be a single-family residential development which will drain west towards an existing retention pond that is sized to accept developed runoff from MDS basins T, U, V and J.

The Montage Unit 6 development will collect and convey the runoff from MDS Basin V to Pond 1 as per the original MDS plan. While the Montage Unit 5 development will collect and convey the runoff from MDS Basins S, T, and enlarged Basin U to Ponds 1 and 2.

Original Study Basins			
Basin ID	Area (Acres)	Allowable Q per <u>MDS</u> (CFS)	Allowable V per <u>MDS</u> (AC-FT)
S*	8.2	Runoff Was Not Included in Original Study	
Park	2.43	7.1	0.21
T	15	70.7	2.43
U*	4.2	25.7	0.87
V	20.6	71.7	2.41
Totals	42.23	175.2	5.92

*MDS Basin S was not intended to drain to Pond 1 and MDS Basin U area was increased by 3.8 acres.

The proposed Montage Unit 5 and Unit 6 hydrologic model (with Pond 1 re-sizing) includes the proposed conditions model from the MDS plan for Pond 1 and Pond 2 to determine the effects on the entire system as shown below.

Pond 2

Study	Area (Sq. mi.)	Pond 2 Discharge	Pond 2 WSEL
MDS	0.1374	14.9	5299.84
Montage 5&6	0.1467	15.3	5299.98

PROPOSED CONDITIONS HYDRAULICS

METHODOLOGY

This drainage study uses StormCAD V8i to determine the capacity of proposed storm drain within the project. This drainage study also uses Flowmaster V8i to determine the capacity of the proposed and existing roadways.



StormCAD Criteria:

Mannings of 0.013 (Reinforced Concrete Pipe).

Headloss Method: HEC-22 Energy.

HEC-22 Benching Method: Flat

Flowmaster Criteria (Street Flow):

Mannings of 0.017 (asphalt).

Proposed street widths used for calculations 29 feet

Assumed 8" Curb Height

ULTIMATE DEVELOPED HYDRAULICS

For the flowrates contributing to the stormdrain system please refer to Section IV. Hydrology. This model was created to ensure the downstream infrastructure has the capacity for the fully developed subdivision. The Ultimate Developed storm drain model is presented in Appendix D and uses the criteria defined above. The proposed storm drain system collects on-site drainage and conveys it to Pond 1 and Pond 2 by street flow and a storm drain in Diekenborn Drive SE. The storm drain sizes of the on-site infrastructure are proposed to be RCP. The capacity of Pond 1 will be increased from 6.12 ac-ft to 7.76 ac-ft to account for the addition of MDS Basin S and the enlargement of MDS Basin U.

The output for the Flowmaster output for the street flow calculations are presented in Appendix D. The criteria used for the street flow calculations are presented above in the Methodology section. All the streets have the capacity for the proposed flowrates.

STORMWATER QUALITY

As part of compliance with the stormwater quality program implemented by the City of Albuquerque in cooperation with the EPA, the existing and proposed detention and retention ponds will serve as a dual use stormwater quality management and flood control device. With the utilization of the ponds, the stormwater released within the project limits will be effectively treated.

CONCLUSION

This report provides a conceptual design and analysis of proposed improvements to safely manage stormwater generated within the project site. In addition to stormwater management, this project will integrate techniques to improve stormwater quality. For a detailed design, please refer to the construction plans to be completed in conjunction with this drainage study.

APPENDIX A

FEMA FIRMETTE

National Flood Hazard Layer FIRMette



106°37'41"W 34°59'36"N



USGS The National Map: Orthoimagery. Data refreshed October, 2020.

0 250 500 1,000 1,500 2,000 Feet

1:6,000

106°37'4"W 34°59'7"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **10/19/2020 at 5:51 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX B

NOAA POINT PRECIPITATION FREQUENCY ESTIMATES



NOAA Atlas 14, Volume 1, Version 5
Location name: Albuquerque, New Mexico,
USA*

Latitude: 34.9913°, Longitude: -106.6213°

Elevation: 5302.6 ft**

* source: ESRI Maps

** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aerials](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.179 (0.155-0.207)	0.232 (0.200-0.268)	0.310 (0.267-0.358)	0.370 (0.318-0.426)	0.453 (0.387-0.520)	0.516 (0.439-0.593)	0.583 (0.493-0.670)	0.654 (0.548-0.750)	0.748 (0.621-0.860)	0.823 (0.679-0.946)
10-min	0.272 (0.236-0.315)	0.352 (0.304-0.408)	0.472 (0.406-0.545)	0.563 (0.484-0.648)	0.689 (0.589-0.791)	0.786 (0.668-0.903)	0.888 (0.750-1.02)	0.995 (0.833-1.14)	1.14 (0.945-1.31)	1.25 (1.03-1.44)
15-min	0.338 (0.293-0.390)	0.437 (0.377-0.506)	0.585 (0.503-0.675)	0.698 (0.599-0.803)	0.854 (0.730-0.981)	0.974 (0.829-1.12)	1.10 (0.929-1.26)	1.23 (1.03-1.41)	1.41 (1.17-1.62)	1.55 (1.28-1.79)
30-min	0.455 (0.394-0.525)	0.589 (0.508-0.681)	0.787 (0.678-0.909)	0.940 (0.807-1.08)	1.15 (0.983-1.32)	1.31 (1.12-1.51)	1.48 (1.25-1.70)	1.66 (1.39-1.90)	1.90 (1.58-2.19)	2.09 (1.72-2.40)
60-min	0.563 (0.488-0.650)	0.729 (0.629-0.842)	0.974 (0.839-1.13)	1.16 (0.999-1.34)	1.42 (1.22-1.64)	1.62 (1.38-1.86)	1.83 (1.55-2.11)	2.06 (1.72-2.36)	2.35 (1.95-2.70)	2.59 (2.13-2.98)
2-hr	0.640 (0.553-0.753)	0.819 (0.705-0.964)	1.08 (0.930-1.27)	1.29 (1.11-1.51)	1.58 (1.34-1.84)	1.82 (1.53-2.11)	2.06 (1.73-2.40)	2.32 (1.93-2.69)	2.68 (2.20-3.11)	2.97 (2.42-3.45)
3-hr	0.678 (0.591-0.794)	0.862 (0.749-1.01)	1.13 (0.980-1.32)	1.34 (1.16-1.56)	1.63 (1.40-1.90)	1.87 (1.59-2.16)	2.12 (1.79-2.45)	2.38 (2.00-2.76)	2.75 (2.28-3.18)	3.05 (2.50-3.53)
6-hr	0.788 (0.688-0.915)	0.991 (0.868-1.15)	1.27 (1.12-1.48)	1.50 (1.31-1.73)	1.80 (1.56-2.08)	2.04 (1.76-2.35)	2.29 (1.96-2.64)	2.55 (2.17-2.93)	2.91 (2.45-3.35)	3.20 (2.67-3.69)
12-hr	0.875 (0.771-0.994)	1.10 (0.973-1.25)	1.39 (1.23-1.58)	1.62 (1.42-1.84)	1.93 (1.69-2.19)	2.17 (1.89-2.45)	2.42 (2.09-2.73)	2.67 (2.29-3.02)	3.01 (2.56-3.42)	3.29 (2.77-3.74)
24-hr	0.985 (0.879-1.11)	1.23 (1.10-1.39)	1.54 (1.37-1.74)	1.79 (1.59-2.01)	2.12 (1.88-2.38)	2.37 (2.09-2.66)	2.63 (2.32-2.95)	2.90 (2.54-3.24)	3.25 (2.83-3.65)	3.53 (3.06-3.96)
2-day	1.05 (0.938-1.17)	1.31 (1.18-1.46)	1.63 (1.46-1.82)	1.88 (1.69-2.09)	2.22 (1.98-2.47)	2.48 (2.21-2.76)	2.75 (2.44-3.05)	3.02 (2.67-3.35)	3.38 (2.97-3.76)	3.65 (3.20-4.07)
3-day	1.13 (1.03-1.24)	1.41 (1.28-1.55)	1.74 (1.58-1.91)	2.00 (1.82-2.19)	2.34 (2.13-2.57)	2.61 (2.36-2.86)	2.88 (2.60-3.15)	3.15 (2.83-3.45)	3.50 (3.14-3.84)	3.77 (3.37-4.14)
4-day	1.22 (1.12-1.32)	1.51 (1.39-1.64)	1.84 (1.70-2.00)	2.11 (1.95-2.28)	2.47 (2.27-2.67)	2.74 (2.52-2.96)	3.01 (2.76-3.25)	3.27 (2.99-3.54)	3.63 (3.31-3.92)	3.89 (3.54-4.22)
7-day	1.40 (1.30-1.52)	1.74 (1.61-1.88)	2.11 (1.95-2.28)	2.40 (2.22-2.59)	2.78 (2.57-2.99)	3.07 (2.83-3.30)	3.35 (3.08-3.60)	3.61 (3.33-3.89)	3.96 (3.64-4.26)	4.21 (3.85-4.54)
10-day	1.54 (1.43-1.67)	1.92 (1.77-2.07)	2.34 (2.17-2.52)	2.67 (2.48-2.87)	3.11 (2.88-3.34)	3.43 (3.17-3.69)	3.76 (3.47-4.03)	4.08 (3.75-4.38)	4.49 (4.12-4.83)	4.80 (4.38-5.16)
20-day	1.96 (1.81-2.12)	2.43 (2.25-2.63)	2.95 (2.73-3.18)	3.34 (3.10-3.59)	3.84 (3.55-4.12)	4.19 (3.88-4.50)	4.54 (4.19-4.87)	4.86 (4.48-5.21)	5.27 (4.85-5.65)	5.55 (5.11-5.96)
30-day	2.34 (2.17-2.52)	2.90 (2.69-3.12)	3.49 (3.24-3.74)	3.92 (3.64-4.20)	4.46 (4.13-4.77)	4.85 (4.48-5.18)	5.21 (4.82-5.57)	5.55 (5.12-5.93)	5.95 (5.49-6.36)	6.23 (5.74-6.66)
45-day	2.84 (2.64-3.04)	3.51 (3.27-3.76)	4.18 (3.90-4.47)	4.65 (4.34-4.97)	5.22 (4.88-5.58)	5.61 (5.24-5.99)	5.96 (5.57-6.35)	6.27 (5.85-6.67)	6.60 (6.17-7.02)	6.79 (6.37-7.22)
60-day	3.28 (3.06-3.53)	4.06 (3.78-4.36)	4.84 (4.51-5.18)	5.39 (5.03-5.77)	6.05 (5.64-6.47)	6.50 (6.07-6.95)	6.91 (6.45-7.39)	7.28 (6.79-7.78)	7.68 (7.18-8.21)	7.94 (7.43-8.48)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

APPENDIX C

AHYMO FILES AND INPUTS

```

START                TIME=0.0 CODE 0 LINES -6
LOCATION              Bernalillo
*S
*S      Montage Unit 5
*S
*S      HYMO PER JAN 1997 DPM REVISIONS
*S*****
RAINFALL              TYPE=-1 RAIN QUAR=0.0 RAIN ONE=1.83
                      RAIN SIX=2.29 RAIN DAY=2.63 DT=0.0
*S*****
*S*****
*S
*S      This model combines the runoff from Montage Units 5 and 6
*S
*S*****
*S*****
*S
*S      Montage Unit 5 Proposed Conditions
*S
*S*****
*S*****
*S-----
*S Fully Developed Site Therefore no Sediment Bulking
*S-----
*S----- COMPUTE FLOWS TO AP 1-----
*S-----
*S COMPUTE Developed BASIN 102
COMPUTE NM HYD        ID=1 HYD=102 AREA=0.0030 SQ MI
                      %A=0 %B=29 %C=29 %D=42 TP=-.1333 HR
                      MASS RAINFALL=-1
PRINT HYD             ID=1 CODE=1
*S-----
*S COMPUTE Developed BASIN 104
COMPUTE NM HYD        ID=2 HYD=104 AREA=0.0050 SQ MI
                      %A=0 %B=24 %C=24 %D=52 TP=-.1333 HR
                      MASS RAINFALL=-1
PRINT HYD             ID=2 CODE=1
*S-----
*S COMPUTE Developed BASIN 105
COMPUTE NM HYD        ID=3 HYD=105 AREA=0.0030 SQ MI
                      %A=0 %B=28 %C=28 %D=44 TP=-.1333 HR
                      MASS RAINFALL=-1
PRINT HYD             ID=3 CODE=1
*S-----
*S COMPUTE Developed BASIN 107
COMPUTE NM HYD        ID=4 HYD=107 AREA=0.0086 SQ MI
                      %A=0 %B=31 %C=31 %D=38 TP=-.1333 HR
                      MASS RAINFALL=-1
PRINT HYD             ID=4 CODE=1
*S-----
*S COMPUTE Developed BASIN 108
COMPUTE NM HYD        ID=6 HYD=108 AREA=0.0020 SQ MI
                      %A=0 %B=100 %C=0 %D=0 TP=-.1333 HR
                      MASS RAINFALL=-1

```

```

PRINT HYD                      ID=6 CODE=1
*S-----
*S-----COMBINE AP 1 TOTAL FLOWS-----
*S-----THESE FLOW DOWN DIEKENBORN TO AP-2-----
*S-----
*S Add Basins 102, 104, 105, 107, & 108
ADD HYD                      ID=15 HYD=AP1 IDi=1 IDii=2
ADD HYD                      ID=15 HYD=AP1 IDi=15 IDii=3
ADD HYD                      ID=15 HYD=AP1 IDi=15 IDii=4
ADD HYD                      ID=15 HYD=AP1 IDi=15 IDii=6
PRINT HYD                    ID=15 CODE=1
*S-----
*S----- COMPUTE FLOWS TO AP 2-----
*S----- THESE FLOWS GO TO POND 1-----
*S COMPUTE Developed BASIN 101
COMPUTE NM HYD              ID=1 HYD=101 AREA=0.0015 SQ MI
                           %A=0 %B=34 %C=34 %D=32 TP=-.1333 HR
                           MASS RAINFALL=-1
PRINT HYD                    ID=1 CODE=1
*S-----
*S COMPUTE Developed BASIN 110
COMPUTE NM HYD              ID=2 HYD=110 AREA=0.0057 SQ MI
                           %A=0 %B=19 %C=19 %D=62 TP=-.1333 HR
                           MASS RAINFALL=-1
PRINT HYD                    ID=2 CODE=1
*S-----
*S COMPUTE Developed BASIN 111
COMPUTE NM HYD              ID=3 HYD=111 AREA=0.0057 SQ MI
                           %A=0 %B=20 %C=20 %D=60 TP=-.1333 HR
                           MASS RAINFALL=-1
PRINT HYD                    ID=3 CODE=1
*S-----
*S COMPUTE Developed BASIN 112
COMPUTE NM HYD              ID=4 HYD=112 AREA=0.0027 SQ MI
                           %A=0 %B=22 %C=22 %D=56 TP=-.1333 HR
                           MASS RAINFALL=-1
PRINT HYD                    ID=4 CODE=1
*S-----
*S COMPUTE Developed BASIN 113
COMPUTE NM HYD              ID=6 HYD=113 AREA=0.0037 SQ MI
                           %A=0 %B=25 %C=25 %D=50 TP=-.1333 HR
                           MASS RAINFALL=-1
PRINT HYD                    ID=6 CODE=1
*S-----
*S COMPUTE Developed BASIN 115
COMPUTE NM HYD              ID=7 HYD=115 AREA=0.0004 SQ MI
                           %A=0 %B=42 %C=0 %D=58 TP=-.1333 HR
                           MASS RAINFALL=-1
PRINT HYD                    ID=7 CODE=1
*S-----
*S COMPUTE Developed BASIN 117
COMPUTE NM HYD              ID=8 HYD=117 AREA=0.0033 SQ MI
                           %A=0 %B=46 %C=47 %D=7 TP=-.1333 HR
                           MASS RAINFALL=-1

```

```

PRINT HYD                      ID=8 CODE=1
*S-----
*S-----COMBINE AP 2 TOTAL FLOWS-----
*S-----THESE FLOWS GO TO POND 1-----
*S Add Basins 101, 110, 111, 112, 113, 115, 117, & AP-1
ADD HYD                      ID=20 HYD=AP2 IDi=1 IDii=2
ADD HYD                      ID=20 HYD=AP2 IDi=20 IDii=3
ADD HYD                      ID=20 HYD=AP2 IDi=20 IDii=4
ADD HYD                      ID=20 HYD=AP2 IDi=20 IDii=6
ADD HYD                      ID=20 HYD=AP2 IDi=20 IDii=7
ADD HYD                      ID=20 HYD=AP2 IDi=20 IDii=8
ADD HYD                      ID=20 HYD=AP2 IDi=20 IDii=15
PRINT HYD                      ID=20 CODE=1
*S-----
*S-----COMPUTE FLOWS TO AP 3-----
*S-----THESE FLOWS GO TO POND 2-----
*S COMPUTE Developed BASIN 103
COMPUTE NM HYD                ID=1 HYD=103 AREA=0.0020 SQ MI
                                %A=0 %B=23 %C=23 %D=54 TP=-.1333 HR
                                MASS RAINFALL=-1
PRINT HYD                      ID=1 CODE=1
*S-----
*S COMPUTE Developed BASIN 109
COMPUTE NM HYD                ID=2 HYD=109 AREA=0.0013 SQ MI
                                %A=0 %B=100 %C=0 %D=0 TP=-.1333 HR
                                MASS RAINFALL=-1
PRINT HYD                      ID=2 CODE=1
*S-----
*S COMPUTE Developed BASIN 106
COMPUTE NM HYD                ID=3 HYD=106 AREA=0.0031 SQ MI
                                %A=0 %B=31 %C=31 %D=38 TP=-.1333 HR
                                MASS RAINFALL=-1
PRINT HYD                      ID=3 CODE=1
*S-----
*S COMPUTE Developed BASIN 114
COMPUTE NM HYD                ID=4 HYD=114 AREA=0.0018 SQ MI
                                %A=0 %B=24 %C=24 %D=52 TP=-.1333 HR
                                MASS RAINFALL=-1
PRINT HYD                      ID=4 CODE=1
*S-----
*S COMPUTE Developed BASIN 116
COMPUTE NM HYD                ID=6 HYD=116 AREA=0.0005 SQ MI
                                %A=0 %B=46 %C=47 %D=7 TP=-.1333 HR
                                MASS RAINFALL=-1
PRINT HYD                      ID=6 CODE=1
*S-----
*S COMPUTE Developed BASIN 118
COMPUTE NM HYD                ID=7 HYD=118 AREA=0.0037 SQ MI
                                %A=0 %B=24 %C=24 %D=52 TP=-.1333 HR
                                MASS RAINFALL=-1
PRINT HYD                      ID=7 CODE=1
*S-----
*S-----COMBINE AP 3 TOTAL FLOWS-----
*S-----THESE FLOWS GO TO POND 2-----

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*S Add Basins 103, 109, 106, 114, 116, & 118
ADD HYD          ID=25 HYD=AP3 IDi=1 IDii=2
ADD HYD          ID=25 HYD=AP3 IDi=25 IDii=3
ADD HYD          ID=25 HYD=AP3 IDi=25 IDii=4
ADD HYD          ID=25 HYD=AP3 IDi=25 IDii=6
ADD HYD          ID=25 HYD=AP3 IDi=25 IDii=7
PRINT HYD        ID=25 CODE=1
*S*****
*S*****
*S
*S          Begin Montage Unit 6 Proposed Conditions
*S
*S*****
*S*****
*S-----
*S Fully Developed Site Therefore no Sediment Bulking
*S-----
*S COMPUTE Developed BASIN 10
COMPUTE NM HYD    ID=1 HYD=B10 AREA=0.0042 SQ MI
                  %A=0 %B=26 %C=26 %D=48 TP=-.1333 HR
                  MASS RAINFALL=-1
PRINT HYD        ID=1 CODE=1
*S-----
*S COMPUTE Developed BASIN 30
COMPUTE NM HYD    ID=3 HYD=B30 AREA=0.0004 SQ MI
                  %A=0 %B=0 %C=0 %D=100 TP=-.1333 HR
                  MASS RAINFALL=-1
PRINT HYD        ID=3 CODE=1
*S-----
*S-----COMBINE AP 2 WITH BASINS 10 & 30-----
*S-----
*S Add Basin 10 and AP 2
ADD HYD          ID=5 HYD=SUM1 IDi=1 IDii=20
PRINT HYD        ID=5 CODE=1
*S Add Basin 10 AP 2 and Basin 30
ADD HYD          ID=5 HYD=SUM1 IDi=5 IDii=3
PRINT HYD        ID=5 CODE=1
*S-----
*S COMPUTE Developed BASIN 100
COMPUTE NM HYD    ID=4 HYD=B100 AREA=0.0015 SQ MI
                  %A=0 %B=29 %C=29 %D=42 TP=-.1333 HR
                  MASS RAINFALL=-1
PRINT HYD        ID=4 CODE=1
*S-----
*S Add Basin 100 and SUM 1
ADD HYD          ID=5 HYD=SUM2 IDi=5 IDii=4
PRINT HYD        ID=5 CODE=1
*S-----
*S COMPUTE Developed BASIN 40
COMPUTE NM HYD    ID=2 HYD=B40 AREA=0.0057 SQ MI
                  %A=0 %B=22 %C=22 %D=56 TP=-.1333 HR
                  MASS RAINFALL=-1
PRINT HYD        ID=2 CODE=1
*S-----

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```

*S Add Basins 40 to SUM 2
ADD HYD          ID=5 HYD=SUM3 IDi=2 IDii=5
PRINT HYD        ID=5 CODE=1
*S-----
*S COMPUTE Developed BASIN 50
COMPUTE NM HYD   ID=2 HYD=B50 AREA=0.0007 SQ MI
                  %A=0 %B=29% C=0% D=71% TP=-.1333 HR
                  MASS RAINFALL=-1
PRINT HYD        ID=2 CODE=1
*S-----
*S Add Basins 50 to SUM 3
ADD HYD          ID=5 HYD=SUM4 IDi=2 IDii=5
PRINT HYD        ID=5 CODE=1
*S-----
*S COMPUTE Developed BASIN 80
COMPUTE NM HYD   ID=8 HYD=B80 AREA=0.0018 SQ MI
                  %A=0 %B=21 %C=21 %D=58 TP=-.1333 HR
                  MASS RAINFALL=-1
PRINT HYD        ID=8 CODE=1
*S-----
*S Add Basin 80 to SUM 4
ADD HYD          ID=5 HYD=SUM5 IDi=8 IDii=5
PRINT HYD        ID=5 CODE=1
*S-----
*S COMPUTE Developed BASIN 110
COMPUTE NM HYD   ID=1 HYD=B110 AREA=0.0025 SQ MI
                  %A=0 %B=29 %C=29 %D=42 TP=-.1333 HR
                  MASS RAINFALL=-1
PRINT HYD        ID=1 CODE=1
*S-----
*S-----
*S Total Flows to Inlet 2 These flows go to Pond 1
*S Add Basin 110 to SUM 5
ADD HYD          ID=40 HYD=INL2 IDi=1 IDii=5
PRINT HYD        ID=40 CODE=1
*S-----
*S-----
*S COMPUTE Developed Park Basin
COMPUTE NM HYD   ID=10 HYD=Park AREA=0.0038 SQ MI
                  %A=0 %B=46 %C=47 %D=7 TP=-.1333 HR
                  MASS RAINFALL=-1
PRINT HYD        ID=10 CODE=1
*S-----
*S COMPUTE Developed BASIN 120
COMPUTE NM HYD   ID=1 HYD=B120 AREA=0.0014 SQ MI
                  %A=0 %B=29 %C=29 %D=42 TP=-.1333 HR
                  MASS RAINFALL=-1
PRINT HYD        ID=1 CODE=1
*S-----
*S COMPUTE Developed BASIN 70
COMPUTE NM HYD   ID=2 HYD=70 AREA=0.0065 SQ MI
                  %A=0 %B=25 %C=25 %D=50 TP=-.1333 HR
                  MASS RAINFALL=-1
PRINT HYD        ID=2 CODE=1

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*S-----
*S Add Park Basin to Basin 120
ADD HYD          ID=45 HYD=INL1 IDi=10 IDii=1
PRINT HYD        ID=45 CODE=1
*S-----
*S-----
*S Total Flows to Inlet 1
*S Add Basin 70 to INL1
ADD HYD          ID=45 HYD=INL1 IDi=45 IDii=2
PRINT HYD        ID=45 CODE=1
*S-----
*S-----
*S COMPUTE Developed BASIN 20
COMPUTE NM HYD   ID=50 HYD=B50 AREA=0.0029 SQ MI
                  %A=0 %B=28 %C=28 %D=44 TP=-.1333 HR
                  MASS RAINFALL=-1
PRINT HYD        ID=50 CODE=1
*S-----
*S-----
*S Add AP 3 to Basin 20 These Basins flow to Pond 2
ADD HYD          ID=60 HYD=INL4 IDi=50 IDii=25
PRINT HYD        ID=60 CODE=1
*S-----
*S COMPUTE Developed BASIN 60
COMPUTE NM HYD   ID=2 HYD=B60 AREA=0.0007 SQ MI
                  %A=0 %B=29 %C=0 %D=71 TP=-.1333 HR
                  MASS RAINFALL=-1
PRINT HYD        ID=2 CODE=1
*S-----
*S COMPUTE Developed BASIN 90
COMPUTE NM HYD   ID=1 HYD=B90 AREA=0.0015 SQ MI
                  %A=0 %B=29 %C=29 %D=42 TP=-.1333 HR
                  MASS RAINFALL=-1
PRINT HYD        ID=1 CODE=1
*S-----
*S-----
*S Total Flows to Inlet 3 These Basins flow to Pond 1
*S Add Basins 60 and Basin 90
ADD HYD          ID=70 HYD=INL3 IDi=2 IDii=1
PRINT HYD        ID=70 CODE=1
*S-----
*S-----Combine all flows for routing through Pond 1-----
*S-----
*S Add Inlets
ADD HYD          ID=80 HYD=INP1 IDi=70 IDii=45
PRINT HYD        ID=80 CODE=1
ADD HYD          ID=80 HYD=Pond IDi=80 IDii=40
PRINT HYD        ID=80 CODE=1
*S-----
*S-----
*S ROUTE BASINS THROUGH POND 1 to Pond 2 (ASSUMES 48" OUTLET PIPE)
ROUTE RESERVOIR  ID=85 HYD=POND1 INFLOW=80 CODE=20
                  OUTFLOW    STORAGE    ELEV
                  0.01      0.11      5294

```

0.01	0.28	5295
0.02	0.59	5296
0.03	1.01	5297
0.04	1.56	5298
0.05	2.17	5299
0.06	2.28	5300
45.1	3.77	5301
45.2	4.93	5302
45.3	6.73	5303
45.4	7.76	5304

PRINT HYD ID=85 CODE=20

*S-----

*S--Combine Pond 1 outflows and all Montage flows for routing through Pond 2

*S-----

*S Add AP 3 and Basin 20

ADD HYD ID=95 HYD=Pond 2 IDi=60 IDii=85

PRINT HYD ID=95 CODE=1

*S-----

*S-----Calculate MDS Basins W-1 W-2 W-3 X J Bobby Foster and Y-1---

*S-----

*S BASIN W-1

COMPUTE NM HYD ID=91 HYD NO=BASIN.W1 DA=0.0048 SQ MI
PER A=0.0 PER B=5.0 PER C=5.0 PER D=90.0
TP=-.1333 HR MASSRAIN=-1

PRINT HYD ID=91 CODE=1

*S-----

*S BASIN W-2

COMPUTE NM HYD ID=92 HYD NO=BASIN.W2 DA=0.0092 SQ MI
PER A=0.0 PER B=25.0 PER C=25.0 PER D=50.0
TP=-.1333 HR MASSRAIN=-1

PRINT HYD ID=92 CODE=1

*S-----

*S BASIN W-3

COMPUTE NM HYD ID=93 HYD NO=BASIN.W3 DA=0.0128 SQ MI
PER A=0.0 PER B=15.0 PER C=15.0 PER D=70.0
TP=-.1333 HR MASSRAIN=-1

PRINT HYD ID=93 CODE=1

*S-----

*S BASIN J

COMPUTE NM HYD ID=94 HYD NO=BASIN.J DA=0.0192 SQ MI
PER A=0.0 PER B=27.0 PER C=27.0 PER D=46.0
TP=-.1333 HR MASSRAIN=-1

PRINT HYD ID=94 CODE=1

*S-----

*S BASIN X

COMPUTE NM HYD ID=95 HYD NO=BASIN.X DA=0.0080 SQ MI
PER A=0.0 PER B=15.0 PER C=15.0 PER D=70.0
TP=-.1333 HR MASSRAIN=-1

PRINT HYD ID=95 CODE=1

*S-----

*S BASIN BOBBY FOSTER

COMPUTE NM HYD ID=96 HYD NO=BASIN.BF DA=0.0094 SQ MI
PER A=0.0 PER B=22.0 PER C=0.0 PER D=78.0

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TP=-.1333 HR    MASSRAIN=-1
PRINT HYD      ID=96    CODE=1
*S-----
*S BASIN Y-1
COMPUTE NM HYD  ID=97 HYD NO=BASIN.Y1  DA=0.0080 SQ MI
PER A=0.0 PER B=15.0 PER C=15.0 PER D=70.0
TP=-.1333 HR    MASSRAIN=-1
PRINT HYD      ID=97    CODE=1
*S-----
*S-----
*S-----
*S-----Combine Remaining MDS Basins -----
*S-----
*S-----
ADD HYD          ID=99 HYD=SUM IDi=91 IDii=92
ADD HYD          ID=99 HYD=SUM IDi=99 IDii=93
ADD HYD          ID=99 HYD=SUM IDi=99 IDii=94
ADD HYD          ID=99 HYD=SUM IDi=99 IDii=95
ADD HYD          ID=99 HYD=SUM IDi=99 IDii=96
ADD HYD          ID=99 HYD=SUM IDi=99 IDii=97
PRINT HYD        ID=99 CODE=1
*S Add Combined MDS Basin to Pond 1 Outflow
ADD HYD          ID=26 HYD=In IDi=85 IDii=99
PRINT HYD        ID=26 CODE=1
*S-----
*S ROUTE BASINS THROUGH POND 2A (ASSUMES 18" OUTLET PIPE)
ROUTE RESERVOIR  ID=95 HYD=POND.2A INFLOW=26 CODE=20
OUTFLOW    STORAGE    ELEV
0.01        0.01        5294
0.02          0.61        5295
0.03          1.47        5296
4.25          2.56        5297
9.51          3.91        5298
12.76          5.59        5299
15.33          7.65        5300
PRINT HYD      ID=95 CODE=20
FINISH

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□(s16.67h8.5v0T□&l8D

AHYMO PROGRAM SUMMARY TABLE (AHYMO-S4)

- Ver. S4.01a, Rel: 01a

RUN DATE (MON/DAY/YR) =12/22/2021

INPUT FILE = Hydro\05.13.2 Hydrology\AHYMO\Full System\Montage 5 and 6 Combined 12-10.txt USER NO.= AHYMO_Temp_User:20122010

[illegible]

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*S-----
*S Add Basins 102, 104, 105, 107, & 108
ADD HYD          AP1  1& 2  15      0.00800      18.39      0.628      1.47119      1.530      3.592
ADD HYD          AP1 15& 3  15      0.01100      25.16      0.856      1.45850      1.530      3.573
ADD HYD          AP1 15& 4  15      0.01960      43.95      1.479      1.41490      1.535      3.504
ADD HYD          AP1 15& 6  15      0.02160      47.09      1.568      1.36101      1.535      3.406
*S-----
*S----- COMPUTE FLOWS TO AP 2-----
*S----- THESE FLOWS GO TO POND 1-----
*S COMPUTE Developed BASIN 101
COMPUTE NM HYD    101.00  -      1      0.00150      3.20      0.103      1.29353      1.535      3.333 PER IMP= 32.00
*S-----
*S COMPUTE Developed BASIN 110
COMPUTE NM HYD    110.00  -      2      0.00570      13.94      0.493      1.62164      1.530      3.822 PER IMP= 62.00
*S-----
*S COMPUTE Developed BASIN 111
COMPUTE NM HYD    111.00  -      3      0.00570      13.82      0.486      1.59977      1.530      3.788 PER IMP= 60.00
*S-----
*S COMPUTE Developed BASIN 112
COMPUTE NM HYD    112.00  -      4      0.00270      6.44      0.224      1.55602      1.530      3.727 PER IMP= 56.00
*S-----
*S COMPUTE Developed BASIN 113
COMPUTE NM HYD    113.00  -      6      0.00370      8.58      0.294      1.49040      1.530      3.622 PER IMP= 50.00
*S-----
*S COMPUTE Developed BASIN 115
COMPUTE NM HYD    115.00  -      7      0.00040      0.94      0.033      1.53145      1.530      3.682 PER IMP= 58.00
*S-----
*S COMPUTE Developed BASIN 117

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□□□

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 2 NOTATION
COMPUTE NM HYD	117.00	-	8	0.00330	6.14	0.180	1.02127	1.540	2.909	PER IMP= 7.00
*S-----										
*S-----COMBINE AP 2 TOTAL FLOWS-----										
*S-----THESE FLOWS GO TO POND 1-----										
*S Add Basins 101, 110, 111, 112, 113, 115, 117, & AP-1										
ADD HYD	AP2 1& 2	20		0.00720	17.14	0.596	1.55321	1.530	3.720	
ADD HYD	AP2 20& 3	20		0.01290	30.96	1.083	1.57376	1.530	3.750	
ADD HYD	AP2 20& 4	20		0.01560	37.40	1.307	1.57067	1.530	3.746	
ADD HYD	AP2 20& 6	20		0.01930	45.98	1.601	1.55527	1.530	3.722	
ADD HYD	AP2 20& 7	20		0.01970	46.92	1.634	1.55477	1.530	3.721	
ADD HYD	AP2 20& 8	20		0.02300	53.05	1.813	1.47822	1.530	3.604	
ADD HYD	AP2 20&15	20		0.04460	100.12	3.381	1.42145	1.530	3.508	
*S-----										
*S-----COMPUTE FLOWS TO AP 3-----										
*S-----THESE FLOWS GO TO POND 2-----										
*S COMPUTE Developed BASIN 103										
COMPUTE NM HYD	103.00	-	1	0.00200	4.73	0.164	1.53414	1.530	3.697	PER IMP= 54.00
*S-----										
*S COMPUTE Developed BASIN 109										
COMPUTE NM HYD	109.00	-	2	0.00130	2.04	0.058	0.83296	1.540	2.456	PER IMP= 0.00
*S-----										
*S COMPUTE Developed BASIN 106										
COMPUTE NM HYD	106.00	-	3	0.00310	6.79	0.225	1.35915	1.535	3.422	PER IMP= 38.00
*S-----										
*S COMPUTE Developed BASIN 114										
COMPUTE NM HYD	114.00	-	4	0.00180	4.22	0.145	1.51227	1.530	3.665	PER IMP= 52.00
*S-----										
*S COMPUTE Developed BASIN 116										
COMPUTE NM HYD	116.00	-	6	0.00050	0.95	0.027	1.02127	1.540	2.959	PER IMP= 7.00
*S-----										
*S COMPUTE Developed BASIN 118										
COMPUTE NM HYD	118.00	-	7	0.00370	8.66	0.298	1.51227	1.530	3.656	PER IMP= 52.00
*S-----										
*S-----COMBINE AP 3 TOTAL FLOWS-----										
*S-----THESE FLOWS GO TO POND 2-----										
*S Add Basins 103, 109, 106, 114, 116, & 118										
ADD HYD	AP3 1& 2	25		0.00330	6.77	0.221	1.25782	1.535	3.205	
ADD HYD	AP3 25& 3	25		0.00640	13.56	0.446	1.30686	1.535	3.310	
ADD HYD	AP3 25& 4	25		0.00820	17.78	0.591	1.35192	1.535	3.388	
ADD HYD	AP3 25& 6	25		0.00870	18.73	0.618	1.33255	1.535	3.363	
ADD HYD	AP3 25& 7	25		0.01240	27.38	0.917	1.38616	1.535	3.450	
*S*****										
*S*****										
*S										
*S Begin Montage Unit 6 Proposed Conditions										

```

*S
*S*****
*S*****
*S-----
*S Fully Developed Site Therefore no Sediment Bulking
*S-----
*S COMPUTE Developed BASIN 10
COMPUTE NM HYD      B10  -    1      0.00420      9.64      0.329      1.46852      1.530      3.588 PER IMP=  48.00
*S-----
*S COMPUTE Developed BASIN 30
COMPUTE NM HYD      B30  -    3      0.00040      1.15      0.043      2.03725      1.525      4.497 PER IMP= 100.00
*S-----
*S-----COMBINE AP 2 WITH BASINS 10 & 30-----
*S-----
*S Add Basin 10 and AP 2
ADD HYD              SUM1  1&20  5      0.04880      109.76      3.710      1.42550      1.530      3.514
*S Add Basin 10 AP 2 and Basin 30
ADD HYD              SUM1  5& 3   5      0.04920      110.92      3.754      1.43047      1.530      3.522
*S-----
*S COMPUTE Developed BASIN 100
COMPUTE NM HYD      B100  -    4      0.00150      3.36      0.112      1.40290      1.535      3.499 PER IMP=  42.00
*S-----
*S Add Basin 100 and SUM 1
ADD HYD              SUM2  5& 4   5      0.05070      114.27      3.866      1.42964      1.530      3.522
*S-----
*S COMPUTE Developed BASIN 40

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COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 3 NOTATION
COMPUTE NM HYD	B40	-	2	0.00570	13.57	0.473	1.55602	1.530	3.721	PER IMP= 56.00
*S-----										
*S Add Basins 40 to SUM 2										
ADD HYD	SUM3	2& 5	5	0.05640	127.85	4.339	1.44241	1.530	3.542	
*S-----										
*S COMPUTE Developed BASIN 50										
COMPUTE NM HYD	B50	-	2	0.00070	1.75	0.063	1.68801	1.530	3.913	PER IMP= 71.00
*S-----										
*S Add Basins 50 to SUM 3										
ADD HYD	SUM4	2& 5	5	0.05710	129.60	4.402	1.44542	1.530	3.546	
*S-----										
*S COMPUTE Developed BASIN 80										
COMPUTE NM HYD	B80	-	8	0.00180	4.34	0.151	1.57789	1.530	3.766	PER IMP= 58.00
*S-----										
*S Add Basin 80 to SUM 4										
ADD HYD	SUM5	8& 5	5	0.05890	133.94	4.553	1.44946	1.530	3.553	
*S-----										
*S COMPUTE Developed BASIN 110										
COMPUTE NM HYD	B110	-	1	0.00250	5.59	0.187	1.40290	1.535	3.492	PER IMP= 42.00
*S-----										
*S-----										
*S Total Flows to Inlet 2 These flows go to Pond 1										
*S Add Basin 110 to SUM 5										
ADD HYD	INL2	1& 5	40	0.06140	139.53	4.740	1.44756	1.530	3.551	
*S-----										
*S-----										
*S COMPUTE Developed Park Basin										
COMPUTE NM HYD	Park	-	10	0.00380	7.07	0.207	1.02127	1.540	2.908	PER IMP= 7.00
*S-----										
*S COMPUTE Developed BASIN 120										
COMPUTE NM HYD	B120	-	1	0.00140	3.14	0.105	1.40290	1.535	3.501	PER IMP= 42.00
*S-----										
*S COMPUTE Developed BASIN 70										
COMPUTE NM HYD	70.00	-	2	0.00650	15.05	0.517	1.49040	1.530	3.619	PER IMP= 50.00
*S-----										
*S Add Park Basin to Basin 120										
ADD HYD	INL1	10& 1	45	0.00520	10.21	0.312	1.12391	1.535	3.067	
*S-----										
*S-----										
*S Total Flows to Inlet 1										
*S Add Basin 70 to INL1										
ADD HYD	INL1	45& 2	45	0.01170	25.26	0.828	1.32749	1.535	3.373	
*S-----										
*S-----										
*S COMPUTE Developed BASIN 20										

COMPUTE NM HYD	B50	-	50	0.00290	6.54	0.220	1.42477	1.530	3.523	PER IMP=	44.00
*S-----											
*S											
*S Add AP 3 to Basin 20 These Basins flow to Pond 2											
ADD HYD	INL4	50&25	60	0.01530	33.92	1.137	1.39346	1.535	3.464		
*S-----											
*S COMPUTE Developed BASIN 60											
COMPUTE NM HYD	B60	-	2	0.00070	1.75	0.063	1.68801	1.530	3.913	PER IMP=	71.00
*S-----											
*S COMPUTE Developed BASIN 90											
COMPUTE NM HYD	B90	-	1	0.00150	3.36	0.112	1.40290	1.535	3.499	PER IMP=	42.00
*S-----											
*S											
*S Total Flows to Inlet 3 These Basins flow to Pond 1											
*S Add Basins 60 and Basin 90											
ADD HYD	INL3	2&1	70	0.00220	5.11	0.175	1.49336	1.530	3.631		
*S-----											
*S-----Combine all flows for routing through Pond 1-----											
*S-----											
*S Add Inlets											
ADD HYD	INP1	70&45	80	0.01390	30.37	1.004	1.35374	1.535	3.413		
ADD HYD	Pond	80&40	80	0.07530	169.88	5.744	1.43024	1.530	3.525		
*S-----											
*S-----											
*S ROUTE BASINS THROUGH POND 1 to Pond 2 (ASSUMES 48" OUTLET PIPE)											
ROUTE RESERVOIR	POND1	80	85	0.07530	45.11	3.634	0.90497	1.815	0.936	AC-FT=	3.880
*S-----											
*S--Combine Pond 1 outflows and all Montage flows for routing through Pond 2											

□□□

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 4	NOTATION
*S-----											
*S Add AP 3 and Basin 20											
ADD HYD	Pond 2&60	95		0.01600	35.67	1.200	1.40633	1.535	3.483		
*S-----											
*S-----	Calculate MDS Basins W-1 W-2 W-3 X J Bobby Foster and Y-1---										
*S-----											
*S BASIN W-1											
COMPUTE NM HYD	BASIN.W1	-	91	0.00480	13.20	0.494	1.92788	1.530	4.296	PER IMP=	90.00
*S-----											
*S BASIN W-2											
COMPUTE NM HYD	BASIN.W2	-	92	0.00920	21.30	0.731	1.49040	1.530	3.618	PER IMP=	50.00
*S-----											
*S BASIN W-3											
COMPUTE NM HYD	BASIN.W3	-	93	0.01280	32.39	1.167	1.70914	1.530	3.954	PER IMP=	70.00
*S-----											
*S BASIN J											
COMPUTE NM HYD	BASIN.J	-	94	0.01920	43.60	1.481	1.44665	1.530	3.548	PER IMP=	46.00
*S-----											
*S BASIN X											
COMPUTE NM HYD	BASIN.X	-	95	0.00800	20.25	0.729	1.70914	1.530	3.956	PER IMP=	70.00
*S-----											
*S BASIN BOBBY FOSTER											
COMPUTE NM HYD	BASIN.BF	-	96	0.00940	24.16	0.889	1.77231	1.530	4.015	PER IMP=	78.00
*S-----											
*S BASIN Y-1											
COMPUTE NM HYD	BASIN.Y1	-	97	0.00800	20.25	0.729	1.70914	1.530	3.956	PER IMP=	70.00
*S-----											
*S-----											
*S-----											
*S-----	Combine Remaining MDS Basins										
*S-----											
ADD HYD	SUM 91&92	99		0.01400	34.50	1.225	1.64035	1.530	3.850		
ADD HYD	SUM 99&93	99		0.02680	66.89	2.392	1.67319	1.530	3.900		
ADD HYD	SUM 99&94	99		0.04600	110.49	3.873	1.57863	1.530	3.753		
ADD HYD	SUM 99&95	99		0.05400	130.74	4.602	1.59796	1.530	3.783		
ADD HYD	SUM 99&96	99		0.06340	154.90	5.491	1.62380	1.530	3.818		
ADD HYD	SUM 99&97	99		0.07140	175.15	6.220	1.63336	1.530	3.833		
*S Add Combined MDS Basin to Pond 1 Outflow											
ADD HYD	In 85&99	26		0.14670	178.22	9.854	1.25948	1.560	1.898		
*S-----											
*S ROUTE BASINS THROUGH POND 2A (ASSUMES 18" OUTLET PIPE)											
ROUTE RESERVOIR	POND.2A	26	95	0.14670	15.30	8.349	1.06707	2.705	0.163	AC-FT=	7.628
FINISH											

□(s0p10h4099T□&l6D□□

□(s16.67h8.5v0T□&l8D

AHYMO PROGRAM (AHYMO-S4) - Version: S4.01a - Rel: 01a
RUN DATE (MON/DAY/YR) = 12/22/2021
START TIME (HR:MIN:SEC) = 11:26:22 USER NO.= AHYMO Temp User:20122010
INPUT FILE = .13 Hydro\05.13.2 Hydrology\AHYMO\Full System\Montage 5 and 6 Combined
12-10.txt

START TIME=0.0 CODE 0 LINES -6
LOCATION Bernalillo
Soil infiltration values (LAND FACTORS) for this location are not available.
The following default values were used.
Land Treatment Initial Abstr.(in) Unif. Infiltr.(in/hour)
A 0.65 1.67
B 0.50 1.25
C 0.35 0.83
D 0.10 0.04

*S
*S Montage Unit 5
*S
*S HYMO PER JAN 1997 DPM REVISIONS
*S*****
RAINFALL TYPE=-1 RAIN QUAR=0.0 RAIN ONE=1.83
RAIN SIX=2.29 RAIN DAY=2.63 DT=0.0

6-HOUR RAINFALL DIST. - BASED ON NOAA ATLAS 14 FOR CONVECTIVE AREAS (NM & AZ)
- D1

DT = 0.005000 HOURS END TIME = 6.000000 HOURS
*S*****
*S*****
*S
*S This model combines the runoff from Montage Units 5 and 6
*S
*S*****
*S*****
*S
*S Montage Unit 5 Proposed Conditions
*S
*S*****
*S*****
*S-----
*S Fully Developed Site Therefore no Sediment Bulking
*S-----
*S----- COMPUTE FLOWS TO AP 1-----
*S-----
*S COMPUTE Developed BASIN 102
COMPUTE NM HYD ID=1 HYD=102 AREA=0.0030 SQ MI
%A=0 %B=29 %C=29 %D=42 TP=-.1333 HR
MASS RAINFALL=-1

K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
7.106428
UNIT PEAK = 4.9745 CFS UNIT VOLUME = 0.9974 B = 526.28 P60 =
1.8300
AREA = 0.001260 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
3.987797
UNIT PEAK = 4.6256 CFS UNIT VOLUME = 0.9969 B = 354.36 P60 =
1.8300
AREA = 0.001740 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 102.00

RUNOFF VOLUME = 1.40290 INCHES = 0.2245 ACRE-FEET
PEAK DISCHARGE RATE = 6.70 CFS AT 1.535 HOURS BASIN AREA = 0.0030 SQ. MI.

*S-----

*S COMPUTE Developed BASIN 104

COMPUTE NM HYD ID=2 HYD=104 AREA=0.0050 SQ MI
%A=0 %B=24 %C=24 %D=52 TP=-.1333 HR
MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
UNIT PEAK = 10.265 CFS UNIT VOLUME = 0.9988 B = 526.28 P60 =
1.8300 AREA = 0.002600 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
UNIT PEAK = 6.3801 CFS UNIT VOLUME = 0.9977 B = 354.36 P60 =
1.8300 AREA = 0.002400 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=2 CODE=1

PARTIAL HYDROGRAPH 104.00

RUNOFF VOLUME = 1.51227 INCHES = 0.4033 ACRE-FEET
PEAK DISCHARGE RATE = 11.69 CFS AT 1.530 HOURS BASIN AREA = 0.0050 SQ. MI.

*S-----

*S COMPUTE Developed BASIN 105

COMPUTE NM HYD ID=3 HYD=105 AREA=0.0030 SQ MI
%A=0 %B=28 %C=28 %D=44 TP=-.1333 HR
MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
UNIT PEAK = 5.2114 CFS UNIT VOLUME = 0.9975 B = 526.28 P60 =
1.8300 AREA = 0.001320 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
UNIT PEAK = 4.4661 CFS UNIT VOLUME = 0.9968 B = 354.36 P60 =
1.8300 AREA = 0.001680 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=3 CODE=1

PARTIAL HYDROGRAPH 105.00

RUNOFF VOLUME = 1.42477 INCHES = 0.2280 ACRE-FEET
PEAK DISCHARGE RATE = 6.76 CFS AT 1.530 HOURS BASIN AREA = 0.0030 SQ. MI.

*S-----

*S COMPUTE Developed BASIN 107

COMPUTE NM HYD ID=4 HYD=107 AREA=0.0086 SQ MI

%A=0 %B=31 %C=31 %D=38 TP=-.1333 HR
MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 12.902 CFS UNIT VOLUME = 0.9990 B = 526.28 P60 =
AREA = 0.003268 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 14.174 CFS UNIT VOLUME = 0.9990 B = 354.36 P60 =
AREA = 0.005332 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=4 CODE=1

PARTIAL HYDROGRAPH 107.00

RUNOFF VOLUME = 1.35915 INCHES = 0.6234 ACRE-FEET
PEAK DISCHARGE RATE = 18.80 CFS AT 1.535 HOURS BASIN AREA = 0.0086 SQ. MI.

*S-----
*S COMPUTE Developed BASIN 108
COMPUTE NM HYD ID=6 HYD=108 AREA=0.0020 SQ MI
%A=0 %B=100 %C=0 %D=0 TP=-.1333 HR
MASS RAINFALL=-1

3.573747 K = 0.131696HR TP = 0.133300HR K/TP RATIO = 0.987965 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 4.8864 CFS UNIT VOLUME = 0.9970 B = 325.68 P60 =
AREA = 0.002000 SQ MI IA = 0.50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=6 CODE=1

PARTIAL HYDROGRAPH 108.00

RUNOFF VOLUME = 0.83296 INCHES = 0.0888 ACRE-FEET
PEAK DISCHARGE RATE = 3.14 CFS AT 1.540 HOURS BASIN AREA = 0.0020 SQ. MI.

*S-----
*S-----COMBINE AP 1 TOTAL FLOWS-----
*S-----THESE FLOW DOWN DIEKENBORN TO AP-2-----
*S-----
*S Add Basins 102, 104, 105, 107, & 108
ADD HYD ID=15 HYD=AP1 IDi=1 IDii=2
ADD HYD ID=15 HYD=AP1 IDi=15 IDii=3
ADD HYD ID=15 HYD=AP1 IDi=15 IDii=4
ADD HYD ID=15 HYD=AP1 IDi=15 IDii=6
PRINT HYD ID=15 CODE=1

HYDROGRAPH FROM AREA AP1

RUNOFF VOLUME = 1.36101 INCHES = 1.5679 ACRE-FEET
PEAK DISCHARGE RATE = 47.09 CFS AT 1.535 HOURS BASIN AREA = 0.0216 SQ. MI.

*S-----

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*S----- COMPUTE FLOWS TO AP 2-----
*S----- THESE FLOWS GO TO POND 1-----
*S COMPUTE Developed BASIN 101
COMPUTE NM HYD      ID=1 HYD=101 AREA=0.0015 SQ MI
                    %A=0 %B=34 %C=34 %D=32 TP=-.1333 HR
                    MASS RAINFALL=-1

      K = 0.072649HR    TP = 0.133300HR    K/TP RATIO = 0.545000    SHAPE CONSTANT, N =
7.106428
      UNIT PEAK = 1.8951    CFS    UNIT VOLUME = 0.9931    B = 526.28    P60 =
1.8300
      AREA = 0.000480 SQ MI    IA = 0.10000 INCHES    INF = 0.04000 INCHES PER HOUR
      RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

      K = 0.118556HR    TP = 0.133300HR    K/TP RATIO = 0.889390    SHAPE CONSTANT, N =
3.987797
      UNIT PEAK = 2.7115    CFS    UNIT VOLUME = 0.9947    B = 354.36    P60 =
1.8300
      AREA = 0.001020 SQ MI    IA = 0.42500 INCHES    INF = 1.04000 INCHES PER HOUR
      RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD      ID=1 CODE=1

                        PARTIAL HYDROGRAPH 101.00

      RUNOFF VOLUME = 1.29353 INCHES = 0.1035 ACRE-FEET
      PEAK DISCHARGE RATE = 3.20 CFS AT 1.535 HOURS BASIN AREA = 0.0015 SQ. MI.

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```

*S-----
*S COMPUTE Developed BASIN 110
COMPUTE NM HYD      ID=2 HYD=110 AREA=0.0057 SQ MI
                    %A=0 %B=19 %C=19 %D=62 TP=-.1333 HR
                    MASS RAINFALL=-1

      K = 0.072649HR    TP = 0.133300HR    K/TP RATIO = 0.545000    SHAPE CONSTANT, N =
7.106428
      UNIT PEAK = 13.952    CFS    UNIT VOLUME = 0.9991    B = 526.28    P60 =
1.8300
      AREA = 0.003534 SQ MI    IA = 0.10000 INCHES    INF = 0.04000 INCHES PER HOUR
      RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

      K = 0.118556HR    TP = 0.133300HR    K/TP RATIO = 0.889390    SHAPE CONSTANT, N =
3.987797
      UNIT PEAK = 5.7580    CFS    UNIT VOLUME = 0.9975    B = 354.36    P60 =
1.8300
      AREA = 0.002166 SQ MI    IA = 0.42500 INCHES    INF = 1.04000 INCHES PER HOUR
      RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD      ID=2 CODE=1

                        PARTIAL HYDROGRAPH 110.00

      RUNOFF VOLUME = 1.62164 INCHES = 0.4930 ACRE-FEET
      PEAK DISCHARGE RATE = 13.94 CFS AT 1.530 HOURS BASIN AREA = 0.0057 SQ. MI.

```

```

*S-----
*S COMPUTE Developed BASIN 111
COMPUTE NM HYD      ID=3 HYD=111 AREA=0.0057 SQ MI
                    %A=0 %B=20 %C=20 %D=60 TP=-.1333 HR
                    MASS RAINFALL=-1

      K = 0.072649HR    TP = 0.133300HR    K/TP RATIO = 0.545000    SHAPE CONSTANT, N =
7.106428

```

1.8300 UNIT PEAK = 13.502 CFS UNIT VOLUME = 0.9991 B = 526.28 P60 =
AREA = 0.003420 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =

1.8300 UNIT PEAK = 6.0611 CFS UNIT VOLUME = 0.9976 B = 354.36 P60 =
AREA = 0.002280 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=3 CODE=1

PARTIAL HYDROGRAPH 111.00

RUNOFF VOLUME = 1.59977 INCHES = 0.4863 ACRE-FEET
PEAK DISCHARGE RATE = 13.82 CFS AT 1.530 HOURS BASIN AREA = 0.0057 SQ. MI.

*S-----

*S COMPUTE Developed BASIN 112

COMPUTE NM HYD ID=4 HYD=112 AREA=0.0027 SQ MI
%A=0 %B=22 %C=22 %D=56 TP=-.1333 HR
MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =

1.8300 UNIT PEAK = 5.9695 CFS UNIT VOLUME = 0.9978 B = 526.28 P60 =

AREA = 0.001512 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =

1.8300 UNIT PEAK = 3.1581 CFS UNIT VOLUME = 0.9954 B = 354.36 P60 =

AREA = 0.001188 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=4 CODE=1

PARTIAL HYDROGRAPH 112.00

RUNOFF VOLUME = 1.55602 INCHES = 0.2241 ACRE-FEET
PEAK DISCHARGE RATE = 6.44 CFS AT 1.530 HOURS BASIN AREA = 0.0027 SQ. MI.

*S-----

*S COMPUTE Developed BASIN 113

COMPUTE NM HYD ID=6 HYD=113 AREA=0.0037 SQ MI
%A=0 %B=25 %C=25 %D=50 TP=-.1333 HR
MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =

1.8300 UNIT PEAK = 7.3039 CFS UNIT VOLUME = 0.9982 B = 526.28 P60 =

AREA = 0.001850 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =

UNIT PEAK = 4.9180 CFS UNIT VOLUME = 0.9971 B = 354.36 P60 =
1.8300 AREA = 0.001850 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=6 CODE=1

PARTIAL HYDROGRAPH 113.00

RUNOFF VOLUME = 1.49040 INCHES = 0.2941 ACRE-FEET
PEAK DISCHARGE RATE = 8.58 CFS AT 1.530 HOURS BASIN AREA = 0.0037 SQ. MI.

*S-----

*S COMPUTE Developed BASIN 115

COMPUTE NM HYD ID=7 HYD=115 AREA=0.0004 SQ MI
%A=0 %B=42 %C=0 %D=58 TP=-.1333 HR
MASS RAINFALL=-1

K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
7.106428

UNIT PEAK = 0.91595 CFS UNIT VOLUME = 0.9856 B = 526.28 P60 =
1.8300

AREA = 0.000232 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

K = 0.131696HR TP = 0.133300HR K/TP RATIO = 0.987965 SHAPE CONSTANT, N =
3.573747

UNIT PEAK = 0.41046 CFS UNIT VOLUME = 0.9642 B = 325.68 P60 =
1.8300

AREA = 0.000168 SQ MI IA = 0.50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=7 CODE=1

PARTIAL HYDROGRAPH 115.00

RUNOFF VOLUME = 1.53145 INCHES = 0.0327 ACRE-FEET
PEAK DISCHARGE RATE = 0.94 CFS AT 1.530 HOURS BASIN AREA = 0.0004 SQ. MI.

*S-----

*S COMPUTE Developed BASIN 117

COMPUTE NM HYD ID=8 HYD=117 AREA=0.0033 SQ MI
%A=0 %B=46 %C=47 %D=7 TP=-.1333 HR
MASS RAINFALL=-1

K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
7.106428

UNIT PEAK = 0.91200 CFS UNIT VOLUME = 0.9856 B = 526.28 P60 =
1.8300

AREA = 0.000231 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

K = 0.118414HR TP = 0.133300HR K/TP RATIO = 0.888330 SHAPE CONSTANT, N =
3.992884

UNIT PEAK = 8.1663 CFS UNIT VOLUME = 0.9982 B = 354.70 P60 =
1.8300

AREA = 0.003069 SQ MI IA = 0.42419 INCHES INF = 1.03774 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=8 CODE=1

PARTIAL HYDROGRAPH 117.00

RUNOFF VOLUME = 1.02127 INCHES = 0.1797 ACRE-FEET
PEAK DISCHARGE RATE = 6.14 CFS AT 1.540 HOURS BASIN AREA = 0.0033 SQ. MI.

```
*S-----
*S-----COMBINE AP 2 TOTAL FLOWS-----
*S-----THESE FLOWS GO TO POND 1-----
*S Add Basins 101, 110, 111, 112, 113, 115, 117, & AP-1
ADD HYD          ID=20 HYD=AP2 IDi=1 IDii=2
ADD HYD          ID=20 HYD=AP2 IDi=20 IDii=3
ADD HYD          ID=20 HYD=AP2 IDi=20 IDii=4
ADD HYD          ID=20 HYD=AP2 IDi=20 IDii=6
ADD HYD          ID=20 HYD=AP2 IDi=20 IDii=7
ADD HYD          ID=20 HYD=AP2 IDi=20 IDii=8
ADD HYD          ID=20 HYD=AP2 IDi=20 IDii=15
PRINT HYD        ID=20 CODE=1
```

HYDROGRAPH FROM AREA AP2

RUNOFF VOLUME = 1.42145 INCHES = 3.3811 ACRE-FEET
PEAK DISCHARGE RATE = 100.12 CFS AT 1.530 HOURS BASIN AREA = 0.0446 SQ. MI.

```
*S-----
*S-----COMPUTE FLOWS TO AP 3-----
*S-----THESE FLOWS GO TO POND 2-----
*S COMPUTE Developed BASIN 103
COMPUTE NM HYD   ID=1 HYD=103 AREA=0.0020 SQ MI
                  %A=0 %B=23 %C=23 %D=54 TP=-.1333 HR
                  MASS RAINFALL=-1
```

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 4.2639 CFS UNIT VOLUME = 0.9970 B = 526.28 P60 =
AREA = 0.001080 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 2.4457 CFS UNIT VOLUME = 0.9941 B = 354.36 P60 =
AREA = 0.000920 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 103.00

RUNOFF VOLUME = 1.53414 INCHES = 0.1636 ACRE-FEET
PEAK DISCHARGE RATE = 4.73 CFS AT 1.530 HOURS BASIN AREA = 0.0020 SQ. MI.

```
*S-----
*S COMPUTE Developed BASIN 109
COMPUTE NM HYD   ID=2 HYD=109 AREA=0.0013 SQ MI
                  %A=0 %B=100 %C=0 %D=0 TP=-.1333 HR
                  MASS RAINFALL=-1
```

3.573747 K = 0.131696HR TP = 0.133300HR K/TP RATIO = 0.987965 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 3.1762 CFS UNIT VOLUME = 0.9953 B = 325.68 P60 =
AREA = 0.001300 SQ MI IA = 0.50000 INCHES INF = 1.25000 INCHES PER HOUR

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=2 CODE=1

PARTIAL HYDROGRAPH 109.00

RUNOFF VOLUME = 0.83296 INCHES = 0.0578 ACRE-FEET
PEAK DISCHARGE RATE = 2.04 CFS AT 1.540 HOURS BASIN AREA = 0.0013 SQ. MI.

*S-----

*S COMPUTE Developed BASIN 106

COMPUTE NM HYD ID=3 HYD=106 AREA=0.0031 SQ MI
%A=0 %B=31 %C=31 %D=38 TP=-.1333 HR
MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
UNIT PEAK = 4.6508 CFS UNIT VOLUME = 0.9972 B = 526.28 P60 =
1.8300 AREA = 0.001178 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
UNIT PEAK = 5.1094 CFS UNIT VOLUME = 0.9972 B = 354.36 P60 =
1.8300 AREA = 0.001922 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=3 CODE=1

PARTIAL HYDROGRAPH 106.00

RUNOFF VOLUME = 1.35915 INCHES = 0.2247 ACRE-FEET
PEAK DISCHARGE RATE = 6.79 CFS AT 1.535 HOURS BASIN AREA = 0.0031 SQ. MI.

*S-----

*S COMPUTE Developed BASIN 114

COMPUTE NM HYD ID=4 HYD=114 AREA=0.0018 SQ MI
%A=0 %B=24 %C=24 %D=52 TP=-.1333 HR
MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
UNIT PEAK = 3.6954 CFS UNIT VOLUME = 0.9965 B = 526.28 P60 =
1.8300 AREA = 0.000936 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
UNIT PEAK = 2.2968 CFS UNIT VOLUME = 0.9938 B = 354.36 P60 =
1.8300 AREA = 0.000864 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=4 CODE=1

PARTIAL HYDROGRAPH 114.00

RUNOFF VOLUME = 1.51227 INCHES = 0.1452 ACRE-FEET
PEAK DISCHARGE RATE = 4.22 CFS AT 1.530 HOURS BASIN AREA = 0.0018 SQ. MI.

```

*S-----
*S COMPUTE Developed BASIN 116
COMPUTE NM HYD      ID=6 HYD=116 AREA=0.0005 SQ MI
                     %A=0 %B=46 %C=47 %D=7 TP=-.1333 HR
                     MASS RAINFALL=-1

      K = 0.072649HR    TP = 0.133300HR    K/TP RATIO = 0.545000    SHAPE CONSTANT, N =
7.106428
UNIT PEAK = 0.13818    CFS    UNIT VOLUME = 0.9057    B = 526.28    P60 =
1.8300
AREA = 0.000035 SQ MI    IA = 0.10000 INCHES    INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

      K = 0.118414HR    TP = 0.133300HR    K/TP RATIO = 0.888330    SHAPE CONSTANT, N =
3.992884
UNIT PEAK = 1.2373    CFS    UNIT VOLUME = 0.9883    B = 354.70    P60 =
1.8300
AREA = 0.000465 SQ MI    IA = 0.42419 INCHES    INF = 1.03774 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD      ID=6 CODE=1

PARTIAL HYDROGRAPH 116.00

RUNOFF VOLUME = 1.02127 INCHES = 0.0272 ACRE-FEET
PEAK DISCHARGE RATE = 0.95 CFS AT 1.540 HOURS BASIN AREA = 0.0005 SQ. MI.

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*S-----
*S COMPUTE Developed BASIN 118
COMPUTE NM HYD      ID=7 HYD=118 AREA=0.0037 SQ MI
                     %A=0 %B=24 %C=24 %D=52 TP=-.1333 HR
                     MASS RAINFALL=-1

      K = 0.072649HR    TP = 0.133300HR    K/TP RATIO = 0.545000    SHAPE CONSTANT, N =
7.106428
UNIT PEAK = 7.5961    CFS    UNIT VOLUME = 0.9983    B = 526.28    P60 =
1.8300
AREA = 0.001924 SQ MI    IA = 0.10000 INCHES    INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

      K = 0.118556HR    TP = 0.133300HR    K/TP RATIO = 0.889390    SHAPE CONSTANT, N =
3.987797
UNIT PEAK = 4.7213    CFS    UNIT VOLUME = 0.9970    B = 354.36    P60 =
1.8300
AREA = 0.001776 SQ MI    IA = 0.42500 INCHES    INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD      ID=7 CODE=1

PARTIAL HYDROGRAPH 118.00

RUNOFF VOLUME = 1.51227 INCHES = 0.2984 ACRE-FEET
PEAK DISCHARGE RATE = 8.66 CFS AT 1.530 HOURS BASIN AREA = 0.0037 SQ. MI.

```

```

*S-----
*S-----COMBINE AP 3 TOTAL FLOWS-----
*S-----THESE FLOWS GO TO POND 2-----
*S Add Basins 103, 109, 106, 114, 116, & 118
ADD HYD      ID=25 HYD=AP3 IDi=1 IDii=2
ADD HYD      ID=25 HYD=AP3 IDi=25 IDii=3

```

ADD HYD ID=25 HYD=AP3 IDi=25 IDii=4
ADD HYD ID=25 HYD=AP3 IDi=25 IDii=6
ADD HYD ID=25 HYD=AP3 IDi=25 IDii=7
PRINT HYD ID=25 CODE=1

HYDROGRAPH FROM AREA AP3

RUNOFF VOLUME = 1.38616 INCHES = 0.9167 ACRE-FEET
PEAK DISCHARGE RATE = 27.38 CFS AT 1.535 HOURS BASIN AREA = 0.0124 SQ. MI.

*S*****
*S*****
*S
*S Begin Montage Unit 6 Proposed Conditions
*S
*S*****
*S*****
*S-----
*S Fully Developed Site Therefore no Sediment Bulking
*S-----
*S COMPUTE Developed BASIN 10
COMPUTE NM HYD ID=1 HYD=B10 AREA=0.0042 SQ MI
%A=0 %B=26 %C=26 %D=48 TP=-.1333 HR
MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 7.9593 CFS UNIT VOLUME = 0.9984 B = 526.28 P60 =
AREA = 0.002016 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 5.8059 CFS UNIT VOLUME = 0.9975 B = 354.36 P60 =
AREA = 0.002184 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=1 CODE=1

HYDROGRAPH FROM AREA B10

RUNOFF VOLUME = 1.46852 INCHES = 0.3289 ACRE-FEET
PEAK DISCHARGE RATE = 9.64 CFS AT 1.530 HOURS BASIN AREA = 0.0042 SQ. MI.

*S-----
*S COMPUTE Developed BASIN 30
COMPUTE NM HYD ID=3 HYD=B30 AREA=0.0004 SQ MI
%A=0 %B=0 %C=0 %D=100 TP=-.1333 HR
MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 1.5792 CFS UNIT VOLUME = 0.9917 B = 526.28 P60 =
AREA = 0.000400 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=3 CODE=1

HYDROGRAPH FROM AREA B30

RUNOFF VOLUME = 2.03725 INCHES = 0.0435 ACRE-FEET
PEAK DISCHARGE RATE = 1.15 CFS AT 1.525 HOURS BASIN AREA = 0.0004 SQ. MI.

*S-----
*S-----COMBINE AP 2 WITH BASINS 10 & 30-----
*S-----
*S Add Basin 10 and AP 2
ADD HYD ID=5 HYD=SUM1 IDi=1 IDii=20
PRINT HYD ID=5 CODE=1

HYDROGRAPH FROM AREA SUM1

RUNOFF VOLUME = 1.42550 INCHES = 3.7101 ACRE-FEET
PEAK DISCHARGE RATE = 109.76 CFS AT 1.530 HOURS BASIN AREA = 0.0488 SQ. MI.

*S Add Basin 10 AP 2 and Basin 30
ADD HYD ID=5 HYD=SUM1 IDi=5 IDii=3
PRINT HYD ID=5 CODE=1

HYDROGRAPH FROM AREA SUM1

RUNOFF VOLUME = 1.43047 INCHES = 3.7535 ACRE-FEET
PEAK DISCHARGE RATE = 110.92 CFS AT 1.530 HOURS BASIN AREA = 0.0492 SQ. MI.

*S-----
*S COMPUTE Developed BASIN 100
COMPUTE NM HYD ID=4 HYD=B100 AREA=0.0015 SQ MI
%A=0 %B=29 %C=29 %D=42 TP=-.1333 HR
MASS RAINFALL=-1

K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
7.106428
UNIT PEAK = 2.4873 CFS UNIT VOLUME = 0.9948 B = 526.28 P60 =
1.8300
AREA = 0.000630 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
3.987797
UNIT PEAK = 2.3128 CFS UNIT VOLUME = 0.9938 B = 354.36 P60 =
1.8300
AREA = 0.000870 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=4 CODE=1

HYDROGRAPH FROM AREA B100

RUNOFF VOLUME = 1.40290 INCHES = 0.1122 ACRE-FEET
PEAK DISCHARGE RATE = 3.36 CFS AT 1.535 HOURS BASIN AREA = 0.0015 SQ. MI.

*S-----
*S Add Basin 100 and SUM 1
ADD HYD ID=5 HYD=SUM2 IDi=5 IDii=4
PRINT HYD ID=5 CODE=1

HYDROGRAPH FROM AREA SUM2

RUNOFF VOLUME = 1.42964 INCHES = 3.8657 ACRE-FEET
PEAK DISCHARGE RATE = 114.27 CFS AT 1.530 HOURS BASIN AREA = 0.0507 SQ. MI.

*S-----

*S COMPUTE Developed BASIN 40

COMPUTE NM HYD ID=2 HYD=B40 AREA=0.0057 SQ MI
%A=0 %B=22 %C=22 %D=56 TP=-.1333 HR
MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 12.602 CFS UNIT VOLUME = 0.9990 B = 526.28 P60 =
AREA = 0.003192 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 6.6672 CFS UNIT VOLUME = 0.9978 B = 354.36 P60 =
AREA = 0.002508 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=2 CODE=1

HYDROGRAPH FROM AREA B40

RUNOFF VOLUME = 1.55602 INCHES = 0.4730 ACRE-FEET
PEAK DISCHARGE RATE = 13.57 CFS AT 1.530 HOURS BASIN AREA = 0.0057 SQ. MI.

*S-----

*S Add Basins 40 to SUM 2

ADD HYD ID=5 HYD=SUM3 IDi=2 IDii=5
PRINT HYD ID=5 CODE=1

HYDROGRAPH FROM AREA SUM3

RUNOFF VOLUME = 1.44241 INCHES = 4.3387 ACRE-FEET
PEAK DISCHARGE RATE = 127.85 CFS AT 1.530 HOURS BASIN AREA = 0.0564 SQ. MI.

*S-----

*S COMPUTE Developed BASIN 50

COMPUTE NM HYD ID=2 HYD=B50 AREA=0.0007 SQ MI
%A=0 %B=29% C=0% D=71% TP=-.1333 HR
MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 1.9622 CFS UNIT VOLUME = 0.9934 B = 526.28 P60 =
AREA = 0.000497 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.573747 K = 0.131696HR TP = 0.133300HR K/TP RATIO = 0.987965 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 0.49597 CFS UNIT VOLUME = 0.9704 B = 325.68 P60 =
AREA = 0.000203 SQ MI IA = 0.50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=2 CODE=1

HYDROGRAPH FROM AREA B50

RUNOFF VOLUME = 1.68801 INCHES = 0.0630 ACRE-FEET
 PEAK DISCHARGE RATE = 1.75 CFS AT 1.530 HOURS BASIN AREA = 0.0007 SQ. MI.

*S-----
 *S Add Basins 50 to SUM 3
 ADD HYD ID=5 HYD=SUM4 IDi=2 IDii=5
 PRINT HYD ID=5 CODE=1

HYDROGRAPH FROM AREA SUM4

RUNOFF VOLUME = 1.44542 INCHES = 4.4018 ACRE-FEET
 PEAK DISCHARGE RATE = 129.60 CFS AT 1.530 HOURS BASIN AREA = 0.0571 SQ. MI.

*S-----
 *S COMPUTE Developed BASIN 80
 COMPUTE NM HYD ID=8 HYD=B80 AREA=0.0018 SQ MI
 %A=0 %B=21 %C=21 %D=58 TP=-.1333 HR
 MASS RAINFALL=-1

K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
 7.106428
 UNIT PEAK = 4.1218 CFS UNIT VOLUME = 0.9969 B = 526.28 P60 =
 1.8300
 AREA = 0.001044 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
 3.987797
 UNIT PEAK = 2.0097 CFS UNIT VOLUME = 0.9928 B = 354.36 P60 =
 1.8300
 AREA = 0.000756 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=8 CODE=1

HYDROGRAPH FROM AREA B80

RUNOFF VOLUME = 1.57789 INCHES = 0.1515 ACRE-FEET
 PEAK DISCHARGE RATE = 4.34 CFS AT 1.530 HOURS BASIN AREA = 0.0018 SQ. MI.

*S-----
 *S Add Basin 80 to SUM 4
 ADD HYD ID=5 HYD=SUM5 IDi=8 IDii=5
 PRINT HYD ID=5 CODE=1

HYDROGRAPH FROM AREA SUM5

RUNOFF VOLUME = 1.44946 INCHES = 4.5532 ACRE-FEET
 PEAK DISCHARGE RATE = 133.94 CFS AT 1.530 HOURS BASIN AREA = 0.0589 SQ. MI.

*S-----
 *S COMPUTE Developed BASIN 110
 COMPUTE NM HYD ID=1 HYD=B110 AREA=0.0025 SQ MI
 %A=0 %B=29 %C=29 %D=42 TP=-.1333 HR
 MASS RAINFALL=-1

K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
7.106428
UNIT PEAK = 4.1455 CFS UNIT VOLUME = 0.9969 B = 526.28 P60 =
1.8300
AREA = 0.001050 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
3.987797
UNIT PEAK = 3.8546 CFS UNIT VOLUME = 0.9962 B = 354.36 P60 =
1.8300
AREA = 0.001450 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=1 CODE=1

HYDROGRAPH FROM AREA B110

RUNOFF VOLUME = 1.40290 INCHES = 0.1871 ACRE-FEET
PEAK DISCHARGE RATE = 5.59 CFS AT 1.535 HOURS BASIN AREA = 0.0025 SQ. MI.

*S-----
*S-----
*S Total Flows to Inlet 2 These flows go to Pond 1
*S Add Basin 110 to SUM 5
ADD HYD ID=40 HYD=INL2 IDi=1 IDii=5
PRINT HYD ID=40 CODE=1

HYDROGRAPH FROM AREA INL2

RUNOFF VOLUME = 1.44756 INCHES = 4.7402 ACRE-FEET
PEAK DISCHARGE RATE = 139.53 CFS AT 1.530 HOURS BASIN AREA = 0.0614 SQ. MI.

*S-----
*S-----
*S COMPUTE Developed Park Basin
COMPUTE NM HYD ID=10 HYD=Park AREA=0.0038 SQ MI
%A=0 %B=46 %C=47 %D=7 TP=-.1333 HR
MASS RAINFALL=-1

K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
7.106428
UNIT PEAK = 1.0502 CFS UNIT VOLUME = 0.9875 B = 526.28 P60 =
1.8300
AREA = 0.000266 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

K = 0.118414HR TP = 0.133300HR K/TP RATIO = 0.888330 SHAPE CONSTANT, N =
3.992884
UNIT PEAK = 9.4037 CFS UNIT VOLUME = 0.9985 B = 354.70 P60 =
1.8300
AREA = 0.003534 SQ MI IA = 0.42419 INCHES INF = 1.03774 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=10 CODE=1

HYDROGRAPH FROM AREA Park

RUNOFF VOLUME = 1.02127 INCHES = 0.2070 ACRE-FEET
PEAK DISCHARGE RATE = 7.07 CFS AT 1.540 HOURS BASIN AREA = 0.0038 SQ. MI.

*S-----

*S COMPUTE Developed BASIN 120

COMPUTE NM HYD ID=1 HYD=B120 AREA=0.0014 SQ MI
%A=0 %B=29 %C=29 %D=42 TP=-.1333 HR
MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
UNIT PEAK = 2.3215 CFS UNIT VOLUME = 0.9944 B = 526.28 P60 =
1.8300 AREA = 0.000588 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
UNIT PEAK = 2.1586 CFS UNIT VOLUME = 0.9933 B = 354.36 P60 =
1.8300 AREA = 0.000812 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=1 CODE=1

HYDROGRAPH FROM AREA B120

RUNOFF VOLUME = 1.40290 INCHES = 0.1047 ACRE-FEET
PEAK DISCHARGE RATE = 3.14 CFS AT 1.535 HOURS BASIN AREA = 0.0014 SQ. MI.

*S-----

*S COMPUTE Developed BASIN 70

COMPUTE NM HYD ID=2 HYD=70 AREA=0.0065 SQ MI
%A=0 %B=25 %C=25 %D=50 TP=-.1333 HR
MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
UNIT PEAK = 12.831 CFS UNIT VOLUME = 0.9990 B = 526.28 P60 =
1.8300 AREA = 0.003250 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
UNIT PEAK = 8.6397 CFS UNIT VOLUME = 0.9983 B = 354.36 P60 =
1.8300 AREA = 0.003250 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=2 CODE=1

OUTFLOW HYDROGRAPH REACH 70.00

RUNOFF VOLUME = 1.49040 INCHES = 0.5167 ACRE-FEET
PEAK DISCHARGE RATE = 15.05 CFS AT 1.530 HOURS BASIN AREA = 0.0065 SQ. MI.

*S-----

*S Add Park Basin to Basin 120

ADD HYD ID=45 HYD=INL1 IDi=10 IDii=1
PRINT HYD ID=45 CODE=1

HYDROGRAPH FROM AREA INL1

RUNOFF VOLUME = 1.12391 INCHES = 0.3117 ACRE-FEET
PEAK DISCHARGE RATE = 10.21 CFS AT 1.535 HOURS BASIN AREA = 0.0052 SQ. MI.

*S-----
*S-----
*S Total Flows to Inlet 1
*S Add Basin 70 to INL1
ADD HYD ID=45 HYD=INL1 IDi=45 IDii=2
PRINT HYD ID=45 CODE=1

HYDROGRAPH FROM AREA INL1

RUNOFF VOLUME = 1.32749 INCHES = 0.8283 ACRE-FEET
PEAK DISCHARGE RATE = 25.26 CFS AT 1.535 HOURS BASIN AREA = 0.0117 SQ. MI.

*S-----
*S-----
*S COMPUTE Developed BASIN 20
COMPUTE NM HYD ID=50 HYD=B50 AREA=0.0029 SQ MI
%A=0 %B=28 %C=28 %D=44 TP=-.1333 HR
MASS RAINFALL=-1

K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
7.106428
UNIT PEAK = 5.0377 CFS UNIT VOLUME = 0.9974 B = 526.28 P60 =
1.8300
AREA = 0.001276 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
3.987797
UNIT PEAK = 4.3172 CFS UNIT VOLUME = 0.9966 B = 354.36 P60 =
1.8300
AREA = 0.001624 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=50 CODE=1

HYDROGRAPH FROM AREA B50

RUNOFF VOLUME = 1.42477 INCHES = 0.2204 ACRE-FEET
PEAK DISCHARGE RATE = 6.54 CFS AT 1.530 HOURS BASIN AREA = 0.0029 SQ. MI.

*S-----
*S
*S Add AP 3 to Basin 20 These Basins flow to Pond 2
ADD HYD ID=60 HYD=INL4 IDi=50 IDii=25
PRINT HYD ID=60 CODE=1

HYDROGRAPH FROM AREA INL4

RUNOFF VOLUME = 1.39346 INCHES = 1.1371 ACRE-FEET
PEAK DISCHARGE RATE = 33.92 CFS AT 1.535 HOURS BASIN AREA = 0.0153 SQ. MI.

*S-----
*S COMPUTE Developed BASIN 60
COMPUTE NM HYD ID=2 HYD=B60 AREA=0.0007 SQ MI
%A=0 %B=29 %C=0 %D=71 TP=-.1333 HR

MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 1.9622 CFS UNIT VOLUME = 0.9934 B = 526.28 P60 =
AREA = 0.000497 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.573747 K = 0.131696HR TP = 0.133300HR K/TP RATIO = 0.987965 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 0.49597 CFS UNIT VOLUME = 0.9704 B = 325.68 P60 =
AREA = 0.000203 SQ MI IA = 0.50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=2 CODE=1

HYDROGRAPH FROM AREA B60

RUNOFF VOLUME = 1.68801 INCHES = 0.0630 ACRE-FEET
PEAK DISCHARGE RATE = 1.75 CFS AT 1.530 HOURS BASIN AREA = 0.0007 SQ. MI.

*S-----
*S COMPUTE Developed BASIN 90
COMPUTE NM HYD ID=1 HYD=B90 AREA=0.0015 SQ MI
%A=0 %B=29 %C=29 %D=42 TP=-.1333 HR
MASS RAINFALL=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 2.4873 CFS UNIT VOLUME = 0.9948 B = 526.28 P60 =
AREA = 0.000630 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 2.3128 CFS UNIT VOLUME = 0.9938 B = 354.36 P60 =
AREA = 0.000870 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=1 CODE=1

HYDROGRAPH FROM AREA B90

RUNOFF VOLUME = 1.40290 INCHES = 0.1122 ACRE-FEET
PEAK DISCHARGE RATE = 3.36 CFS AT 1.535 HOURS BASIN AREA = 0.0015 SQ. MI.

*S-----
*S
*S Total Flows to Inlet 3 These Basins flow to Pond 1
*S Add Basins 60 and Basin 90
ADD HYD ID=70 HYD=INL3 IDi=2 IDii=1
PRINT HYD ID=70 CODE=1

HYDROGRAPH FROM AREA INL3

RUNOFF VOLUME = 1.49336 INCHES = 0.1752 ACRE-FEET
PEAK DISCHARGE RATE = 5.11 CFS AT 1.530 HOURS BASIN AREA = 0.0022 SQ. MI.

```

*S-----
*S-----Combine all flows for routing through Pond 1-----
*S-----
*S Add Inlets
ADD HYD          ID=80 HYD=INP1 IDi=70 IDii=45
PRINT HYD        ID=80 CODE=1

```

HYDROGRAPH FROM AREA INP1

```

RUNOFF VOLUME =      1.35374 INCHES      =      1.0036 ACRE-FEET
PEAK DISCHARGE RATE =      30.37 CFS    AT    1.535 HOURS    BASIN AREA =    0.0139 SQ. MI.

```

```

ADD HYD          ID=80 HYD=Pond IDi=80 IDii=40
PRINT HYD        ID=80 CODE=1

```

HYDROGRAPH FROM AREA Pond

```

RUNOFF VOLUME =      1.43024 INCHES      =      5.7438 ACRE-FEET
PEAK DISCHARGE RATE =      169.88 CFS    AT    1.530 HOURS    BASIN AREA =    0.0753 SQ. MI.

```

```

*S-----
*S-----
*S ROUTE BASINS THROUGH POND 1 to Pond 2 (ASSUMES 48" OUTLET PIPE)
ROUTE RESERVOIR      ID=85 HYD=POND1 INFLOW=80 CODE=20

```

OUTFLOW	STORAGE	ELEV
0.01	0.11	5294
0.01	0.28	5295
0.02	0.59	5296
0.03	1.01	5297
0.04	1.56	5298
0.05	2.17	5299
0.06	2.28	5300
45.1	3.77	5301
45.2	4.93	5302
45.3	6.73	5303
45.4	7.76	5304

* * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
0.00	0.00	-Infinity	-Infinity	0.00
0.10	0.00	5295.00	0.280	0.01
0.20	0.00	5295.00	0.280	0.01
0.30	0.00	5295.00	0.280	0.01
0.40	0.00	5295.00	0.280	0.01
0.50	0.00	5295.00	0.280	0.01
0.60	0.00	5295.00	0.280	0.01
0.70	0.00	5295.00	0.280	0.01
0.80	1.27	5295.00	0.280	0.01
0.90	3.73	5295.00	0.280	0.01
1.00	5.35	5295.00	0.280	0.01
1.10	8.92	5295.00	0.280	0.01
1.20	13.79	5295.13	0.321	0.01
1.30	23.91	5295.61	0.468	0.02
1.40	64.47	5296.49	0.795	0.02
1.50	161.72	5298.31	1.749	0.04
1.60	145.82	5300.51	3.035	22.89
1.70	86.54	5300.95	3.703	43.06
1.80	49.38	5301.09	3.877	45.11
1.90	31.41	5301.05	3.829	45.11
2.00	21.93	5300.94	3.679	42.36

2.10	15.40	5300.82	3.504	37.04
2.20	11.40	5300.70	3.329	31.77
2.30	8.69	5300.60	3.169	26.93
2.40	6.85	5300.50	3.028	22.68
2.50	4.58	5300.42	2.904	18.92
2.60	3.14	5300.34	2.793	15.57
2.70	2.37	5300.28	2.699	12.72
2.80	1.85	5300.23	2.621	10.37
2.90	1.46	5300.19	2.557	8.44
3.00	1.18	5300.15	2.505	6.86
3.10	0.98	5300.12	2.463	5.58
3.20	0.81	5300.10	2.428	4.55
3.30	0.70	5300.08	2.401	3.71
3.40	0.61	5300.07	2.378	3.03
3.50	0.55	5300.05	2.360	2.49
3.60	0.53	5300.04	2.346	2.06
3.70	0.52	5300.04	2.335	1.72
3.80	0.51	5300.03	2.326	1.45
3.90	0.51	5300.03	2.319	1.24
4.00	0.51	5300.02	2.314	1.08
4.10	0.51	5300.02	2.310	0.95
4.20	0.51	5300.02	2.306	0.86
4.30	0.52	5300.02	2.304	0.78
4.40	0.52	5300.01	2.302	0.72
4.50	0.53	5300.01	2.301	0.68
4.60	0.54	5300.01	2.299	0.65
4.70	0.55	5300.01	2.299	0.63
4.80	0.56	5300.01	2.298	0.61
4.90	0.57	5300.01	2.298	0.60
5.00	0.58	5300.01	2.298	0.59
5.10	0.59	5300.01	2.298	0.59
5.20	0.60	5300.01	2.298	0.59
5.30	0.62	5300.01	2.298	0.60
5.40	0.63	5300.01	2.298	0.60
5.50	0.64	5300.01	2.298	0.61

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
5.60	0.66	5300.01	2.298	0.62
5.70	0.67	5300.01	2.299	0.63
5.80	0.69	5300.01	2.299	0.64
5.90	0.71	5300.01	2.300	0.65
6.00	0.72	5300.01	2.300	0.67
6.10	0.62	5300.01	2.300	0.68
6.20	0.23	5300.01	2.298	0.62
6.30	0.10	5300.01	2.295	0.51
6.40	0.06	5300.01	2.292	0.42
6.50	0.03	5300.01	2.289	0.33
6.60	0.02	5300.00	2.287	0.27
6.70	0.01	5300.00	2.285	0.21
6.80	0.00	5300.00	2.283	0.16
6.90	0.00	5300.00	2.282	0.13
7.00	0.00	5300.00	2.281	0.10
7.10	0.00	5300.00	2.281	0.08
7.20	0.00	5300.00	2.280	0.06
7.30	0.00	5300.00	2.280	0.06
7.40	0.00	5299.99	2.279	0.06
7.50	0.00	5299.99	2.279	0.06
7.60	0.00	5299.98	2.278	0.06
7.70	0.00	5299.98	2.278	0.06
7.80	0.00	5299.97	2.277	0.06
7.90	0.00	5299.97	2.277	0.06
8.00	0.00	5299.96	2.276	0.06
8.10	0.00	5299.96	2.276	0.06
8.20	0.00	5299.96	2.275	0.06
8.30	0.00	5299.95	2.275	0.06
8.40	0.00	5299.95	2.274	0.06
8.50	0.00	5299.94	2.274	0.06
8.60	0.00	5299.94	2.273	0.06
8.70	0.00	5299.93	2.273	0.06

8.80	0.00	5299.93	2.272	0.06
8.90	0.00	5299.92	2.272	0.06
9.00	0.00	5299.92	2.271	0.06
9.10	0.00	5299.92	2.271	0.06
9.20	0.00	5299.91	2.270	0.06
9.30	0.00	5299.91	2.270	0.06
9.40	0.00	5299.90	2.269	0.06
9.50	0.00	5299.90	2.269	0.06
9.60	0.00	5299.89	2.268	0.06
9.70	0.00	5299.89	2.268	0.06
9.80	0.00	5299.88	2.267	0.06
9.90	0.00	5299.88	2.267	0.06
10.00	0.00	5299.88	2.266	0.06
10.10	0.00	5299.87	2.266	0.06
10.20	0.00	5299.87	2.265	0.06
10.30	0.00	5299.86	2.265	0.06
10.40	0.00	5299.86	2.264	0.06
10.50	0.00	5299.85	2.264	0.06
10.60	0.00	5299.85	2.263	0.06
10.70	0.00	5299.84	2.263	0.06
10.80	0.00	5299.84	2.262	0.06
10.90	0.00	5299.84	2.262	0.06
11.00	0.00	5299.83	2.261	0.06
11.10	0.00	5299.83	2.261	0.06

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
11.20	0.00	5299.82	2.260	0.06
11.30	0.00	5299.82	2.260	0.06
11.40	0.00	5299.81	2.260	0.06
11.50	0.00	5299.81	2.259	0.06
11.60	0.00	5299.81	2.259	0.06
11.70	0.00	5299.80	2.258	0.06
11.80	0.00	5299.80	2.258	0.06
11.90	0.00	5299.79	2.257	0.06
12.00	0.00	5299.79	2.257	0.06
12.10	0.00	5299.78	2.256	0.06
12.20	0.00	5299.78	2.256	0.06
12.30	0.00	5299.77	2.255	0.06
12.40	0.00	5299.77	2.255	0.06
12.50	0.00	5299.77	2.254	0.06
12.60	0.00	5299.76	2.254	0.06
12.70	0.00	5299.76	2.253	0.06
12.80	0.00	5299.75	2.253	0.06
12.90	0.00	5299.75	2.252	0.06
13.00	0.00	5299.74	2.252	0.06
13.10	0.00	5299.74	2.251	0.06
13.20	0.00	5299.74	2.251	0.06
13.30	0.00	5299.73	2.250	0.06
13.40	0.00	5299.73	2.250	0.06
13.50	0.00	5299.72	2.250	0.06
13.60	0.00	5299.72	2.249	0.06
13.70	0.00	5299.71	2.249	0.06
13.80	0.00	5299.71	2.248	0.06
13.90	0.00	5299.71	2.248	0.06
14.00	0.00	5299.70	2.247	0.06
14.10	0.00	5299.70	2.247	0.06
14.20	0.00	5299.69	2.246	0.06
14.30	0.00	5299.69	2.246	0.06
14.40	0.00	5299.68	2.245	0.06
14.50	0.00	5299.68	2.245	0.06
14.60	0.00	5299.68	2.244	0.06
14.70	0.00	5299.67	2.244	0.06
14.80	0.00	5299.67	2.243	0.06
14.90	0.00	5299.66	2.243	0.06
15.00	0.00	5299.66	2.242	0.06
15.10	0.00	5299.65	2.242	0.06
15.20	0.00	5299.65	2.242	0.06
15.30	0.00	5299.65	2.241	0.06
15.40	0.00	5299.64	2.241	0.06

15.50	0.00	5299.64	2.240	0.06
15.60	0.00	5299.63	2.240	0.06
15.70	0.00	5299.63	2.239	0.06
15.80	0.00	5299.62	2.239	0.06
15.90	0.00	5299.62	2.238	0.06
16.00	0.00	5299.62	2.238	0.06
16.10	0.00	5299.61	2.237	0.06
16.20	0.00	5299.61	2.237	0.06
16.30	0.00	5299.60	2.236	0.06
16.40	0.00	5299.60	2.236	0.06
16.50	0.00	5299.60	2.235	0.06
16.60	0.00	5299.59	2.235	0.06
16.70	0.00	5299.59	2.235	0.06

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
---------------	-----------------	----------------	-------------------	------------------

16.80	0.00	5299.58	2.234	0.06
16.90	0.00	5299.58	2.234	0.06
17.00	0.00	5299.57	2.233	0.06
17.10	0.00	5299.57	2.233	0.06
17.20	0.00	5299.57	2.232	0.06
17.30	0.00	5299.56	2.232	0.06
17.40	0.00	5299.56	2.231	0.06
17.50	0.00	5299.55	2.231	0.06
17.60	0.00	5299.55	2.230	0.06
17.70	0.00	5299.54	2.230	0.06
17.80	0.00	5299.54	2.229	0.06
17.90	0.00	5299.54	2.229	0.06
18.00	0.00	5299.53	2.229	0.06
18.10	0.00	5299.53	2.228	0.06
18.20	0.00	5299.52	2.228	0.06
18.30	0.00	5299.52	2.227	0.06
18.40	0.00	5299.52	2.227	0.06
18.50	0.00	5299.51	2.226	0.06
18.60	0.00	5299.51	2.226	0.06
18.70	0.00	5299.50	2.225	0.06
18.80	0.00	5299.50	2.225	0.05
18.90	0.00	5299.50	2.224	0.05
19.00	0.00	5299.49	2.224	0.05
19.10	0.00	5299.49	2.224	0.05
19.20	0.00	5299.48	2.223	0.05
19.30	0.00	5299.48	2.223	0.05
19.40	0.00	5299.47	2.222	0.05
19.50	0.00	5299.47	2.222	0.05
19.60	0.00	5299.47	2.221	0.05
19.70	0.00	5299.46	2.221	0.05
19.80	0.00	5299.46	2.220	0.05
19.90	0.00	5299.45	2.220	0.05

PEAK DISCHARGE = 45.109 CFS - PEAK OCCURS AT HOUR 1.81
 MAXIMUM WATER SURFACE ELEVATION = 5301.095
 MAXIMUM STORAGE = 3.8797 AC-FT INCREMENTAL TIME= 0.005000HRS

PRINT HYD ID=85 CODE=20

HYDROGRAPH FROM AREA POND1

FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME
	HRS	CFS	HRS	CFS	HRS	CFS	HRS
0.1	0.000	0.0	4.000	1.1	8.000	0.1	12.000
0.1	0.100	0.0	4.100	1.0	8.100	0.1	12.100
0.1	0.200	0.0	4.200	0.9	8.200	0.1	12.200
0.1	0.300	0.0	4.300	0.8	8.300	0.1	12.300
0.1	0.400	0.0	4.400	0.7	8.400	0.1	12.400
0.1	0.500	0.0					

	0.500	0.0		4.500	0.7	8.500	0.1	12.500
0.1	16.500	0.1						
	0.600	0.0		4.600	0.6	8.600	0.1	12.600
0.1	16.600	0.1						
	0.700	0.0		4.700	0.6	8.700	0.1	12.700
0.1	16.700	0.1						
	0.800	0.0		4.800	0.6	8.800	0.1	12.800
0.1	16.800	0.1						
	0.900	0.0		4.900	0.6	8.900	0.1	12.900
0.1	16.900	0.1						
	1.000	0.0		5.000	0.6	9.000	0.1	13.000
0.1	17.000	0.1						
	1.100	0.0		5.100	0.6	9.100	0.1	13.100
0.1	17.100	0.1						
	1.200	0.0		5.200	0.6	9.200	0.1	13.200
0.1	17.200	0.1						
	1.300	0.0		5.300	0.6	9.300	0.1	13.300
0.1	17.300	0.1						
	1.400	0.0		5.400	0.6	9.400	0.1	13.400
0.1	17.400	0.1						
	1.500	0.0		5.500	0.6	9.500	0.1	13.500
0.1	17.500	0.1						
	1.600	22.9		5.600	0.6	9.600	0.1	13.600
0.1	17.600	0.1						
	1.700	43.1		5.700	0.6	9.700	0.1	13.700
0.1	17.700	0.1						
	1.800	45.1		5.800	0.6	9.800	0.1	13.800
0.1	17.800	0.1						
	1.900	45.1		5.900	0.7	9.900	0.1	13.900
0.1	17.900	0.1						
	2.000	42.4		6.000	0.7	10.000	0.1	14.000
0.1	18.000	0.1						
	2.100	37.0		6.100	0.7	10.100	0.1	14.100
0.1	18.100	0.1						
	2.200	31.8		6.200	0.6	10.200	0.1	14.200
0.1	18.200	0.1						
	2.300	26.9		6.300	0.5	10.300	0.1	14.300
0.1	18.300	0.1						
	2.400	22.7		6.400	0.4	10.400	0.1	14.400
0.1	18.400	0.1						
	2.500	18.9		6.500	0.3	10.500	0.1	14.500
0.1	18.500	0.1						
	2.600	15.6		6.600	0.3	10.600	0.1	14.600
0.1	18.600	0.1						
	2.700	12.7		6.700	0.2	10.700	0.1	14.700
0.1	18.700	0.1						
	2.800	10.4		6.800	0.2	10.800	0.1	14.800
0.1	18.800	0.1						
	2.900	8.4		6.900	0.1	10.900	0.1	14.900
0.1	18.900	0.1						
	3.000	6.9		7.000	0.1	11.000	0.1	15.000
0.1	19.000	0.1						
	3.100	5.6		7.100	0.1	11.100	0.1	15.100
0.1	19.100	0.1						
	3.200	4.5		7.200	0.1	11.200	0.1	15.200
0.1	19.200	0.1						
	3.300	3.7		7.300	0.1	11.300	0.1	15.300
0.1	19.300	0.1						
	3.400	3.0		7.400	0.1	11.400	0.1	15.400
0.1	19.400	0.1						
	3.500	2.5		7.500	0.1	11.500	0.1	15.500
0.1	19.500	0.1						
	3.600	2.1		7.600	0.1	11.600	0.1	15.600
0.1	19.600	0.1						
	3.700	1.7		7.700	0.1	11.700	0.1	15.700
0.1	19.700	0.1						
	3.800	1.5		7.800	0.1	11.800	0.1	15.800
0.1	19.800	0.1						
	3.900	1.2		7.900	0.1	11.900	0.1	15.900
0.1	19.900	0.1						

RUNOFF VOLUME = 0.90497 INCHES = 3.6343 ACRE-FEET
PEAK DISCHARGE RATE = 45.11 CFS AT 1.815 HOURS BASIN AREA = 0.0753 SQ. MI.

*S-----
*S--Combine Pond 1 outflows and all Montage flows for routing through Pond 2
*S-----
*S Add AP 3 and Basin 20
ADD HYD ID=95 HYD=Pond 2 IDi=60 IDii=85
PRINT HYD ID=95 CODE=1

HYDROGRAPH FROM AREA Pond

RUNOFF VOLUME = 1.40633 INCHES = 1.2001 ACRE-FEET
PEAK DISCHARGE RATE = 35.67 CFS AT 1.535 HOURS BASIN AREA = 0.0160 SQ. MI.

*S-----
*S-----Calculate MDS Basins W-1 W-2 W-3 X J Bobby Foster and Y-1---
*S-----
*S BASIN W-1
COMPUTE NM HYD ID=91 HYD NO=BASIN.W1 DA=0.0048 SQ MI
PER A=0.0 PER B=5.0 PER C=5.0 PER D=90.0
TP=-.1333 HR MASSRAIN=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 17.056 CFS UNIT VOLUME = 0.9993 B = 526.28 P60 =
AREA = 0.004320 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 1.2760 CFS UNIT VOLUME = 0.9887 B = 354.36 P60 =
AREA = 0.000480 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=91 CODE=1

HYDROGRAPH FROM AREA BASIN.W1

RUNOFF VOLUME = 1.92788 INCHES = 0.4935 ACRE-FEET
PEAK DISCHARGE RATE = 13.20 CFS AT 1.530 HOURS BASIN AREA = 0.0048 SQ. MI.

*S-----
*S BASIN W-2
COMPUTE NM HYD ID=92 HYD NO=BASIN.W2 DA=0.0092 SQ MI
PER A=0.0 PER B=25.0 PER C=25.0 PER D=50.0
TP=-.1333 HR MASSRAIN=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 18.161 CFS UNIT VOLUME = 0.9993 B = 526.28 P60 =
AREA = 0.004600 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 12.228 CFS UNIT VOLUME = 0.9988 B = 354.36 P60 =

AREA = 0.004600 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=92 CODE=1

HYDROGRAPH FROM AREA BASIN.W2

RUNOFF VOLUME = 1.49040 INCHES = 0.7313 ACRE-FEET
PEAK DISCHARGE RATE = 21.30 CFS AT 1.530 HOURS BASIN AREA = 0.0092 SQ. MI.

*S-----

*S BASIN W-3

COMPUTE NM HYD ID=93 HYD NO=BASIN.W3 DA=0.0128 SQ MI
PER A=0.0 PER B=15.0 PER C=15.0 PER D=70.0
TP=-.1333 HR MASSRAIN=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 35.375 CFS UNIT VOLUME = 0.9997 B = 526.28 P60 =
AREA = 0.008960 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 10.208 CFS UNIT VOLUME = 0.9986 B = 354.36 P60 =
AREA = 0.003840 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=93 CODE=1

HYDROGRAPH FROM AREA BASIN.W3

RUNOFF VOLUME = 1.70914 INCHES = 1.1668 ACRE-FEET
PEAK DISCHARGE RATE = 32.39 CFS AT 1.530 HOURS BASIN AREA = 0.0128 SQ. MI.

*S-----

*S BASIN J

COMPUTE NM HYD ID=94 HYD NO=BASIN.J DA=0.0192 SQ MI
PER A=0.0 PER B=27.0 PER C=27.0 PER D=46.0
TP=-.1333 HR MASSRAIN=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 34.869 CFS UNIT VOLUME = 0.9996 B = 526.28 P60 =
AREA = 0.008832 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
1.8300 UNIT PEAK = 27.562 CFS UNIT VOLUME = 0.9995 B = 354.36 P60 =
AREA = 0.010368 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=94 CODE=1

HYDROGRAPH FROM AREA BASIN.J

RUNOFF VOLUME = 1.44665 INCHES = 1.4814 ACRE-FEET

PEAK DISCHARGE RATE = 43.60 CFS AT 1.530 HOURS BASIN AREA = 0.0192 SQ. MI.

*S-----

*S BASIN X

COMPUTE NM HYD ID=95 HYD NO=BASIN.X DA=0.0080 SQ MI
PER A=0.0 PER B=15.0 PER C=15.0 PER D=70.0
TP=-.1333 HR MASSRAIN=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
UNIT PEAK = 22.109 CFS UNIT VOLUME = 0.9994 B = 526.28 P60 =
1.8300 AREA = 0.005600 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.987797 K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
UNIT PEAK = 6.3801 CFS UNIT VOLUME = 0.9977 B = 354.36 P60 =
1.8300 AREA = 0.002400 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=95 CODE=1

HYDROGRAPH FROM AREA BASIN.X

RUNOFF VOLUME = 1.70914 INCHES = 0.7292 ACRE-FEET
PEAK DISCHARGE RATE = 20.25 CFS AT 1.530 HOURS BASIN AREA = 0.0080 SQ. MI.

*S-----

*S BASIN BOBBY FOSTER

COMPUTE NM HYD ID=96 HYD NO=BASIN.BF DA=0.0094 SQ MI
PER A=0.0 PER B=22.0 PER C=0.0 PER D=78.0
TP=-.1333 HR MASSRAIN=-1

7.106428 K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
UNIT PEAK = 28.947 CFS UNIT VOLUME = 0.9996 B = 526.28 P60 =
1.8300 AREA = 0.007332 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

3.573747 K = 0.131696HR TP = 0.133300HR K/TP RATIO = 0.987965 SHAPE CONSTANT, N =
UNIT PEAK = 5.0525 CFS UNIT VOLUME = 0.9971 B = 325.68 P60 =
1.8300 AREA = 0.002068 SQ MI IA = 0.50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=96 CODE=1

HYDROGRAPH FROM AREA BASIN.BF

RUNOFF VOLUME = 1.77231 INCHES = 0.8885 ACRE-FEET
PEAK DISCHARGE RATE = 24.16 CFS AT 1.530 HOURS BASIN AREA = 0.0094 SQ. MI.

*S-----

*S BASIN Y-1

COMPUTE NM HYD ID=97 HYD NO=BASIN.Y1 DA=0.0080 SQ MI
PER A=0.0 PER B=15.0 PER C=15.0 PER D=70.0
TP=-.1333 HR MASSRAIN=-1

K = 0.072649HR TP = 0.133300HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N =
7.106428
UNIT PEAK = 22.109 CFS UNIT VOLUME = 0.9994 B = 526.28 P60 =
1.8300
AREA = 0.005600 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

K = 0.118556HR TP = 0.133300HR K/TP RATIO = 0.889390 SHAPE CONSTANT, N =
3.987797
UNIT PEAK = 6.3801 CFS UNIT VOLUME = 0.9977 B = 354.36 P60 =
1.8300
AREA = 0.002400 SQ MI IA = 0.42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.005000

PRINT HYD ID=97 CODE=1

HYDROGRAPH FROM AREA BASIN.Y1

RUNOFF VOLUME = 1.70914 INCHES = 0.7292 ACRE-FEET
PEAK DISCHARGE RATE = 20.25 CFS AT 1.530 HOURS BASIN AREA = 0.0080 SQ. MI.

*S-----
*S-----
*S-----
*S-----Combine Remaining MDS Basins -----
*S-----
*S-----
ADD HYD ID=99 HYD=SUM IDi=91 IDii=92
ADD HYD ID=99 HYD=SUM IDi=99 IDii=93
ADD HYD ID=99 HYD=SUM IDi=99 IDii=94
ADD HYD ID=99 HYD=SUM IDi=99 IDii=95
ADD HYD ID=99 HYD=SUM IDi=99 IDii=96
ADD HYD ID=99 HYD=SUM IDi=99 IDii=97
PRINT HYD ID=99 CODE=1

HYDROGRAPH FROM AREA SUM

RUNOFF VOLUME = 1.63336 INCHES = 6.2198 ACRE-FEET
PEAK DISCHARGE RATE = 175.15 CFS AT 1.530 HOURS BASIN AREA = 0.0714 SQ. MI.

*S Add Combined MDS Basin to Pond 1 Outflow
ADD HYD ID=26 HYD=In IDi=85 IDii=99
PRINT HYD ID=26 CODE=1

HYDROGRAPH FROM AREA In

RUNOFF VOLUME = 1.25948 INCHES = 9.8541 ACRE-FEET
PEAK DISCHARGE RATE = 178.22 CFS AT 1.560 HOURS BASIN AREA = 0.1467 SQ. MI.

*S-----
*S ROUTE BASINS THROUGH POND 2A (ASSUMES 18" OUTLET PIPE)
ROUTE RESERVOIR ID=95 HYD=POND.2A INFLOW=26 CODE=20
OUTFLOW STORAGE ELEV
0.01 0.01 5294
0.02 0.61 5295
0.03 1.47 5296
4.25 2.56 5297
9.51 3.91 5298
12.76 5.59 5299
15.33 7.65 5300

* * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
0.00	0.00	5293.00	-0.590	0.00
0.10	0.01	5294.00	0.010	0.01
0.20	0.01	5294.00	0.010	0.01
0.30	0.01	5294.00	0.010	0.01
0.40	0.01	5294.00	0.010	0.01
0.50	0.01	5294.00	0.010	0.01
0.60	0.01	5294.00	0.010	0.01
0.70	0.01	5294.00	0.010	0.01
0.80	1.71	5294.01	0.014	0.01
0.90	5.01	5294.06	0.043	0.01
1.00	7.17	5294.14	0.093	0.01
1.10	11.94	5294.27	0.170	0.01
1.20	18.45	5294.47	0.294	0.01
1.30	30.52	5294.80	0.488	0.02
1.40	69.67	5295.30	0.867	0.02
1.50	167.55	5296.36	1.860	1.54
1.60	171.76	5297.53	3.273	7.03
1.70	131.96	5298.33	4.456	10.57
1.80	98.32	5298.83	5.304	12.21
1.90	80.24	5299.16	5.928	13.18
2.00	67.07	5299.41	6.428	13.80
2.10	54.21	5299.59	6.811	14.28
2.20	44.45	5299.73	7.097	14.64
2.30	36.65	5299.83	7.309	14.90
2.40	30.45	5299.91	7.461	15.09
2.50	24.06	5299.96	7.561	15.22
2.60	19.06	5299.98	7.612	15.28
2.70	15.40	5299.99	7.628	15.30
2.80	12.49	5299.98	7.616	15.29
2.90	10.14	5299.97	7.583	15.25
3.00	8.26	5299.94	7.533	15.18
3.10	6.77	5299.91	7.470	15.10
3.20	5.57	5299.88	7.396	15.01
3.30	4.62	5299.84	7.314	14.91
3.40	3.86	5299.79	7.226	14.80
3.50	3.25	5299.75	7.134	14.69
3.60	2.78	5299.70	7.038	14.57
3.70	2.42	5299.66	6.939	14.44
3.80	2.14	5299.61	6.839	14.32
3.90	1.93	5299.56	6.738	14.19
4.00	1.76	5299.51	6.637	14.07
4.10	1.64	5299.46	6.535	13.94
4.20	1.55	5299.41	6.434	13.81
4.30	1.48	5299.36	6.332	13.69
4.40	1.42	5299.31	6.232	13.56
4.50	1.39	5299.26	6.132	13.44
4.60	1.37	5299.21	6.033	13.31
4.70	1.36	5299.17	5.935	13.19
4.80	1.36	5299.12	5.837	13.07
4.90	1.36	5299.07	5.741	12.95
5.00	1.37	5299.03	5.646	12.83
5.10	1.38	5298.98	5.552	12.69
5.20	1.39	5298.92	5.459	12.51
5.30	1.42	5298.87	5.368	12.33
5.40	1.45	5298.81	5.279	12.16
5.50	1.47	5298.76	5.191	11.99
5.60	1.50	5298.71	5.105	11.82
5.70	1.53	5298.66	5.020	11.66
5.80	1.56	5298.61	4.937	11.50
5.90	1.60	5298.56	4.856	11.34
6.00	1.63	5298.52	4.776	11.19

6.10	1.51	5298.47	4.698	11.03
6.20	0.93	5298.42	4.617	10.88
6.30	0.65	5298.37	4.535	10.72
6.40	0.50	5298.32	4.451	10.56
6.50	0.39	5298.27	4.368	10.40
6.60	0.30	5298.22	4.286	10.24
6.70	0.23	5298.18	4.204	10.08
6.80	0.18	5298.13	4.123	9.92
6.90	0.13	5298.08	4.043	9.77
7.00	0.10	5298.03	3.964	9.61
7.10	0.08	5297.98	3.886	9.42
7.20	0.06	5297.93	3.810	9.12
7.30	0.06	5297.87	3.736	8.83
7.40	0.06	5297.82	3.665	8.55
7.50	0.06	5297.77	3.596	8.29
7.60	0.06	5297.72	3.529	8.03
7.70	0.06	5297.67	3.464	7.77
7.80	0.06	5297.62	3.401	7.53
7.90	0.06	5297.58	3.341	7.29
8.00	0.06	5297.53	3.282	7.06
8.10	0.06	5297.49	3.225	6.84
8.20	0.06	5297.45	3.170	6.63
8.30	0.06	5297.41	3.116	6.42
8.40	0.06	5297.37	3.065	6.22
8.50	0.06	5297.34	3.015	6.02
8.60	0.06	5297.30	2.966	5.83
8.70	0.06	5297.27	2.919	5.65
8.80	0.06	5297.23	2.874	5.47
8.90	0.06	5297.20	2.830	5.30
9.00	0.06	5297.17	2.787	5.13
9.10	0.06	5297.14	2.746	4.97
9.20	0.06	5297.11	2.706	4.82
9.30	0.06	5297.08	2.667	4.67
9.40	0.06	5297.05	2.630	4.52
9.50	0.06	5297.02	2.593	4.38
9.60	0.06	5297.00	2.558	4.24
9.70	0.06	5296.97	2.524	4.11
9.80	0.06	5296.94	2.491	3.98
9.90	0.06	5296.91	2.459	3.86
10.00	0.06	5296.88	2.428	3.74
10.10	0.06	5296.85	2.398	3.62
10.20	0.06	5296.83	2.369	3.51
10.30	0.06	5296.80	2.341	3.40
10.40	0.06	5296.77	2.314	3.30
10.50	0.06	5296.75	2.288	3.20
10.60	0.06	5296.73	2.262	3.10
10.70	0.06	5296.70	2.238	3.00
10.80	0.06	5296.68	2.214	2.91
10.90	0.06	5296.66	2.190	2.82
11.00	0.06	5296.64	2.168	2.73
11.10	0.06	5296.62	2.146	2.65

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
11.20	0.06	5296.60	2.125	2.57
11.30	0.06	5296.58	2.105	2.49
11.40	0.06	5296.56	2.085	2.41
11.50	0.06	5296.55	2.066	2.34
11.60	0.06	5296.53	2.047	2.26
11.70	0.06	5296.51	2.029	2.20
11.80	0.06	5296.50	2.012	2.13
11.90	0.06	5296.48	1.995	2.06
12.00	0.06	5296.47	1.979	2.00
12.10	0.06	5296.45	1.963	1.94
12.20	0.06	5296.44	1.948	1.88
12.30	0.06	5296.42	1.933	1.82
12.40	0.06	5296.41	1.919	1.77
12.50	0.06	5296.40	1.905	1.71
12.60	0.06	5296.39	1.891	1.66
12.70	0.06	5296.37	1.878	1.61

12.80	0.06	5296.36	1.866	1.56
12.90	0.06	5296.35	1.853	1.51
13.00	0.06	5296.34	1.841	1.47
13.10	0.06	5296.33	1.830	1.42
13.20	0.06	5296.32	1.819	1.38
13.30	0.06	5296.31	1.808	1.34
13.40	0.06	5296.30	1.798	1.30
13.50	0.06	5296.29	1.788	1.26
13.60	0.06	5296.28	1.778	1.22
13.70	0.06	5296.27	1.768	1.18
13.80	0.06	5296.27	1.759	1.15
13.90	0.06	5296.26	1.750	1.12
14.00	0.06	5296.25	1.742	1.08
14.10	0.06	5296.24	1.733	1.05
14.20	0.06	5296.23	1.725	1.02
14.30	0.06	5296.23	1.717	0.99
14.40	0.06	5296.22	1.710	0.96
14.50	0.06	5296.21	1.703	0.93
14.60	0.06	5296.21	1.695	0.90
14.70	0.06	5296.20	1.689	0.88
14.80	0.06	5296.19	1.682	0.85
14.90	0.06	5296.19	1.675	0.83
15.00	0.06	5296.18	1.669	0.80
15.10	0.06	5296.18	1.663	0.78
15.20	0.06	5296.17	1.657	0.75
15.30	0.06	5296.17	1.652	0.73
15.40	0.06	5296.16	1.646	0.71
15.50	0.06	5296.16	1.641	0.69
15.60	0.06	5296.15	1.636	0.67
15.70	0.06	5296.15	1.631	0.65
15.80	0.06	5296.14	1.626	0.63
15.90	0.06	5296.14	1.621	0.61
16.00	0.06	5296.13	1.616	0.60
16.10	0.06	5296.13	1.612	0.58
16.20	0.06	5296.13	1.608	0.56
16.30	0.06	5296.12	1.604	0.55
16.40	0.06	5296.12	1.600	0.53
16.50	0.06	5296.12	1.596	0.52
16.60	0.06	5296.11	1.592	0.50
16.70	0.06	5296.11	1.588	0.49

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
16.80	0.06	5296.11	1.585	0.47
16.90	0.06	5296.10	1.582	0.46
17.00	0.06	5296.10	1.578	0.45
17.10	0.06	5296.10	1.575	0.44
17.20	0.06	5296.09	1.572	0.42
17.30	0.06	5296.09	1.569	0.41
17.40	0.06	5296.09	1.566	0.40
17.50	0.06	5296.09	1.563	0.39
17.60	0.06	5296.08	1.560	0.38
17.70	0.06	5296.08	1.558	0.37
17.80	0.06	5296.08	1.555	0.36
17.90	0.06	5296.08	1.553	0.35
18.00	0.06	5296.07	1.550	0.34
18.10	0.06	5296.07	1.548	0.33
18.20	0.06	5296.07	1.546	0.32
18.30	0.06	5296.07	1.544	0.32
18.40	0.06	5296.07	1.542	0.31
18.50	0.06	5296.06	1.539	0.30
18.60	0.06	5296.06	1.537	0.29
18.70	0.06	5296.06	1.536	0.28
18.80	0.05	5296.06	1.534	0.28
18.90	0.05	5296.06	1.532	0.27
19.00	0.05	5296.06	1.530	0.26
19.10	0.05	5296.05	1.528	0.26
19.20	0.05	5296.05	1.527	0.25
19.30	0.05	5296.05	1.525	0.24
19.40	0.05	5296.05	1.524	0.24

19.50	0.05	5296.05	1.522	0.23
19.60	0.05	5296.05	1.521	0.23
19.70	0.05	5296.05	1.519	0.22
19.80	0.05	5296.04	1.518	0.22
19.90	0.05	5296.04	1.517	0.21

PEAK DISCHARGE = 15.302 CFS - PEAK OCCURS AT HOUR 2.70
 MAXIMUM WATER SURFACE ELEVATION = 5299.989
 MAXIMUM STORAGE = 7.6275 AC-FT INCREMENTAL TIME= 0.005000HRS

PRINT HYD ID=95 CODE=20

HYDROGRAPH FROM AREA POND.2A

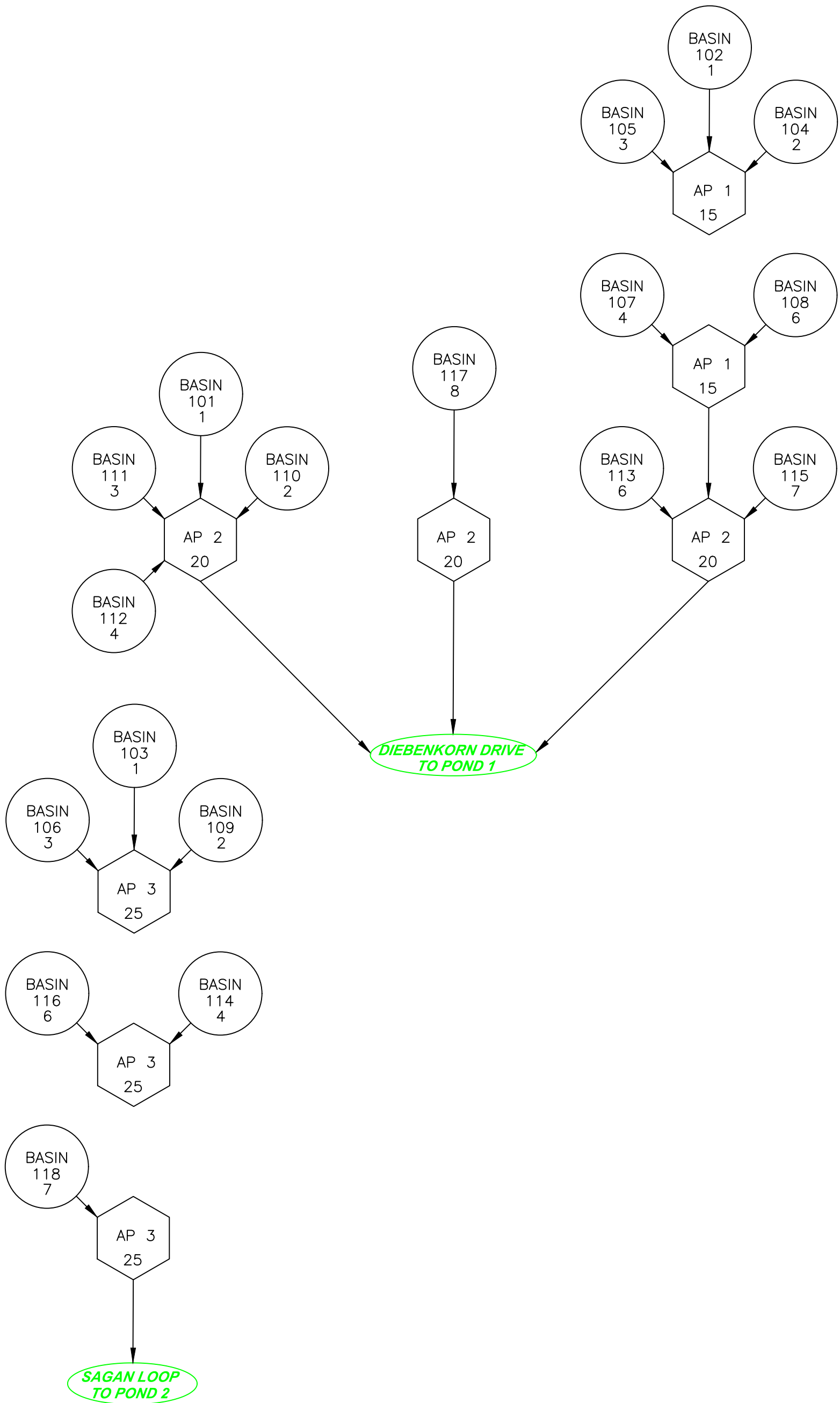
FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME
	HRS	CFS	HRS	CFS	HRS	CFS	HRS
2.0	0.000	0.0	4.000	14.1	8.000	7.1	12.000
1.9	0.100	0.0	4.100	13.9	8.100	6.8	12.100
1.9	0.200	0.0	4.200	13.8	8.200	6.6	12.200
1.8	0.300	0.0	4.300	13.7	8.300	6.4	12.300
1.8	0.400	0.0	4.400	13.6	8.400	6.2	12.400
1.7	0.500	0.0	4.500	13.4	8.500	6.0	12.500
1.7	0.600	0.0	4.600	13.3	8.600	5.8	12.600
1.6	0.700	0.0	4.700	13.2	8.700	5.6	12.700
1.6	0.800	0.0	4.800	13.1	8.800	5.5	12.800
1.5	0.900	0.0	4.900	12.9	8.900	5.3	12.900
1.5	1.000	0.0	5.000	12.8	9.000	5.1	13.000
1.4	1.100	0.0	5.100	12.7	9.100	5.0	13.100
1.4	1.200	0.0	5.200	12.5	9.200	4.8	13.200
1.3	1.300	0.0	5.300	12.3	9.300	4.7	13.300
1.3	1.400	0.0	5.400	12.2	9.400	4.5	13.400
1.3	1.500	1.5	5.500	12.0	9.500	4.4	13.500
1.2	1.600	7.0	5.600	11.8	9.600	4.2	13.600
1.2	1.700	10.6	5.700	11.7	9.700	4.1	13.700
1.1	1.800	12.2	5.800	11.5	9.800	4.0	13.800
1.1	1.900	13.2	5.900	11.3	9.900	3.9	13.900
1.1	2.000	13.8	6.000	11.2	10.000	3.7	14.000
1.0	2.100	14.3	6.100	11.0	10.100	3.6	14.100
1.0	2.200	14.6	6.200	10.9	10.200	3.5	14.200
1.0	2.300	14.9	6.300	10.7	10.300	3.4	14.300
1.0	2.400	15.1	6.400	10.6	10.400	3.3	14.400
0.9	2.500	15.2	6.500	10.4	10.500	3.2	14.500
0.9	2.600	15.3	6.600	10.2	10.600	3.1	14.600

	2.700	15.3	6.700	10.1	10.700	3.0	14.700
0.9	18.700	0.3					
	2.800	15.3	6.800	9.9	10.800	2.9	14.800
0.9	18.800	0.3					
	2.900	15.2	6.900	9.8	10.900	2.8	14.900
0.8	18.900	0.3					
	3.000	15.2	7.000	9.6	11.000	2.7	15.000
0.8	19.000	0.3					
	3.100	15.1	7.100	9.4	11.100	2.6	15.100
0.8	19.100	0.3					
	3.200	15.0	7.200	9.1	11.200	2.6	15.200
0.8	19.200	0.2					
	3.300	14.9	7.300	8.8	11.300	2.5	15.300
0.7	19.300	0.2					
	3.400	14.8	7.400	8.6	11.400	2.4	15.400
0.7	19.400	0.2					
	3.500	14.7	7.500	8.3	11.500	2.3	15.500
0.7	19.500	0.2					
	3.600	14.6	7.600	8.0	11.600	2.3	15.600
0.7	19.600	0.2					
	3.700	14.4	7.700	7.8	11.700	2.2	15.700
0.7	19.700	0.2					
	3.800	14.3	7.800	7.5	11.800	2.1	15.800
0.6	19.800	0.2					
	3.900	14.2	7.900	7.3	11.900	2.1	15.900
0.6	19.900	0.2					

RUNOFF VOLUME = 1.06707 INCHES = 8.3487 ACRE-FEET
 PEAK DISCHARGE RATE = 15.30 CFS AT 2.705 HOURS BASIN AREA = 0.1467 SQ. MI.

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 11:26:22
 □(s0p10h4099T□&l6D□□



27MAR08 (GSF)
H:\p\p\17101601_Soloto\p\m_study\FINAL_01-2018\ExhibitA\ExhibitA_3D_Layout.dwg

Designed For:

TWILIGHT HOMES

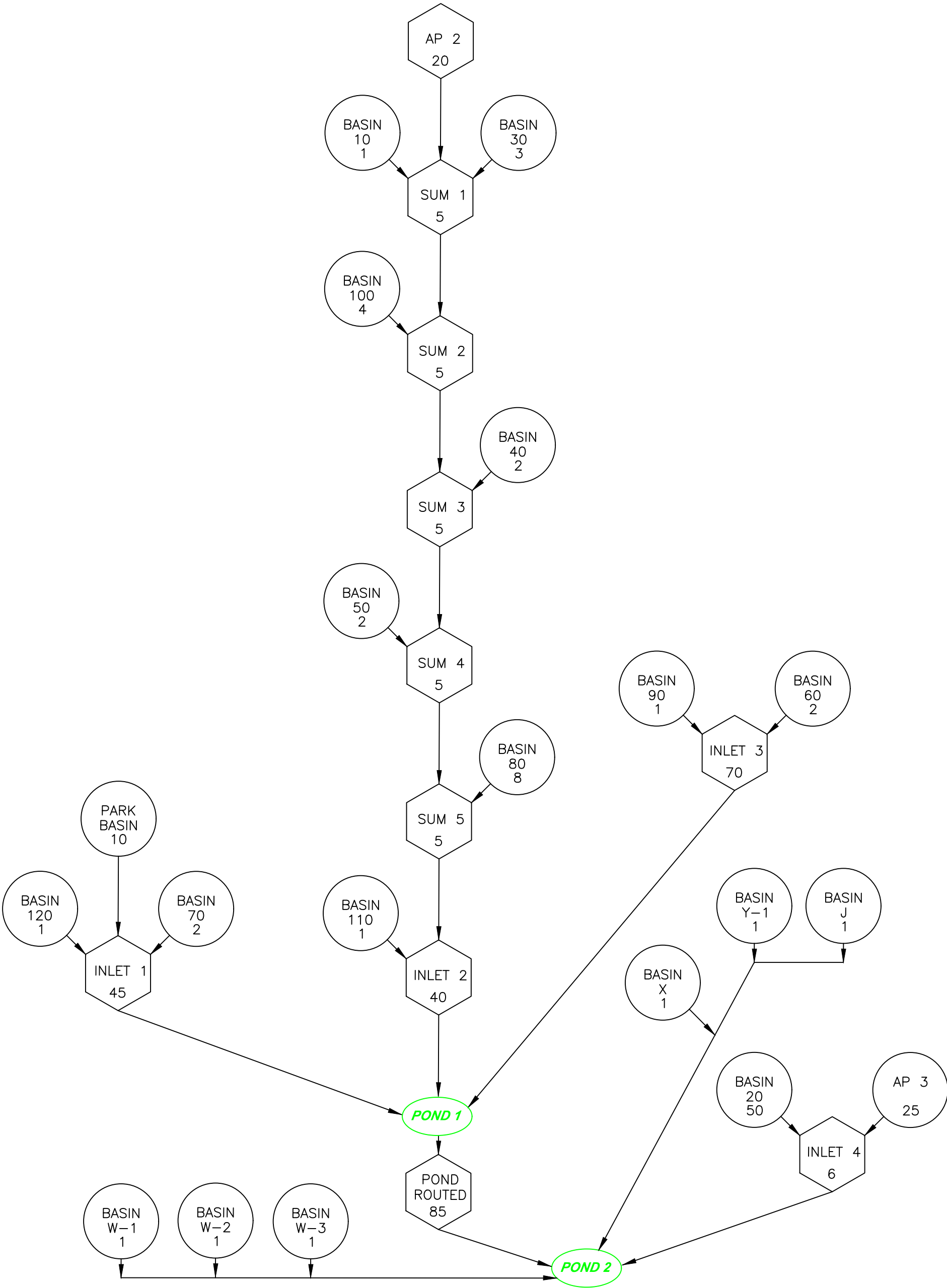
PROPOSED MONTAGE 5
AHYMO SCHEMATIC

Designed By:

HUITT-ZOLLARS

Huitt-Zollars, Inc. Rio Rancho
333 Rio Rancho DR NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

APPENDIX C EXHIBIT 1



Designed For:

TWILIGHT HOMES

MONTAGE 6
AHYMO SCHEMATIC

Designed By:

HUITT-ZOLLARS
Huitt-Zollars, Inc. Rio Rancho
333 Rio Rancho DR NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

APPENDIX D

STREET CAPACITY CALCULATIONS

Project Description

Input Data

Station (ft)	Elevation (ft)
--------------	----------------

Roughness Segment Definitions

(0+00, 0.67)	(0+46, 0.67)	0.016
--------------	--------------	-------

Options

Results

Bentley Systems, Inc. Haestad Methods Software Bentley CenterMaster V8i (SELECTseries 1) [08.11.01.03]

Worksheet for Dekooning Loop Capacity @ 0.5% w 8" Curbs

Results

Critical Slope	0.00511	ft/ft
Velocity	3.73	ft/s
Velocity Head	0.22	ft
Specific Energy	0.89	ft
Froude Number	0.99	
Flow Type	Subcritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	0.67	ft
Critical Depth	0.67	ft
Channel Slope	0.50000	%
Critical Slope	0.00511	ft/ft

Project Description

Input Data

Station (ft)	Elevation (ft)
--------------	----------------

Roughness Segment Definitions

(0+00, 0.50)	(0+20, 0.50)	0.016
--------------	--------------	-------

Options

Results

Bentley Systems, Inc. Haestad Methods Software Bentley CenterMaster V8i (SELECTseries 1) [08.11.01.03]

Worksheet for Keefer Avenue Capacity @ 0.5% w 6" Curbs

Results

Critical Slope	0.00544	ft/ft
Velocity	3.45	ft/s
Velocity Head	0.19	ft
Specific Energy	0.69	ft
Froude Number	0.96	
Flow Type	Subcritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	0.50	ft
Critical Depth	0.49	ft
Channel Slope	0.50000	%
Critical Slope	0.00544	ft/ft

Project Description

Input Data

Station (ft)	Elevation (ft)
--------------	----------------

Roughness Segment Definitions

(0+00, 0.50)	(0+46, 0.50)	0.016
--------------	--------------	-------

Options

Results

Bentley Systems, Inc. Haestad Methods Software Bentley CenterMaster V8i (SELECTseries 1) [08.11.01.03]

Worksheet for Sagan Loop Capacity @ 0.5% w 6" Curbs

Results

Critical Slope	0.00635	ft/ft
Velocity	2.43	ft/s
Velocity Head	0.09	ft
Specific Energy	0.55	ft
Froude Number	0.89	
Flow Type	Subcritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

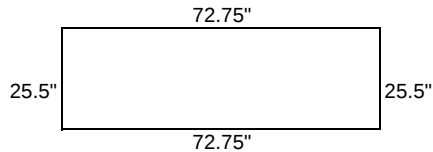
GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	0.46	ft
Critical Depth	0.44	ft
Channel Slope	0.50000	%
Critical Slope	0.00635	ft/ft

Inlet Worksheet Double 'D'

Objective: Analyze capacity of a Double D Inlet

Grate Dimensions



**Net dimensions of open area of a single grate.
(Total Area less Area of Bars)

Weir Perimeter - Double 'D' = $2 \times 25.5" + 2 \times 72.75" = 16.375$ ft
 Area of Orifice - Double 'D' = $25.5" \times (72.75") = 12.88$ sq ft

Calculate Orifice and Weir Flow into Grate at Design Depth (0.9 ft)

Orifice Equation	Weir Equation
$Q = 0.6 \times A \times (2 \times g \times h)^{1/2}$ Where $A = 12.880$ sq. ft. $g = 32.2$ ft ² /sec $h = 0.9$ ft Therefore $Q = 58.83439634$ cfs	$Q = 2.65 \times P \times H^{1/2}$ Where $P = 16.375$ ft $H = 0.9$ ft Therefore $Q = 41$ cfs

Weir Equation controls

Double "D" Inlet flow @ .1 below edge of pavement = 41 cfs

Apply 25% Clogging Factor to determine allowable design flow into inlet

$$41 \times 0.75 = 31 \text{ cfs}$$

Therefore Capacity of Double 'D' = 31 cfs.

APPENDIX E

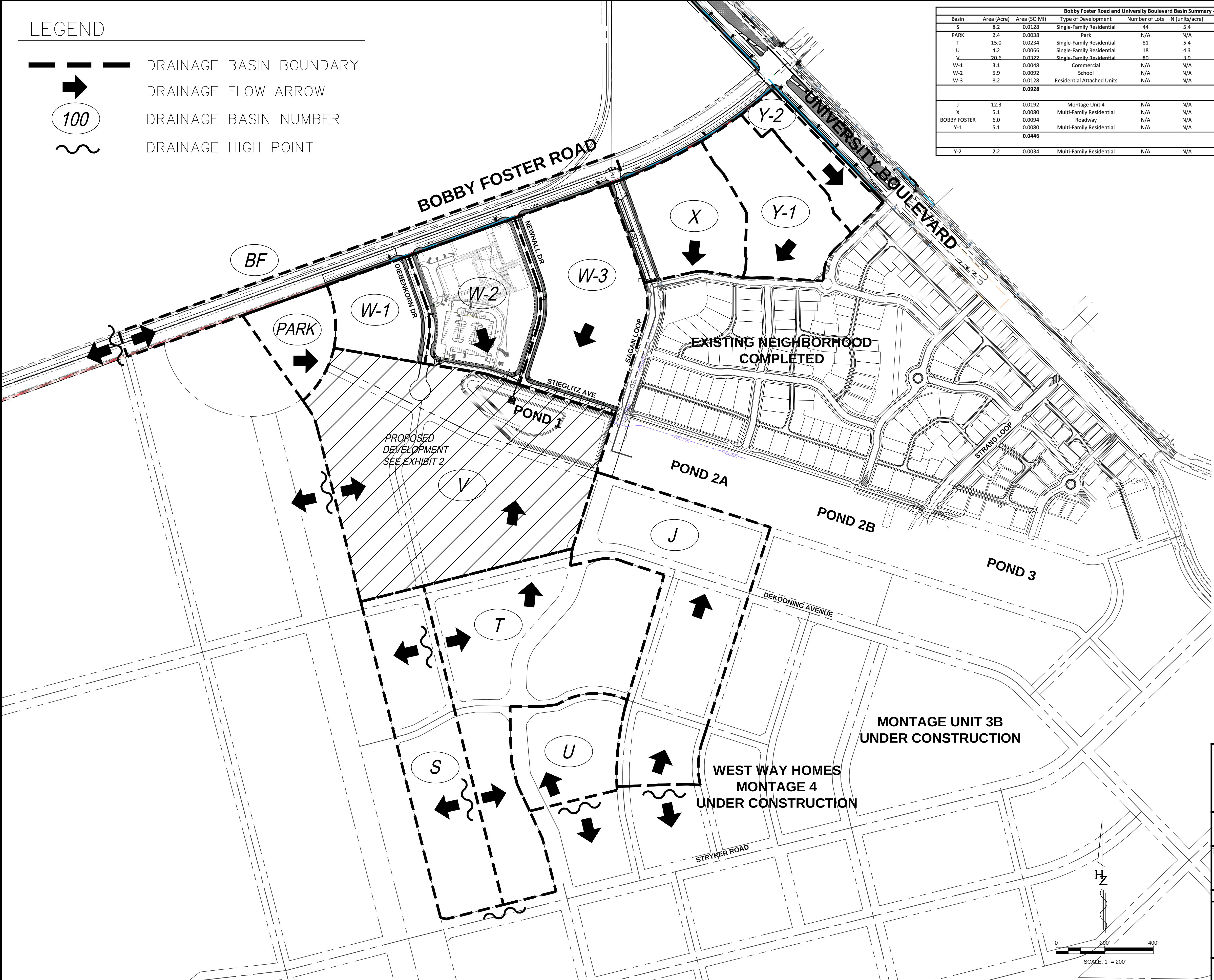
BASIN MAPS

LEGEND

- DRAINAGE BASIN BOUNDARY
- DRAINAGE FLOW ARROW
- 100

DRAINAGE BASIN NUMBER
- DRAINAGE HIGH POINT

Bobby Foster Road and University Boulevard Basin Summary - Developed Conditions											
Basin	Area (Acre)	Area (SQ MI)	Type of Development	Number of Lots	N (units/acre)	%A	%B	%C	%D	100-Year V (AC-FT)	100-Year Q (CFS)
S	8.2	0.0128	Single-Family Residential	44	5.4	0	24	24	52	1.03	29.9
PARK	2.4	0.0038	Park	N/A	N/A	0	46	47	7	0.21	7.1
T	15.0	0.0234	Single-Family Residential	81	5.4	0	24	24	52	1.89	54.7
U	4.2	0.0066	Single-Family Residential	18	4.3	0	28	28	44	0.50	14.9
V	20.6	0.0322	Single-Family Residential	80	3.9	0	28	28	42	2.41	71.7
W-1	3.1	0.0048	Commercial	N/A	N/A	0	5	5	90	0.49	13.2
W-2	5.9	0.0092	School	N/A	N/A	0	25	25	50	0.73	21.3
W-3	8.2	0.0128	Residential Attached Units	N/A	N/A	0	15	15	70	1.17	32.4
0.0928										Total Inflow to Pond 1 =	7.40
										Total Outflow from Pond 1 =	5.44
										45.3	
J	12.3	0.0192	Montage Unit 4	N/A	N/A	0	27	27	46	1.48	43.6
X	5.1	0.0080	Multi-Family Residential	N/A	N/A	0	15	15	70	0.73	20.3
BOBBY FOSTER	6.0	0.0094	Roadway	N/A	N/A	0	22	0	78	0.89	24.2
Y-1	5.1	0.0080	Multi-Family Residential	N/A	N/A	0	15	15	70	0.73	20.3
0.0446										Total Inflow to Pond 2A =	9.27
										Total Outflow from Pond 2A =	7.78
										14.9	
Y-2	2.2	0.0034	Multi-Family Residential	N/A	N/A	0	15	15	70	0.31	8.6



Designed By:
HUITT-ZOLLARS
Huitt-Zollars, Inc. Albuquerque
6501 Americas Pkwy NE, Suite 550
Albuquerque, New Mexico 87110
Phone (505) 883-8114 Fax (505) 883-5022

SC³ DEVELOPMENT
4020 Vassar Drive NE Suite I

TITLE: MONTAGE UNIT 6 TWILIGHT HOMES		Mo./Day/Yr.	
Design Review Committee	City Engineer		
Last Update			
City Project No. 3935.81	Zone Map No. R-15-Z, R-16-Z	Sheet EX. 1	Of 1

Printed: 3/10/2022 10:56:41 AM By: Edgardo, Scott
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CONDITIONS BASIN MAP.dwg
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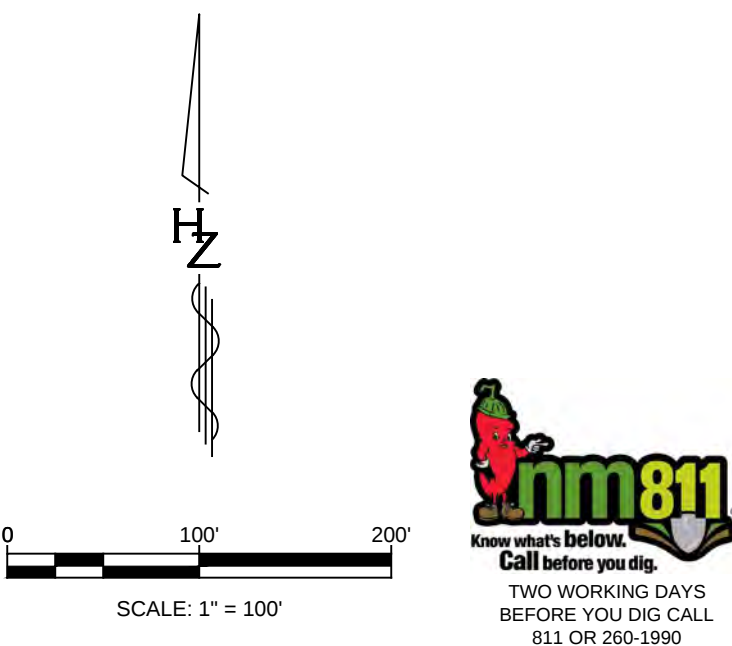


GENERAL NOTES

- ALL DISTURBED COMMERCIAL LOTS AND NON-RESIDENTIAL LOTS AREAS NOT PROPOSED TO BE IMPROVED SHALL BE STRAW CRIMPED W/ NATIVE SEEDING PER COA SPECIFICATION 1011 & 1012.
- SEE PLAT FOR LOT DIMENSIONS.
- SEE DETAIL X FOR TYPICAL LOT GRADING.
- SEE SHEETS XX-XX FOR DIAGRAM & DETAILS OF WALLS RETAINING MORE THAN 18", AND PERIMETER WALLS.
- EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION FOR THIS PROJECT.
- THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION PROJECT.
- CONTRACTOR SHALL OBTAIN PERMISSION TO GRADE ON PRIVATE PROPERTY. CITY SHALL NOT BE RESPONSIBLE FOR CONTRACTOR TRESPASSING ON PRIVATE PROPERTY

LEGEND

- DRAINAGE BASIN BOUNDARY
- DRAINAGE FLOW PATH
- XX DRAINAGE BASIN NUMBER
- ~ DRAINAGE HIGH POINT
- XXX ANALYSIS POINT
- PROPOSED SD



Designed By:

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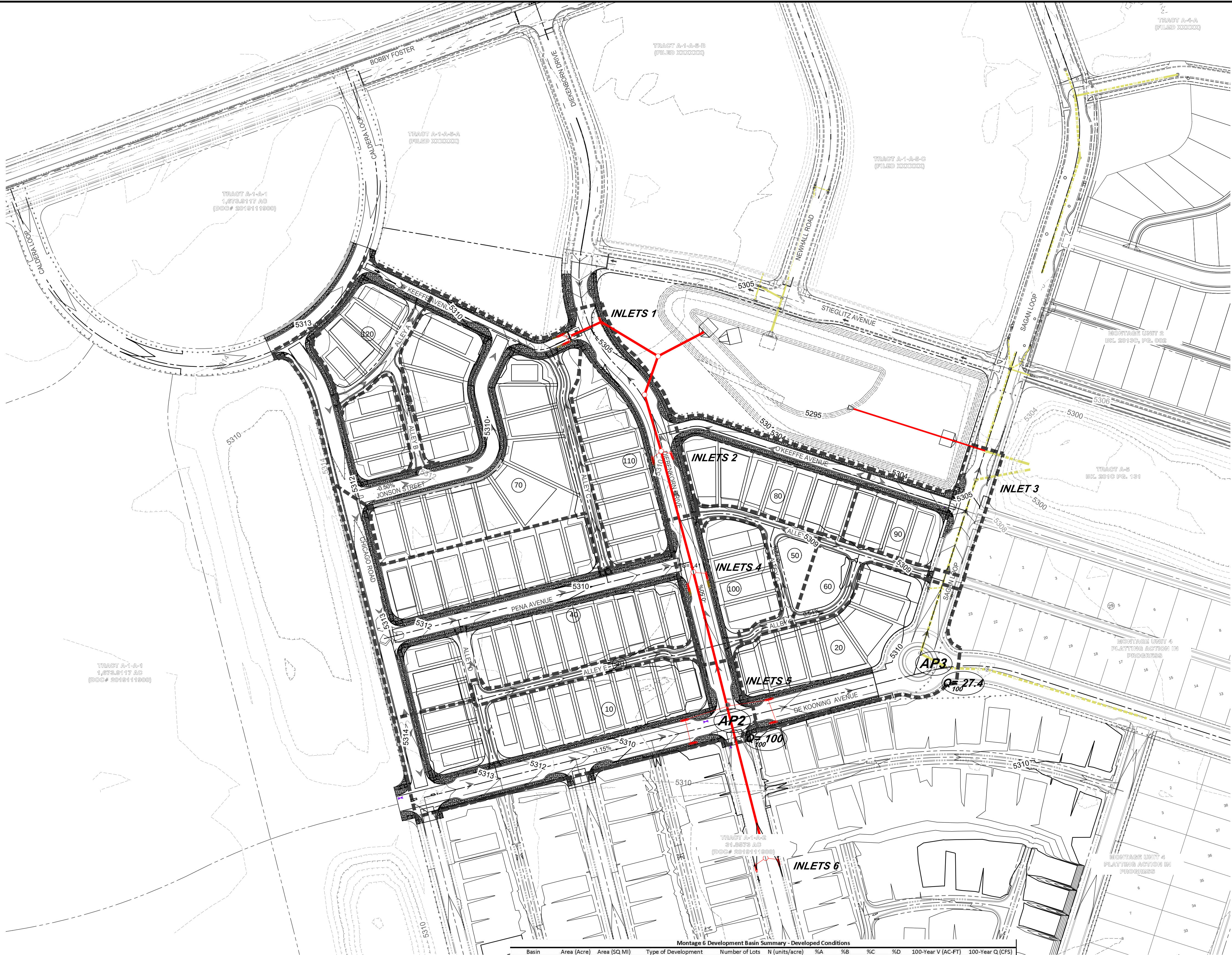
MONTAGE UNIT 5 SC³ DEVELOPMENT

TITLE:

PROPOSED CONDITIONS BASIN MAP

Design Review Committee	City Engineer	Mo./Day/Yr.	
		Mo./Day/Yr.	Mo./Day/Yr.
Last Update			
City Project No.	Zone Map No.	Sheet	
775444	R-15-Z, S-15-Z	Of	

Plotset: 3/8/2022 10:54:06 AM, By:Edwards, Scott
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Last Saved: 3/8/2022 10:53:44 AM, Settings



Montage 6 Development Basin Summary - Developed Conditions												
Basin	Area (Acre)	Area (SQ MI)	Type of Development	Number of Lots	N (units/acre)	%A	%B	%C	%D	100-Year V (AC-FT)	100-Year Q (CFS)	
10	2.7	0.0042	Single-Family Residential	13	4.9	0	26	26	49	0.33	9.6	
20	1.9	0.0029	Single-Family Residential	8	4.2	0	28	28	44	0.22	6.5	
30	0.3	0.0004	Single-Family Residential	1	N/A	0	0	0	100	0.04	1.2	
40	3.6	0.0057	Single-Family Residential	21	5.8	0	22	22	55	0.47	13.6	
50	0.4	0.0007	Park Parcel	1	0.0	0	29	0	71	0.06	1.8	
60	0.4	0.0007	Park Parcel	1	2.3	0	42	0	58	0.06	1.8	
70	4.2	0.0065	Single-Family Residential	19	4.5	0	27	27	46	0.52	15.1	
80	1.2	0.0018	Single-Family Residential	6	6.0	0	21	21	57	0.15	4.3	
90	1.0	0.0015	Single-Family Residential	4	4.2	0	29	29	42	0.11	3.4	
100	0.9	0.0015	Single-Family Res. W/Park	9	9.6	0	29	29	42	0.11	3.4	
110	1.6	0.0025	Single-Family Residential	8	4.9	0	29	29	42	0.19	5.6	
120	0.9	0.0014	Single-Family Residential	4	4.4	0	29	29	42	0.11	3.1	
19.1		0.0298					Total Inflow to Pond 1 =			2.38	69.2	

- GENERAL NOTES
1.

ALL DISTURBED LOT AREAS NOT PROPOSED TO BE IMPROVED SHALL BE STRAW CRIMPED W/ NATIVE SEEDING PER COA SPECIFICATION 1011 & 1012.
2.

EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION FOR THIS PROJECT.
3.

THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION PROJECT.
4.

CONTRACTOR SHALL OBTAIN PERMISSION TO GRADE ON PRIVATE PROPERTY. CITY SHALL NOT BE RESPONSIBLE FOR CONTRACTOR TRESPASSING ON PRIVATE PROPERTY

- LEGEND
- DRAINAGE BASIN BOUNDARY

DRAINAGE FLOW PATH

XX

DRAINAGE BASIN NUMBER

DRAINAGE HIGH POINT

xxx

ANALYSIS POINT

PROPOSED SD
- 0

100'

200'

SCALE: 1" = 100'

Hz

Know what's below.
Call before you dig.
TWO WORKING DAYS
BEFORE YOU DIG CALL
811 OR 266-1999

nm811

DESIGNED BY: JLM
DATE: August 4, 2021
DRAWN BY: LRT
DATE: August 4, 2021
DWG NAME: Mont 6 PROPOSED CONDITIONS BASE
CHECKED BY: SAE
DATE: August 4, 2021

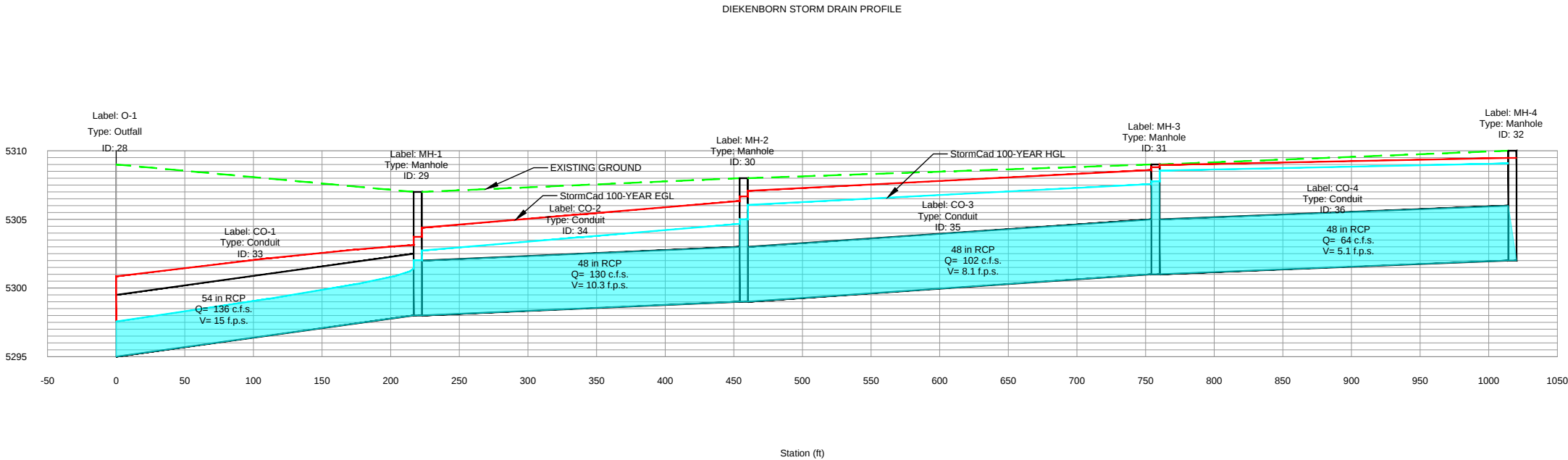
MONTAGE UNIT 6
QUESTA DEL ORO, LLC

TITLE:
PROPOSED CONDITIONS BASIN MAP

Design Review Committee		City Engineer		Mo./Day/Yr.	
				Mo./Day/Yr.	
City Project No.		Zone Map No.		Sheet	Of
775445		R-15-Z, R-16-Z			

APPENDIX F

StormCad Output



Diekenborn to Pond 1 Storm Drain									
Label	Start Node	Stop Node	Length (Unified) (ft)	Flow (cfs)	Rise (Unified) (ft)	Capacity (Full Flow) (cfs)	Velocity (ft/s)	Invert (Start) (ft)	Invert (Stop) (ft)
CO-1	MH-5	MH-1	112.3	114	5.5	347.13	13.09	5,296.80	5,298.00
CO-2	MH-1	MH-2	237.5	114	5	194.15	10.28	5,298.00	5,299.32
CO-3	MH-2	MH-3	300	100	5	194.89	9.99	5,299.32	5,301.00
CO-4	MH-3	MH-D1	260	47	4.5	121.95	7.17	5,301.00	5,302.00
CO-8	MH-5	MH-6	76.4	139	5.5	446.75	5.85	5,296.80	5,296.00

Designed By:
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Huitt-Zollars, Inc. Albuquerque
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MONTAGE UNIT 6
SC³ DEVELOPMENT

TITLE:
DIEKENBORN DRIVE
STORM DRAIN PROFILE

Design Review Committee

City Engineer

Last Update

City Project No.

Zone Map No.

Sheet

Of

Mo./Day/Yr.

Mo./Day/Yr.

NO.

DATE

REVISIONS

DESIGN

DESIGNED BY: SAE

DATE: DEC. 2021

DRAWN BY: LRT

DATE: DEC. 2021

DWG NAME: Diekenborn Profile.dwg

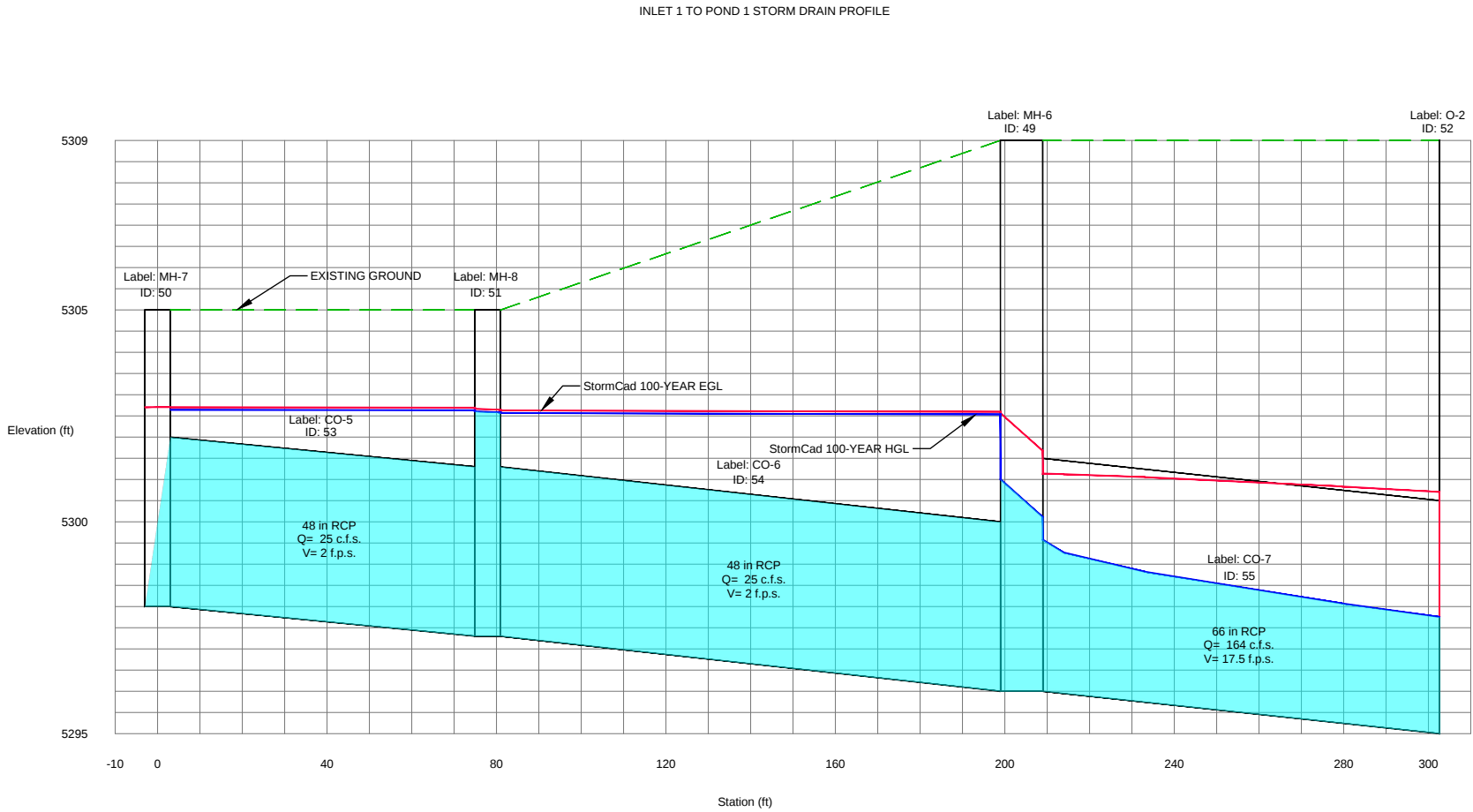
PROJ #: R313015.01

CHECKED BY: SAE

DATE: DEC. 2021

ENGINEER'S SEAL			SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
			FIELD NOTES					
			NO.	BY	DATE			
NO.	DATE	REMARKS	BY			FOUND MONUMENT "15-112 1987"	CONTRACTOR	DATE
REVISIONS						STANDARD 3 1/4" ALUMINUM DISC	WORKMAN USED BY	DATE
DESIGN						NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE-N.A.D. 1983)	INSPECTORS	DATE
						N=1,487,534.543	ACCEPTANCE BY	DATE
						E=1,511,214.742	FIELD VERIFICATION BY	DATE
							DRAWINGS	DATE
							CORRECTED BY	DATE
						ELEV=4965.627 (NAVD 1988)	MICRO-FILM INFORMATION	
						GROUND TO GRID FACTOR=0.999685508	RECORDED BY	DATE
						MAPPING ANGLE=97°45'37"	Mo.	

Plotted: 1/25/2022 11:32:44 AM, By: Banks, Kevin
Title: R313015.01 - Montage 5 Engineering\GIS Design\05.13 Hydrol\05.13.11 Hydraulic\Inlet 1 Profile to Pond 1
1-24-22
Last Saved: 1/25/2022 11:31:52 AM, kbanks



Inlet 1 to Pond 1 Storm Drain									
Label	Start Node	Stop Node	Length (Unified) (ft)	Flow (cfs)	Rise (Unified) (ft)	Capacity (Full Flow) (cfs)	Velocity (ft/s)	Invert (Start) (ft)	Invert (Stop) (ft)
CO-5	MH-7	MH-8	77.9	25	4	176.99	1.99	5,298.00	5,297.30
CO-6	MH-8	MH-6	126.1	25	4	145.86	1.99	5,297.30	5,296.00
CO-7	MH-6	O-2	98.6	164	5.5	439.56	17.15	5,296.00	5,295.00



Designed By:
HUITT-ZOLLARS
Huitt-Zollars, Inc. Albuquerque
6501 Americas Pkwy NE, Suite 550
Albuquerque, New Mexico 87110
Phone (505) 883-8114 Fax (505) 883-5022

MONTAGE UNIT 6 SC ³ DEVELOPMENT			
TITLE: INLET 1 TO POND 1 STORM DRAIN PROFILE			
Design Review Committee	City Engineer	Mo./Day/Yr.	
Last Update		Mo./Day/Yr.	
City Project No.	Zone Map No.	Sheet	Of
		R-15-Z, S-15-Z	

ENGINEER'S SEAL			SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
			FIELD NOTES					
			NO.	BY	DATE			
NO.	DATE	REMARKS	BY		DATE	FOUND MONUMENT	CONTRACTOR	DATE
REVISIONS								
DESIGN								
DESIGNED BY: SAE			DATE: DEC. 2021					
DRAWN BY: LRT			DATE: DEC. 2021					
DWG NAME: Iliad 1 1-24-22.dwg			PROJ #: R313015.01					
CHECKED BY: SAE			DATE: DEC. 2021					
						MAPPING ANGLE=PP1453.77"		DATE
						GROUND TO GRID FACTOR=0.999685508		DATE
						ELEV=4965.627 (NAVD 1989)		DATE
						E=1,511,214.742		DATE
						N=1,487,534.543		DATE
						NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE-N.A.D. 1983)		DATE
						STANDARD 3 1/4" ALUMINUM DISC		DATE
						WORKMANSHIP BY		DATE