

# CITY OF ALBUQUERQUE

Planning Department  
Brennon Williams, Director



Mayor Timothy M. Keller

April 26, 2021

David Soule, P.E.  
Rio Grande Engineering  
P.O. Box 93924  
Albuquerque, NM 87199

**RE: 1105 Silver Ave. SW**  
**Grading and Drainage Plan**  
**Engineer's Stamp Date: 04/19/21**  
**Hydrology File: K13D079**

Dear Mr. Soule:

Based upon the information provided in your submittal received 04/19/2021, the Grading and Drainage Plan is approved for Building Permit.

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, [jhughes@cabq.gov](mailto:jhughes@cabq.gov), 924-3420) 14 days prior to any earth disturbance.

Please provide Drainage Covenant for the detention pond per Article 6-15(C) of the DPM prior to Permanent Release of Occupancy. There is a recording fee (\$25, payable to Bernalillo County). Please contact 924-3996. Due to COVID-19, please follow the instructions:

Either mail or drop off the originals. Please mail the \$25.00 recording fee check made payable to Bernalillo County to:

Planning Dept./DRC  
600 2nd St. NW, Ste. 400  
ABQ, NM, 87102

If you drop off the originals, there is a drop box outside the building labeled DRC. Once approved and recorded, a copy will be email.

# CITY OF ALBUQUERQUE

*Planning Department*  
Brennon Williams, Director



*Mayor Timothy M. Keller*

If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto:rbrissette@cabq.gov) .

Sincerely,

*Renée C. Brissette*

Renée C. Brissette, P.E. CFM  
Senior Engineer, Hydrology  
Planning Department

PO Box 1293

Albuquerque

NM 87103

[www.cabq.gov](http://www.cabq.gov)



# City of Albuquerque

Planning Department  
Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

**Project Title:** 1105 SILVER SW **Building Permit #:** \_\_\_\_\_ **Hydrology File #:** \_\_\_\_\_  
**DRB#:** \_\_\_\_\_ **EPC#:** \_\_\_\_\_ **Work Order#:** \_\_\_\_\_  
**Legal Description:** LOT 15-A, BLOCK 14 RAYNOLDS SUBDIVISION  
**City Address:** 1105 SILVER SW

**Applicant:** \_\_\_\_\_ **Contact:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**Other Contact:** RIO GRANDE ENGINEERING **Contact:** DAVID SOULE  
**Address:** PO BOX 93924 ALB NM 87199  
**Phone#:** 505.321.9099 **Fax#:** 505.872.0999 **E-mail:** david@riograndeengineering.com

**TYPE OF DEVELOPMENT:** \_\_\_\_\_ PLAT ☒ RESIDENCE \_\_\_\_\_ DRB SITE \_\_\_\_\_ ADMIN SITE

Check all that Apply:

**DEPARTMENT:**  
☒ HYDROLOGY/ DRAINAGE  
\_\_\_\_\_ TRAFFIC/ TRANSPORTATION

**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?

IS THIS A RESUBMITTAL?: \_\_\_\_\_ Yes ☒ No

**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:** \_\_\_\_\_ **By:** \_\_\_\_\_

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

FEE PAID: \_\_\_\_\_



BASIN DATA

Basin	Area (sf)	Area (acres)	Treatment A % (acres)	Treatment B % (acres)	Treatment C % (acres)	Treatment D % (acres)	Q100 GENERATED	Q100 DISCHARGED			
EXISTING TO ALLEY	3525.00	0.081	0%	0	50%	0.040	50%	0.0405	0%	0.000	0.22
EXISTING TO SILVER	3485.00	0.080	0%	0	50%	0.040	50%	0.0407	0%	0.000	0.21
PROPOSED TO ALLEY	1059.00	0.024	0%	0	10%	0.002	85%	0.0207	5%	0.001	0.08
PROPOSED TO SILVER	5961.00	0.137	0%	0	10%	0.014	26%	0.0356	64%	0.088	0.28
TOTAL EXISTING											0.43
TOTAL PROPOSED											0.32

FIRST FLUSH/REDEVELOPMENT (0.48" PER SF IMP)

133.526 required

154.000 provided

\* SITE DISCHARGE CALCULATED UTILIZING ARYMO. THE DETENTION POND HAS DIFFERENT T<sub>p</sub> THEREFORE THE CUMULATIVE DISCHARGE IS SLIGHTLY LESS THAT THE SUMMATION OF EACH BASIN

Narrative  
The subject property is located within a fully developed area of downtown Albuquerque. All down stream drainage improvements have been completed. This is a new development of an site that discharges 0.43 cfs of which 22 cfs drains to alley and 21 cfs drains to silver. The proposed improvements will free discharge 08 cfs to the alley and 26 cfs to the silver. The combined flow leaving the site is .11 cfs less than historic. The improved areas will pass thru a detention pond with a water quality volume below the outlet pipe. The outlet pipe size restricts the flow and the yard pond is sized to contain the water quality volume of 134 CF.

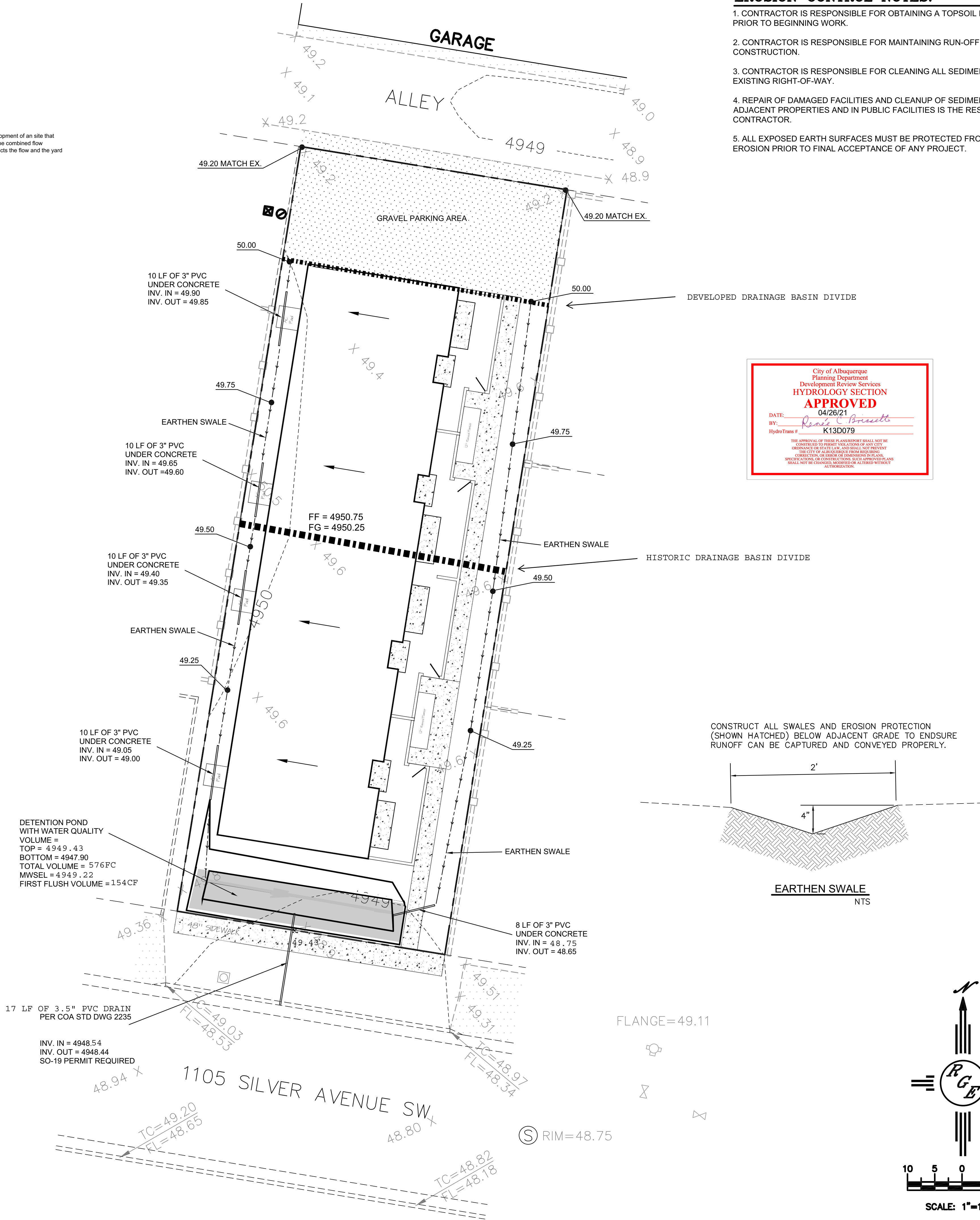
Private Drainage Facilities within City Right-of-Way  
Notice to Contractor  
(Special Order 19 ~ "SO-19")

- Build sidewalk culvert per COA STD DWG 2236.
- Contact Storm Drain Maintenance at (505) 857-8033 to schedule a meeting prior to forming.
- An excavation permit will be required before beginning any work within City Right-Of-Way.
- All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
- Two working days prior to any excavation, the contractor must contact **New Mexico One Call, dial "811"** [or (505) 260-1990] for the location of existing utilities.
- Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
- Backfill compaction shall be according to traffic/street use.
- Maintenance of the facility shall be the responsibility of the owner of the property being served.
- Work on arterial streets may be required on a 24-hour basis.
- Contractor must contact Storm Drain Maintenance at (505) 857-8033 to schedule a construction inspection. For excavating and barricading inspections, contact Construction Coordination at (505) 924-3416.

REV. 01/27/21

CAUTION:

EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.

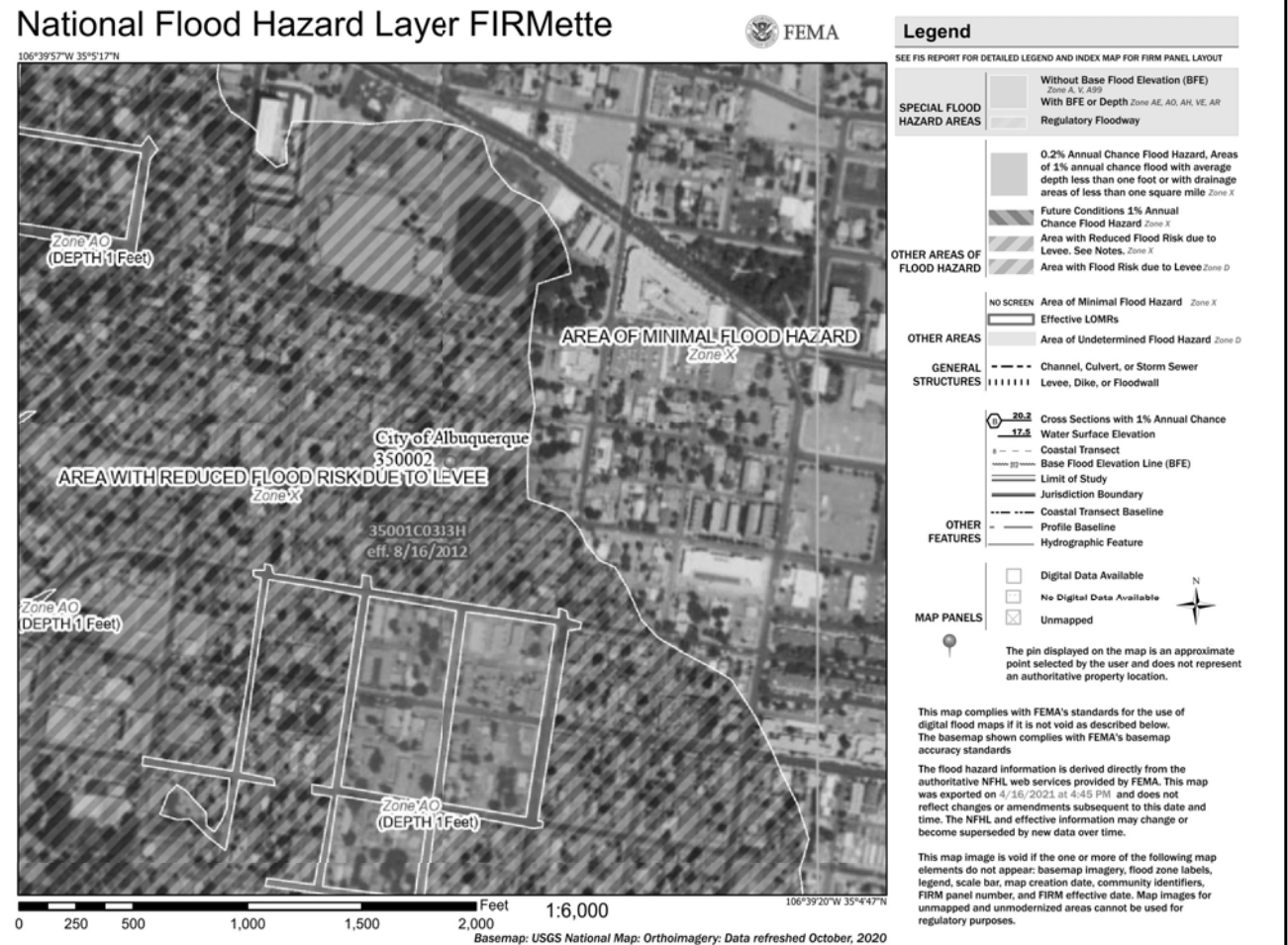


EROSION CONTROL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
- REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



VICINITY MAP: K-13-Z



FIRM MAP:

LEGAL DESCRIPTION:

LOT 15-A BLOCK 14 RAYNOLDS ADDITION  
CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

NOTES:

- ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
- ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.
- ANY PERIMETER WALLS MUST BE PERMITTED SEPARATELY ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
- SURVEY INFORMATION PROVIDED BY COMMUNITY SCIENCES CORPORATION USING NAVD DATUM 1988.
- A PAD ELEVATION CERTIFICATION SHALL BE REQUIRED PRIOR TO RELEASE OF BUILDING PERMIT.

LEGEND

---	XXXX	EXISTING CONTOUR
- - -	XXXX	EXISTING INDEX CONTOUR
---	XXXX	PROPOSED CONTOUR
---	XXXX	PROPOSED INDEX CONTOUR
+	XXXX	EXISTING SPOT ELEVATION
●	XXXX	PROPOSED SPOT ELEVATION
---		BOUNDARY
---		ADJACENT BOUNDARY
=====		EXISTING CURB AND GUTTER
---		PROPOSED EARTHEN SWALE
---		PROPOSED RETAINING WALL
---		PROPOSED GRAVEL
---		PROPOSED CONCRETE

ENGINEER'S SEAL	Lot 15-A Blk 14 Raynolds Addition 1105 SILVER AVE.	DRAWN BY DEM
DAVID SOULE REGISTERED PROFESSIONAL ENGINEER 14522	GRADING AND DRAINAGE PLAN	DATE 4-17-21
4/19/21	Rio Grande Engineering	Lot 15-A Blk 14 Raynolds Addition.dwg
DAVID SOULE P.E. #14522	P.O. BOX 53954 ALBUQUERQUE, NM 87199 (505) 321-9099	SHEET # 1 of 2
		JOB #



POND STAGE-STORAGE

ACTUAL ELEV.	DEPTH (FT)	AREA SF	VOLUME PER UNIT	VOLUME CUMULATIVE	VOLUME AC-FT	Q (CFS)
47.90	0.00	171.00	0	0	0.000	0.00
48.54	0.00	311.00	154.24	154.24	0.004	0.00
49.00	0.46	489.00	184.00	338.24	0.008	0.22
49.43	0.89	620.00	238.44	576.675	0.013	0.30

OUTLET

Orifice Equation  
Q = CA SQRT(2gH)  
  
C = 0.6  
Diameter (in) 3.5  
Area (ft<sup>2</sup>)= 0.066813385  
g = 32.2  
H (ft) = Depth of water above center of orifice  
Q (CFS)= Flow

ANYMO.OUT  
- Version: 54.01a - Rel: 01a  
RUN DATE (MM/DD/YY) = 04/19/2021  
START TIME (HH:MM:SS) = 11:07:47 USER NO.=  
Riograndesingia41983127  
INPUT FILE = Documents and Settings\Owner\Desktop\2021 10BS\202115-  
silver\pondrout041921.txt  
\*S ANYMO - DETENTION-SILVER APTS  
\*S POND ROUTING  
START TIME=0.0 PUNCH CODE=0  
RAINFALL TYPE=2  
QUARTER=0.0 ONE= 1.78 IN  
SIX=2.29 IN DAY= 2.59 IN DT = 0.05 HR

AREAS 24-HOUR RAINFALL DIST. - BASED ON NOAA ATLAS 14 FOR CONVECTIVE  
(NW & AZ) - D1

DT = 0.050000 HOURS END TIME = 24.000002 HOURS  
0.0000 0.0034 0.0069 0.0307 0.0147 0.0189 0.0236  
0.0393 0.0409 0.0523 0.0640 0.0768 0.0898 0.1032  
0.1170 0.1330 0.1465 0.1627 0.1802 0.2032 0.2289  
0.2634 0.3025 0.3507 0.4131 0.4876 0.6127 0.8072  
1.1405 1.3747 1.5394 1.6522 1.7336 1.7821 1.8386  
1.8791 1.9088 1.9361 1.9585 1.9770 1.9934 2.0082  
2.0223 2.0343 2.0460 2.0573 2.0683 2.0773 2.0853  
2.0873 2.0922 2.0968 2.1014 2.1058 2.1102 2.1145  
2.1186 2.1228 2.1265 2.1304 2.1341 2.1379 2.1415  
2.1453 2.1488 2.1521 2.1554 2.1586 2.1617 2.1645  
2.1683 2.1714 2.1745 2.1775 2.1802 2.1833 2.1864  
2.1893 2.1922 2.1948 2.1976 2.1998 2.2012 2.2030  
2.2067 2.2134 2.2140 2.2166 2.2191 2.2217 2.2242  
2.2269 2.2296 2.2326 2.2356 2.2384 2.2412 2.2442  
2.2455 2.2458 2.2481 2.2503 2.2526 2.2548 2.2570  
2.2592 2.2614 2.2636 2.2657 2.2671 2.2681 2.2681  
2.2740 2.2763 2.2781 2.2801 2.2821 2.2841 2.2861  
2.2881 2.2900 2.2925 2.2947 2.2963 2.2983 2.2992  
2.2930 2.2938 2.2967 2.2975 2.2983 2.2992 2.3000  
2.3000 2.3017 2.3025 2.3031 2.3042 2.3050 2.3058  
2.3067 2.3075 2.3083 2.3092 2.3100 2.3108 2.3117  
2.3125 2.3133 2.3142 2.3150 2.3158 2.3167 2.3175  
2.3183 2.3192 2.3200 2.3208 2.3217 2.3225 2.3233  
2.3242 2.3250 2.3258 2.3267 2.3275 2.3283 2.3292  
2.3300 2.3308 2.3317 2.3325 2.3331 2.3342 2.3350  
2.3358 2.3367 2.3375 2.3383 2.3392 2.3400 2.3408  
2.3417 2.3425 2.3433 2.3442 2.3450 2.3458 2.3467  
2.3475 2.3483 2.3492 2.3500 2.3508 2.3517 2.3525  
2.3533 2.3542 2.3550 2.3558 2.3567 2.3575 2.3583  
2.3592 2.3600 2.3608 2.3617 2.3625 2.3633 2.3642  
2.3650 2.3658 2.3667 2.3675 2.3683 2.3692 2.3700  
2.3708 2.3716 2.3725 2.3733 2.3742 2.3750 2.3758  
2.3767 2.3775 2.3783 2.3792 2.3800 2.3808 2.3817  
2.3825 2.3833 2.3842 2.3850 2.3858 2.3867 2.3875  
2.3883 2.3892 2.3900 2.3908 2.3917 2.3925 2.3933  
2.3942 2.3950 2.3958 2.3967 2.3975 2.3983 2.3992  
2.4000 2.4008 2.4017 2.4025 2.4033 2.4042 2.4050  
2.4058 2.4067 2.4075 2.4083 2.4092 2.4100 2.4108  
Page 1

ANYMO.OUT  
2.4117 2.4125 2.4133 2.4142 2.4150 2.4158 2.4167  
2.4175 2.4184 2.4192 2.4200 2.4208 2.4217 2.4225  
2.4233 2.4242 2.4250 2.4258 2.4267 2.4275 2.4283  
2.4292 2.4300 2.4308 2.4317 2.4325 2.4333 2.4342  
2.4350 2.4358 2.4367 2.4375 2.4383 2.4392 2.4400  
2.4408 2.4417 2.4425 2.4433 2.4442 2.4450 2.4458  
2.4467 2.4475 2.4483 2.4492 2.4500 2.4508 2.4517  
2.4525 2.4533 2.4542 2.4550 2.4558 2.4567 2.4575  
2.4583 2.4592 2.4600 2.4608 2.4617 2.4625 2.4633  
2.4642 2.4650 2.4658 2.4667 2.4675 2.4683 2.4692  
2.4700 2.4708 2.4717 2.4725 2.4733 2.4742 2.4750  
2.4758 2.4767 2.4775 2.4783 2.4792 2.4800 2.4808  
2.4817 2.4825 2.4833 2.4842 2.4850 2.4858 2.4867  
2.4875 2.4883 2.4892 2.4900 2.4908 2.4917 2.4925  
2.4933 2.4942 2.4950 2.4958 2.4967 2.4975 2.4983  
2.4992 2.5000 2.5008 2.5017 2.5025 2.5033 2.5042  
2.5050 2.5058 2.5067 2.5075 2.5083 2.5092 2.5100  
2.5108 2.5117 2.5125 2.5133 2.5142 2.5150 2.5158  
2.5167 2.5175 2.5183 2.5192 2.5200 2.5208 2.5217  
2.5225 2.5233 2.5241 2.5250 2.5258 2.5266 2.5275  
2.5283 2.5292 2.5300 2.5308 2.5317 2.5325 2.5333  
2.5341 2.5350 2.5358 2.5366 2.5375 2.5383 2.5391  
2.5400 2.5408 2.5416 2.5425 2.5433 2.5441 2.5450  
2.5458 2.5466 2.5475 2.5483 2.5491 2.5500 2.5508  
2.5516 2.5525 2.5533 2.5541 2.5550 2.5558 2.5566  
2.5575 2.5583 2.5591 2.5600 2.5608 2.5616 2.5625  
2.5633 2.5641 2.5650 2.5658 2.5666 2.5675 2.5683  
2.5691 2.5700 2.5708 2.5716 2.5725 2.5733 2.5741  
2.5750 2.5758 2.5766 2.5775 2.5783 2.5791 2.5800  
2.5808 2.5816 2.5825 2.5833 2.5841 2.5850 2.5858  
2.5866 2.5875 2.5883 2.5891 2.5900  
Page 2

\*Basin EXISTING TO ALLEY  
COMPUTE NM HYD ID=1 HYD NO=101 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=2 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO SILVER  
COMPUTE NM HYD ID=2 HYD NO=102 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=2 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO ALLEY  
COMPUTE NM HYD ID=1 HYD NO=101 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=1 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO SILVER  
COMPUTE NM HYD ID=2 HYD NO=102 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=2 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO SILVER  
COMPUTE NM HYD ID=2 HYD NO=102 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=2 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO SILVER  
COMPUTE NM HYD ID=2 HYD NO=102 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=2 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO SILVER  
COMPUTE NM HYD ID=2 HYD NO=102 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=2 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO SILVER  
COMPUTE NM HYD ID=2 HYD NO=102 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=2 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO SILVER  
COMPUTE NM HYD ID=2 HYD NO=102 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=2 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO SILVER  
COMPUTE NM HYD ID=2 HYD NO=102 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=2 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO SILVER  
COMPUTE NM HYD ID=2 HYD NO=102 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=2 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO SILVER  
COMPUTE NM HYD ID=2 HYD NO=102 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=2 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO SILVER  
COMPUTE NM HYD ID=2 HYD NO=102 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=2 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO SILVER  
COMPUTE NM HYD ID=2 HYD NO=102 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=2 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO SILVER  
COMPUTE NM HYD ID=2 HYD NO=102 D= .0001254 SQ MI  
PER A=0 PER B=50 PER C=50 PER D=0  
TP= .138 MASSRAIN=1  
K = 0.122899HR TP = 0.138000HR K/TP RATIO = 0.890574 SHAPE  
CONSTANT, N = 3.982130 CFS UNIT VOLUME = 0.9620 B = 353.98  
P50 = 1.7800 AREA = 0.000125 SQ MI IA = 0.42500 INCHES INF = 1.04000  
INCHES  
PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
0.050000  
PRINT HYD ID=2 CODE=3  
TIME TIME FLOW TIME FLOW TIME FLOW  
FLOW HRS TIME CFS FLOW HRS CFS HRS CFS  
1.800 0.0 0.0 0.600 0.0 1.200 0.0  
1.950 0.0 0.0 0.900 0.0 1.500 0.2  
2.100 0.0 0.0 1.050 0.0 1.650 0.1  
2.250 0.0 0.0 1.050 0.0 1.650 0.1  
0.0001 RUNOFF VOLUME = 0.90620 INCHES = 0.0061 ACRE-FEET  
PEAK DISCHARGE RATE = 0.22 CFS AT 1.550 HOURS BASIN AREA =  
SQ. MI.

\*Basin EXISTING TO SILVER  
COMPUTE NM HYD ID=2 HYD NO=1