

MASTER DRAINAGE PLAN

for the

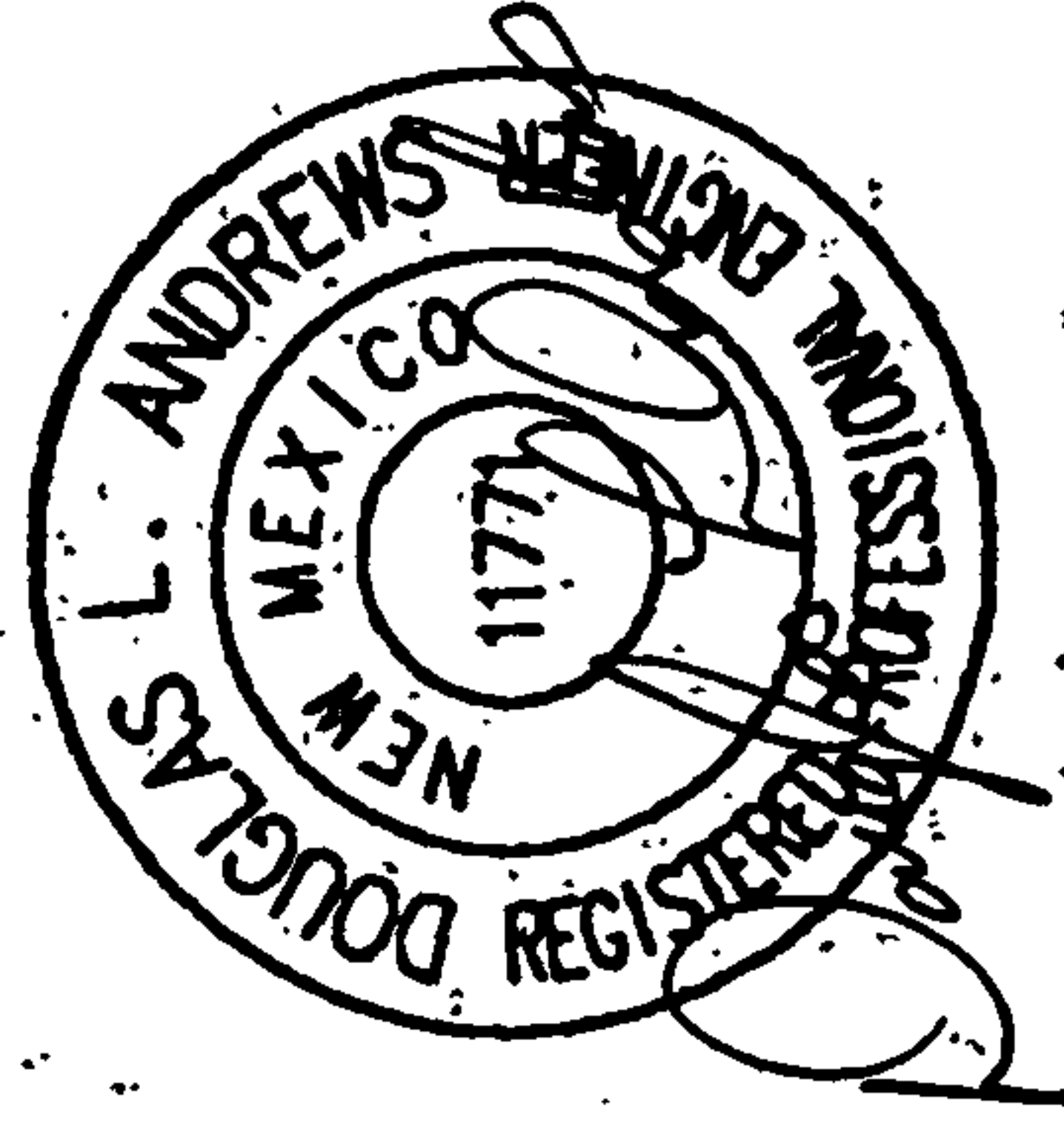
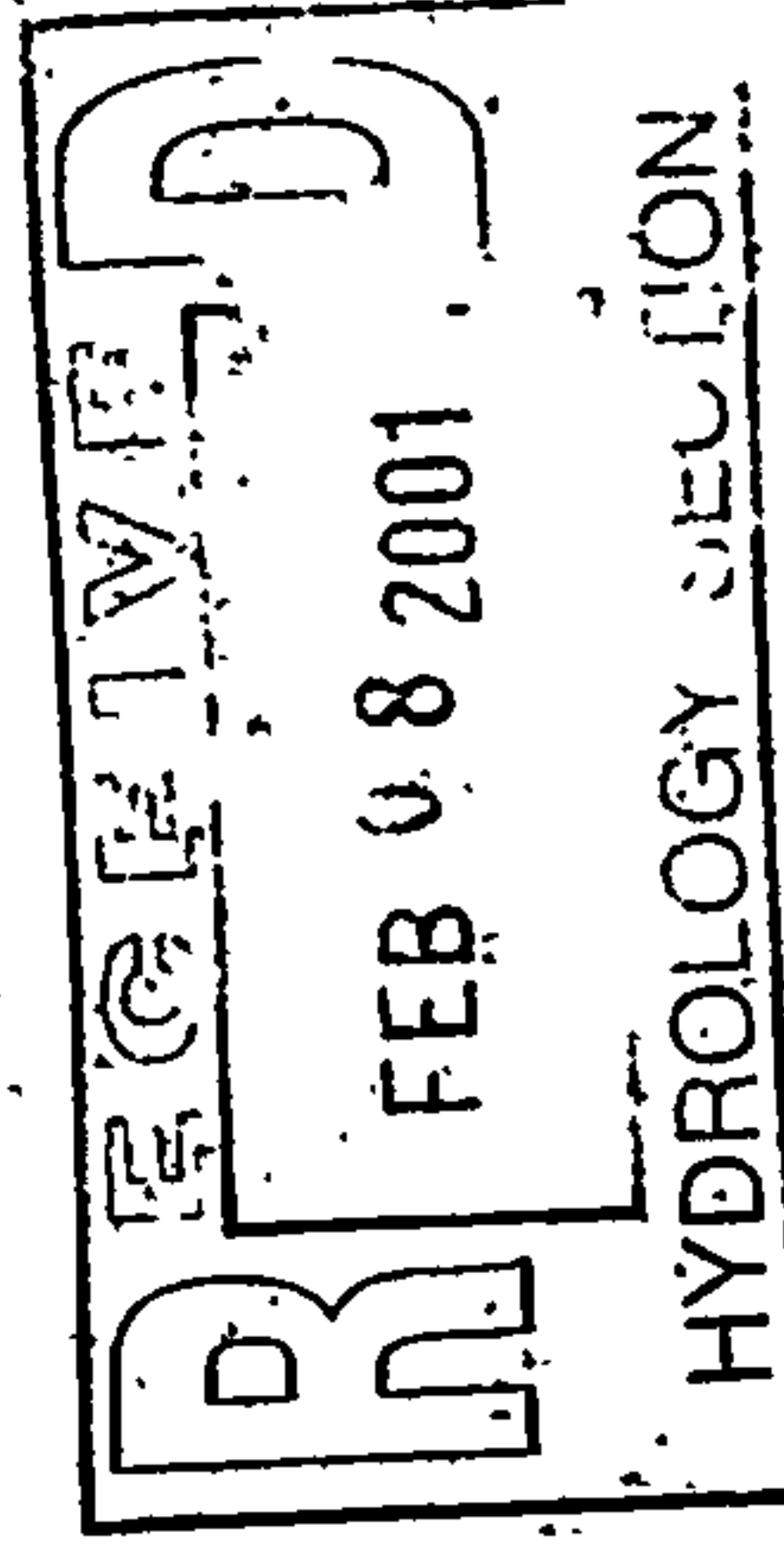
WEST SIDE TRANSIT FACILITY

CITY OF ALBUQUERQUE, NEW MEXICO

Prepared for:

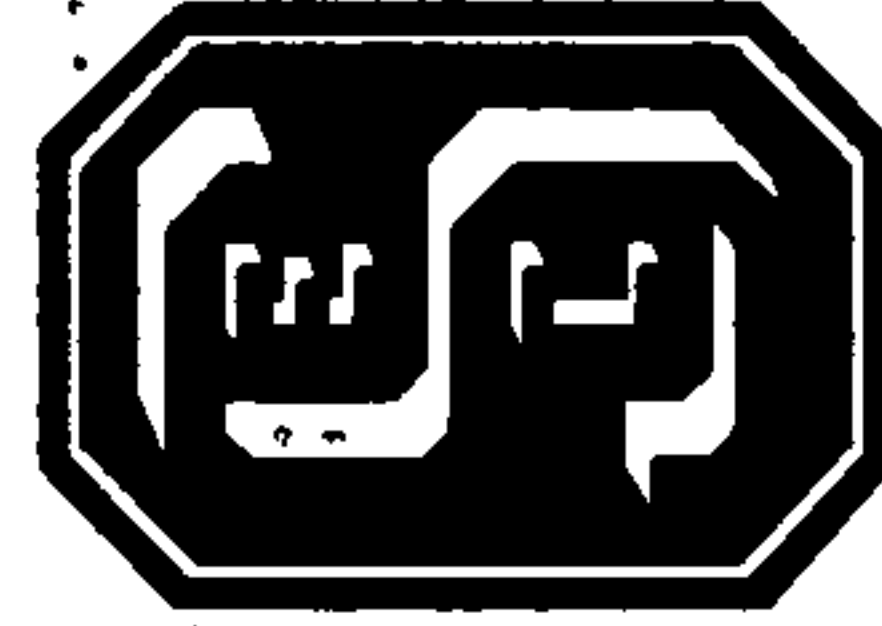
CITY OF ALBUQUERQUE
TRANSIT DEPARTMENT

February, 2001



Prepared by:

2-8-01



Smith Engineering Company

A Full-Service Engineering Company

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I. INTRODUCTION

The City of Albuquerque Transit Department is planning to construct a transit facility on the city's west side to maintain and operate a fleet of 125 buses and 35 vans. The proposed facility will be an integral part of the Transit Department's promotion of alternative transportation services. The proposed site consists of approximately 20 acres located south and east of the Interstate 40 and Unser Boulevard interchange. A vicinity map showing the location of the proposed facility is shown in Figure 1.

Smith Engineering Company (SEC) has been retained by DWL Architects to provide civil engineering services for the proposed West Side Transit Facility. Included in the civil engineering scope of work is to provide drainage engineering services for the development of the West Side Transit Facility.

The proposed site lies within a drainage basin that contributes to the Unser Diversion. The Unser Diversion is a series of six detention ponds connected in series by storm drain culvert pipes. Initially, SEC met with the City of Albuquerque Hydrology Development Section to determine the requirements for proper drainage of the proposed West Side Transit Facility. ~~SEC entered the meeting proposing free discharge from the fully developed West Side Transit Facility to the Unser Diversion Pond No. 6.~~ The city's obvious response was "What effect will this have on the Unser Diversion system as a whole?" At the same meeting, the City mentioned that a master plan for the Unser Diversion drainage basin could be useful for future development.

In order to accommodate the city's requirement (of analyzing the entire Unser Diversion), SEC decided to prepare this master plan not only to obtain preliminary approval of the drainage plan for the Transit Facility, but to also provide the city with a plan for future development within the Unser Diversion drainage basin.

This master drainage plan will analyze the hydraulic capacity of the Unser Diversion for existing, interim, and fully developed conditions. This master plan will also provide a hydraulic analysis/design of storm drain required within roadways impacted by the development of the Transit Facility. These roads included Daytona Road, Oliver Ross Road and Los Volcanes Road.

II. DRAINAGE AREA BOUNDARIES

The drainage basin boundary for the area north of Interstate 40 (considered off-site basins in this report) is bounded on the north by the Ladera Diversion and Detention Facilities, the south by Interstate 40 and east and west by existing topographic features. The drainage basin boundary for the area south of Interstate 40 (considered on-site basins in this report) is generally bounded on the north by Interstate 40, the south by the Avalon Subdivision Unit I, the west by property lines and topographic features between 94th Street and 98th Street and the east by the Unser Diversion. Drainage Area Maps 1 through 4 located in the back pockets of this report show the drainage area boundaries.

III. DRAINAGE CHARACTERISTICS

A. Existing Topography

The contributing drainage area north of Interstate 40 slopes from the northwest to the southeast with a surface gradient varying from 2.5 percent to 3.75 percent. Natural arroyos exist within this northern off-site basin, which convey storm water runoff to culverts under Interstate 40 and eventually to the Unser Diversion.

The contributing drainage area south of Interstate 40 also slopes from the northwest to the southeast with surface gradients varying from 2.5 percent to 6 percent. Natural arroyos as well as gradually sloping lands (causing sheet flow) exist within this southern on-site basin, which convey storm water runoff to the Unser Diversion detention pond facilities. The topography of both the off-site basins and the on-site basins are shown on Maps 1 through 4 located in the back pockets of this report.

B. Existing Vegetation

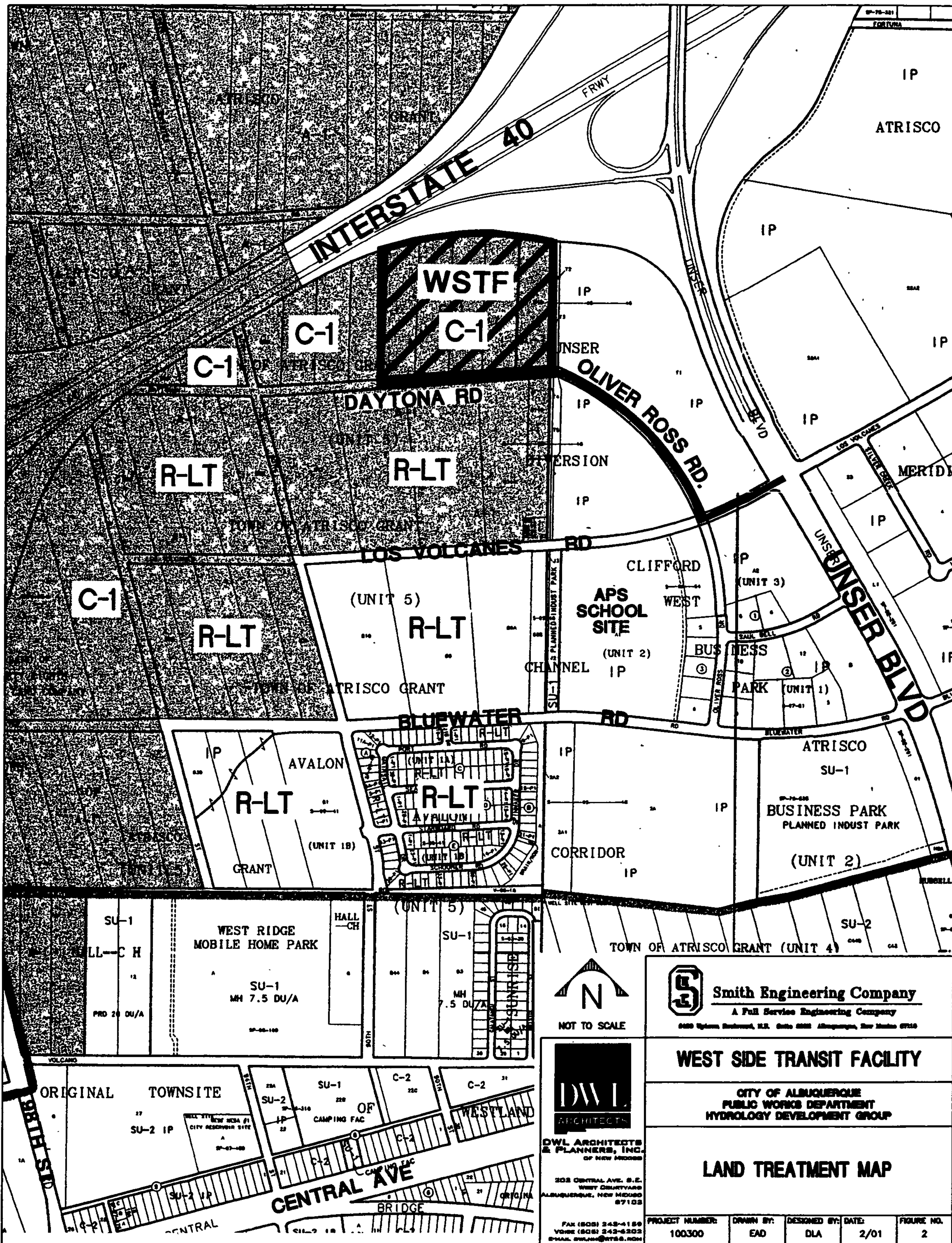
Existing vegetation is relatively sparse throughout the area and consists of open-type desert grassland. Generally, vegetative cover is estimated at less than 40 percent. Under developed conditions, it is anticipated that the area will be covered with hard impervious surfaces and various types of landscaping.

C. Land Use

Under existing conditions approximately 95 percent of the drainage basin is undeveloped. Some residential development has recently occurred in the southern portion of the area south of Interstate 40. Developed condition land uses were determined from City of Albuquerque Zone Atlas Maps. According to the Zone Atlas Maps, some of the land south of Interstate 40 is zoned A-1. It is difficult to predict future zoning for land currently designated A-1. After visiting the drainage basin several times, and reviewing the Bernalillo County mapping mentioned above, educated assumptions were made in determining future zoning of these parcels. Figure No. 2 shows zoning used for this drainage master plan.

IV. EXISTING DRAINAGE FACILITIES

Four existing culverts under Interstate 40 currently convey storm water runoff generated from the north side of Interstate 40 to the south. The culverts range in size from a single 30 inch CMP to triple 6'x4' CBCs. Once the runoff exits these culverts, natural channels convey the storm water to the Unser Diversion. The Unser Diversion is located west of Unser Blvd. and is comprised of six detention ponds (in series) connected by culvert type pipes. The storm water runoff from the Unser Diversion is then discharged east through a storm drain pipe and eventually discharges to the Unser Blvd. storm drain system. Maps 1 through 4 located in the back pocket of the report show the existing drainage facilities as they currently exist.



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LAND TREATMENT MAP



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100300	EAD	DLA	2/01	2

V. FLOOD PLAINS

After reviewing the Flood Insurance Rate Map for Bernalillo County and Incorporated Areas (Panel 328 of 825 Map No. 35001C0328 D) dated September 20, 1996, flood plains do exist on properties in the drainage area. Figure 3 shows the existing flood plains within the drainage basin. Since the construction of the Unser Diversion in 1997, the Federal Emergency Management Agency (FEMA) has issued a Letter of Map Revision, removing downstream flood plains.

VI. HYDROLOGY

Frequency flows were quantified using the AHYMO computer program according to "Section 22.2 Hydrology of the Development Process Manual, Design Criteria for the City of Albuquerque, New Mexico". Mapping for this study utilized the orthophotography and vector contour composite images (part of the Bernalillo County Digital Mapping). The mapping was obtained from the Albuquerque Metropolitan Arroyo and Flood Control Authority (AMAFCA).

Rainfall amounts for the frequency events were derived from the NOAA Atlas shown in "Section 22.2 Hydrology of the Development Process Manual", figures C-1, C-2 and C-3. Developed condition sub-basins were generally broken down into platted lands while topographic features were utilized to determine existing condition drainage sub-basins.

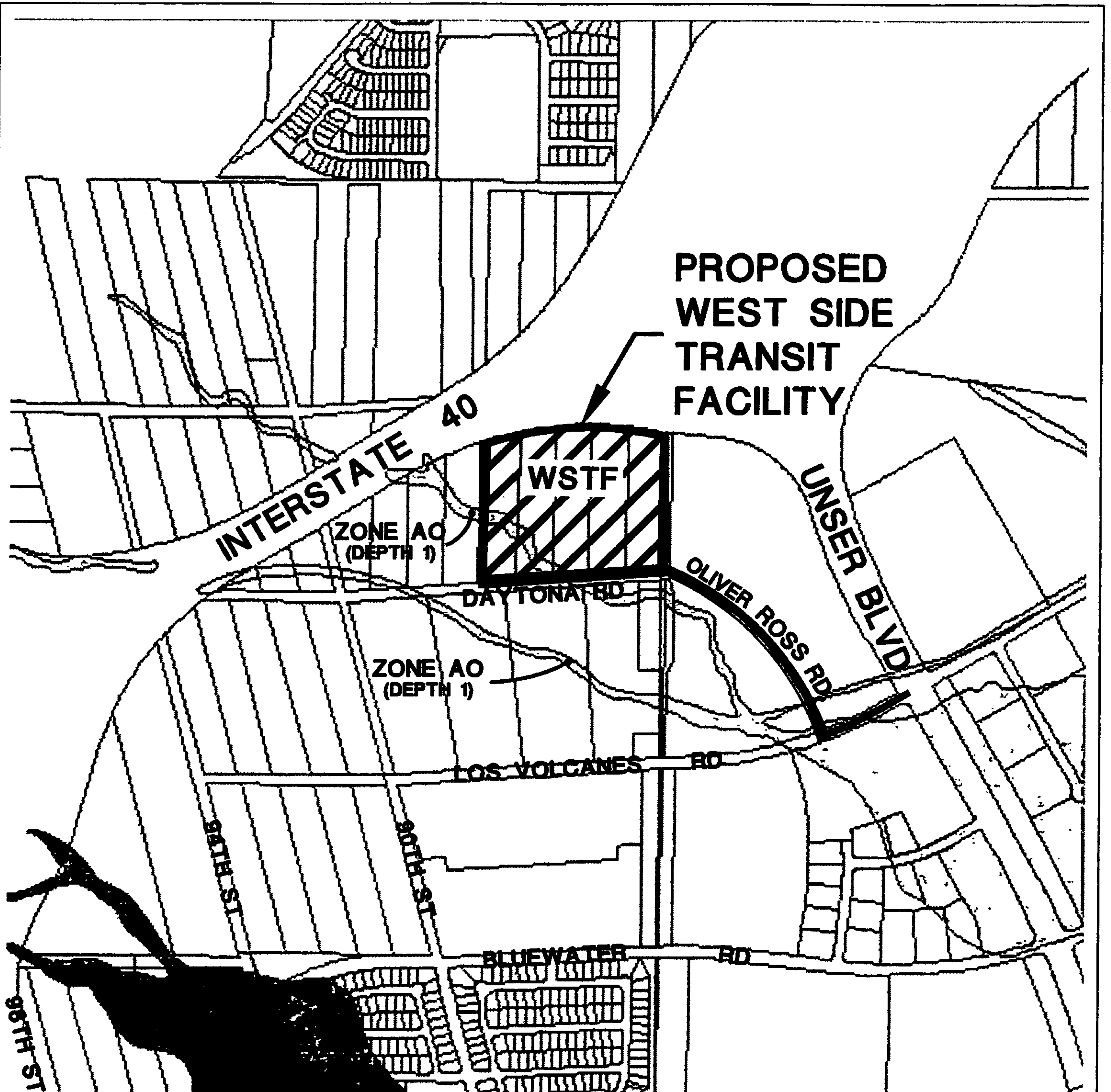
Existing condition land treatments were determined utilizing the Bernalillo County mapping mentioned above. Developed condition land treatments were determined by correlating the proposed zoning mentioned above to the appropriate land treatments as shown in "Section 22.2 Hydrology of the Development Process Manual", tables A-4 and A-5. Appendix "A" links the zoning used for developed conditions to the appropriate land treatments used in the AHYMO computer models.

Time of concentration calculations utilized the SCS Upland Method as described in "Section 22.2 Hydrology of the Development Process Manual". Appendix "B" contains AHYMO basin parameter worksheets together with peak flows and volumes for each sub-basin. AHYMO output summary tables are included in Appendix "C". Detailed AHYMO computer model input and output files are available for observation at the offices of Smith Engineering Company. 10 year and 100 year peak flows and volumes at designated analysis points are shown on Maps 1 through 4 located in the back pockets of this report.

VII. HYDRAULICS

The hydraulics of the proposed storm drain system are based on utilizing the following three basic system parts:

1. Streets – which act as open channels to convey storm water runoff the drop inlets.



COPY OF:

FIRM
FLOOD INSURANCE RATE MAP

BERNALILLO COUNTY,
NEW MEXICO AND INCORPORATED AREAS

PANEL 328 OF 825

MAP NUMBER 35001C0328 D

EFFECTIVE DATE:
SEPTEMBER 20, 1996

FEDERAL EMERGENCY MANAGEMENT AGENCY



NOT TO SCALE



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WEST SIDE TRANSIT FACILITY

CITY OF ALBUQUERQUE
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HYDROLOGY DEVELOPMENT GROUP

FLOOD PLAN MAP



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100300	EAD	DLA	2/01	3

2. Underground piping – with convey storm water runoff from the drop inlets to the Unser Diversion.
3. Unser Diversion – which detains storm water runoff through six detention ponds and ultimately discharge it at a controlled rate to the Unser Blvd storm drain system.

Street capacities were determined using “Flow Master”, a computer program that utilizes Manning’s Equation to determine hydraulic capacities of the individual roadways. Hydraulic grade lines for storm drain pipes were calculated using “Storm Cad”, a computer program used to perform hydraulic analyses on storm drain pipe systems. “Storm Cad” utilizes Manning’s Equation for open channel flow as well as pressurized flow incorporating friction head loss and other minor head losses within the storm drain system. Culvert pipes were analyzed utilizing “Culvert Master”, a computer program specializing in the design and analysis of culvert pipes. Hydraulic calculations relative to pond routing were performed using the AHYMO computer program.

VIII. ANALYSIS

This section of the report provides a brief description of the Unser Diversion facility followed by four separate analyses of the detention pond capacities for the following conditions:

- Existing Condition
- Existing Condition with the Transit Facility fully developed
- Developed Interim Condition
- Developed Condition

It should be mentioned that all of the analyses below assume free discharge from each basin. In other words, no basins were assumed to contain detention ponds for individual developments.

A. Unser Diversion

Easterling & Associates Inc. performed the design of the Unser Diversion. The construction of the project was complete in May of 1997. AMAFCA funded the construction of the project. AMAFCA transferred ownership of the Unser Diversion shortly thereafter to the City of Albuquerque who currently maintains the facility. Reinforced concrete outlet structures exist in each of the six detention ponds. Culvert pipe connecting the ponds in series range in size from 36 inch to 48 inch. Currently three eight-inch holes are cored through the reinforced concrete outlet structures to drain low flows from each pond. The volumes of the six detention ponds range in volumes from approximately 4.75 acre-feet to 11.50 acre-feet.

Existing pond stage/storage and discharge curves utilized in the AHYMO computer models are tabulated in Table 1. The existing pond storage volumes were taken from the “Master Drainage Plan for the Atrisco Business Park, October 1993, prepared by Easterling & Associates, Inc. Discharge rating curves for each pond were calculated

from the existing reinforced outlet structures and incorporating downstream tailwater elevations shown on the Unser Diversion as-built construction drawing plan set.

Drainage easements exist west of each of the Unser Diversion detention pond with the exception of Pond No. 3 and Pond No. 4. These two easements were vacated in the last 18 months as part of the development of a residential subdivision. The drainage easements exist for possible expansion of the ponds if additional volume is required to adequately handle future developed runoff volume if required. According to the "Master Drainage Plan for the Atrisco Business Park" the existing reinforced concrete outlet structures could also be modified to discharge fully developed flows by coring additional 10 inch holes in the remaining three sides of the square outlet structures.

According to the "Master Drainage Plan for the Atrisco Business Park", Pond No. 5 is not utilized in fully developed conditions. Since Pond No. 5 is considered only a temporary facility, existing outlet works along with existing pond grading are utilized in all of the analyses mentioned below relative to Pond No. 5. Discharge curves for the proposed outlet structures were calculated similar to that of the existing outlet structure mentioned above. Table 1 also shows the proposed condition stage/storage and discharge curves for the Unser Diversion used in the AHYMO computer models.

B. Existing Condition Analysis

Map No. 1 located in the back pocket of this report shows the contributing drainage basin used in the analysis of existing conditions. Four individual analyses were performed to determine freeboard in each of the six detention ponds.

Analysis 1

Existing pond outlet works were utilized for each pond in the AHYMO model.
Existing pond grading was utilized for each pond in the AHYMO model.

Analysis 2

Proposed pond outlet works were utilized for each pond in the AHYMO model.
Existing pond grading was utilized for each pond in the AHYMO model.

Analysis 3

Existing pond outlet works were utilized for each pond in the AHYMO model.
Proposed pond grading was utilized for each pond in the AHYMO model.

Analysis 4

Proposed pond outlet works were utilized for each pond in the AHYMO model.
Proposed pond grading was utilized for each pond in the AHYMO model.

Freeboard results for each of the analyses are shown in Table 2. A glance at Table 2 shows that by modifying the pond outlet works and increasing pond volumes provides additional freeboard. But for obvious reasons, using existing pond outlet works and existing pond grading for existing conditions provides adequate freeboard.

C. Existing Condition with the Transit Facility Fully Developed Analysis

Map No. 2 located in the back pocket of this report shows the contributing drainage basin used in the analysis of existing condition with the transit facility fully developed. This analysis is similar to that of existing conditions with the exception of the West Side Transit Facility is considered fully developed. Four individual analyses were performed to determine freeboard in each of the six detention ponds.

Analysis 1

Existing pond outlet works were utilized for each pond in the AHYMO model.
Existing pond grading was utilized for each pond in the AHYMO model.

Analysis 2

Proposed pond outlet works were utilized for each pond in the AHYMO model.
Existing pond grading was utilized for each pond in the AHYMO model.

Analysis 3

Existing pond outlet works were utilized for each pond in the AHYMO model.
Proposed pond grading was utilized for each pond in the AHYMO model.

Analysis 4

Proposed pond outlet works were utilized for each pond in the AHYMO model.
Proposed pond grading was utilized for each pond in the AHYMO model.

Freeboard results for each of the analyses are shown in Table 3. Table 3 shows that by modifying the pond volumes to the proposed condition while keeping the outlet works in existing condition provides maximum freeboard for the system as a whole. Keeping the existing outlet works along with the existing pond volumes provides adequate freeboard within all the ponds. Freeboard for Analysis 1 exceeds two feet in all detention ponds with the exception of Pond No. 6, which has 1.8 feet of freeboard.

D. Developed Interim Condition Analysis

Map No. 3 located in the back pocket of this report shows the contributing drainage basin used in the analysis of developed interim conditions. Developed interim condition assumes the land within the contributing drainage basin south of Interstate 40 is fully developed while the contributing basin north of Interstate 40 remains in existing condition. Four individual analyses were performed to determine freeboard in each of the six detention ponds.

Analysis 1

Existing pond outlet works were utilized for each pond in the AHYMO model.
Existing pond grading was utilized for each pond in the AHYMO model.

Analysis 2

Proposed pond outlet works were utilized for each pond in the AHYMO model.
Existing pond grading was utilized for each pond in the AHYMO model.

Analysis 3

Existing pond outlet works were utilized for each pond in the AHYMO model.
Proposed pond grading was utilized for each pond in the AHYMO model.

Analysis 4

Proposed pond outlet works were utilized for each pond in the AHYMO model.
Proposed pond grading was utilized for each pond in the AHYMO model.

Freeboard results for each of the analyses are shown in Table 4. Table 4 shows runoff in Pond No. 4 overtops the emergency spillway in all of the analyses with the exception of Analysis 4. Analysis 4 results show that Pond No. 4 contains the 100 year event with no freeboard (HWL = Emergency Spillway Elevation) while Pond No. 3 has a freeboard less than one foot. Even though Analysis 4 shows the system works, this is not a desirable option. Some of the properties south of Interstate 40 may be required to detain runoff until the I-40 Interceptor is constructed to divert the off-site flow north of Interstate 40 to the east.

E. Developed Condition Analysis

Map No. 4 located in the back pocket of this report shows the contributing drainage basin used in the analysis of fully developed condition. The developed condition analysis assumes the I-40 Interceptor has been constructed and will divert all off-site flows north of Interstate 40 to the east. The developed condition model assumes all land within the contributing drainage basin south of Interstate 40 is fully developed. Three individual analyses were performed to determine freeboard in each of the six detention ponds.

Analysis 1

Existing pond outlet works were utilized for each pond in the AHYMO model.
Existing pond grading was utilized for each pond in the AHYMO model.

Analysis 2

Proposed pond outlet works were utilized for each pond in the AHYMO model.
Existing pond grading was utilized for each pond in the AHYMO model.

Analysis 3

Proposed pond outlet works were utilized for ponds 6, 2 and 1 in the AHYMO model while ponds 3 and 4 utilize existing outlet works.
Existing pond grading was utilized for each pond in the AHYMO model.

Freeboard results for each of the analyses are shown in Table 5. Analysis 1 provides freeboard in excess of two feet in all of the ponds with the exception of Pond No. 6 and Pond No. 2. Pond No. 6 has a freeboard of 1.2 feet while Pond No. 2 has a freeboard of 1.9 feet. Analysis 2 modifies all detention pond outlet works to proposed condition and produces favorable results. Freeboards in all the ponds exceed two feet in Analysis 2. Analysis 3 looked at modifying the outlet works in Pond No. 6, Pond No. 2 and Pond No. 1. Analysis 3 also produced favorable results relative to freeboard.

TABLE 1

UNSER DIVERSION DETENTION PONDS
STAGE/STORAGE AND DISCHARGE TABLES

Unser Diversion Pond No. 6

Elevation (Ft.)	Existing Storage (Ac.Ft.)	Existing Outflow (cfs)	Possible Future Storage (Ac.Ft.)	Possible Future Outflow (cfs)
70.0	0.00	0.0	0.00	0.0
71.0	0.14	4.0	0.30	4.4
72.0	0.83	6.2	1.16	16.0
73.0	1.77	7.9	2.33	32.0
74.0	2.79	9.2	3.59	45.0
75.0	3.87	10.4	4.93	51.0
76.0	5.04	11.5	6.34	56.0
77.0	6.27	79.5	7.85	79.5
77.9	7.46	86.1	9.43	86.1
79.0	9.01	93.2	11.10	93.2

Unser Diversion Pond No. 3

Elevation (Ft.)	Existing Storage (Ac.Ft.)	Existing Outflow (cfs)	Possible Future Storage* (Ac.Ft.)	Possible Future Outflow (cfs)
43.0	0.00	0.0	0.00	0.0
44.0	0.07	0.0	0.07	0.0
45.0	0.50	1.5	0.50	7.5
46.0	1.04	5.1	1.04	24.7
47.0	1.64	7.0	1.64	34.2
47.5	1.97	7.8	1.97	38.0
48.0	2.30	39.8	2.30	72.8
48.5	2.65	85.9	2.65	85.9
49.0	3.01	92.4	3.01	92.4
50.0	3.78	104.3	3.78	104.3
51.0	4.61	114.4	4.61	114.4
51.2	4.79	116.2	4.79	116.2
52.2	5.51	123.4	5.51	123.4

* Pond No. 4 can not be expanded due to right-of-way constraints

Unser Diversion Pond No. 5*

Elevation (Ft.)	Existing Storage (Ac.Ft.)	Existing Outflow (cfs)	Possible Future Storage* (Ac.Ft.)	Possible Future Outflow* (cfs)
60.0	0.00	0.0	0.00	0.0
61.0	0.02	4.0	0.02	4.0
62.0	0.37	6.5	0.37	6.5
63.0	0.76	8.2	0.76	8.2
64.0	1.19	9.7	1.19	9.7
64.5	1.42	41.6	1.42	41.6
65.0	1.66	93.0	1.66	93.0
65.5	1.89	106.3	1.89	106.3
66.0	2.12	116.7	2.12	116.7
67.0	2.74	132.6	2.74	132.6
68.0	3.35	146.8	3.35	146.8
68.8	3.87	157.2	3.87	157.2
69.0	4.01	160.0	4.01	160.0
70.0	4.73	172.0	4.73	172.0

* Pond No. 5 is not utilized in fully developed conditions. For this reason, the existing pond outlet works and the existing pond volume were utilized in all AHYMO computer models.

Unser Diversion Pond No. 2

Elevation (Ft.)	Existing Storage (Ac.Ft.)	Existing Outflow (cfs)	Possible Future Storage (Ac.Ft.)	Possible Future Outflow (cfs)
37.9	0.00	0.0	0.00	0.0
38.0	0.00	0.0	0.02	0.0
39.0	0.18	0.0	0.27	0.0
40.0	0.73	0.0	1.05	0.0
41.0	1.57	3.4	2.19	16.7
42.0	2.50	5.9	3.49	28.9
43.0	3.56	7.6	4.87	37.3
44.0	4.68	9.0	6.34	44.1
44.8	5.88	10.0	7.58	48.9
45.5	6.52	18.1	8.71	58.0
46.0	7.16	127.2	9.53	142.2
47.0	8.52	154.6	11.25	154.6
47.9	9.83	165.0	12.87	165.0
48.9	11.51	176.8	14.94	176.8

Unser Diversion Pond No. 4

Elevation (Ft.)	Existing Storage (Ac.Ft.)	Existing Outflow (cfs)	Possible Future Storage* (Ac.Ft.)	Possible Future Outflow (cfs)
47.0	0.00	0.0	0.00	0.0
48.0	0.08	0.0	0.08	0.0
49.0	0.51	3.0	0.51	17.8
50.0	1.30	5.7	1.30	36.5
51.0	2.29	7.5	2.29	49.2
51.9	3.26	8.7	3.26	57.7
52.0	3.37	11.7	3.37	61.4
52.5	3.94	50.6	3.94	86.0
53.0	4.52	92.5	4.52	92.5
54.0	5.76	104.3	5.76	104.3
55.1	7.18	115.9	7.18	115.9
56.0	8.51	124.6	8.51	124.6

* Pond No. 4 can not be expanded due to right-of-way constraints

Unser Diversion Pond No. 1

Elevation (Ft.)	Existing Storage (Ac.Ft.)	Existing Outflow (cfs)	Possible Future Storage (Ac.Ft.)	Possible Future Outflow (cfs)
33.5	0.00	0.0	0.00	0.0
34.0	0.00	0.0	0.05	0.0
35.0	0.29	4.0	0.54	10.4
36.0	0.86	6.3	1.34	26.5
37.0	1.54	7.9	2.22	47.1
38.0	2.27	9.3	3.18	61.1
39.0	3.07	10.4	4.22	68.9
40.0	3.94	11.5	5.34	75.8
41.0	4.87	12.5	6.54	82.2
42.0	5.87	101.5	7.83	111.6
43.0	6.94	118.6	9.19	118.6
43.9	7.96	124.6	10.49	124.6
45.0	9.29	131.5	12.16	131.5

TABLE 2

UNSER DIVERSION DETENTION POND RESULTS
EXISTING CONDITIONS

ANALYSIS 1

Pond Outlet Works: Existing
Pond Grading: Existing
100yr. AHYMO Input File: EXT100EE.IN
10yr. AHYMO Input File: EXT10EE.IN

UNSER DIVERSION POND NO.	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6	71.4	74.5	77.9	6.5	3.4
5	64.2	66.9	68.8	4.6	1.9
4	50.7	53.1	55.1	4.4	2.0
3	46.3	48.7	51.2	4.9	2.5
2	41.3	45.4	47.9	6.6	2.5
1	35.3	40.5	43.9	8.6	3.4

ANALYSIS 2

Pond Outlet Works: Proposed
Pond Grading: Existing
100yr. AHYMO Input File: EXT100PE.IN
10yr. AHYMO Input File: EXT10PE.IN

UNSER DIVERSION POND NO.	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6	71.3	73.5	77.9	6.6	4.4
5	64.2	66.9	68.8	4.6	1.9
4	49.2	53.2	55.1	5.9	1.9
3	45.7	48.8	51.2	5.5	2.4
2	40.8	44.9	47.9	7.1	3.0
1	35.2	37.3	43.9	8.7	6.6

ANALYSIS 3

Pond Outlet Works: Existing
Pond Grading: Proposed
100yr. AHYMO Input File: EXT100EP.IN
10yr. AHYMO Input File: EXT10EP.IN

UNSER DIVERSION POND NO.	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6	71.2	73.8	77.9	6.7	4.1
5	64.2	66.9	68.8	4.6	1.9
4	50.7	53.1	55.1	4.4	2.0
3	46.3	48.7	51.2	4.9	2.5
2	41.0	44.8	47.9	6.9	3.1
1	34.9	38.3	43.9	9.0	5.6

Notes: Pond 5 was not expanded due to the fact that it is not required in developed conditions.

Ponds 3 and 4 can not be expanded due to Right-of-Way constraints.

ANALYSIS 4

Pond Outlet Works: Proposed
Pond Grading: Proposed
100yr. AHYMO Input File: EXT100PP.IN
10yr. AHYMO Input File: EXT10PP.IN

UNSER DIVERSION POND NO.	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6	71.1	73.1	77.9	6.8	4.8
5*	64.2	66.9	68.8	4.6	1.9
4*	49.1	53.1	55.1	6.0	2.0
3	45.6	48.7	51.2	5.6	2.5
2	40.7	44.1	47.9	7.2	3.8
1	35.0	36.9	43.9	8.9	7.0

Notes: Pond 5 was not expanded due to the fact that it is not required in developed conditions.

Ponds 3 and 4 can not be expanded due to Right-of-Way constraints.

TABLE 3

UNSER DIVERSION DETENTION POND RESULTS**EXISTING CONDITIONS WITH THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED****ANALYSIS 1**

Pond Outlet Works: Existing
Pond Grading: Existing
100yr. AHYMO Input File: WTF100EE.IN
10yr. AHYMO Input File: WTF10EE.IN

UNSER DIVERSION POND NO.	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6	73.1	76.1	77.9	4.8	1.8
5	64.2	66.8	68.8	4.6	2.0
4	51.6	53.1	55.1	3.5	2.0
3	46.9	48.8	51.2	4.3	2.4
2	41.8	45.5	47.9	6.1	2.4
1	35.5	41.0	43.9	8.4	2.9

ANALYSIS 2

Pond Outlet Works: Proposed
Pond Grading: Existing
100yr. AHYMO Input File: WTF100PE.IN
10yr. AHYMO Input File: WTF10PE.IN

UNSER DIVERSION POND NO.	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6	72.4	74.6	77.9	5.5	3.3
5	64.2	66.8	68.8	4.6	2.0
4	49.8	53.6	55.1	5.3	1.5
3	46.3	49.1	51.2	4.9	2.1
2	41.4	45.6	47.9	6.5	2.3
1	35.6	37.8	43.9	8.3	6.1

ANALYSIS 3

Pond Outlet Works: Existing
Pond Grading: Proposed
100yr. AHYMO Input File: WTF100EP.IN
10yr. AHYMO Input File: WTF10EP.IN

UNSER DIVERSION POND NO.	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6	72.7	75.3	77.9	5.2	2.6
5	64.2	66.8	68.8	4.6	2.0
4	51.5	53.1	55.1	3.6	2.0
3	46.9	48.7	51.2	4.3	2.5
2	41.5	45.0	47.9	6.4	2.9
1	35.2	38.7	43.9	8.7	5.2

Notes: Pond 5 was not expanded due to the fact that it is not required in developed conditions.

Ponds 3 and 4 can not be expanded due to Right-of-Way constraints.

ANALYSIS 4

Pond Outlet Works: Proposed
Pond Grading: Proposed
100yr. AHYMO Input File: WTF100PP.IN
10yr. AHYMO Input File: WTF10PP.IN

UNSER DIVERSION POND NO.	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6	72.2	74.1	77.9	5.7	3.8
5	64.2	66.8	68.8	4.6	2.0
4	49.6	53.5	55.1	5.5	1.6
3	46.2	49.0	51.2	5.0	2.2
2	41.1	44.7	47.9	6.8	3.2
1	35.4	37.1	43.9	8.5	6.8

Notes: Pond 5 was not expanded due to the fact that it is not required in developed conditions.

Ponds 3 and 4 can not be expanded due to Right-of-Way constraints.

TABLE 4

UNSER DIVERSION DETENTION POND RESULTS
DEVELOPED INTERIM CONDITIONS

ANALYSIS 1

Pond Outlet Works: Existing
Pond Grading: Existing
100yr. AHYMO Input File: INT100EE.IN
10yr. AHYMO Input File: INT10EE.IN

UNSER DIVERSION POND NO	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6	75.4	77.4	77.9	2.5	0.5
5	64.1	65.8	68.8	4.7	3.0
4*	52.2	55.8	55.1	2.9	-0.7
3	47.8	50.8	51.2	3.4	0.4
2	45.2	46.2	47.9	2.7	1.7
1	38.8	42.7	43.9	5.1	1.2

* 100 Year Storm Event HWL Exceeds Emergency Spillway Elevation

ANALYSIS 2

Pond Outlet Works: Proposed
Pond Grading: Existing
100yr. AHYMO Input File: INT100PE.IN
10yr. AHYMO Input File: INT10PE.IN

UNSER DIVERSION POND NO	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6	73.9	76.9	77.9	4.0	1.0
5	64.1	65.8	68.8	4.7	3.0
4*	51.6	55.5	55.1	3.5	-0.4
3	47.8	50.7	51.2	3.4	0.5
2	44.6	46.0	47.9	3.3	1.9
1	37.0	42.0	43.9	6.9	1.9

* 100 Year Storm Event HWL Exceeds Emergency Spillway Elevation

ANALYSIS 3

Pond Outlet Works: Existing
Pond Grading: Proposed
100yr. AHYMO Input File: INT100EP.IN
10yr. AHYMO Input File: INT10EP.IN

UNSER DIVERSION POND NO.	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6	74.6	76.9	77.9	3.3	1.0
5	64.1	65.8	68.8	4.7	3.0
4*	52.1	55.2	55.1	3.0	-0.1
3	47.7	50.4	51.2	3.5	0.8
2	44.4	46.0	47.9	3.5	1.9
1	37.8	42.1	43.9	6.1	1.8

Notes: There is no need to expand Pond 5.

Ponds 3 and 4 can not be expanded due to Right-of-Way constraints.

* 100 Year Storm Event HWL Exceeds Emergency Spillway Elevation

ANALYSIS 4

Pond Outlet Works: Proposed
Pond Grading: Proposed
100yr. AHYMO Input File: INT100PP.IN
10yr. AHYMO Input File: INT10PP.IN

UNSER DIVERSION POND NO.	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6	73.5	76.3	77.9	4.4	1.6
5	64.1	65.8	68.8	4.7	3.0
4*	51.3	55.1	55.1	3.8	0.0
3	47.8	50.5	51.2	3.4	0.7
2	43.9	45.8	47.9	4.0	2.1
1	36.8	41.4	43.9	7.1	2.5

Notes: There is no need to expand Pond 5.

Ponds 3 and 4 can not be expanded due to Right-of-Way constraints.

* 100 Year Storm Event HWL Equals Emergency Spillway Elevation

TABLE 5

UNSER DIVERSION DETENTION POND RESULTS
DEVELOPED CONDITIONS

ANALYSIS 1

Pond Outlet Works: Existing
Pond Grading: Existing
100yr. AHYMO Input File: DEV100EE.IN
10yr. AHYMO Input File: DEV10EE.IN

UNSER DIVERSION POND NO.	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6	75.3	76.7	77.9	2.6	1.2
5*	N/A	N/A	N/A	N/A	N/A
4	51.9	52.9	55.1	3.2	2.2
3	47.5	48.7	51.2	3.7	2.5
2	44.1	46.0	47.9	3.8	1.9
1	37.9	41.9	43.9	6.0	2.0

* Unser Diversion Pond No. 5 is not utilized in Developed Conditions.

ANALYSIS 2

Pond Outlet Works: Proposed
Pond Grading: Existing
100yr. AHYMO Input File: DEV100PE.IN
10yr. AHYMO Input File: DEV10PE.IN

UNSER DIVERSION POND NO.	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6	73.9	75.9	77.9	4.0	2.0
5*	N/A	N/A	N/A	N/A	N/A
4	51.1	52.4	55.1	4.0	2.7
3	47.8	48.9	51.2	3.4	2.3
2	44.3	45.9	47.9	3.6	2.0
1	37.0	41.0	43.9	6.9	2.9

* Unser Diversion Pond No. 5 is not utilized in Developed Conditions.

ANALYSIS 3

Pond Outlet Works: Existing with the exception of Pond 6, Pond 2 and Pond 1 (Pond 6, Pond 2 and Pond 1 use proposed outlet works)
Pond Grading: Existing
100yr. AHYMO Input File: DEVP621.IN
10yr. AHYMO Input File: No 10 year event modeled

UNSER DIVERSION POND NO.	10 YR. HWL	100 YR. HWL	EMERGENCY SPILLWAY ELEVATION	10 YR. FREEBOARD (FT.)	100 YR. FREEBOARD (FT.)
6		75.9	77.9		2.0
5*	N/A	N/A	N/A	N/A	N/A
4		53.0	55.1		2.1
3		49.1	51.2		2.1
2		45.9	47.9		2.0
1		40.5	43.9		3.4

* Unser Diversion Pond No. 5 is not utilized in Developed Conditions.

TABLE 6

UNSER DIVERSION POND COMPARISON**100 YEAR - 24 HOUR STORM EVENT**

UNSER DIVERSION POND NO	EXISTING CONDITIONS		EXISTING CONDITIONS WITH WEST SIDE TRANSIT FACILITY FULLY DEVELOPED		DEVELOPED INTERIM CONDITIONS		FULLY DEVELOPED CONDITIONS	
	Existing Pond Volume Existing Pond Outlet Works		Existing Pond Volume Existing Pond Outlet Works		Existing Pond Volume Existing Pond Outlet Works		Existing Pond Volume Existing Pond Outlet Works	
	FREEBOARD (FT.)		FREEBOARD (FT.)		FREEBOARD (FT.)		FREEBOARD (FT.)	
6	3.4		1.8		0.5		1.2	
5	1.9		2.0		3.0		N/A*	
4	2.0		2.0		-0.7		0.0	
3	2.5		2.4		0.4		0.7	
2	2.5		2.4		1.7		2.1	
1	3.4		2.9		1.2		2.5	

* Unser Diversion Pond No. 5 is not utilized in Developed Conditions

IX. PROPOSED STORM DRAIN

During the initial meetings between SEC and the City of Albuquerque Hydrology Development Section, the city requested that SEC provide a preliminary storm drain design for Daytona Road from the Unser Diversion west to Interstate 40. The storm drain analysis assumes fully developed conditions with the I-40 Interceptor in place with the exception of off-site flows contributing to Daytona Road through the Mirehaven Arroyo "B". Hydraulic analyses relative to Daytona Rd. are shown in Appendices D, E and F. Map No. 5 located in the back pocket of the report shows future storm drain pipe required for Daytona Rd.

SEC also analyzed Oliver Ross Road and Los Volcanes Road to determine storm drain requirements. Appendix G provides the analysis for the Oliver Ross and Los Volcanes roadways. Map No. 5 also shows proposed improvements required for Oliver Ross Road and Los Volcanes Road.

X. CONCLUSIONS

The Existing Condition Analysis shows that all of the Unser Diversion detention ponds (using existing outlet works and existing pond volumes) have calculated freeboard in excess of two feet with the exception of the temporary Pond No. 5. Pond No. 5 has a calculated freeboard of 1.9 ft.

The Existing Condition Analysis with the Transit Facility Fully Developed (using existing outlet works and existing pond volumes) also produced freeboard in excess of two feet with the exception of Pond No. 6. Pond No. 6 has a calculated freeboard = 1.8 ft.

The Fully Developed Conditions Analysis (using existing outlet works and existing pond volumes and assuming the I-40 interceptor is in place) produced free board is in excess of two feet in all ponds with the exception of Pond No. 6 and Pond No. 2. Pond No. 6 has a calculated freeboard = 1.2 ft. while Pond No. 2 has a freeboard = 1.9 ft. All of these scenarios mentioned thus far work well when utilizing existing pond volumes and pond outlet works.

The Developed Interim Condition Analysis produced different results. Due to the off-site storm water runoff generated from the off-site basin north of Interstate 40 along with the developed flows generated south of Interstate 40, Pond No. 4 overtops the emergency spillway elevation in all cases with the exception of Analysis 4. Analysis 4 utilizes proposed pond volumes along with proposed outlet works, and even then Pond No. 4 has no freeboard (the high water level (HWL) in Pond No. 4 is the same elevation as the emergency spillway elevation). It should also be noted that in Analysis 4, Pond No. 3 has a calculated freeboard of 0.7 feet. All other detention ponds in Analysis 4 have a calculated freeboard in excess of 1.6 ft.

In summary, the additional runoff generated from development of the West Side Transit Facility will have no negative effects on the existing Unser Diversion. Adequate freeboard will still exist within the Unser Diversion by allowing free discharge from the fully developed Transit Facility site.

With the assumption that the I-40 Interceptor will be constructed within the next five to ten years and development of the basin south of Interstate 40 remains at its current rate, the Unser Diversion should operate without any signs of overtopping. If the development south of Interstate 40 begins to accelerate without the construction of the I-40 Interceptor, the City of Albuquerque should look at modifying pond volumes and pond outlet works for the detention ponds within the Unser Diversion or require individual properties to detain storm water runoff generated from their properties. A summary the Unser Diversion detention ponds mentioned in the section of the report is located in Table 6.

XI. REFERENCES

Anderson-Hydro, August 1997, "AHYMO Computer Program User's Manual"

City of Albuquerque, July 1997, "Development Process Manual, Section 22.2, Hydrology".

Easterling & Associates Inc., October 1993, "Master Drainage Plan for the Atrisco Business Park".

Easterling & Associates Inc., September 1993, "Draft Design Analysis Report for the Albuquerque Metropolitan Arroyo Flood Control Authority Unser Diversion".

Easterling & Associates, May 1997, "Unser Diversion As-Built Construction Drawing Plan Set".

Haestad Methods Inc., August 2000, "FlowMaster PE Version 6.0 Computer Software".

Haestad Methods Inc., November 2000, "CulvertMaster Computer Software".

Haestad Methods Inc., December 1999, "StormCad Computer Software".

URS Griener, Inc., March 1998, "Final Design Report Amole Del Norte Storm Diversion Facilities Tierra Bayita Drainage Facilities Phase III".

APPENDIX A

LAND TREATMENT SUMMARY

MASTER DRAINAGE PLAN WEST SIDE TRANSIT FACILITY

LAND TREATMENT SUMMARY

ZONE DESIGNATION	LAND TREATMENTS			
	"A"	"B"	"C"	"D"
<u>RESIDENTIAL</u> R-LT		43		57
<u>COMMERCIAL</u> C-1		10		90
<u>INDUSTRIAL</u> IP		20		80
<u>COA RIGHT OF WAYS</u> OLIVER ROSS DR. LOS VOLCANES RD.		18 22		82 78
<u>NMSHTD RIGHT OF WAY</u> I40-1, I40-2, I40-3, I40-4	65			35

APPENDIX B

AHYMO BASIN PARAMETER WORKSHEETS, PEAK BASIN FLOWS, AND VOLUMES

MASTER DRAINAGE PLAN WEST SIDE TRANSIT FACILITY

AHYMO BASIN PARAMETER WORKSHEET PEAK BASIN FLOWS AND VOLUMES EXISTING CONDITIONS

												10 YEAR		100 YEAR		
BASIN	AREA (sq.mi.)	LENGTH (ft.)	ELEV. DIFF. (ft.)	SLOPE (%)	K	VEL (fps)	T(c) (hr.)	T(p) (hr.)	LAND TREATMENT				PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)	PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)
									(%)							
									A	B	C	D				
O-1E	0 0242	400	13 0	3 25	0 7	1 26	0 09	0 06								
		1350	40 0	2 96	2 0	3 44	0 11	0.07								
		400	9 0	2 25	3 0	4 50	<u>0.02</u>	<u>0.02</u>								
		TOTAL =					0 22	0 15	100				3	0 1	18	0 6
O-2E	0 0422	400	12 0	3 00	0 7	1 21	0 09	0 06								
		1450	50 0	3.45	2 0	3 71	0 11	0 07								
		1600	40 0	2 50	3 0	4 74	<u>0.09</u>	<u>0.06</u>								
		TOTAL =					0 29	0 20	100				4	0 2	24	1 0
O-3E	0 0164	400	14 0	3 50	0 7	1 31	0 08	0 06								
		780	20 0	2 56	2.0	3 20	0 07	0 05								
		900	20 0	2 22	3 0	4 47	<u>0.06</u>	<u>0.04</u>				1				
		TOTAL =					0 21	0 14	99				3	0.1	13	0 4
O-4E	0 0094	400	10.0	2 50	0 7	1.11	0 10	0 07								
		900	22 0	2.44	2 0	3.13	0.08	0 05								
		150	2 0	1.33	3 0	3 46	<u>0.01</u>	<u>0.01</u>				2				
		TOTAL =					0 19	0 13	98				2	0 1	8	0 2
O-5E	0 1097	400	16 0	4 00	0 7	1 40	0 08	0 05								
		1600	51 0	3 19	2 0	3 57	0 12	0 08								
		2100	52 0	2 48	3 0	4 72	<u>0.12</u>	<u>0.08</u>				2				
		TOTAL =					0 33	0 22	98				14	0.7	63	2 8
O-6E	0 0732	400	12 0	3.00	0 7	1 21	0 09	0 06								
		1600	57 0	3 56	2 0	3 77	0 12	0 08								
		650	21 0	3 23	3 0	5 39	<u>0.03</u>	<u>0.02</u>								
		1170	9 0	0 77	3 0	2 63	<u>0.12</u>	<u>0.08</u>								
		TOTAL =					0 37	0 24	100				6	0 3	36	1 7
O-7E	0 0523	400	19 0	4 75	0 7	1 53	0 07	0 05								
		150	12 0	8 00	2 0	5 66	0 01	0 00								
		2950	102 0	3 46	3 0	5 58	<u>0.15</u>	<u>0.10</u>								
		TOTAL =					0 23	0 15	100				7	0 2	39	1 2
O-8E	0 0099	1320	4 0	0 30	3 0	1.65	0 22	0 15								
							0 22	0 15	15			85	15	0 7	23	1 1
O-9E	0 0348	400	18 0	4.50	0 7	1 48	0 07	0 05								
		200	17 0	8 50	2.0	5 83	<u>0.01</u>	<u>0.01</u>								
		1000	43 0	4.30	3 0	6.22	<u>0.04</u>	<u>0.03</u>								
		TOTAL =					0 13	0 09	95			5	8	0 3	32	1 0
I40-1	0 0075	1765	33 0	1.87	3.0	4 10	<u>0.12</u>	<u>0.08</u>								
	TOTAL =						0 12	0 08	65			35	6	0 2	11	0 5
I40-2	0 0031	760	11 0	1 45	3 0	3 61	0 06	0 04								
	TOTAL =						0 06	0 04	65			35	2	0 1	5	0 2

MASTER DRAINAGE PLAN WEST SIDE TRANSIT FACILITY

AHYMO BASIN PARAMETER WORKSHEET PEAK BASIN FLOWS AND VOLUMES EXISTING CONDITIONS

													10 YEAR		100 YEAR	
BASIN	AREA (sq.mi.)	LENGTH (ft.)	ELEV. DIFF. (ft.)	SLOPE (%)	K	VEL (fps)	T(c) (hr.)	T(p) (hr.)	LAND TREATMENT (%)				PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)	PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)
									A	B	C	D				
I40-3	0 0019 TOTAL =	415	7.0	1 69	3 0	3 90	<u>0 03</u> 0 03	<u>0 02</u> 0 02	65			35	1	0.1	3	0.1
I40-4	0 0012 TOTAL =	285	4 0	1.40	3.0	3 55	<u>0 02</u> 0 02	<u>0 01</u> 0 01	65			35	1	0 04	2	0 1
120 5 *	0 0162	-	-	-	-	-	-	0 13	100				3	0.1	13	0 4
120 6 *	0 0328	-	-	-	-	-	-	0 13	98			2	6	0 2	28	0 8
130 7 *	0 0170	-	-	-	-	-	-	0 13	86	12	2		3	0 1	15	0 4
130.8 *	0 0327	-	-	-	-	-	-	0 14	100				5	0 1	25	0 8
130 9 *	0 0095	-	-	-	-	-	-	0 13	86	12	2		2	0 1	8	0 2
140 1 *	0 0196	-	-	-	-	-	-	0 13	74	22	4		4	0 1	19	0 5
140 2 *	0 0892	-	-	-	-	-	-	0 13	92	4	4		16	0 5	79	2 2
150 1 *	0 1525	-	-	-	-	-	-	0 23	96		4		17	0 8	90	3 9
170 1	0 0642 TOTAL =	400 1600	9 0 27 0	2 25 1 69	0 7 2 0	1 05 2 60	<u>0 11</u> <u>0 17</u> 0 28	<u>0 07</u> <u>0 11</u> 0 18	98			2	9	0 4	43	1 6
P-1	0 0029	N/A	N/A	N/A	N/A	N/A	0.20	0 13	98			2	1	0 02	3	0 1
P-2	0 0036	N/A	N/A	N/A	N/A	N/A	0 20	0 13	98			2	1	0 02	3	0 1
P-3	0 0027	N/A	N/A	N/A	N/A	N/A	0 20	0 13	98			2	1	0 02	2	0 1
P-4	0 0036	N/A	N/A	N/A	N/A	N/A	0 20	0 13	98			2	1	0 02	3	0 1
P-5	0 0029	N/A	N/A	N/A	N/A	N/A	0 20	0 13	98			2	1	0 02	3	0 1
P-6	0 0043	N/A	N/A	N/A	N/A	N/A	0 20	0 13	98			2	1	0 03	4	0 1

* Hydrology parameters taken from "Master Drainage Plan for the Atrisco Business Park", Revised October 1993, Easterling & Associates, Inc.

MASTER DRAINAGE PLAN WEST SIDE TRANSIT FACILITY

AHYMO BASIN PARAMETER WORKSHEET PEAK BASIN FLOWS AND VOLUMES

EXISTING CONDITIONS WITH THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED

												10 YEAR		100 YEAR		
BASIN	AREA (sq.mi.)	LENGTH (ft.)	ELEV. DIFF. (ft.)	SLOPE (%)	K	VEL (fps)	T(c) (hr.)	T(p) (hr.)	LAND TREATMENT				PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)	PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)
									(<u>%</u>)							
									A	B	C	D				
O-1E	0.0242	400	13.0	3.25	0.7	1.26	0.09	0.06								
		1350	40.0	2.96	2.0	3.44	0.11	0.07								
		400	9.0	2.25	3.0	4.50	<u>0.02</u>	<u>0.02</u>								
		TOTAL =					0.22	0.15	100					3	0.1	18
O-2E	0.0422	400	12.0	3.00	0.7	1.21	0.09	0.06								
		1450	50.0	3.45	2.0	3.71	0.11	0.07								
		1600	40.0	2.50	3.0	4.74	<u>0.09</u>	<u>0.06</u>								
		TOTAL =					0.29	0.20	100					4	0.2	24
O-3E	0.0164	400	14.0	3.50	0.7	1.31	0.08	0.06								
		780	20.0	2.56	2.0	3.20	0.07	0.05								
		900	20.0	2.22	3.0	4.47	<u>0.06</u>	<u>0.04</u>				1				
		TOTAL =					0.21	0.14	99				1	3	0.1	13
O-4E	0.0094	400	10.0	2.50	0.7	1.11	0.10	0.07								
		900	22.0	2.44	2.0	3.13	0.08	0.05								
		150	2.0	1.33	3.0	3.46	<u>0.01</u>	<u>0.01</u>				2				
		TOTAL =					0.19	0.13	98				2	2	0.1	8
O-5E	0.1097	400	16.0	4.00	0.7	1.40	0.08	0.05								
		1600	51.0	3.19	2.0	3.57	0.12	0.08								
		2100	52.0	2.48	3.0	4.72	<u>0.12</u>	<u>0.08</u>				2				
		TOTAL =					0.33	0.22	98				2	14	0.7	63
O-6E	0.0732	400	12.0	3.00	0.7	1.21	0.09	0.06								
		1600	57.0	3.56	2.0	3.77	0.12	0.08								
		650	21.0	3.23	3.0	5.39	<u>0.03</u>	<u>0.02</u>								
		1170	9.0	0.77	3.0	2.63	<u>0.12</u>	<u>0.08</u>								
		TOTAL =					0.37	0.24	100					6	0.3	36
O-7E	0.0523	400	19.0	4.75	0.7	1.53	0.07	0.05								
		150	12.0	8.00	2.0	5.66	0.01	0.00								
		2950	102.0	3.46	3.0	5.58	<u>0.15</u>	<u>0.10</u>								
		TOTAL =					0.23	0.15	100					7	0.2	39
O-8E	0.0099	1320	4.0	0.30	3.0	1.65	0.22	0.15								
							0.22	0.15	15				85	15	0.7	23
O-9E	0.0348	400	18.0	4.50	0.7	1.48	0.07	0.05								
		200	17.0	8.50	2.0	5.83	<u>0.01</u>	<u>0.01</u>								
		1000	43.0	4.30	3.0	6.22	<u>0.04</u>	<u>0.03</u>								
		TOTAL =					0.13	0.09	95				5	8	0.3	32
I40-1	0.0075	1765	33.0	1.87	3.0	4.10	<u>0.12</u>	<u>0.08</u>								
		TOTAL =					0.12	0.08	65				35	6	0.2	11
I40-2	0.0031	760	11.0	1.45	3.0	3.61	<u>0.06</u>	<u>0.04</u>								
		TOTAL =					0.06	0.04	65				35	2	0.1	5

MASTER DRAINAGE PLAN WEST SIDE TRANSIT FACILITY

AHYMO BASIN PARAMETER WORKSHEET PEAK BASIN FLOWS AND VOLUMES

EXISTING CONDITIONS WITH THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED

BASIN	AREA (sq.mi.)	LENGTH (ft.)	ELEV. DIFF. (ft.)	SLOPE (%)	K	VEL (fps)	T(c) (hr.)	T(p) (hr.)	LAND TREATMENT				10 YEAR		100 YEAR	
									(%)				PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)	PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)
									A	B	C	D				
I40-3	0.0019	415	7.0	1.69	3.0	3.90	<u>0.03</u>	<u>0.02</u>								
	TOTAL =						0.03	0.02	65			35	1	0.1	3	0.1
I40-4	0.0012	285	4.0	1.40	3.0	3.55	<u>0.02</u>	<u>0.01</u>								
	TOTAL =						0.02	0.01	65			35	1	0.04	2	0.1
120.5 *	0.0052	-	-	-	-	-	-	0.13	100				1	0.02	4	0.1
120.5A *	0.0020	-	-	-	-	-	-	0.13	100				0.30	0.01	2	0.05
130.7 *	0.0170	-	-	-	-	-	-	0.13	86	12	2		3	0.1	15	0.4
130.8 *	0.0301	-	-	-	-	-	-	0.14	100				5	0.1	23	0.7
130.9 *	0.0095	-	-	-	-	-	-	0.13	86	12	2		2	0.1	8	0.2
140.1 *	0.0196	-	-	-	-	-	-	0.13	74	22	4		4	0.1	19	0.5
140.2 *	0.0892	-	-	-	-	-	-	0.13	92	4	4		16	0.5	79	2.2
150.1 *	0.1525	-	-	-	-	-	-	0.23	96		4		17	0.8	90	3.9
A-1D	0.0240	300	6.0	2.00	1.0	1.41	0.06	0.04								
		820	4.0	0.49	3.0	2.10	0.11	0.07								
		735	18.0	2.45	3.0	4.69	<u>0.04</u>	<u>0.03</u>								
	TOTAL =						0.21	0.14		10		90	40	1.8	61	2.9
A-2D	0.0125	370	12.0	3.24	1.0	1.80	0.06	0.04								
		760	4.0	0.53	3.0	2.18	<u>0.10</u>	<u>0.06</u>								
	TOTAL =						0.15	0.10	15	9		76	18	0.8	29	1.3
G-1D	0.0229	400	10.0	2.50	0.7	1.11	0.10	0.07								
		800	16.0	2.00	2.0	2.83	<u>0.08</u>	<u>0.05</u>								
	TOTAL =						0.18	0.12	100				4	0.1	21	0.5
G-2D	0.0031	1395	22.0	1.58	3.0	3.77	<u>0.10</u>	<u>0.07</u>								
	TOTAL =						0.10	0.07		18		82	5	0.2	8	0.3

MASTER DRAINAGE PLAN WEST SIDE TRANSIT FACILITY

AHYMO BASIN PARAMETER WORKSHEET PEAK BASIN FLOWS AND VOLUMES

EXISTING CONDITIONS WITH THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED

BASIN	AREA (sq.mi.)	LENGTH (ft.)	ELEV. DIFF. (ft.)	SLOPE (%)	K	VEL (fps)	T(c) (hr.)	T(p) (hr.)	LAND TREATMENT				10 YEAR		100 YEAR	
									(%)				PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)	PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)
									A	B	C	D				
G-3D	0.0351	400	9.0	2.25	0.7	1.05	0.11	0.07								
	TOTAL =	1600	27.0	1.69	2.0	2.60	<u>0.17</u>	<u>0.11</u>								
							0.28	0.18	100				4	0.2	22	0.8
G-4D	0.0033	1430	18.0	1.26	3.0	3.37	<u>0.12</u>	<u>0.08</u>								
	TOTAL =						0.12	0.08		18		82	5	0.2	8	0.4
P-1	0.0029	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.02	3	0.1
P-2	0.0036	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.02	3	0.1
P-3	0.0027	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.02	2	0.1
P-4	0.0036	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.02	3	0.1
P-5	0.0029	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.02	3	0.1
P-6	0.0043	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.03	4	0.1

* Hydrology paramaters taken from "Master Drainage Plan for the Atrisco Business Park", Revised Octover 1993, Easterling & Associates, Inc.

MASTER DRAINAGE PLAN WEST SIDE TRANSIT FACILITY

AHYMO BASIN PARAMETER WORKSHEET PEAK BASIN FLOWS AND VOLUMES DEVELOPED INTERIM CONDITIONS

												10 YEAR		100 YEAR			
BASIN	AREA (sq.mi.)	LENGTH (ft.)	ELEV. DIFF. (ft.)	SLOPE (%)	K	VEL (fps)	T(c) (hr.)	T(p) (hr.)	LAND TREATMENT				PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)	PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)	
									(<u>%</u>)								
									A	B	C	D					
O-1E	0.0242	400	13.0	3.25	0.7	1.26	0.09	0.06									
		1350	40.0	2.96	2.0	3.44	0.11	0.07									
		400	9.0	2.25	3.0	4.50	<u>0.02</u>	<u>0.02</u>									
		TOTAL =					0.22	0.15	100					3	0.1	18	0.6
O-2E	0.0422	400	12.0	3.00	0.7	1.21	0.09	0.06									
		1450	50.0	3.45	2.0	3.71	0.11	0.07									
		1600	40.0	2.50	3.0	4.74	<u>0.09</u>	<u>0.06</u>									
		TOTAL =					0.29	0.20	100					4	0.2	24	1.0
O-3E	0.0164	400	14.0	3.50	0.7	1.31	0.08	0.06									
		780	20.0	2.56	2.0	3.20	0.07	0.05									
		900	20.0	2.22	3.0	4.47	<u>0.06</u>	<u>0.04</u>				1		3	0.1	13	0.4
		TOTAL =					0.21	0.14	99								
O-4E	0.0094	400	10.0	2.50	0.7	1.11	0.10	0.07									
		900	22.0	2.44	2.0	3.13	0.08	0.05									
		150	2.0	1.33	3.0	3.46	<u>0.01</u>	<u>0.01</u>				2		2	0.1	8	0.2
		TOTAL =					0.19	0.13	98								
O-5E	0.1097	400	16.0	4.00	0.7	1.40	0.08	0.05									
		1600	51.0	3.19	2.0	3.57	0.12	0.08									
		2100	52.0	2.48	3.0	4.72	<u>0.12</u>	<u>0.08</u>				2		14	0.7	63	2.8
		TOTAL =					0.33	0.22	98								
O-6E	0.0732	400	12.0	3.00	0.7	1.21	0.09	0.06									
		1600	57.0	3.56	2.0	3.77	0.12	0.08									
		650	21.0	3.23	3.0	5.39	<u>0.03</u>	<u>0.02</u>									
		1170	9.0	0.77	3.0	2.63	<u>0.12</u>	<u>0.08</u>									
		TOTAL =					0.37	0.24	100					6	0.3	36	1.7
O-7E	0.0523	400	19.0	4.75	0.7	1.53	0.07	0.05									
		150	12.0	8.00	2.0	5.66	0.01	0.00									
		2950	102.0	3.46	3.0	5.58	<u>0.15</u>	<u>0.10</u>									
		TOTAL =					0.23	0.15	100					7	0.2	39	1.2
O-8E	0.0099	1320	4.0	0.30	3.0	1.65	0.22	0.15									
							0.22	0.15	15				85	15	0.7	23	1.1
O-9E	0.0348	400	18.0	4.50	0.7	1.48	0.07	0.05									
		200	17.0	8.50	2.0	5.83	<u>0.01</u>	<u>0.01</u>									
		1000	43.0	4.30	3.0	6.22	<u>0.04</u>	<u>0.03</u>									
		TOTAL =					0.13	0.09	95				5	8	0.3	32	1.0
I40-1	0.0075	1765	33.0	1.87	3.0	4.10	<u>0.12</u>	<u>0.08</u>									
	TOTAL =						0.12	0.08	65				35	6	0.2	11	0.5
I40-2	0.0031	760	11.0	1.45	3.0	3.61	0.06	0.04									
	TOTAL =						0.06	0.04	65				35	2	0.1	5	0.2

MASTER DRAINAGE PLAN WEST SIDE TRANSIT FACILITY

AHYMO BASIN PARAMETER WORKSHEET PEAK BASIN FLOWS AND VOLUMES DEVELOPED INTERIM CONDITIONS

BASIN	AREA (sq.mi.)	LENGTH (ft.)	ELEV. DIFF. (ft.)	SLOPE (%)	K	VEL (fps)	T(c) (hr.)	T(p) (hr.)	LAND TREATMENT (%)				10 YEAR		100 YEAR	
									A	B	C	D	PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)	PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)
I40-3	0.0019 TOTAL =	415	7.0	1.69	3.0	3.90	<u>0.03</u> 0.03	<u>0.02</u> 0.02	65			35	1	0.1	3	0.1
I40-4	0.0012 TOTAL =	285	4.0	1.40	3.0	3.55	<u>0.02</u> 0.02	<u>0.01</u> 0.01	65			35	1	0.04	2	0.1
A-1D	0.0257 TOTAL =	175 340 775	5.0 10.0 24.0	2.86 2.94 3.10	1.0 2.0 3.0	1.69 3.43 5.28	0.03 0.03 <u>0.04</u> 0.10	0.02 0.02 <u>0.03</u> 0.06								
										31		69	36	1.6	59	2.6
A-2D	0.0284 TOTAL =	400 120 730	8.0 2.0 12.0	2.00 1.67 1.64	1.0 2.0 3.0	1.41 2.58 3.85	0.08 0.01 <u>0.05</u> 0.14	0.05 0.01 <u>0.04</u> 0.10								
										16		84	46	2.0	171	3.3
A-3D	0.0240 TOTAL =	300 820 735	6.0 4.0 18.0	2.00 0.49 2.45	1.0 3.0 3.0	1.41 2.10 4.69	0.06 0.11 <u>0.04</u> 0.21	0.04 0.07 <u>0.03</u> 0.14								
										10		90	40	1.8	61	2.9
A-4D	0.0125 TOTAL =	370 760	12.0 4.0	3.24 0.53	1.0 3.0	1.80 2.18	0.06 <u>0.10</u> 0.15	0.04 <u>0.06</u> 0.10								
									15	9		76	18	0.8	29	1.3
C-1D	0.0115 TOTAL =	400 250 475	8.0 19.0 31.0	2.00 7.60 6.53	1.0 2.0 3.0	1.41 5.51 7.66	0.08 0.01 <u>0.02</u> 0.11	0.05 0.01 <u>0.01</u> 0.07								
										43		57	14	0.6	24	1.0
C-2D	0.0574 TOTAL =	400 350 1520	4.0 12.0 52.0	1.00 3.43 3.42	1.0 2.0 3.0	1.00 3.70 5.55	0.11 0.03 <u>0.08</u> 0.21	0.07 0.02 <u>0.05</u> 0.14								
										43		57	69	3.0	119	5.1
D-1D	0.0468 TOTAL =	200 1050 800	10.0 32.0 8.0	5.00 3.05 1.00	1.0 3.0 3.0	2.24 5.24 3.00	0.02 0.06 <u>0.07</u> 0.15	0.02 0.04 <u>0.05</u> 0.10								
										43		57	58	2.4	99	4.2
E-1D	0.0282 TOTAL =	400 200 600	2.0 10.0 12.0	0.50 5.00 2.00	1.0 2.0 3.0	0.71 4.47 4.24	0.16 0.01 <u>0.04</u> 0.21	0.10 0.01 <u>0.03</u> 0.14								
										29		71	39	1.7	64	2.9
E-2D	0.0172 TOTAL =	400 1050	10.0 22.0	2.50 2.10	1.0 3.0	1.58 4.34	0.07 <u>0.07</u> 0.14	0.05 <u>0.04</u> 0.09								
										10		90	29	1.3	45	2.1

MASTER DRAINAGE PLAN WEST SIDE TRANSIT FACILITY

AHYMO BASIN PARAMETER WORKSHEET PEAK BASIN FLOWS AND VOLUMES DEVELOPED INTERIM CONDITIONS

BASIN	AREA (sq.mi.)	LENGTH (ft.)	ELEV. DIFF. (ft.)	SLOPE (%)	K	VEL (fps)	T(c) (hr.)	T(p) (hr.)	LAND TREATMENT (%)				10 YEAR		100 YEAR	
									A	B	C	D	PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)	PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)
E-3D	0.0425	200 900 930	4.0 20.0 22.0	2.00 2.22 2.37	1.0 3.0 3.0	1.41 4.47 4.61	0.04 0.06 <u>0.06</u>	0.03 0.04 <u>0.04</u>								
	TOTAL =						0.15	0.10		43		57	53	2.2	90	3.8
E-4D	0.0030	1200	26.0	2.17	3.0	4.42	<u>0.08</u>	<u>0.05</u>								
	TOTAL =						0.08	0.05		10		90	5	0.2	8	0.4
F-1D	0.0396	250 850 700 200	5.0 20.0 4.0 2.0	2.00 2.35 0.57 1.00	1.0 3.0 3.0 3.0	1.41 4.60 2.27 3.00	0.05 0.05 <u>0.09</u> <u>0.02</u>	0.03 0.03 <u>0.06</u> <u>0.01</u>								
	TOTAL =						0.20	0.14		43		57	48	2.1	82	3.5
G-1D	0.0229	400 800	10.0 16.0	2.50 2.00	1.0 2.0	1.58 2.83	0.07 <u>0.08</u>	0.05 <u>0.05</u>								
	TOTAL =						0.15	0.10		20		80	36	1.6	56	2.5
G-2D	0.0031	1395	22.0	1.58	3.0	3.77	<u>0.10</u>	<u>0.07</u>								
	TOTAL =						0.10	0.07		18		82	5	0.2	8	0.3
G-3D	0.0351	400 1700	7.0 27.0	1.75 1.59	1.0 2.5	1.32 3.15	0.08 <u>0.15</u>	0.06 <u>0.10</u>								
	TOTAL =						0.23	0.16		20		80	49	2.4	78	3.9
G-4D	0.0033	1430	18.0	1.26	3.0	3.37	<u>0.12</u>	<u>0.08</u>								
	TOTAL =						0.12	0.08		18		82	5	0.2	8	0.4
P-1	0.0029	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.02	3	0.1
P-2	0.0036	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.02	3	0.1
P-3	0.0027	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.02	2	0.1
P-4	0.0036	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.02	3	0.1
P-5	0.0029	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.02	3	0.1
P-6	0.0043	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.03	4	0.1

MASTER DRAINAGE PLAN WEST SIDE TRANSIT FACILITY

AHYMO BASIN PARAMETER WORKSHEET PEAK BASIN FLOWS AND VOLUMES DEVELOPED CONDITIONS

BASIN	AREA (sq.mi.)	LENGTH (ft.)	ELEV. DIFF. (ft.)	SLOPE (%)	K	VEL (fps)	T(c) (hr.)	T(p) (hr.)	LAND TREATMENT (%)				10 YEAR		100 YEAR	
									A	B	C	D	PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)	PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)
I40-1	0.0075 TOTAL =	1765	33.0	1.87	3.0	4.10	<u>0.12</u> 0.12	<u>0.08</u> 0.08	65			35	6	0.2	11	0.5
I40-2	0.0031 TOTAL =	760	11.0	1.45	3.0	3.61	0.06 0.06	0.04 0.04	65			35	2	0.1	5	0.2
I40-3	0.0019 TOTAL =	415	7.0	1.69	3.0	3.90	<u>0.03</u> 0.03	<u>0.02</u> 0.02	65			35	1	0.1	3	0.1
I40-4	0.0012 TOTAL =	285	4.0	1.40	3.0	3.55	<u>0.02</u> 0.02	<u>0.01</u> 0.01	65			35	1	0.04	2	0.1
A-1D	0.0257 <i>11.5</i> TOTAL =	175 340 775	5.0 10.0 24.0	2.86 2.94 3.10	1.0 2.0 3.0	1.69 3.43 5.28	0.03 0.03 <u>0.04</u> 0.10	0.02 0.02 <u>0.03</u> 0.06							<i>26</i> <i>ch</i>	
A-2D	0.0284 TOTAL =	400 120 730	8.0 2.0 12.0	2.00 1.67 1.64	1.0 2.0 3.0	1.41 2.58 3.85	0.08 0.01 <u>0.05</u> 0.14	0.05 0.01 <u>0.04</u> 0.10								
A-3D	0.0240 <i>15.4</i> TOTAL =	300 820 735	6.0 4.0 18.0	2.00 0.49 2.45	1.0 3.0 3.0	1.41 2.10 4.69	0.06 0.11 <u>0.04</u> 0.21	0.04 0.07 <u>0.03</u> 0.14							<i>4</i> <i>90</i> <i>ch</i>	
A-4D	0.0125 <i>8</i> TOTAL =	370 760	12.0 4.0	3.24 0.53	1.0 3.0	1.80 2.18	0.06 <u>0.10</u> 0.15	0.04 <u>0.06</u> 0.10							<i>61</i> <i>ch</i>	<i>3.6 ch</i>
C-1D	0.0115 TOTAL =	400 250 475	8.0 19.0 31.0	2.00 7.60 6.53	1.0 2.0 3.0	1.41 5.51 7.66	0.08 0.01 <u>0.02</u> 0.11	0.05 0.01 <u>0.01</u> 0.07								
C-2D	0.0574 TOTAL =	400 350 1520	4.0 12.0 52.0	1.00 3.43 3.42	1.0 2.0 3.0	1.00 3.70 5.55	0.11 0.03 <u>0.08</u> 0.21	0.07 0.02 <u>0.05</u> 0.14								
D-1D	0.0468 TOTAL =	200 1050 800	10.0 32.0 8.0	5.00 3.05 1.00	1.0 3.0 3.0	2.24 5.24 3.00	0.02 0.06 <u>0.07</u> 0.15	0.02 0.04 <u>0.05</u> 0.10								
E-1D	0.0282 TOTAL =	400 200 600	2.0 10.0 12.0	0.50 5.00 2.00	1.0 2.0 3.0	0.71 4.47 4.24	0.16 0.01 <u>0.04</u> 0.21	0.10 0.01 <u>0.03</u> 0.14								

MASTER DRAINAGE PLAN WEST SIDE TRANSIT FACILITY

AHYMO BASIN PARAMETER WORKSHEET PEAK BASIN FLOWS AND VOLUMES DEVELOPED CONDITIONS

BASIN	AREA (sq.mi.)	LENGTH (ft.)	ELEV. DIFF. (ft.)	SLOPE (%)	K	VEL (fps)	T(c) (hr.)	T(p) (hr.)	LAND TREATMENT (%)				10 YEAR		100 YEAR	
									A	B	C	D	PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)	PEAK FLOW (24hr.) (cfs)	RUNOFF VOLUME (24hr.) (ac.ft.)
E-2D	0.0172	400 1050	10.0 22.0	2.50 2.10	1.0 3.0	1.58 4.34	0.07 <u>0.07</u> 0.14	0.05 <u>0.04</u> 0.09								
	TOTAL =									10		90	29	1.3	45	2.1
E-3D	0.0425	200 900 930	4.0 20.0 22.0	2.00 2.22 2.37	1.0 3.0 3.0	1.41 4.47 4.61	0.04 0.06 <u>0.06</u> 0.15	0.03 0.04 <u>0.04</u> 0.10								
	TOTAL =									43		57	53	2.2	90	3.8
E-4D	0.0030	1200	26.0	2.17	3.0	4.42	<u>0.08</u> 0.08	<u>0.05</u> 0.05								
	TOTAL =									10		90	5	0.2	8	0.4
F-1D	0.0396	250 850 700 200	5.0 20.0 4.0 2.0	2.00 2.35 0.57 1.00	1.0 3.0 3.0 3.0	1.41 4.60 2.27 3.00	0.05 0.05 <u>0.09</u> <u>0.02</u> 0.20	0.03 0.03 <u>0.06</u> <u>0.01</u> 0.14								
	TOTAL =									43		57	48	2.1	82	3.5
G-1D	0.0229	400 800	10.0 16.0	2.50 2.00	1.0 2.0	1.58 2.83	0.07 <u>0.08</u> 0.15	0.05 <u>0.05</u> 0.10								
	TOTAL =									20		80	36	1.6	56	2.5
G-2D	0.0031	1395	22.0	1.58	3.0	3.77	<u>0.10</u> 0.10	<u>0.07</u> 0.07								
	TOTAL =									18		82	5	0.2	8	0.3
G-3D	0.0351	400 1700	7.0 27.0	1.75 1.59	1.0 2.5	1.32 3.15	0.08 <u>0.15</u> 0.23	0.06 <u>0.10</u> 0.16								
	TOTAL =									20		80	49	2.4	78	3.9
G-4D	0.0033	1430	18.0	1.26	3.0	3.37	<u>0.12</u> 0.12	<u>0.08</u> 0.08								
	TOTAL =									18		82	5	0.2	8	0.4
P-1	0.0029	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.02	3	0.1
P-2	0.0036	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	2	0.05	5	0.1
P-3	0.0027	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.02	2	0.1
P-4	0.0036	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.02	3	0.1
P-6	0.0043	N/A	N/A	N/A	N/A	N/A	0.20	0.13	98			2	1	0.03	4	0.1

APPENDIX C

AHYMO SUMMARY TABLES

Ext10ee.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = EXT10EE.IN

RUN DATE (MON/DAY/YR) = 01/23/2001
USER NO. = C_ANDRSN.I01

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 10 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: EXT10EE.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/20/00											
START											
										TIME=	.00
RAINFALL TYPE= 2										RAIN24=	1.770
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	O-1E	-	3	.02420	3.43	.108	.08362	1.550	.221 PER IMP=	.00	
COMPUTE NM HYD	O-2E	-	4	.04220	4.48	.188	.08362	1.600	.166 PER IMP=	.00	
ADD HYD	AP-1	3& 4	10	.06640	7.65	.296	.08361	1.550	.180		
ROUTE	AP-1R	10	2	.06640	5.45	.296	.08362	1.700	.128		
COMPUTE NM HYD	O-3E	-	3	.01640	2.72	.086	.09818	1.550	.259 PER IMP=	1.00	
ADD HYD	PARTAP-2	2& 3	10	.08280	7.02	.382	.08650	1.650	.132		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	13.54	.660	.11274	1.600	.193 PER IMP=	2.00	
DIVIDE HYD	PART AP-7	3	98	.10970	13.54	.660	.11274	1.600	.193		
	PART AP-7	AND	99	.00000	.00	.000	.00000	-.050	.000		
ROUTE	AP-7R	99	2	.00000	.00	.000	.00000	-.050	.000		
ADD HYD	AP-2	10& 2	10	.08280	7.02	.382	.08650	1.650	.132		
ROUTE	AP-2R	10	2	.08280	6.98	.382	.08651	1.700	.132		
COMPUTE NM HYD	I40-3	-	3	.00190	1.40	.060	.59326	1.500	1.154 PER IMP=	35.00	
ADD HYD	AP-3	2& 3	20	.08470	7.72	.442	.09786	1.650	.142		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	1.75	.057	.11274	1.550	.292 PER IMP=	2.00	
ROUTE	AP-4R	3	2	.00940	1.84	.057	.11280	1.550	.306		
COMPUTE NM HYD	I40-4	-	3	.00120	.89	.038	.59326	1.500	1.156 PER IMP=	35.00	
ADD HYD	AP-5	2& 3	10	.01060	2.64	.094	.16710	1.550	.389		
ADD HYD	AP-3+AP-5	20&10	10	.09530	9.60	.537	.10556	1.600	.157		
ROUTE	AP-6	10	12	.09530	9.61	.537	.10557	1.600	.158		
ROUTE	AP-7R-CUL	98	2	.10970	13.58	.660	.11274	1.600	.193		
COMPUTE NM HYD	I40-2	-	3	.00310	2.28	.098	.59326	1.500	1.152 PER IMP=	35.00	
ADD HYD	AP-8	2& 3	20	.11280	15.19	.758	.12594	1.600	.210		
COMPUTE NM HYD	O-6E	-	3	.07320	6.49	.326	.08362	1.650	.138 PER IMP=	.00	
COMPUTE NM HYD	O-7E	-	4	.05230	7.41	.233	.08362	1.550	.221 PER IMP=	.00	
ADD HYD	AP-9	3& 4	10	.12550	13.19	.560	.08362	1.600	.164		

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
ROUTE	AP-9R	10	2	.12550	13.27	.560	.08362	1.600	.165		
COMPUTE NM HYD	O-8E	-	3	.00990	14.68	.698	1.32131	1.500	2.318 PER IMP=	85.00	
ADD HYD	AP-10	2& 3	10	.13540	26.66	1.257	.17411	1.550	.308		
ROUTE	AP-10R	10	2	.13540	21.80	1.257	.17411	1.650	.252		
COMPUTE NM HYD	O-9E	-	3	.03480	8.15	.290	.15643	1.500	.366 PER IMP=	5.00	
ADD HYD	AP-11	2& 3	10	.17020	27.81	1.548	.17049	1.600	.255		
ROUTE	AP-11R	10	2	.17020	27.65	1.548	.17050	1.600	.254		
COMPUTE NM HYD	I40-1	-	3	.00750	5.52	.237	.59326	1.500	1.150 PER IMP=	35.00	
ADD HYD	AP-12	2& 3	30	.17770	31.52	1.785	.18833	1.600	.277		
ROUTE	AP-8R	20	22	.11280	15.03	.758	.12595	1.650	.208		
COMPUTE NM HYD	130.70	-	1	.01696	3.27	.092	.10184	1.550	.301 PER IMP=	.00	
COMPUTE NM HYD	130.90	-	2	.00954	1.84	.052	.10184	1.550	.301 PER IMP=	.00	
ADD HYD	130.91	1& 2	1	.02650	5.11	.144	.10183	1.550	.301		
ROUTE	AP-12R	30	3	.17770	30.80	1.785	.18834	1.650	.271		
ADD HYD	130.72	1& 3	4	.20420	34.10	1.929	.17711	1.650	.261		
ADD HYD	AP-13	4&22	2	.31700	49.13	2.686	.15890	1.650	.242		
ROUTE	AP-13R	2	3	.31700	44.96	2.687	.15890	1.700	.222		
COMPUTE NM HYD	130.80	-	1	.03270	4.91	.146	.08362	1.550	.235 PER IMP=	.00	
ADD HYD	130.81	3& 1	10	.34970	47.65	2.832	.15186	1.700	.213		
COMPUTE NM HYD	P-5	-	3	.00290	.55	.017	.11274	1.550	.294 PER IMP=	2.00	
ADD HYD	AP-15UB	10& 3	11	.35260	47.93	2.849	.15149	1.700	.212		
ROUTE	AP-6R	12	1	.09530	8.36	.537	.10557	1.750	.137		
COMPUTE NM HYD	120.50	-	2	.01620	2.55	.072	.08362	1.550	.246 PER IMP=	.00	
ADD HYD	120.51	2& 1	3	.11150	9.35	.609	.10238	1.700	.131		
DIVIDE HYD	AP-6A	3	15	.11150	9.81	.639	.10749	1.700	.138		
	120.53	AND	16	.11150	.47	.030	.00512	1.700	.007		
COMPUTE NM HYD	120.60	-	6	.03280	6.10	.197	.11274	1.550	.291 PER IMP=	2.00	
DIVIDE HYD	AP-6B	6	17	.03280	6.16	.199	.11386	1.550	.294		

Ext100ee.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = EXT100EE.IN

RUN DATE (MON/DAY/YR) =01/25/2001
USER NO. = C_ANDRSN.I01

		FROM	TO	AREA	PEAK	RUNOFF		TIME TO	CFS	PAGE =	1
COMMAND	HYDROGRAPH IDENTIFICATION	ID NO.	ID NO.	(SQ MI)	DISCHARGE (CFS)	VOLUME (AC-FT)	RUNOFF (INCHES)	PEAK (HOURS)	PER ACRE	NOTATION	
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: EXT100EE.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/20/00											
START											
RAINFALL TYPE= 2											
TIME= .00											
RAIN24= 2.660											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	O-1E	-	3	.02420	18.06	.567	.43936	1.550	1.166 PER IMP=	.00	
COMPUTE NM HYD	O-2E	-	4	.04220	24.34	.989	.43936	1.600	.901 PER IMP=	.00	
ADD HYD	AP-1	3& 4	10	.06640	41.88	1.556	.43936	1.550	.986		
ROUTE	AP-1R	10	2	.06640	36.11	1.556	.43938	1.650	.850		
COMPUTE NM HYD	O-3E	-	3	.01640	13.10	.402	.45924	1.500	1.248 PER IMP=	1.00	
ADD HYD	PARTAP-2	2& 3	10	.08280	44.73	1.958	.44330	1.650	.844		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	63.37	2.803	.47912	1.600	.903 PER IMP=	2.00	
DIVIDE HYD	PART AP-7	3	98	.08594	32.00	2.196	.47911	1.500	.582		
	PART AP-7	AND	99	.02376	31.37	.607	.47911	1.600	2.062		
ROUTE	AP-7R	99	2	.02376	31.64	.608	.47944	1.600	2.081		
ADD HYD	AP-2	10& 2	10	.10656	76.00	2.565	.45135	1.600	1.114		
ROUTE	AP-2R	10	2	.10656	79.83	2.565	.45136	1.600	1.171		
COMPUTE NM HYD	I40-3	-	3	.00190	2.86	.115	1.13512	1.500	2.350 PER IMP=	35.00	
ADD HYD	AP-3	2& 3	20	.10846	81.89	2.680	.46333	1.600	1.180		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	8.11	.240	.47912	1.500	1.348 PER IMP=	2.00	
ROUTE	AP-4R	3	2	.00940	8.17	.240	.47921	1.500	1.358		
COMPUTE NM HYD	I40-4	-	3	.00120	1.81	.073	1.13512	1.500	2.357 PER IMP=	35.00	
ADD HYD	AP-5	2& 3	10	.01060	9.98	.313	.55337	1.500	1.471		
ADD HYD	AP-3+AP-5	20&10	10	.11906	89.90	2.993	.47135	1.600	1.180		
ROUTE	AP-6	10	12	.11906	87.97	2.993	.47135	1.650	1.154		
ROUTE	AP-7R-CUL	98	2	.08594	33.23	2.196	.47912	1.500	.604		
COMPUTE NM HYD	I40-2	-	3	.00310	4.65	.188	1.13512	1.500	2.346 PER IMP=	35.00	
ADD HYD	AP-8	2& 3	20	.08904	37.88	2.384	.50195	1.500	.665		
COMPUTE NM HYD	O-6E	-	3	.07320	35.69	1.715	.43936	1.600	.762 PER IMP=	.00	
COMPUTE NM HYD	O-7E	-	4	.05230	39.03	1.226	.43936	1.550	1.166 PER IMP=	.00	
ADD HYD	AP-9	3& 4	10	.12550	71.47	2.941	.43936	1.550	.890		
TIME= .00											
RAIN24= 2.660											
PAGE = 2											
COMMAND	HYDROGRAPH IDENTIFICATION	ID NO.	ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	NOTATION	
ROUTE	AP-9R	10	2	.12550	70.89	2.941	.43937	1.600	.883		
COMPUTE NM HYD	O-8E	-	3	.00990	23.00	1.124	2.12906	1.500	3.630 PER IMP=	85.00	
ADD HYD	AP-10	2& 3	10	.13540	92.59	4.065	.56290	1.550	1.068		
ROUTE	AP-10R	10	2	.13540	89.10	4.065	.56291	1.600	1.028		
COMPUTE NM HYD	O-9E	-	3	.03480	31.99	1.000	.53875	1.500	1.436 PER IMP=	5.00	
ADD HYD	AP-11	2& 3	10	.17020	114.14	5.065	.55797	1.600	1.048		
ROUTE	AP-11R	10	2	.17020	114.79	5.065	.55797	1.600	1.054		
COMPUTE NM HYD	I40-1	-	3	.00750	11.24	.454	1.13512	1.500	2.342 PER IMP=	35.00	
ADD HYD	AP-12	2& 3	30	.17770	122.86	5.519	.58232	1.600	1.080		
ROUTE	AP-8R	20	22	.08904	38.28	2.384	.50196	1.550	.672		
COMPUTE NM HYD	130.70	-	1	.01696	15.02	.425	.46988	1.500	1.384 PER IMP=	.00	
COMPUTE NM HYD	130.90	-	2	.00954	8.45	.239	.46988	1.500	1.385 PER IMP=	.00	
ADD HYD	130.91	1& 2	1	.02650	23.48	.664	.46988	1.500	1.384		
ROUTE	AP-12R	30	3	.17770	121.65	5.519	.58233	1.600	1.070		
ADD HYD	130.72	1& 3	4	.20420	140.42	6.183	.56773	1.600	1.074		
ADD HYD	AP-13	4&22	2	.29324	176.26	8.567	.54776	1.600	.939		
ROUTE	AP-13R	2	3	.29324	172.47	8.567	.54776	1.650	.919		
COMPUTE NM HYD	130.80	-	1	.03270	25.40	.766	.43936	1.550	1.214 PER IMP=	.00	
ADD HYD	130.81	3& 1	10	.32594	189.38	9.333	.53688	1.650	.908		
COMPUTE NM HYD	P-5	-	3	.00290	2.51	.074	.47912	1.500	1.353 PER IMP=	2.00	
ADD HYD	AP-15UB	10& 3	11	.32884	190.90	9.406	.53633	1.650	.907		
ROUTE	AP-6R	12	1	.11906	84.75	2.993	.47135	1.650	1.112		
COMPUTE NM HYD	120.50	-	2	.01620	13.33	.380	.43936	1.500	1.286 PER IMP=	.00	
ADD HYD	120.51	2& 1	3	.13526	92.90	3.373	.46752	1.650	1.073		
DIVIDE HYD	AP-6A	3	15	.13526	97.54	3.541	.49089	1.650	1.127		
	120.53	AND	16	.13526	4.64	.169	.02338	1.650	.054		
COMPUTE NM HYD	120.60	-	6	.03280	28.25	.838	.47912	1.500	1.346 PER IMP=	2.00	
DIVIDE HYD	AP-6B	6	17	.03280	28.53	.846	.48390	1.500	1.359		

	120.62	AND	16	.03280	.06	.002	.00113	1.550	.003	
ADD HYD	120.63	15&17	10	.14430	13.69	.838	.10894	1.600	.148	
COMPUTE NM HYD	P-6	-	3	.00430	.81	.026	.11274	1.550	.293	PER IMP= 2.00
ADD HYD	AP-14	10& 3	18	.14860	14.37	.863	.10895	1.600	.151	
ROUTE RESERVOIR	AP-14R	18	2	.14860	4.83	.863	.10895	2.200	.051	AC-FT= .399
ROUTE	POND6ROUTE36	2	12	.14860	4.83	.863	.10895	2.200	.051	
ROUTE	POND6ROUTE48	12	22	.14860	4.83	.863	.10895	2.200	.051	
DIVIDE HYD	AP-15	11	17	.35260	51.28	3.048	.16209	1.700	.227	
	130.83	AND	16	.35260	3.36	.199	.01060	1.700	.015	
ROUTE RESERVOIR	AP-15R	17	5	.35260	23.55	3.048	.16209	2.050	.104	AC-FT= 1.291
ROUTE	P-5R	5	11	.35260	23.72	3.048	.16209	2.050	.105	
ADD HYD	POND-5R&6R	11&22	10	.50120	28.50	3.912	.14633	2.050	.089	
COMPUTE NM HYD	P-4	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP= 2.00
ADD HYD	AP-15A	10& 3	10	.50480	28.58	3.932	.14606	2.050	.088	
ROUTE RESERVOIR	AP-15AR	10	5	.50480	6.96	3.851	.14302	4.300	.022	AC-FT= 1.991
ROUTE	P-4R	5	12	.50480	6.96	3.851	.14302	4.300	.022	
COMPUTE NM HYD	AP-16	-	1	.01960	4.43	.124	.11841	1.550	.353	PER IMP= .00
ROUTE	140.11	1	22	.01960	3.49	.124	.11845	1.600	.278	
ROUTE	140.12	22	15	.01960	3.47	.124	.11845	1.650	.276	
COMPUTE NM HYD	140.20	-	1	.08920	16.45	.462	.09721	1.550	.288	PER IMP= .00
ADD HYD	AP-17UB	15& 1	2	.10880	18.28	.586	.10103	1.550	.262	
DIVIDE HYD	AP-17	2	17	.10880	19.74	.633	.10911	1.550	.283	
	140.23	AND	16	.10880	1.46	.047	.00808	1.550	.021	
ADD HYD	140.24	17&12	2	.61360	19.75	4.484	.13701	1.550	.050	

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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	P-3	-	3	.00270	.51	.016	.11274	1.550	.294	PER IMP= 2.00	
ADD HYD	AP-18	2& 3	10	.61630	20.25	4.499	.13687	1.550	.051		
ROUTE RESERVOIR	AP-18R	10	4	.61630	5.73	4.412	.13422	6.350	.015	AC-FT= 1.241	
ROUTE	P-3R	4	2	.61630	5.73	4.412	.13421	6.350	.015		
COMPUTE NM HYD	P-2	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP= 2.00	
ADD HYD	AP-18A	2& 3	10	.61990	5.73	4.432	.13406	6.350	.014		
ROUTE RESERVOIR	AP-18AR	10	5	.61990	4.10	3.664	.11082	9.500	.010	AC-FT= 1.828	
ROUTE	P-2R	5	10	.61990	4.10	3.664	.11081	9.500	.010		
COMPUTE NM HYD	AP-19UB	-	1	.15250	16.02	.753	.09263	1.650	.164	PER IMP= .00	
DIVIDE HYD	AP-19	1	17	.15250	16.82	.791	.09726	1.650	.172		
	150.12	AND	16	.15250	.80	.038	.00463	1.650	.008		
ADD HYD	150.13	10&17	10	.77240	16.83	4.455	.10814	1.650	.034		
COMPUTE NM HYD	P-1	-	3	.00290	.55	.017	.11274	1.550	.294	PER IMP= 2.00	
ADD HYD	AP-20	10& 3	10	.77530	17.29	4.471	.10813	1.600	.035		
ROUTE RESERVOIR	150.14	10	5	.77530	4.58	4.457	.10779	2.100	.009	AC-FT= .437	
COMPUTE NM HYD	AP-21&170.1	-	3	.06420	9.31	.386	.11274	1.550	.227	PER IMP= 2.00	
FINISH											

	120.62	AND	16	.03280	.28	.008	.00479	1.500	.013	
ADD HYD	120.63	15&17	10	.16806	114.84	4.388	.48953	1.650	1.068	
COMPUTE NM HYD	P-6	-	3	.00430	3.72	.110	.47912	1.500	1.350	PER IMP= 2.00
ADD HYD	AP-14	10& 3	18	.17236	117.09	4.498	.48926	1.650	1.061	
ROUTE RESERVOIR	AP-14R	18	2	.17236	9.77	4.498	.48926	2.400	.089	AC-FT= 3.305
ROUTE	POND6ROUTE36	2	12	.17236	9.77	4.498	.48926	2.450	.089	
ROUTE	POND6ROUTE48	12	22	.17236	9.77	4.498	.48926	2.450	.089	
DIVIDE HYD	AP-15	11	17	.32884	204.27	10.065	.57387	1.650	.971	
	130.83	AND	16	.32884	13.36	.658	.03754	1.650	.063	
ROUTE RESERVOIR	AP-15R	17	5	.32884	130.75	10.065	.57387	1.850	.621	AC-FT= 2.666
ROUTE	P-5R	5	11	.32884	131.18	10.065	.57388	1.800	.623	
ADD HYD	POND-5R&6R	11&22	10	.50120	139.93	14.562	.54477	1.800	.436	
COMPUTE NM HYD	P-4	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP= 2.00
ADD HYD	AP-15A	10& 3	10	.50480	140.72	14.654	.54429	1.800	.436	
ROUTE RESERVOIR	AP-15AR	10	5	.50480	93.63	14.571	.54122	2.200	.290	AC-FT= 4.641
ROUTE	P-4R	5	12	.50480	94.22	14.571	.54123	2.200	.292	
COMPUTE NM HYD	AP-16	-	1	.01960	18.50	.522	.49901	1.500	1.475	PER IMP= .00
ROUTE	140.11	1	22	.01960	16.56	.522	.49908	1.550	1.320	
ROUTE	140.12	22	15	.01960	17.13	.522	.49909	1.600	1.366	
COMPUTE NM HYD	140.20	-	1	.08920	78.50	2.196	.46166	1.500	1.375	PER IMP= .00
ADD HYD	AP-17UB	15& 1	2	.10880	91.60	2.718	.46840	1.550	1.316	
DIVIDE HYD	AP-17	2	17	.10880	98.93	2.935	.50587	1.550	1.421	
	140.23	AND	16	.10880	7.33	.217	.03747	1.550	.105	
ADD HYD	140.24	17&12	2	.61360	100.79	17.507	.53496	2.200	.257	

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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	P-3	-	3	.00270	2.34	.069	.47912	1.500	1.354	PER IMP= 2.00
ADD HYD	AP-18	2& 3	10	.61630	101.53	17.575	.53469	1.550	.257	
ROUTE RESERVOIR	AP-18R	10	4	.61630	88.48	17.467	.53141	2.350	.224	AC-FT= 2.796
ROUTE	P-3R	4	2	.61630	88.54	17.467	.53141	2.300	.224	
COMPUTE NM HYD	P-2	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP= 2.00
ADD HYD	AP-18A	2& 3	10	.61990	88.70	17.559	.53109	2.300	.224	
ROUTE RESERVOIR	AP-18AR	10	5	.61990	16.86	16.695	.50497	4.550	.042	AC-FT= 6.420
ROUTE	P-2R	5	10	.61990	16.86	16.694	.50495	4.550	.042	
COMPUTE NM HYD	AP-19UB	-	1	.15250	85.35	3.692	.45390	1.600	.874	PER IMP= .00
DIVIDE HYD	AP-19	1	17	.15250	89.62	3.876	.47660	1.600	.918	
	150.12	AND	16	.15250	4.27	.185	.02270	1.600	.044	
ADD HYD	150.13	10&17	10	.77240	89.63	20.571	.49935	1.600	.181	
COMPUTE NM HYD	P-1	-	3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP= 2.00
ADD HYD	AP-20	10& 3	10	.77530	91.63	20.644	.49926	1.600	.185	
ROUTE RESERVOIR	150.14	10	5	.77530	12.02	20.590	.49796	6.800	.024	AC-FT= 4.419
COMPUTE NM HYD	AP-21&170.1	-	3	.06420	43.17	1.640	.47912	1.550	1.051	PER IMP= 2.00
FINISH										

Ext10pe.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = EXT10PE.IN

RUN DATE (MON/DAY/YR) = 01/23/2001
USER NO. = C_ANDRSN.I01

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 10 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: EXT10PE.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE PROPOSED POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/20/00											
START											
RAINFALL TYPE= 2											
TIME= .00											
RAIN24= 1.770											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	O-1E	-	3	.02420	3.43	.108	.08362	1.550	.221 PER IMP=	.00	
COMPUTE NM HYD	O-2E	-	4	.04220	4.48	.188	.08362	1.600	.166 PER IMP=	.00	
ADD HYD	AP-1	3& 4	10	.06640	7.65	.296	.08361	1.550	.180		
ROUTE	AP-1R	10	2	.06640	5.45	.296	.08362	1.700	.128		
COMPUTE NM HYD	O-3E	-	3	.01640	2.72	.086	.09818	1.550	.259 PER IMP=	1.00	
ADD HYD	PARTAP-2	2& 3	10	.08280	7.02	.382	.08650	1.650	.132		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	13.54	.660	.11274	1.600	.193 PER IMP=	2.00	
DIVIDE HYD	PART AP-7	3	98	.10970	13.54	.660	.11274	1.600	.193		
	PART AP-7	AND	99	.00000	.00	.000	.00000	-.050	.000		
ROUTE	AP-7R	99	2	.00000	.00	.000	.00000	-.050	.000		
ADD HYD	AP-2	10& 2	10	.08280	7.02	.382	.08650	1.650	.132		
ROUTE	AP-2R	10	2	.08280	6.98	.382	.08651	1.700	.132		
COMPUTE NM HYD	I40-3	-	3	.00190	1.40	.060	.59326	1.500	1.154 PER IMP=	35.00	
ADD HYD	AP-3	2& 3	20	.08470	7.72	.442	.09786	1.650	.142		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	1.75	.057	.11274	1.550	.292 PER IMP=	2.00	
ROUTE	AP-4R	3	2	.00940	1.84	.057	.11280	1.550	.306		
COMPUTE NM HYD	I40-4	-	3	.00120	.89	.038	.59326	1.500	1.156 PER IMP=	35.00	
ADD HYD	AP-5	2& 3	10	.01060	2.64	.094	.16710	1.550	.389		
ADD HYD	AP-3+AP-5	20&10	10	.09530	9.60	.537	.10556	1.600	.157		
ROUTE	AP-6	10	12	.09530	9.61	.537	.10557	1.600	.158		
ROUTE	AP-7R-CUL	98	2	.10970	13.58	.660	.11274	1.600	.193		
COMPUTE NM HYD	I40-2	-	3	.00310	2.28	.098	.59326	1.500	1.152 PER IMP=	35.00	
ADD HYD	AP-8	2& 3	20	.11280	15.19	.758	.12594	1.600	.210		
COMPUTE NM HYD	O-6E	-	3	.07320	6.49	.326	.08362	1.650	.138 PER IMP=	.00	
COMPUTE NM HYD	O-7E	-	4	.05230	7.41	.233	.08362	1.550	.221 PER IMP=	.00	
ADD HYD	AP-9	3& 4	10	.12550	13.19	.560	.08362	1.600	.164		

□

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
ROUTE	AP-9R	10	2	.12550	13.27	.560	.08362	1.600	.165		
COMPUTE NM HYD	O-8E	-	3	.00990	14.68	.698	1.32131	1.500	2.318 PER IMP=	85.00	
ADD HYD	AP-10	2& 3	10	.13540	26.66	1.257	.17411	1.550	.308		
ROUTE	AP-10R	10	2	.13540	21.80	1.257	.17411	1.650	.252		
COMPUTE NM HYD	O-9E	-	3	.03480	8.15	.290	.15643	1.500	.366 PER IMP=	5.00	
ADD HYD	AP-11	2& 3	10	.17020	27.81	1.548	.17049	1.600	.255		
ROUTE	AP-11R	10	2	.17020	27.65	1.548	.17050	1.600	.254		
COMPUTE NM HYD	I40-1	-	3	.00750	5.52	.237	.59326	1.500	1.150 PER IMP=	35.00	
ADD HYD	AP-12	2& 3	30	.17770	31.52	1.785	.18833	1.600	.277		
ROUTE	AP-8R	20	22	.11280	15.03	.758	.12595	1.650	.208		
COMPUTE NM HYD	130.70	-	1	.01696	3.27	.092	.10184	1.550	.301 PER IMP=	.00	
COMPUTE NM HYD	130.90	-	2	.00954	1.84	.052	.10184	1.550	.301 PER IMP=	.00	
ADD HYD	130.91	1& 2	1	.02650	5.11	.144	.10183	1.550	.301		
ROUTE	AP-12R	30	3	.17770	30.80	1.785	.18834	1.650	.271		
ADD HYD	130.72	1& 3	4	.20420	34.10	1.929	.17711	1.650	.261		
ADD HYD	AP-13	4&22	2	.31700	49.13	2.686	.15890	1.650	.242		
ROUTE	AP-13R	2	3	.31700	44.96	2.687	.15890	1.700	.222		
COMPUTE NM HYD	130.80	-	1	.03270	4.91	.146	.08362	1.550	.235 PER IMP=	.00	
ADD HYD	130.81	3& 1	10	.34970	47.65	2.832	.15186	1.700	.213		
COMPUTE NM HYD	P-5	-	3	.00290	.55	.017	.11274	1.550	.294 PER IMP=	2.00	
ADD HYD	AP-15UB	10& 3	11	.35260	47.93	2.849	.15149	1.700	.212		
ROUTE	AP-6R	12	1	.09530	8.36	.537	.10557	1.750	.137		
COMPUTE NM HYD	120.50	-	2	.01620	2.55	.072	.08362	1.550	.246 PER IMP=	.00	
ADD HYD	120.51	2& 1	3	.11150	9.35	.609	.10238	1.700	.131		
DIVIDE HYD	AP-6A	3	15	.11150	9.81	.639	.10749	1.700	.138		
	120.53	AND	16	.11150	.47	.030	.00512	1.700	.007		
COMPUTE NM HYD	120.60	-	6	.03280	6.10	.197	.11274	1.550	.291 PER IMP=	2.00	
DIVIDE HYD	AP-6B	6	17	.03280	6.16	.199	.11386	1.550	.294		

	120.62	AND	16	.03280	.06	.002	.00113	1.550	.003	
ADD HYD	120.63	15&17	10	.14430	13.69	.838	.10894	1.600	.148	
COMPUTE NM HYD	P-6	-	3	.00430	.81	.026	.11274	1.550	.293	PER IMP= 2.00
ADD HYD	AP-14	10& 3	18	.14860	14.37	.863	.10895	1.600	.151	
ROUTE RESERVOIR	AP-14R	18	2	.14860	7.30	.863	.10895	2.050	.077	AC-FT= .313
ROUTE	POND6ROUTE36	2	12	.14860	7.30	.863	.10895	2.050	.077	
ROUTE	POND6ROUTE48	12	22	.14860	7.30	.863	.10895	2.050	.077	
DIVIDE HYD	AP-15	11	17	.35260	51.28	3.048	.16209	1.700	.227	
	130.83	AND	16	.35260	3.36	.199	.01060	1.700	.015	
ROUTE RESERVOIR	AP-15R	17	5	.35260	23.55	3.048	.16209	2.050	.104	AC-FT= 1.291
ROUTE	P-5R	5	11	.35260	23.72	3.048	.16209	2.050	.105	
ADD HYD	POND-5R&6R	11&22	10	.50120	31.03	3.912	.14633	2.050	.097	
COMPUTE NM HYD	P-4	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP= 2.00
ADD HYD	AP-15A	10& 3	10	.50480	31.10	3.932	.14606	2.050	.096	
ROUTE RESERVOIR	AP-15AR	10	5	.50480	21.36	3.854	.14313	2.400	.066	AC-FT= .661
ROUTE	P-4R	5	12	.50480	21.36	3.854	.14313	2.400	.066	
COMPUTE NM HYD	AP-16	-	1	.01960	4.43	.124	.11841	1.550	.353	PER IMP= .00
ROUTE	140.11	1	22	.01960	3.49	.124	.11845	1.600	.278	
ROUTE	140.12	22	15	.01960	3.47	.124	.11845	1.650	.276	
COMPUTE NM HYD	140.20	-	1	.08920	16.45	.462	.09721	1.550	.288	PER IMP= .00
ADD HYD	AP-17UB	15& 1	2	.10880	18.28	.586	.10103	1.550	.262	
DIVIDE HYD	AP-17	2	17	.10880	19.74	.633	.10911	1.550	.283	
	140.23	AND	16	.10880	1.46	.047	.00808	1.550	.021	
ADD HYD	140.24	17&12	2	.61360	22.64	4.487	.13710	2.350	.058	

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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	P-3	-	3	.00270	.51	.016	.11274	1.550	.294	PER IMP= 2.00	
ADD HYD	AP-18	2& 3	10	.61630	22.66	4.502	.13697	2.350	.057		
ROUTE RESERVOIR	AP-18R	10	4	.61630	19.25	4.433	.13487	2.750	.049	AC-FT= .870	
ROUTE	P-3R	4	2	.61630	19.25	4.433	.13487	2.750	.049		
COMPUTE NM HYD	P-2	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP= 2.00	
ADD HYD	AP-19A	2& 3	10	.61990	19.27	4.454	.13472	2.750	.049		
ROUTE RESERVOIR	AP-19AR	10	5	.61990	14.08	3.724	.11264	3.550	.035	AC-FT= 1.437	
ROUTE	P-2R	5	10	.61990	14.08	3.724	.11264	3.550	.035		
COMPUTE NM HYD	AP-19UB	-	1	.15250	16.02	.753	.09263	1.650	.164	PER IMP= .00	
DIVIDE HYD	AP-19	1	17	.15250	16.82	.791	.09726	1.650	.172		
	150.12	AND	16	.15250	.80	.038	.00463	1.650	.008		
ADD HYD	150.13	10&17	10	.77240	16.83	4.515	.10960	1.650	.034		
COMPUTE NM HYD	P-1	-	3	.00290	.55	.017	.11274	1.550	.294	PER IMP= 2.00	
ADD HYD	AP-20	10& 3	10	.77530	17.29	4.531	.10959	1.600	.035		
ROUTE RESERVOIR	150.14	10	5	.77530	13.48	4.531	.10957	4.000	.027	AC-FT= .402	
COMPUTE NM HYD	AP-21&170.1	-	3	.06420	9.31	.386	.11274	1.550	.227	PER IMP= 2.00	
FINISH											

Ext100pe.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = EXT100PE.IN

RUN DATE (MON/DAY/YR) =01/25/2001
USER NO.= C_ANDRSN.I01

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: EXT100PE.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE PROPOSED POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/20/00											
START											
RAINFALL TYPE= 2											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	O-1E	-	3	.02420	18.06	.567	.43936	1.550	1.166	PER IMP=	.00
COMPUTE NM HYD	O-2E	-	4	.04220	24.34	.989	.43936	1.600	.901	PER IMP=	.00
ADD HYD	AP-1	3& 4	10	.06640	41.88	1.556	.43936	1.550	.986		
ROUTE	AP-1R	10	2	.06640	36.11	1.556	.43938	1.650	.850		
COMPUTE NM HYD	O-3E	-	3	.01640	13.10	.402	.45924	1.500	1.248	PER IMP=	1.00
ADD HYD	PARTAP-2	2& 3	10	.08280	44.73	1.958	.44330	1.650	.844		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	63.37	2.803	.47912	1.600	.903	PER IMP=	2.00
DIVIDE HYD	PART AP-7	3	98	.08594	32.00	2.196	.47911	1.500	.582		
	PART AP-7	AND	99	.02376	31.37	.607	.47911	1.600	2.062		
ROUTE	AP-7R	99	2	.02376	31.64	.608	.47944	1.600	2.081		
ADD HYD	AP-2	10& 2	10	.10656	76.00	2.565	.45135	1.600	1.114		
ROUTE	AP-2R	10	2	.10656	79.83	2.565	.45136	1.600	1.171		
COMPUTE NM HYD	I40-3	-	3	.00190	2.86	.115	1.13512	1.500	2.350	PER IMP=	35.00
ADD HYD	AP-3	2& 3	20	.10846	81.89	2.680	.46333	1.600	1.180		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	8.11	.240	.47912	1.500	1.348	PER IMP=	2.00
ROUTE	AP-4R	3	2	.00940	8.17	.240	.47921	1.500	1.358		
COMPUTE NM HYD	I40-4	-	3	.00120	1.81	.073	1.13512	1.500	2.357	PER IMP=	35.00
ADD HYD	AP-5	2& 3	10	.01060	9.98	.313	.55337	1.500	1.471		
ADD HYD	AP-3+AP-5	20&10	10	.11906	89.90	2.993	.47135	1.600	1.180		
ROUTE	AP-6	10	12	.11906	87.97	2.993	.47135	1.650	1.154		
ROUTE	AP-7R-CUL	98	2	.08594	33.23	2.196	.47912	1.500	.604		
COMPUTE NM HYD	I40-2	-	3	.00310	4.65	.188	1.13512	1.500	2.346	PER IMP=	35.00
ADD HYD	AP-8	2& 3	20	.08904	37.88	2.384	.50195	1.500	.665		
COMPUTE NM HYD	O-6E	-	3	.07320	35.69	1.715	.43936	1.600	.762	PER IMP=	.00
COMPUTE NM HYD	O-7E	-	4	.05230	39.03	1.226	.43936	1.550	1.166	PER IMP=	.00
ADD HYD	AP-9	3& 4	10	.12550	71.47	2.941	.43936	1.550	.890		

□

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
ROUTE	AP-9R	10	2	.12550	70.89	2.941	.43937	1.600	.883		
COMPUTE NM HYD	O-8E	-	3	.00990	23.00	1.124	2.12906	1.500	3.630	PER IMP=	85.00
ADD HYD	AP-10	2& 3	10	.13540	92.59	4.065	.56290	1.550	1.068		
ROUTE	AP-10R	10	2	.13540	89.10	4.065	.56291	1.600	1.028		
COMPUTE NM HYD	O-9E	-	3	.03480	31.99	1.000	.53875	1.500	1.436	PER IMP=	5.00
ADD HYD	AP-11	2& 3	10	.17020	114.14	5.065	.55797	1.600	1.048		
ROUTE	AP-11R	10	2	.17020	114.79	5.065	.55797	1.600	1.054		
COMPUTE NM HYD	I40-1	-	3	.00750	11.24	.454	1.13512	1.500	2.342	PER IMP=	35.00
ADD HYD	AP-12	2& 3	30	.17770	122.86	5.519	.58232	1.600	1.080		
ROUTE	AP-8R	20	22	.08904	38.28	2.384	.50196	1.550	.672		
COMPUTE NM HYD	130.70	-	1	.01696	15.02	.425	.46988	1.500	1.384	PER IMP=	.00
COMPUTE NM HYD	130.90	-	2	.00954	8.45	.239	.46988	1.500	1.385	PER IMP=	.00
ADD HYD	130.91	1& 2	1	.02650	23.48	.664	.46988	1.500	1.384		
ROUTE	AP-12R	30	3	.17770	121.65	5.519	.58233	1.600	1.070		
ADD HYD	130.72	1& 3	4	.20420	140.42	6.183	.56773	1.600	1.074		
ADD HYD	AP-13	4&22	2	.29324	176.26	8.567	.54776	1.600	.939		
ROUTE	AP-13R	2	3	.29324	172.47	8.567	.54776	1.650	.919		
COMPUTE NM HYD	130.80	-	1	.03270	25.40	.766	.43936	1.550	1.214	PER IMP=	.00
ADD HYD	130.81	3& 1	10	.32594	189.38	9.333	.53688	1.650	.908		
COMPUTE NM HYD	P-5	-	3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	AP-15UB	10& 3	11	.32884	190.90	9.406	.53633	1.650	.907		
ROUTE	AP-6R	12	1	.11906	84.75	2.993	.47135	1.650	1.112		
COMPUTE NM HYD	120.50	-	2	.01620	13.33	.380	.43936	1.500	1.286	PER IMP=	.00
ADD HYD	120.51	2& 1	3	.13526	92.90	3.373	.46752	1.650	1.073		
DIVIDE HYD	AP-6A	3	15	.13526	97.54	3.541	.49089	1.650	1.127		
	120.53	AND	16	.13526	4.64	.169	.02338	1.650	.054		
COMPUTE NM HYD	120.60	-	6	.03280	28.25	.838	.47912	1.500	1.346	PER IMP=	2.00
DIVIDE HYD	AP-6B	6	17	.03280	28.53	.846	.48390	1.500	1.359		

	120.62	AND	16	.03280	.28	.008	.00479	1.500	.013		
ADD HYD	120.63	15&17	10	.16806	114.84	4.388	.48953	1.650	1.068		
COMPUTE NM HYD	P-6	-	3	.00430	3.72	.110	.47912	1.500	1.350	PER IMP=	2.00
ADD HYD	AP-14	10&3	18	.17236	117.09	4.498	.48926	1.650	1.061		
ROUTE RESERVOIR	AP-14R	18	2	.17236	38.13	4.498	.48926	1.900	.346	AC-FT=	2.250
ROUTE	POND6ROUTE36	2	12	.17236	38.12	4.498	.48926	1.900	.346		
ROUTE	POND6ROUTE48	12	22	.17236	38.12	4.498	.48926	1.900	.346		
DIVIDE HYD	AP-15	11	17	.32884	204.27	10.065	.57387	1.650	.971		
	130.83	AND	16	.32884	13.36	.658	.03754	1.650	.063		
ROUTE RESERVOIR	AP-15R	17	5	.32884	130.75	10.065	.57387	1.850	.621	AC-FT=	2.666
ROUTE	P-5R	5	11	.32884	131.18	10.065	.57388	1.800	.623		
ADD HYD	POND-5R&6R	11&22	10	.50120	168.51	14.562	.54477	1.900	.525		
COMPUTE NM HYD	P-4	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-15A	10&3	10	.50480	168.96	14.654	.54429	1.900	.523		
ROUTE RESERVOIR	AP-15AR	10	5	.50480	95.22	14.575	.54136	2.250	.295	AC-FT=	4.809
ROUTE	P-4R	5	12	.50480	95.31	14.575	.54136	2.250	.295		
COMPUTE NM HYD	AP-16	-	1	.01960	18.50	.522	.49901	1.500	1.475	PER IMP=	.00
ROUTE	140.11	1	22	.01960	16.56	.522	.49908	1.550	1.320		
ROUTE	140.12	22	15	.01960	17.13	.522	.49909	1.600	1.366		
COMPUTE NM HYD	140.20	-	1	.08920	78.50	2.196	.46166	1.500	1.375	PER IMP=	.00
ADD HYD	AP-17UB	15&1	2	.10880	91.60	2.718	.46840	1.550	1.316		
DIVIDE HYD	AP-17	2	17	.10880	98.93	2.935	.50587	1.550	1.421		
	140.23	AND	16	.10880	7.33	.217	.03747	1.550	.105		
ADD HYD	140.24	17&12	2	.61360	101.44	17.510	.53507	1.550	.258		
□											
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	P-3	-	3	.00270	2.34	.069	.47912	1.500	1.354	PER IMP=	2.00
ADD HYD	AP-18	2&3	10	.61630	103.70	17.578	.53480	1.550	.263		
ROUTE RESERVOIR	AP-18R	10	4	.61630	90.35	17.510	.53270	2.600	.229	AC-FT=	2.898
ROUTE	P-3R	4	2	.61630	90.34	17.510	.53270	2.600	.229		
COMPUTE NM HYD	P-2	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-18A	2&3	10	.61990	90.42	17.601	.53238	2.600	.228		
ROUTE RESERVOIR	AP-18AR	10	5	.61990	50.71	16.871	.51028	3.400	.128	AC-FT=	6.005
ROUTE	P-2R	5	10	.61990	50.70	16.871	.51028	3.400	.128		
COMPUTE NM HYD	AP-19UB	-	1	.15250	85.35	3.692	.45390	1.600	.874	PER IMP=	.00
DIVIDE HYD	AP-19	1	17	.15250	89.62	3.876	.47660	1.600	.918		
	150.12	AND	16	.15250	4.27	.185	.02270	1.600	.044		
ADD HYD	150.13	10&17	10	.77240	89.64	20.747	.50363	1.600	.181		
COMPUTE NM HYD	P-1	-	3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	AP-20	10&3	10	.77530	91.63	20.820	.50352	1.600	.185		
ROUTE RESERVOIR	150.14	10	5	.77530	50.75	20.820	.50350	3.700	.102	AC-FT=	1.729
COMPUTE NM HYD	AP-21&170.1	-	3	.06420	43.17	1.640	.47912	1.550	1.051	PER IMP=	2.00
FINISH											

Ext10ep.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = EXT10EP.IN

RUN DATE (MON/DAY/YR) = 01/23/2001
USER NO. = C_ANDRSN.101

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 10 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: EXT10EP.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND											
*S OUTLET WORKS AND THE PROPOSED POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/20/00											
START											
RAINFALL TYPE= 2											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	O-1E	-	3	.02420	3.43	.108	.08362	1.550	.221 PER IMP=		.00
COMPUTE NM HYD	O-2E	-	4	.04220	4.48	.188	.08362	1.600	.166 PER IMP=		.00
ADD HYD	AP-1	3& 4	10	.06640	7.65	.296	.08361	1.550	.180		
ROUTE	AP-1R	10	2	.06640	5.45	.296	.08362	1.700	.128		
COMPUTE NM HYD	O-3E	-	3	.01640	2.72	.086	.09818	1.550	.259 PER IMP=		1.00
ADD HYD	PARTAP-2	2& 3	10	.08280	7.02	.382	.08650	1.650	.132		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	13.54	.660	.11274	1.600	.193 PER IMP=		2.00
DIVIDE HYD	PART AP-7	3	98	.10970	13.54	.660	.11274	1.600	.193		
	PART AP-7	AND	99	.00000	.00	.000	.00000	-.050	.000		
ROUTE	AP-7R	99	2	.00000	.00	.000	.00000	-.050	.000		
ADD HYD	AP-2	10& 2	10	.08280	7.02	.382	.08650	1.650	.132		
ROUTE	AP-2R	10	2	.08280	6.98	.382	.08651	1.700	.132		
COMPUTE NM HYD	I40-3	-	3	.00190	1.40	.060	.59326	1.500	1.154 PER IMP=		35.00
ADD HYD	AP-3	2& 3	20	.08470	7.72	.442	.09786	1.650	.142		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	1.75	.057	.11274	1.550	.292 PER IMP=		2.00
ROUTE	AP-4R	3	2	.00940	1.84	.057	.11280	1.550	.306		
COMPUTE NM HYD	I40-4	-	3	.00120	.89	.038	.59326	1.500	1.156 PER IMP=		35.00
ADD HYD	AP-5	2& 3	10	.01060	2.64	.094	.16710	1.550	.389		
ADD HYD	AP-3+AP-5	20&10	10	.09530	9.60	.537	.10556	1.600	.157		
ROUTE	AP-6	10	12	.09530	9.61	.537	.10557	1.600	.158		
ROUTE	AP-7R-CUL	98	2	.10970	13.58	.660	.11274	1.600	.193		
COMPUTE NM HYD	I40-2	-	3	.00310	2.28	.098	.59326	1.500	1.152 PER IMP=		35.00
ADD HYD	AP-8	2& 3	20	.11280	15.19	.758	.12594	1.600	.210		
COMPUTE NM HYD	O-6E	-	3	.07320	6.49	.326	.08362	1.650	.138 PER IMP=		.00
COMPUTE NM HYD	O-7E	-	4	.05230	7.41	.233	.08362	1.550	.221 PER IMP=		.00
ADD HYD	AP-9	3& 4	10	.12550	13.19	.560	.08362	1.600	.164		

□

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
ROUTE	AP-9R	10	2	.12550	13.27	.560	.08362	1.600	.165		
COMPUTE NM HYD	O-8E	-	3	.00990	14.68	.698	1.32131	1.500	2.318 PER IMP=		85.00
ADD HYD	AP-10	2& 3	10	.13540	26.66	1.257	.17411	1.550	.308		
ROUTE	AP-10R	10	2	.13540	21.80	1.257	.17411	1.650	.252		
COMPUTE NM HYD	O-9E	-	3	.03480	8.15	.290	.15643	1.500	.366 PER IMP=		5.00
ADD HYD	AP-11	2& 3	10	.17020	27.81	1.548	.17049	1.600	.255		
ROUTE	AP-11R	10	2	.17020	27.65	1.548	.17050	1.600	.254		
COMPUTE NM HYD	I40-1	-	3	.00750	5.52	.237	.59326	1.500	1.150 PER IMP=		35.00
ADD HYD	AP-12	2& 3	30	.17770	31.52	1.785	.18833	1.600	.277		
ROUTE	AP-8R	20	22	.11280	15.03	.758	.12595	1.650	.208		
COMPUTE NM HYD	130.70	-	1	.01696	3.27	.092	.10184	1.550	.301 PER IMP=		.00
COMPUTE NM HYD	130.90	-	2	.00954	1.84	.052	.10184	1.550	.301 PER IMP=		.00
ADD HYD	130.91	1& 2	1	.02650	5.11	.144	.10183	1.550	.301		
ROUTE	AP-12R	30	3	.17770	30.80	1.785	.18834	1.650	.271		
ADD HYD	130.72	1& 3	4	.20420	34.10	1.929	.17711	1.650	.261		
ADD HYD	AP-13	4&22	2	.31700	49.13	2.686	.15890	1.650	.242		
ROUTE	AP-13R	2	3	.31700	44.96	2.687	.15890	1.700	.222		
COMPUTE NM HYD	130.80	-	1	.03270	4.91	.146	.08362	1.550	.235 PER IMP=		.00
ADD HYD	130.81	3& 1	10	.34970	47.65	2.832	.15186	1.700	.213		
COMPUTE NM HYD	P-5	-	3	.00290	.55	.017	.11274	1.550	.294 PER IMP=		2.00
ADD HYD	AP-15UB	10& 3	11	.35260	47.93	2.849	.15149	1.700	.212		
ROUTE	AP-6R	12	1	.09530	8.36	.537	.10557	1.750	.137		
COMPUTE NM HYD	120.50	-	2	.01620	2.55	.072	.08362	1.550	.246 PER IMP=		.00
ADD HYD	120.51	2& 1	3	.11150	9.35	.609	.10238	1.700	.131		
DIVIDE HYD	AP-6A	3	15	.11150	9.81	.639	.10749	1.700	.138		
	120.53	AND	16	.11150	.47	.030	.00512	1.700	.007		
COMPUTE NM HYD	120.60	-	6	.03280	6.10	.197	.11274	1.550	.291 PER IMP=		2.00
DIVIDE HYD	AP-6B	6	17	.03280	6.16	.199	.11386	1.550	.294		

	120.62	AND	16	.03280	.06	.002	.00113	1.550	.003	
ADD HYD	120.63	15&17	10	.14430	13.69	.838	.10894	1.600	.148	
COMPUTE NM HYD	P-6	-	3	.00430	.81	.026	.11274	1.550	.293	PER IMP= 2.00
ADD HYD	AP-14	10& 3	18	.14860	14.37	.863	.10895	1.600	.151	
ROUTE RESERVOIR	AP-14R	18	2	.14860	4.37	.863	.10895	2.250	.046	AC-FT= .445
ROUTE	POND6ROUTE36	2	12	.14860	4.37	.863	.10895	2.250	.046	
ROUTE	POND6ROUTE48	12	22	.14860	4.37	.863	.10895	2.250	.046	
DIVIDE HYD	AP-15	11	17	.35260	51.28	3.048	.16209	1.700	.227	
	130.83	AND	16	.35260	3.36	.199	.01060	1.700	.015	
ROUTE RESERVOIR	AP-15R	17	5	.35260	23.55	3.048	.16209	2.050	.104	AC-FT= 1.291
ROUTE	P-5R	5	11	.35260	23.72	3.048	.16209	2.050	.105	
ADD HYD	POND-5R&6R	11&22	10	.50120	28.04	3.912	.14633	2.050	.087	
COMPUTE NM HYD	P-4	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP= 2.00
ADD HYD	AP-15A	10& 3	10	.50480	28.12	3.932	.14606	2.050	.087	
ROUTE RESERVOIR	AP-15AR	10	5	.50480	6.89	3.850	.14302	4.450	.021	AC-FT= 1.953
ROUTE	P-4R	5	12	.50480	6.89	3.850	.14302	4.450	.021	
COMPUTE NM HYD	AP-16	-	1	.01960	4.43	.124	.11841	1.550	.353	PER IMP= .00
ROUTE	140.11	1	22	.01960	3.49	.124	.11845	1.600	.278	
ROUTE	140.12	22	15	.01960	3.47	.124	.11845	1.650	.276	
COMPUTE NM HYD	140.20	-	1	.08920	16.45	.462	.09721	1.550	.288	PER IMP= .00
ADD HYD	AP-17UB	15& 1	2	.10880	18.28	.586	.10103	1.550	.262	
DIVIDE HYD	AP-17	2	17	.10880	19.74	.633	.10911	1.550	.283	
	140.23	AND	16	.10880	1.46	.047	.00808	1.550	.021	
ADD HYD	140.24	17&12	2	.61360	19.74	4.484	.13700	1.550	.050	

□

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	P-3	-	3	.00270	.51	.016	.11274	1.550	.294	PER IMP= 2.00
ADD HYD	AP-18	2& 3	10	.61630	20.25	4.499	.13687	1.550	.051	
ROUTE RESERVOIR	AP-18R	10	4	.61630	5.70	4.411	.13421	6.400	.014	AC-FT= 1.233
ROUTE	P-3R	4	2	.61630	5.70	4.411	.13420	6.400	.014	
COMPUTE NM HYD	P-2	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP= 2.00
ADD HYD	AP-18A	2& 3	10	.61990	5.70	4.432	.13405	6.400	.014	
ROUTE RESERVOIR	AP-18AR	10	5	.61990	3.51	3.312	.10017	10.100	.009	AC-FT= 2.245
ROUTE	P-2R	5	10	.61990	3.51	3.311	.10016	10.100	.009	
COMPUTE NM HYD	AP-19UB	-	1	.15250	16.02	.753	.09263	1.650	.164	PER IMP= .00
DIVIDE HYD	AP-19	1	17	.15250	16.82	.791	.09726	1.650	.172	
	150.12	AND	16	.15250	.80	.038	.00463	1.650	.008	
ADD HYD	150.13	10&17	10	.77240	16.83	4.102	.09959	1.650	.034	
COMPUTE NM HYD	P-1	-	3	.00290	.55	.017	.11274	1.550	.294	PER IMP= 2.00
ADD HYD	AP-20	10& 3	10	.77530	17.28	4.119	.09961	1.600	.035	
ROUTE RESERVOIR	150.14	10	5	.77530	3.68	4.032	.09751	2.150	.007	AC-FT= .501
COMPUTE NM HYD	AP-21&170.1	-	3	.06420	9.31	.386	.11274	1.550	.227	PER IMP= 2.00
FINISH										

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = EXT100EP.IN

RUN DATE (MON/DAY/YR) =01/25/2001
USER NO. = C_ANDRSN.I01

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: EXT100EP.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND											
*S OUTLET WORKS AND THE PROPOSED POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/20/00											
START											
RAINFALL TYPE= 2											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	O-1E	-	3	.02420	18.06	.567	.43936	1.550	1.166	PER IMP=	.00
COMPUTE NM HYD	O-2E	-	4	.04220	24.34	.989	.43936	1.600	.901	PER IMP=	.00
ADD HYD	AP-1	3& 4	10	.06640	41.88	1.556	.43936	1.550	.986		
ROUTE	AP-1R	10	2	.06640	36.11	1.556	.43938	1.650	.850		
COMPUTE NM HYD	O-3E	-	3	.01640	13.10	.402	.45924	1.500	1.248	PER IMP=	1.00
ADD HYD	PARTAP-2	2& 3	10	.08280	44.73	1.958	.44330	1.650	.844		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	63.37	2.803	.47912	1.600	.903	PER IMP=	2.00
DIVIDE HYD	PART AP-7	3	98	.08594	32.00	2.196	.47911	1.500	.582		
	PART AP-7	AND	99	.02376	31.37	.607	.47911	1.600	2.062		
ROUTE	AP-7R	99	2	.02376	31.64	.608	.47944	1.600	2.081		
ADD HYD	AP-2	10& 2	10	.10656	76.00	2.565	.45135	1.600	1.114		
ROUTE	AP-2R	10	2	.10656	79.83	2.565	.45136	1.600	1.171		
COMPUTE NM HYD	I40-3	-	3	.00190	2.86	.115	1.13512	1.500	2.350	PER IMP=	35.00
ADD HYD	AP-3	2& 3	20	.10846	81.89	2.680	.46333	1.600	1.180		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	8.11	.240	.47912	1.500	1.348	PER IMP=	2.00
ROUTE	AP-4R	3	2	.00940	8.17	.240	.47921	1.500	1.358		
COMPUTE NM HYD	I40-4	-	3	.00120	1.81	.073	1.13512	1.500	2.357	PER IMP=	35.00
ADD HYD	AP-5	2& 3	10	.01060	9.98	.313	.55337	1.500	1.471		
ADD HYD	AP-3+AP-5	20&10	10	.11906	89.90	2.993	.47135	1.600	1.180		
ROUTE	AP-6	10	12	.11906	87.97	2.993	.47135	1.650	1.154		
ROUTE	AP-7R-CUL	. 98	2	.08594	33.23	2.196	.47912	1.500	.604		
COMPUTE NM HYD	I40-2	-	3	.00310	4.65	.188	1.13512	1.500	2.346	PER IMP=	35.00
ADD HYD	AP-8	2& 3	20	.08904	37.88	2.384	.50195	1.500	.665		
COMPUTE NM HYD	O-6E	-	3	.07320	35.69	1.715	.43936	1.600	.762	PER IMP=	.00
COMPUTE NM HYD	O-7E	-	4	.05230	39.03	1.226	.43936	1.550	1.166	PER IMP=	.00
ADD HYD	AP-9	3& 4	10	.12550	71.47	2.941	.43936	1.550	.890		

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
ROUTE	AP-9R	10	2	.12550	70.89	2.941	.43937	1.600	.883		
COMPUTE NM HYD	O-8E	-	3	.00990	23.00	1.124	2.12906	1.500	3.630	PER IMP=	85.00
ADD HYD	AP-10	2& 3	10	.13540	92.59	4.065	.56290	1.550	1.068		
ROUTE	AP-10R	10	2	.13540	89.10	4.065	.56291	1.600	1.028		
COMPUTE NM HYD	O-9E	-	3	.03480	31.99	1.000	.53875	1.500	1.436	PER IMP=	5.00
ADD HYD	AP-11	2& 3	10	.17020	114.14	5.065	.55797	1.600	1.048		
ROUTE	AP-11R	10	2	.17020	114.79	5.065	.55797	1.600	1.054		
COMPUTE NM HYD	I40-1	-	3	.00750	11.24	.454	1.13512	1.500	2.342	PER IMP=	35.00
ADD HYD	AP-12	2& 3	30	.17770	122.86	5.519	.58232	1.600	1.080		
ROUTE	AP-8R	20	22	.08904	38.28	2.384	.50196	1.550	.672		
COMPUTE NM HYD	130.70	-	1	.01696	15.02	.425	.46988	1.500	1.384	PER IMP=	.00
COMPUTE NM HYD	130.90	-	2	.00954	8.45	.239	.46988	1.500	1.385	PER IMP=	.00
ADD HYD	130.91	1& 2	1	.02650	23.48	.664	.46988	1.500	1.384		
ROUTE	AP-12R	30	3	.17770	121.65	5.519	.58233	1.600	1.070		
ADD HYD	130.72	1& 3	4	.20420	140.42	6.183	.56773	1.600	1.074		
ADD HYD	AP-13	4&22	2	.29324	176.26	8.567	.54776	1.600	.939		
ROUTE	AP-13R	2	3	.29324	172.47	8.567	.54776	1.650	.919		
COMPUTE NM HYD	130.80	-	1	.03270	25.40	.766	.43936	1.550	1.214	PER IMP=	.00
ADD HYD	130.81	3& 1	10	.32594	189.38	9.333	.53688	1.650	.908		
COMPUTE NM HYD	P-5	-	3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	AP-15UB	10& 3	11	.32884	190.90	9.406	.53633	1.650	.907		
ROUTE	AP-6R	12	1	.11906	84.75	2.993	.47135	1.650	1.112		
COMPUTE NM HYD	120.50	-	2	.01620	13.33	.380	.43936	1.500	1.286	PER IMP=	.00
ADD HYD	120.51	2& 1	3	.13526	92.90	3.373	.46752	1.650	1.073		
DIVIDE HYD	AP-6A	3	15	.13526	97.54	3.541	.49089	1.650	1.127		
	120.53	AND	16	.13526	4.64	.169	.02338	1.650	.054		
COMPUTE NM HYD	120.60	-	6	.03280	28.25	.838	.47912	1.500	1.346	PER IMP=	2.00
DIVIDE HYD	AP-6B	6	17	.03280	28.53	.846	.48390	1.500	1.359		

	120.62	AND	16	.03280	.28	.008	.00479	1.500	.013		
ADD HYD	120.63	15&17	10	.16806	114.84	4.388	.48953	1.650	1.068		
COMPUTE NM HYD	P-6	-	3	.00430	3.72	.110	.47912	1.500	1.350	PER IMP=	2.00
ADD HYD	AP-14	10&3	18	.17236	117.09	4.498	.48926	1.650	1.061		
ROUTE RESERVOIR	AP-14R	18	2	.17236	8.98	4.498	.48926	2.450	.081	AC-FT=	3.376
ROUTE	POND6ROUTE36	2	12	.17236	8.98	4.498	.48926	2.450	.081		
ROUTE	POND6ROUTE48	12	22	.17236	8.98	4.498	.48926	2.450	.081		
DIVIDE HYD	AP-15	11	17	.32884	204.27	10.065	.57387	1.650	.971		
	130.83	AND	16	.32884	13.36	.658	.03754	1.650	.063		
ROUTE RESERVOIR	AP-15R	17	5	.32884	130.75	10.065	.57387	1.850	.621	AC-FT=	2.666
ROUTE	P-5R	5	11	.32884	131.18	10.065	.57388	1.800	.623		
ADD HYD	POND-5R&6R	11&22	10	.50120	139.22	14.562	.54477	1.800	.434		
COMPUTE NM HYD	P-4	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-15A	10&3	10	.50480	140.01	14.654	.54429	1.800	.433		
ROUTE RESERVOIR	AP-15AR	10	5	.50480	93.42	14.571	.54122	2.200	.289	AC-FT=	4.619
ROUTE	P-4R	5	12	.50480	93.98	14.571	.54122	2.200	.291		
COMPUTE NM HYD	AP-16	-	1	.01960	18.50	.522	.49901	1.500	1.475	PER IMP=	.00
ROUTE	140.11	1	22	.01960	16.56	.522	.49908	1.550	1.320		
ROUTE	140.12	22	15	.01960	17.13	.522	.49909	1.600	1.366		
COMPUTE NM HYD	140.20	-	1	.08920	78.50	2.196	.46166	1.500	1.375	PER IMP=	.00
ADD HYD	AP-17UB	15&1	2	.10880	91.60	2.718	.46840	1.550	1.316		
DIVIDE HYD	AP-17	2	17	.10880	98.93	2.935	.50587	1.550	1.421		
	140.23	AND	16	.10880	7.33	.217	.03747	1.550	.105		
ADD HYD	140.24	17&12	2	.61360	100.55	17.506	.53495	2.200	.256		

□

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	P-3	-	3	.00270	2.34	.069	.47912	1.500	1.354	PER IMP=	2.00
ADD HYD	AP-18	2&3	10	.61630	101.44	17.575	.53468	1.550	.257		
ROUTE RESERVOIR	AP-18R	10	4	.61630	88.19	17.465	.53134	2.300	.224	AC-FT=	2.780
ROUTE	P-3R	4	2	.61630	88.27	17.465	.53134	2.300	.224		
COMPUTE NM HYD	P-2	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-18A	2&3	10	.61990	88.43	17.556	.53102	2.300	.223		
ROUTE RESERVOIR	AP-18AR	10	5	.61990	10.20	16.094	.48681	6.300	.026	AC-FT=	7.608
ROUTE	P-2R	5	10	.61990	10.20	16.093	.48677	6.350	.026		
COMPUTE NM HYD	AP-19UB	-	1	.15250	85.35	3.692	.45390	1.600	.874	PER IMP=	.00
DIVIDE HYD	AP-19	1	17	.15250	89.62	3.876	.47660	1.600	.918		
	150.12	AND	16	.15250	4.27	.185	.02270	1.600	.044		
ADD HYD	150.13	10&17	10	.77240	89.63	19.970	.48476	1.600	.181		
COMPUTE NM HYD	P-1	-	3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	AP-20	10&3	10	.77530	91.62	20.043	.48472	1.600	.185		
ROUTE RESERVOIR	150.14	10	5	.77530	9.61	19.636	.47487	10.250	.019	AC-FT=	3.475
COMPUTE NM HYD	AP-21&170.1	-	3	.06420	43.17	1.640	.47912	1.550	1.051	PER IMP=	2.00
FINISH											

Ext10pp.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = EXT10PP.IN

RUN DATE (MON/DAY/YR) = 01/25/2001
USER NO. = C_ANDRSN.I01

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 10 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: EXT10PP.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE PROPOSED POND											
*S OUTLET WORKS AND THE PROPOSED POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/20/00											
START											
RAINFALL TYPE= 2											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	O-1E	-	3	.02420	3.43	.108	.08362	1.550	.221 PER IMP=		.00
COMPUTE NM HYD	O-2E	-	4	.04220	4.48	.188	.08362	1.600	.166 PER IMP=		.00
ADD HYD	AP-1	3& 4	10	.06640	7.65	.296	.08361	1.550	.180		
ROUTE	AP-1R	10	2	.06640	5.45	.296	.08362	1.700	.128		
COMPUTE NM HYD	O-3E	-	3	.01640	2.72	.086	.09818	1.550	.259 PER IMP=		1.00
ADD HYD	PARTAP-2	2& 3	10	.08280	7.02	.382	.08650	1.650	.132		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	13.54	.660	.11274	1.600	.193 PER IMP=		2.00
DIVIDE HYD	PART AP-7	3	98	.10970	13.54	.660	.11274	1.600	.193		
	PART AP-7	AND	99	.00000	.00	.000	.00000	-.050	.000		
ROUTE	AP-7R	99	2	.00000	.00	.000	.00000	-.050	.000		
ADD HYD	AP-2	10& 2	10	.08280	7.02	.382	.08650	1.650	.132		
ROUTE	AP-2R	10	2	.08280	6.98	.382	.08651	1.700	.132		
COMPUTE NM HYD	I40-3	-	3	.00190	1.40	.060	.59326	1.500	1.154 PER IMP=		35.00
ADD HYD	AP-3	2& 3	20	.08470	7.72	.442	.09786	1.650	.142		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	1.75	.057	.11274	1.550	.292 PER IMP=		2.00
ROUTE	AP-4R	3	2	.00940	1.84	.057	.11280	1.550	.306		
COMPUTE NM HYD	I40-4	-	3	.00120	.89	.038	.59326	1.500	1.156 PER IMP=		35.00
ADD HYD	AP-5	2& 3	10	.01060	2.64	.094	.16710	1.550	.389		
ADD HYD	AP-3+AP-5	20&10	10	.09530	9.60	.537	.10556	1.600	.157		
ROUTE	AP-6	10	12	.09530	9.61	.537	.10557	1.600	.158		
ROUTE	AP-7R-CUL	98	2	.10970	13.58	.660	.11274	1.600	.193		
COMPUTE NM HYD	I40-2	-	3	.00310	2.28	.098	.59326	1.500	1.152 PER IMP=		35.00
ADD HYD	AP-8	2& 3	20	.11280	15.19	.758	.12594	1.600	.210		
COMPUTE NM HYD	O-6E	-	3	.07320	6.49	.326	.08362	1.650	.138 PER IMP=		.00
COMPUTE NM HYD	O-7E	-	4	.05230	7.41	.233	.08362	1.550	.221 PER IMP=		.00
ADD HYD	AP-9	3& 4	10	.12550	13.19	.560	.08362	1.600	.164		

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
ROUTE	AP-9R	10	2	.12550	13.27	.560	.08362	1.600	.165		
COMPUTE NM HYD	O-8E	-	3	.00990	14.68	.698	1.32131	1.500	2.318 PER IMP=		85.00
ADD HYD	AP-10	2& 3	10	.13540	26.66	1.257	.17411	1.550	.308		
ROUTE	AP-10R	10	2	.13540	21.80	1.257	.17411	1.650	.252		
COMPUTE NM HYD	O-9E	-	3	.03480	8.15	.290	.15643	1.500	.366 PER IMP=		5.00
ADD HYD	AP-11	2& 3	10	.17020	27.81	1.548	.17049	1.600	.255		
ROUTE	AP-11R	10	2	.17020	27.65	1.548	.17050	1.600	.254		
COMPUTE NM HYD	I40-1	-	3	.00750	5.52	.237	.59326	1.500	1.150 PER IMP=		35.00
ADD HYD	AP-12	2& 3	30	.17770	31.52	1.785	.18833	1.600	.277		
ROUTE	AP-8R	20	22	.11280	15.03	.758	.12595	1.650	.208		
COMPUTE NM HYD	130.70	-	1	.01696	3.27	.092	.10184	1.550	.301 PER IMP=		.00
COMPUTE NM HYD	130.90	-	2	.00954	1.84	.052	.10184	1.550	.301 PER IMP=		.00
ADD HYD	130.91	1& 2	1	.02650	5.11	.144	.10183	1.550	.301		
ROUTE	AP-12R	30	3	.17770	30.80	1.785	.18834	1.650	.271		
ADD HYD	130.72	1& 3	4	.20420	34.10	1.929	.17711	1.650	.261		
ADD HYD	AP-13	4&22	2	.31700	49.13	2.686	.15890	1.650	.242		
ROUTE	AP-13R	2	3	.31700	44.96	2.687	.15890	1.700	.222		
COMPUTE NM HYD	130.80	-	1	.03270	4.91	.146	.08362	1.550	.235 PER IMP=		.00
ADD HYD	130.81	3& 1	10	.34970	47.65	2.832	.15186	1.700	.213		
COMPUTE NM HYD	P-5	-	3	.00290	.55	.017	.11274	1.550	.294 PER IMP=		2.00
ADD HYD	AP-15UB	10& 3	11	.35260	47.93	2.849	.15149	1.700	.212		
ROUTE	AP-6R	12	1	.09530	8.36	.537	.10557	1.750	.137		
COMPUTE NM HYD	120.50	-	2	.01620	2.55	.072	.08362	1.550	.246 PER IMP=		.00
ADD HYD	120.51	2& 1	3	.11150	9.35	.609	.10238	1.700	.131		
DIVIDE HYD	AP-6A	3	15	.11150	9.81	.639	.10749	1.700	.138		
	120.53	AND	16	.11150	.47	.030	.00512	1.700	.007		
COMPUTE NM HYD	120.60	-	6	.03280	6.10	.197	.11274	1.550	.291 PER IMP=		2.00
DIVIDE HYD	AP-6B	6	17	.03280	6.16	.199	.11386	1.550	.294		

	120.62	AND	16	.03280	.06	.002	.00113	1.550	.003		
ADD HYD	120.63	15&17	10	.14430	13.69	.838	.10894	1.600	.148		
COMPUTE NM HYD	P-6	-	3	.00430	.81	.026	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-14	10& 3	18	.14860	14.37	.863	.10895	1.600	.151		
ROUTE RESERVOIR	AP-14R	18	2	.14860	5.77	.863	.10895	2.150	.061	AC-FT=	.402
ROUTE	POND6ROUTE36	2	12	.14860	5.78	.863	.10895	2.150	.061		
ROUTE	POND6ROUTE48	12	22	.14860	5.78	.863	.10895	2.150	.061		
DIVIDE HYD	AP-15	11	17	.35260	51.28	3.048	.16209	1.700	.227		
	130.83	AND	16	.35260	3.36	.199	.01060	1.700	.015		
ROUTE RESERVOIR	AP-15R	17	5	.35260	23.55	3.048	.16209	2.050	.104	AC-FT=	1.291
ROUTE	P-5R	5	11	.35260	23.72	3.048	.16209	2.050	.105		
ADD HYD	POND-5R&6R	11&22	10	.50120	29.41	3.912	.14633	2.050	.092		
COMPUTE NM HYD	P-4	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-15A	10& 3	10	.50480	29.49	3.932	.14606	2.050	.091		
ROUTE RESERVOIR	AP-15AR	10	5	.50480	20.35	3.853	.14312	2.400	.063	AC-FT=	.619
ROUTE	P-4R	5	12	.50480	20.36	3.853	.14312	2.400	.063		
COMPUTE NM HYD	AP-16	-	1	.01960	4.43	.124	.11841	1.550	.353	PER IMP=	.00
ROUTE	140.11	1	22	.01960	3.49	.124	.11845	1.600	.278		
ROUTE	140.12	22	15	.01960	3.47	.124	.11845	1.650	.276		
COMPUTE NM HYD	140.20	-	1	.08920	16.45	.462	.09721	1.550	.288	PER IMP=	.00
ADD HYD	AP-17UB	15& 1	2	.10880	18.28	.586	.10103	1.550	.262		
DIVIDE HYD	AP-17	2	17	.10880	19.74	.633	.10911	1.550	.283		
	140.23	AND	16	.10880	1.46	.047	.00808	1.550	.021		
ADD HYD	140.24	17&12	2	.61360	21.61	4.486	.13709	2.350	.055		
□											
			FROM TO		PEAK	RUNOFF		TIME TO	CFS	PAGE =	3
	HYDROGRAPH	ID	ID	AREA	DISCHARGE	VOLUME	RUNOFF	PEAK	PER	NOTATION	
COMMAND	IDENTIFICATION	NO.	NO.	(SQ MI)	(CFS)	(AC-FT)	(INCHES)	(HOURS)	ACRE		
COMPUTE NM HYD	P-3	-	3	.00270	.51	.016	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	AP-18	2& 3	10	.61630	21.64	4.502	.13696	2.350	.055		
ROUTE RESERVOIR	AP-18R	10	4	.61630	18.29	4.433	.13487	2.750	.046	AC-FT=	.839
ROUTE	P-3R	4	2	.61630	18.29	4.433	.13486	2.750	.046		
COMPUTE NM HYD	P-2	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-18A	2& 3	10	.61990	18.31	4.454	.13471	2.750	.046		
ROUTE RESERVOIR	AP-18AR	10	5	.61990	11.34	3.407	.10307	4.050	.029	AC-FT=	1.823
ROUTE	P-2R	5	10	.61990	11.34	3.407	.10306	4.050	.029		
COMPUTE NM HYD	AP-19UB	-	1	.15250	16.02	.753	.09263	1.650	.164	PER IMP=	.00
DIVIDE HYD	AP-19	1	17	.15250	16.82	.791	.09726	1.650	.172		
	150.12	AND	16	.15250	.80	.038	.00463	1.650	.008		
ADD HYD	150.13	10&17	10	.77240	16.83	4.199	.10192	1.650	.034		
COMPUTE NM HYD	P-1	-	3	.00290	.55	.017	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	AP-20	10& 3	10	.77530	17.29	4.215	.10193	1.600	.035		
ROUTE RESERVOIR	150.14	10	5	.77530	10.61	4.164	.10070	4.650	.021	AC-FT=	.550
COMPUTE NM HYD	AP-21&170.1	-	3	.06420	9.31	.386	.11274	1.550	.227	PER IMP=	2.00
FINISH											

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = EXT100PP.IN

RUN DATE (MON/DAY/YR) = 01/25/2001
USER NO. = C_ANDRSN.101

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: EXT100PP.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE PROPOSED POND											
*S OUTLET WORKS AND THE PROPOSED POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/20/00											
START											
RAINFALL TYPE= 2											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	O-1E	-	3	.02420	18.06	.567	.43936	1.550	1.166	PER IMP=	.00
COMPUTE NM HYD	O-2E	-	4	.04220	24.34	.989	.43936	1.600	.901	PER IMP=	.00
ADD HYD	AP-1	3 & 4	10	.06640	41.88	1.556	.43936	1.550	.986		
ROUTE	AP-1R	10	2	.06640	36.11	1.556	.43938	1.650	.850		
COMPUTE NM HYD	O-3E	-	3	.01640	13.10	.402	.45924	1.500	1.248	PER IMP=	1.00
ADD HYD	PARTAP-2	2 & 3	10	.08280	44.73	1.958	.44330	1.650	.844		
COMPUTE NM HYD	AP-7 & O-5E	-	3	.10970	63.37	2.803	.47912	1.600	.903	PER IMP=	2.00
DIVIDE HYD	PART AP-7	3	98	.08594	32.00	2.196	.47911	1.500	.582		
	PART AP-7	AND	99	.02376	31.37	.607	.47911	1.600	2.062		
ROUTE	AP-7R	99	2	.02376	31.64	.608	.47944	1.600	2.081		
ADD HYD	AP-2	10 & 2	10	.10656	76.00	2.565	.45135	1.600	1.114		
ROUTE	AP-2R	10	2	.10656	79.83	2.565	.45136	1.600	1.171		
COMPUTE NM HYD	I40-3	-	3	.00190	2.86	.115	1.13512	1.500	2.350	PER IMP=	35.00
ADD HYD	AP-3	2 & 3	20	.10846	81.89	2.680	.46333	1.600	1.180		
COMPUTE NM HYD	AP-4 & O-4E	-	3	.00940	8.11	.240	.47912	1.500	1.348	PER IMP=	2.00
ROUTE	AP-4R	3	2	.00940	8.17	.240	.47921	1.500	1.358		
COMPUTE NM HYD	I40-4	-	3	.00120	1.81	.073	1.13512	1.500	2.357	PER IMP=	35.00
ADD HYD	AP-5	2 & 3	10	.01060	9.98	.313	.55337	1.500	1.471		
ADD HYD	AP-3 & AP-5	20 & 10	10	.11906	89.90	2.993	.47135	1.600	1.180		
ROUTE	AP-6	10	12	.11906	87.97	2.993	.47135	1.650	1.154		
ROUTE	AP-7R-CUL	98	2	.08594	33.23	2.196	.47912	1.500	.604		
COMPUTE NM HYD	I40-2	-	3	.00310	4.65	.188	1.13512	1.500	2.346	PER IMP=	35.00
ADD HYD	AP-8	2 & 3	20	.08904	37.88	2.384	.50195	1.500	.665		
COMPUTE NM HYD	O-6E	-	3	.07320	35.69	1.715	.43936	1.600	.762	PER IMP=	.00
COMPUTE NM HYD	O-7E	-	4	.05230	39.03	1.226	.43936	1.550	1.166	PER IMP=	.00
ADD HYD	AP-9	3 & 4	10	.12550	71.47	2.941	.43936	1.550	.890		

□

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
ROUTE	AP-9R	10	2	.12550	70.89	2.941	.43937	1.600	.883		
COMPUTE NM HYD	O-8E	-	3	.00990	23.00	1.124	2.12906	1.500	3.630	PER IMP=	85.00
ADD HYD	AP-10	2 & 3	10	.13540	92.59	4.065	.56290	1.550	1.068		
ROUTE	AP-10R	10	2	.13540	89.10	4.065	.56291	1.600	1.028		
COMPUTE NM HYD	O-9E	-	3	.03480	31.99	1.000	.53875	1.500	1.436	PER IMP=	5.00
ADD HYD	AP-11	2 & 3	10	.17020	114.14	5.065	.55797	1.600	1.048		
ROUTE	AP-11R	10	2	.17020	114.79	5.065	.55797	1.600	1.054		
COMPUTE NM HYD	I40-1	-	3	.00750	11.24	.454	1.13512	1.500	2.342	PER IMP=	35.00
ADD HYD	AP-12	2 & 3	30	.17770	122.86	5.519	.58232	1.600	1.080		
ROUTE	AP-8R	20	22	.08904	38.28	2.384	.50196	1.550	.672		
COMPUTE NM HYD	130.70	-	1	.01696	15.02	.425	.46988	1.500	1.384	PER IMP=	.00
COMPUTE NM HYD	130.90	-	2	.00954	8.45	.239	.46988	1.500	1.385	PER IMP=	.00
ADD HYD	130.91	1 & 2	1	.02650	23.48	.664	.46988	1.500	1.384		
ROUTE	AP-12R	30	3	.17770	121.65	5.519	.58233	1.600	1.070		
ADD HYD	130.72	1 & 3	4	.20420	140.42	6.183	.56773	1.600	1.074		
ADD HYD	AP-13	4 & 22	2	.29324	176.26	8.567	.54776	1.600	.939		
ROUTE	AP-13R	2	3	.29324	172.47	8.567	.54776	1.650	.919		
COMPUTE NM HYD	130.80	-	1	.03270	25.40	.766	.43936	1.550	1.214	PER IMP=	.00
ADD HYD	130.81	3 & 1	10	.32594	189.38	9.333	.53688	1.650	.908		
COMPUTE NM HYD	P-5	-	3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	AP-15UB	10 & 3	11	.32884	190.90	9.406	.53633	1.650	.907		
ROUTE	AP-6R	12	1	.11906	84.75	2.993	.47135	1.650	1.112		
COMPUTE NM HYD	120.50	-	2	.01620	13.33	.380	.43936	1.500	1.286	PER IMP=	.00
ADD HYD	120.51	2 & 1	3	.13526	92.90	3.373	.46752	1.650	1.073		
DIVIDE HYD	AP-6A	3	15	.13526	97.54	3.541	.49089	1.650	1.127		
	120.53	AND	16	.13526	4.64	.169	.02338	1.650	.054		
COMPUTE NM HYD	120.60	-	6	.03280	28.25	.838	.47912	1.500	1.346	PER IMP=	2.00
DIVIDE HYD	AP-6B	6	17	.03280	28.53	.846	.48390	1.500	1.359		

	120.62	AND	16	.03280	.28	.008	.00479	1.500	.013	
ADD HYD	120.63	15&17	10	.16806	114.84	4.388	.48953	1.650	1.068	
COMPUTE NM HYD	P-6	-	3	.00430	3.72	.110	.47912	1.500	1.350	PER IMP= 2.00
ADD HYD	AP-14	10& 3	18	.17236	117.09	4.498	.48926	1.650	1.061	
ROUTE RESERVOIR	AP-14R		2	.17236	33.14	4.498	.48926	1.950	.300	AC-FT= 2.440
ROUTE	POND6ROUTE36		2	.17236	33.14	4.498	.48926	1.950	.300	
ROUTE	POND6ROUTE48		12	.17236	33.15	4.498	.48926	1.950	.301	
DIVIDE HYD	AP-15		11	.32884	204.27	10.065	.57387	1.650	.971	
	130.83	AND	16	.32884	13.36	.658	.03754	1.650	.063	
ROUTE RESERVOIR	AP-15R		17	.32884	130.75	10.065	.57387	1.850	.621	AC-FT= 2.666
ROUTE	P-SR		5	.32884	131.18	10.065	.57388	1.800	.623	
ADD HYD	POND-5R&6R	11&22	10	.50120	163.37	14.562	.54477	1.900	.509	
COMPUTE NM HYD	P-4	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP= 2.00
ADD HYD	AP-15A	10& 3	10	.50480	163.82	14.654	.54429	1.900	.507	
ROUTE RESERVOIR	AP-15AR		10	.50480	93.54	14.574	.54135	2.250	.290	AC-FT= 4.632
ROUTE	P-4R		5	.50480	93.57	14.574	.54135	2.250	.290	
COMPUTE NM HYD	AP-16	-	1	.01960	18.50	.522	.49901	1.500	1.475	PER IMP= .00
ROUTE	140.11		1	.01960	16.56	.522	.49908	1.550	1.320	
ROUTE	140.12		22	.01960	17.13	.522	.49909	1.600	1.366	
COMPUTE NM HYD	140.20	-	1	.08920	78.50	2.196	.46166	1.500	1.375	PER IMP= .00
ADD HYD	AP-17UB	15& 1	2	.10880	91.60	2.718	.46840	1.550	1.316	
DIVIDE HYD	AP-17		2	.10880	98.93	2.935	.50587	1.550	1.421	
	140.23	AND	16	.10880	7.33	.217	.03747	1.550	.105	
ADD HYD	140.24	17&12	2	.61360	100.56	17.510	.53505	1.550	.256	

□

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	P-3	-	3	.00270	2.34	.069	.47912	1.500	1.354	PER IMP= 2.00	
ADD HYD	AP-18	2& 3	10	.61630	102.82	17.578	.53478	1.550	.261		
ROUTE RESERVOIR	AP-18R		10	.61630	89.08	17.509	.53269	2.550	.226	AC-FT= 2.829	
ROUTE	P-3R		4	.61630	89.06	17.509	.53269	2.550	.226		
COMPUTE NM HYD	P-2	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP= 2.00	
ADD HYD	AP-18A	2& 3	10	.61990	89.15	17.601	.53237	2.550	.225		
ROUTE RESERVOIR	AP-18AR		10	.61990	44.89	16.554	.50070	3.600	.113	AC-FT= 6.543	
ROUTE	P-2R		5	.61990	44.89	16.554	.50070	3.600	.113		
COMPUTE NM HYD	AP-19UB	-	1	.15250	85.35	3.692	.45390	1.600	.874	PER IMP= .00	
DIVIDE HYD	AP-19		1	.15250	89.62	3.876	.47660	1.600	.918		
	150.12	AND	16	.15250	4.27	.185	.02270	1.600	.044		
ADD HYD	150.13	10&17	10	.77240	89.64	20.430	.49594	1.600	.181		
COMPUTE NM HYD	P-1	-	3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP= 2.00	
ADD HYD	AP-20	10& 3	10	.77530	91.63	20.503	.49586	1.600	.185		
ROUTE RESERVOIR	150.14		10	.77530	45.54	20.452	.49463	3.900	.092	AC-FT= 2.153	
COMPUTE NM HYD	AP-21&170.1	-	3	.06420	43.17	1.640	.47912	1.550	1.051	PER IMP= 2.00	
FINISH											

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = WTF10EE.IN

RUN DATE (MON/DAY/YR) = 01/30/2001
USER NO. = C_ANDRSN.I01

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE AND											
*S WITH THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED											
*S 10 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: WTF10EE.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE											
*S AND THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED.											
*S											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING).											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 (WITH THE EXCEPTION											
*S OF THE WEST SIDE TRANSIT FACILITY AREA) WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/21/00											
START											
RAINFALL TYPE= 2											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	O-1E	-	3	.02420	3.43	.108	.08362	1.550	.221 PER IMP=	.00	
COMPUTE NM HYD	O-2E	-	4	.04220	4.48	.188	.08362	1.600	.166 PER IMP=	.00	
ADD HYD	AP-1	3& 4	10	.06640	7.65	.296	.08361	1.550	.180		
ROUTE	AP-1R	10	2	.06640	5.45	.296	.08362	1.700	.128		
COMPUTE NM HYD	O-3E	-	3	.01640	2.72	.086	.09818	1.550	.259 PER IMP=	1.00	
ADD HYD	PARTAP-2	2& 3	10	.08280	7.02	.382	.08650	1.650	.132		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	13.54	.660	.11274	1.600	.193 PER IMP=	2.00	
DIVIDE HYD	PART AP-7	3	98	.10970	13.54	.660	.11274	1.600	.193		
	PART AP-7	AND	99	.00000	.00	.000	.00000	-.050	.000		
ROUTE	AP-7R	99	2	.00000	.00	.000	.00000	-.050	.000		
ADD HYD	AP-2	10& 2	10	.08280	7.02	.382	.08650	1.650	.132		
ROUTE	AP-2R	10	2	.08280	6.98	.382	.08651	1.700	.132		
COMPUTE NM HYD	I40-3	-	3	.00190	1.40	.060	.59326	1.500	1.154 PER IMP=	35.00	
ADD HYD	AP-3	2& 3	20	.08470	7.72	.442	.09786	1.650	.142		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	1.75	.057	.11274	1.550	.292 PER IMP=	2.00	
ROUTE	AP-4R	3	2	.00940	1.84	.057	.11280	1.550	.306		
COMPUTE NM HYD	I40-4	-	3	.00120	.89	.038	.59326	1.500	1.156 PER IMP=	35.00	
ADD HYD	AP-5	2& 3	10	.01060	2.64	.094	.16710	1.550	.389		
ADD HYD	AP-3+AP-5	20&10	10	.09530	9.60	.537	.10556	1.600	.157		
ROUTE	PARTAP-6	10	12	.09530	9.61	.537	.10557	1.600	.158		
ROUTE	AP-7R-CUL	98	2	.10970	13.58	.660	.11274	1.600	.193		
COMPUTE NM HYD	I40-2	-	3	.00310	2.28	.098	.59326	1.500	1.152 PER IMP=	35.00	

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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
ADD HYD	AP-8	2& 3	20	.11280	15.19	.758	.12594	1.600	.210		
COMPUTE NM HYD	O-6E	-	3	.07320	6.49	.326	.08362	1.650	.138 PER IMP=	.00	
COMPUTE NM HYD	O-7E	-	4	.05230	7.41	.233	.08362	1.550	.221 PER IMP=	.00	
ADD HYD	AP-9	3& 4	10	.12550	13.19	.560	.08362	1.600	.164		
ROUTE	AP-9R	10	2	.12550	13.27	.560	.08362	1.600	.165		
COMPUTE NM HYD	O-8E	-	3	.00990	14.68	.698	1.32131	1.500	2.318 PER IMP=	85.00	
ADD HYD	AP-10	2& 3	10	.13540	26.66	1.257	.17411	1.550	.308		
ROUTE	AP-10R	10	2	.13540	21.80	1.257	.17411	1.650	.252		
COMPUTE NM HYD	O-9E	-	3	.03480	8.15	.290	.15643	1.500	.366 PER IMP=	5.00	
ADD HYD	AP-11	2& 3	10	.17020	27.81	1.548	.17049	1.600	.255		
ROUTE	AP-11R	10	2	.17020	27.65	1.548	.17050	1.600	.254		
COMPUTE NM HYD	I40-1	-	3	.00750	5.52	.237	.59326	1.500	1.150 PER IMP=	35.00	
ADD HYD	AP-12	2& 3	30	.17770	31.52	1.785	.18833	1.600	.277		
ROUTE	AP-8R	20	22	.11280	15.03	.758	.12595	1.650	.208		
COMPUTE NM HYD	130.70	-	1	.01696	3.27	.092	.10184	1.550	.301 PER IMP=	.00	
COMPUTE NM HYD	130.90	-	2	.00954	1.84	.052	.10184	1.550	.301 PER IMP=	.00	
ADD HYD	130.91	1& 2	1	.02650	5.11	.144	.10183	1.550	.301		
ROUTE	AP-12R	30	3	.17770	30.80	1.785	.18834	1.650	.271		
ADD HYD	130.72	1& 3	4	.20420	34.10	1.929	.17711	1.650	.261		
ADD HYD	AP-13	4&22	2	.31700	49.13	2.686	.15890	1.650	.242		
ROUTE	AP-13R	2	3	.31700	44.96	2.687	.15890	1.700	.222		
COMPUTE NM HYD	130.80	-	1	.03010	4.52	.134	.08362	1.550	.235 PER IMP=	.00	
ADD HYD	130.81	3& 1	10	.34710	47.44	2.821	.15237	1.700	.214		
COMPUTE NM HYD	P-5	-	3	.00290	.55	.017	.11274	1.550	.294 PER IMP=	2.00	
ADD HYD	AP-15UB	10& 3	11	.35000	47.71	2.837	.15199	1.700	.213		
COMPUTE NM HYD	120.50	-	3	.00520	.82	.023	.08362	1.550	.246 PER IMP=	.00	
ADD HYD	AP-6	3&12	10	.10050	10.32	.560	.10443	1.600	.160		
ROUTE	AP-6R	10	2	.10050	10.45	.560	.10444	1.650	.162		

COMPUTE NM HYD	A-1D	-	3	.02400	39.69	1.802	1.40796	1.500	2.584 PER IMP=	90.00
ADD HYD	AP-6A	24	3	.12450	43.13	2.362	.35571	1.500	.541	
COMPUTE NM HYD	AP-6B&A-2D	-	3	.01250	18.04	.801	1.20080	1.500	2.256 PER IMP=	76.00
COMPUTE NM HYD	120.5A	-	4	.00200	.32	.009	.08362	1.550	.247 PER IMP=	.00
ADD HYD	AP-6B+120.5A	34	4	.01450	18.35	.809	1.04667	1.500	1.977	
ADD HYD	AP-6A+	104	20	.13900	61.48	3.171	.42779	1.500	.691	
COMPUTE NM HYD	P-6	-	3	.00430	.81	.026	.11274	1.550	.293 PER IMP=	2.00
ADD HYD	AP-14	104	3	.14330	62.27	3.196	.41823	1.500	.679	
ROUTE RESERVOIR	AP-14R	18	2	.14330	8.05	3.196	.41823	2.200	.088 AC-FT=	1.888
ROUTE	POND6ROUTE36	2	12	.14330	8.05	3.196	.41823	2.200	.088	
ROUTE	POND6ROUTE48	12	22	.14330	8.05	3.196	.41823	2.200	.088	
DIVIDE HYD	AP-15	11	17	.35000	51.05	3.036	.16263	1.700	.228	
	130.83 AND	16		.35000	3.34	.199	.01064	1.700	.015	
ROUTE RESERVOIR	AP-15R	17	5	.35000	23.22	3.036	.16263	2.050	.104 AC-FT=	1.289
ROUTE	P-5R	5	11	.35000	23.50	3.036	.16263	2.050	.105	
ADD HYD	POND-5R&6R	114	22	.49330	31.46	6.232	.23688	2.050	.100	
COMPUTE NM HYD	P-4	-	3	.00360	.68	.022	.11274	1.550	.293 PER IMP=	2.00
ADD HYD	AP-15A	104	3	.49690	31.54	6.253	.23594	2.050	.099	
ROUTE RESERVOIR	AP-15AR	10	5	.49690	8.29	6.169	.23279	5.150	.026 AC-FT=	2.925
ROUTE	P-4R	5	12	.49690	8.29	6.169	.23279	5.150	.026	
COMPUTE NM HYD	AP-16	-	1	.01960	4.43	.124	.11841	1.550	.353 PER IMP=	.00
ROUTE	140.11	1	22	.01960	3.49	.124	.11845	1.600	.278	
ROUTE	140.12	22	15	.01960	3.47	.124	.11845	1.650	.276	
COMPUTE NM HYD	140.20	-	1	.08920	16.45	.462	.09721	1.550	.288 PER IMP=	.00

□

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
ADD HYD	AP-17UB	154	1	.10880	18.28	.586	.10103	1.550	.262		
DIVIDE HYD	AP-17	2	17	.10880	19.74	.633	.10911	1.550	.283		
	140.23 AND	16		.10880	1.46	.047	.00808	1.550	.021		
ADD HYD	140.24	174	12	.60570	19.89	6.802	.21057	1.550	.051		
COMPUTE NM HYD	P-3	-	3	.00270	.51	.016	.11274	1.550	.294 PER IMP=	2.00	
ADD HYD	AP-18	24	3	.60840	20.40	6.818	.21011	1.550	.052		
ROUTE RESERVOIR	AP-18R	10	4	.60840	6.86	6.699	.20644	7.700	.018 AC-FT=	1.597	
ROUTE	P-3R	4	2	.60840	6.86	6.698	.20643	7.700	.018		
COMPUTE NM HYD	P-2	-	3	.00360	.68	.022	.11274	1.550	.293 PER IMP=	2.00	
ADD HYD	AP-18A	24	3	.61200	6.86	6.719	.20585	7.700	.018		
ROUTE RESERVOIR	AP-18AR	10	5	.61200	5.41	5.891	.18050	11.700	.014 AC-FT=	2.315	
ROUTE	P-2R	5	10	.61200	5.41	5.891	.18048	11.700	.014		
COMPUTE NM HYD	AP-19UB	-	1	.15250	16.02	.753	.09263	1.650	.164 PER IMP=	.00	
DIVIDE HYD	AP-19	1	17	.15250	16.82	.791	.09726	1.650	.172		
	150.12 AND	16		.15250	.80	.038	.00463	1.650	.008		
ADD HYD	150.13	104	17	.76450	16.83	6.682	.16388	1.650	.034		
COMPUTE NM HYD	P-1	-	3	.00290	.55	.017	.11274	1.550	.294 PER IMP=	2.00	
ADD HYD	AP-20	104	3	.76740	17.29	6.698	.16366	1.600	.035		
ROUTE RESERVOIR	150.14	10	5	.76740	5.04	6.664	.16282	13.650	.010 AC-FT=	.550	
COMPUTE NM HYD	AP-21&G-1D	-	3	.02290	3.61	.102	.08362	1.550	.246 PER IMP=	.00	
COMPUTE NM HYD	AP-22&G-2D	-	4	.00310	4.90	.215	1.30254	1.500	2.469 PER IMP=	82.00	
ROUTE	AP-22R	4	12	.00310	4.76	.215	1.30270	1.500	2.398		
COMPUTE NM HYD	AP-23&G-3D	-	5	.03510	4.10	.157	.08362	1.600	.183 PER IMP=	.00	
COMPUTE NM HYD	G-4D	-	6	.00330	5.08	.220	1.24983	1.500	2.407 PER IMP=	78.00	
ADD HYD	AP-24	124	6	.00640	9.84	.435	1.27528	1.500	2.403		
FINISH											

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = WTF100EE.IN

RUN DATE (MON/DAY/YR) = 01/26/2001
USER NO. = C_ANDRSN.I01

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE AND											
*S WITH THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: WTF100EE.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE											
*S AND THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED.											
*S											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING).											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 (WITH THE EXCEPTION											
*S OF THE WEST SIDE TRANSIT FACILITY AREA) WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/21/00											
START											
RAINFALL TYPE= 2											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	O-1E	-	3	.02420	18.06	.567	.43936	1.550	1.166	PER IMP=	.00
COMPUTE NM HYD	O-2E	-	4	.04220	24.34	.989	.43936	1.600	.901	PER IMP=	.00
ADD HYD	AP-1	3& 4	10	.06640	41.88	1.556	.43936	1.550	.986		
ROUTE	AP-1R	10	2	.06640	36.11	1.556	.43938	1.650	.850		
COMPUTE NM HYD	O-3E	-	3	.01640	13.10	.402	.45924	1.500	1.248	PER IMP=	1.00
ADD HYD	PARTAP-2	2& 3	10	.08280	44.73	1.958	.44330	1.650	.844		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	63.37	2.803	.47912	1.600	.903	PER IMP=	2.00
DIVIDE HYD	PART AP-7	3	98	.08594	32.00	2.196	.47911	1.500	.582		
	PART AP-7	AND	99	.02376	31.37	.607	.47911	1.600	2.062		
ROUTE	AP-7R	99	2	.02376	31.64	.608	.47944	1.600	2.081		
ADD HYD	AP-2	10& 2	10	.10656	76.00	2.565	.45135	1.600	1.114		
ROUTE	AP-2R	10	2	.10656	79.83	2.565	.45136	1.600	1.171		
COMPUTE NM HYD	I40-3	-	3	.00190	2.86	.115	1.13512	1.500	2.350	PER IMP=	35.00
ADD HYD	AP-3	2& 3	20	.10846	81.89	2.680	.46333	1.600	1.180		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	8.11	.240	.47912	1.500	1.348	PER IMP=	2.00
ROUTE	AP-4R	3	2	.00940	8.17	.240	.47921	1.500	1.358		
COMPUTE NM HYD	I40-4	-	3	.00120	1.81	.073	1.13512	1.500	2.357	PER IMP=	35.00
ADD HYD	AP-5	2& 3	10	.01060	9.98	.313	.55337	1.500	1.471		
ADD HYD	AP-3+AP-5	20&10	10	.11906	89.90	2.993	.47135	1.600	1.180		
ROUTE	PARTAP-6	10	12	.11906	87.97	2.993	.47135	1.650	1.154		
ROUTE	AP-7R-CUL	98	2	.08594	33.23	2.196	.47912	1.500	.604		
COMPUTE NM HYD	I40-2	-	3	.00310	4.65	.188	1.13512	1.500	2.346	PER IMP=	35.00

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
ADD HYD	AP-8	2& 3	20	.08904	37.88	2.384	.50195	1.500	.665		
COMPUTE NM HYD	O-6E	-	3	.07320	35.69	1.715	.43936	1.600	.762	PER IMP=	.00
COMPUTE NM HYD	O-7E	-	4	.05230	39.03	1.226	.43936	1.550	1.166	PER IMP=	.00
ADD HYD	AP-9	3& 4	10	.12550	71.47	2.941	.43936	1.550	.890		
ROUTE	AP-9R	10	2	.12550	70.89	2.941	.43937	1.600	.883		
COMPUTE NM HYD	O-8E	-	3	.00990	23.00	1.124	2.12906	1.500	3.630	PER IMP=	85.00
ADD HYD	AP-10	2& 3	10	.13540	92.59	4.065	.56290	1.550	1.068		
ROUTE	AP-10R	10	2	.13540	89.10	4.065	.56291	1.600	1.028		
COMPUTE NM HYD	O-9E	-	3	.03480	31.99	1.000	.53875	1.500	1.436	PER IMP=	5.00
ADD HYD	AP-11	2& 3	10	.17020	114.14	5.065	.55797	1.600	1.048		
ROUTE	AP-11R	10	2	.17020	114.79	5.065	.55797	1.600	1.054		
COMPUTE NM HYD	I40-1	-	3	.00750	11.24	.454	1.13512	1.500	2.342	PER IMP=	35.00
ADD HYD	AP-12	2& 3	30	.17770	122.86	5.519	.58232	1.600	1.080		
ROUTE	AP-8R	20	22	.08904	38.28	2.384	.50196	1.550	.672		
COMPUTE NM HYD	130.70	-	1	.01696	15.02	.425	.46988	1.500	1.384	PER IMP=	.00
COMPUTE NM HYD	130.90	-	2	.00954	8.45	.239	.46988	1.500	1.385	PER IMP=	.00
ADD HYD	130.91	1& 2	1	.02650	23.48	.664	.46988	1.500	1.384		
ROUTE	AP-12R	30	3	.17770	121.65	5.519	.58233	1.600	1.070		
ADD HYD	130.72	1& 3	4	.20420	140.42	6.183	.56773	1.600	1.074		
ADD HYD	AP-13	4&22	2	.29324	176.26	8.567	.54776	1.600	.939		
ROUTE	AP-13R	2	3	.29324	172.47	8.567	.54776	1.650	.919		
COMPUTE NM HYD	130.80	-	1	.03010	23.38	.705	.43936	1.550	1.214	PER IMP=	.00
ADD HYD	130.81	3& 1	10	.32334	188.04	9.272	.53767	1.650	.909		
COMPUTE NM HYD	P-5	-	3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	AP-15UB	10& 3	11	.32624	189.56	9.345	.53710	1.650	.908		
COMPUTE NM HYD	120.50	-	3	.00520	4.28	.122	.43936	1.500	1.287	PER IMP=	.00
ADD HYD	AP-6	3&12	10	.12426	90.59	3.115	.47001	1.650	1.139		
ROUTE	AP-6R	10	2	.12426	91.47	3.115	.47001	1.650	1.150		

COMPUTE NM HYD	A-1D	-	3	.02400	61.30	2.881	2.25115	1.500	3.991	PER IMP=	90.00
ADD HYD	AP-6A	2&	3 10	.14826	126.03	5.996	.75833	1.650	1.328		
COMPUTE NM HYD	AP-6B&A-2D	-	3	.01250	29.07	1.312	1.96827	1.500	3.634	PER IMP=	76.00
COMPUTE NM HYD	120.5A	-	4	.00200	1.65	.047	.43936	1.500	1.290	PER IMP=	.00
ADD HYD	AP-6B+120.5A	3&	4 20	.01450	30.72	1.359	1.75736	1.500	3.310		
ADD HYD	AP-6A+	10&	20 10	.16276	146.46	7.355	.84732	1.600	1.406		
COMPUTE NM HYD	P-6	-	3	.00430	3.72	.110	.47912	1.500	1.350	PER IMP=	2.00
ADD HYD	AP-14	10&	3 18	.16706	149.41	7.465	.83784	1.600	1.397		
ROUTE RESERVOIR	AP-14R	18	2	.16706	16.89	7.465	.83784	2.250	.158	AC-FT=	5.134
ROUTE	POND6ROUTE36	2	12	.16706	16.85	7.465	.83784	2.250	.158		
ROUTE	POND6ROUTE48	12	22	.16706	16.98	7.465	.83784	2.250	.159		
DIVIDE HYD	AP-15	11	17	.32624	202.83	9.999	.57470	1.650	.971		
	130.83 AND	16		.32624	13.27	.654	.03760	1.650	.064		
ROUTE RESERVOIR	AP-15R	17	5	.32624	130.19	9.999	.57470	1.850	.624	AC-FT=	2.645
ROUTE	P-5R	5	11	.32624	131.24	9.999	.57470	1.800	.629		
ADD HYD	POND-5R&6R	11&	22 10	.49330	141.70	17.465	.66382	1.800	.449		
COMPUTE NM HYD	P-4	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-15A	10&	3 10	.49690	142.49	17.556	.66246	1.800	.448		
ROUTE RESERVOIR	AP-15AR	10	5	.49690	94.20	17.471	.65925	2.200	.296	AC-FT=	4.701
ROUTE	P-4R	5	12	.49690	94.82	17.471	.65925	2.200	.298		
COMPUTE NM HYD	AP-16	-	1	.01960	18.50	.522	.49901	1.500	1.475	PER IMP=	.00
ROUTE	140.11	1	22	.01960	16.56	.522	.49908	1.550	1.320		
ROUTE	140.12	22	15	.01960	17.13	.522	.49909	1.600	1.366		
COMPUTE NM HYD	140.20	-	1	.08920	78.50	2.196	.46166	1.500	1.375	PER IMP=	.00

□

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
ADD HYD	AP-17UB	15&	1 2	.10880	91.60	2.718	.46840	1.550	1.316		
DIVIDE HYD	AP-17	2	17	.10880	98.93	2.935	.50587	1.550	1.421		
	140.23 AND	16		.10880	7.33	.217	.03747	1.550	.105		
ADD HYD	140.24	17&	12 2	.60570	101.94	20.406	.63170	2.100	.263		
COMPUTE NM HYD	P-3	-	3	.00270	2.34	.069	.47912	1.500	1.354	PER IMP=	2.00
ADD HYD	AP-18	2&	3 10	.60840	102.13	20.474	.63099	2.100	.262		
ROUTE RESERVOIR	AP-18R	10	4	.60840	89.26	20.314	.62604	2.350	.229	AC-FT=	2.839
ROUTE	P-3R	4	2	.60840	89.28	20.313	.62602	2.400	.229		
COMPUTE NM HYD	P-2	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-18A	2&	3 10	.61200	89.41	20.405	.62514	2.400	.228		
ROUTE RESERVOIR	AP-18AR	10	5	.61200	20.58	19.387	.59397	3.900	.053	AC-FT=	6.532
ROUTE	P-2R	5	10	.61200	20.58	19.386	.59394	3.950	.053		
COMPUTE NM HYD	AP-19UB	-	1	.15250	85.35	3.692	.45390	1.600	.874	PER IMP=	.00
DIVIDE HYD	AP-19	1	17	.15250	89.62	3.876	.47660	1.600	.918		
	150.12 AND	16		.15250	4.27	.185	.02270	1.600	.044		
ADD HYD	150.13	10&	17 10	.76450	89.63	23.262	.57053	1.600	.183		
COMPUTE NM HYD	P-1	-	3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	AP-20	10&	3 10	.76740	91.63	23.336	.57017	1.600	.187		
ROUTE RESERVOIR	150.14	10	5	.76740	15.14	23.184	.56646	6.400	.031	AC-FT=	4.897
COMPUTE NM HYD	AP-21&G-1D	-	3	.02290	18.84	.537	.43936	1.500	1.286	PER IMP=	.00
COMPUTE NM HYD	AP-22&G-2D	-	4	.00310	7.72	.349	2.11028	1.500	3.893	PER IMP=	82.00
ROUTE	AP-22R	4	12	.00310	7.56	.349	2.11044	1.500	3.808		
COMPUTE NM HYD	AP-23&G-3D	-	5	.03510	22.33	.822	.43936	1.550	.994	PER IMP=	.00
COMPUTE NM HYD	G-4D	-	6	.00330	8.10	.359	2.03985	1.500	3.837	PER IMP=	78.00
ADD HYD	AP-24	12&	6 10	.00640	15.66	.708	2.07389	1.500	3.823		
FINISH											

Wtfl10pe.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = WTF10PE.IN

RUN DATE (MON/DAY/YR) =01/30/2001
USER NO.= C_ANDRSN.101

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE AND											
*S WITH THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED											
*S 10 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: WTF10PE.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE PROPOSED POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE											
*S AND THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED.											
*S											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING).											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 (WITH THE EXCEPTION											
*S OF THE WEST SIDE TRANSIT FACILITY AREA) WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/21/00											
START											
RAINFALL TYPE= 2											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	O-1E	-	3	.02420	3.43	.108	.08362	1.550	.221	PER IMP=	.00
COMPUTE NM HYD	O-2E	-	4	.04220	4.48	.188	.08362	1.600	.166	PER IMP=	.00
ADD HYD	AP-1	3& 4	10	.06640	7.65	.296	.08361	1.550	.180		
ROUTE	AP-1R	10	2	.06640	5.45	.296	.08362	1.700	.128		
COMPUTE NM HYD	O-3E	-	3	.01640	2.72	.086	.09818	1.550	.259	PER IMP=	1.00
ADD HYD	PARTAP-2	2& 3	10	.08280	7.02	.382	.08650	1.650	.132		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	13.54	.660	.11274	1.600	.193	PER IMP=	2.00
DIVIDE HYD	PART AP-7	3	98	.10970	13.54	.660	.11274	1.600	.193		
	PART AP-7	AND	99	.00000	.00	.000	.00000	-.050	.000		
ROUTE	AP-7R	99	2	.00000	.00	.000	.00000	-.050	.000		
ADD HYD	AP-2	10& 2	10	.08280	7.02	.382	.08650	1.650	.132		
ROUTE	AP-2R	10	2	.08280	6.98	.382	.08651	1.700	.132		
COMPUTE NM HYD	I40-3	-	3	.00190	1.40	.060	.59326	1.500	1.154	PER IMP=	35.00
ADD HYD	AP-3	2& 3	20	.08470	7.72	.442	.09786	1.650	.142		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	1.75	.057	.11274	1.550	.292	PER IMP=	2.00
ROUTE	AP-4R	3	2	.00940	1.84	.057	.11280	1.550	.306		
COMPUTE NM HYD	I40-4	-	3	.00120	.89	.038	.59326	1.500	1.156	PER IMP=	35.00
ADD HYD	AP-5	2& 3	10	.01060	2.64	.094	.16710	1.550	.389		
ADD HYD	AP-3+AP-5	20&10	10	.09530	9.60	.537	.10556	1.600	.157		
ROUTE	PARTAP-6	10	12	.09530	9.61	.537	.10557	1.600	.158		
ROUTE	AP-7R-CUL	98	2	.10970	13.58	.660	.11274	1.600	.193		
COMPUTE NM HYD	I40-2	-	3	.00310	2.28	.098	.59326	1.500	1.152	PER IMP=	35.00

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
ADD HYD	AP-8	2& 3	20	.11280	15.19	.758	.12594	1.600	.210		
COMPUTE NM HYD	O-6E	-	3	.07320	6.49	.326	.08362	1.650	.138	PER IMP=	.00
COMPUTE NM HYD	O-7E	-	4	.05230	7.41	.233	.08362	1.550	.221	PER IMP=	.00
ADD HYD	AP-9	3& 4	10	.12550	13.19	.560	.08362	1.600	.164		
ROUTE	AP-9R	10	2	.12550	13.27	.560	.08362	1.600	.165		
COMPUTE NM HYD	O-8E	-	3	.00990	14.68	.698	1.32131	1.500	2.318	PER IMP=	85.00
ADD HYD	AP-10	2& 3	10	.13540	26.66	1.257	.17411	1.550	.308		
ROUTE	AP-10R	10	2	.13540	21.80	1.257	.17411	1.650	.252		
COMPUTE NM HYD	O-9E	-	3	.03480	8.15	.290	.15643	1.500	.366	PER IMP=	5.00
ADD HYD	AP-11	2& 3	10	.17020	27.81	1.548	.17049	1.600	.255		
ROUTE	AP-11R	10	2	.17020	27.65	1.548	.17050	1.600	.254		
COMPUTE NM HYD	I40-1	-	3	.00750	5.52	.237	.59326	1.500	1.150	PER IMP=	35.00
ADD HYD	AP-12	2& 3	30	.17770	31.52	1.785	.18833	1.600	.277		
ROUTE	AP-8R	20	22	.11280	15.03	.758	.12595	1.650	.208		
COMPUTE NM HYD	130.70	-	1	.01696	3.27	.092	.10184	1.550	.301	PER IMP=	.00
COMPUTE NM HYD	130.90	-	2	.00954	1.84	.052	.10184	1.550	.301	PER IMP=	.00
ADD HYD	130.91	1& 2	1	.02650	5.11	.144	.10183	1.550	.301		
ROUTE	AP-12R	30	3	.17770	30.80	1.785	.18834	1.650	.271		
ADD HYD	130.72	1& 3	4	.20420	34.10	1.929	.17711	1.650	.261		
ADD HYD	AP-13	4&22	2	.31700	49.13	2.686	.15890	1.650	.242		
ROUTE	AP-13R	2	3	.31700	44.96	2.687	.15890	1.700	.222		
COMPUTE NM HYD	130.80	-	1	.03010	4.52	.134	.08362	1.550	.235	PER IMP=	.00
ADD HYD	130.81	3& 1	10	.34710	47.44	2.821	.15237	1.700	.214		
COMPUTE NM HYD	P-5	-	3	.00290	.55	.017	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	AP-15UB	10& 3	11	.35000	47.71	2.837	.15199	1.700	.213		
COMPUTE NM HYD	120.50	-	3	.00520	.82	.023	.08362	1.550	.246	PER IMP=	.00
ADD HYD	AP-6	3&12	10	.10050	10.32	.560	.10443	1.600	.160		
ROUTE	AP-6R	10	2	.10050	10.45	.560	.10444	1.650	.162		

COMPUTE NM HYD	A-1D	-	3	.02400	39.69	1.802	1.40796	1.500	2.584	PER IMP=	90.00
ADD HYD	AP-6A	2& 3	10	.12450	43.13	2.362	.35571	1.500	.541		
COMPUTE NM HYD	AP-6B&A-2D	-	3	.01250	18.04	.801	1.20080	1.500	2.256	PER IMP=	76.00
COMPUTE NM HYD	120.5A	-	4	.00200	.32	.009	.08362	1.550	.247	PER IMP=	.00
ADD HYD	AP-6B+120.5A	3& 4	20	.01450	18.35	.809	1.04667	1.500	1.977		
ADD HYD	AP-6A+	10&20	10	.13900	61.48	3.171	.42779	1.500	.691		
COMPUTE NM HYD	P-6	-	3	.00430	.81	.026	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-14	10& 3	18	.14330	62.27	3.196	.41823	1.500	.679		
ROUTE RESERVOIR	AP-14R	18	2	.14330	22.83	3.196	.41823	1.950	.249	AC-FT=	1.230
ROUTE	POND6ROUTE36	2	12	.14330	22.84	3.196	.41823	1.950	.249		
ROUTE	POND6ROUTE48	12	22	.14330	22.85	3.196	.41823	1.950	.249		
DIVIDE HYD	AP-15	11	17	.35000	51.05	3.036	.16263	1.700	.228		
	130.83	AND	16	.35000	3.34	.199	.01064	1.700	.015		
ROUTE RESERVOIR	AP-15R	17	5	.35000	23.22	3.036	.16263	2.050	.104	AC-FT=	1.289
ROUTE	P-5R	5	11	.35000	23.50	3.036	.16263	2.050	.105		
ADD HYD	POND-5R&6R	11&22	10	.49330	46.02	6.232	.23688	2.050	.146		
COMPUTE NM HYD	P-4	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-15A	10& 3	10	.49690	46.10	6.253	.23594	2.050	.145		
ROUTE RESERVOIR	AP-15AR	10	5	.49690	31.93	6.174	.23296	2.400	.100	AC-FT=	1.106
ROUTE	P-4R	5	12	.49690	31.93	6.174	.23296	2.400	.100		
COMPUTE NM HYD	AP-16	-	1	.01960	4.43	.124	.11841	1.550	.353	PER IMP=	.00
ROUTE	140.11	1	22	.01960	3.49	.124	.11845	1.600	.278		
ROUTE	140.12	22	15	.01960	3.47	.124	.11845	1.650	.276		
COMPUTE NM HYD	140.20	-	1	.08920	16.45	.462	.09721	1.550	.288	PER IMP=	.00

□

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
ADD HYD	AP-17UB	15& 1	2	.10880	18.28	.586	.10103	1.550	.262		
DIVIDE HYD	AP-17	2	17	.10880	19.74	.633	.10911	1.550	.283		
	140.23	AND	16	.10880	1.46	.047	.00808	1.550	.021		
ADD HYD	140.24	17&12	2	.60570	33.13	6.807	.21071	2.350	.085		
COMPUTE NM HYD	P-3	-	3	.00270	.51	.016	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	AP-18	2& 3	10	.60840	33.15	6.822	.21025	2.350	.085		
ROUTE RESERVOIR	AP-18R	10	4	.60840	27.49	6.753	.20813	2.850	.071	AC-FT=	1.219
ROUTE	P-3R	4	2	.60840	27.49	6.753	.20813	2.850	.071		
COMPUTE NM HYD	P-2	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-18A	2& 3	10	.61200	27.51	6.774	.20754	2.850	.070		
ROUTE RESERVOIR	AP-18AR	10	5	.61200	21.71	6.043	.18513	3.700	.055	AC-FT=	1.949
ROUTE	P-2R	5	10	.61200	21.71	6.043	.18513	3.700	.055		
COMPUTE NM HYD	AP-19UB	-	1	.15250	16.02	.753	.09263	1.650	.164	PER IMP=	.00
DIVIDE HYD	AP-19	1	17	.15250	16.82	.791	.09726	1.650	.172		
	150.12	AND	16	.15250	.80	.038	.00463	1.650	.008		
ADD HYD	150.13	10&17	10	.76450	22.10	6.834	.16760	3.650	.045		
COMPUTE NM HYD	P-1	-	3	.00290	.55	.017	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	AP-20	10& 3	10	.76740	22.11	6.850	.16737	3.650	.045		
ROUTE RESERVOIR	150.14	10	5	.76740	20.85	6.849	.16735	4.100	.042	AC-FT=	.664
COMPUTE NM HYD	AP-21&G-1D	-	3	.02290	3.61	.102	.08362	1.550	.246	PER IMP=	.00
COMPUTE NM HYD	AP-22&G-2D	-	4	.00310	4.90	.215	1.30254	1.500	2.469	PER IMP=	82.00
ROUTE	AP-22R	4	12	.00310	4.76	.215	1.30270	1.500	2.398		
COMPUTE NM HYD	AP-23&G-3D	-	5	.03510	4.10	.157	.08362	1.600	.183	PER IMP=	.00
COMPUTE NM HYD	G-4D	-	6	.00330	5.08	.220	1.24983	1.500	2.407	PER IMP=	78.00
ADD HYD	AP-24	12& 6	10	.00640	9.84	.435	1.27528	1.500	2.403		
FINISH											

Wtf100pe.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAECA Hydrologic Model - January, 1994
INPUT FILE = WTF100PE.IN

RUN DATE (MON/DAY/YR) = 01/29/2001
USER NO. = C_ANDRSN.I01

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE AND											
*S WITH THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: WTF100PE.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE PROPOSED POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE											
*S AND THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED.											
*S											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING).											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 (WITH THE EXCEPTION											
*S OF THE WEST SIDE TRANSIT FACILITY AREA) WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/21/00											
START											
RAINFALL TYPE= 2											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	O-1E	-	3	.02420	18.06	.567	.43936	1.550	1.166	PER IMP=	.00
COMPUTE NM HYD	O-2E	-	4	.04220	24.34	.989	.43936	1.600	.901	PER IMP=	.00
ADD HYD	AP-1	3& 4	10	.06640	41.88	1.556	.43936	1.550	.986		
ROUTE	AP-1R	10	2	.06640	36.11	1.556	.43938	1.650	.850		
COMPUTE NM HYD	O-3E	-	3	.01640	13.10	.402	.45924	1.500	1.248	PER IMP=	1.00
ADD HYD	PARTAP-2	2& 3	10	.08280	44.73	1.958	.44330	1.650	.844		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	63.37	2.803	.47912	1.600	.903	PER IMP=	2.00
DIVIDE HYD	PART AP-7	3	98	.08594	32.00	2.196	.47911	1.500	.582		
	PART AP-7	AND	99	.02376	31.37	.607	.47911	1.600	2.062		
ROUTE	AP-7R	99	2	.02376	31.64	.608	.47944	1.600	2.081		
ADD HYD	AP-2	10& 2	10	.10656	76.00	2.565	.45135	1.600	1.114		
ROUTE	AP-2R	10	2	.10656	79.83	2.565	.45136	1.600	1.171		
COMPUTE NM HYD	I40-3	-	3	.00190	2.86	.115	1.13512	1.500	2.350	PER IMP=	35.00
ADD HYD	AP-3	2& 3	20	.10846	81.89	2.680	.46333	1.600	1.180		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	8.11	.240	.47912	1.500	1.348	PER IMP=	2.00
ROUTE	AP-4R	3	2	.00940	8.17	.240	.47921	1.500	1.358		
COMPUTE NM HYD	I40-4	-	3	.00120	1.81	.073	1.13512	1.500	2.357	PER IMP=	35.00
ADD HYD	AP-5	2& 3	10	.01060	9.98	.313	.55337	1.500	1.471		
ADD HYD	AP-3+AP-5	20&10	10	.11906	89.90	2.993	.47135	1.600	1.180		
ROUTE	PARTAP-6	10	12	.11906	87.97	2.993	.47135	1.650	1.154		
ROUTE	AP-7R-CUL	98	2	.08594	33.23	2.196	.47912	1.500	.604		
COMPUTE NM HYD	I40-2	-	3	.00310	4.65	.188	1.13512	1.500	2.346	PER IMP=	35.00

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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
ADD HYD	AP-8	2& 3	20	.08904	37.88	2.384	.50195	1.500	.665		
COMPUTE NM HYD	O-6E	-	3	.07320	35.69	1.715	.43936	1.600	.762	PER IMP=	.00
COMPUTE NM HYD	O-7E	-	4	.05230	39.03	1.226	.43936	1.550	1.166	PER IMP=	.00
ADD HYD	AP-9	3& 4	10	.12550	71.47	2.941	.43936	1.550	.890		
ROUTE	AP-9R	10	2	.12550	70.89	2.941	.43937	1.600	.883		
COMPUTE NM HYD	O-8E	-	3	.00990	23.00	1.124	2.12906	1.500	3.630	PER IMP=	85.00
ADD HYD	AP-10	2& 3	10	.13540	92.59	4.065	.56290	1.550	1.068		
ROUTE	AP-10R	10	2	.13540	89.10	4.065	.56291	1.600	1.028		
COMPUTE NM HYD	O-9E	-	3	.03480	31.99	1.000	.53875	1.500	1.436	PER IMP=	5.00
ADD HYD	AP-11	2& 3	10	.17020	114.14	5.065	.55797	1.600	1.048		
ROUTE	AP-11R	10	2	.17020	114.79	5.065	.55797	1.600	1.054		
COMPUTE NM HYD	I40-1	-	3	.00750	11.24	.454	1.13512	1.500	2.342	PER IMP=	35.00
ADD HYD	AP-12	2& 3	30	.17770	122.86	5.519	.58232	1.600	1.080		
ROUTE	AP-8R	20	22	.08904	38.28	2.384	.50196	1.550	.672		
COMPUTE NM HYD	130.70	-	1	.01696	15.02	.425	.46988	1.500	1.384	PER IMP=	.00
COMPUTE NM HYD	130.90	-	2	.00954	8.45	.239	.46988	1.500	1.385	PER IMP=	.00
ADD HYD	130.91	1& 2	1	.02650	23.48	.664	.46988	1.500	1.384		
ROUTE	AP-12R	30	3	.17770	121.65	5.519	.58233	1.600	1.070		
ADD HYD	130.72	1& 3	4	.20420	140.42	6.183	.56773	1.600	1.074		
ADD HYD	AP-13	4&22	2	.29324	176.26	8.567	.54776	1.600	.939		
ROUTE	AP-13R	2	3	.29324	172.47	8.567	.54776	1.650	.919		
COMPUTE NM HYD	130.80	-	1	.03010	23.38	.705	.43936	1.550	1.214	PER IMP=	.00
ADD HYD	130.81	3& 1	10	.32334	188.04	9.272	.53767	1.650	.909		
COMPUTE NM HYD	P-5	-	3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	AP-15UB	10& 3	11	.32624	189.56	9.345	.53710	1.650	.908		
COMPUTE NM HYD	120.50	-	3	.00520	4.28	.122	.43936	1.500	1.287	PER IMP=	.00
ADD HYD	AP-6	3&12	10	.12426	90.59	3.115	.47001	1.650	1.139		
ROUTE	AP-6R	10	2	.12426	91.47	3.115	.47001	1.650	1.150		

COMPUTE NM HYD	A-1D	-	3	.02400	61.30	2.881	2.25115	1.500	3.991	PER IMP=	90.00
ADD HYD	AP-6A	2& 3	10	.14826	126.03	5.996	.75833	1.650	1.328		
COMPUTE NM HYD	AP-6B&A-2D	-	3	.01250	29.07	1.312	1.96827	1.500	3.634	PER IMP=	76.00
COMPUTE NM HYD	120.5A	-	4	.00200	1.65	.047	.43936	1.500	1.290	PER IMP=	.00
ADD HYD	AP-6B+120.5A	3& 4	20	.01450	30.72	1.359	1.75736	1.500	3.310		
ADD HYD	AP-6A+	10&20	10	.16276	146.46	7.355	.84732	1.600	1.406		
COMPUTE NM HYD	P-6	-	3	.00430	3.72	.110	.47912	1.500	1.350	PER IMP=	2.00
ADD HYD	AP-14	10& 3	18	.16706	149.41	7.465	.83784	1.600	1.397		
ROUTE RESERVOIR	AP-14R	18	2	.16706	48.71	7.465	.83784	1.950	.456	AC-FT=	3.459
ROUTE	POND6ROUTE36	2	12	.16706	48.73	7.465	.83784	1.950	.456		
ROUTE	POND6ROUTE48	12	22	.16706	48.70	7.465	.83784	1.950	.455		
DIVIDE HYD	AP-15	11	17	.32624	202.83	9.999	.57470	1.650	.971		
	130.83	AND	16	.32624	13.27	.654	.03760	1.650	.064		
ROUTE RESERVOIR	AP-15R	17	5	.32624	130.19	9.999	.57470	1.850	.624	AC-FT=	2.645
ROUTE	P-5R	5	11	.32624	131.24	9.999	.57470	1.800	.629		
ADD HYD	POND-5R&6R	11&22	10	.49330	178.75	17.465	.66382	1.900	.566		
COMPUTE NM HYD	P-4	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-15A	10& 3	10	.49690	179.37	17.556	.66246	1.800	.564		
ROUTE RESERVOIR	AP-15AR	10	5	.49690	99.87	17.477	.65947	2.250	.314	AC-FT=	5.298
ROUTE	P-4R	5	12	.49690	99.92	17.477	.65947	2.300	.314		
COMPUTE NM HYD	AP-16	-	1	.01960	18.50	.522	.49901	1.500	1.475	PER IMP=	.00
ROUTE	140.11	1	22	.01960	16.56	.522	.49908	1.550	1.320		
ROUTE	140.12	22	15	.01960	17.13	.522	.49909	1.600	1.366		
COMPUTE NM HYD	140.20	-	1	.08920	78.50	2.196	.46166	1.500	1.375	PER IMP=	.00

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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
ADD HYD	AP-17UB	15& 1	2	.10880	91.60	2.718	.46840	1.550	1.316		
DIVIDE HYD	AP-17	2	17	.10880	98.93	2.935	.50587	1.550	1.421		
	140.23	AND	16	.10880	7.33	.217	.03747	1.550	.105		
ADD HYD	140.24	17&12	2	.60570	107.19	20.412	.63188	1.550	.277		
COMPUTE NM HYD	P-3	-	3	.00270	2.34	.069	.47912	1.500	1.354	PER IMP=	2.00
ADD HYD	AP-18	2& 3	10	.60840	109.44	20.480	.63117	1.550	.281		
ROUTE RESERVOIR	AP-18R	10	4	.60840	94.06	20.412	.62905	2.700	.242	AC-FT=	3.118
ROUTE	P-3R	4	2	.60840	94.09	20.412	.62905	2.700	.242		
COMPUTE NM HYD	P-2	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-18A	2& 3	10	.61200	94.15	20.503	.62816	2.700	.240		
ROUTE RESERVOIR	AP-18AR	10	5	.61200	71.15	19.771	.60573	3.300	.182	AC-FT=	6.618
ROUTE	P-2R	5	10	.61200	71.17	19.771	.60573	3.300	.182		
COMPUTE NM HYD	AP-19UB	-	1	.15250	85.35	3.692	.45390	1.600	.674	PER IMP=	.00
DIVIDE HYD	AP-19	1	17	.15250	89.62	3.876	.47660	1.600	.918		
	150.12	AND	16	.15250	4.27	.185	.02270	1.600	.044		
ADD HYD	150.13	10&17	10	.76450	89.64	23.647	.57997	1.600	.183		
COMPUTE NM HYD	P-1	-	3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	AP-20	10& 3	10	.76740	91.63	23.721	.57957	1.600	.187		
ROUTE RESERVOIR	150.14	10	5	.76740	58.70	23.720	.57956	3.650	.120	AC-FT=	2.146
COMPUTE NM HYD	AP-21&G-1D	-	3	.02290	18.84	.537	.43936	1.500	1.286	PER IMP=	.00
COMPUTE NM HYD	AP-22&G-2D	-	4	.00310	7.72	.349	2.11028	1.500	3.893	PER IMP=	82.00
ROUTE	AP-22R	4	12	.00310	7.56	.349	2.11044	1.500	3.808		
COMPUTE NM HYD	AP-23&G-3D	-	5	.03510	22.33	.822	.43936	1.550	.994	PER IMP=	.00
COMPUTE NM HYD	G-4D	-	6	.00330	8.10	.359	2.03985	1.500	3.837	PER IMP=	78.00
ADD HYD	AP-24	12& 6	10	.00640	15.66	.708	2.07389	1.500	3.823		
FINISH											

Wtf10ep.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = WTF10EP.IN

RUN DATE (MON/DAY/YR) =01/30/2001
USER NO.= C_ANDRSN.I01

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE AND											
*S WITH THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED											
*S 10 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: WTF10EP.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND											
*S OUTLET WORKS AND THE PROPOSED POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE											
*S AND THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED.											
*S											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING).											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 (WITH THE EXCEPTION											
*S OF THE WEST SIDE TRANSIT FACILITY AREA) WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/21/00											
START											
RAINFALL TYPE= 2											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	0-1E	-	3	.02420	3.43	.108	.08362	1.550	.221 PER IMP=	.00	
COMPUTE NM HYD	0-2E	-	4	.04220	4.48	.188	.08362	1.600	.166 PER IMP=	.00	
ADD HYD	AP-1	3& 4	10	.06640	7.65	.296	.08361	1.550	.180		
ROUTE	AP-1R	10	2	.06640	5.45	.296	.08362	1.700	.128		
COMPUTE NM HYD	0-3E	-	3	.01640	2.72	.086	.09818	1.550	.259 PER IMP=	1.00	
ADD HYD	PARTAP-2	2& 3	10	.08280	7.02	.382	.08650	1.650	.132		
COMPUTE NM HYD	AP-7&0-5E	-	3	.10970	13.54	.660	.11274	1.600	.193 PER IMP=	2.00	
DIVIDE HYD	PART AP-7	3	98	.10970	13.54	.660	.11274	1.600	.193		
	PART AP-7	AND	99	.00000	.00	.000	.00000	-.050	.000		
ROUTE	AP-7R	99	2	.00000	.00	.000	.00000	-.050	.000		
ADD HYD	AP-2	10& 2	10	.08280	7.02	.382	.08650	1.650	.132		
ROUTE	AP-2R	10	2	.08280	6.98	.382	.08651	1.700	.132		
COMPUTE NM HYD	I40-3	-	3	.00190	1.40	.060	.59326	1.500	1.154 PER IMP=	35.00	
ADD HYD	AP-3	2& 3	20	.08470	7.72	.442	.09786	1.650	.142		
COMPUTE NM HYD	AP-4&0-4E	-	3	.00940	1.75	.057	.11274	1.550	.292 PER IMP=	2.00	
ROUTE	AP-4R	3	2	.00940	1.84	.057	.11280	1.550	.306		
COMPUTE NM HYD	I40-4	-	3	.00120	.89	.038	.59326	1.500	1.156 PER IMP=	35.00	
ADD HYD	AP-5	2& 3	10	.01060	2.64	.094	.16710	1.550	.389		
ADD HYD	AP-3+AP-5	20&10	10	.09530	9.60	.537	.10556	1.600	.157		
ROUTE	PARTAP-6	10	12	.09530	9.61	.537	.10557	1.600	.158		
ROUTE	AP-7R-CUL	98	2	.10970	13.58	.660	.11274	1.600	.193		
COMPUTE NM HYD	I40-2	-	3	.00310	2.28	.098	.59326	1.500	1.152 PER IMP=	35.00	

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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
ADD HYD	AP-8	2& 3	20	.11280	15.19	.758	.12594	1.600	.210		
COMPUTE NM HYD	0-6E	-	3	.07320	6.49	.326	.08362	1.650	.138 PER IMP=	.00	
COMPUTE NM HYD	0-7E	-	4	.05230	7.41	.233	.08362	1.550	.221 PER IMP=	.00	
ADD HYD	AP-9	3& 4	10	.12550	13.19	.560	.08362	1.600	.164		
ROUTE	AP-9R	10	2	.12550	13.27	.560	.08362	1.600	.165		
COMPUTE NM HYD	0-8E	-	3	.00990	14.68	.698	1.32131	1.500	2.318 PER IMP=	85.00	
ADD HYD	AP-10	2& 3	10	.13540	26.66	1.257	.17411	1.550	.308		
ROUTE	AP-10R	10	2	.13540	21.80	1.257	.17411	1.650	.252		
COMPUTE NM HYD	0-9E	-	3	.03480	8.15	.290	.15643	1.500	.366 PER IMP=	5.00	
ADD HYD	AP-11	2& 3	10	.17020	27.81	1.548	.17049	1.600	.255		
ROUTE	AP-11R	10	2	.17020	27.65	1.548	.17050	1.600	.254		
COMPUTE NM HYD	I40-1	-	3	.00750	5.52	.237	.59326	1.500	1.150 PER IMP=	35.00	
ADD HYD	AP-12	2& 3	30	.17770	31.52	1.785	.18833	1.600	.277		
ROUTE	AP-8R	20	22	.11280	15.03	.758	.12595	1.650	.208		
COMPUTE NM HYD	130.70	-	1	.01696	3.27	.092	.10184	1.550	.301 PER IMP=	.00	
COMPUTE NM HYD	130.90	-	2	.00954	1.84	.052	.10184	1.550	.301 PER IMP=	.00	
ADD HYD	130.91	1& 2	1	.02650	5.11	.144	.10183	1.550	.301		
ROUTE	AP-12R	30	3	.17770	30.80	1.785	.18834	1.650	.271		
ADD HYD	130.72	1& 3	4	.20420	34.10	1.929	.17711	1.650	.261		
ADD HYD	AP-13	4&22	2	.31700	49.13	2.686	.15890	1.650	.242		
ROUTE	AP-13R	2	3	.31700	44.96	2.687	.15890	1.700	.222		
COMPUTE NM HYD	130.80	-	1	.03010	4.52	.134	.08362	1.550	.235 PER IMP=	.00	
ADD HYD	130.81	3& 1	10	.34710	47.44	2.821	.15237	1.700	.214		
COMPUTE NM HYD	P-5	-	3	.00290	.55	.017	.11274	1.550	.294 PER IMP=	2.00	
ADD HYD	AP-15UB	10& 3	11	.35000	47.71	2.837	.15199	1.700	.213		
COMPUTE NM HYD	120.50	-	3	.00520	.82	.023	.08362	1.550	.246 PER IMP=	.00	
ADD HYD	AP-6	3&12	10	.10050	10.32	.560	.10443	1.600	.160		
ROUTE	AP-6R	10	2	.10050	10.45	.560	.10444	1.650	.162		

COMPUTE NM HYD	A-1D	-	3	.02400	39.69	1.802	1.40796	1.500	2.584	PER IMP=	90.00
ADD HYD	AP-6A	2	3	.12450	43.13	2.362	.35571	1.500	.541		
COMPUTE NM HYD	AP-6B&A-2D	-	3	.01250	18.04	.801	1.20080	1.500	2.256	PER IMP=	76.00
COMPUTE NM HYD	120.5A	-	4	.00200	.32	.009	.08362	1.550	.247	PER IMP=	.00
ADD HYD	AP-6B+120.5A	3	4	.01450	18.35	.809	1.04667	1.500	1.977		
ADD HYD	AP-6A+ 10	20	10	.13900	61.48	3.171	.42779	1.500	.691		
COMPUTE NM HYD	P-6	-	3	.00430	.81	.026	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-14	10	3	.14330	62.27	3.196	.41823	1.500	.679		
ROUTE RESERVOIR	AP-14R	18	2	.14330	7.34	3.196	.41822	2.250	.080	AC-FT=	1.944
ROUTE	POND6ROUTE36	2	12	.14330	7.34	3.196	.41822	2.250	.080		
ROUTE	POND6ROUTE48	12	22	.14330	7.34	3.196	.41822	2.250	.080		
DIVIDE HYD	AP-15	11	17	.35000	51.05	3.036	.16263	1.700	.228		
	130.83	AND	16	.35000	3.34	.199	.01064	1.700	.015		
ROUTE RESERVOIR	AP-15R	17	5	.35000	23.22	3.036	.16263	2.050	.104	AC-FT=	1.289
ROUTE	P-5R	5	11	.35000	23.50	3.036	.16263	2.050	.105		
ADD HYD	POND-5R&6R	11	22	.49330	30.72	6.232	.23688	2.050	.097		
COMPUTE NM HYD	P-4	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-15A	10	3	.49690	30.79	6.253	.23594	2.050	.097		
ROUTE RESERVOIR	AP-15AR	10	5	.49690	8.13	6.168	.23275	5.150	.026	AC-FT=	2.797
ROUTE	P-4R	5	12	.49690	8.13	6.168	.23275	5.150	.026		
COMPUTE NM HYD	AP-16	-	1	.01960	4.43	.124	.11841	1.550	.353	PER IMP=	.00
ROUTE	140.11	1	22	.01960	3.49	.124	.11845	1.600	.278		
ROUTE	140.12	22	15	.01960	3.47	.124	.11845	1.650	.276		
COMPUTE NM HYD	140.20	-	1	.08920	16.45	.462	.09721	1.550	.288	PER IMP=	.00

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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
ADD HYD	AP-17UB	15	1	.10880	18.28	.586	.10103	1.550	.262		
DIVIDE HYD	AP-17	2	17	.10880	19.74	.633	.10911	1.550	.283		
	140.23	AND	16	.10880	1.46	.047	.00808	1.550	.021		
ADD HYD	140.24	17	12	.60570	19.81	6.801	.21054	1.550	.051		
COMPUTE NM HYD	P-3	-	3	.00270	.51	.016	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	AP-18	2	3	.60840	20.32	6.817	.21008	1.550	.052		
ROUTE RESERVOIR	AP-18R	10	4	.60840	6.77	6.693	.20627	7.800	.017	AC-FT=	1.568
ROUTE	P-3R	4	2	.60840	6.77	6.693	.20626	7.850	.017		
COMPUTE NM HYD	P-2	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-18A	2	3	.61200	6.77	6.713	.20568	7.850	.017		
ROUTE RESERVOIR	AP-18AR	10	5	.61200	4.76	5.481	.16793	12.500	.012	AC-FT=	2.899
ROUTE	P-2R	5	10	.61200	4.76	5.481	.16791	12.500	.012		
COMPUTE NM HYD	AP-19UB	-	1	.15250	16.02	.753	.09263	1.650	.164	PER IMP=	.00
DIVIDE HYD	AP-19	1	17	.15250	16.82	.791	.09726	1.650	.172		
	150.12	AND	16	.15250	.80	.038	.00463	1.650	.008		
ADD HYD	150.13	10	17	.76450	16.83	6.272	.15382	1.650	.034		
COMPUTE NM HYD	P-1	-	3	.00290	.55	.017	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	AP-20	10	3	.76740	17.28	6.288	.15364	1.600	.035		
ROUTE RESERVOIR	150.14	10	5	.76740	4.38	6.150	.15026	14.650	.009	AC-FT=	.672
COMPUTE NM HYD	AP-21&G-1D	-	3	.02290	3.61	.102	.08362	1.550	.246	PER IMP=	.00
COMPUTE NM HYD	AP-22&G-2D	-	4	.00310	4.90	.215	1.30254	1.500	2.469	PER IMP=	82.00
ROUTE	AP-22R	4	12	.00310	4.76	.215	1.30270	1.500	2.398		
COMPUTE NM HYD	AP-23&G-3D	-	5	.03510	4.10	.157	.08362	1.600	.183	PER IMP=	.00
COMPUTE NM HYD	G-4D	-	6	.00330	5.08	.220	1.24983	1.500	2.407	PER IMP=	78.00
ADD HYD	AP-24	12	6	.00640	9.84	.435	1.27528	1.500	2.403		
FINISH											

Wtf100ep.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = WTF100EP.IN

RUN DATE (MON/DAY/YR) =01/29/2001
USER NO.= C_ANDRSN.101

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE AND											
*S WITH THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: WTF100EP.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND											
*S OUTLET WORKS AND THE PROPOSED POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE											
*S AND THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED.											
*S											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING).											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 (WITH THE EXCEPTION											
*S OF THE WEST SIDE TRANSIT FACILITY AREA) WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/21/00											
START											
RAINFALL TYPE= 2											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	O-1E	-	3	.02420	18.06	.567	.43936	1.550	1.166 PER IMP=	.00	
COMPUTE NM HYD	O-2E	-	4	.04220	24.34	.989	.43936	1.600	.901 PER IMP=	.00	
ADD HYD	AP-1	3& 4	10	.06640	41.88	1.556	.43936	1.550	.986		
ROUTE	AP-1R	10	2	.06640	36.11	1.556	.43938	1.650	.850		
COMPUTE NM HYD	O-3E	-	3	.01640	13.10	.402	.45924	1.500	1.248 PER IMP=	1.00	
ADD HYD	PARTAP-2	2& 3	10	.08280	44.73	1.958	.44330	1.650	.844		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	63.37	2.803	.47912	1.600	.903 PER IMP=	2.00	
DIVIDE HYD	PART AP-7	3	98	.08594	32.00	2.196	.47911	1.500	.582		
	PART AP-7	AND	99	.02376	31.37	.607	.47911	1.600	2.062		
ROUTE	AP-7R	99	2	.02376	31.64	.608	.47944	1.600	2.081		
ADD HYD	AP-2	10& 2	10	.10656	76.00	2.565	.45135	1.600	1.114		
ROUTE	AP-2R	10	2	.10656	79.83	2.565	.45136	1.600	1.171		
COMPUTE NM HYD	I40-3	-	3	.00190	2.86	.115	1.13512	1.500	2.350 PER IMP=	35.00	
ADD HYD	AP-3	2& 3	20	.10846	81.89	2.680	.46333	1.600	1.180		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	8.11	.240	.47912	1.500	1.348 PER IMP=	2.00	
ROUTE	AP-4R	3	2	.00940	8.17	.240	.47921	1.500	1.358		
COMPUTE NM HYD	I40-4	-	3	.00120	1.81	.073	1.13512	1.500	2.357 PER IMP=	35.00	
ADD HYD	AP-5	2& 3	10	.01060	9.98	.313	.55337	1.500	1.471		
ADD HYD	AP-3+AP-5	20&10	10	.11906	89.90	2.993	.47135	1.600	1.180		
ROUTE	PARTAP-6	10	12	.11906	87.97	2.993	.47135	1.650	1.154		
ROUTE	AP-7R-CUL	98	2	.08594	33.23	2.196	.47912	1.500	.604		
COMPUTE NM HYD	I40-2	-	3	.00310	4.65	.188	1.13512	1.500	2.346 PER IMP=	35.00	

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
ADD HYD	AP-8	2& 3	20	.08904	37.88	2.384	.50195	1.500	.665		
COMPUTE NM HYD	O-6E	-	3	.07320	35.69	1.715	.43936	1.600	.762 PER IMP=	.00	
COMPUTE NM HYD	O-7E	-	4	.05230	39.03	1.226	.43936	1.550	1.166 PER IMP=	.00	
ADD HYD	AP-9	3& 4	10	.12550	71.47	2.941	.43936	1.550	.890		
ROUTE	AP-9R	10	2	.12550	70.89	2.941	.43937	1.600	.883		
COMPUTE NM HYD	O-8E	-	3	.00990	23.00	1.124	2.12906	1.500	3.630 PER IMP=	85.00	
ADD HYD	AP-10	2& 3	10	.13540	92.59	4.065	.56290	1.550	1.068		
ROUTE	AP-10R	10	2	.13540	89.10	4.065	.56291	1.600	1.028		
COMPUTE NM HYD	O-9E	-	3	.03480	31.99	1.000	.53875	1.500	1.436 PER IMP=	5.00	
ADD HYD	AP-11	2& 3	10	.17020	114.14	5.065	.55797	1.600	1.048		
ROUTE	AP-11R	10	2	.17020	114.79	5.065	.55797	1.600	1.054		
COMPUTE NM HYD	I40-1	-	3	.00750	11.24	.454	1.13512	1.500	2.342 PER IMP=	35.00	
ADD HYD	AP-12	2& 3	30	.17770	122.86	5.519	.58232	1.600	1.080		
ROUTE	AP-8R	20	22	.08904	38.28	2.384	.50196	1.550	.672		
COMPUTE NM HYD	130.70	-	1	.01696	15.02	.425	.46988	1.500	1.384 PER IMP=	.00	
COMPUTE NM HYD	130.90	-	2	.00954	8.45	.239	.46988	1.500	1.385 PER IMP=	.00	
ADD HYD	130.91	1& 2	1	.02650	23.48	.664	.46988	1.500	1.384		
ROUTE	AP-12R	30	3	.17770	121.65	5.519	.58233	1.600	1.070		
ADD HYD	130.72	1& 3	4	.20420	140.42	6.183	.56773	1.600	1.074		
ADD HYD	AP-13	4&22	2	.29324	176.26	8.567	.54776	1.600	.939		
ROUTE	AP-13R	2	3	.29324	172.47	8.567	.54776	1.650	.919		
COMPUTE NM HYD	130.80	-	1	.03010	23.38	.705	.43936	1.550	1.214 PER IMP=	.00	
ADD HYD	130.81	3& 1	10	.32334	188.04	9.272	.53767	1.650	.909		
COMPUTE NM HYD	P-5	-	3	.00290	2.51	.074	.47912	1.500	1.353 PER IMP=	2.00	
ADD HYD	AP-15UB	10& 3	11	.32624	189.56	9.345	.53710	1.650	.908		
COMPUTE NM HYD	120.50	-	3	.00520	4.28	.122	.43936	1.500	1.287 PER IMP=	.00	
ADD HYD	AP-6	3&12	10	.12426	90.59	3.115	.47001	1.650	1.139		
ROUTE	AP-6R	10	2	.12426	91.47	3.115	.47001	1.650	1.150		

COMPUTE NM HYD	A-1D	-	3	.02400	61.30	2.881	2.25115	1.500	3.991	PER IMP=	90.00
ADD HYD	AP-6A	24	3	.14826	126.03	5.996	.75833	1.650	1.328		
COMPUTE NM HYD	AP-6B&A-2D	-	3	.01250	29.07	1.312	1.96827	1.500	3.634	PER IMP=	76.00
COMPUTE NM HYD	120.5A	-	4	.00200	1.65	.047	.43936	1.500	1.290	PER IMP=	.00
ADD HYD	AP-6B+120.5A	34	4	.01450	30.72	1.359	1.75736	1.500	3.310		
ADD HYD	AP-6A+	104	20	.16276	146.46	7.355	.84732	1.600	1.406		
COMPUTE NM HYD	P-6	-	3	.00430	3.72	.110	.47912	1.500	1.350	PER IMP=	2.00
ADD HYD	AP-14	104	3	.16706	149.41	7.465	.83784	1.600	1.397		
ROUTE RESERVOIR	AP-14R	18	2	.16706	10.68	7.465	.83784	2.400	.100	AC-FT=	5.290
ROUTE	POND6ROUTE36	2	12	.16706	10.68	7.465	.83784	2.400	.100		
ROUTE	POND6ROUTE48	12	22	.16706	10.68	7.465	.83784	2.400	.100		
DIVIDE HYD	AP-15	11	17	.32624	202.83	9.999	.57470	1.650	.971		
	130.83	AND	16	.32624	13.27	.654	.03760	1.650	.064		
ROUTE RESERVOIR	AP-15R	17	5	.32624	130.19	9.999	.57470	1.850	.624	AC-FT=	2.645
ROUTE	P-5R	5	11	.42634	131.24	9.999	.57470	1.800	.629		
ADD HYD	POND-5R&6R	114	22	.49330	140.80	17.465	.66381	1.800	.446		
COMPUTE NM HYD	P-4	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-15A	104	3	.49690	141.59	17.556	.66246	1.800	.445		
ROUTE RESERVOIR	AP-15AR	10	5	.49690	93.71	17.469	.65919	2.200	.295	AC-FT=	4.650
ROUTE	P-4R	5	12	.49690	94.25	17.469	.65918	2.200	.296		
COMPUTE NM HYD	AP-16	-	1	.01960	18.50	.522	.49901	1.500	1.475	PER IMP=	.00
ROUTE	140.11	1	22	.01960	16.56	.522	.49908	1.550	1.320		
ROUTE	140.12	22	15	.01960	17.13	.522	.49909	1.600	1.366		
COMPUTE NM HYD	140.20	-	1	.08920	78.50	2.196	.46166	1.500	1.375	PER IMP=	.00

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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
ADD HYD	AP-17UB	154	1	.10880	91.60	2.718	.46840	1.550	1.316		
DIVIDE HYD	AP-17	2	17	.10880	98.93	2.935	.50587	1.550	1.421		
	140.23	AND	16	.10880	7.33	.217	.03747	1.550	.105		
ADD HYD	140.24	174	12	.60570	101.32	20.405	.63164	2.100	.261		
COMPUTE NM HYD	P-3	-	3	.00270	2.34	.069	.47912	1.500	1.354	PER IMP=	2.00
ADD HYD	AP-18	24	3	.60840	101.79	20.473	.63094	1.550	.261		
ROUTE RESERVOIR	AP-18R	10	4	.60840	88.61	20.300	.62562	2.350	.228	AC-FT=	2.803
ROUTE	P-3R	4	2	.60840	88.68	20.300	.62560	2.300	.228		
COMPUTE NM HYD	P-2	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-18A	24	3	.61200	88.84	20.391	.62473	2.300	.227		
ROUTE RESERVOIR	AP-18AR	10	5	.61200	12.66	18.518	.56733	6.150	.032	AC-FT=	7.951
ROUTE	P-2R	5	10	.61200	12.66	18.516	.56727	6.150	.032		
COMPUTE NM HYD	AP-19UB	-	1	.15250	85.35	3.692	.45390	1.600	.874	PER IMP=	.00
DIVIDE HYD	AP-19	1	17	.15250	89.62	3.876	.47660	1.600	.918		
	150.12	AND	16	.15250	4.27	.185	.02270	1.600	.044		
ADD HYD	150.13	104	17	.76450	89.63	22.392	.54918	1.600	.183		
COMPUTE NM HYD	P-1	-	3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	AP-20	104	3	.76740	91.62	22.465	.54890	1.600	.187		
ROUTE RESERVOIR	150.14	10	5	.76740	10.03	21.364	.52198	8.450	.020	AC-FT=	3.875
COMPUTE NM HYD	AP-21&G-1D	-	3	.02290	18.84	.537	.43936	1.500	1.286	PER IMP=	.00
COMPUTE NM HYD	AP-22&G-2D	-	4	.00310	7.72	.349	2.11028	1.500	3.893	PER IMP=	82.00
ROUTE	AP-22R	4	12	.00310	7.56	.349	2.11044	1.500	3.808		
COMPUTE NM HYD	AP-23&G-3D	-	5	.03510	22.33	.822	.43936	1.550	.994	PER IMP=	.00
COMPUTE NM HYD	G-4D	-	6	.00330	8.10	.359	2.03985	1.500	3.837	PER IMP=	78.00
ADD HYD	AP-24	124	6	.00640	15.66	.708	2.07389	1.500	3.823		
FINISH											

Wtf10pp.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = WTF10PP.IN

RUN DATE (MON/DAY/YR) = 01/30/2001
USER NO. = C_ANDRSN.101

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE AND											
*S WITH THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED											
*S 10 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: WTF10PP.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE PROPOSED POND											
*S OUTLET WORKS AND THE PROPOSED POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE											
*S AND THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED.											
*S											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING).											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 (WITH THE EXCEPTION											
*S OF THE WEST SIDE TRANSIT FACILITY AREA) WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/21/00											
START											
RAINFALL TYPE= 2											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	O-1E	-	3	.02420	3.43	.108	.08362	1.550	.221	PER IMP=	.00
COMPUTE NM HYD	O-2E	-	4	.04220	4.48	.188	.08362	1.600	.166	PER IMP=	.00
ADD HYD	AP-1	3& 4	10	.06640	7.65	.296	.08361	1.550	.180		
ROUTE	AP-1R	10	2	.06640	5.45	.296	.08362	1.700	.128		
COMPUTE NM HYD	O-3E	-	3	.01640	2.72	.086	.09818	1.550	.259	PER IMP=	1.00
ADD HYD	PARTAP-2	2& 3	10	.08280	7.02	.382	.08650	1.650	.132		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	13.54	.660	.11274	1.600	.193	PER IMP=	2.00
DIVIDE HYD	PART AP-7	3	98	.10970	13.54	.660	.11274	1.600	.193		
	PART AP-7	AND	99	.00000	.00	.000	.00000	-.050	.000		
ROUTE	AP-7R	99	2	.00000	.00	.000	.00000	-.050	.000		
ADD HYD	AP-2	10& 2	10	.08280	7.02	.382	.08650	1.650	.132		
ROUTE	AP-2R	10	2	.08280	6.98	.382	.08651	1.700	.132		
COMPUTE NM HYD	I40-3	-	3	.00190	1.40	.060	.59326	1.500	1.154	PER IMP=	35.00
ADD HYD	AP-3	2& 3	20	.08470	7.72	.442	.09786	1.650	.142		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	1.75	.057	.11274	1.550	.292	PER IMP=	2.00
ROUTE	AP-4R	3	2	.00940	1.84	.057	.11280	1.550	.306		
COMPUTE NM HYD	I40-4	-	3	.00120	.89	.038	.59326	1.500	1.156	PER IMP=	35.00
ADD HYD	AP-5	2& 3	10	.01060	2.64	.094	.16710	1.550	.389		
ADD HYD	AP-3+AP-5	20&10	10	.09530	9.60	.537	.10556	1.600	.157		
ROUTE	PARTAP-6	10	12	.09530	9.61	.537	.10557	1.600	.158		
ROUTE	AP-7R-CUL	98	2	.10970	13.58	.660	.11274	1.600	.193		
COMPUTE NM HYD	I40-2	-	3	.00310	2.28	.098	.59326	1.500	1.152	PER IMP=	35.00

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
ADD HYD	AP-8	2& 3	20	.11280	15.19	.758	.12594	1.600	.210		
COMPUTE NM HYD	O-6E	-	3	.07320	6.49	.326	.08362	1.650	.138	PER IMP=	.00
COMPUTE NM HYD	O-7E	-	4	.05230	7.41	.233	.08362	1.550	.221	PER IMP=	.00
ADD HYD	AP-9	3& 4	10	.12550	13.19	.560	.08362	1.600	.164		
ROUTE	AP-9R	10	2	.12550	13.27	.560	.08362	1.600	.165		
COMPUTE NM HYD	O-8E	-	3	.00990	14.68	.698	1.32131	1.500	2.318	PER IMP=	85.00
ADD HYD	AP-10	2& 3	10	.13540	26.66	1.257	.17411	1.550	.308		
ROUTE	AP-10R	10	2	.13540	21.80	1.257	.17411	1.650	.252		
COMPUTE NM HYD	O-9E	-	3	.03480	8.15	.290	.15643	1.500	.366	PER IMP=	5.00
ADD HYD	AP-11	2& 3	10	.17020	27.81	1.548	.17049	1.600	.255		
ROUTE	AP-11R	10	2	.17020	27.65	1.548	.17050	1.600	.254		
COMPUTE NM HYD	I40-1	-	3	.00750	5.52	.237	.59326	1.500	1.150	PER IMP=	35.00
ADD HYD	AP-12	2& 3	30	.17770	31.52	1.785	.18833	1.600	.277		
ROUTE	AP-8R	20	22	.11280	15.03	.758	.12595	1.650	.208		
COMPUTE NM HYD	130.70	-	1	.01696	3.27	.092	.10184	1.550	.301	PER IMP=	.00
COMPUTE NM HYD	130.90	-	2	.00954	1.84	.052	.10184	1.550	.301	PER IMP=	.00
ADD HYD	130.91	1& 2	1	.02650	5.11	.144	.10183	1.550	.301		
ROUTE	AP-12R	30	3	.17770	30.80	1.785	.18834	1.650	.271		
ADD HYD	130.72	1& 3	4	.20420	34.10	1.929	.17711	1.650	.261		
ADD HYD	AP-13	4&22	2	.31700	49.13	2.686	.15890	1.650	.242		
ROUTE	AP-13R	2	3	.31700	44.96	2.687	.15890	1.700	.222		
COMPUTE NM HYD	130.80	-	1	.03010	4.52	.134	.08362	1.550	.235	PER IMP=	.00
ADD HYD	130.81	3& 1	10	.34710	47.44	2.821	.15237	1.700	.214		
COMPUTE NM HYD	P-5	-	3	.00290	.55	.017	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	AP-15UB	10& 3	11	.35000	47.71	2.837	.15199	1.700	.213		
COMPUTE NM HYD	120.50	-	3	.00520	.82	.023	.08362	1.550	.246	PER IMP=	.00
ADD HYD	AP-6	3&12	10	.10050	10.32	.560	.10443	1.600	.160		
ROUTE	AP-6R	10	2	.10050	10.45	.560	.10444	1.650	.162		

COMPUTE NM HYD	A-1D	-	3	.02400	39.69	1.802	1.40796	1.500	2.584	PER IMP=	90.00
ADD HYD	AP-6A	26	3	10	.12450	43.13	2.362	.35571	1.500	.541	
COMPUTE NM HYD	AP-6B&A-2D	-	3		.01250	18.04	.801	1.20080	1.500	2.256	PER IMP= 76.00
COMPUTE NM HYD	120.5A	-	4		.00200	.32	.009	.08362	1.550	.247	PER IMP= .00
ADD HYD	AP-6B+120.5A	36	4	20	.01450	18.35	.809	1.04667	1.500	1.977	
ADD HYD	AP-6A+	106	20	10	.13900	61.48	3.171	.42779	1.500	.691	
COMPUTE NM HYD	P-6	-	3		.00430	.81	.026	.11274	1.550	.293	PER IMP= 2.00
ADD HYD	AP-14	106	3	18	.14330	62.27	3.196	.41823	1.500	.679	
ROUTE RESERVOIR	AP-14R	18	2		.14330	19.45	3.196	.41823	2.000	.212	AC-FT= 1.412
ROUTE	POND6ROUTE36	2	12		.14330	19.44	3.196	.41822	2.000	.212	
ROUTE	POND6ROUTE48	12	22		.14330	19.44	3.196	.41822	2.000	.212	
DIVIDE HYD	AP-15	11	17		.35000	51.05	3.036	.16263	1.700	.228	
	130.83	AND	16		.35000	3.34	.199	.01064	1.700	.015	
ROUTE RESERVOIR	AP-15R	17	5		.35000	23.22	3.036	.16263	2.050	.104	AC-FT= 1.289
ROUTE	P-5R	5	11		.35000	23.50	3.036	.16263	2.050	.105	
ADD HYD	POND-5R&6R	116	22	10	.49330	42.93	6.232	.23688	2.050	.136	
COMPUTE NM HYD	P-4	-	3		.00360	.68	.022	.11274	1.550	.293	PER IMP= 2.00
ADD HYD	AP-15A	106	3	10	.49690	43.01	6.253	.23594	2.050	.135	
ROUTE RESERVOIR	AP-15AR	10	5		.49690	29.74	6.172	.23291	2.400	.094	AC-FT= 1.014
ROUTE	P-4R	5	12		.49690	29.74	6.172	.23291	2.400	.094	
COMPUTE NM HYD	AP-16	-	1		.01960	4.43	.124	.11841	1.550	.353	PER IMP= .00
ROUTE	140.11	1	22		.01960	3.49	.124	.11845	1.600	.278	
ROUTE	140.12	22	15		.01960	3.47	.124	.11845	1.650	.276	
COMPUTE NM HYD	140.20	-	1		.08920	16.45	.462	.09721	1.550	.288	PER IMP= .00

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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
ADD HYD	AP-17UB	156	1	2	.10880	18.28	.586	.10103	1.550	.262	
DIVIDE HYD	AP-17	2	17		.10880	19.74	.633	.10911	1.550	.283	
	140.23	AND	16		.10880	1.46	.047	.00808	1.550	.021	
ADD HYD	140.24	176	12	2	.60570	30.91	6.805	.21067	2.400	.080	
COMPUTE NM HYD	P-3	-	3		.00270	.51	.016	.11274	1.550	.294	PER IMP= 2.00
ADD HYD	AP-18	26	3	10	.60840	30.93	6.821	.21021	2.400	.079	
ROUTE RESERVOIR	AP-18R	10	4		.60840	26.20	6.752	.20808	2.850	.067	AC-FT= 1.137
ROUTE	P-3R	4	2		.60840	26.20	6.752	.20808	2.850	.067	
COMPUTE NM HYD	P-2	-	3		.00360	.68	.022	.11274	1.550	.293	PER IMP= 2.00
ADD HYD	AP-18A	26	3	10	.61200	26.21	6.773	.20750	2.850	.067	
ROUTE RESERVOIR	AP-18AR	10	5		.61200	18.42	5.724	.17538	3.900	.047	AC-FT= 2.373
ROUTE	P-2R	5	10		.61200	18.42	5.724	.17537	3.900	.047	
COMPUTE NM HYD	AP-19UB	-	1		.15250	16.02	.753	.09263	1.650	.164	PER IMP= .00
DIVIDE HYD	AP-19	1	17		.15250	16.82	.791	.09726	1.650	.172	
	150.12	AND	16		.15250	.80	.038	.00463	1.650	.008	
ADD HYD	150.13	106	17	10	.76450	18.72	6.515	.15979	3.900	.038	
COMPUTE NM HYD	P-1	-	3		.00290	.55	.017	.11274	1.550	.294	PER IMP= 2.00
ADD HYD	AP-20	106	3	10	.76740	18.72	6.532	.15959	3.900	.038	
ROUTE RESERVOIR	150.14	10	5		.76740	17.12	6.481	.15834	4.550	.035	AC-FT= .874
COMPUTE NM HYD	AP-21&G-1D	-	3		.02290	3.67	.102	.08362	1.550	.251	PER IMP= .00
COMPUTE NM HYD	AP-22&G-2D	-	4		.00310	4.90	.215	1.30254	1.500	2.469	PER IMP= 82.00
ROUTE	AP-22R	4	12		.00310	4.76	.215	1.30270	1.500	2.398	
COMPUTE NM HYD	AP-23&G-3D	-	5		.03510	4.10	.157	.08362	1.600	.183	PER IMP= .00
COMPUTE NM HYD	G-4D	-	6		.00330	5.08	.220	1.24983	1.500	2.407	PER IMP= 78.00
ADD HYD	AP-24	126	6	10	.00640	9.84	.435	1.27528	1.500	2.403	
FINISH											

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = WTF100PP.IN

RUN DATE (MON/DAY/YR) = 01/29/2001
USER NO. = C_ANDRSN.101

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 = 1	NOTATION
*S EXISTING CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE AND											
*S WITH THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: WTF100PP.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE PROPOSED POND											
*S OUTLET WORKS AND THE PROPOSED POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S EXISTING CONDITIONS WITHOUT THE I-40 INTERCEPTOR IN PLACE											
*S AND THE WEST SIDE TRANSIT FACILITY FULLY DEVELOPED.											
*S											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN EXISTING CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING).											
*S DRAINAGE BASINS SOUTH OF INTERSTATE 40 (WITH THE EXCEPTION											
*S OF THE WEST SIDE TRANSIT FACILITY AREA) WERE TAKEN FROM											
*S THE "MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK"											
*S REVISED OCTOBER 1993, PREPARED BY EASTERLING & ASSOCIATES, INC.											
*S DATE: 11/21/00											
START											
RAINFALL TYPE= 2											
TIME= .00											
RAIN24= 2.660											
*S BEGIN OFFSITE WATERSHED NORTH OF INTERSTATE 40 - EXISTING CONDITION											
COMPUTE NM HYD	0-1E	-	3	.02420	18.06	.567	.43936	1.550	1.166 PER IMP=	.00	
COMPUTE NM HYD	0-2E	-	4	.04220	24.34	.989	.43936	1.600	.901 PER IMP=	.00	
ADD HYD	AP-1	3& 4	10	.06640	41.88	1.556	.43936	1.550	.986		
ROUTE	AP-1R	10	2	.06640	36.11	1.556	.43938	1.650	.850		
COMPUTE NM HYD	0-3E	-	3	.01640	13.10	.402	.45924	1.500	1.248 PER IMP=	1.00	
ADD HYD	PARTAP-2	2& 3	10	.08280	44.73	1.958	.44330	1.650	.844		
COMPUTE NM HYD	AP-7&0-5E	-	3	.10970	63.37	2.803	.47912	1.600	.903 PER IMP=	2.00	
DIVIDE HYD	PART AP-7	3	98	.08594	32.00	2.196	.47911	1.500	.582		
	PART AP-7	AND	99	.02376	31.37	.607	.47911	1.600	2.062		
ROUTE	AP-7R	99	2	.02376	31.64	.608	.47944	1.600	2.081		
ADD HYD	AP-2	10& 2	10	.10656	76.00	2.565	.45135	1.600	1.114		
ROUTE	AP-2R	10	2	.10656	79.83	2.565	.45136	1.600	1.171		
COMPUTE NM HYD	I40-3	-	3	.00190	2.86	.115	1.13512	1.500	2.350 PER IMP=	35.00	
ADD HYD	AP-3	2& 3	20	.10846	81.89	2.680	.46333	1.600	1.180		
COMPUTE NM HYD	AP-4&0-4E	-	3	.00940	8.11	.240	.47912	1.500	1.348 PER IMP=	2.00	
ROUTE	AP-4R	3	2	.00940	8.17	.240	.47921	1.500	1.358		
COMPUTE NM HYD	I40-4	-	3	.00120	1.81	.073	1.13512	1.500	2.357 PER IMP=	35.00	
ADD HYD	AP-5	2& 3	10	.01060	9.98	.313	.55337	1.500	1.471		
ADD HYD	AP-3+AP-5	20&10	10	.11906	89.90	2.993	.47135	1.600	1.180		
ROUTE	PARTAP-6	10	12	.11906	87.97	2.993	.47135	1.650	1.154		
ROUTE	AP-7R-CUL	98	2	.08594	33.23	2.196	.47912	1.500	.604		
COMPUTE NM HYD	I40-2	-	3	.00310	4.65	.188	1.13512	1.500	2.346 PER IMP=	35.00	

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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
ADD HYD	AP-8	2& 3	20	.08904	37.88	2.384	.50195	1.500	.665		
COMPUTE NM HYD	0-6E	-	3	.07320	35.69	1.715	.43936	1.600	.762 PER IMP=	.00	
COMPUTE NM HYD	0-7E	-	4	.05230	39.03	1.226	.43936	1.550	1.166 PER IMP=	.00	
ADD HYD	AP-9	3& 4	10	.12550	71.47	2.941	.43936	1.550	.890		
ROUTE	AP-9R	10	2	.12550	70.89	2.941	.43937	1.600	.883		
COMPUTE NM HYD	0-8E	-	3	.00990	23.00	1.124	2.12906	1.500	3.630 PER IMP=	85.00	
ADD HYD	AP-10	2& 3	10	.13540	92.59	4.065	.56290	1.550	1.068		
ROUTE	AP-10R	10	2	.13540	89.10	4.065	.56291	1.600	1.028		
COMPUTE NM HYD	0-9E	-	3	.03480	31.99	1.000	.53875	1.500	1.436 PER IMP=	5.00	
ADD HYD	AP-11	2& 3	10	.17020	114.14	5.065	.55797	1.600	1.048		
ROUTE	AP-11R	10	2	.17020	114.79	5.065	.55797	1.600	1.054		
COMPUTE NM HYD	I40-1	-	3	.00750	11.24	.454	1.13512	1.500	2.342 PER IMP=	35.00	
ADD HYD	AP-12	2& 3	30	.17770	122.86	5.519	.58232	1.600	1.080		
ROUTE	AP-8R	20	22	.08904	38.28	2.384	.50196	1.550	.672		
COMPUTE NM HYD	130.70	-	1	.01696	15.02	.425	.46988	1.500	1.384 PER IMP=	.00	
COMPUTE NM HYD	130.90	-	2	.00954	8.45	.239	.46988	1.500	1.385 PER IMP=	.00	
ADD HYD	130.91	1& 2	1	.02650	23.48	.664	.46988	1.500	1.384		
ROUTE	AP-12R	30	3	.17770	121.65	5.519	.58233	1.600	1.070		
ADD HYD	130.72	1& 3	4	.20420	140.42	6.183	.56773	1.600	1.074		
ADD HYD	AP-13	4&22	2	.29324	176.26	8.567	.54776	1.600	.939		
ROUTE	AP-13R	2	3	.29324	172.47	8.567	.54776	1.650	.919		
COMPUTE NM HYD	130.80	-	1	.03010	23.38	.705	.43936	1.550	1.214 PER IMP=	.00	
ADD HYD	130.81	3& 1	10	.32334	188.04	9.272	.53767	1.650	.909		
COMPUTE NM HYD	P-5	-	3	.00290	2.51	.074	.47912	1.500	1.353 PER IMP=	2.00	
ADD HYD	AP-15UB	10& 3	11	.32624	189.56	9.345	.53710	1.650	.908		
COMPUTE NM HYD	120.50	-	3	.00520	4.28	.122	.43936	1.500	1.287 PER IMP=	.00	
ADD HYD	AP-6	3&12	10	.12426	90.59	3.115	.47001	1.650	1.139		
ROUTE	AP-6R	10	2	.12426	91.47	3.115	.47001	1.650	1.150		

COMPUTE NM HYD	A-1D	-	3	.02400	61.30	2.881	2.25115	1.500	3.991	PER IMP=	90.00
ADD HYD	AP-6A	24	3	.14826	126.03	5.996	.75833	1.650	1.328		
COMPUTE NM HYD	AP-6B&A-2D	-	3	.01250	29.07	1.312	1.96827	1.500	3.634	PER IMP=	76.00
COMPUTE NM HYD	120.5A	-	4	.00200	1.65	.047	.43936	1.500	1.290	PER IMP=	.00
ADD HYD	AP-6B+120.5A	34	4	.01450	30.72	1.359	1.75736	1.500	3.310		
ADD HYD	AP-6A+	104	20	.16276	146.46	7.355	.84732	1.600	1.406		
COMPUTE NM HYD	P-6	-	3	.00430	3.72	.110	.47912	1.500	1.350	PER IMP=	2.00
ADD HYD	AP-14	104	3	.16706	149.41	7.465	.83784	1.600	1.397		
ROUTE RESERVOIR	AP-14R	18	2	.16706	45.45	7.465	.83784	1.950	.425	AC-FT=	3.692
ROUTE	POND6ROUTE36	2	12	.16706	45.46	7.465	.83784	2.000	.425		
ROUTE	POND6ROUTE48	12	22	.16706	45.46	7.465	.83784	2.000	.425		
DIVIDE HYD	AP-15	11	17	.32624	202.83	9.999	.57470	1.650	.971		
	130.83 AND	16		.32624	13.27	.654	.03760	1.650	.064		
ROUTE RESERVOIR	AP-15R	17	5	.32624	130.19	9.999	.57470	1.850	.624	AC-FT=	2.645
ROUTE	P-5R	5	11	.32624	131.24	9.999	.57470	1.800	.629		
ADD HYD	POND-5R&6R	114	22	.49330	175.50	17.465	.66382	1.900	.556		
COMPUTE NM HYD	P-4	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-15A	104	3	.49690	175.95	17.556	.66246	1.900	.553		
ROUTE RESERVOIR	AP-15AR	10	5	.49690	98.28	17.475	.65941	2.250	.309	AC-FT=	5.131
ROUTE	P-4R	5	12	.49690	98.21	17.475	.65941	2.300	.309		
COMPUTE NM HYD	AP-16	-	1	.01960	18.50	.522	.49901	1.500	1.475	PER IMP=	.00
ROUTE	140.11	1	22	.01960	16.56	.522	.49908	1.550	1.320		
ROUTE	140.12	22	15	.01960	17.13	.522	.49909	1.600	1.366		
COMPUTE NM HYD	140.20	-	1	.08920	78.50	2.196	.46166	1.500	1.375	PER IMP=	.00

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
ADD HYD	AP-17UB	154	1	.10880	91.60	2.718	.46840	1.550	1.316		
DIVIDE HYD	AP-17	2	17	.10880	98.93	2.935	.50587	1.550	1.421		
	140.23 AND	16		.10880	7.33	.217	.03747	1.550	.105		
ADD HYD	140.24	174	12	.60570	104.93	20.411	.63183	1.550	.271		
COMPUTE NM HYD	P-3	-	3	.00270	2.34	.069	.47912	1.500	1.354	PER IMP=	2.00
ADD HYD	AP-18	24	3	.60840	107.19	20.479	.63113	1.550	.275		
ROUTE RESERVOIR	AP-18R	10	4	.60840	92.84	20.410	.62901	2.650	.238	AC-FT=	3.039
ROUTE	P-3R	4	2	.60840	92.83	20.410	.62901	2.650	.238		
COMPUTE NM HYD	P-2	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-18A	24	3	.61200	92.90	20.502	.62811	2.650	.237		
ROUTE RESERVOIR	AP-18AR	10	5	.61200	48.57	19.452	.59597	3.700	.124	AC-FT=	7.496
ROUTE	P-2R	5	10	.61200	48.57	19.452	.59597	3.700	.124		
COMPUTE NM HYD	AP-19UB	-	1	.15250	85.35	3.692	.45390	1.600	.874	PER IMP=	.00
DIVIDE HYD	AP-19	1	17	.15250	89.62	3.876	.47660	1.600	.918		
	150.12 AND	16		.15250	4.27	.185	.02270	1.600	.044		
ADD HYD	150.13	104	17	.76450	89.64	23.329	.57216	1.600	.183		
COMPUTE NM HYD	P-1	-	3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	AP-20	104	3	.76740	91.63	23.402	.57179	1.600	.187		
ROUTE RESERVOIR	150.14	10	5	.76740	48.42	23.351	.57053	4.200	.099	AC-FT=	2.311
COMPUTE NM HYD	AP-21&G-1D	-	3	.02290	19.35	.537	.43936	1.500	1.320	PER IMP=	.00
COMPUTE NM HYD	AP-22&G-2D	-	4	.00310	7.72	.349	2.11028	1.500	3.893	PER IMP=	82.00
ROUTE	AP-22R	4	12	.00310	7.56	.349	2.11044	1.500	3.808		
COMPUTE NM HYD	AP-23&G-3D	-	5	.03510	22.33	.822	.43936	1.550	.994	PER IMP=	.00
COMPUTE NM HYD	G-4D	-	6	.00330	8.10	.359	2.03985	1.500	3.837	PER IMP=	78.00
ADD HYD	AP-24	124	6	.00640	15.66	.708	2.07389	1.500	3.823		
FINISH											

Int10ee.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMATCA Hydrologic Model - January, 1994
INPUT FILE = INT10EE.IN

RUN DATE (MON/DAY/YR) =01/30/2001
USER NO.= C_ANDRSN.I01

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 = 1	NOTATION
*S DEVELOPED INTERIM CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE *S 10 YEAR, 24 HOUR STORM EVENT *S *S FILE NAME: INT10EE.IN *S *S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND *S OUTLET WORKS AND THE EXISTING POND GRADING. *S *S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY *S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING *S DEVELOPED CONDITIONS SOUTH OF INTERSTATE 40 WITHOUT THE I-40 INTERCEPTOR *S IN PLACE. IN OTHER WORDS, FULLY DEVELOPED CONDITIONS SOUTH OF I-40 *S INCLUDING EXISTING CONDITION OFFSITE FLOWS NORTH OF INTERSTATE 40. *S *S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN DEVELOPED/INTERIM CONDITIONS. *S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER *S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT) *S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING) *S *S DATE: 11/8/00 START RAINFALL TYPE= 2 *S BEGIN WATERSHED NORTH OF INTERSTATE 40 COMPUTE NM HYD O-1E - 3 .02420 3.43 .108 .08362 1.550 .221 PER IMP= .00 COMPUTE NM HYD O-2E - 4 .04220 4.48 .188 .08362 1.600 .166 PER IMP= .00 ADD HYD AP-1 3& 4 10 .06640 7.65 .296 .08361 1.550 .180 ROUTE AP-1R 10 2 .06640 5.45 .296 .08362 1.700 .128 COMPUTE NM HYD O-3E - 3 .01640 2.72 .086 .09818 1.550 .259 PER IMP= 1.00 ADD HYD PARTAP-2 2& 3 10 .08280 7.02 .382 .08650 1.650 .132 COMPUTE NM HYD AP-7&O-5E - 3 .10970 13.54 .660 .11274 1.600 .193 PER IMP= 2.00 DIVIDE HYD PART AP-7 3 98 .10970 13.54 .660 .11274 1.600 .193 PART AP-7 AND 99 .00000 .00 .000 .00000 -.050 .000 ROUTE AP-7R 99 2 .00000 .00 .000 .00000 -.050 .000 ADD HYD AP-2 10& 2 10 .08280 7.02 .382 .08650 1.650 .132 ROUTE AP-2R 10 2 .08280 6.98 .382 .08651 1.700 .132 COMPUTE NM HYD I40-3 - 3 .00190 1.40 .060 .59326 1.500 1.154 PER IMP= 35.00 ADD HYD AP-3 2& 3 20 .08470 7.72 .442 .09786 1.650 .142 COMPUTE NM HYD AP-4&O-4E - 3 .00940 1.75 .057 .11274 1.550 .292 PER IMP= 2.00 ROUTE AP-4R 3 2 .00940 1.84 .057 .11280 1.550 .306 COMPUTE NM HYD I40-4 - 3 .00120 .89 .038 .59326 1.500 1.156 PER IMP= 35.00 ADD HYD AP-5 2& 3 10 .01060 2.64 .094 .16710 1.550 .389 ADD HYD AP-3+AP-5 20&10 10 .09530 9.60 .537 .10556 1.600 .157 ROUTE AP-6 10 12 .09530 9.61 .537 .10557 1.600 .158 ROUTE AP-7R-CUL 98 2 .10970 13.58 .660 .11274 1.600 .193 COMPUTE NM HYD I40-2 - 3 .00310 2.28 .098 .59326 1.500 1.152 PER IMP= 35.00 ADD HYD AP-8 2& 3 20 .11280 15.19 .758 .12594 1.600 .210 COMPUTE NM HYD O-6E - 3 .07320 6.49 .326 .08362 1.650 .138 PER IMP= .00 COMPUTE NM HYD O-7E - 4 .05230 7.41 .233 .08362 1.550 .221 PER IMP= .00 ADD HYD AP-9 3& 4 10 .12550 13.19 .560 .08362 1.600 .164 *S BEGIN WATERSHED SOUTH OF INTERSTATE 40 ROUTE AP-9R 10 2 .12550 13.27 .560 .08362 1.600 .165 COMPUTE NM HYD O-8E - 3 .00990 14.68 .698 1.32131 1.500 2.318 PER IMP= 85.00 ADD HYD AP-10 2& 3 10 .13540 26.66 1.257 .17411 1.550 .308 ROUTE AP-10R 10 2 .13540 21.80 1.257 .17411 1.650 .252 COMPUTE NM HYD O-9E - 3 .03480 8.15 .290 .15643 1.500 .366 PER IMP= 5.00 ADD HYD AP-11 2& 3 10 .17020 27.81 1.548 .17049 1.600 .255 ROUTE AP-11R 10 2 .17020 27.65 1.548 .17050 1.600 .254 COMPUTE NM HYD I40-1 - 3 .00750 5.52 .237 .59326 1.500 1.150 PER IMP= 35.00 ADD HYD AP-12 2& 3 30 .17770 31.52 1.785 .18833 1.600 .277 *S BEGIN WATERSHED SOUTH OF INTERSTATE 40 ROUTE AP-12R 30 2 .17770 31.40 1.785 .18834 1.600 .276 ROUTE AP-8R 20 22 .11280 15.07 .758 .12595 1.600 .209 ADD HYD AP-13 2&22 10 .29050 46.47 2.543 .16411 1.600 .250 *S ROUTE FLOWS FROM AP-13 THRU PIPE TO UNSER DIVERSION POND NO. 5. *S IF FLOW FROM AP-13 WERE ROUTED TO TO UNSER DIVERSION POND NO. 6, *S POND NO. 6 WOULD OVERTOP. PLUS, THE EXISTING FLOW FROM THIS AREA *S DRAINS INTO POND NO. 5. ROUTE AP-13R 10 32 .29050 44.30 2.543 .16411 1.650 .238 COMPUTE NM HYD AP-13&A-1D - 3 .02570 36.06 1.551 1.13124 1.500 2.192 PER IMP= 69.00 ROUTE AP-13AR 3 22 .02570 35.42 1.551 1.13126 1.500 2.154 ROUTE AP-6R 12 2 .09530 9.68 .537 .10557 1.600 .159 ADD HYD PARTAP-14 22& 2 10 .12100 42.03 2.087 .32341 1.550 .543 COMPUTE NM HYD A-2D - 3 .02840 45.59 2.013 1.32889 1.500 2.508 PER IMP= 84.00 ADD HYD AP-14 10& 3 10 .14940 85.56 4.100 .51455 1.500 .895 ROUTE AP-14R 10 2 .14940 85.01 4.100 .51455 1.550 .889 COMPUTE NM HYD A-3D - 3 .02400 39.69 1.802 1.40796 1.500 2.584 PER IMP= 90.00 ADD HYD AP-15 2& 3 10 .17340 121.81 5.902 .63820 1.500 1.098 COMPUTE NM HYD AP-16&A-4D - 3 .01250 18.04 .801 1.20080 1.500 2.256 PER IMP= 76.00											

ADD HYD	AP-15+AP-16	10	3	10	.18590	139.86	6.703	.67603	1.500	1.176		
COMPUTE NM HYD	P-6	-		3	.00430	.81	.026	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-17	10	3	10	.19020	140.65	6.728	.66322	1.500	1.155		
ROUTE RESERVOIR	AP-17R	10		2	.19020	10.85	6.728	.66322	2.300	.089	AC-FT=	4.349
ROUTE	POND6ROUTE36	2		12	.19020	10.85	6.728	.66322	2.300	.089		
ROUTE	POND6ROUTE48	12		22	.19020	10.85	6.728	.66322	2.300	.089		
COMPUTE NM HYD	P-5	-		3	.00290	.55	.017	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	AP-18	3	32	10	.29340	44.66	2.559	.16354	1.650	.238		
ROUTE RESERVOIR	AP-18R	10		12	.29340	15.49	2.559	.16353	2.150	.082	AC-FT=	1.231
ROUTE	POND-5ROUTE4	12		32	.29340	15.68	2.559	.16354	2.150	.084		
ADD HYD	POND-5R46R	32	22	20	.48360	26.47	9.287	.36006	2.150	.086		
COMPUTE NM HYD	AP-19&C-1D	-		3	.01150	14.28	.597	.97312	1.500	1.940	PER IMP=	57.00
ROUTE	AP-19R	3		2	.01150	13.58	.597	.97317	1.550	1.846		
COMPUTE NM HYD	C-2D	-		4	.05740	69.47	2.979	.97312	1.500	1.891	PER IMP=	57.00
ADD HYD	AP-20	2	4	10	.06890	82.47	3.576	.97311	1.500	1.870		
COMPUTE NM HYD	P-4	-		3	.00360	.68	.022	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	P-4+POND-5R4	20	3	20	.48720	26.52	9.307	.35820	2.150	.085		
ADD HYD	AP-20A	10	20	30	.55610	93.37	12.883	.43438	1.500	.262		
ROUTE RESERVOIR	AP-20AR	30		2	.55610	23.45	12.796	.43143	2.450	.066	AC-FT=	3.540
ROUTE	POND-4R	2		12	.55610	23.46	12.795	.43142	2.450	.066		
COMPUTE NM HYD	P-3	-		3	.00270	.51	.016	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	P-3+POND-4R	12	3	10	.55880	23.48	12.811	.42985	2.450	.066		
COMPUTE NM HYD	AP-21&D-1D	-		3	.04680	58.08	2.429	.97312	1.500	1.939	PER IMP=	57.00
ADD HYD	AP-21A	10	3	10	.60560	62.72	15.240	.47183	1.500	.162		

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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
ROUTE RESERVOIR	AP-21AR	10	2	.60560	23.96	15.034	.46548	2.650	.062	AC-FT=	2.136
COMPUTE NM HYD	AP-22&E-1D	-	3	.02820	39.44	1.741	1.15760	1.500	2.185	PER IMP=	71.00
ROUTE	AP-22R	3	12	.02820	38.12	1.741	1.15761	1.550	2.112		
COMPUTE NM HYD	E-2D	-	3	.01720	29.01	1.292	1.40796	1.500	2.635	PER IMP=	90.00
ADD HYD	AP-23	3	12	.04540	66.46	3.033	1.25243	1.500	2.287		
ROUTE	AP-23R	10	12	.04540	66.02	3.033	1.25245	1.550	2.272		
COMPUTE NM HYD	E-3D	-	3	.04250	52.74	2.206	.97312	1.500	1.939	PER IMP=	57.00
ADD HYD	AP-24	12	3	.08790	115.92	5.238	1.11738	1.500	2.060		
ROUTE	AP-23R	10	12	.08790	116.53	5.238	1.11739	1.550	2.071		
COMPUTE NM HYD	E-4D	-	3	.00300	5.07	.225	1.40796	1.500	2.638	PER IMP=	90.00
ADD HYD	AP-25	12	3	.09090	120.95	5.464	1.12697	1.550	2.079		
ADD HYD	AP-25+POND-3	2	10	.69650	124.65	20.498	.55181	1.550	.280		
COMPUTE NM HYD	P-2	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-25A	3	10	.70010	125.33	20.519	.54953	1.550	.280		
ROUTE RESERVOIR	AP-25AR	10	2	.70010	14.35	19.345	.51811	5.000	.032	AC-FT=	6.221
ROUTE	POND-2R	2	12	.70010	14.35	19.344	.51807	5.050	.032		
COMPUTE NM HYD	AP-26&F-1D	-	3	.03980	48.17	2.066	.97312	1.500	1.891	PER IMP=	57.00
COMPUTE NM HYD	P-1	-	4	.00290	.55	.017	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	P-1+P-1D	3	4	.04270	48.71	2.082	.91423	1.500	1.783		
ADD HYD	AP-26A	10	12	.74280	49.19	21.426	.54084	1.500	.103		
ROUTE RESERVOIR	AP-26AR	10	2	.74280	10.14	21.067	.53179	11.400	.021	AC-FT=	2.885
COMPUTE NM HYD	AP-27&G-1D	-	3	.02290	35.53	1.559	1.27619	1.500	2.424	PER IMP=	80.00
COMPUTE NM HYD	AP-28&G-2D	-	4	.00310	4.90	.215	1.30254	1.500	2.469	PER IMP=	82.00
ROUTE	AP-28R	4	12	.00310	4.76	.215	1.30270	1.500	2.398		
COMPUTE NM HYD	AP-29&G-3D	-	5	.03510	48.94	2.389	1.27619	1.500	2.178	PER IMP=	80.00
COMPUTE NM HYD	G-4D	-	6	.00330	5.08	.220	1.24983	1.500	2.407	PER IMP=	78.00
ADD HYD	AP-30	12	6	.00640	9.84	.435	1.27528	1.500	2.403		
FINISH											

Int100ee.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = INT100EE.IN

RUN DATE (MON/DAY/YR) =01/30/2001
USER NO.= C_ANDRSN.I01

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 = 1	NOTATION
*S DEVELOPED INTERIM CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: INT100EE.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S DEVELOPED CONDITIONS SOUTH OF INTERSTATE 40 WITHOUT THE I-40 INTERCEPTOR											
*S IN PLACE. IN OTHER WORDS, FULLY DEVELOPED CONDITIONS SOUTH OF I-40											
*S INCLUDING EXISTING CONDITION OFFSITE FLOWS NORTH OF INTERSTATE 40.											
*S											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN DEVELOPED/INTERIM CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S											
*S DATE: 11/8/00											
START											
RAINFALL TYPE= 2											
TIME= .00											
RAIN24= 2.660											
*S BEGIN WATERSHED NORTH OF INTERSTATE 40											
COMPUTE NM HYD	O-1E	-	3	.02420	18.06	.567	.43936	1.550	1.166	PER IMP=	.00
COMPUTE NM HYD	O-2E	-	4	.04220	24.34	.989	.43936	1.600	.901	PER IMP=	.00
ADD HYD	AP-1	36	4	10	.06640	41.88	1.556	.43936	.986		
ROUTE	AP-1R	10	2		.06640	36.11	1.556	.43938	1.650	.850	
COMPUTE NM HYD	O-3E	-	3		.01640	13.10	.402	.45924	1.500	1.248	PER IMP= 1.00
ADD HYD	PARTAP-2	26	3	10	.08280	44.73	1.958	.44330	1.650	.844	
COMPUTE NM HYD	AP-760-5E	-	3		.10970	63.37	2.803	.47912	1.600	.903	PER IMP= 2.00
DIVIDE HYD	PART AP-7	3	98		.08594	32.00	2.196	.47911	1.500	.582	
ROUTE	PART AP-7	AND	99		.02376	31.37	.607	.47911	1.600	2.062	
ROUTE	AP-7R	99	2		.02376	31.64	.608	.47944	1.600	2.081	
ADD HYD	AP-2	106	2	10	.10656	76.00	2.565	.45135	1.600	1.114	
ROUTE	AP-2R	10	2		.10656	79.83	2.565	.45136	1.600	1.171	
COMPUTE NM HYD	I40-3	-	3		.00190	2.86	.115	1.13512	1.500	2.350	PER IMP= 35.00
ADD HYD	AP-3	26	3	20	.10846	81.89	2.680	.46333	1.600	1.180	
COMPUTE NM HYD	AP-460-4E	-	3		.00940	8.11	.240	.47912	1.500	1.348	PER IMP= 2.00
ROUTE	AP-4R	3	2		.00940	8.17	.240	.47921	1.500	1.358	
COMPUTE NM HYD	I40-4	-	3		.00120	1.81	.073	1.13512	1.500	2.357	PER IMP= 35.00
ADD HYD	AP-5	26	3	10	.01060	9.98	.313	.55337	1.500	1.471	
ADD HYD	AP-3+AP-5	206	10	10	.11906	89.90	2.993	.47135	1.600	1.180	
ROUTE	AP-6	10	12		.11906	87.97	2.993	.47135	1.650	1.154	
ROUTE	AP-7R-CUL	98	2		.08594	33.23	2.196	.47912	1.500	.604	
COMPUTE NM HYD	I40-2	-	3		.00310	4.65	.188	1.13512	1.500	2.346	PER IMP= 35.00
ADD HYD	AP-8	26	3	20	.08904	37.88	2.384	.50195	1.500	.665	
COMPUTE NM HYD	O-6E	-	3		.07320	35.69	1.715	.43936	1.600	.762	PER IMP= .00
COMPUTE NM HYD	O-7E	-	4		.05230	39.03	1.226	.43936	1.550	1.166	PER IMP= .00
ADD HYD	AP-9	36	4	10	.12550	71.47	2.941	.43936	1.550	.890	

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
ROUTE	AP-9R	10	2		.12550	70.89	2.941	.43937	1.600	.883	
COMPUTE NM HYD	O-8E	-	3		.00990	23.00	1.124	2.12906	1.500	3.630	PER IMP= 85.00
ADD HYD	AP-10	26	3	10	.13540	92.59	4.065	.56290	1.550	1.068	
ROUTE	AP-10R	10	2		.13540	89.10	4.065	.56291	1.600	1.028	
COMPUTE NM HYD	O-9E	-	3		.03480	31.99	1.000	.53875	1.500	1.436	PER IMP= 5.00
ADD HYD	AP-11	26	3	10	.17020	114.14	5.065	.55797	1.600	1.048	
ROUTE	AP-11R	10	2		.17020	114.79	5.065	.55797	1.600	1.054	
COMPUTE NM HYD	I40-1	-	3		.00750	11.24	.454	1.13512	1.500	2.342	PER IMP= 35.00
ADD HYD	AP-12	26	3	30	.17770	122.86	5.519	.58232	1.600	1.080	
*S BEGIN WATERSHED SOUTH OF INTERSTATE 40											
ROUTE	AP-12R	30	2		.17770	123.23	5.519	.58233	1.600	1.084	
ROUTE	AP-8R	20	22		.08904	39.96	2.384	.50196	1.500	.701	
ADD HYD	AP-13	2622	10		.26674	158.78	7.902	.55549	1.600	.930	
*S ROUTE FLOWS FROM AP-13 THRU PIPE TO UNSER DIVERSION POND NO. 5.											
*S IF FLOW FROM AP-13 WERE ROUTED TO TO UNSER DIVERSION POND NO. 6,											
*S POND NO. 6 WOULD OVERTOP. PLUS, THE EXISTING FLOW FROM THIS AREA											
*S DRAINS INTO POND NO. 5.											
ROUTE	AP-13R	10	32		.26674	154.05	7.902	.55550	1.650	.902	
COMPUTE NM HYD	AP-13A6A-1D	-	3		.02570	59.05	2.579	1.88137	1.500	3.590	PER IMP= 69.00
ROUTE	AP-13AR	3	22		.02570	58.26	2.579	1.88138	1.500	3.542	
ROUTE	AP-6R	12	2		.11906	88.44	2.993	.47135	1.650	1.161	
ADD HYD	PARTAP-14	226	2	10	.14476	125.63	5.572	.72167	1.600	1.356	
COMPUTE NM HYD	A-2D	-	3		.02840	71.47	3.250	2.14550	1.500	3.932	PER IMP= 84.00
ADD HYD	AP-14	106	3	10	.17316	175.97	8.822	.95518	1.550	1.588	
ROUTE	AP-14R	10	2		.17316	175.47	8.822	.95518	1.600	1.583	
COMPUTE NM HYD	A-3D	-	3		.02400	61.30	2.881	2.25115	1.500	3.991	PER IMP= 90.00
ADD HYD	AP-15	26	3	10	.19716	229.58	11.703	1.11293	1.550	1.819	
COMPUTE NM HYD	AP-166A-4D	-	3		.01250	29.07	1.312	1.96827	1.500	3.634	PER IMP= 76.00

ADD HYD	AP-15+AP-16	10	3	10	.20966	255.16	13.015	1.16393	1.550	1.902		
COMPUTE NM HYD	P-6	-		3	.00430	3.72	.110	.47912	1.500	1.350	PER IMP=	2.00
ADD HYD	AP-17	10	3	10	.21396	258.75	13.125	1.15016	1.550	1.890		
ROUTE RESERVOIR	AP-17R	10		2	.21396	82.33	13.125	1.15016	1.950	.601	AC-FT=	6.783
ROUTE	POND6ROUTE36	2		12	.21396	82.41	13.125	1.15016	1.950	.602		
ROUTE	POND6ROUTE48	12		22	.21396	83.00	13.125	1.15016	1.900	.606		
COMPUTE NM HYD	P-5	-		3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	AP-18	3	32	10	.26964	155.57	7.976	.55462	1.650	.901		
ROUTE RESERVOIR	AP-18R	10		12	.26964	113.38	7.976	.55462	1.800	.657	AC-FT=	2.044
ROUTE	POND-5ROUTE4	12		32	.26964	119.58	7.976	.55462	1.800	.693		
ADD HYD	POND-5R&6R	32	22	20	.48360	201.34	21.101	.81811	1.800	.651		
COMPUTE NM HYD	AP-19&C-1D	-		3	.01150	24.41	1.024	1.67006	1.500	3.317	PER IMP=	57.00
ROUTE	AP-19R	3		2	.01150	23.29	1.024	1.67010	1.550	3.164		
COMPUTE NM HYD	C-2D	-		4	.05740	118.78	5.113	1.67006	1.500	3.233	PER IMP=	57.00
ADD HYD	AP-20	2	4	10	.06890	141.50	6.137	1.67005	1.500	3.209		
COMPUTE NM HYD	P-4	-		3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	P-4+POND-5R&6	20	3	20	.48720	202.13	21.192	.81559	1.800	.648		
ADD HYD	AP-20A	10	20	30	.55610	251.18	27.329	.92146	1.800	.706		
ROUTE RESERVOIR	AP-20AR	30		2	.55610	122.30	27.237	.91836	2.250	.344	AC-FT=	8.157
ROUTE	POND-4R	2		12	.55610	122.38	27.237	.91835	2.250	.344		
COMPUTE NM HYD	P-3	-		3	.00270	2.34	.069	.47912	1.500	1.354	PER IMP=	2.00
ADD HYD	P-3+POND-4R	12	3	10	.55880	122.51	27.305	.91620	2.250	.343		
COMPUTE NM HYD	AP-21&D-1D	-		3	.04680	99.31	4.168	1.67006	1.500	3.316	PER IMP=	57.00
ADD HYD	AP-21A	10	3	10	.60560	137.30	31.474	.97446	2.050	.354		

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
ROUTE RESERVOIR	AP-21AR	10	2	.60560	112.11	31.212	.96635	2.700	.289	AC-FT=	4.426
COMPUTE NM HYD	AP-22&E-1D	-	3	.02820	64.16	2.883	1.91659	1.500	3.555	PER IMP=	71.00
ROUTE	AP-22R	3	12	.02820	61.84	2.883	1.91660	1.550	3.427		
COMPUTE NM HYD	E-2D	-	3	.01720	44.80	2.065	2.25115	1.500	4.070	PER IMP=	90.00
ADD HYD	AP-23	3	12	.04540	106.21	4.948	2.04333	1.500	3.655		
ROUTE	AP-23R	10	12	.04540	104.90	4.948	2.04334	1.550	3.610		
COMPUTE NM HYD	E-3D	-	3	.04250	90.19	3.785	1.67006	1.500	3.316	PER IMP=	57.00
ADD HYD	AP-24	12	3	.08790	191.75	8.733	1.86285	1.500	3.408		
ROUTE	AP-23R	10	12	.08790	190.60	8.733	1.86286	1.550	3.388		
COMPUTE NM HYD	E-4D	-	3	.00300	7.83	.360	2.25115	1.500	4.076	PER IMP=	90.00
ADD HYD	AP-25	12	3	.09090	197.44	9.093	1.87566	1.550	3.394		
ADD HYD	AP-25+POND-3	2	10	.69650	203.90	40.305	1.08502	1.550	.457		
COMPUTE NM HYD	P-2	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-25A	3	10	.70010	206.90	40.397	1.08190	1.550	.462		
ROUTE RESERVOIR	AP-25AR	10	2	.70010	131.20	38.772	1.03839	2.200	.293	AC-FT=	7.367
ROUTE	POND-2R	2	12	.70010	132.28	38.770	1.03833	2.150	.295		
COMPUTE NM HYD	AP-26&F-1D	-	3	.03980	82.37	3.545	1.67006	1.500	3.234	PER IMP=	57.00
COMPUTE NM HYD	P-1	-	4	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	P-1+P-1D	3	4	.04270	84.88	3.618	1.58885	1.500	3.106		
ADD HYD	AP-26A	10	12	.74280	147.24	42.388	1.06998	2.050	.310		
ROUTE RESERVOIR	AP-26AR	10	2	.74280	113.87	41.053	1.03626	3.050	.240	AC-FT=	6.641
COMPUTE NM HYD	AP-27&G-1D	-	3	.02290	56.30	2.534	2.07506	1.500	3.841	PER IMP=	80.00
COMPUTE NM HYD	AP-28&G-2D	-	4	.00310	7.72	.349	2.11028	1.500	3.893	PER IMP=	82.00
ROUTE	AP-28R	4	12	.00310	7.56	.349	2.11044	1.500	3.808		
COMPUTE NM HYD	AP-29&G-3D	-	5	.03510	77.66	3.885	2.07506	1.500	3.457	PER IMP=	80.00
COMPUTE NM HYD	G-4D	-	6	.00330	8.10	.359	2.03985	1.500	3.837	PER IMP=	78.00
ADD HYD	AP-30	12	6	.00640	15.66	.708	2.07389	1.500	3.823		
FINISH											

Int10pe.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = INT10PE.IN

RUN DATE (MON/DAY/YR) =01/22/2001
USER NO.= C_ANDRSN.101

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 = 1	NOTATION
*S DEVELOPED INTERIM CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 10 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: INT10PE.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE PROPOSED POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S DEVELOPED CONDITIONS SOUTH OF INTERSTATE 40 WITHOUT THE I-40 INTERCEPTOR											
*S IN PLACE. IN OTHER WORDS, FULLY DEVELOPED CONDITIONS SOUTH OF I-40											
*S INCLUDING EXISTING CONDITION OFFSITE FLOWS NORTH OF INTERSTATE 40.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN DEVELOPED/INTERIM CONDITIONS.											
*S THE OUTLET WORKS FOR EACH UNSER DIVERSION POND HAS BEEN MODIFIED											
*S BY PLACING ADDITIONAL 10" OPENINGS AROUND EACH STRUCTURE EXCEPT											
*S AT UNSER DIVERSION POND NO. 5 (PER CHUCK EASTERLING'S REPORT).											
*S OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER ELEVATIONS											
*S SHOWN ON THE UNSER DIVERSION (AS-BUILT) CONSTRUCTION PLAN SET											
*S (PLANS BY CHUCK EASTERLING).											
*S DATE: 11/8/00											
START											
RAINFALL TYPE= 2											
*S BEGIN WATERSHED NORTH OF INTERSTATE 40											
COMPUTE NM HYD	O-1E	-	3	.02420	3.43	.108	.08362	1.550	.221	PER IMP=	.00
COMPUTE NM HYD	O-2E	-	4	.04220	4.48	.188	.08362	1.600	.166	PER IMP=	.00
ADD HYD	AP-1	3& 4	10	.06640	7.65	.296	.08361	1.550	.180		
ROUTE	AP-1R	10	2	.06640	5.45	.296	.08362	1.700	.128		
COMPUTE NM HYD	O-3E	-	3	.01640	2.72	.086	.09818	1.550	.259	PER IMP=	1.00
ADD HYD	PARTAP-2	2& 3	10	.08280	7.02	.382	.08650	1.650	.132		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	13.54	.660	.11274	1.600	.193	PER IMP=	2.00
DIVIDE HYD	PART AP-7	3	98	.10970	13.54	.660	.11274	1.600	.193		
ROUTE	AP-7R	AND 99	2	.00000	.00	.000	.00000	-.050	.000		
ADD HYD	AP-2	10& 2	10	.08280	7.02	.382	.08650	1.650	.132		
ROUTE	AP-2R	10	2	.08280	6.98	.382	.08651	1.700	.132		
COMPUTE NM HYD	I40-3	-	3	.00190	1.40	.060	.59326	1.500	1.154	PER IMP=	35.00
ADD HYD	AP-3	2& 3	20	.08470	7.72	.442	.09786	1.650	.142		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	1.75	.057	.11274	1.550	.292	PER IMP=	2.00
ROUTE	AP-4R	3	2	.00940	1.84	.057	.11280	1.550	.306		
COMPUTE NM HYD	I40-4	-	3	.00120	.89	.038	.59326	1.500	1.156	PER IMP=	35.00
ADD HYD	AP-5	2& 3	10	.01060	2.64	.094	.16710	1.550	.389		
ADD HYD	AP-3+AP-5	20&10	10	.09530	9.60	.537	.10556	1.600	.157		
ROUTE	AP-6	10	12	.09530	9.61	.537	.10557	1.600	.158		
ROUTE	AP-7R-CUL	98	2	.10970	13.58	.660	.11274	1.600	.193		
COMPUTE NM HYD	I40-2	-	3	.00310	2.28	.098	.59326	1.500	1.152	PER IMP=	35.00
ADD HYD	AP-8	2& 3	20	.11280	15.19	.758	.12594	1.600	.210		
COMPUTE NM HYD	O-6E	-	3	.07320	6.49	.326	.08362	1.650	.138	PER IMP=	.00
COMPUTE NM HYD	O-7E	-	4	.05230	7.41	.233	.08362	1.550	.221	PER IMP=	.00

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
ADD HYD	AP-9	3& 4	10	.12550	13.19	.560	.08362	1.600	.164		
ROUTE	AP-9R	10	2	.12550	13.27	.560	.08362	1.600	.165		
COMPUTE NM HYD	O-8E	-	3	.00990	14.68	.698	1.32131	1.500	2.318	PER IMP=	85.00
ADD HYD	AP-10	2& 3	10	.13540	26.66	1.257	.17411	1.550	.308		
ROUTE	AP-10R	10	2	.13540	21.80	1.257	.17411	1.650	.252		
COMPUTE NM HYD	O-9E	-	3	.03480	8.15	.290	.15643	1.500	.366	PER IMP=	5.00
ADD HYD	AP-11	2& 3	10	.17020	27.81	1.548	.17049	1.600	.255		
ROUTE	AP-11R	10	2	.17020	27.65	1.548	.17050	1.600	.254		
COMPUTE NM HYD	I40-1	-	3	.00750	5.52	.237	.59326	1.500	1.150	PER IMP=	35.00
ADD HYD	AP-12	2& 3	30	.17770	31.52	1.785	.18833	1.600	.277		
*S BEGIN WATERSHED SOUTH OF INTERSTATE 40											
ROUTE	AP-12R	30	2	.17770	31.40	1.785	.18834	1.600	.276		
ROUTE	AP-8R	20	22	.11280	15.07	.758	.12595	1.600	.209		
ADD HYD	AP-13	2&22	10	.29050	46.47	2.543	.16411	1.600	.250		
*S ROUTE FLOWS FROM AP-13 THRU PIPE TO UNSER DIVERSION POND NO. 5.											
*S IF FLOW FROM AP-13 WERE ROUTED TO TO UNSER DIVERSION POND NO. 6,											
*S POND NO. 6 WOULD OVERTOP. PLUS, THE EXISTING FLOW FROM THIS AREA											
*S DRAINS INTO POND NO. 5.											
ROUTE	AP-13R	10	32	.29050	44.30	2.543	.16411	1.650	.238		
COMPUTE NM HYD	AP-13&A-1D	-	3	.02570	36.06	1.551	1.13124	1.500	2.192	PER IMP=	69.00
ROUTE	AP-13AR	3	22	.02570	35.42	1.551	1.13126	1.500	2.154		
ROUTE	AP-6R	12	2	.09530	9.68	.537	.10557	1.600	.159		
ADD HYD	PARTAP-14	22& 2	10	.12100	42.03	2.087	.32341	1.550	.543		
COMPUTE NM HYD	A-2D	-	3	.02840	45.59	2.013	1.32889	1.500	2.508	PER IMP=	84.00
ADD HYD	AP-14	10& 3	10	.14940	85.56	4.100	.51455	1.500	.895		
ROUTE	AP-14R	10	2	.14940	85.01	4.100	.51455	1.550	.889		
COMPUTE NM HYD	A-3D	-	3	.02400	39.69	1.802	1.40796	1.500	2.584	PER IMP=	90.00
ADD HYD	AP-15	2& 3	10	.17340	121.81	5.902	.63820	1.500	1.098		

COMPUTE NM HYD	AP-16&A-4D	-	3	.01250	18.04	.801	1.20080	1.500	2.256 PER IMP=	76.00
ADD HYD	AP-15+AP-16	10& 3	10	.18590	139.86	6.703	.67603	1.500	1.176	
COMPUTE NM HYD	P-6	-	3	.00430	.81	.026	.11274	1.550	.293 PER IMP=	2.00
ADD HYD	AP-17	10& 3	10	.19020	140.65	6.728	.66322	1.500	1.155	
ROUTE RESERVOIR	AP-17R	10	2	.19020	44.25	6.728	.66321	1.950	.364 AC-FT=	2.727
ROUTE	POND6ROUTE36	2	12	.19020	44.25	6.728	.66322	1.950	.364	
ROUTE	POND6ROUTE48	12	22	.19020	44.26	6.728	.66322	1.950	.364	
COMPUTE NM HYD	P-5	-	3	.00290	.55	.017	.11274	1.550	.294 PER IMP=	2.00
ADD HYD	AP-18	3&32	10	.29340	44.66	2.559	.16354	1.650	.238	
ROUTE RESERVOIR	AP-18R	10	12	.29340	15.49	2.559	.16353	2.150	.082 AC-FT=	1.231
ROUTE	POND-5ROUTE4	12	32	.29340	15.68	2.559	.16354	2.150	.084	
ADD HYD	POND-5R&6R	32&22	20	.48360	58.25	9.287	.36006	2.150	.188	
COMPUTE NM HYD	AP-19&C-1D	-	3	.01150	14.28	.597	.97312	1.500	1.940 PER IMP=	57.00
ROUTE	AP-19R	3	2	.01150	13.58	.597	.97317	1.550	1.846	
COMPUTE NM HYD	C-2D	-	4	.05740	69.47	2.979	.97312	1.500	1.891 PER IMP=	57.00
ADD HYD	AP-20	2& 4	10	.06890	82.47	3.576	.97311	1.500	1.870	
COMPUTE NM HYD	P-4	-	3	.00360	.68	.022	.11274	1.550	.293 PER IMP=	2.00
ADD HYD	P-4+POND-5R&6	20& 3	20	.48720	58.30	9.307	.35820	2.150	.187	
ADD HYD	AP-20A	10&20	30	.55610	110.20	12.883	.43438	1.550	.310	
ROUTE RESERVOIR	AP-20AR	30	2	.55610	54.69	12.804	.43170	2.300	.154 AC-FT=	2.916
ROUTE	POND-4R	2	12	.55610	54.69	12.804	.43170	2.300	.154	
COMPUTE NM HYD	P-3	-	3	.00270	.51	.016	.11274	1.550	.294 PER IMP=	2.00
ADD HYD	P-3+POND-4R	12& 3	10	.55880	54.72	12.819	.43013	2.300	.153	
COMPUTE NM HYD	AP-21&D-1D	-	3	.04680	58.08	2.429	.97312	1.500	1.939 PER IMP=	57.00

□

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	
ADD HYD	AP-21A	10& 3	10	.60560	83.36	15.248	.47209	1.550	.215		
ROUTE RESERVOIR	AP-21AR	10	2	.60560	60.70	15.179	.46996	2.150	.157 AC-FT=	2.184	
COMPUTE NM HYD	AP-22&E-1D	-	3	.02820	39.44	1.741	1.15760	1.500	2.185 PER IMP=	71.00	
ROUTE	AP-22R	3	12	.02820	38.12	1.741	1.15761	1.550	2.112		
COMPUTE NM HYD	E-2D	-	3	.01720	29.01	1.292	1.40796	1.500	2.635 PER IMP=	90.00	
ADD HYD	AP-23	3&12	10	.04540	66.46	3.033	1.25243	1.500	2.287		
ROUTE	AP-23R	10	12	.04540	66.02	3.033	1.25245	1.550	2.272		
COMPUTE NM HYD	E-3D	-	3	.04250	52.74	2.206	.97312	1.500	1.939 PER IMP=	57.00	
ADD HYD	AP-24	12& 3	10	.08790	115.92	5.238	1.11738	1.500	2.060		
ROUTE	AP-23R	10	12	.08790	116.53	5.238	1.11739	1.550	2.071		
COMPUTE NM HYD	E-4D	-	3	.00300	5.07	.225	1.40796	1.500	2.638 PER IMP=	90.00	
ADD HYD	AP-25	12& 3	10	.09090	120.95	5.464	1.12697	1.550	2.079		
ADD HYD	AP-25+POND-3	2&10	10	.69650	142.13	20.643	.55571	1.550	.319		
COMPUTE NM HYD	P-2	-	3	.00360	.68	.022	.11274	1.550	.293 PER IMP=	2.00	
ADD HYD	AP-25A	3&10	10	.70010	142.81	20.663	.55340	1.550	.319		
ROUTE RESERVOIR	AP-25AR	10	2	.70010	47.61	19.931	.53378	3.200	.106 AC-FT=	5.555	
ROUTE	POND-2R	2	12	.70010	47.61	19.931	.53378	3.200	.106		
COMPUTE NM HYD	AP-26&F-1D	-	3	.03980	48.17	2.066	.97312	1.500	1.891 PER IMP=	57.00	
COMPUTE NM HYD	P-1	-	4	.00290	.55	.017	.11274	1.550	.294 PER IMP=	2.00	
ADD HYD	P-1+P-1D	3& 4	10	.04270	48.71	2.082	.91423	1.500	1.783		
ADD HYD	AP-26A	10&12	10	.74280	58.22	22.013	.55566	1.550	.122		
ROUTE RESERVOIR	AP-26AR	10	2	.74280	47.46	22.012	.55564	3.450	.100 AC-FT=	1.556	
COMPUTE NM HYD	AP-27&G-1D	-	3	.02290	35.53	1.559	1.27619	1.500	2.424 PER IMP=	80.00	
COMPUTE NM HYD	AP-28&G-2D	-	4	.00310	4.90	.215	1.30254	1.500	2.469 PER IMP=	82.00	
ROUTE	AP-28R	4	12	.00310	4.76	.215	1.30270	1.500	2.398		
COMPUTE NM HYD	AP-29&G-3D	-	5	.03510	48.94	2.389	1.27619	1.500	2.178 PER IMP=	80.00	
COMPUTE NM HYD	G-4D	-	6	.00330	5.08	.220	1.24983	1.500	2.407 PER IMP=	78.00	
ADD HYD	AP-30	12& 6	10	.00640	9.84	.435	1.27528	1.500	2.403		
FINISH											

Int100pe.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = INT100PE.IN

RUN DATE (MON/DAY/YR) =01/22/2001
USER NO.= C_ANDRSEN.I01

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 = 1	NOTATION
*S DEVELOPED INTERIM CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: INT100PE.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE PROPOSED POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S DEVELOPED CONDITIONS SOUTH OF INTERSTATE 40 WITHOUT THE I-40 INTERCEPTOR											
*S IN PLACE. IN OTHER WORDS, FULLY DEVELOPED CONDITIONS SOUTH OF I-40											
*S INCLUDING EXISTING CONDITION OFFSITE FLOWS NORTH OF INTERSTATE 40.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN DEVELOPED/INTERIM CONDITIONS.											
*S THE OUTLET WORKS FOR EACH UNSER DIVERSION POND HAS BEEN MODIFIED											
*S BY PLACING ADDITIONAL 10" OPENINGS AROUND EACH STRUCTURE EXCEPT											
*S AT UNSER DIVERSION POND NO. 5 (PER CHUCK EASTERLING'S REPORT).											
*S OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER ELEVATIONS											
*S SHOWN ON THE UNSER DIVERSION (AS-BUILT) CONSTRUCTION PLAN SET											
*S (PLANS BY CHUCK EASTERLING).											
*S DATE: 11/8/00											
START											
RAINFALL TYPE= 2										TIME=	.00
*S BEGIN WATERSHED NORTH OF INTERSTATE 40										RAIN24=	2.660
COMPUTE NM HYD	O-1E	-	3	.02420	18.06	.567	.43936	1.550	1.166	PER IMP=	.00
COMPUTE NM HYD	O-2E	-	4	.04220	24.34	.989	.43936	1.600	.901	PER IMP=	.00
ADD HYD	AP-1	3& 4	10	.06640	41.88	1.556	.43936	1.550	.986		
ROUTE	AP-1R	10	2	.06640	36.11	1.556	.43938	1.650	.850		
COMPUTE NM HYD	O-3E	-	3	.01640	13.10	.402	.45924	1.500	1.248	PER IMP=	1.00
ADD HYD	PARTAP-2	2& 3	10	.08280	44.73	1.958	.44330	1.650	.844		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	63.37	2.803	.47912	1.600	.903	PER IMP=	2.00
DIVIDE HYD	PART AP-7	3	98	.08594	32.00	2.196	.47911	1.500	.582		
ROUTE	PART AP-7	AND	99	.02376	31.37	.607	.47911	1.600	2.062		
ROUTE	AP-7R	99	2	.02376	31.64	.608	.47944	1.600	2.081		
ADD HYD	AP-2	10& 2	10	.10656	76.00	2.565	.45135	1.600	1.114		
ROUTE	AP-2R	10	2	.10656	79.83	2.565	.45136	1.600	1.171		
COMPUTE NM HYD	I40-3	-	3	.00190	2.86	.115	1.13512	1.500	2.350	PER IMP=	35.00
ADD HYD	AP-3	2& 3	20	.10846	81.89	2.680	.46333	1.600	1.180		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	8.11	.240	.47912	1.500	1.348	PER IMP=	2.00
ROUTE	AP-4R	3	2	.00940	8.17	.240	.47921	1.500	1.358		
COMPUTE NM HYD	I40-4	-	3	.00120	1.81	.073	1.13512	1.500	2.357	PER IMP=	35.00
ADD HYD	AP-5	2& 3	10	.01060	9.98	.313	.55337	1.500	1.471		
ADD HYD	AP-3+AP-5	20&10	10	.11906	89.90	2.993	.47135	1.600	1.180		
ROUTE	AP-6	10	12	.11906	87.97	2.993	.47135	1.650	1.154		
ROUTE	AP-7R-CUL	98	2	.08594	33.23	2.196	.47912	1.500	.604		
COMPUTE NM HYD	I40-2	-	3	.00310	4.65	.188	1.13512	1.500	2.346	PER IMP=	35.00
ADD HYD	AP-8	2& 3	20	.08904	37.88	2.384	.50195	1.500	.665		
COMPUTE NM HYD	O-6E	-	3	.07320	35.69	1.715	.43936	1.600	.762	PER IMP=	.00
COMPUTE NM HYD	O-7E	-	4	.05230	39.03	1.226	.43936	1.550	1.166	PER IMP=	.00

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
ADD HYD	AP-9	3& 4	10	.12550	71.47	2.941	.43936	1.550	.890		
ROUTE	AP-9R	10	2	.12550	70.89	2.941	.43937	1.600	.883		
COMPUTE NM HYD	O-8E	-	3	.00990	23.00	1.124	2.12906	1.500	3.630	PER IMP=	85.00
ADD HYD	AP-10	2& 3	10	.13540	92.59	4.065	.56290	1.550	1.068		
ROUTE	AP-10R	10	2	.13540	89.10	4.065	.56291	1.600	1.028		
COMPUTE NM HYD	O-9E	-	3	.03480	31.99	1.000	.53875	1.500	1.436	PER IMP=	5.00
ADD HYD	AP-11	2& 3	10	.17020	114.14	5.065	.55797	1.600	1.048		
ROUTE	AP-11R	10	2	.17020	114.79	5.065	.55797	1.600	1.054		
COMPUTE NM HYD	I40-1	-	3	.00750	11.24	.454	1.13512	1.500	2.342	PER IMP=	35.00
ADD HYD	AP-12	2& 3	30	.17770	122.86	5.519	.58232	1.600	1.080		
*S BEGIN WATERSHED SOUTH OF INTERSTATE 40											
ROUTE	AP-12R	30	2	.17770	123.23	5.519	.58233	1.600	1.084		
ROUTE	AP-8R	20	22	.08904	39.96	2.384	.50196	1.500	.701		
ADD HYD	AP-13	2&22	10	.26674	158.78	7.902	.55549	1.600	.930		
*S ROUTE FLOWS FROM AP-13 THRU PIPE TO UNSER DIVERSION POND NO. 5.											
*S IF FLOW FROM AP-13 WERE ROUTED TO TO UNSER DIVERSION POND NO. 6,											
*S POND NO. 6 WOULD OVERTOP. PLUS, THE EXISTING FLOW FROM THIS AREA											
*S DRAINS INTO POND NO. 5.											
ROUTE	AP-13R	10	32	.26674	154.05	7.902	.55550	1.650	.902		
COMPUTE NM HYD	AP-13&A-1D	-	3	.02570	59.05	2.579	1.88137	1.500	3.590	PER IMP=	69.00
ROUTE	AP-13AR	3	22	.02570	58.26	2.579	1.88138	1.500	3.542		
ROUTE	AP-6R	12	2	.11906	88.44	2.993	.47135	1.650	1.161		
ADD HYD	PARTAP-14	22& 2	10	.14476	125.63	5.572	.72167	1.600	1.356		
COMPUTE NM HYD	A-2D	-	3	.02840	71.47	3.250	2.14550	1.500	3.932	PER IMP=	84.00
ADD HYD	AP-14	10& 3	10	.17316	175.97	8.822	.95518	1.550	1.588		
ROUTE	AP-14R	10	2	.17316	175.47	8.822	.95518	1.600	1.583		
COMPUTE NM HYD	A-3D	-	3	.02400	61.30	2.881	2.25115	1.500	3.991	PER IMP=	90.00
ADD HYD	AP-15	2& 3	10	.19716	229.58	11.703	1.11293	1.550	1.819		

COMPUTE NM HYD	AP-16&A-4D	-	3	.01250	29.07	1.312	1.96827	1.500	3.634 PER IMP=	76.00
ADD HYD	AP-15+AP-16	10&	3 10	.20966	255.16	13.015	1.16393	1.550	1.902	
COMPUTE NM HYD	P-6	-	3	.00430	3.72	.110	.47912	1.500	1.350 PER IMP=	2.00
ADD HYD	AP-17	10&	3 10	.21396	258.75	13.125	1.15016	1.550	1.890	
ROUTE RESERVOIR	AP-17R	10	2	.21396	78.24	13.125	1.15016	1.950	.571 AC-FT=	6.209
ROUTE	POND6ROUTE36	2	12	.21396	78.20	13.125	1.15016	2.000	.571	
ROUTE	POND6ROUTE48	12	22	.21396	78.26	13.125	1.15016	1.950	.571	
COMPUTE NM HYD	P-5	-	3	.00290	2.51	.074	.47912	1.500	1.353 PER IMP=	2.00
ADD HYD	AP-18	3&	32 10	.26964	155.57	7.976	.55462	1.650	.901	
ROUTE RESERVOIR	AP-18R	10	12	.26964	113.38	7.976	.55462	1.800	.657 AC-FT=	2.044
ROUTE	POND-5ROUTE4	12	32	.26964	119.58	7.976	.55462	1.800	.693	
ADD HYD	POND-5R&6R	32&	22 20	.48360	191.14	21.101	.81811	1.900	.618	
COMPUTE NM HYD	AP-19&C-1D	-	3	.01150	24.41	1.024	1.67006	1.500	3.317 PER IMP=	57.00
ROUTE	AP-19R	3	2	.01150	23.29	1.024	1.67010	1.550	3.164	
COMPUTE NM HYD	C-2D	-	4	.05740	118.78	5.113	1.67006	1.500	3.233 PER IMP=	57.00
ADD HYD	AP-20	2&	4 10	.06890	141.50	6.137	1.67005	1.500	3.209	
COMPUTE NM HYD	P-4	-	3	.00360	3.11	.092	.47912	1.500	1.352 PER IMP=	2.00
ADD HYD	P-4+POND-5R&	20&	3 20	.48720	191.58	21.192	.81559	1.900	.614	
ADD HYD	AP-20A	10&	20 30	.55610	242.54	27.329	.92146	1.700	.681	
ROUTE RESERVOIR	AP-20AR	30	2	.55610	119.72	27.250	.91877	2.250	.336 AC-FT=	7.764
ROUTE	POND-4R	2	12	.55610	119.78	27.249	.91877	2.250	.337	
COMPUTE NM HYD	P-3	-	3	.00270	2.34	.069	.47912	1.500	1.354 PER IMP=	2.00
ADD HYD	P-3+POND-4R	12&	3 10	.55880	119.90	27.318	.91662	2.250	.335	
COMPUTE NM HYD	AP-21&D-1D	-	3	.04680	99.31	4.168	1.67006	1.500	3.316 PER IMP=	57.00

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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
ADD HYD	AP-21A	10&	3 10	.60560	138.80	31.486	.97484	1.500	.358	
ROUTE RESERVOIR	AP-21AR	10	2	.60560	111.57	31.417	.97271	2.750	.288 AC-FT=	4.380
COMPUTE NM HYD	AP-22&E-1D	-	3	.02820	64.16	2.883	1.91659	1.500	3.555 PER IMP=	71.00
ROUTE	AP-22R	3	12	.02820	61.84	2.883	1.91660	1.550	3.427	
COMPUTE NM HYD	E-2D	-	3	.01720	44.80	2.065	2.25115	1.500	4.070 PER IMP=	90.00
ADD HYD	AP-23	3&	12 10	.04540	106.21	4.948	2.04333	1.500	3.655	
ROUTE	AP-23R	10	12	.04540	104.90	4.948	2.04334	1.550	3.610	
COMPUTE NM HYD	E-3D	-	3	.04250	90.19	3.785	1.67006	1.500	3.316 PER IMP=	57.00
ADD HYD	AP-24	12&	3 10	.08790	191.75	8.733	1.86285	1.500	3.408	
ROUTE	AP-23R	10	12	.08790	190.60	8.733	1.86286	1.550	3.388	
COMPUTE NM HYD	E-4D	-	3	.00300	7.83	.360	2.25115	1.500	4.076 PER IMP=	90.00
ADD HYD	AP-25	12&	3 10	.09090	197.44	9.093	1.87566	1.550	3.394	
ADD HYD	AP-25+POND-3	2&	10 10	.69650	231.20	40.510	1.09056	1.550	.519	
COMPUTE NM HYD	P-2	-	3	.00360	3.11	.092	.47912	1.500	1.352 PER IMP=	2.00
ADD HYD	AP-25A	3&	10 10	.70010	234.21	40.602	1.08740	1.550	.523	
ROUTE RESERVOIR	AP-25AR	10	2	.70010	138.57	39.869	1.06777	2.150	.309 AC-FT=	7.131
ROUTE	POND-2R	2	12	.70010	138.89	39.869	1.06777	2.100	.310	
COMPUTE NM HYD	AP-26&F-1D	-	3	.03980	82.37	3.545	1.67006	1.500	3.234 PER IMP=	57.00
COMPUTE NM HYD	P-1	-	4	.00290	2.51	.074	.47912	1.500	1.353 PER IMP=	2.00
ADD HYD	P-1+F-1D	3&	4 10	.04270	84.88	3.618	1.58885	1.500	3.106	
ADD HYD	AP-26A	10&	12 10	.74280	152.00	43.487	1.09772	2.100	.320	
ROUTE RESERVOIR	AP-26AR	10	2	.74280	111.47	43.487	1.09770	3.300	.234 AC-FT=	5.863
COMPUTE NM HYD	AP-27&G-1D	-	3	.02290	56.30	2.534	2.07506	1.500	3.841 PER IMP=	80.00
COMPUTE NM HYD	AP-28&G-2D	-	4	.00310	7.72	.349	2.11028	1.500	3.893 PER IMP=	82.00
ROUTE	AP-28R	4	12	.00310	7.56	.349	2.11044	1.500	3.808	
COMPUTE NM HYD	AP-29&G-3D	-	5	.03510	77.66	3.885	2.07506	1.500	3.457 PER IMP=	80.00
COMPUTE NM HYD	G-4D	-	6	.00330	8.10	.359	2.03985	1.500	3.837 PER IMP=	78.00
ADD HYD	AP-30	12&	6 10	.00640	15.66	.708	2.07389	1.500	3.823	
FINISH										

Int10ep.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = INT10EP.IN

RUN DATE (MON/DAY/YR) =01/22/2001
USER NO.= C ANDRSN.101

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 = 1	NOTATION
*S DEVELOPED INTERIM CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 10 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: INT10EP.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND											
*S OUTLET WORKS AND THE PROPOSED POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S DEVELOPED CONDITIONS SOUTH OF INTERSTATE 40 WITHOUT THE I-40 INTERCEPTOR											
*S IN PLACE. IN OTHER WORDS, FULLY DEVELOPED CONDITIONS SOUTH OF I-40											
*S INCLUDING EXISTING CONDITION OFFSITE FLOWS NORTH OF INTERSTATE 40.											
*S											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN DEVELOPED/INTERIM CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S											
*S DATE: 11/8/00											
START											
RAINFALL TYPE= 2											
*S BEGIN WATERSHED NORTH OF INTERSTATE 40											
COMPUTE NM HYD	O-1E	-	3	.02420	3.43	.108	.08362	1.550	.221 PER IMP=		.00
COMPUTE NM HYD	O-2E	-	4	.04220	4.48	.188	.08362	1.600	.166 PER IMP=		.00
ADD HYD	AP-1	3& 4	10	.06640	7.65	.296	.08361	1.550	.180		
ROUTE	AP-1R	10	2	.06640	5.45	.296	.08362	1.700	.128		
COMPUTE NM HYD	O-3E	-	3	.01640	2.72	.086	.09818	1.550	.259 PER IMP=		1.00
ADD HYD	PARTAP-2	2& 3	10	.08280	7.02	.382	.08650	1.650	.132		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	13.54	.660	.11274	1.600	.193 PER IMP=		2.00
DIVIDE HYD	PART AP-7	3	98	.10970	13.54	.660	.11274	1.600	.193		
	PART AP-7	AND	99	.00000	.00	.000	.00000	-.050	.000		
ROUTE	AP-7R	99	2	.00000	.00	.000	.00000	-.050	.000		
ADD HYD	AP-2	10& 2	10	.08280	7.02	.382	.08650	1.650	.132		
ROUTE	AP-2R	10	2	.08280	6.98	.382	.08651	1.700	.132		
COMPUTE NM HYD	I40-3	-	3	.00190	1.40	.060	.59326	1.500	1.154 PER IMP=		35.00
ADD HYD	AP-3	2& 3	20	.08470	7.72	.442	.09786	1.650	.142		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	1.75	.057	.11274	1.550	.292 PER IMP=		2.00
ROUTE	AP-4R	3	2	.00940	1.84	.057	.11280	1.550	.306		
COMPUTE NM HYD	I40-4	-	3	.00120	.89	.038	.59326	1.500	1.156 PER IMP=		35.00
ADD HYD	AP-5	2& 3	10	.01060	2.64	.094	.16710	1.550	.389		
ADD HYD	AP-3+AP-5	20&10	10	.09530	9.60	.537	.10556	1.600	.157		
ROUTE	AP-6	10	12	.09530	9.61	.537	.10557	1.600	.158		
ROUTE	AP-7R-CUL	98	2	.10970	13.58	.660	.11274	1.600	.193		
COMPUTE NM HYD	I40-2	-	3	.00310	2.28	.098	.59326	1.500	1.152 PER IMP=		35.00
ADD HYD	AP-8	2& 3	20	.11280	15.19	.758	.12594	1.600	.210		
COMPUTE NM HYD	O-6E	-	3	.07320	6.49	.326	.08362	1.650	.138 PER IMP=		.00
COMPUTE NM HYD	O-7E	-	4	.05230	7.41	.233	.08362	1.550	.221 PER IMP=		.00
ADD HYD	AP-9	3& 4	10	.12550	13.19	.560	.08362	1.600	.164		

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
ROUTE	AP-9R	10	2	.12550	13.27	.560	.08362	1.600	.165		
COMPUTE NM HYD	O-8E	-	3	.00990	14.68	.698	1.32131	1.500	2.318 PER IMP=		85.00
ADD HYD	AP-10	2& 3	10	.13540	26.66	1.257	.17411	1.550	.308		
ROUTE	AP-10R	10	2	.13540	21.80	1.257	.17411	1.650	.252		
COMPUTE NM HYD	O-9E	-	3	.03480	8.15	.290	.15643	1.500	.366 PER IMP=		5.00
ADD HYD	AP-11	2& 3	10	.17020	27.81	1.548	.17049	1.600	.255		
ROUTE	AP-11R	10	2	.17020	27.65	1.548	.17050	1.600	.254		
COMPUTE NM HYD	I40-1	-	3	.00750	5.52	.237	.59326	1.500	1.150 PER IMP=		35.00
ADD HYD	AP-12	2& 3	30	.17770	31.52	1.785	.18833	1.600	.277		
*S BEGIN WATERSHED SOUTH OF INTERSTATE 40											
ROUTE	AP-12R	30	2	.17770	31.40	1.785	.18834	1.600	.276		
ROUTE	AP-8R	20	22	.11280	15.07	.758	.12595	1.600	.209		
ADD HYD	AP-13	2&22	10	.29050	46.47	2.543	.16411	1.600	.250		
*S ROUTE FLOWS FROM AP-13 THRU PIPE TO UNSER DIVERSION POND NO. 5.											
*S IF FLOW FROM AP-13 WERE ROUTED TO TO UNSER DIVERSION POND NO. 6,											
*S POND NO. 6 WOULD OVERTOP. PLUS, THE EXISTING FLOW FROM THIS AREA											
*S DRAINS INTO POND NO. 5.											
ROUTE	AP-13R	10	32	.29050	44.30	2.543	.16411	1.650	.238		
COMPUTE NM HYD	AP-13&A-1D	-	3	.02570	36.06	1.551	1.13124	1.500	2.192 PER IMP=		69.00
ROUTE	AP-13AR	3	22	.02570	35.42	1.551	1.13126	1.500	2.154		
ROUTE	AP-6R	12	2	.09530	9.68	.537	.10557	1.600	.159		
ADD HYD	PARTAP-14	22& 2	10	.12100	42.03	2.087	.32341	1.550	.543		
COMPUTE NM HYD	A-2D	-	3	.02840	45.59	2.013	1.32889	1.500	2.508 PER IMP=		84.00
ADD HYD	AP-14	10& 3	10	.14940	85.56	4.100	.51455	1.500	.895		
ROUTE	AP-14R	10	2	.14940	85.01	4.100	.51455	1.550	.889		
COMPUTE NM HYD	A-3D	-	3	.02400	39.69	1.802	1.40796	1.500	2.584 PER IMP=		90.00
ADD HYD	AP-15	2& 3	10	.17340	121.81	5.902	.63820	1.500	1.098		
COMPUTE NM HYD	AP-16&A-4D	-	3	.01250	18.04	.801	1.20080	1.500	2.256 PER IMP=		76.00

ADD HYD	AP-15+AP-16	10 3	10	.18590	139.86	6.703	.67603	1.500	1.176		
COMPUTE NM HYD	P-6	-	3	.00430	.81	.026	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-17	10 3	10	.19020	140.65	6.728	.66322	1.500	1.155		
ROUTE RESERVOIR	AP-17R	10	2	.19020	9.95	6.728	.66321	2.300	.082	AC-FT=	4.422
ROUTE	POND6ROUTE36	2	12	.19020	9.94	6.728	.66321	2.300	.082		
ROUTE	POND6ROUTE48	12	22	.19020	9.95	6.728	.66321	2.350	.082		
COMPUTE NM HYD	P-5	-	3	.00290	.55	.017	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	AP-18	3 32	10	.29340	44.66	2.559	.16354	1.650	.238		
ROUTE RESERVOIR	AP-18R	10	12	.29340	15.49	2.559	.16353	2.150	.082	AC-FT=	1.231
ROUTE	POND-5ROUTE4	12	32	.29340	15.68	2.559	.16354	2.150	.084		
ADD HYD	POND-5R46R	32 22	20	.48360	25.56	9.287	.36006	2.150	.083		
COMPUTE NM HYD	AP-19 1D	-	3	.01150	14.28	.597	.97312	1.500	1.940	PER IMP=	57.00
ROUTE	AP-19R	3	2	.01150	13.58	.597	.97317	1.550	1.846		
COMPUTE NM HYD	C-2D	-	4	.05740	69.47	2.979	.97312	1.500	1.891	PER IMP=	57.00
ADD HYD	AP-20	2 4	10	.06890	82.47	3.576	.97311	1.500	1.870		
COMPUTE NM HYD	P-4	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	P-4+POND-5R4	20 3	20	.48720	25.61	9.307	.35819	2.150	.082		
ADD HYD	AP-20A	10 20	30	.55610	93.15	12.883	.43438	1.500	.262		
ROUTE RESERVOIR	AP-20AR	30	2	.55610	22.02	12.793	.43135	2.500	.062	AC-FT=	3.519
ROUTE	POND-4R	2	12	.55610	22.03	12.793	.43134	2.500	.062		
COMPUTE NM HYD	P-3	-	3	.00270	.51	.016	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	P-3+POND-4R	12 3	10	.55880	22.05	12.808	.42977	2.500	.062		
COMPUTE NM HYD	AP-21 1D	-	3	.04680	58.08	2.429	.97312	1.500	1.939	PER IMP=	57.00
ADD HYD	AP-21A	10 3	10	.60560	62.65	15.237	.47176	1.500	.162		

□

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
ROUTE RESERVOIR	AP-21AR	10	2	.60560	22.59	15.020	.46504	2.650	.058	AC-FT=	2.122
COMPUTE NM HYD	AP-22 1D	-	3	.02820	39.44	1.741	1.15760	1.500	2.185	PER IMP=	71.00
ROUTE	AP-22R	3	12	.02820	38.12	1.741	1.15761	1.550	2.112		
COMPUTE NM HYD	E-2D	-	3	.01720	29.01	1.292	1.40796	1.500	2.635	PER IMP=	90.00
ADD HYD	AP-23	3 12	10	.04540	66.46	3.033	1.25243	1.500	2.287		
ROUTE	AP-23R	10	12	.04540	66.02	3.033	1.25245	1.550	2.272		
COMPUTE NM HYD	E-3D	-	3	.04250	52.74	2.206	.97312	1.500	1.939	PER IMP=	57.00
ADD HYD	AP-24	12 3	10	.08790	115.92	5.238	1.11738	1.500	2.060		
ROUTE	AP-23R	10	12	.08790	116.53	5.238	1.11739	1.550	2.071		
COMPUTE NM HYD	E-4D	-	3	.00300	5.07	.225	1.40796	1.500	2.638	PER IMP=	90.00
ADD HYD	AP-25	12 3	10	.09090	120.95	5.464	1.12697	1.550	2.079		
ADD HYD	AP-25+POND-3	2 10	10	.69650	124.64	20.484	.55143	1.550	.280		
COMPUTE NM HYD	P-2	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-25A	3 10	10	.70010	125.32	20.505	.54915	1.550	.280		
ROUTE RESERVOIR	AP-25AR	10	2	.70010	9.51	18.407	.49296	9.300	.021	AC-FT=	6.968
ROUTE	POND-2R	2	12	.70010	9.51	18.405	.49291	9.300	.021		
COMPUTE NM HYD	AP-26 1D	-	3	.03980	48.17	2.066	.97312	1.500	1.891	PER IMP=	57.00
COMPUTE NM HYD	P-1	-	4	.00290	.55	.017	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	P-1+P-1D	3 4	10	.04270	48.71	2.082	.91423	1.500	1.783		
ADD HYD	AP-26A	10 12	10	.74280	48.74	20.487	.51713	1.500	.103		
ROUTE RESERVOIR	AP-26AR	10	2	.74280	9.08	19.217	.48508	17.300	.019	AC-FT=	3.032
COMPUTE NM HYD	AP-27 1D	-	3	.02290	35.53	1.559	1.27619	1.500	2.424	PER IMP=	80.00
COMPUTE NM HYD	AP-28 2D	-	4	.00310	4.90	.215	1.30254	1.500	2.469	PER IMP=	82.00
ROUTE	AP-28R	4	12	.00310	4.76	.215	1.30270	1.500	2.398		
COMPUTE NM HYD	AP-29 3D	-	5	.03510	48.94	2.389	1.27619	1.500	2.178	PER IMP=	80.00
COMPUTE NM HYD	G-4D	-	6	.00330	5.08	.220	1.24983	1.500	2.407	PER IMP=	78.00
ADD HYD	AP-30	12 6	10	.00640	9.84	.435	1.27528	1.500	2.403		
FINISH											

Int100ep.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = INT100EP.IN

RUN DATE (MON/DAY/YR) =01/22/2001
USER NO.= C_ANDRSN.101

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 = 1	NOTATION
*S DEVELOPED INTERIM CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: INT100EP.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND											
*S OUTLET WORKS AND THE PROPOSED POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S DEVELOPED CONDITIONS SOUTH OF INTERSTATE 40 WITHOUT THE I-40 INTERCEPTOR											
*S IN PLACE. IN OTHER WORDS, FULLY DEVELOPED CONDITIONS SOUTH OF I-40											
*S INCLUDING EXISTING CONDITION OFFSITE FLOWS NORTH OF INTERSTATE 40.											
*S											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN DEVELOPED/INTERIM CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S											
*S DATE: 11/8/00											
START											
RAINFALL TYPE= 2											
TIME= .00											
RAIN24= 2.660											
*S BEGIN WATERSHED NORTH OF INTERSTATE 40											
COMPUTE NM HYD	O-1E	-	3	.02420	18.06	.567	.43936	1.550	1.166	PER IMP=	.00
COMPUTE NM HYD	O-2E	-	4	.04220	24.34	.989	.43936	1.600	.901	PER IMP=	.00
ADD HYD	AP-1	3& 4	10	.06640	41.88	1.556	.43936	1.550	.986		
ROUTE	AP-1R	10	2	.06640	36.11	1.556	.43938	1.650	.850		
COMPUTE NM HYD	O-3E	-	3	.01640	13.10	.402	.45924	1.500	1.248	PER IMP=	1.00
ADD HYD	PARTAP-2	2& 3	10	.08280	44.73	1.958	.44330	1.650	.844		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	63.37	2.803	.47912	1.600	.903	PER IMP=	2.00
DIVIDE HYD	PART AP-7	3	98	.08594	32.00	2.196	.47911	1.500	.582		
	PART AP-7	AND	99	.02376	31.37	.607	.47911	1.600	2.062		
ROUTE	AP-7R	99	2	.02376	31.64	.608	.47944	1.600	2.081		
ADD HYD	AP-2	10& 2	10	.10656	76.00	2.565	.45135	1.600	1.114		
ROUTE	AP-2R	10	2	.10656	79.83	2.565	.45136	1.600	1.171		
COMPUTE NM HYD	I40-3	-	3	.00190	2.86	.115	1.13512	1.500	2.350	PER IMP=	35.00
ADD HYD	AP-3	2& 3	20	.10846	81.89	2.680	.46333	1.600	1.180		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	8.11	.240	.47912	1.500	1.348	PER IMP=	2.00
ROUTE	AP-4R	3	2	.00940	8.17	.240	.47921	1.500	1.358		
COMPUTE NM HYD	I40-4	-	3	.00120	1.81	.073	1.13512	1.500	2.357	PER IMP=	35.00
ADD HYD	AP-5	2& 3	10	.01060	9.98	.313	.55337	1.500	1.471		
ADD HYD	AP-3+AP-5	20&10	10	.11906	89.90	2.993	.47135	1.600	1.180		
ROUTE	AP-6	10	12	.11906	87.97	2.993	.47135	1.650	1.154		
ROUTE	AP-7R-CUL	98	2	.08594	33.23	2.196	.47912	1.500	.604		
COMPUTE NM HYD	I40-2	-	3	.00310	4.65	.188	1.13512	1.500	2.346	PER IMP=	35.00
ADD HYD	AP-8	2& 3	20	.08904	37.88	2.384	.50195	1.500	.665		
COMPUTE NM HYD	O-6E	-	3	.07320	35.69	1.715	.43936	1.600	.762	PER IMP=	.00
COMPUTE NM HYD	O-7E	-	4	.05230	39.03	1.226	.43936	1.550	1.166	PER IMP=	.00
ADD HYD	AP-9	3& 4	10	.12550	71.47	2.941	.43936	1.550	.890		

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
ROUTE	AP-9R	10	2	.12550	70.89	2.941	.43937	1.600	.883		
COMPUTE NM HYD	O-8E	-	3	.00990	23.00	1.124	2.12906	1.500	3.630	PER IMP=	85.00
ADD HYD	AP-10	2& 3	10	.13540	92.59	4.065	.56290	1.550	1.068		
ROUTE	AP-10R	10	2	.13540	89.10	4.065	.56291	1.600	1.028		
COMPUTE NM HYD	O-9E	-	3	.03480	31.99	1.000	.53875	1.500	1.436	PER IMP=	5.00
ADD HYD	AP-11	2& 3	10	.17020	114.14	5.065	.55797	1.600	1.048		
ROUTE	AP-11R	10	2	.17020	114.79	5.065	.55797	1.600	1.054		
COMPUTE NM HYD	I40-1	-	3	.00750	11.24	.454	1.13512	1.500	2.342	PER IMP=	35.00
ADD HYD	AP-12	2& 3	30	.17770	122.86	5.519	.58232	1.600	1.080		
*S BEGIN WATERSHED SOUTH OF INTERSTATE 40											
ROUTE	AP-12R	30	2	.17770	123.23	5.519	.58233	1.600	1.084		
ROUTE	AP-8R	20	22	.08904	39.96	2.384	.50196	1.500	.701		
ADD HYD	AP-13	2&22	10	.26674	158.78	7.902	.55549	1.600	.930		
*S ROUTE FLOWS FROM AP-13 THRU PIPE TO UNSER DIVERSION POND NO. 5.											
*S IF FLOW FROM AP-13 WERE ROUTED TO TO UNSER DIVERSION POND NO. 6,											
*S POND NO. 6 WOULD OVERTOP. PLUS, THE EXISTING FLOW FROM THIS AREA											
*S DRAINS INTO POND NO. 5.											
ROUTE	AP-13R	10	32	.26674	154.05	7.902	.55550	1.650	.902		
COMPUTE NM HYD	AP-13&A-1D	-	3	.02570	59.05	2.579	1.88137	1.500	3.590	PER IMP=	69.00
ROUTE	AP-13AR	3	22	.02570	58.26	2.579	1.88138	1.500	3.542		
ROUTE	AP-6R	12	2	.11906	88.44	2.993	.47135	1.650	1.161		
ADD HYD	PARTAP-14	22& 2	10	.14476	125.63	5.572	.72167	1.600	1.356		
COMPUTE NM HYD	A-2D	-	3	.02840	71.47	3.250	2.14550	1.500	3.932	PER IMP=	84.00
ADD HYD	AP-14	10& 3	10	.17316	175.97	8.822	.95518	1.550	1.588		
ROUTE	AP-14R	10	2	.17316	175.47	8.822	.95518	1.600	1.583		
COMPUTE NM HYD	A-3D	-	3	.02400	61.30	2.881	2.25115	1.500	3.991	PER IMP=	90.00
ADD HYD	AP-15	2& 3	10	.19716	229.58	11.703	1.11293	1.550	1.819		
COMPUTE NM HYD	AP-16&A-4D	-	3	.01250	29.07	1.312	1.96827	1.500	3.634	PER IMP=	76.00

ADD HYD	AP-15+AP-16	10	3	10	.20966	255.16	13.015	1.16393	1.550	1.902	
COMPUTE NM HYD	P-6	-		3	.00430	3.72	.110	.47912	1.500	1.350	PER IMP= 2.00
ADD HYD	AP-17	10	3	10	.21396	258.75	13.125	1.15016	1.550	1.890	
ROUTE RESERVOIR	AP-17R	10		2	.21396	69.43	13.125	1.15015	2.000	.507	AC-FT= 7.626
ROUTE	POND6ROUTE36	2		12	.21396	69.45	13.125	1.15015	2.050	.507	
ROUTE	POND6ROUTE48	12		22	.21396	69.38	13.125	1.15015	2.050	.507	
COMPUTE NM HYD	P-5	-		3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP= 2.00
ADD HYD	AP-18	3	32	10	.26964	155.57	7.976	.55462	1.650	.901	
ROUTE RESERVOIR	AP-18R	10		12	.26964	113.38	7.976	.55462	1.800	.657	AC-FT= 2.044
ROUTE	POND-5ROUTE4	12		32	.26964	119.58	7.976	.55462	1.800	.693	
ADD HYD	POND-5R6R	32	22	20	.48360	176.49	21.101	.81811	1.900	.570	
COMPUTE NM HYD	AP-19C-1D	-		3	.01150	24.41	1.024	1.67006	1.500	3.317	PER IMP= 57.00
ROUTE	AP-19R	3		2	.01150	23.29	1.024	1.67010	1.550	3.164	
COMPUTE NM HYD	C-2D	-		4	.05740	118.78	5.113	1.67006	1.500	3.233	PER IMP= 57.00
ADD HYD	AP-20	2	4	10	.06890	141.50	6.137	1.67005	1.500	3.209	
COMPUTE NM HYD	P-4	-		3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP= 2.00
ADD HYD	P-4+POND-5R4	20	3	20	.48720	176.94	21.192	.81559	1.900	.567	
ADD HYD	AP-20A	10	20	30	.55610	214.97	27.329	.92145	1.900	.604	
ROUTE RESERVOIR	AP-20AR	30		2	.55610	116.55	27.232	.91819	2.200	.327	AC-FT= 7.281
ROUTE	POND-4R	2		12	.55610	116.61	27.232	.91818	2.250	.328	
COMPUTE NM HYD	P-3	-		3	.00270	2.34	.069	.47912	1.500	1.354	PER IMP= 2.00
ADD HYD	P-3+POND-4R	12	3	10	.55880	116.74	27.300	.91604	2.250	.326	
COMPUTE NM HYD	AP-21C-1D	-		3	.04680	99.31	4.168	1.67006	1.500	3.316	PER IMP= 57.00
ADD HYD	AP-21A	10	3	10	.60560	132.28	31.469	.97430	2.050	.341	

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
ROUTE RESERVOIR	AP-21AR	10	2	.60560	108.34	31.169	.96504	2.600	.280	AC-FT= 4.114	
COMPUTE NM HYD	AP-22E-1D	-	3	.02820	64.16	2.883	1.91659	1.500	3.555	PER IMP= 71.00	
ROUTE	AP-22R	3	12	.02820	61.84	2.883	1.91660	1.550	3.427		
COMPUTE NM HYD	E-2D	-	3	.01720	44.80	2.065	2.25115	1.500	4.070	PER IMP= 90.00	
ADD HYD	AP-23	3	12	.04540	106.21	4.948	2.04333	1.500	3.655		
ROUTE	AP-23R	10	12	.04540	104.90	4.948	2.04334	1.550	3.610		
COMPUTE NM HYD	E-3D	-	3	.04250	90.19	3.785	1.67006	1.500	3.316	PER IMP= 57.00	
ADD HYD	AP-24	12	3	.08790	191.75	8.733	1.86285	1.500	3.408		
ROUTE	AP-23R	10	12	.08790	190.60	8.733	1.86286	1.550	3.388		
COMPUTE NM HYD	E-4D	-	3	.00300	7.83	.360	2.25115	1.500	4.076	PER IMP= 90.00	
ADD HYD	AP-25	12	3	.09090	197.44	9.093	1.87566	1.550	3.394		
ADD HYD	AP-25+POND-3	2	10	.69650	203.89	40.263	1.08388	1.550	.457		
COMPUTE NM HYD	P-2	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP= 2.00	
ADD HYD	AP-25A	3	10	.70010	206.90	40.354	1.08076	1.550	.462		
ROUTE RESERVOIR	AP-25AR	10	2	.70010	119.07	36.987	.99057	2.350	.266	AC-FT= 9.470	
ROUTE	POND-2R	2	12	.70010	120.56	36.983	.99048	2.350	.269		
COMPUTE NM HYD	AP-26E-1D	-	3	.03980	82.37	3.545	1.67006	1.500	3.234	PER IMP= 57.00	
COMPUTE NM HYD	P-1	-	4	.00290	2.51	.074	.47912	1.500	1.353	PER IMP= 2.00	
ADD HYD	P-1+F-1D	3	4	.04270	84.88	3.618	1.58885	1.500	3.106		
ADD HYD	AP-26A	10	12	.74280	124.76	40.602	1.02488	2.250	.262		
ROUTE RESERVOIR	AP-26AR	10	2	.74280	103.22	37.292	.94132	3.150	.217	AC-FT= 7.967	
COMPUTE NM HYD	AP-27G-1D	-	3	.02290	56.30	2.534	2.07506	1.500	3.841	PER IMP= 80.00	
COMPUTE NM HYD	AP-28G-2D	-	4	.00310	7.72	.349	2.11028	1.500	3.893	PER IMP= 82.00	
ROUTE	AP-28R	4	12	.00310	7.56	.349	2.11044	1.500	3.808		
COMPUTE NM HYD	AP-29G-3D	-	5	.03510	77.66	3.885	2.07506	1.500	3.457	PER IMP= 80.00	
COMPUTE NM HYD	G-4D	-	6	.00330	8.10	.359	2.03985	1.500	3.837	PER IMP= 78.00	
ADD HYD	AP-30	12	6	.00640	15.66	.708	2.07389	1.500	3.823		
FINISH											

Int10pp.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = INT10PP.IN

RUN DATE (MON/DAY/YR) =01/22/2001
USER NO.= C_ANDRSN.101

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 = 1	NOTATION
*S DEVELOPED INTERIM CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 10 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: INT10PP.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE PROPOSED POND											
*S OUTLET WORKS AND THE PROPOSED POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S DEVELOPED CONDITIONS SOUTH OF INTERSTATE 40 WITHOUT THE I-40 INTERCEPTOR											
*S IN PLACE. IN OTHER WORDS, FULLY DEVELOPED CONDITIONS SOUTH OF I-40											
*S INCLUDING EXISTING CONDITION OFFSITE FLOWS NORTH OF INTERSTATE 40.											
*S											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN DEVELOPED/INTERIM CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S											
*S DATE: 11/8/00											
START											
RAINFALL TYPE= 2											
*S BEGIN WATERSHED NORTH OF INTERSTATE 40											
COMPUTE NM HYD	O-1E	-	3	.02420	3.43	.108	.08362	1.550	.221	PER IMP=	.00
COMPUTE NM HYD	O-2E	-	4	.04220	4.48	.188	.08362	1.600	.166	PER IMP=	.00
ADD HYD	AP-1	3& 4	10	.06640	7.65	.296	.08361	1.550	.180		
ROUTE	AP-1R	10	2	.06640	5.45	.296	.08362	1.700	.128		
COMPUTE NM HYD	O-3E	-	3	.01640	2.72	.086	.09818	1.550	.259	PER IMP=	1.00
ADD HYD	PARTAP-2	2& 3	10	.08280	7.02	.382	.08650	1.650	.132		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	13.54	.660	.11274	1.600	.193	PER IMP=	2.00
DIVIDE HYD	PART AP-7	3	98	.10970	13.54	.660	.11274	1.600	.193		
	PART AP-7	AND	99	.00000	.00	.000	.00000	-.050	.000		
ROUTE	AP-7R	99	2	.00000	.00	.000	.00000	-.050	.000		
ADD HYD	AP-2	10& 2	10	.08280	7.02	.382	.08650	1.650	.132		
ROUTE	AP-2R	10	2	.08280	6.98	.382	.08651	1.700	.132		
COMPUTE NM HYD	I40-3	-	3	.00190	1.40	.060	.59326	1.500	1.154	PER IMP=	35.00
ADD HYD	AP-3	2& 3	20	.08470	7.72	.442	.09786	1.650	.142		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	1.75	.057	.11274	1.550	.292	PER IMP=	2.00
ROUTE	AP-4R	3	2	.00940	1.84	.057	.11280	1.550	.306		
COMPUTE NM HYD	I40-4	-	3	.00120	.89	.038	.59326	1.500	1.156	PER IMP=	35.00
ADD HYD	AP-5	2& 3	10	.01060	2.64	.094	.16710	1.550	.389		
ADD HYD	AP-3+AP-5	20&10	10	.09530	9.60	.537	.10556	1.600	.157		
ROUTE	AP-6	10	12	.09530	9.61	.537	.10557	1.600	.158		
ROUTE	AP-7R-CUL	98	2	.10970	13.58	.660	.11274	1.600	.193		
COMPUTE NM HYD	I40-2	-	3	.00310	2.28	.098	.59326	1.500	1.152	PER IMP=	35.00
ADD HYD	AP-8	2& 3	20	.11280	15.19	.758	.12594	1.600	.210		
COMPUTE NM HYD	O-6E	-	3	.07320	6.49	.326	.08362	1.650	.138	PER IMP=	.00
COMPUTE NM HYD	O-7E	-	4	.05230	7.41	.233	.08362	1.550	.221	PER IMP=	.00
ADD HYD	AP-9	3& 4	10	.12550	13.19	.560	.08362	1.600	.164		

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
ROUTE	AP-9R	10	2	.12550	13.27	.560	.08362	1.600	.165		
COMPUTE NM HYD	O-8E	-	3	.00990	14.68	.698	1.32131	1.500	2.318	PER IMP=	85.00
ADD HYD	AP-10	2& 3	10	.13540	26.66	1.257	.17411	1.550	.308		
ROUTE	AP-10R	10	2	.13540	21.80	1.257	.17411	1.650	.252		
COMPUTE NM HYD	O-9E	-	3	.03480	8.15	.290	.15643	1.500	.366	PER IMP=	5.00
ADD HYD	AP-11	2& 3	10	.17020	27.81	1.548	.17049	1.600	.255		
ROUTE	AP-11R	10	2	.17020	27.65	1.548	.17050	1.600	.254		
COMPUTE NM HYD	I40-1	-	3	.00750	5.52	.237	.59326	1.500	1.150	PER IMP=	35.00
ADD HYD	AP-12	2& 3	30	.17770	31.52	1.785	.18833	1.600	.277		
*S BEGIN WATERSHED SOUTH OF INTERSTATE 40											
ROUTE	AP-12R	30	2	.17770	31.40	1.785	.18834	1.600	.276		
ROUTE	AP-8R	20	22	.11280	15.07	.758	.12595	1.600	.209		
ADD HYD	AP-13	2&22	10	.29050	46.47	2.543	.16411	1.600	.250		
*S ROUTE FLOWS FROM AP-13 THRU PIPE TO UNSER DIVERSION POND NO. 5.											
*S IF FLOW FROM AP-13 WERE ROUTED TO TO UNSER DIVERSION POND NO. 6,											
*S POND NO. 6 WOULD OVERTOP. PLUS, THE EXISTING FLOW FROM THIS AREA											
*S DRAINS INTO POND NO. 5.											
ROUTE	AP-13R	10	32	.29050	44.30	2.543	.16411	1.650	.238		
COMPUTE NM HYD	AP-13A&A-1D	-	3	.02570	36.06	1.551	1.13124	1.500	2.192	PER IMP=	69.00
ROUTE	AP-13AR	3	22	.02570	35.42	1.551	1.13126	1.500	2.154		
ROUTE	AP-6R	12	2	.09530	9.68	.537	.10557	1.600	.159		
ADD HYD	PARTAP-14	22& 2	10	.12100	42.03	2.087	.32341	1.550	.543		
COMPUTE NM HYD	A-2D	-	3	.02840	45.59	2.013	1.32889	1.500	2.508	PER IMP=	84.00
ADD HYD	AP-14	10& 3	10	.14940	85.56	4.100	.51455	1.500	.895		
ROUTE	AP-14R	10	2	.14940	85.01	4.100	.51455	1.550	.889		
COMPUTE NM HYD	A-3D	-	3	.02400	39.69	1.802	1.40796	1.500	2.584	PER IMP=	90.00
ADD HYD	AP-15	2& 3	10	.17340	121.81	5.902	.63820	1.500	1.098		
COMPUTE NM HYD	AP-16&A-4D	-	3	.01250	18.04	.801	1.20080	1.500	2.256	PER IMP=	76.00

ADD HYD	AP-15+AP-16	10 3	10	.18590	139.86	6.703	.67603	1.500	1.176		
COMPUTE NM HYD	P-6	-	3	.00430	.81	.026	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-17	10 3	10	.19020	140.65	6.728	.66322	1.500	1.155		
ROUTE RESERVOIR	AP-17R	10	2	.19020	38.95	6.728	.66321	2.000	.320	AC-FT=	3.003
ROUTE	POND6ROUTE36	2	12	.19020	38.94	6.728	.66321	2.000	.320		
ROUTE	POND6ROUTE48	12	22	.19020	38.94	6.728	.66321	2.000	.320		
COMPUTE NM HYD	P-5	-	3	.00290	.55	.017	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	AP-18	3 32	10	.29340	44.66	2.559	.16354	1.650	.238		
ROUTE RESERVOIR	AP-18R	10	12	.29340	15.49	2.559	.16353	2.150	.082	AC-FT=	1.231
ROUTE	POND-5ROUTE4	12	32	.29340	15.68	2.559	.16354	2.150	.084		
ADD HYD	POND-5R&6R	32 22	20	.48360	53.95	9.287	.36006	2.150	.174		
COMPUTE NM HYD	AP-19&C-1D	-	3	.01150	14.28	.597	.97312	1.500	1.940	PER IMP=	57.00
ROUTE	AP-19R	3	2	.01150	13.58	.597	.97317	1.550	1.846		
COMPUTE NM HYD	C-2D	-	4	.05740	69.47	2.979	.97312	1.500	1.891	PER IMP=	57.00
ADD HYD	AP-20	2 4	10	.06890	82.47	3.576	.97311	1.500	1.870		
COMPUTE NM HYD	P-4	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	P-4+POND-5R&	20 3	20	.48720	54.00	9.307	.35819	2.150	.173		
ADD HYD	AP-20A	10 20	30	.55610	104.06	12.883	.43438	1.550	.292		
ROUTE RESERVOIR	AP-20AR	30	2	.55610	52.39	12.802	.43165	2.300	.147	AC-FT=	2.653
ROUTE	POND-4R	2	12	.55610	52.38	12.802	.43165	2.300	.147		
COMPUTE NM HYD	P-3	-	3	.00270	.51	.016	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	P-3+POND-4R	12 3	10	.55880	52.41	12.817	.43008	2.300	.147		
COMPUTE NM HYD	AP-21&D-1D	-	3	.04680	58.08	2.429	.97312	1.500	1.939	PER IMP=	57.00
ADD HYD	AP-21A	10 3	10	.60560	82.19	15.246	.47204	1.550	.212		

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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
ROUTE RESERVOIR	AP-21AR	10	2	.60560	58.50	15.177	.46991	2.150	.151	AC-FT=	2.163
COMPUTE NM HYD	AP-22&E-1D	-	3	.02820	39.44	1.741	1.15760	1.500	2.185	PER IMP=	71.00
ROUTE	AP-22R	3	12	.02820	38.12	1.741	1.15761	1.550	2.112		
COMPUTE NM HYD	E-2D	-	3	.01720	29.01	1.292	1.40796	1.500	2.635	PER IMP=	90.00
ADD HYD	AP-23	3 12	10	.04540	66.46	3.033	1.25243	1.500	2.287		
ROUTE	AP-23R	10	12	.04540	66.02	3.033	1.25245	1.550	2.272		
COMPUTE NM HYD	E-3D	-	3	.04250	52.74	2.206	.97312	1.500	1.939	PER IMP=	57.00
ADD HYD	AP-24	12 3	10	.08790	115.92	5.238	1.11738	1.500	2.060		
ROUTE	AP-23R	10	12	.08790	116.53	5.238	1.11739	1.550	2.071		
COMPUTE NM HYD	E-4D	-	3	.00300	5.07	.225	1.40796	1.500	2.638	PER IMP=	90.00
ADD HYD	AP-25	12 3	10	.09090	120.95	5.464	1.12697	1.550	2.079		
ADD HYD	AP-25+POND-3	2 10	10	.69650	141.83	20.641	.55566	1.550	.318		
COMPUTE NM HYD	P-2	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-25A	3 10	10	.70010	142.50	20.662	.55336	1.550	.318		
ROUTE RESERVOIR	AP-25AR	10	2	.70010	43.12	19.612	.52524	3.300	.096	AC-FT=	6.128
ROUTE	POND-2R	2	12	.70010	43.12	19.612	.52524	3.300	.096		
COMPUTE NM HYD	AP-26&F-1D	-	3	.03980	48.17	2.066	.97312	1.500	1.891	PER IMP=	57.00
COMPUTE NM HYD	P-1	-	4	.00290	.55	.017	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	P-1+F-1D	3 4	10	.04270	48.71	2.082	.91423	1.500	1.783		
ADD HYD	AP-26A	10 12	10	.74280	49.69	21.694	.54760	1.600	.105		
ROUTE RESERVOIR	AP-26AR	10	2	.74280	42.51	21.642	.54628	3.850	.089	AC-FT=	2.024
COMPUTE NM HYD	AP-27&G-1D	-	3	.02290	35.53	1.559	1.27619	1.500	2.424	PER IMP=	80.00
COMPUTE NM HYD	AP-28&G-2D	-	4	.00310	4.90	.215	1.30254	1.500	2.469	PER IMP=	82.00
ROUTE	AP-28R	4	12	.00310	4.76	.215	1.30270	1.500	2.398		
COMPUTE NM HYD	AP-29&G-3D	-	5	.03510	48.94	2.389	1.27619	1.500	2.178	PER IMP=	80.00
COMPUTE NM HYD	G-4D	-	6	.00330	5.08	.220	1.24983	1.500	2.407	PER IMP=	78.00
ADD HYD	AP-30	12 6	10	.00640	9.84	.435	1.27528	1.500	2.403		
FINISH											

Int100pp.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = INT100PP.IN

RUN DATE (MON/DAY/YR) =01/22/2001
USER NO.= C_ANDRSN.I01

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 = 1	NOTATION
*S DEVELOPED INTERIM CONDITIONS, WITHOUT I-40 INTERCEPTOR IN PLACE											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: INT100PP.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE PROPOSED POND											
*S OUTLET WORKS AND THE PROPOSED POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S DEVELOPED CONDITIONS SOUTH OF INTERSTATE 40 WITHOUT THE I-40 INTERCEPTOR											
*S IN PLACE. IN OTHER WORDS, FULLY DEVELOPED CONDITIONS SOUTH OF I-40											
*S INCLUDING EXISTING CONDITION OFFSITE FLOWS NORTH OF INTERSTATE 40.											
*S											
*S NOTES: UNSER DIVERSION POND NO. 5 IS USED IN DEVELOPED/INTERIM CONDITIONS.											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S											
*S DATE: 11/8/00											
START											
RAINFALL TYPE= 2											
*S BEGIN WATERSHED NORTH OF INTERSTATE 40											
COMPUTE NM HYD	O-1E	-	3	.02420	18.06	.567	.43936	1.550	1.166 PER IMP=	.00	
COMPUTE NM HYD	O-2E	-	4	.04220	24.34	.989	.43936	1.600	.901 PER IMP=	.00	
ADD HYD	AP-1	3& 4	10	.06640	41.88	1.556	.43936	1.550	.986		
ROUTE	AP-1R	10	2	.06640	36.11	1.556	.43938	1.650	.850		
COMPUTE NM HYD	O-3E	-	3	.01640	13.10	.402	.45924	1.500	1.248 PER IMP=	1.00	
ADD HYD	PARTAP-2	2& 3	10	.08280	44.73	1.958	.44330	1.650	.844		
COMPUTE NM HYD	AP-7&O-5E	-	3	.10970	63.37	2.803	.47912	1.600	.903 PER IMP=	2.00	
DIVIDE HYD	PART AP-7	3	98	.08594	32.00	2.196	.47911	1.500	.582		
	PART AP-7 AND	99		.02376	31.37	.607	.47911	1.600	2.062		
ROUTE	AP-7R	99	2	.02376	31.64	.608	.47944	1.600	2.081		
ADD HYD	AP-2	10& 2	10	.10656	76.00	2.565	.45135	1.600	1.114		
ROUTE	AP-2R	10	2	.10656	79.83	2.565	.45136	1.600	1.171		
COMPUTE NM HYD	I40-3	-	3	.00190	2.86	.115	1.13512	1.500	2.350 PER IMP=	35.00	
ADD HYD	AP-3	2& 3	20	.10846	81.89	2.680	.46333	1.600	1.180		
COMPUTE NM HYD	AP-4&O-4E	-	3	.00940	8.11	.240	.47912	1.500	1.348 PER IMP=	2.00	
ROUTE	AP-4R	3	2	.00940	8.17	.240	.47921	1.500	1.358		
COMPUTE NM HYD	I40-4	-	3	.00120	1.81	.073	1.13512	1.500	2.357 PER IMP=	35.00	
ADD HYD	AP-5	2& 3	10	.01060	9.98	.313	.55337	1.500	1.471		
ADD HYD	AP-3+AP-5	20&10	10	.11906	89.90	2.993	.47135	1.600	1.180		
ROUTE	AP-6	10	12	.11906	87.97	2.993	.47135	1.650	1.154		
ROUTE	AP-7R-CUL	98	2	.08594	33.23	2.196	.47912	1.500	.604		
COMPUTE NM HYD	I40-2	-	3	.00310	4.65	.188	1.13512	1.500	2.346 PER IMP=	35.00	
ADD HYD	AP-8	2& 3	20	.08904	37.88	2.384	.50195	1.500	.665		
COMPUTE NM HYD	O-6E	-	3	.07320	35.69	1.715	.43936	1.600	.762 PER IMP=	.00	
COMPUTE NM HYD	O-7E	-	4	.05230	39.03	1.226	.43936	1.550	1.166 PER IMP=	.00	
ADD HYD	AP-9	3& 4	10	.12550	71.47	2.941	.43936	1.550	.890		

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
ROUTE	AP-9R	10	2	.12550	70.89	2.941	.43937	1.600	.883		
COMPUTE NM HYD	O-8E	-	3	.00990	23.00	1.124	2.12906	1.500	3.630 PER IMP=	85.00	
ADD HYD	AP-10	2& 3	10	.13540	92.59	4.065	.56290	1.550	1.068		
ROUTE	AP-10R	10	2	.13540	89.10	4.065	.56291	1.600	1.028		
COMPUTE NM HYD	O-9E	-	3	.03480	31.99	1.000	.53875	1.500	1.436 PER IMP=	5.00	
ADD HYD	AP-11	2& 3	10	.17020	114.14	5.065	.55797	1.600	1.048		
ROUTE	AP-11R	10	2	.17020	114.79	5.065	.55797	1.600	1.054		
COMPUTE NM HYD	I40-1	-	3	.00750	11.24	.454	1.13512	1.500	2.342 PER IMP=	35.00	
ADD HYD	AP-12	2& 3	30	.17770	122.86	5.519	.58232	1.600	1.080		
*S BEGIN WATERSHED SOUTH OF INTERSTATE 40											
ROUTE	AP-12R	30	2	.17770	123.23	5.519	.58233	1.600	1.084		
ROUTE	AP-8R	20	22	.08904	39.96	2.384	.50196	1.500	.701		
ADD HYD	AP-13	2&22	10	.26674	158.78	7.902	.55549	1.600	.930		
*S ROUTE FLOWS FROM AP-13 THRU PIPE TO UNSER DIVERSION POND NO. 5.											
*S IF FLOW FROM AP-13 WERE ROUTED TO TO UNSER DIVERSION POND NO. 6,											
*S POND NO. 6 WOULD OVERTOP. PLUS, THE EXISTING FLOW FROM THIS AREA											
*S DRAINS INTO POND NO. 5.											
ROUTE	AP-13R	10	32	.26674	154.05	7.902	.55550	1.650	.902		
COMPUTE NM HYD	AP-13A&A-1D	-	3	.02570	59.05	2.579	1.88137	1.500	3.590 PER IMP=	69.00	
ROUTE	AP-13AR	3	22	.02570	58.26	2.579	1.88138	1.500	3.542		
ROUTE	AP-6R	12	2	.11906	88.44	2.993	.47135	1.650	1.161		
ADD HYD	PARTAP-14	22& 2	10	.14476	125.63	5.572	.72167	1.600	1.356		
COMPUTE NM HYD	A-2D	-	3	.02840	71.47	3.250	2.14550	1.500	3.932 PER IMP=	84.00	
ADD HYD	AP-14	10& 3	10	.17316	175.97	8.822	.95518	1.550	1.588		
ROUTE	AP-14R	10	2	.17316	175.47	8.822	.95518	1.600	1.583		
COMPUTE NM HYD	A-3D	-	3	.02400	61.30	2.881	2.25115	1.500	3.991 PER IMP=	90.00	
ADD HYD	AP-15	2& 3	10	.19716	229.58	11.703	1.11293	1.550	1.819		
COMPUTE NM HYD	AP-16&A-4D	-	3	.01250	29.07	1.312	1.96827	1.500	3.634 PER IMP=	76.00	

ADD HYD	AP-15+AP-16	10 3	10	.20966	255.16	13.015	1.16393	1.550	1.902		
COMPUTE NM HYD	P-6	-	3	.00430	3.72	.110	.47912	1.500	1.350	PER IMP=	2.00
ADD HYD	AP-17	10 3	10	.21396	258.75	13.125	1.15016	1.550	1.890		
ROUTE RESERVOIR	AP-17R	10	2	.21396	62.62	13.125	1.15015	2.050	.457	AC-FT=	6.765
ROUTE	POND6ROUTE36	2	12	.21396	62.63	13.125	1.15015	2.050	.457		
ROUTE	POND6ROUTE48	12	22	.21396	62.58	13.125	1.15015	2.050	.457		
COMPUTE NM HYD	P-5	-	3	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	AP-18	3 32	10	.26964	155.57	7.976	.55462	1.650	.901		
ROUTE RESERVOIR	AP-18R	10	12	.26964	113.38	7.976	.55462	1.800	.657	AC-FT=	2.044
ROUTE	POND-5ROUTE4	12	32	.26964	119.58	7.976	.55462	1.800	.693		
ADD HYD	POND-5R 6R	32 22	20	.48360	174.55	21.101	.81811	1.800	.564		
COMPUTE NM HYD	AP-19 6C-1D	-	3	.01150	24.41	1.024	1.67006	1.500	3.317	PER IMP=	57.00
ROUTE	AP-19R	3	2	.01150	23.29	1.024	1.67010	1.550	3.164		
COMPUTE NM HYD	C-2D	-	4	.05740	118.78	5.113	1.67006	1.500	3.233	PER IMP=	57.00
ADD HYD	AP-20	2 4	10	.06890	141.50	6.137	1.67005	1.500	3.209		
COMPUTE NM HYD	P-4	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	P-4+POND-5R 6	20 3	20	.48720	175.34	21.192	.81559	1.800	.562		
ADD HYD	AP-20A	10 20	30	.55610	237.86	27.329	.92145	1.700	.668		
ROUTE RESERVOIR	AP-20AR	30	2	.55610	115.67	27.248	.91871	2.200	.325	AC-FT=	7.155
ROUTE	POND-4R	2	12	.55610	115.65	27.248	.91871	2.200	.325		
COMPUTE NM HYD	P-3	-	3	.00270	2.34	.069	.47912	1.500	1.354	PER IMP=	2.00
ADD HYD	P-3+POND-4R	12 3	10	.55880	115.79	27.316	.91656	2.200	.324		
COMPUTE NM HYD	AP-21 6D-1D	-	3	.04680	99.31	4.168	1.67006	1.500	3.316	PER IMP=	57.00
ADD HYD	AP-21A	10 3	10	.60560	138.09	31.484	.97479	1.500	.356		

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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
ROUTE RESERVOIR	AP-21AR	10	2	.60560	108.88	31.415	.97265	2.700	.281	AC-FT=	4.159
COMPUTE NM HYD	AP-22 6E-1D	-	3	.02820	64.16	2.883	1.91659	1.500	3.555	PER IMP=	71.00
ROUTE	AP-22R	3	12	.02820	61.84	2.883	1.91660	1.550	3.427		
COMPUTE NM HYD	E-2D	-	3	.01720	44.80	2.065	2.25115	1.500	4.070	PER IMP=	90.00
ADD HYD	AP-23	3 12	10	.04540	106.21	4.948	2.04333	1.500	3.655		
ROUTE	AP-23R	10	12	.04540	104.90	4.948	2.04334	1.550	3.610		
COMPUTE NM HYD	E-3D	-	3	.04250	90.19	3.785	1.67006	1.500	3.316	PER IMP=	57.00
ADD HYD	AP-24	12 3	10	.08790	191.75	8.733	1.86285	1.500	3.408		
ROUTE	AP-23R	10	12	.08790	190.60	8.733	1.86286	1.550	3.388		
COMPUTE NM HYD	E-4D	-	3	.00300	7.83	.360	2.25115	1.500	4.076	PER IMP=	90.00
ADD HYD	AP-25	12 3	10	.09090	197.44	9.093	1.87566	1.550	3.394		
ADD HYD	AP-25+POND-3	2 10	10	.69650	231.02	40.509	1.09050	1.550	.518		
COMPUTE NM HYD	P-2	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-25A	3 10	10	.70010	234.02	40.600	1.08735	1.550	.522		
ROUTE RESERVOIR	AP-25AR	10	2	.70010	115.88	39.549	1.05921	2.500	.259	AC-FT=	9.274
ROUTE	POND-2R	2	12	.70010	115.91	39.549	1.05921	2.550	.259		
COMPUTE NM HYD	AP-26 6F-1D	-	3	.03980	82.37	3.545	1.67006	1.500	3.234	PER IMP=	57.00
COMPUTE NM HYD	P-1	-	4	.00290	2.51	.074	.47912	1.500	1.353	PER IMP=	2.00
ADD HYD	P-1+F-1D	3 4	10	.04270	84.88	3.618	1.58885	1.500	3.106		
ADD HYD	AP-26A	10 12	10	.74280	118.94	43.168	1.08965	2.450	.250		
ROUTE RESERVOIR	AP-26AR	10	2	.74280	93.73	43.114	1.08830	3.800	.197	AC-FT=	7.046
COMPUTE NM HYD	AP-27 6G-1D	-	3	.02290	56.30	2.534	2.07506	1.500	3.841	PER IMP=	80.00
COMPUTE NM HYD	AP-28 6G-2D	-	4	.00310	7.72	.349	2.11028	1.500	3.893	PER IMP=	82.00
ROUTE	AP-28R	4	12	.00310	7.56	.349	2.11044	1.500	3.808		
COMPUTE NM HYD	AP-29 6G-3D	-	5	.03510	77.66	3.885	2.07506	1.500	3.457	PER IMP=	80.00
COMPUTE NM HYD	G-4D	-	6	.00330	8.10	.359	2.03985	1.500	3.837	PER IMP=	78.00
ADD HYD	AP-30	12 6	10	.00640	15.66	.708	2.07389	1.500	3.823		
FINISH											

Dev10ee.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = DEV10EE.IN

RUN DATE (MON/DAY/YR) = 01/25/2001
USER NO. = C_ANDRSN.I01

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 = 1	NOTATION
*S DEVELOPED CONDITIONS WITH I-40 INTERCEPTOR IN PLACE											
*S 10 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: DEV10EE.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S FULLY DEVELOPED CONDITIONS WITH THE I-40 INTERCEPTOR IN PLACE.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS NOT USED IN FULLY DEVELOPED											
*S CONDITION (PER CHUCK EASTERLING'S REPORT).											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S DATE: 11/7/00											
START											
RAINFALL TYPE= 2											
*S FOR WATERSHED NORTH OF INTERSTATE 40											
*S ALL FLOWS TO BE PICKED UP BY I-40 INTERCEPTOR											
*S BEGIN WATERSHED SOUTH OF INTERSTATE 40											
COMPUTE NM HYD	I40-1	-	3	.00750	5.52	.237	.59326	1.500	1.150	PER IMP=	35.00
ROUTE	I40-1R	3	2	.00750	5.30	.237	.59333	1.550	1.104		
COMPUTE NM HYD	I40-2	-	3	.00310	2.28	.098	.59326	1.500	1.152	PER IMP=	35.00
ROUTE	I40-2R	3	12	.00310	2.24	.098	.59339	1.500	1.129		
ADD HYD	I401R&I402R	2&12	10	.01060	7.47	.335	.59322	1.550	1.102		
COMPUTE NM HYD	A-1D	-	3	.02570	36.06	1.551	1.13124	1.500	2.192	PER IMP=	69.00
ADD HYD	AP-1	10&3	10	.03630	43.48	1.886	.97412	1.500	1.872		
ROUTE	AP-1R	10	2	.03630	42.61	1.886	.97414	1.500	1.834		
COMPUTE NM HYD	I40-3	-	3	.00190	1.40	.060	.59326	1.500	1.154	PER IMP=	35.00
COMPUTE NM HYD	I40-4	-	4	.00120	.89	.038	.59326	1.500	1.156	PER IMP=	35.00
ADD HYD	I40-3&I40-4	3&4	10	.00310	2.29	.098	.59310	1.500	1.155		
ROUTE	I403R&I404R	10	12	.00310	2.09	.098	.59338	1.550	1.051		
ADD HYD	PARTAP-2	2&12	10	.03940	44.43	1.984	.94415	1.500	1.762		
COMPUTE NM HYD	A-2D	-	3	.02840	45.59	2.013	1.32889	1.500	2.508	PER IMP=	84.00
ADD HYD	AP-2	10&3	10	.06780	90.02	3.997	1.10531	1.500	2.075		
ROUTE	AP-2R	10	2	.06780	87.57	3.997	1.10532	1.500	2.018		
COMPUTE NM HYD	A-3D	-	3	.02400	39.69	1.802	1.40796	1.500	2.584	PER IMP=	90.00
ADD HYD	AP-3	2&3	10	.09180	127.26	5.799	1.18443	1.500	2.166		
COMPUTE NM HYD	AP-4&A-4D	-	3	.01250	18.04	.801	1.20080	1.500	2.256	PER IMP=	76.00
ADD HYD	AP-3+AP-4	10&3	10	.10430	145.30	6.599	1.18639	1.500	2.177		
COMPUTE NM HYD	P-6	-	3	.00430	.81	.026	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-5	10&3	10	.10860	146.10	6.625	1.14374	1.500	2.102		
ROUTE RESERVOIR	POND-6R	10	2	.10860	10.76	6.625	1.14374	2.250	.155	AC-FT=	4.257
ROUTE	POND6ROUTE36	2	12	.10860	10.76	6.625	1.14374	2.250	.155		
ROUTE	POND6ROUTE48	12	22	.10860	10.76	6.625	1.14374	2.250	.155		
COMPUTE NM HYD	AP-6&C-1D	-	3	.01150	14.28	.597	.97312	1.500	1.940	PER IMP=	57.00

TIME= .00
RAIN24= 1.770

□

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
ROUTE	AP-6R	3	2	.01150	13.60	.597	.97316	1.550	1.847		
COMPUTE NM HYD	C-2D	-	3	.05740	69.47	2.979	.97312	1.500	1.891	PER IMP=	57.00
ADD HYD	AP-7	2&3	10	.06890	82.45	3.576	.97311	1.500	1.870		
ADD HYD	PARTAP-8	10&22	20	.17750	88.81	10.200	1.07750	1.500	.782		
COMPUTE NM HYD	P-4	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-8	20&3	10	.18110	89.47	10.221	1.05823	1.500	.772		
ROUTE RESERVOIR	POND-4	10	2	.18110	9.75	10.134	1.04922	4.000	.084	AC-FT=	3.295
ROUTE	POND-4R	2	12	.18110	9.75	10.134	1.04922	4.000	.084		
COMPUTE NM HYD	P-3	-	3	.00270	.51	.016	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	P-3+POND-4R	12&3	10	.18380	9.75	10.149	1.03536	4.000	.083		
COMPUTE NM HYD	AP-9&D-1D	-	3	.04680	58.08	2.429	.97312	1.500	1.939	PER IMP=	57.00
ADD HYD	AP-9A	10&3	10	.23060	62.65	12.578	1.02273	1.500	.424		
ROUTE RESERVOIR	POND-3	10	2	.23060	9.88	12.383	1.00688	4.200	.067	AC-FT=	1.991
COMPUTE NM HYD	AP-10&E-1D	-	3	.02820	39.44	1.741	1.15760	1.500	2.185	PER IMP=	71.00
ROUTE	AP-10R	3	12	.02820	38.12	1.741	1.15761	1.550	2.112		
COMPUTE NM HYD	E-2D	-	3	.01720	29.01	1.292	1.40796	1.500	2.635	PER IMP=	90.00
ADD HYD	AP-11	3&12	10	.04540	66.46	3.033	1.25243	1.500	2.287		
ROUTE	AP-11R	10	12	.04540	66.02	3.033	1.25245	1.550	2.272		
COMPUTE NM HYD	E-3D	-	3	.04250	52.74	2.206	.97312	1.500	1.939	PER IMP=	57.00
ADD HYD	AP-12	12&3	10	.08790	115.92	5.238	1.11738	1.500	2.060		
ROUTE	AP-11R	10	12	.08790	116.53	5.238	1.11739	1.550	2.071		
COMPUTE NM HYD	E-4D	-	3	.00300	5.07	.225	1.40796	1.500	2.638	PER IMP=	90.00
ADD HYD	AP-13	12&3	10	.09090	120.95	5.464	1.12697	1.550	2.079		
ADD HYD	AP-13+POND-3	2&10	10	.32150	124.65	17.847	1.04083	1.550	.606		
COMPUTE NM HYD	P-2	-	3	.00360	1.80	.048	.24840	1.500	.783	PER IMP=	2.00
ADD HYD	AP-13A	3&10	10	.32510	126.37	17.894	1.03200	1.550	.607		
ROUTE RESERVOIR	POND-2	10	2	.32510	9.18	16.801	.96898	9.900	.044	AC-FT=	4.894
ROUTE	POND-2R	2	12	.32510	9.18	16.799	.96890	9.900	.044		

COMPUTE NM HYD	AP-14&F-1D	-	3	.03980	48.17	2.066	.97312	1.500	1.891	PER IMP=	57.00
COMPUTE NM HYD	P-1	-	4	.00290	.55	.017	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	P-1+F-1D	3& 4	10	.04270	48.71	2.082	.91423	1.500	1.783		
ADD HYD	AP-14A	10&12	10	.36780	49.21	18.881	.96255	1.500	.209		
ROUTE RESERVOIR	POND-1	10	2	.36780	9.13	18.707	.95367	14.750	.039	AC-FT=	2.184
COMPUTE NM HYD	AP-15&G-1D	-	3	.02290	35.53	1.559	1.27619	1.500	2.424	PER IMP=	80.00
COMPUTE NM HYD	AP-16&G-2D	-	4	.00310	4.90	.215	1.30254	1.500	2.469	PER IMP=	82.00
ROUTE	AP-16R	4	12	.00310	4.76	.215	1.30270	1.500	2.398		
COMPUTE NM HYD	AP-17&G-3D	-	5	.03510	48.94	2.389	1.27619	1.500	2.178	PER IMP=	80.00
COMPUTE NM HYD	G-4D	-	6	.00330	5.08	.220	1.24983	1.500	2.407	PER IMP=	78.00
ADD HYD	AP-18	12& 6	10	.00640	9.84	.435	1.27528	1.500	2.403		
FINISH											

Dev100ee.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = DEV100EE.IN

RUN DATE (MON/DAY/YR) =01/25/2001
USER NO. = C ANDRSN.I01

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 = 1	NOTATION
*S DEVELOPED CONDITIONS WITH I-40 INTERCEPTOR IN PLACE											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: DEV100EE.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S FULLY DEVELOPED CONDITIONS WITH THE I-40 INTERCEPTOR IN PLACE.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS NOT USED IN FULLY DEVELOPED											
*S CONDITION (PER CHUCK EASTERLING'S REPORT).											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S DATE: 11/7/00											
START											
RAINFALL TYPE= 2											
TIME= .00											
RAIN24= 2.660											
*S FOR WATERSHED NORTH OF INTERSTATE 40											
*S ALL FLOWS TO BE PICKED UP BY I-40 INTERCEPTOR											
*S BEGIN WATERSHED SOUTH OF INTERSTATE 40											
COMPUTE NM HYD	I40-1	-	3	.00750	11.24	.454	1.13512	1.500	2.342	PER IMP=	35.00
ROUTE	I40-1R	3	2	.00750	10.83	.454	1.13518	1.550	2.256		
COMPUTE NM HYD	I40-2	-	3	.00310	4.65	.188	1.13512	1.500	2.346	PER IMP=	35.00
ROUTE	I40-2R	3	12	.00310	4.61	.188	1.13529	1.500	2.325		
ADD HYD	I401R&I402R	2&12	10	.01060	15.34	.642	1.13508	1.500	2.261		
COMPUTE NM HYD	A-1D	-	3	.02570	59.05	2.579	1.88137	1.500	3.590	PER IMP=	69.00
ADD HYD	AP-1	10&3	10	.03630	74.38	3.220	1.66343	1.500	3.202		
ROUTE	AP-1R	10	2	.03630	73.06	3.220	1.66346	1.500	3.145		
COMPUTE NM HYD	I40-3	-	3	.00190	2.86	.115	1.13512	1.500	2.350	PER IMP=	35.00
COMPUTE NM HYD	I40-4	-	4	.00120	1.81	.073	1.13512	1.500	2.357	PER IMP=	35.00
ADD HYD	I40-3&I40-4	3&4	10	.00310	4.67	.188	1.13493	1.500	2.353		
ROUTE	I403R&I404R	10	12	.00310	4.38	.188	1.13522	1.550	2.208		
ADD HYD	PARTAP-2	2&12	10	.03940	76.99	3.408	1.62186	1.500	3.053		
COMPUTE NM HYD	A-2D	-	3	.02840	71.47	3.250	2.14550	1.500	3.932	PER IMP=	84.00
ADD HYD	AP-2	10&3	10	.06780	148.46	6.658	1.84120	1.500	3.421		
ROUTE	AP-2R	10	2	.06780	144.80	6.658	1.84122	1.500	3.337		
COMPUTE NM HYD	A-3D	-	3	.02400	61.30	2.881	2.25115	1.500	3.991	PER IMP=	90.00
ADD HYD	AP-3	2&3	10	.09180	206.10	9.539	1.94838	1.500	3.508		
COMPUTE NM HYD	AP-4&A-4D	-	3	.01250	29.07	1.312	1.96827	1.500	3.634	PER IMP=	76.00
ADD HYD	AP-3+AP-4	10&3	10	.10430	235.17	10.851	1.95076	1.500	3.523		
COMPUTE NM HYD	P-6	-	3	.00430	3.72	.110	.47912	1.500	1.350	PER IMP=	2.00
ADD HYD	AP-5	10&3	10	.10860	238.89	10.961	1.89248	1.500	3.437		
ROUTE RESERVOIR	POND-6R	10	2	.10860	59.90	10.961	1.89248	2.000	.862	AC-FT=	5.918
ROUTE	POND6ROUTE36	2	12	.10860	60.01	10.961	1.89248	2.000	.863		
ROUTE	POND6ROUTE48	12	22	.10860	59.78	10.961	1.89248	1.950	.860		
COMPUTE NM HYD	AP-6&C-1D	-	3	.01150	24.41	1.024	1.67006	1.500	3.317	PER IMP=	57.00

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
ROUTE	AP-6R	3	2	.01150	23.38	1.024	1.67010	1.550	3.177		
COMPUTE NM HYD	C-2D	-	3	.05740	118.78	5.113	1.67006	1.500	3.233	PER IMP=	57.00
ADD HYD	AP-7	2&3	10	.06890	141.62	6.137	1.67005	1.500	3.212		
ADD HYD	PARTAP-8	10&22	20	.17750	149.74	17.098	1.80614	1.500	1.318		
COMPUTE NM HYD	P-4	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-8	20&3	10	.18110	152.86	17.190	1.77971	1.500	1.319		
ROUTE RESERVOIR	POND-4	10	2	.18110	81.98	17.099	1.77033	2.100	.707	AC-FT=	4.377
ROUTE	POND-4R	2	12	.18110	82.19	17.099	1.77032	2.100	.709		
COMPUTE NM HYD	P-3	-	3	.00270	2.34	.069	.47912	1.500	1.354	PER IMP=	2.00
ADD HYD	P-3+POND-4R	12&3	10	.18380	82.38	17.167	1.75127	2.100	.700		
COMPUTE NM HYD	AP-9&D-1D	-	3	.04680	99.31	4.168	1.67006	1.500	3.316	PER IMP=	57.00
ADD HYD	AP-9A	10&3	10	.23060	107.39	21.336	1.73478	1.500	.728		
ROUTE RESERVOIR	POND-3	10	2	.23060	88.48	21.088	1.71463	2.150	.600	AC-FT=	2.796
COMPUTE NM HYD	AP-10&E-1D	-	3	.02820	64.16	2.883	1.91659	1.500	3.555	PER IMP=	71.00
ROUTE	AP-10R	3	12	.02820	61.84	2.883	1.91660	1.550	3.427		
COMPUTE NM HYD	E-2D	-	3	.01720	44.80	2.065	2.25115	1.500	4.070	PER IMP=	90.00
ADD HYD	AP-11	3&12	10	.04540	106.21	4.948	2.04333	1.500	3.655		
ROUTE	AP-11R	10	12	.04540	104.90	4.948	2.04334	1.550	3.610		
COMPUTE NM HYD	E-3D	-	3	.04250	90.19	3.785	1.67006	1.500	3.316	PER IMP=	57.00
ADD HYD	AP-12	12&3	10	.08790	191.75	8.733	1.86285	1.500	3.408		
ROUTE	AP-11R	10	12	.08790	190.60	8.733	1.86286	1.550	3.388		
COMPUTE NM HYD	E-4D	-	3	.00300	7.83	.360	2.25115	1.500	4.076	PER IMP=	90.00
ADD HYD	AP-13	12&3	10	.09090	197.44	9.093	1.87566	1.550	3.394		
ADD HYD	AP-13+POND-3	2&10	10	.32150	203.89	30.181	1.76016	1.550	.991		
COMPUTE NM HYD	P-2	-	3	.00360	4.76	.135	.70157	1.500	2.066	PER IMP=	2.00
ADD HYD	AP-13A	3&10	10	.32510	208.38	30.315	1.74841	1.550	1.002		
ROUTE RESERVOIR	POND-2	10	2	.32510	126.20	28.794	1.66070	2.100	.607	AC-FT=	7.153
ROUTE	POND-2R	2	12	.32510	129.46	28.792	1.66057	2.100	.622		

COMPUTE NM HYD	AP-14&F-1D	-	3	.03980	82.37	3.545	1.67006	1.500	3.234 PER IMP=	57.00
COMPUTE NM HYD	P-1	-	4	.00290	2.51	.074	.47912	1.500	1.353 PER IMP=	2.00
ADD HYD	P-1+F-1D	3& 4	10	.04270	84.88	3.618	1.58885	1.500	3.106	
ADD HYD	AP-14A	10&12	10	.36780	142.57	32.410	1.65225	2.100	.606	
ROUTE RESERVOIR	POND-1	10	2	.36780	93.38	31.228	1.59195	2.450	.397 AC-FT=	5.776
COMPUTE NM HYD	AP-15&G-1D	-	3	.02290	56.30	2.534	2.07506	1.500	3.841 PER IMP=	80.00
COMPUTE NM HYD	AP-16&G-2D	-	4	.00310	7.72	.349	2.11028	1.500	3.893 PER IMP=	82.00
ROUTE	AP-16R	4	12	.00310	7.56	.349	2.11044	1.500	3.808	
COMPUTE NM HYD	AP-17&G-3D	-	5	.03510	77.66	3.885	2.07506	1.500	3.457 PER IMP=	80.00
COMPUTE NM HYD	G-4D	-	6	.00330	8.10	.359	2.03985	1.500	3.837 PER IMP=	78.00
ADD HYD	AP-18	12& 6	10	.00640	15.66	.708	2.07389	1.500	3.823	
FINISH										

Dev10pe.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = DEV10PE.IN

RUN DATE (MON/DAY/YR) =01/19/2001
USER NO.= C_ANDRSN.101

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 = 1	NOTATION
*S DEVELOPED CONDITIONS WITH I-40 INTERCEPTOR IN PLACE											
*S 10 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: DEV10PE.IN											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE PROPOSED POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S FULLY DEVELOPED CONDITIONS WITH THE I-40 INTERCEPTOR IN PLACE.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS NOT USED IN FULLY DEVELOPED											
*S CONDITION (PER CHUCK EASTERLING'S REPORT).											
*S THE OUTLET WORKS FOR EACH UNSER DIVERSION POND HAS BEEN MODIFIED											
*S BY PLACING ADDITIONAL 10" OPENINGS AROUND EACH STRUCTURE (PER											
*S CHUCK EASTERLING'S REPORT). OUTLET RATING CURVES WERE ALSO BASED											
*S UPON TAILWATER ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S DATE: 11/7/00											
START											
RAINFALL TYPE= 2											
*S FOR WATERSHED NORTH OF INTERSTATE 40											
*S ALL FLOWS TO BE PICKED UP BY I-40 INTERCEPTOR											
*S BEGIN WATERSHED SOUTH OF INTERSTATE 40											
COMPUTE NM HYD	I40-1	-	3	.00750	5.52	.237	.59326	1.500	1.150	PER IMP=	35.00
ROUTE	I40-1R	3	2	.00750	5.30	.237	.59333	1.550	1.104		
COMPUTE NM HYD	I40-2	-	3	.00310	2.28	.098	.59326	1.500	1.152	PER IMP=	35.00
ROUTE	I40-2R	3	12	.00310	2.24	.098	.59339	1.500	1.129		
ADD HYD	I401R&I402R	2&12	10	.01060	7.47	.335	.59322	1.550	1.102		
COMPUTE NM HYD	A-1D	-	3	.02570	36.06	1.551	1.13124	1.500	2.192	PER IMP=	69.00
ADD HYD	AP-1	10& 3	10	.03630	43.48	1.886	.97412	1.500	1.872		
ROUTE	AP-1R	10	2	.03630	42.61	1.886	.97414	1.500	1.834		
COMPUTE NM HYD	I40-3	-	3	.00190	1.40	.060	.59326	1.500	1.154	PER IMP=	35.00
COMPUTE NM HYD	I40-4	-	4	.00120	.89	.038	.59326	1.500	1.156	PER IMP=	35.00
ADD HYD	I40-3&I40-4	3& 4	10	.00310	2.29	.098	.59310	1.500	1.155		
ROUTE	I403R&I404R	10	12	.00310	2.09	.098	.59338	1.550	1.051		
ADD HYD	PARTAP-2	2&12	10	.03940	44.43	1.984	.94415	1.500	1.762		
COMPUTE NM HYD	A-2D	-	3	.02840	45.59	2.013	1.32889	1.500	2.508	PER IMP=	84.00
ADD HYD	AP-2	10& 3	10	.06780	90.02	3.997	1.10531	1.500	2.075		
ROUTE	AP-2R	10	2	.06780	87.57	3.997	1.10532	1.500	2.018		
COMPUTE NM HYD	A-3D	-	3	.02400	39.69	1.802	1.40796	1.500	2.584	PER IMP=	90.00
ADD HYD	AP-3	2& 3	10	.09180	127.26	5.799	1.18443	1.500	2.166		
COMPUTE NM HYD	AP-4&A-4D	-	3	.01250	18.04	.801	1.20080	1.500	2.256	PER IMP=	76.00
ADD HYD	AP-3+AP-4	10& 3	10	.10430	145.30	6.599	1.18639	1.500	2.177		
COMPUTE NM HYD	P-6	-	3	.00430	.81	.026	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-5	10& 3	10	.10860	146.10	6.625	1.14374	1.500	2.102		
ROUTE RESERVOIR	POND-6R	10	2	.10860	43.69	6.625	1.14374	1.900	.629	AC-FT=	2.684
ROUTE	POND6ROUTE36	2	12	.10860	43.69	6.625	1.14374	1.900	.629		
ROUTE	POND6ROUTE48	12	22	.10860	43.68	6.625	1.14374	1.950	.628		
COMPUTE NM HYD	AP-6&C-1D	-	3	.01150	14.28	.597	.97312	1.500	1.940	PER IMP=	57.00
ROUTE	AP-6R	3	2	.01150	13.60	.597	.97316	1.550	1.847		

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	C-2D	-	3	.05740	69.47	2.979	.97312	1.500	1.891	PER IMP=	57.00
ADD HYD	AP-7	2& 3	10	.06890	82.45	3.576	.97311	1.500	1.870		
ADD HYD	PARTAP-8	10&22	20	.17750	105.83	10.200	1.07750	1.550	.932		
COMPUTE NM HYD	P-4	-	3	.00360	.68	.022	.11274	1.550	.293	PER IMP=	2.00
ADD HYD	AP-8	20& 3	10	.18110	106.51	10.221	1.05823	1.550	.919		
ROUTE RESERVOIR	POND-4	10	2	.18110	50.45	10.142	1.05000	2.150	.435	AC-FT=	2.433
ROUTE	POND-4R	2	12	.18110	50.45	10.142	1.05000	2.150	.435		
COMPUTE NM HYD	P-3	-	3	.00270	.51	.016	.11274	1.550	.294	PER IMP=	2.00
ADD HYD	P-3+POND-4R	12& 3	10	.18380	50.49	10.157	1.03614	2.150	.429		
COMPUTE NM HYD	AP-9&D-1D	-	3	.04680	58.08	2.429	.97312	1.500	1.939	PER IMP=	57.00
ADD HYD	AP-9A	10& 3	10	.23060	82.75	12.586	1.02335	1.550	.561		
ROUTE RESERVOIR	POND-3	10	2	.23060	57.95	12.517	1.01775	2.100	.393	AC-FT=	2.158
COMPUTE NM HYD	AP-10&E-1D	-	3	.02820	39.44	1.741	1.15760	1.500	2.185	PER IMP=	71.00
ROUTE	AP-10R	3	12	.02820	38.12	1.741	1.15761	1.550	2.112		
COMPUTE NM HYD	E-2D	-	3	.01720	29.01	1.292	1.40796	1.500	2.635	PER IMP=	90.00
ADD HYD	AP-11	3&12	10	.04540	66.46	3.033	1.25243	1.500	2.287		
ROUTE	AP-11R	10	12	.04540	66.02	3.033	1.25245	1.550	2.272		
COMPUTE NM HYD	E-3D	-	3	.04250	52.74	2.206	.97312	1.500	1.939	PER IMP=	57.00
ADD HYD	AP-12	12& 3	10	.08790	115.92	5.238	1.11738	1.500	2.060		
ROUTE	AP-11R	10	12	.08790	116.53	5.238	1.11739	1.550	2.071		
COMPUTE NM HYD	E-4D	-	3	.00300	5.07	.225	1.40796	1.500	2.638	PER IMP=	90.00
ADD HYD	AP-13	12& 3	10	.09090	120.95	5.464	1.12697	1.550	2.079		
ADD HYD	AP-13+POND-3	2&10	10	.32150	142.03	17.981	1.04863	1.550	.690		
COMPUTE NM HYD	P-2	-	3	.00360	1.80	.048	.24840	1.500	.783	PER IMP=	2.00
ADD HYD	AP-13A	3&10	10	.32510	143.76	18.027	1.03972	1.550	.691		
ROUTE RESERVOIR	POND-2	10	2	.32510	45.98	17.295	.99747	2.900	.221	AC-FT=	5.148
ROUTE	POND-2R	2	12	.32510	45.98	17.295	.99747	2.900	.221		
COMPUTE NM HYD	AP-14&F-1D	-	3	.03980	48.17	2.066	.97312	1.500	1.891	PER IMP=	57.00

Dev10pe.sum

COMPUTE NM HYD	P-1	-	4	.00290	.55	.017	.11274	1.550	.294 PER IMP=	2.00
ADD HYD	P-1+F-1D	3& 4	10	.04270	48.71	2.082	.91423	1.500	1.783	
ADD HYD	AP-14A	10&12	10	.36780	58.47	19.377	.98781	1.550	.248	
ROUTE RESERVOIR	POND-1	10	2	.36780	46.28	19.376	.98777	3.000	.197 AC-FT=	1.510
COMPUTE NM HYD	AP-15&G-1D	-	3	.02290	35.53	1.559	1.27619	1.500	2.424 PER IMP=	80.00
COMPUTE NM HYD	AP-16&G-2D	-	4	.00310	4.90	.215	1.30254	1.500	2.469 PER IMP=	82.00
ROUTE	AP-16R	4	12	.00310	4.76	.215	1.30270	1.500	2.398	
COMPUTE NM HYD	AP-17&G-3D	-	5	.03510	48.94	2.389	1.27619	1.500	2.178 PER IMP=	80.00
COMPUTE NM HYD	G-4D	-	6	.00330	5.08	.220	1.24983	1.500	2.407 PER IMP=	78.00
ADD HYD	AP-18	12& 6	10	.00640	9.84	.435	1.27528	1.500	2.403	
FINISH										

Dev100pe.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = DEV100PE.IN

RUN DATE (MON/DAY/YR) = 01/25/2001
USER NO. = C_ANDRSN.101

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 = 1	NOTATION
*S DEVELOPED CONDITIONS WITH I-40 INTERCEPTOR IN PLACE											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: DEV100PE.IN											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE PROPOSED POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING.											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S FULLY DEVELOPED CONDITIONS WITH THE I-40 INTERCEPTOR IN PLACE.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS NOT USED IN FULLY DEVELOPED											
*S CONDITION (PER CHUCK EASTERLING'S REPORT).											
*S THE OUTLET WORKS FOR EACH UNSER DIVERSION POND HAS BEEN MODIFIED											
*S BY PLACING ADDITIONAL 10" OPENINGS AROUND EACH STRUCTURE (PER											
*S CHUCK EASTERLING'S REPORT). OUTLET RATING CURVES WERE ALSO BASED											
*S UPON TAILWATER ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S DATE: 11/7/00											
START											
RAINFALL TYPE= 2											
TIME= .00											
RAIN24= 2.660											
*S FOR WATERSHED NORTH OF INTERSTATE 40											
*S ALL FLOWS TO BE PICKED UP BY I-40 INTERCEPTOR											
*S BEGIN WATERSHED SOUTH OF INTERSTATE 40											
COMPUTE NM HYD	I40-1	-	3	.00750	11.24	.454	1.13512	1.500	2.342	PER IMP=	35.00
ROUTE	I40-1R	3	2	.00750	10.83	.454	1.13518	1.550	2.256		
COMPUTE NM HYD	I40-2	-	3	.00310	4.65	.188	1.13512	1.500	2.346	PER IMP=	35.00
ROUTE	I40-2R	3	12	.00310	4.61	.188	1.13529	1.500	2.325		
ADD HYD	I401R&I402R	2&12	10	.01060	15.34	.642	1.13508	1.500	2.261		
COMPUTE NM HYD	A-1D	-	3	.02570	59.05	2.579	1.88137	1.500	3.590	PER IMP=	69.00
ADD HYD	AP-1	10& 3	10	.03630	74.38	3.220	1.66343	1.500	3.202		
ROUTE	AP-1R	10	2	.03630	73.06	3.220	1.66346	1.500	3.145		
COMPUTE NM HYD	I40-3	-	3	.00190	2.86	.115	1.13512	1.500	2.350	PER IMP=	35.00
COMPUTE NM HYD	I40-4	-	4	.00120	1.81	.073	1.13512	1.500	2.357	PER IMP=	35.00
ADD HYD	I40-3&I40-4	3& 4	10	.00310	4.67	.188	1.13493	1.500	2.353		
ROUTE	I403R&I404R	10	12	.00310	4.38	.188	1.13522	1.550	2.208		
ADD HYD	PARTAP-2	2&12	10	.03940	76.99	3.408	1.62186	1.500	3.053		
COMPUTE NM HYD	A-2D	-	3	.02840	71.47	3.250	2.14550	1.500	3.932	PER IMP=	84.00
ADD HYD	AP-2	10& 3	10	.06780	148.46	6.658	1.84120	1.500	3.421		
ROUTE	AP-2R	10	2	.06780	144.80	6.658	1.84122	1.500	3.337		
COMPUTE NM HYD	A-3D	-	3	.02400	61.30	2.881	2.25115	1.500	3.991	PER IMP=	90.00
ADD HYD	AP-3	2& 3	10	.09180	206.10	9.539	1.94838	1.500	3.508		
COMPUTE NM HYD	AP-4&A-4D	-	3	.01250	29.07	1.312	1.96827	1.500	3.634	PER IMP=	76.00
ADD HYD	AP-3+AP-4	10& 3	10	.10430	235.17	10.851	1.95076	1.500	3.523		
COMPUTE NM HYD	P-6	-	3	.00430	3.72	.110	.47912	1.500	1.350	PER IMP=	2.00
ADD HYD	AP-5	10& 3	10	.10860	238.89	10.961	1.89248	1.500	3.437		
ROUTE RESERVOIR	POND-6R	10	2	.10860	55.69	10.961	1.89248	2.000	.801	AC-FT=	4.965
ROUTE	POND6ROUTE36	2	12	.10860	55.69	10.961	1.89248	2.050	.801		
ROUTE	POND6ROUTE48	12	22	.10860	55.71	10.961	1.89248	2.050	.802		
COMPUTE NM HYD	AP-6&C-1D	-	3	.01150	24.41	1.024	1.67006	1.500	3.317	PER IMP=	57.00
ROUTE	AP-6R	3	2	.01150	23.38	1.024	1.67010	1.550	3.177		

□

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	C-2D	-	3	.05740	118.78	5.113	1.67006	1.500	3.233	PER IMP=	57.00
ADD HYD	AP-7	2& 3	10	.06890	141.62	6.137	1.67005	1.500	3.212		
ADD HYD	PARTAP-8	10&22	20	.17750	176.57	17.098	1.80614	1.550	1.554		
COMPUTE NM HYD	P-4	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-8	20& 3	10	.18110	179.57	17.190	1.77971	1.550	1.549		
ROUTE RESERVOIR	POND-4	10	2	.18110	82.38	17.110	1.77147	2.050	.711	AC-FT=	3.859
ROUTE	POND-4R	2	12	.18110	82.40	17.110	1.77147	2.050	.711		
COMPUTE NM HYD	P-3	-	3	.00270	2.34	.069	.47912	1.500	1.354	PER IMP=	2.00
ADD HYD	P-3+POND-4R	12& 3	10	.18380	82.62	17.178	1.75240	2.050	.702		
COMPUTE NM HYD	AP-9&D-1D	-	3	.04680	99.31	4.168	1.67006	1.500	3.316	PER IMP=	57.00
ADD HYD	AP-9A	10& 3	10	.23060	138.39	21.347	1.73569	1.500	.938		
ROUTE RESERVOIR	POND-3	10	2	.23060	91.01	21.278	1.73009	2.150	.617	AC-FT=	2.934
COMPUTE NM HYD	AP-10&E-1D	-	3	.02820	64.16	2.883	1.91659	1.500	3.555	PER IMP=	71.00
ROUTE	AP-10R	3	12	.02820	61.84	2.883	1.91660	1.550	3.427		
COMPUTE NM HYD	E-2D	-	3	.01720	44.80	2.065	2.25115	1.500	4.070	PER IMP=	90.00
ADD HYD	AP-11	3&12	10	.04540	106.21	4.948	2.04333	1.500	3.655		
ROUTE	AP-11R	10	12	.04540	104.90	4.948	2.04334	1.550	3.610		
COMPUTE NM HYD	E-3D	-	3	.04250	90.19	3.785	1.67006	1.500	3.316	PER IMP=	57.00
ADD HYD	AP-12	12& 3	10	.08790	191.75	8.733	1.86285	1.500	3.408		
ROUTE	AP-11R	10	12	.08790	190.60	8.733	1.86286	1.550	3.388		
COMPUTE NM HYD	E-4D	-	3	.00300	7.83	.360	2.25115	1.500	4.076	PER IMP=	90.00
ADD HYD	AP-13	12& 3	10	.09090	197.44	9.093	1.87566	1.550	3.394		
ADD HYD	AP-13+POND-3	2&10	10	.32150	231.12	30.371	1.77125	1.550	1.123		
COMPUTE NM HYD	P-2	-	3	.00360	4.76	.135	.70157	1.500	2.066	PER IMP=	2.00
ADD HYD	AP-13A	3&10	10	.32510	235.61	30.505	1.75938	1.550	1.132		
ROUTE RESERVOIR	POND-2	10	2	.32510	128.74	29.772	1.71710	2.100	.619	AC-FT=	7.056
ROUTE	POND-2R	2	12	.32510	129.54	29.772	1.71710	2.100	.623		
COMPUTE NM HYD	AP-14&F-1D	-	3	.03980	82.37	3.545	1.67006	1.500	3.234	PER IMP=	57.00

COMPUTE NM HYD	P-1	-	4	.00290	2.51	.074	.47912	1.500	1.353 PER IMP=	2.00	
ADD HYD	P-1+F-1D	36	4	10	.04270	84.88	3.618	1.58885	1.500	3.106	
ADD HYD	AP-14A	106	12	10	.36780	142.65	33.391	1.70221	2.100	.606	
ROUTE RESERVOIR	POND-1	10	2		.36780	82.17	33.390	1.70218	2.800	.349 AC-FT=	4.862
COMPUTE NM HYD	AP-15G-1D	-	3		.02290	56.30	2.534	2.07506	1.500	3.841 PER IMP=	80.00
COMPUTE NM HYD	AP-16G-2D	-	4		.00310	7.72	.349	2.11028	1.500	3.893 PER IMP=	82.00
ROUTE	AP-16R	4	12		.00310	7.56	.349	2.11044	1.500	3.808	
COMPUTE NM HYD	AP-17G-3D	-	5		.03510	77.66	3.885	2.07506	1.500	3.457 PER IMP=	80.00
COMPUTE NM HYD	G-4D	-	6		.00330	8.10	.359	2.03985	1.500	3.837 PER IMP=	78.00
ADD HYD	AP-18	126	6	10	.00640	15.66	.708	2.07389	1.500	3.823	
FINISH											

Devp621.sum

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = DEVF621.IN

RUN DATE (MON/DAY/YR) =01/25/2001
USER NO.= C_ANDRSN.I01

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 = 1	NOTATION
*S DEVELOPED CONDITIONS WITH I-40 INTERCEPTOR IN PLACE											
*S 100 YEAR, 24 HOUR STORM EVENT											
*S											
*S FILE NAME: DEVF621.IN											
*S											
*S THIS MODEL ANALYZES THE UNSER DIVERSION PONDS WITH THE EXISTING POND											
*S OUTLET WORKS AND THE EXISTING POND GRADING. IN THIS TRIAL, POND NO. 6,											
*S POND NO. 2 AND POND NO. 1 OUTLET WORKS HAVE BEEN MODIFIED TO REPRESENT											
*S PROPOSED OUTLET WORKS.											
*S											
*S MASTER DRAINAGE PLAN FOR THE WEST SIDE TRANSIT FACILITY											
*S											
*S THIS AHYMO FILE ANALYZES THE UNSER DIVERSION (DETENTION PONDS) ASSUMING											
*S FULLY DEVELOPED CONDITIONS WITH THE I-40 INTERCEPTOR IN PLACE.											
*S NOTES: UNSER DIVERSION POND NO. 5 IS NOT USED IN FULLY DEVELOPED											
*S CONDITION (PER CHUCK EASTERLING'S REPORT).											
*S THE OUTLET RATING CURVES WERE ALSO BASED UPON TAILWATER											
*S ELEVATIONS SHOWN ON THE UNSER DIVERSION (AS-BUILT)											
*S CONSTRUCTION PLAN SET (PLANS BY CHUCK EASTERLING)											
*S DATE: 11/7/00											
START											
RAINFALL TYPE= 2											
*S FOR WATERSHED NORTH OF INTERSTATE 40											
*S ALL FLOWS TO BE PICKED UP BY I-40 INTERCEPTOR											
*S BEGIN WATERSHED SOUTH OF INTERSTATE 40											
COMPUTE NM HYD	I40-1	-	3	.00750	11.24	.454	1.13512	1.500	2.342	PER IMP=	35.00
ROUTE	I40-1R	3	2	.00750	10.83	.454	1.13518	1.550	2.256		
COMPUTE NM HYD	I40-2	-	3	.00310	4.65	.188	1.13512	1.500	2.346	PER IMP=	35.00
ROUTE	I40-2R	3	12	.00310	4.61	.188	1.13529	1.500	2.325		
ADD HYD	I401R&I402R	2&12	10	.01060	15.34	.642	1.13508	1.500	2.261		
COMPUTE NM HYD	A-1D	-	3	.02570	59.05	2.579	1.88137	1.500	3.590	PER IMP=	69.00
ADD HYD	AP-1	10&3	10	.03630	74.38	3.220	1.66343	1.500	3.202		
ROUTE	AP-1R	10	2	.03630	73.06	3.220	1.66346	1.500	3.145		
COMPUTE NM HYD	I40-3	-	3	.00190	2.86	.115	1.13512	1.500	2.350	PER IMP=	35.00
COMPUTE NM HYD	I40-4	-	4	.00120	1.81	.073	1.13512	1.500	2.357	PER IMP=	35.00
ADD HYD	I40-3&I40-4	3&4	10	.00310	4.67	.188	1.13493	1.500	2.353		
ROUTE	I403R&I404R	10	12	.00310	4.38	.188	1.13522	1.550	2.208		
ADD HYD	PARTAP-2	2&12	10	.03940	76.99	3.408	1.62186	1.500	3.053		
COMPUTE NM HYD	A-2D	-	3	.02840	71.47	3.250	2.14550	1.500	3.932	PER IMP=	84.00
ADD HYD	AP-2	10&3	10	.06780	148.46	6.658	1.84120	1.500	3.421		
ROUTE	AP-2R	10	2	.06780	144.80	6.658	1.84122	1.500	3.337		
COMPUTE NM HYD	A-3D	-	3	.02400	61.30	2.881	2.25115	1.500	3.991	PER IMP=	90.00
ADD HYD	AP-3	2&3	10	.09180	206.10	9.539	1.94838	1.500	3.508		
COMPUTE NM HYD	AP-4&A-4D	-	3	.01250	29.07	1.312	1.96827	1.500	3.634	PER IMP=	76.00
ADD HYD	AP-3+AP-4	10&3	10	.10430	235.17	10.851	1.95076	1.500	3.523		
COMPUTE NM HYD	P-6	-	3	.00430	3.72	.110	.47912	1.500	1.350	PER IMP=	2.00
ADD HYD	AP-5	10&3	10	.10860	238.89	10.961	1.89248	1.500	3.437		
ROUTE RESERVOIR	POND-6R	10	2	.10860	55.69	10.961	1.89248	2.000	.801	AC-FT=	4.965
ROUTE	POND6ROUTE36	2	12	.10860	55.69	10.961	1.89248	2.050	.801		

TIME= .00
RAIN24= 2.660

□

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
ROUTE	POND6ROUTE48	12	22	.10860	55.71	10.961	1.89248	2.050	.802		
COMPUTE NM HYD	AP-6&C-1D	-	3	.01150	24.41	1.024	1.67006	1.500	3.317	PER IMP=	57.00
ROUTE	AP-6R	3	2	.01150	23.38	1.024	1.67010	1.550	3.177		
COMPUTE NM HYD	C-2D	-	3	.05740	118.78	5.113	1.67006	1.500	3.233	PER IMP=	57.00
ADD HYD	AP-7	2&3	10	.06890	141.62	6.137	1.67005	1.500	3.212		
ADD HYD	PARTAP-8	10&22	20	.17750	176.57	17.098	1.80614	1.550	1.554		
COMPUTE NM HYD	P-4	-	3	.00360	3.11	.092	.47912	1.500	1.352	PER IMP=	2.00
ADD HYD	AP-8	20&3	10	.18110	179.57	17.190	1.77971	1.550	1.549		
ROUTE RESERVOIR	POND-4	10	2	.18110	88.27	17.100	1.77039	2.000	.762	AC-FT=	4.464
ROUTE	POND-4R	2	12	.18110	88.20	17.100	1.77039	2.000	.761		
COMPUTE NM HYD	P-3	-	3	.00270	2.34	.069	.47912	1.500	1.354	PER IMP=	2.00
ADD HYD	P-3+POND-4R	12&3	10	.18380	88.46	17.168	1.75134	1.950	.752		
COMPUTE NM HYD	AP-9&D-1D	-	3	.04680	99.31	4.168	1.67006	1.500	3.316	PER IMP=	57.00
ADD HYD	AP-9A	10&3	10	.23060	111.94	21.336	1.73484	1.850	.758		
ROUTE RESERVOIR	POND-3	10	2	.23060	94.02	21.103	1.71590	2.150	.637	AC-FT=	3.115
COMPUTE NM HYD	AP-10&E-1D	-	3	.02820	64.16	2.883	1.91659	1.500	3.555	PER IMP=	71.00
ROUTE	AP-10R	3	12	.02820	61.84	2.883	1.91660	1.550	3.427		
COMPUTE NM HYD	E-2D	-	3	.01720	44.80	2.065	2.25115	1.500	4.070	PER IMP=	90.00
ADD HYD	AP-11	3&12	10	.04540	106.21	4.948	2.04333	1.500	3.655		
ROUTE	AP-11R	10	12	.04540	104.90	4.948	2.04334	1.550	3.610		
COMPUTE NM HYD	E-3D	-	3	.04250	90.19	3.785	1.67006	1.500	3.316	PER IMP=	57.00
ADD HYD	AP-12	12&3	10	.08790	191.75	8.733	1.86285	1.500	3.408		
ROUTE	AP-11R	10	12	.08790	190.60	8.733	1.86286	1.550	3.388		
COMPUTE NM HYD	E-4D	-	3	.00300	7.83	.360	2.25115	1.500	4.076	PER IMP=	90.00
ADD HYD	AP-13	12&3	10	.09090	197.44	9.093	1.87566	1.550	3.394		
ADD HYD	AP-13+POND-3	2&10	10	.32150	203.90	30.197	1.76107	1.550	.991		
COMPUTE NM HYD	P-2	-	3	.00360	4.76	.135	.70157	1.500	2.066	PER IMP=	2.00
ADD HYD	AP-13A	3&10	10	.32510	208.39	30.331	1.74931	1.550	1.002		

ROUTE RESERVOIR	POND-2	10	2	.32510	121.71	29.564	1.70508	2.150	.585 AC-FT=	7.003
ROUTE	POND-2R	2	12	.32510	121.90	29.563	1.70504	2.200	.586	
COMPUTE NM HYD	AP-14&F-1D	-	3	.03980	82.37	3.545	1.67006	1.500	3.234 PER IMP=	57.00
COMPUTE NM HYD	P-1	-	4	.00290	2.51	.074	.47912	1.500	1.353 PER IMP=	2.00
ADD HYD	P-1+P-1D	3& 4	10	.04270	84.88	3.618	1.58885	1.500	3.106	
ADD HYD	AP-14A	10&12	10	.36780	130.86	33.181	1.69155	2.150	.556	
ROUTE RESERVOIR	POND-1	10	2	.36780	78.98	33.161	1.69049	2.700	.336 AC-FT=	4.399
COMPUTE NM HYD	AP-15&G-1D	-	3	.02290	56.30	2.534	2.07506	1.500	3.841 PER IMP=	80.00
COMPUTE NM HYD	AP-16&G-2D	-	4	.00310	7.72	.349	2.11028	1.500	3.893 PER IMP=	82.00
ROUTE	AP-16R	4	12	.00310	7.56	.349	2.11044	1.500	3.808	
COMPUTE NM HYD	AP-17&G-3D	-	5	.03510	77.66	3.885	2.07506	1.500	3.457 PER IMP=	80.00
COMPUTE NM HYD	G-4D	-	6	.00330	8.10	.359	2.03985	1.500	3.837 PER IMP=	78.00
ADD HYD	AP-18	12& 6	10	.00640	15.66	.708	2.07389	1.500	3.823	
FINISH										

APPENDIX D

DAYTONA ROAD HYDRAULIC ANALYSIS

MASTER DRAINAGE PLAN – WEST SIDE TRANSIT FACILITY**DAYTONA ROAD HYDRAULIC ANALYSIS**

Given: Fully Developed Conditions.

I-40 Interceptor is in place.

100yr.-24hr. storm event

Daytona Rd. is not classified as an arterial or collector street or roadway.

No Roadways intersecting Daytona Road are classified as arterial or collectors.

Thus, the 10 year storm event was not included as part of this analysis.

Street capacity calculations and storm drain pipe hydraulic calculations are attached.

Analysis:

Analysis begins at the west end of Daytona Rd.

Total flow from basin I40-1 (Interstate 40 median drain) through culvert under I-40 = 11cfs. This 11cfs will be routed in a storm drain pipe in Daytona Rd. to 90th St.

Total Flow at Daytona Rd. and 90th St. (AP-1) = 74cfs.

11cfs is already in the pipe (from the I40-1 basin).

The remaining 63cfs will be in street (It should be noted that a small amount of the 63 cfs will probably be in 90th St. both north and south of Daytona Rd.).

Street capacity of Daytona Rd. (assuming a roadway slope of 2%) = 95cfs (see attached street capacity calculation sheet).

It appears there is no need to install inlets at this intersection. But, if we look downstream to AP-2, we see that the flow = 148cfs, which is greater than the street capacity of 95cfs. Thus, we will pick up some of this flow at Daytona Rd. and 90th St.

Install 2 inlets on 90th St. north of Daytona Rd.

Install 2 inlets on 90th St. south of Daytona Rd.

Install 4 inlets on Daytona Rd. west of 90th St.

Thus, total number of inlets at Daytona Rd. = 8.

Assuming each inlet will collect 5cfs, a total of 40cfs will be picked up and put into the storm drain pipe in Daytona Rd.

In summary (at Daytona Rd. and 90th St.), $Q_{\text{pipe}} = 11\text{cfs} + 40\text{cfs} = 51\text{cfs}$, $Q_{\text{street}} = 23\text{cfs}$.

Total flow at west boundary of the West Side Transit Facility (AP-2) = 148cfs.

At this same location, (AP-2) additional offsite flow from the Mirehaven Arroyo "B" will need to be collected. This additional flow = 91cfs (the additional 91cfs will be picked up in a storm drain pipe and transported to the storm drain pipe in Daytona Rd.).

Thus, just upstream of AP-2 there is $51\text{cfs} + 91\text{cfs} = 142\text{cfs}$ in the Daytona Rd storm drain pipe. The street flow in Daytona Rd. = $148\text{cfs} - 51\text{cfs} = 97\text{cfs}$. Street Capacity = 95cfs. Inlets are required.

Install 8 inlets at AP-2. Again, assuming 5cfs will be picked up at each inlet, this will put an additional 40cfs into the Daytona Rd. storm drain pipe.

In summary as we leave AP-2,

$Q_{\text{pipe}} = 142\text{cfs} + 40\text{cfs} = 182\text{cfs}$,

$Q_{\text{street}} = 148\text{cfs} - 91\text{cfs} = 57\text{cfs}$.

Total flow at Daytona Rd. and Unser Diversion Pond No. 6 (AP-3) = 206cfs plus the offsite flow of 91cfs from the Mirehaven Arroyo "B".

All of the flow from the West Side Transit Facility (Basin A-3D, $Q=61\text{cfs}$) is proposed to be picked up in a storm drain pipe and carried to the storm drain pipe located in Daytona Rd.

Thus, approaching AP-3, $Q_{\text{pipe}} = 182\text{cfs} + 61\text{cfs} = 243\text{cfs}$. $Q_{\text{street}} = 206\text{cfs} + 91\text{cfs} - 243\text{cfs} = 54\text{cfs}$.

All of this flow is required to be picked up and put into the Daytona Rd. storm drain pipe.

Thus, assuming 5cfs is picked per inlet, $54\text{cfs}/5\text{cfs/inlet} = 10.8$ inlets.

To be conservative, 12 inlets should be placed at AP-3 to collect all of the 54cfs.

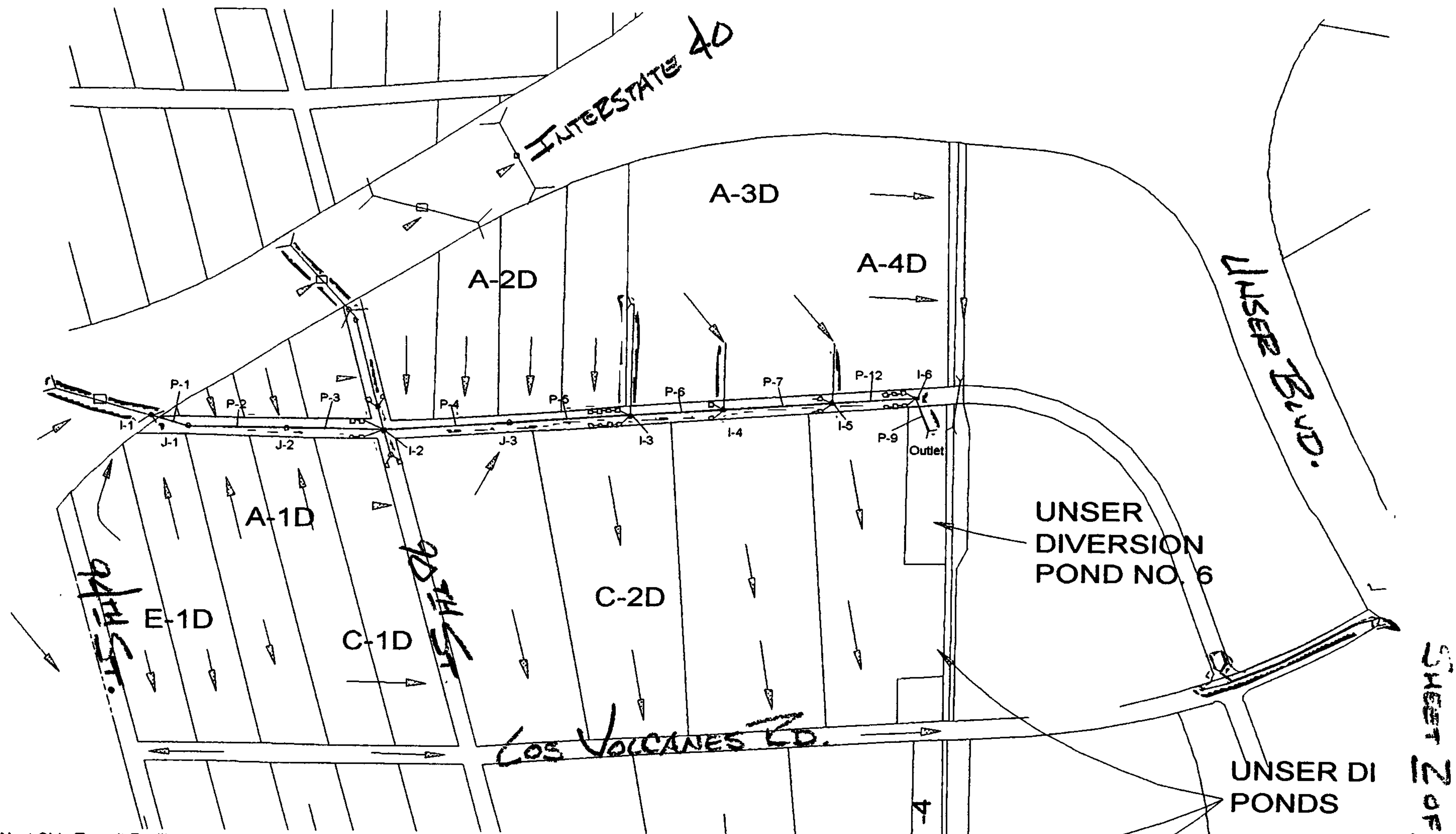
In summary as we leave AP-3,

$Q_{\text{pipe}} = 297\text{cfs}$. => This pipe flow will be emptied into the Unser Diversion Pond No. 6.

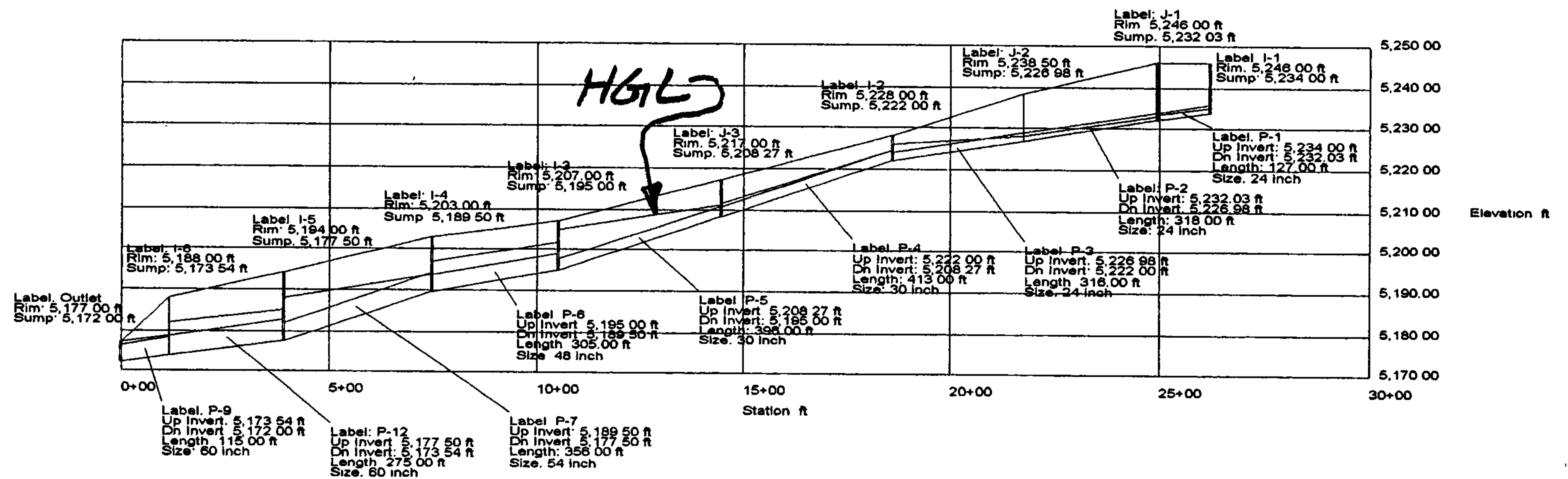
$Q_{\text{street}} = 0\text{cfs}$

SEE ATTACHED STORM DRAIN PIPE CALCULATIONS FOR ALL PROPOSED STORM DRAIN PIPE SIZES

DAYTONA ROAD STORM DRAIN - PLAN VIEW



DAYTONA ROAD STORM DRAIN - PROFILE



Combined Pipe/Node Report <duplicate>

Downstream Node	Length (ft)	Section Size	Capacity (cfs)	Average Velocity (ft/s)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Constructed Slope (%)	Downstream Rim Elevation (ft)	Downstream Sump Elevation (ft)	Upstream Node	Upstream HGL (ft)	Section Material	Section Shape	Downstream HGL (ft)	Discharge (cfs)	Number Sections	Upstream Velocity (ft/s)	Downstream Velocity (ft/s)	Downstream Ground Elevation (ft)	Upstream Ground Elevation (ft)	Pipe	Roughness
J-1	127.00	24 inch	28.17	5.39	5,234.00	5,232.03	1.5512	5,246.00	5,232.03	I-1	5,235.19	Concrete	Circular	5,233.32	11.00	1	5.65	5.14	5,246.00	5,246.00	P-1	0.013
J-2	318.00	24 inch	28.51	5.58	5,232.03	5,226.98	1.5881	5,238.50	5,226.98	J-1	5,233.22	Concrete	Circular	5,228.19	11.00	1	5.65	5.51	5,238.50	5,246.00	P-2	0.013
I-2	316.00	24 inch	28.40	4.58	5,226.98	5,222.00	1.5759	5,228.00	5,222.00	J-2	5,228.17	Concrete	Circular	5,226.11	11.00	1	5.65	3.50	5,228.00	5,238.50	P-3	0.013
J-3	413.00	30 inch	74.78	10.57	5,222.00	5,208.27	3.3245	5,217.00	5,208.27	I-2	5,224.31	Concrete	Circular	5,211.30	51.00	1	10.76	10.39	5,217.00	5,228.00	P-4	0.013
I-3	396.00	30 inch	75.08	10.39	5,208.27	5,195.00	3.3510	5,207.00	5,195.00	J-3	5,211.22	Concrete	Circular	5,205.09	51.00	1	10.39	10.39	5,207.00	5,217.00	P-5	0.013
I-4	305.00	48 inch	192.88	14.48	5,195.00	5,189.50	1.8033	5,203.00	5,189.50	I-3	5,201.83	Concrete	Circular	5,196.94	182.00	1	14.48	14.48	5,203.00	5,207.00	P-6	0.013
I-5	356.00	54 inch	361.02	14.26	5,189.50	5,177.50	3.3708	5,194.00	5,177.50	I-4	5,193.67	Concrete	Circular	5,188.00	223.00	1	14.50	14.02	5,194.00	5,203.00	P-7	0.013
Outlet	115.00	60 inch	301.37	16.19	5,173.54	5,172.00	1.3391	5,177.00	5,172.00	I-5	5,178.20	Concrete	Circular	5,176.22	297.00	1	15.59	16.80	5,177.00	5,188.00	P-9	0.013
I-6	275.00	60 inch	312.51	13.90	5,177.50	5,173.54	1.4400	5,188.00	5,173.54	I-6	5,185.00	Concrete	Circular	5,181.97	273.00	1	13.90	13.90	5,188.00	5,194.00	P-12	0.013

DAYTONA ROAD STORM DRAIN - HYDRAULIC SUMMARY

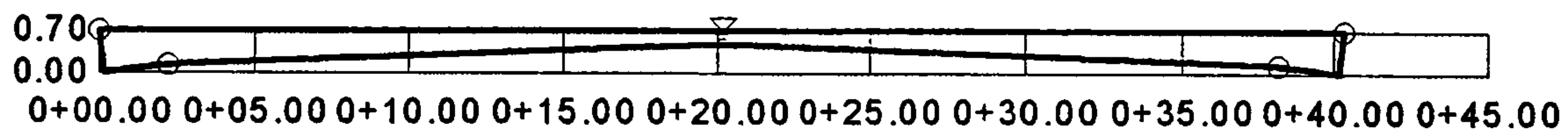
Master Drainage Plan for the West Side Transit Facility

Cross Section for Irregular Channel

Project Description	
Worksheet	40' STREET CAPACITY CALC
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

DAYTONA FL.

Section Data	
Mannings Coefficient	0.018
Slope	2.0000 %
Water Surface Elevation	0.67 ft
Elevation Range	0.00 to 0.67
Discharge	95.38 cfs



V:2.0
H:1
NTS

Worksheet Worksheet for Irregular Channel

Project Description	
Worksheet	40' STREET CAPACITY CALC
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

DAYTONA RD.

Input Data	
Slope	2.0000 %
Water Surface Elevation	0.67 ft

Options	
Current Roughness Method	Improved Lotter's Method
Open Channel Weighting Metho	Improved Lotter's Method
Closed Channel Weighting Meth	Horton's Method

Results	
Mannings Coefficient	0.018
Elevation Range	0.00 to 0.67
Discharge	95.38 cfs
Flow Area	15.68 ft ²
Wetted Perimeter	41.40 ft
Top Width	40.33 ft
Actual Depth	0.67 ft
Critical Elevation	0.84 ft
Critical Slope	0.6059 %
Velocity	6.08 ft/s
Velocity Head	0.57 ft
Specific Energy	1.24 ft
Froude Number	1.72
Flow Type	Supercritical

Roughness Segments		
Start Station	End Station	Mannings Coefficient
0+00.00	0+02.17	0.013
0+02.17	0+38.17	0.020
0+38.17	0+40.33	0.013

Natural Channel Points	
Station (ft)	Elevation (ft)
0+00.00	0.67
0+00.17	0.00
0+02.17	0.13
0+20.17	0.49
0+38.17	0.13
0+40.17	0.00
0+40.33	0.67

2% crown ≈ 0.80
 $Q = 55 \text{ cfs}$

APPENDIX E

MIREHAVEN ARROYO "B" DIVERSION PIPE HYDRAULIC ANALYSIS

Culvert Calculator Report

Mirehaven Arroyo "B" Diversion Pipe

Solve For: Headwater Elevation

Culvert Summary			
Allowable HW Elevation	5,210.0 ft	Headwater Depth/ Height	1.23
Computed Headwater Elevation	5,208.9 ft	Discharge	91.00 cfs
Inlet Control HW Elev	5,208.7 ft	Tailwater Elevation	5,201.8 ft
Outlet Control HW Elev	5,208.9 ft	Control Type	Entrance Control
Grades			
Upstream Invert	5,204.0 ft	Downstream Invert	5,195.0 ft
Length	375.0 ft	Constructed Slope	2.4000 %
Hydraulic Profile			
Profile	CompositePressureS1S2	Depth, Downstream	6.8 ft
Slope Type	N/A	Normal Depth	1.8 ft
Flow Regime	N/A	Critical Depth	2.9 ft
Velocity Downstream	7.2 ft/s	Critical Slope	0.5271 %
Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	4.0 ft
Section Size	48 inch	Rise	4.0 ft
Number Sections	1		
Outlet Control Properties			
Outlet Control HW Elev	5,208.9 ft	Upstream Velocity Head	1.4 ft
Ke	0.50	Entrance Loss	0.7 ft
Inlet Control Properties			
Inlet Control HW Elev	5,208.7 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	13 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

AWO = 4.85 ft
 = el 5208.85 ✓

MIREHAVEN ARROYO "B" DIVERSION PIPE

WEST SIDE
TRANSIT
FACILITY
SITE

DAYTONA ROAD

DAYTONA ROAD
STORM DRAIN

APPENDIX F

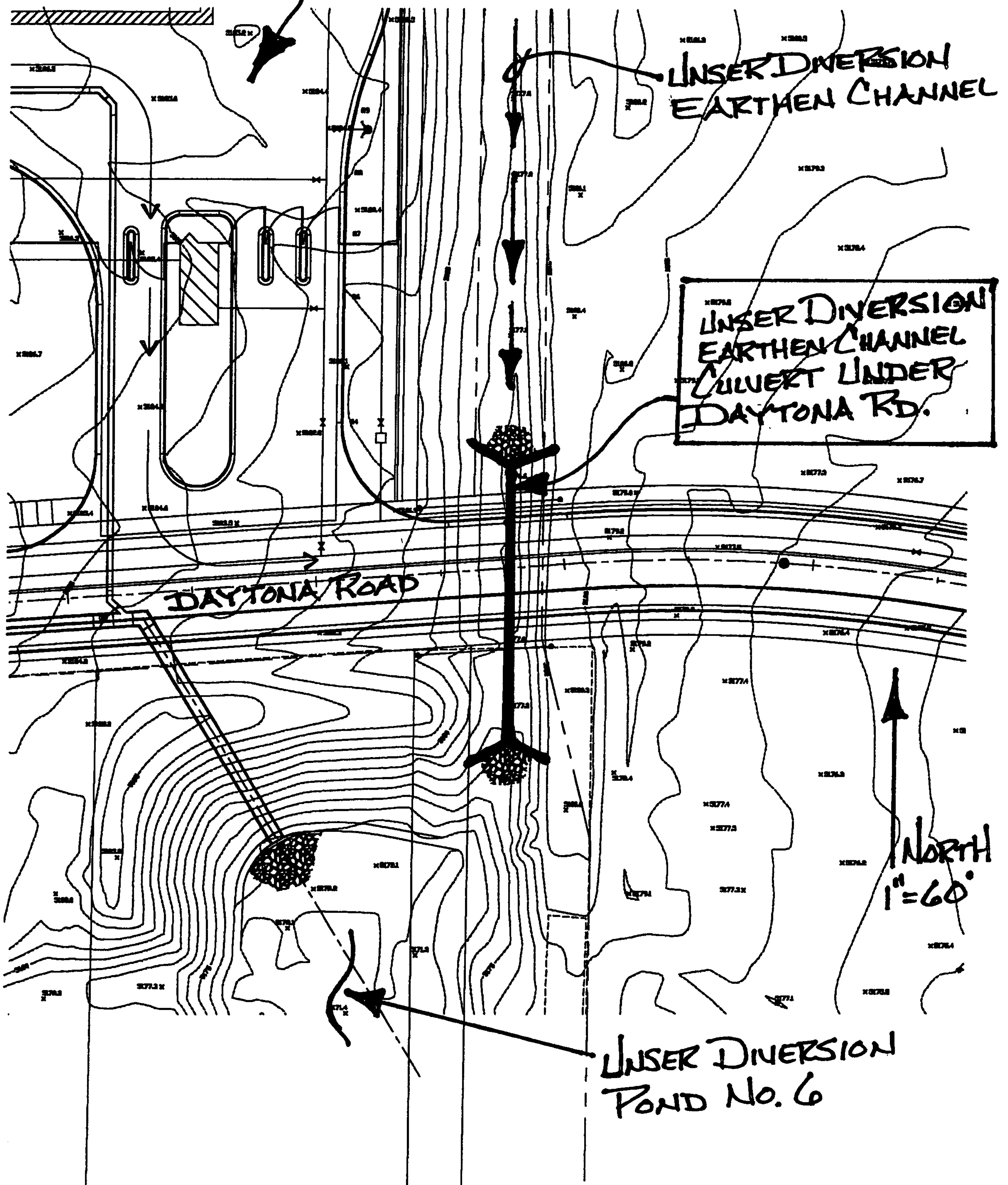
UNSER DIVERSION EARTHEN CHANNEL CULVERT PIPE UNDER DAYTONA ROAD HYDRAULIC ANALYSIS

Culvert Calculator Report

U.D. Earthen Channel Under Daytona Rd.

Solve For: Headwater Elevation

Culvert Summary			
Allowable HW Elevation	5,180.0 ft	Headwater Depth/ Height	0.94
Computed Headwater Elevation	5,179.4 ft	Discharge	29.00 cfs
Inlet Control HW Elev	5,179.2 ft	Tailwater Elevation	5,176.7 ft
Outlet Control HW Elev	5,179.4 ft	Control Type	Entrance Control
Grades			
Upstream Invert	5,176.6 ft	Downstream Invert	5,176.0 ft
Length	110.0 ft	Constructed Slope	0.5455 %
Hydraulic Profile			
Profile	S2	Depth, Downstream	1.7 ft
Slope Type	Steep	Normal Depth	1.7 ft
Flow Regime	Supercritical	Critical Depth	1.7 ft
Velocity Downstream	7.3 ft/s	Critical Slope	0.4624 %
Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	3.0 ft
Section Size	36 inch	Rise	3.0 ft
Number Sections	1		
Outlet Control Properties			
Outlet Control HW Elev	5,179.4 ft	Upstream Velocity Head	0.7 ft
Ke	0.50	Entrance Loss	0.4 ft
Inlet Control Properties			
Inlet Control HW Elev	5,179.2 ft	Flow Control	Unsubmerged
Inlet Type	Square edge w/headwall	Area Full	7 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		



APPENDIX G

OLIVER ROSS ROAD AND LOS VOLCANES ROAD HYDRAULIC ANALYSIS

MASTER DRAINAGE PLAN – WEST SIDE TRANSIT FACILITY**OLIVER ROSS ROAD AND LOS VOLCANES ROAD HYDRAULIC ANALYSIS**

Given: Fully Developed Conditions.

I-40 Interceptor is in place.

100yr.-24hr. storm event

Los Volcanes Rd. is not classified as an arterial or collector street or roadway.

Oliver Ross Rd. is not classified as an arterial or collector street or roadway

Thus, the 10 year storm event was not included as part of this analysis.

Street capacity calculations attached.

Assumption: Each inlet will collect 5cfs.

Analysis:

Analysis begins at the south end of Oliver Ross Rd., just north of Los Volcanes Rd.

Total flow generated from the Oliver Ross Basin (Basin G-2D and AP-16) = 8cfs. Oliver Ross Rd. capacity = 95cfs (see street capacity calculation sheet, attached). No inlets or storm drain pipe is required on Oliver Ross at Los Volcanes Rd. Let this flow enter Los Volcanes Rd.

Total flow in Los Volcanes just west of Unser Blvd. (AP-18) = 16 cfs. At this point, all flow in Los Volcanes will be on the South side of the roadway. The width of Los Volcanes at this location is approximately 48 feet. Capacity of Los Volcanes Rd. at this location = 68cfs. Two inlets currently exist on the south side of Los Volcanes Rd. just west of Unser Blvd. These two inlets will intercept 10cfs at this location. The remaining 6cfs will enter the west half/side of Unser Blvd. as street flow. The capacity of Unser Blvd will be discussed below.

Let's take a look at Unser Blvd. around the Los Volcanes Rd. intersection. According to the Master Drainage Plan for the Atrisco Business Park, October 1993 prepared by Easterling & Associates, Inc., the west half of Unser Blvd. is carrying 14cfs just north of Los Volcanes Rd. while the east half of Unser is carrying 13cfs. A total of 4 inlets currently exist on Unser Blvd. just north of Los Volcanes (two on the west side and two on the east side). Each inlet will intercept 5 cfs. Thus, looking at the west side of Unser, 10cfs will be picked up by inlets while 4cfs bypassed the two inlets and remain in the street just south of the two westerly inlets. When we add the 6cfs from Los Volcanes Rd., there will be 10cfs on the west half of Unser Rd. The capacity of the west half of Unser Rd. = 43cfs. – OK. In summary, six total inlets exist at this intersection (4 on Unser Blvd and 2 on Los Volcanes Rd.) capturing a total of 30cfs. According to Easterling's report (mentioned above), the capacity of the 30" storm drain pipe in Unser Blvd. = 41cfs. – OK. Thus, no new storm drain infrastructure will be required at this intersection.

In summary (to this point), all of the flow in Oliver Ross Rd and Los Volcanes is accounted for. Now we need to look at basins G-1D and G-3D. According to the Master Plan for the Atrisco Business Park (mentioned above) the maximum runoff allowed from these two basins combined = 47cfs. Combined runoff from these two basins = 134cfs. Thus, detention of the runoff from these two basins is required in order to meet the allowable runoff rate of 47 cfs. The same property owner owns both tracts of land (G-1D and G-3D). At this time, It is difficult to determine how drainage of these two tracts will develop. The following is proposed at this time:

A detention pond will be constructed at the southeast corner of basin G-3D. Flows from Basin G-1D will be routed to basin G-3D and eventually to the detention Pond located within basin G-3D. A storm drain stub out will need to be installed (in the future) from the Unser Blvd storm drain to the southwest detention pond located within basin G-3D. This will meet the requirements laid out in the Master Drainage Plan for the Atrisco Business Park.

SEE ATTACHED STREET CAPACITY CALCULATIONS

Worksheet

Worksheet for Irregular Channel

Project Description

Worksheet 40' STREET CAPACITY CALC
 Flow Element Irregular Channel
 Method Manning's Formula
 Solve For Discharge

OLIVER ROAD

Input Data

Slope 2.0000 %
 Water Surface Elevation 0.67 ft

Options

Current Roughness Method Improved Lotter's Method
 Open Channel Weighting Metho Improved Lotter's Method
 Closed Channel Weighting Meth Horton's Method

Results

Mannings Coefficient 0.018
 Elevation Range 0.00 to 0.67
 Discharge 95.38 cfs
 Flow Area 15.68 ft²
 Wetted Perimeter 41.40 ft
 Top Width 40.33 ft
 Actual Depth 0.67 ft
 Critical Elevation 0.84 ft
 Critical Slope 0.6059 %
 Velocity 6.08 ft/s
 Velocity Head 0.57 ft
 Specific Energy 1.24 ft
 Froude Number 1.72
 Flow Type Supercritical

Roughness Segments

Start Station	End Station	Mannings Coefficient
0+00.00	0+02.17	0.013
0+02.17	0+38.17	0.020
0+38.17	0+40.33	0.013

Natural Channel Points

Station (ft)	Elevation (ft)
0+00.00	0.67
0+00.17	0.00
0+02.17	0.13
0+20.17	0.49
0+38.17	0.13
0+40.17	0.00
0+40.33	0.67

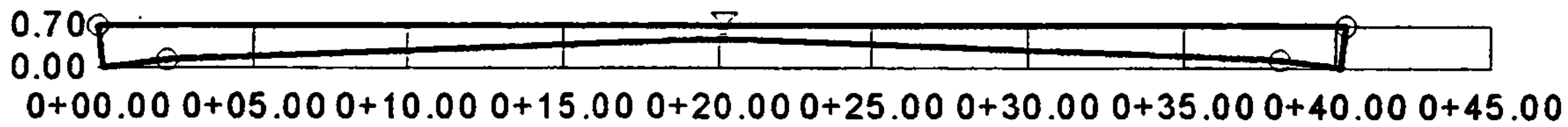
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Master Drainage Plan for the West Side Transit Facility
Cross Section for Irregular Channel

Project Description	
Worksheet	40' STREET CAPACITY CALC
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

→ OVER RISE R.I.

Section Data	
Mannings Coefficient	0.018
Slope	2.0000 %
Water Surface Elevation	0.67 ft
Elevation Range	0.00 to 0.67
Discharge	95.38 cfs



V:2.0
H:1
NTS

Worksheet

Worksheet for Irregular Channel

Project Description	
Worksheet	48' STREET CAPACITY CALC
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

— LOS VOLCANES RD.

Input Data	
Slope	1.0000 %
Water Surface Elevation	0.67 ft

Options	
Current Roughness Method	Improved Lotter's Method
Open Channel Weighting Metho	Improved Lotter's Method
Closed Channel Weighting Meth	Horton's Method

Results	
Mannings Coefficient	0.018
Elevation Range	0.00 to 0.67
Discharge	67.81 cfs
Flow Area	16.84 ft ²
Wetted Perimeter	49.40 ft
Top Width	48.33 ft
Actual Depth	0.67 ft
Critical Elevation	0.72 ft
Critical Slope	0.6654 %
Velocity	4.03 ft/s
Velocity Head	0.25 ft
Specific Energy	0.92 ft
Froude Number	1.20
Flow Type	Supercritical

Roughness Segments		
Start Station	End Station	Mannings Coefficient
0+00.00	0+02.17	0.013
0+02.17	0+46.17	0.020
0+46.17	0+48.33	0.013

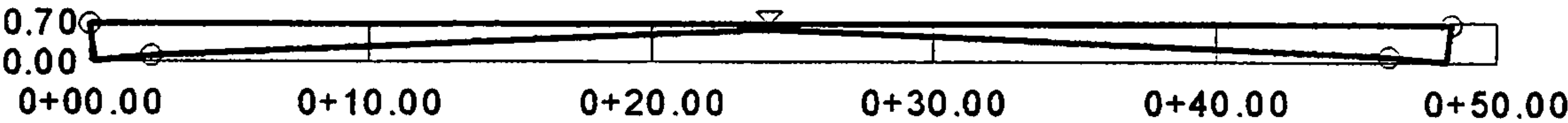
Natural Channel Points	
Station (ft)	Elevation (ft)
0+00.00	0.67
0+00.17	0.00
0+02.17	0.13
0+24.17	0.56
0+46.17	0.13
0+48.17	0.00
0+48.33	0.67

Cross Section
Cross Section for Irregular Channel

Project Description	
Worksheet	48' STREET CAPACITY CALC
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

LOS VOLCANES RD.

Section Data	
Mannings Coefficient	0.018
Slope	1.0000 %
Water Surface Elevation	0.67 ft
Elevation Range	0.00 to 0.67
Discharge	67.81 cfs



V:2.0
H:1
NTS

Worksheet

Worksheet for Irregular Channel

Project Description	
Worksheet	ARTERIAL' STREET CAPACITY CALCULATION (
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

→ LINER SWD
(WEST SIDE)

Input Data	
Slope	1.6000 %
Water Surface Elevation	0.67 ft

Options	
Current Roughness Method	Improved Lotter's Method
Open Channel Weighting Metho	Improved Lotter's Method
Closed Channel Weighting Meth	Horton's Method

Results	
Mannings Coefficient	0.018
Elevation Range	0.00 to 1.05
Discharge	42.65 cfs
Flow Area	8.37 ft ²
Wetted Perimeter	24.81 ft
Top Width	24.21 ft
Actual Depth	0.67 ft
Critical Elevation	0.78 ft
Critical Slope	0.6298 %
Velocity	5.10 ft/s
Velocity Head	0.40 ft
Specific Energy	1.07 ft
Froude Number	1.53
Flow Type	Supercritical

Roughness Segments		
Start Station	End Station	Mannings Coefficient
0+00.00	0+02.17	0.013
0+02.17	0+23.34	0.020
0+23.34	0+24.34	0.130

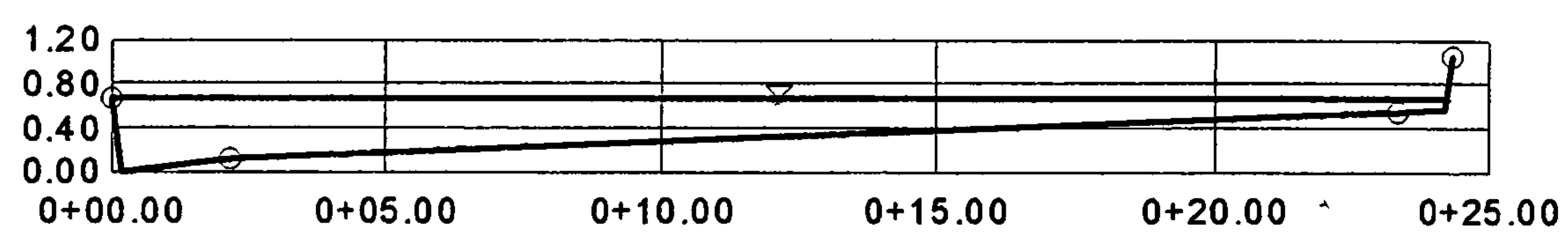
Natural Channel Points	
Station (ft)	Elevation (ft)
0+00.00	0.67
0+00.17	0.00
0+02.17	0.13
0+23.34	0.55
0+24.17	0.57
0+24.34	1.05

Cross Section
Cross Section for Irregular Channel

Project Description	
Worksheet	ARTERIAL STREET CAPACITY CALCULATION (
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

UNSEEN
(West Side)

Section Data	
Mannings Coefficient	0.018
Slope	1.6000 %
Water Surface Elevation	0.67 ft
Elevation Range	0.00 to 1.05
Discharge	42.65 cfs



V:2.0
H:1
NTS

MASTER DRAINAGE PLAN
for the
WEST SIDE TRANSIT FACILITY
CITY OF ALBUQUERQUE, NEW MEXICO

Dated February 2001

AMENDMENT, DECEMBER 2002

Prepared For:

City of Albuquerque
Transit Department

December 2002

Prepared By:



Smith Engineering Company
6400 Uptown Blvd NE, Suite 500E
Albuquerque, NM 87110

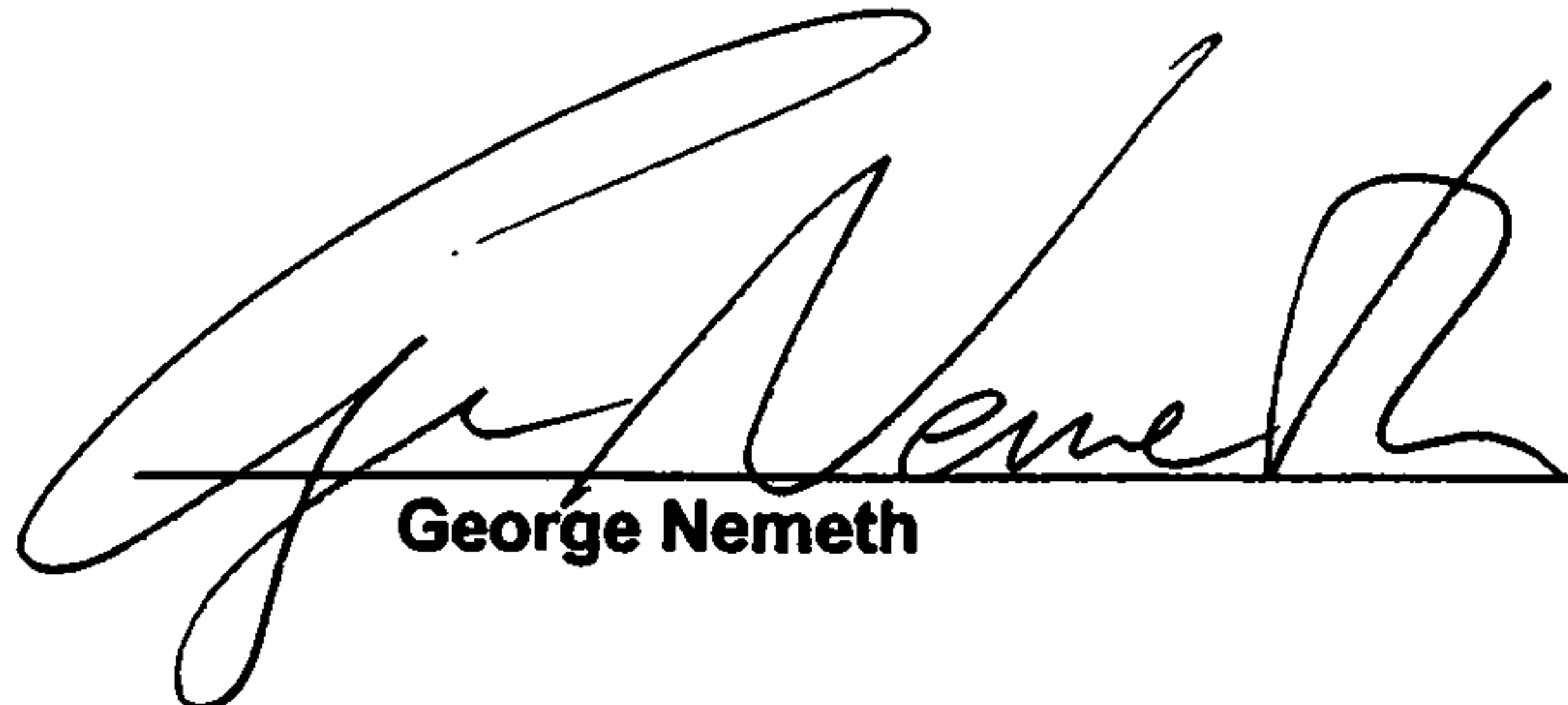
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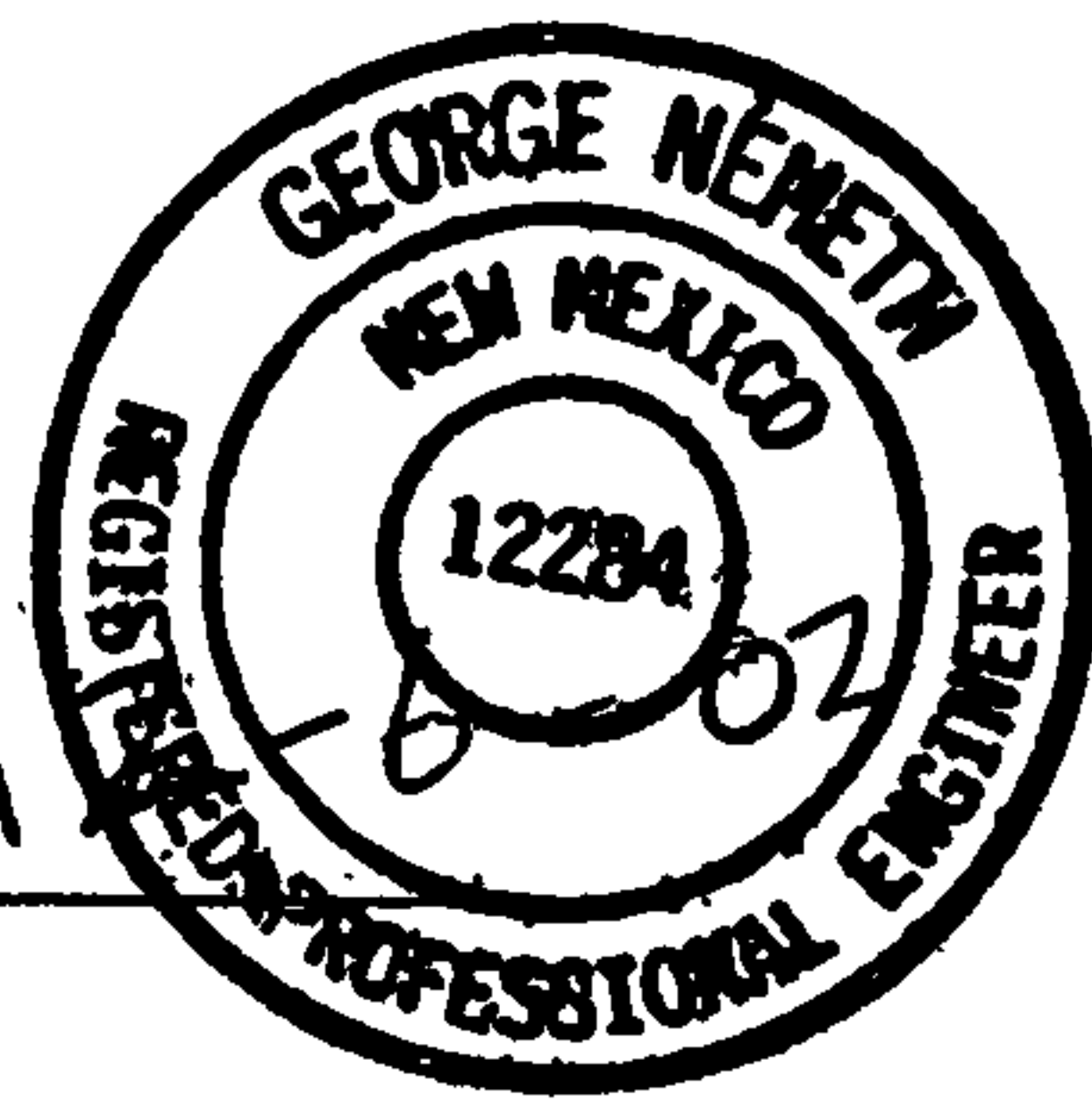
SEC project #100300F

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HYDROLOGY SECTION

I, George Nemeth, being first duly sworn upon my oath state that I am a registered professional engineer in the State of New Mexico, and that this document was prepared by me, or under my direct supervision, and is true and correct to the best of my knowledge and belief.

License No. 12284


George Nemeth





6	14	0.6	24	1.0
7	82	3.6	142	6.1
8 **	89	10.2	153	17.2
9	58	2.4	99	4.2
9A ***	63	12.6	107	21.3
10	39	1.7	64	2.9
11	66	3.0	106	4.9
12	116	5.2	192	8.7
13	121	5.5	197	9.1
13A ****	126	17.9	208	30.3
14	48	2.1	82	3.5
14A *****	49	18.9	143	32.4
15 *****	36	1.6	56	2.5
16	5	0.2	8	0.3
17 *****	49	2.4	78	3.9
18	10	0.4	16	0.7

- * TOTAL FLOW INTO UNSER DIVERSION POND NO. 6
- ** TOTAL FLOW INTO UNSER DIVERSION POND NO. 5
- *** TOTAL FLOW INTO UNSER DIVERSION POND NO. 4
- **** TOTAL FLOW INTO UNSER DIVERSION POND NO. 3
- ***** TOTAL FLOW INTO UNSER DIVERSION POND NO. 2
- ***** TOTAL FLOW INTO UNSER DIVERSION POND NO. 1
- ***** SEE GENERAL NOTE 3.

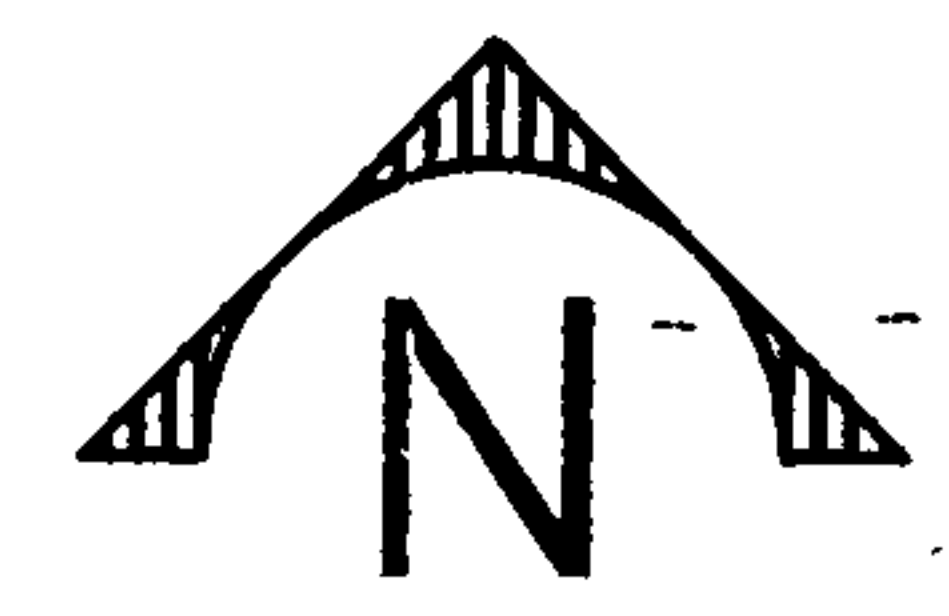




Figure 3

INTRODUCTION

The information in this document is intended to amend the report titled "Master Drainage Plan for the West Side Transit Facility, City of Albuquerque, New Mexico", dated February 2001, prepared for the City of Albuquerque, Transit Department, and prepared by Smith Engineering Company. The Master Drainage Plan obtained approval from the City of Albuquerque (COA), Hydrology Division in a letter from Bradley L. Bingham, PE, dated April 5, 2001.

This Amendment, December 2002, adds information to the original Master Drainage Plan dated February 2001. This Amendment includes analysis of additional proposed storm drain facilities on the south end of the proposed Oliver Ross Drive and along the proposed widening of the existing Los Volcanes Road. The proposed storm drain will eventually connect to existing COA drainage facilities near the Unser Blvd/Los Volcanes Road intersection. All of the information in the original Master Drainage Plan remains unchanged by this amendment.

The Unser Diversion ponds receive storm water runoff from drainage basins located to the west of the ponds. The West Side Transit Facility (WSTF) is also located to the west of the ponds and, therefore, drain to the ponds. The proposed Oliver Ross Road and widening of Los Volcanes Road are located east of the Unser Diversion ponds and thus drain to the existing storm drain system in Unser Blvd. This report, designated **AMENDMENT, DECEMBER 2002**, addresses the ability of a proposed storm drain system to convey storm water runoff to the existing Unser Blvd. storm drain system.

The project location is indicated on Zone Atlas page K-9 and is included herein as Figure 1. An enlarged view of the project location is shown in Figure 2. The information in Figure 2 shows the existing conditions. A copy of a portion of the proposed full development conditions is shown in Figure 3, which is Map No. 4 from the above referenced Master Drainage Plan. The information in Figure 3 is the basis for the hydraulic analysis and design discussed in the next section of this report.

The storm water runoff from the 100-year storm event was computed in the WSTF master drainage plan for a number of drainage basins that are applicable to the analysis in this report. Specifically, the two parcels on either side of the proposed Oliver Ross Road as well as the runoff from the proposed public right-of way for both Oliver Ross Road and Los Volcanes Road. These basins are shown in Figure 3 along with the previously computed 100-year peak runoff rates.

The proposed storm drain system in Los Volcanes Road will connect to the existing system in Unser Blvd. The pipe sizes shown in Los Volcanes Road are adequate to convey the 100-year peak runoff rate without surcharging the drain inlets or manholes above the finish grade elevation. In other words, The Hydraulic Grade Line (HGL) elevation is lower than the proposed finish grade elevation in all instances. However, some of the existing Unser Blvd. storm drain pipes must be replaced with larger pipes to achieve an HGL elevation lower than the finish and existing grades during the 100-year storm event. Specifically, the existing 30" pipes in Unser Blvd. will be replaced with new 36" pipes.

HYDROLOGY

The “Master Drainage Plan for the West Side Transit Facility” provides a computation of the peak runoff rate for the 100-year storm event. The runoff rate established in that report are applied in this report for the design of the proposed storm drain system in Los Volcanes Road. No further hydrologic analysis was performed for this report.

HYDRAULIC ANALYSIS & DESIGN

Several late developments affected the overall scope of this construction project. One of the scope changes includes additional storm drain facilities within Los Volcanes Road and connection to an existing storm drain system in Unser Blvd. Although the proposed additional storm drain in Los Volcanes Road was sized to convey the 100-year peak runoff rate, the existing downstream system and the overall system hydraulic grade line (HGL) were not evaluated at the time since the contract documents were out for bid.

Subsequent to the bidding phase of this project, an analysis of the existing downstream system and overall HGL of the system was performed by SEC using the numerical modeling software StormCAD, from Haestad Methods. It was discovered that the proposed Los Volcanes storm drain system, although properly sized for the design flow (100-year storm), was flooding during the 100 year peak runoff rate. The problem was found to be the existing 30” storm drain in Unser Blvd., which acted as a “bottleneck” causing the proposed Los Volcanes system to flood.

The existing storm drain system in Unser Blvd. is shown in Figure 2. A simple solution exists to eliminate flooding of the proposed Los Volcanes storm drain during the design storm: upsize the existing 30” pipes in Unser Blvd. to 36” pipes. The result of this pipe upsizing is to keep the HGL from exceeding the rim elevations of the upstream structures. The results of the StormCAD model are included as Appendix A. The estimated construction costs associated with upsizing to 36” pipes is included as Appendix B and is estimated to be approximately \$140,000.00.

Within the StormCAD model, the following assumptions and parameters were utilized:

- * Concrete pipe with Manning $n = 0.013$
- * Inlet capacity for all Drain Inlets is 4 cfs with the exception of the two multiple inlets on Unser Blvd. north of Los Volcanes, which assumes 8 cfs each side.

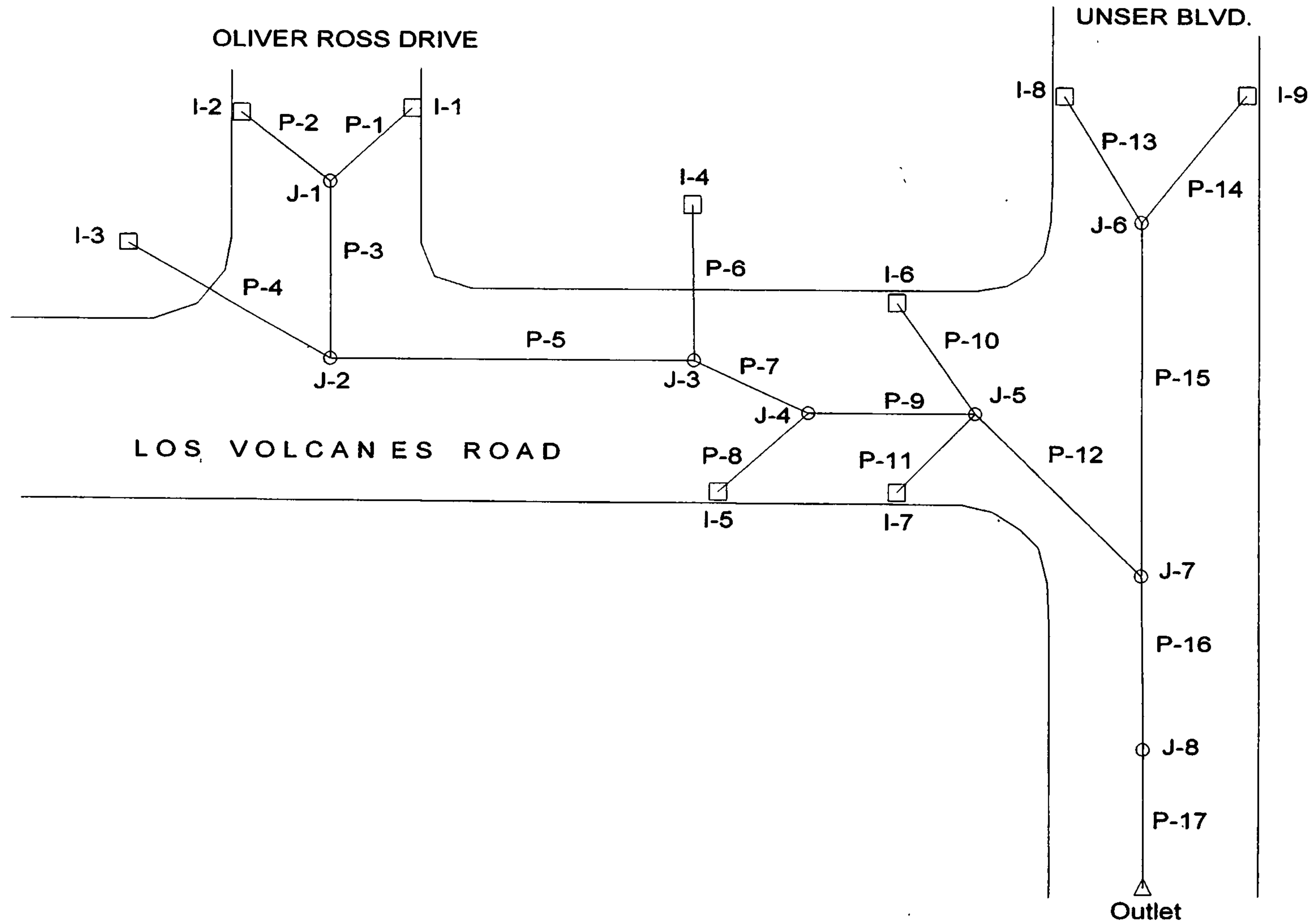
RECOMMENDATIONS

Based on the hydraulic analysis, it is recommended that approximately 995 feet of existing 30” RCP, located within the Unser Blvd. right of way, be replaced with new 36” RCP. This will eliminate the “bottleneck” in the overall drainage system between Oliver Ross Road and the Unser Diversion Channel just north of Central Avenue. It will also provide adequate conveyance capacity for the 100-year peak runoff such that the HGL remains below grade at all structures on Los Volcanes Road and Olive Ross Road.

11
12
13
14

APPENDIX A

OLIVER ROSS DRIVE / LOS VOLCANES ROAD STORM DRAIN



Combined Pipe/Node Report

Pipe	Upstream Node	Downstream Node	Length (ft)	Section Size	Capacity (cfs)	Discharge (cfs)	Average Velocity (ft/s)	Upstream Invert Elevation (ft)	Upstream Crown Elevation (ft)	Upstream Rim Elevation (ft)	Upstream HGL (ft)	Downstream Invert Elevation (ft)	Downstream Crown Elevation (ft)	Downstream Rim Elevation (ft)	Downstream HGL (ft)	Constructed Slope (ft/ft)
P-2	I-2	J-1	16.00	18 inch	11.14	4.00	2.77	45.42	46.92	48.49	46.48	45.24	46.74	48.81	46.49	0.011250
P-1	I-1	J-1	32.00	18 inch	10.67	4.00	2.65	45.42	46.92	48.49	46.49	45.09	46.59	48.81	46.49	0.010312
P-4	I-3	J-2	56.00	24 inch	22.42	19.00	6.05	43.73	45.73	54.00	46.57	43.18	45.18	48.65	46.17	0.009821
P-3	J-1	J-2	55.00	18 inch	10.50	8.00	4.53	43.73	45.23	48.81	46.49	43.18	44.68	48.65	46.17	0.010000
P-5	J-2	J-3	475.00	30 inch	53.33	27.00	5.50	43.17	45.67	48.65	45.89	35.14	37.64	43.85	43.83	0.016905
P-6	I-4	J-3	32.00	24 inch	22.62	22.00	7.00	35.46	37.46	44.00	44.14	35.14	37.14	43.85	43.83	0.010000
P-7	J-3	J-4	56.00	30 inch	56.16	49.00	9.98	35.04	37.54	43.85	42.90	33.99	36.49	43.14	42.11	0.018750
P-8	I-5	J-4	16.00	18 inch	43.39	4.00	2.26	37.87	39.37	43.20	42.13	35.14	36.64	43.14	42.11	0.170625
P-10	I-6	J-5	40.00	18 inch	18.79	4.00	2.26	35.55	37.05	43.00	40.86	34.27	35.77	43.11	40.80	0.032000
P-9	J-4	J-5	24.00	30 inch	60.95	53.00	10.80	33.89	36.39	43.14	41.20	33.36	35.86	43.11	40.80	0.022083
P-11	I-7	J-5	16.00	18 inch	64.11	4.00	3.34	40.86	42.36	43.00	41.63	34.90	36.40	43.11	40.80	0.372500
P-14	I-9	J-6	72.00	18 inch	28.63	8.00	4.53	39.01	40.51	44.00	40.53	33.66	35.16	44.51	40.11	0.074306
P-13	I-8	J-6	72.00	18 inch	23.26	8.00	4.53	37.22	38.72	44.00	40.53	33.69	35.19	44.51	40.11	0.049028
P-12	J-5	J-7	98.00	36 inch	77.40	61.00	8.63	33.36	36.36	43.11	39.99	32.04	35.04	42.17	39.17	0.013469
P-15	J-6	J-7	124.00	24 inch	17.36	16.00	5.09	33.11	35.11	44.51	39.79	32.38	34.38	42.17	39.17	0.005887
P-16	J-7	J-8	447.00	36 inch	66.69	77.00	10.89	31.82	34.82	42.17	37.88	27.35	30.35	36.35	31.92	0.010000
P-17	J-8	Outlet	450.00	36 inch	88.09	77.00	10.89	27.45	30.45	36.35	31.00	19.60	22.60	29.89	25.00	0.017444

----- Beginning Calculation Cycle -----

Discharge: 19.00 cfs at node I-3
Discharge: 4.00 cfs at node I-2
Discharge: 4.00 cfs at node I-1
Discharge: 8.00 cfs at node J-1
Discharge: 27.00 cfs at node J-2
Discharge: 22.00 cfs at node I-4
Discharge: 49.00 cfs at node J-3
Discharge: 4.00 cfs at node I-5
Discharge: 53.00 cfs at node J-4
Discharge: 4.00 cfs at node I-6
Discharge: 4.00 cfs at node I-7
Discharge: 61.00 cfs at node J-5
Discharge: 8.00 cfs at node I-8
Discharge: 8.00 cfs at node I-9
Discharge: 16.00 cfs at node J-6
Discharge: 77.00 cfs at node J-7
Discharge: 77.00 cfs at node J-8
Discharge: 77.00 cfs at node Outlet

Beginning iteration 1

Discharge: 19.00 cfs at node I-3
Discharge: 4.00 cfs at node I-2
Discharge: 4.00 cfs at node I-1
Discharge: 8.00 cfs at node J-1
Discharge: 27.00 cfs at node J-2
Discharge: 22.00 cfs at node I-4
Discharge: 49.00 cfs at node J-3
Discharge: 4.00 cfs at node I-5
Discharge: 53.00 cfs at node J-4
Discharge: 4.00 cfs at node I-6
Discharge: 4.00 cfs at node I-7
Discharge: 61.00 cfs at node J-5
Discharge: 8.00 cfs at node I-8
Discharge: 8.00 cfs at node I-9
Discharge: 16.00 cfs at node J-6
Discharge: 77.00 cfs at node J-7
Discharge: 77.00 cfs at node J-8
Discharge: 77.00 cfs at node Outlet

Discharge Convergence Achieved in 1 iterations: relative error: 0.0

** Warning: Design constraints not met.

** Problem: Flooding in system

Warning: No Duration data exists in IDF Table

Information: Outlet Known flow propagated from upstream junctions.

Information: P-17 Surcharged condition

Information: J-8 Known flow propagated from upstream junctions.

Information: P-16 Surcharged condition

Information: J-7 Known flow propagated from upstream junctions.

Information: P-12 Surcharged condition

Information: P-15 Surcharged condition

Information: J-5 Known flow propagated from upstream junctions.

Information: P-9 Surcharged condition

Information: P-10 Surcharged condition

Violation: P-11 does not meet minimum cover constraint at upstream end.

Information: J-4 Known flow propagated from upstream junctions.

Information: P-7 Surcharged condition

Information: P-8 Surcharged condition

Violation: P-8 does not meet maximum slope constraint (try drop structure).

Information: J-3 Known flow propagated from upstream junctions.

Information: P-5 Surcharged condition

Violation: P-5 does not meet minimum cover constraint at upstream end.

Information: P-6 Surcharged condition

Information: J-2 Known flow propagated from upstream junctions.

Information: P-4 Surcharged condition

Violation: P-4 does not meet minimum cover constraint at downstream end.

Information: P-3 Surcharged condition

Violation: P-3 does not meet minimum cover constraint at downstream end.
 Information: J-1 Known flow propagated from upstream junctions.
 Violation: P-2 does not meet minimum cover constraint at downstream end.
 Violation: P-1 does not meet minimum cover constraint at downstream end.
 Information: I-4 The hydraulic grade exceeds the Rim/Ground elevation
 Information: I-4 Flooding condition.
 Information: J-6 Known flow propagated from upstream junctions.
 Information: P-13 Surcharged condition
 Information: P-14 Surcharged condition

----- Calculations Complete -----

**** Analysis Options ****

Friction method: Manning's Formula
 Hydraulic Grade Convergence Test: 0.010000
 Maximum Network Traversals: 5
 Number of Flow Profile Steps: 5
 Discharge Convergence Test: 0.010000
 Maximum Design Passes: 3

----- Network Quick View -----

Label	Length	Size	Discharge	Hydraulic Grade Upstream	Downstream
P-4	56.00	24 inch	19.00	46.57	46.17
P-2	16.00	18 inch	4.00	46.48	46.49
P-1	32.00	18 inch	4.00	46.49	46.49
P-3	55.00	18 inch	8.00	46.49	46.17
P-5	475.00	30 inch	27.00	45.89	43.83
P-6	32.00	24 inch	22.00	44.14	43.83
P-7	56.00	30 inch	49.00	42.90	42.11
P-9	24.00	30 inch	53.00	41.20	40.80
P-10	40.00	18 inch	4.00	40.86	40.80
P-11	16.00	18 inch	4.00	41.63	40.80
P-12	98.00	36 inch	61.00	39.99	39.17
P-13	72.00	18 inch	8.00	40.53	40.11
P-14	72.00	18 inch	8.00	40.53	40.11
P-15	124.00	24 inch	16.00	39.79	39.17
P-8	16.00	18 inch	4.00	42.13	42.11
P-16	447.00	36 inch	77.00	37.88	31.92
P-17	450.00	36 inch	77.00	31.00	25.00

Label	Discharge	Ground	Elevations Upstream HGL	Downstream HGL
I-3	19.00	54.00	46.85	46.57
I-2	4.00	49.15	46.55	46.48
I-1	4.00	49.16	46.56	46.49
J-1	8.00	48.81	46.49	46.49
J-2	27.00	48.65	46.17	45.89
J-3	49.00	43.85	43.83	42.90
I-4	22.00	44.00	44.00	44.00
J-4	53.00	43.14	42.11	41.20
J-5	61.00	43.11	40.80	39.99
I-6	4.00	43.66	40.90	40.86
I-7	4.00	43.66	41.78	41.63
J-7	77.00	42.17	39.17	37.88
J-6	16.00	44.51	40.11	39.79
I-8	8.00	44.66	40.69	40.53
I-9	8.00	44.66	40.69	40.53
Outlet	77.00	29.89	25.00	25.00
I-5	4.00	43.86	42.17	42.13
J-8	77.00	36.35	31.92	31.00

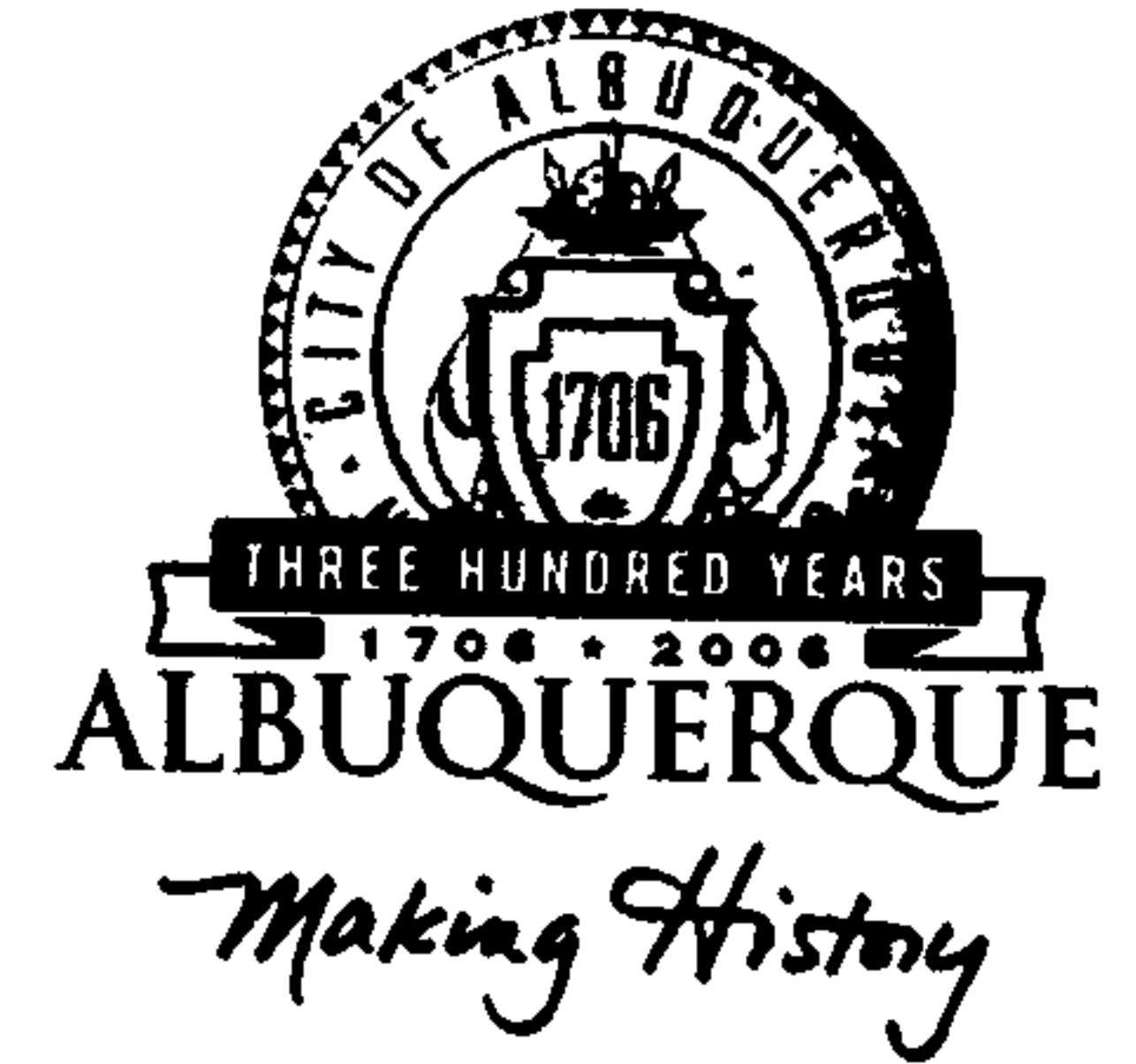
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FIELD ORDER No. 1 - ADDITIONAL STORM DRAIN IN UNSER BLVD.

12/06/2002

WEST SIDE TRANSIT FACILITY, COA PROJECT #5658.01						
					CCL, Inc.	
BID ITEM NO.	SPEC. ITEM NO.	DESCRIPTION	UNIT	EST. QTY	UNIT PRICE	AMOUNT
	4.01	Construction Staking, complete	LS	1	\$1,000.00	\$1,000.00
	19.01	Construction Traffic Control & Barricading, complete	LS	1	\$2,000.00	\$2,000.00
	302.01	Aggregate Base Course, crushed, 6" thick, cip.	SY	1,400	\$5.43	\$7,602.00
	301.020	Subgrade Preparation, 12" at 95% compaction, complete-in-place	SY	1,400	\$0.95	\$1,330.00
	302.01X	Aggregate Base Course, crushed, 8" thick, cip.	SY	1,400	\$6.55	\$9,170.00
	336.034	Arterial Asphalt Concrete, Type A, 2 inch thick, machine laydown, complete-in-place	SY	1,400	\$4.17	\$5,838.00
	336.036	Arterial Asphalt Concrete, Type A, 2-1/2 inch thick, machine laydown, complete-in-place	SY	1,400	\$5.02	\$7,028.00
	336.120	Tack Coat, cationic emulsified asphalt, complete-in-place	SY	1,400	\$0.25	\$350.00
	340.025	Wheelchair Access Ramp, 4" PCC, Std. Curb., complete-in-place SD 2441	EA	2	\$437.77	\$875.54
	340.050	Curb and gutter, standard, PCC, complete-in-place	LF	80	\$10.00	\$800.00
	340.060	Curb and gutter, Median, PCC, complete-in-place	LF	1,000	\$8.00	\$8,000.00
	343.030	Existing Pavement, Asphalt Concrete, more than 4" thick, sawcut, remove & dispose, complete	SY	1,400	\$7.00	\$9,800.00
	343.075	Existing Curb & Gutter, PC Concrete, remove, dispose & replace, complete-in-place	LF	80	\$15.95	\$1,276.00
	701.110	Trenching, Backfilling, & Compaction for 18" to 36" storm drain, 8' to 12' in depth, pipe not incl, complete	LF	1,000	\$12.33	\$12,330.00
	910.018	36" Reinforced Concrete Pipe, Class IV, furnish and install in open trench, complete-in-place	LF	984	\$58.84	\$57,898.56
**	910.077	Wye/Tee, 36" X 18" any degree, furnished and installed in open trench, cip	EA	2	\$650.00	\$1,300.00
**	920.001X	Connect new 36" SD to existing SD manhole, cip.	EA	6	\$900.00	\$5,400.00
** = Line Item not in original CCM bid						
SUB-TOTAL OF BID ITEMS						\$131,998.10
NEW MEXICO GROSS RECEIPTS TAX @ 5.8125%						\$7,672.39
TOTAL ESTIMATED COST						\$139,670.49

CITY OF ALBUQUERQUE



April 18, 2005

George Nemeth, P.E.
Smith Engineering Company
2201 San Pedro NE – Building #4, Suite 200
Albuquerque, NM 87110

**Re: West Side Transit Facility – Phase 4, 8001 Daytona Road NW
Grading and Drainage Plan • Engineer Stamp dated 2-25-05 (J9 – D16)**

Dear Mr. Nemeth,

Based upon the information provided in your submittal dated 3-24-05, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology and prior to release of the Certificate of Occupancy an Engineer's Certification of the grading plan per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3990.

Sincerely,

Phillip J. Lovato, E.I.

Engineering Associate, Planning Dept.
Development and Building Services

C: file

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

3-9/016

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

PROJECT TITLE: **West Side Transit Facility - Phase 4**
DRB#: 02DRB-00202 EPC#: 00128-01641

ZONE MAP: J-9, K-9
WORK ORDER#: _____

LEGAL DESCRIPTION: _____
CITY ADDRESS: 8001 Daytona Road NW Albuquerque

ENGINEERING FIRM: Smith Engineering Company CONTACT: George Nemeth, P.E.
ADDRESS: 2201 San Pedro NE, Bldg #4, Suite 200 PHONE: 884-0700
CITY, STATE: Albuquerque, NM ZIP CODE: 87110

OWNER: City of Albuquerque, Transit Department CONTACT: Tim Cynova, P.E.
ADDRESS: 601 Yale Blvd. SE PHONE: 764-6125
CITY, STATE: Albuquerque, NM ZIP CODE: 87106

ARCHITECT: DWL Architects CONTACT: Ron Burton, AIA
ADDRESS: 202 Central Ave. SE PHONE: 242-6202
CITY, STATE: Albuquerque, NM ZIP CODE: 87102

SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

- | <u>TYPE OF SUBMITTAL:</u> | <u>CHECK TYPE OF APPROVAL SOUGHT:</u> |
|--|--|
| ☐ DRAINAGE REPORT | ☐ SIA/FINANCIAL GUARANTEE RELEASE |
| ☐ DRAINAGE PLAN 1 st SUBMITTAL | ☐ PRELIMINARY PLAT APPROVAL |
| ☒ DRAINAGE PLAN RESUBMITTAL | ☐ S. DEV. PLAN FOR SUB'D APPROVAL |
| ☐ CONCEPTUAL G & D PLAN | ☐ S. DEV. FOR BLDG. PERMIT APPROVAL |
| ☐ GRADING PLAN | ☐ SECTOR PLAN APPROVAL |
| ☐ EROSION CONTROL PLAN | ☐ FINAL PLAT APPROVAL |
| ☐ ENGINEER'S CERT (HYDROLOGY) | ☐ FOUNDATION PERMIT APPROVAL |
| ☐ CLOMR/LOMR | ☒ BUILDING PERMIT APPROVAL |
| ☐ TRAFFIC CIRCULATION LAYOUT | ☐ CERTIFICATE OF OCCUPANCY |
| ☐ ENGINEER'S CERT (TCL) | ☐ GRADING PERMIT APPROVAL |
| ☐ ENGINEER'S CERT (DRB SITE PLAN) | ☐ PAVING PERMIT APPROVAL |
| ☐ OTHER | ☒ WORK ORDER APPROVAL |
| | ☐ OTHER (SPECIFY) |

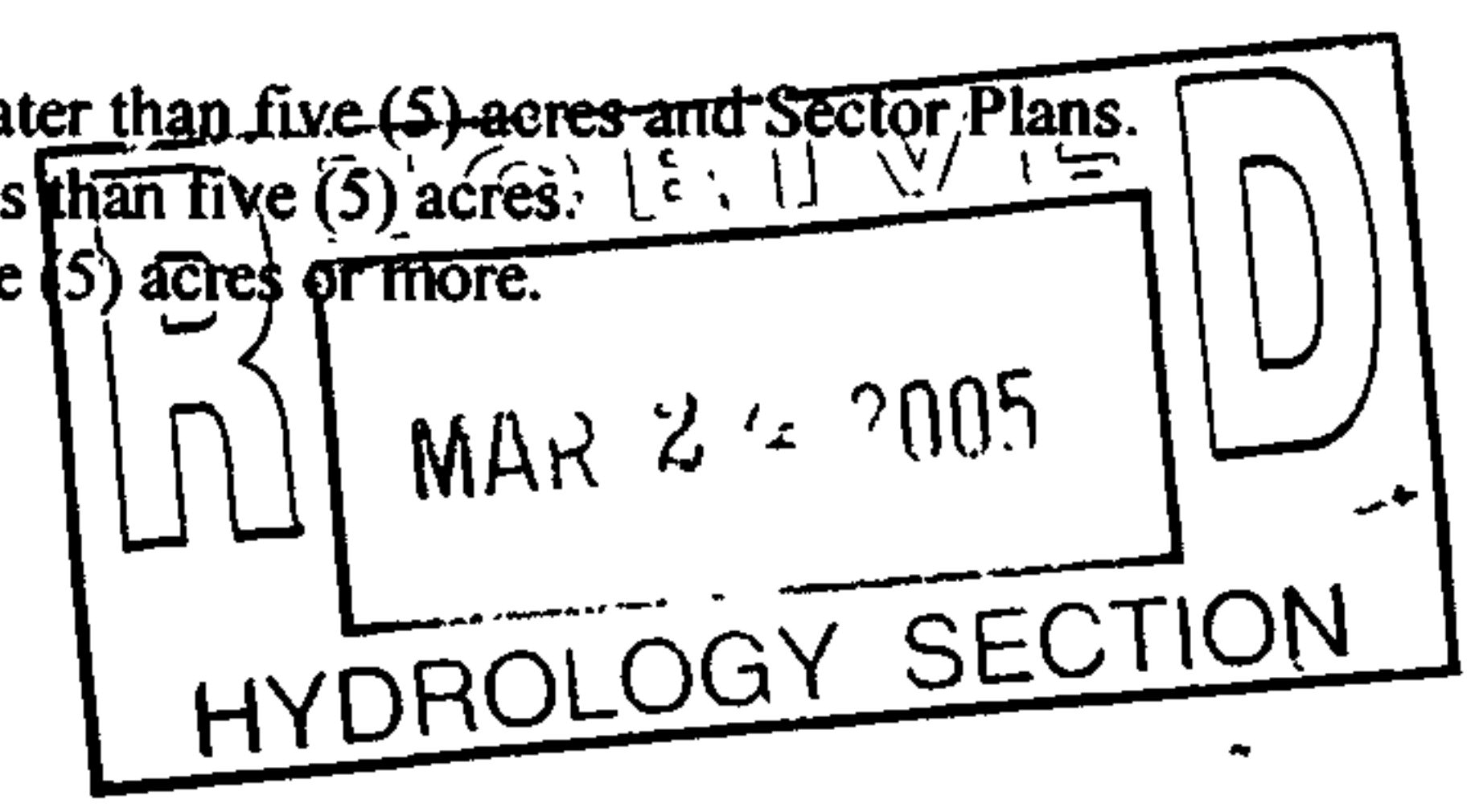
WAS A PRE-DESIGN CONFERENCE ATTENDED:
☐ YES
☒ NO
☐ COPY PROVIDED

DATE SUBMITTED: March 24, 2005

BY: George Nemeth, P.E. 

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.



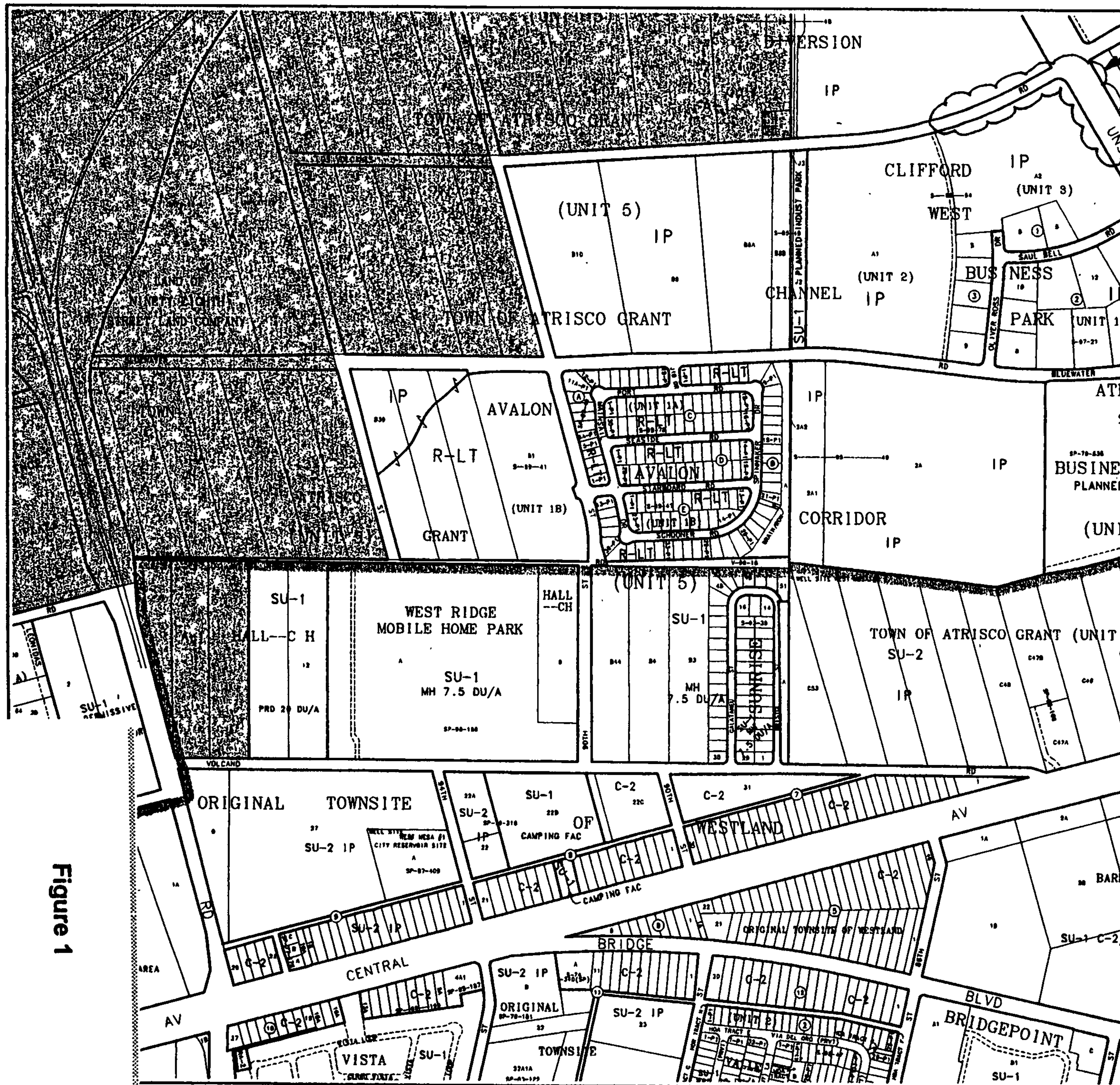
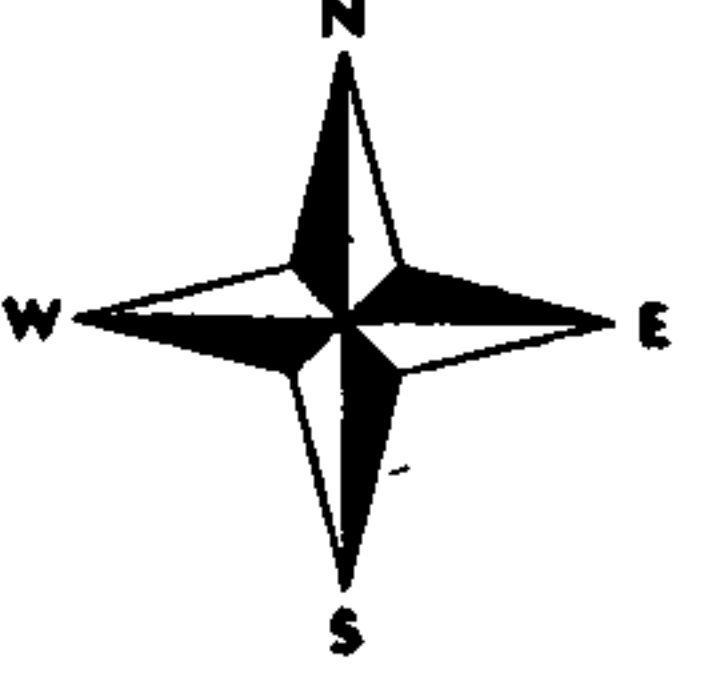


Figure 1

PROJECT LOCATION

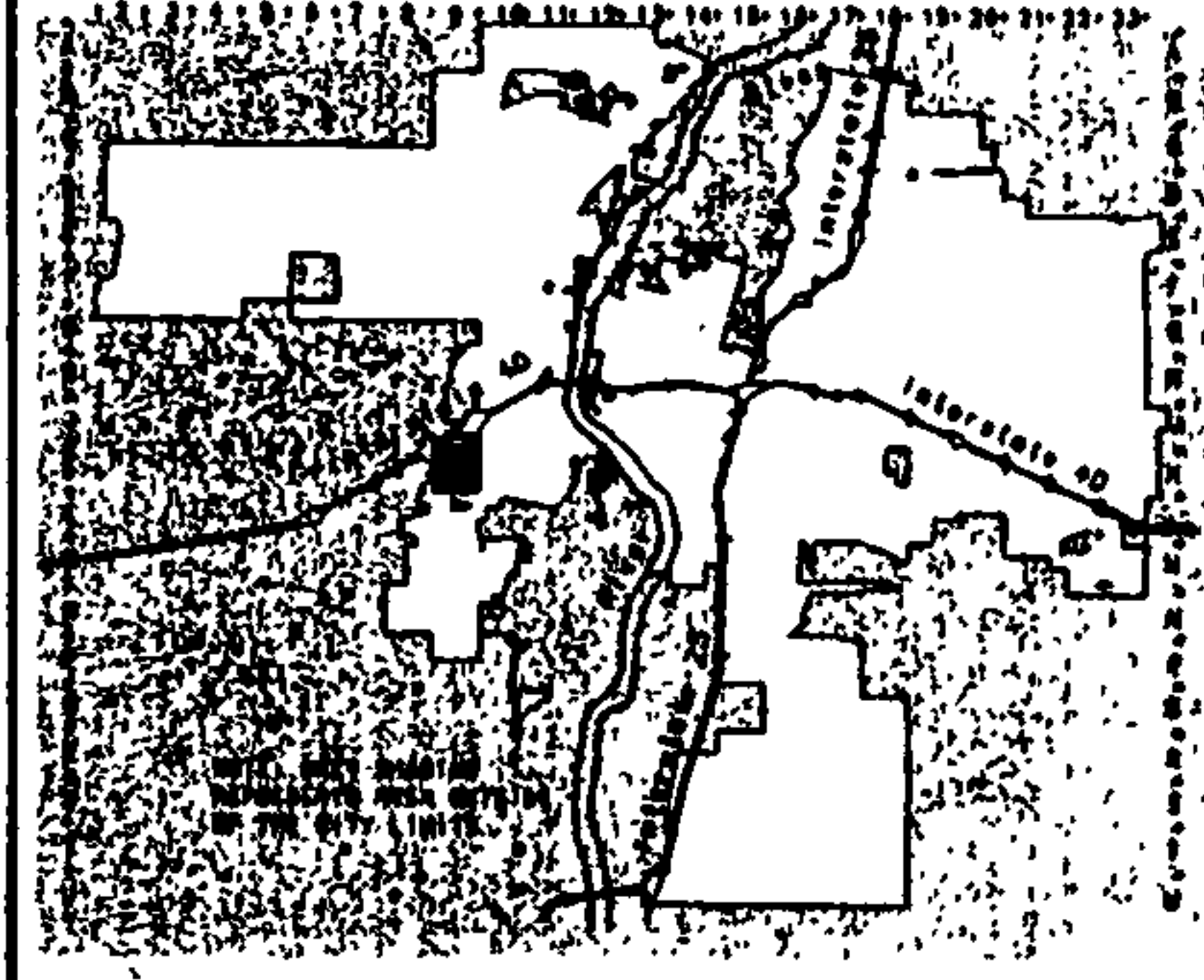


CITY OF Albuquerque
 A large Geographic Information System
 PLANNING DEPARTMENT
 © Copyright 1999



GRAPHIC SCALE IN FEET

250 0 500 1000



Zone Atlas Page K-9-Z

Map Amended through April 07, 1999



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 5, 2001

Doug Andrews, PE
Smith Engineering Co.
6400 Uptown Blvd. Ste 500E
Albuquerque, NM 87110

Re: Westside Transit Facility Master Drainage Report
Engineer's Stamp dated 2-8-01, (J9/D16)

Dear Mr. Andrews,

Based on your information provided in your submittal dated 2-28-01, the above referenced Master Drainage Report is acceptable; you may begin your plans for the facility itself. Keep in mind that construction of the storm drain must be by City Work Order.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE
Sr. Engineer, Hydrology

C: file

DRAINAGE INFORMATION SHEET

J9/D016

APPLICANT'S NAME: CITY OF ALBUQUERQUE TRANSIT DEPT. ZONE ATLAS/DRNG. FILE #: ~~1112~~DRB #: PENDING EPC #: SEE BELOW WORK ORDER #: _____LEGAL DESCRIPTION: TRACT B, UNIT No. 5, TOWN OF ATRISCO GRANTCITY ADDRESS: DAYTONA ROAD (ANNEXATION FROM COUNTY IN PROGRESS)ENGINEERING FIRM: SMITH ENGINEERING COMPANYCONTACT: DOUGLAS ANDREWSADDRESS: 6400 UPTOWN BLVD 87110PHONE: 884-0700OWNER: CITY OF ALBUQUERQUE TRANSIT DEPT.CONTACT: BRUCE RIZZIERIADDRESS: 601 YALE BLVD 87106PHONE: 764-6123ARCHITECT: DWL ARCHITECTSCONTACT: RON BURTONADDRESS: 202 CENTRAL SE WEST COURTYARD
87102PHONE: 242-6202

SURVEYOR: _____

CONTACT: _____

ADDRESS: _____

PHONE: _____

CONTRACTOR: _____

CONTACT: _____

ADDRESS: _____

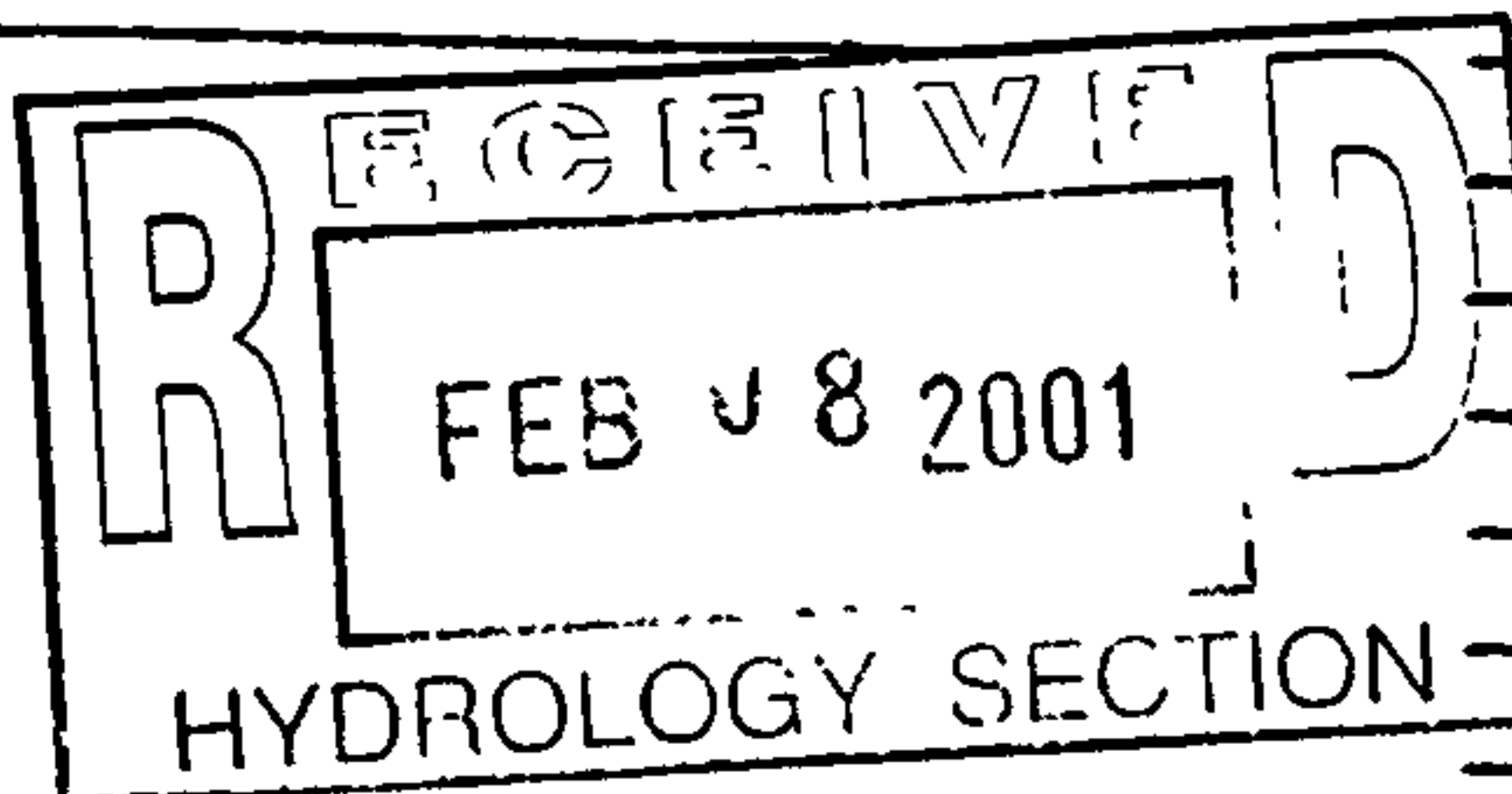
PHONE: _____

TYPE OF SUBMITTAL:

- ☒ DRAINAGE REPORT
☐ DRAINAGE PLAN
☐ CONCEPTUAL GRADING & DRAINAGE PLAN
☐ GRADING PLAN
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERTIFICATION
☐ OTHER _____

PRE-DESIGN MEETING:

- ☒ YES
☐ NO
☐ COPY PROVIDED



CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SKETCH PLAT APPROVAL
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D APPROVAL
☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
☐ SECTOR PLAN APPROVAL
☐ FINAL PLAT APPROVAL
☐ FOUNDATION PERMIT APPROVAL
☐ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY APPROVAL
☐ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☐ S.A.D. DRAINAGE REPORT
☐ DRAINAGE REQUIREMENTS
☒ SUBDIVISION CERTIFICATION
☒ OTHER MASTER DRAINAGE PLAN (SPECIFY)

DATE SUBMITTED: 2-8-01BY: DOUGLAS ANDREWS

ERG CASE NUMBER:

00114-00000-0164300128-00000-0164100128-00000-0164200110-00000-01650



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 4, 2002

Patrick J Conley, PE
Smith Engineering Co.
6400 Uptown Blvd. Ste 500E
Albuquerque, NM 87110

Re: Westside Transit Facility Conceptual Grading Plan
Engineer's Stamp dated 2-11-02, (J9/D16)

Dear Mr. Conley,

Based on your information contained in your submittal dated 2-14-02, the above referenced plan is approved for Site Plan for Subdivision, Site Plan for Building Permit, Preliminary and Final Plat actions by the DRB. Prior to Building Permit or Work Order, please submit a more comprehensive plan that can be constructible.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE
Sr. Engineer, PWD
Development and Building Services

C: file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/11/2002)

J-9/D16

PROJECT TITLE: WESTSIDE TRANSIT FACILITY ZONE MAP/DRG. FILE #: J-9-2
DRB #: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: _____
CITY ADDRESS: _____

ENGINEERING FIRM: SMITH ENGINEERING CO.
ADDRESS: 4400 UPTOWN BLVD NE
CITY, STATE: ALBANY GA 31707

CONTACT: LAURENCE LOPEZ
PHONE: 814-0700
ZIP CODE: _____

OWNER: C.O.A. TRANSIT
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

ARCHITECT: DWA ARCHITECTS
ADDRESS: 202 CENTRAL SW
CITY, STATE: ALBANY GA 31702

CONTACT: _____
PHONE: _____
ZIP CODE: _____

SURVEYOR: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

CONTRACTOR: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☒ DRAINAGE PLAN
- ☒ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☒ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (TCL)
- ☐ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ☐ OTHER

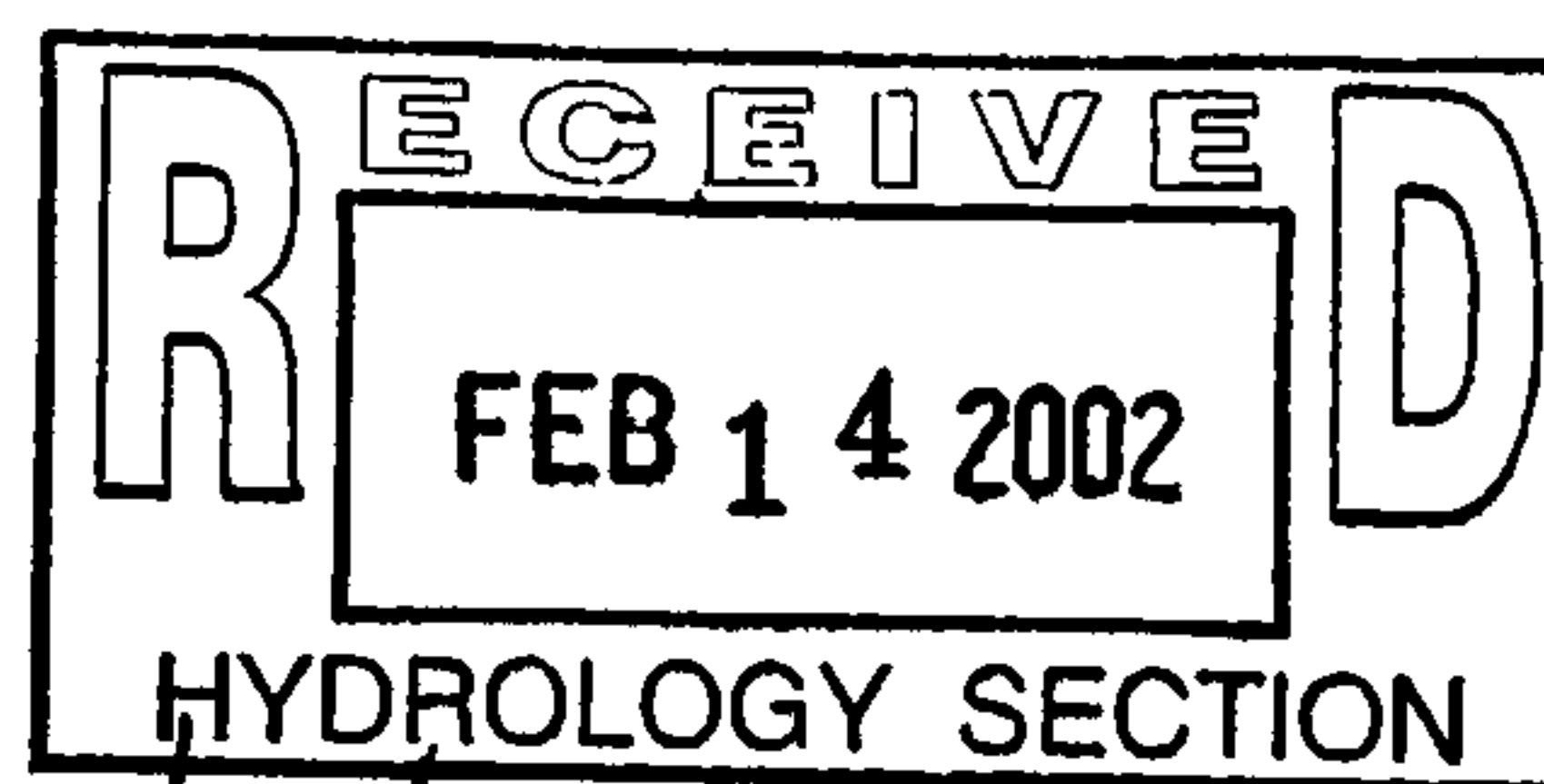
CHECK TYPE OF APPROVAL SOUGHT:

- ☒ SIA / FINANCIAL GUARANTEE RELEASE
- ☒ PRELIMINARY PLAT APPROVAL
- ☒ S. DEV. PLAN FOR SUB'D. APPROVAL
- ☒ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ☒ SECTOR PLAN APPROVAL
- ☒ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY (PERM.)
- ☐ CERTIFICATE OF OCCUPANCY (TEMP.)
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
- ☐ NO
- ☐ COPY PROVIDED

DATE SUBMITTED: 2/14/02 BY: LAURENCE LOPEZ



Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5)
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or



Smith Engineering Company

A Full Service Engineering Company

February 14, 2002

Mr. Brad Bingham
City of Albuquerque
Public Works Department
P.O. Box 1293
Albuquerque, NM 87103

Re: Westside Transit Facility, Phase 3
City Project Number: 5658.01

Dear Brad,

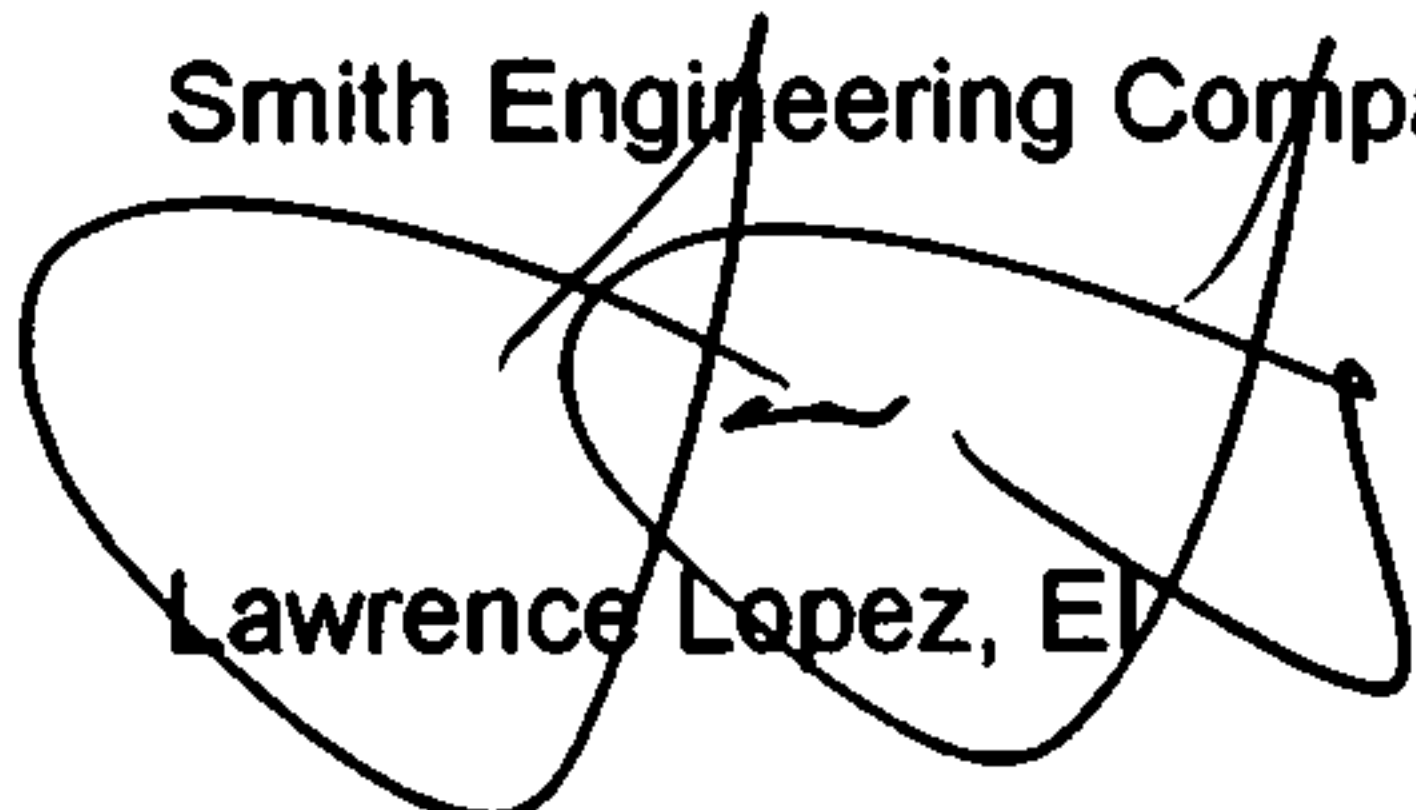
Attached is a copy of a conceptual grading/storm drain plan for the above referenced project. DWL Architects submitted this project for DRB review on February 12, 2002. Furthermore, you approved a master drainage report entitled "Master Drainage Pland for the West Side Transit Facility, City of Albuquerque, New Mexico" on April 5, 2001.

Please note that flows from the Mirehaven Arroyo, which is located directly west of the site, have been reduced by the construction of an upstream retention basin. The CLOMR/LOMR for this facility is attached for your information.

Please let me know if you have any questions or concerns.

Sincerely,

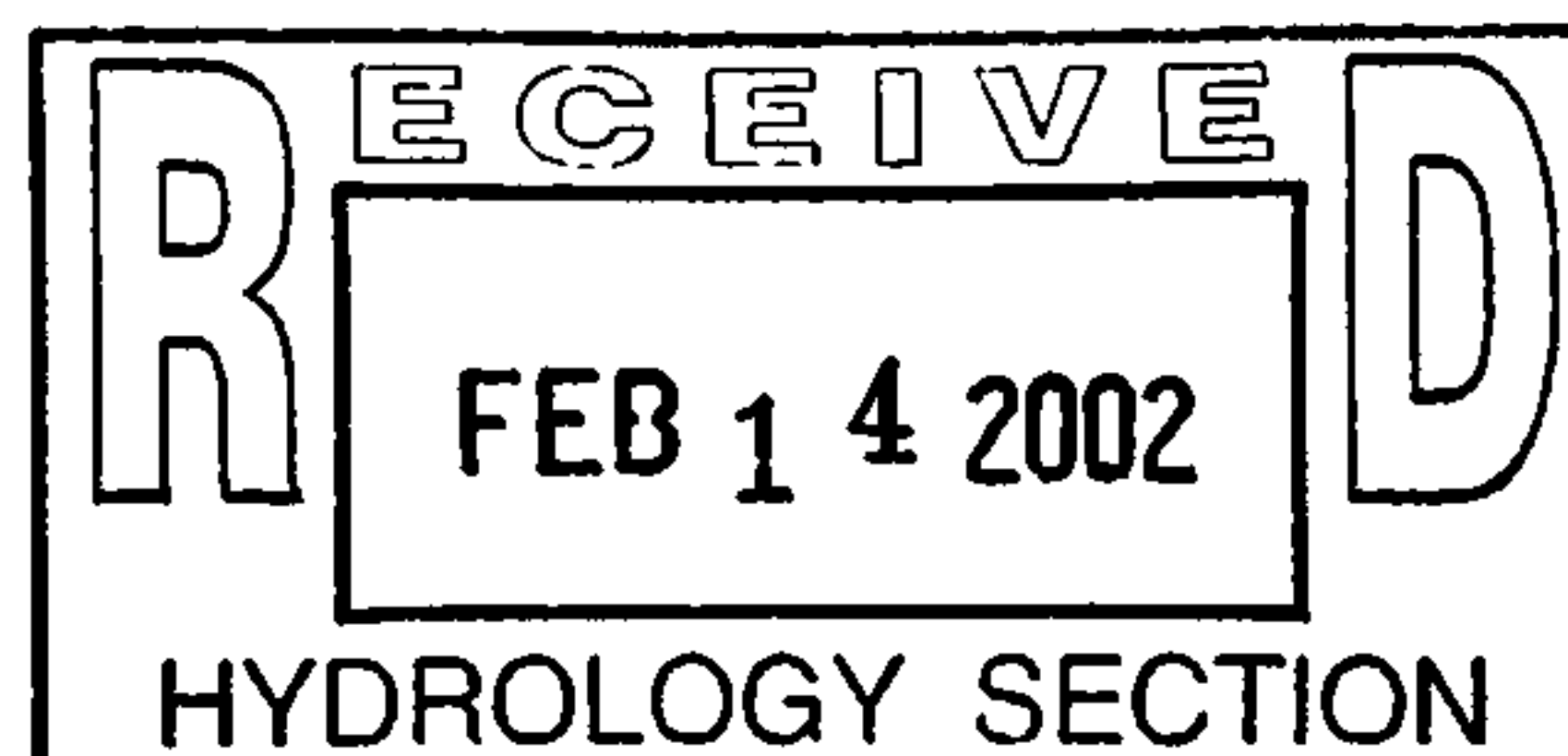
Smith Engineering Company



Lawrence Lopez, EIT

cc: File
Ron Burton, DWL Architects

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Federal Emergency Management Agency

Washington, D.C. 20472

JAN 08 2002

Mr. Juan R. Vigil
County Manager, Bernalillo County
2400 Broadway, S.E.
Albuquerque, NM 87102

IN REPLY REFER TO:

Case Number: 01-06-1901R

Community: Bernalillo County, New Mexico
(Unincorporated Areas)

Community No.: 350001

104

Dear Mr. Rutherford:

This is in reference to a letter dated August 17, 2001, from Carlos A. Montoya, City/County Floodplain Administrator, requesting a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA) for the proposed Painted Sky Subdivision. The proposed project will be located along an unnamed tributary to Mirehaven Arroyo C from a point approximately 2,800 feet downstream of Interstate 40 to a point approximately 500 feet upstream of Interstate 40 and will consist of the construction of six retention ponds, positioned in a row beginning approximately 500 feet upstream of Interstate 40 and continuing northwest 1950 feet along the Interstate 40 easement. The project will also include the ponds' associated drainage system, which will capture all runoff to the unnamed tributary to Mirehaven Arroyo C at a point approximately 300 feet upstream of Interstate 40. The area of the proposed project is shown on the Bernalillo County, New Mexico and Incorporated Areas Flood Insurance Rate Map (FIRM) number 35001C0328 D, dated September 20, 1996. This project also affects flood hazard information for the City of Albuquerque, Bernalillo County, New Mexico.

We received the following data, prepared by James D. Hughes, P.E., of Mark Goodwin & Associates, P.A., in support of this request:

- AHYMO97 hydrologic model, dated May 31, 2000, of the 1% annual chance (100-year) flood, representing the proposed conditions for the unnamed tributary to Mirehaven Arroyo C;
- backup hydrologic calculations in a report titled *Drainage Report for Painted Sky Subdivision*, dated August 2000;
- a drainage map, dated August 2000, titled *Offsite Drainage Map*, at a scale of 1 inch=500 feet, with a contour interval of 2 feet, in support of the hydrologic model of the unnamed tributary to Mirehaven Arroyo C;

- a certified topographic work map, dated December 7, 2000, titled *Workmap from Floodway Map*, at a scale of 1 inch=500 feet, with a contour interval of 2 feet, showing the effective and proposed floodplain along the unnamed tributary to Mirehaven Arroyo C;
- design plans for the retention ponds and roadside drainage system, dated December 7, 2000, titled *Painted Sky Subdivision Grading and Drainage Plan*;
- a report titled *C.L.O.M.R. Request for Painted Sky*, dated June 21, 2001;
- a copy of the Bernalillo County, New Mexico and Incorporated Areas FIRM number 35001C0328 D, annotated to reflect proposed conditions; and
- completed application/certification forms, including community concurrence with the proposed project.

We received all of the data required to perform a technical review of the CLOMR request as of October 15, 2001.

We have reviewed the submitted data and determined that the proposed project meets the minimum floodplain management criteria of the National Flood Insurance Program (NFIP). If the project is built as proposed, a revision to the FIRM for your community will be warranted. This revision will show the following effects, as shown by the data submitted to support the request:

1% Annual Chance Floodplain

When the proposed model was compared to the effective FIRM for the unnamed tributary to Mirehaven Arroyo C, it was determined that a maximum increase in the 1% annual chance floodplain for your community as well as the entire revision area of 250 feet would occur at a point approximately 100 feet upstream of Interstate 40. The maximum decrease in the 1% annual chance floodplain for your community as well as the entire revision area of 210 feet would occur at a point approximately 220 feet downstream of Interstate 40.

In addition, the proposed project will revise the currently effective flood zone designations along the unnamed tributary to Mirehaven Arroyo C. The unnamed tributary to Mirehaven Arroyo C is currently designated as Zone AO on the effective FIRM. This designation indicates the presence of flood depths of 1 to 3 feet (sheet flow on sloping terrain), with the average depth in this case determined to be 1 foot in the channel of the unnamed tributary to Mirehaven Arroyo C. The sheet flow in this channel will be intercepted by a series of six retention ponds and the designation changed to Zone AE, for which the base flood elevations have been determined by calculating the depth in each of the retention ponds during the 1% annual chance rainfall event.

Future revisions to the FIRM, or restudies of the flood hazards in this area, could modify this determination.

We based this determination on the 1% annual chance discharges computed in the revised hydrologic model. Future development of projects upstream may increase discharges, which may increase flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on discharges and could, therefore, establish greater flood hazards in this area.

Your community must approve all proposed floodplain development, including this proposed project, and ensure that permits required by other Federal agencies and/or State and local agencies have been obtained. State and/or community officials may set standards for construction that are more restrictive than the minimum NFIP standards or may limit development in floodplains, based on knowledge of local conditions and in the interest of safety. If the State and/or the community have adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

Retention ponds will fail to maintain the designed storage capacity without proper maintenance, such as the regular clearing of accumulated bottom sediments. To avoid such failures, we require participating communities to ensure that the storage capacity within the retention pond is maintained according to NFIP regulations Subparagraph 60.3(b)(7). Therefore, upon completion of the project, your community must submit documentation ensuring that the retention pond will be maintained to preserve its design function. We may request that your community submit a description and schedule of its retention pond maintenance, as outlined in Subparagraph 65.6(a)(12) of the NFIP regulations.

NFIP regulations Section 65.3 states that when a community's Base (1% annual chance) Flood Elevations (BFEs) increase or decrease because of physical changes that affect flooding conditions, the community must submit technical or scientific data to FEMA that substantiate these changes. The community must submit such data as soon as possible, but no later than 6 months after such data become available, so that FEMA can base flood insurance premium rates and floodplain management requirements on the most up-to-date and accurate information available.

Upon completion of the proposed project, your community must request a revision to the FIRM per NFIP regulations Section 65.3. The revision request should include the data listed below.

1. Evidence of compliance with NFIP regulations Paragraph 65.4(b), which states that "all requests for changes to effective maps . . . must be made in writing by the community's Chief Executive Officer (CEO) or an official designated by the CEO. Should the CEO refuse to submit such a request on behalf of another party, we will agree to review the request only if written evidence is provided indicating the CEO or designee has been requested to do so."
2. As-built plans of all relevant project elements or a statement declaring that the project was built as proposed, either of which must be certified by a Professional Engineer. Please provide digital copies of the as-built plans, if available.
3. Hydrologic analyses for as-built conditions of the 1% annual chance flood if they differ from the proposed conditions model.

4

4. Certified topographic mapping, delineating the 1% annual chance floodplain for the unnamed tributary to Mirehaven Arroyo C, representing as-built conditions.
 - a. Please show this information on a certified map of suitable scale and topographic definition to provide reasonable accuracy.
 - b. Please label all items for easy cross-referencing to the hydrologic model and summary data.
5. A copy of the Bernalillo County, New Mexico and Incorporated Areas FIRM number 35001C0328 D, dated September 20, 1996, annotated to reflect as-built conditions.
6. Please submit documentation of individual legal notices that were sent to property owners who are adversely impacted by any widening and/or shifting of the 1% annual chance floodplain for the unnamed tributary to Mirehaven Arroyo C.
 - a. If you submit notification and acceptance from the adversely impacted property owners, FEMA can issue a Letter of Map Revision (LOMR) effective the date of issuance.
 - b. If you submit notification of, but not acceptance by, the adversely impacted property owners, FEMA may issue a LOMR effective 3 to 6 months after the date of issuance.
 - c. If you submit neither notification of nor acceptance by the adversely impacted property owners, FEMA can either defer the map change, if minor, or revise the map by reissuance rather than by letter. Reissued maps are typically effective 9 to 12 months after issuance of a preliminary map.
7. Documentation showing compliance with NFIP regulations Subparagraph 65.6(a)(12) regarding maintenance.

If the project is built as proposed in the data submitted in support of this request, you do not have to resubmit items 3 through 5 listed above; otherwise, please resubmit them.

We have enclosed a copy of our application/certification forms for your reference. The application/certification forms package may be downloaded directly from the FEMA website at http://www.fema.gov/mit/tsd/EN_main.htm or copies may be obtained by contacting the FEMA Map Assistance Center, toll free, at 1-877-FEMA MAP (1-877-336-2627). Typically, we do not require all of these forms if the project is completed as proposed in the data submitted in support of this request. The enclosed document, titled *Requirements for Submitting Application/Certification Forms to Support Requests for NFIP Map Revisions*, describes in detail the circumstances under which the forms are required.

The NFIP is primarily funded by policyholders, not taxes. We recover costs associated with reviewing and processing requests for modifications to published FIRMs to minimize the financial burden on the policyholders. The fee for an as-built LOMR request in follow-up to this CLOMR is \$3,400, which we must receive before we can begin processing. This fee represents the new fee schedule effective June 1, 2000. However, the fee schedule is subject to change, and

the requester is required to submit the fee in effect at the time of the submission. Your payment must be a check or money order made payable to the National Flood Insurance Program and should be forwarded to:

Federal Emergency Management Agency
Fee Charge System Administrator
P.O. Box 3173
Merrifield, Virginia 22216

Once we receive the processing fee and the items listed above, complete our review, and verify that the completed project meets all applicable NFIP standards, we will revise your community's FIRM to incorporate the effects of the completed project, as appropriate.

Part 65 of the enclosed NFIP regulations further describes the data needed to support a request to revise a FIRM. Your compliance with the criteria outlined in the NFIP regulations will streamline our review, allowing us to expeditiously revise your community's FIRM.

If you have any questions regarding this CLOMR, please contact the FEMA Map Assistance Center, toll free, at 1-877-FEMA MAP (1-877-336-2627).

Sincerely,



William R. Blanton Jr., Project Officer
Hazards Study Branch
Federal Insurance and
Mitigation Administration

For: Matthew B. Miller, P.E., Chief
Hazards Study Branch
Federal Insurance and
Mitigation Administration

cc: The Honorable Martin Chavez, Mayor, City of Albuquerque
Carlos A. Montoya, Floodplain Administrator, Bernalillo County
James D. Hughes, Mark Goodwin & Associates
Community Map Repository, Bernalillo County
Tim West, Public Works Division Director, Bernalillo County



**U.S. Department
of Transportation
Federal Transit
Administration**

REGION VI
Arkansas, Louisiana,
New Mexico, Oklahoma,
Texas

819 Taylor St., Suite 8A36
Fort Worth, TX 76102
817-978-0550
817-978-0573 (FAX)

December 14, 1999

Bruce Rizzieri
City of Albuquerque
Transit Department
601 Yale Street, SE
Albuquerque, New Mexico 87106

Re: West Side Transit Facility
Grant No: NM-90-X054

Dear Mr. Rizzieri:

This letter is to inform you that the Federal Transit Administration has reviewed the environmental document for the proposed West Side Transit Facility. The State Historic Preservation Officer concurred with the FTA's proposed "No Adverse Effect" finding on the Section 106 environmental action; therefore, all environmental work for the proposed West Side Transit Facility has been completed, in accordance with 23 CFR Part 771.117(d) and 36 CFR Part 800, Section 106; provided, that the specified conditions indicated below are carried out in the course of the project undertaking:

- Once the exact location of the western burrowing owl has been established, avoidance or mitigation measures should be implemented in consultation with the U.S. Fish and Wildlife Service. Construction may not begin or must cease during nesting season, in event that the burrowing owl(s) has not dispersed from the nesting or breeding area.
- If modifications of the Mier Haven Arroyo B are required in the course of project construction, the City of Albuquerque will notify the U.S. Army Corps of Engineers as design details are established.

These conditions will be included in the grant contract when the grant application is approved in the future.

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: West Side Transit Facility, Phase II ZONE MAP/DRG. FILE #: J-9/D16
 DRB #: AA-03AA-01690 EPC#: 1000937 WORK ORDER#: _____

LEGAL DESCRIPTION: Tracts B-15-B-16, B-17, B-18, B-19, Town of Atlixco Grant
 CITY ADDRESS: 8001 Dayton

ENGINEERING FIRM: Smith Engineering Co.
 ADDRESS: 2201 San Pedro NE
 CITY, STATE: Albany

CONTACT: George Nemeth
 PHONE: 884-0700
 ZIP CODE: 87110

OWNER: City of Albany Transit Dept
 ADDRESS: 100 First St.
 CITY, STATE: Albany

CONTACT: Tim Cynoka
 PHONE: 764-6125
 ZIP CODE: 87102

ARCHITECT: DWL Architects
 ADDRESS: 202 Central, West Countyland
 CITY, STATE: Albany

CONTACT: Ron Burton
 PHONE: 242-6202
 ZIP CODE: 87102

SURVEYOR: _____
 ADDRESS: _____
 CITY, STATE: _____

CONTACT: _____
 PHONE: _____
 ZIP CODE: _____

CONTRACTOR: _____
 ADDRESS: _____
 CITY, STATE: _____

CONTACT: _____
 PHONE: _____
 ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL, *REQUIRES TCL or equal*
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☒ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (TCL)
- ☐ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ☐ OTHER

Noted 3/21/05

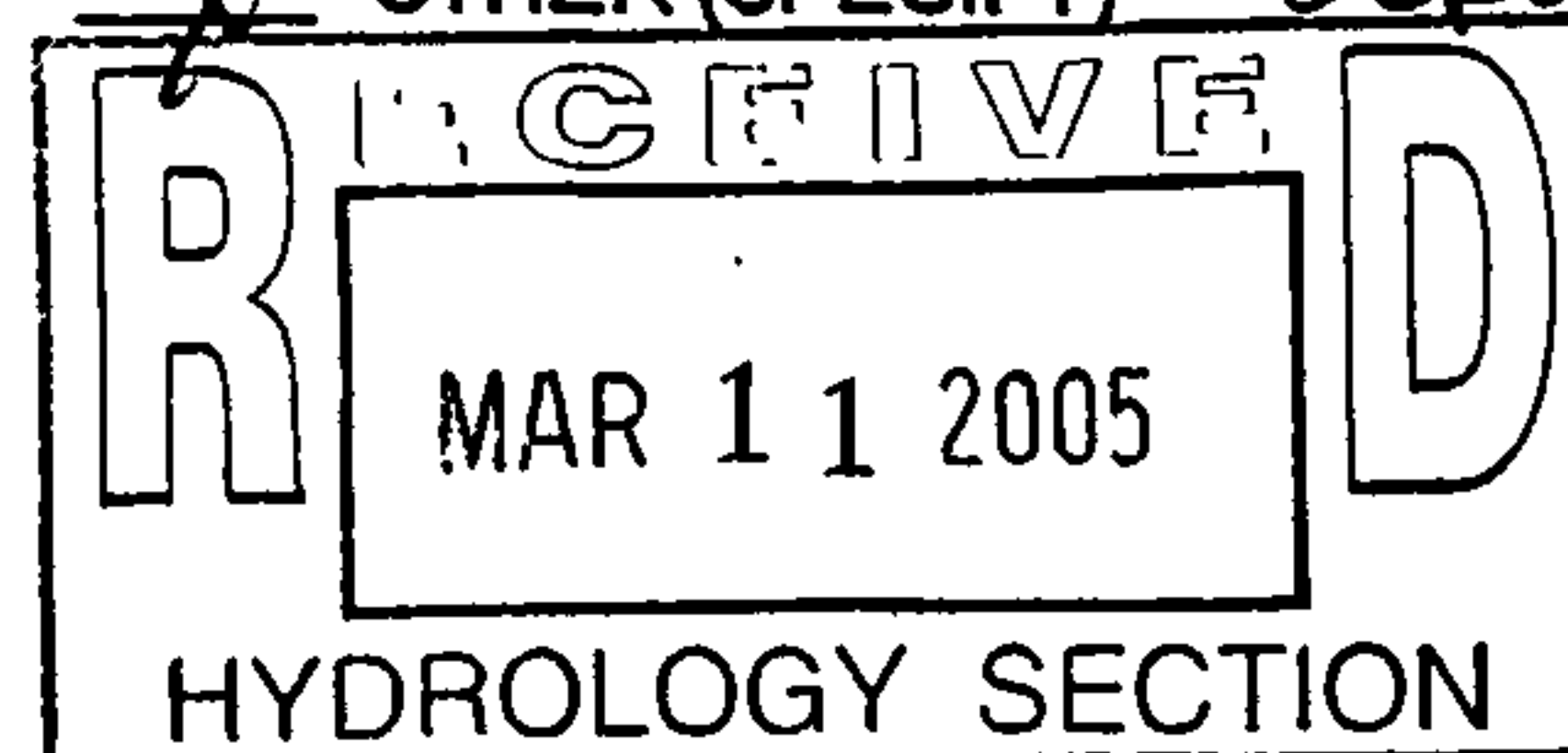
CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA / FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D. APPROVAL
- ☒ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY (PERM.)
- ☐ CERTIFICATE OF OCCUPANCY (TEMP.)
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☒ OTHER (SPECIFY) - Updated Grading Plan

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
- ☐ NO
- ☐ COPY PROVIDED

DATE SUBMITTED: _____ BY: _____

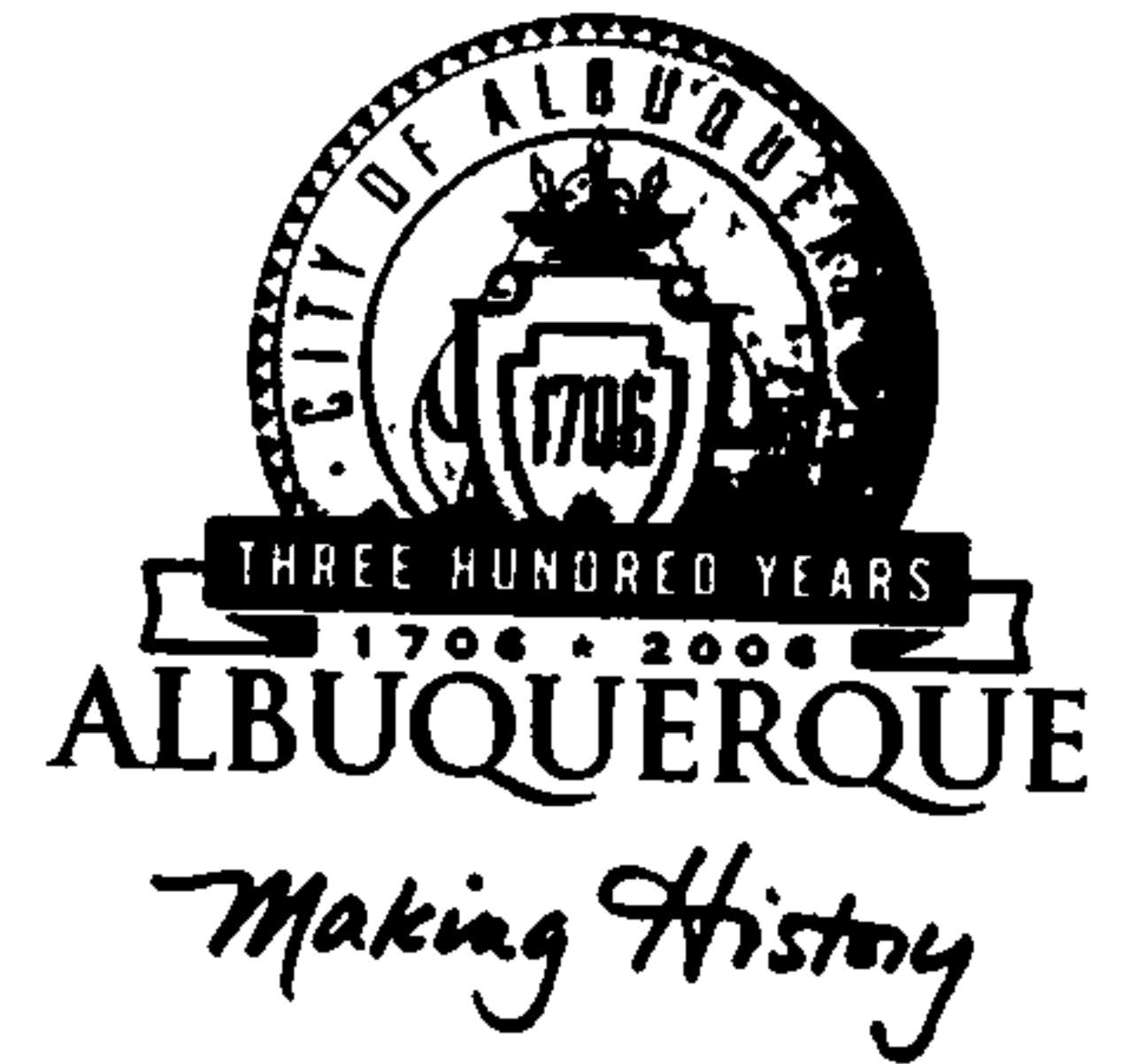


Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. Drainage Report: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

Need to
talk
to George

CITY OF ALBUQUERQUE



August 17, 2004

Ron Burton, R.A.
DWL Architects
202 Central Ave. SE, West Courtyard
Albuquerque, NM 87102

**Re: West Side Transit Facility Phase IIIA, Temporary Certificate of
Occupancy (J9-D16)
Certification dated 8-17-04**

Dear Mr. Burton,

Based upon the information provided in your submittal received 8-17-04, the
above referenced certification is approved for release of 180-day temporary Certificate
of Occupancy by Transportation Development.

P.O. Box 1293

If you have any questions, you can contact me at 924-3981.

Albuquerque

Sincerely,

Kristal D. Metro
Engineering Associate, Planning Dept.
Development and Building Services

New Mexico 87103

www.cabq.gov

C: Phyllis Villanueva
file



Smith Engineering Company

A Full Service Engineering Company

J-9/D16

August 17, 2004

Mr. Brad Bingham
Hydrology Division
Dept. of Public Works
City of Albuquerque
600 2nd Street NW
Albuquerque, NM 87103

Re.: West Side Transit Facility – Phase III A Construction
COA Project No. 5658-03

Dear Brad:

On August 16, 2004, I attended a final walk-through for substantial completion for the above referenced project. I agree that the site/civil work completed by the contractor for Phase III A was done in substantial compliance with the construction drawings prepared by Smith Engineering Company as shown on sheets SI-C-101 and SI-C-102 and as revised through Revision 1.

Please call to discuss this further or if you require additional information.

Sincerely,

Smith Engineering Company

George Nemeth, P.E.
Senior Civil Engineer



Copy: Jason Hall – DWL Architects
SEC file 100300



Smith Engineering Company

A Full Service Engineering Company

File

August 17, 2004

~~J-19/D16~~

Mr. Brad Bingham
Hydrology Division
Dept. of Public Works
City of Albuquerque
600 2nd Street NW
Albuquerque, NM 87103

~~H-09~~
J-09/D16

Re.: West Side Transit Facility – Phase III A Construction
COA Project No. 5658-03

Dear Brad:

On August 16, 2004, I attended a final walk-through for substantial completion for the above referenced project. I agree that the site/civil work completed by the contractor for Phase III A was done in substantial compliance with the construction drawings prepared by Smith Engineering Company as shown on sheets SI-C-101 and SI-C-102 and as revised through Revision 1.

Please call to discuss this further or if you require additional information.

Sincerely,

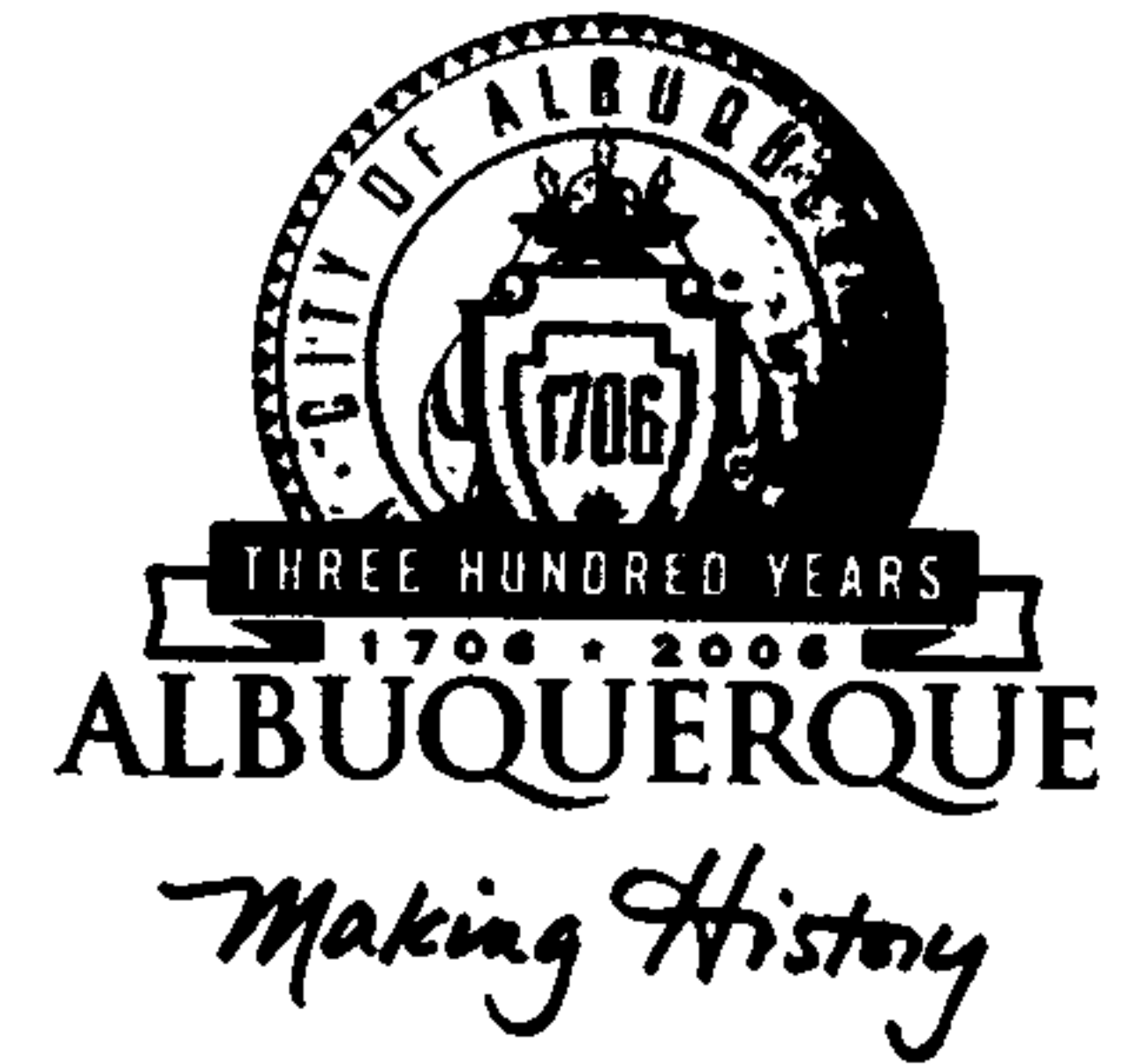
Smith Engineering Company

George Nemeth, P.E.
Senior Civil Engineer



Copy: Jason Hall – DWL Architects
SEC file 100300

CITY OF ALBUQUERQUE



August 16, 2004

George Nemeth, P.E.
Smith Engineering
6400 Uptown Blvd. NE Suite 500E
Albuquerque, NM 87110

**Re: West Side Transit Facility Phase IIIA, Temporary Certificate of
Occupancy (J9-D16)
Certification dated 8-17-04**

Dear Mr. Nemeth,

Based upon the information provided in your submittal received 8-17-04, the
above referenced certification is approved for release of 180-day temporary Certificate
of Occupancy by Hydrology.

P.O. Box 1293

If you have any questions, you can contact me at 924-3981.

Albuquerque

Sincerely,

New Mexico 87103

Kristal D. Metro
Engineering Associate, Planning Dept.
Development and Building Services

www.cabq.gov

C: Phyllis Villanueva
file

5-9/016



Ron R. Burton, AIA
Willard L. Eastman, AIA

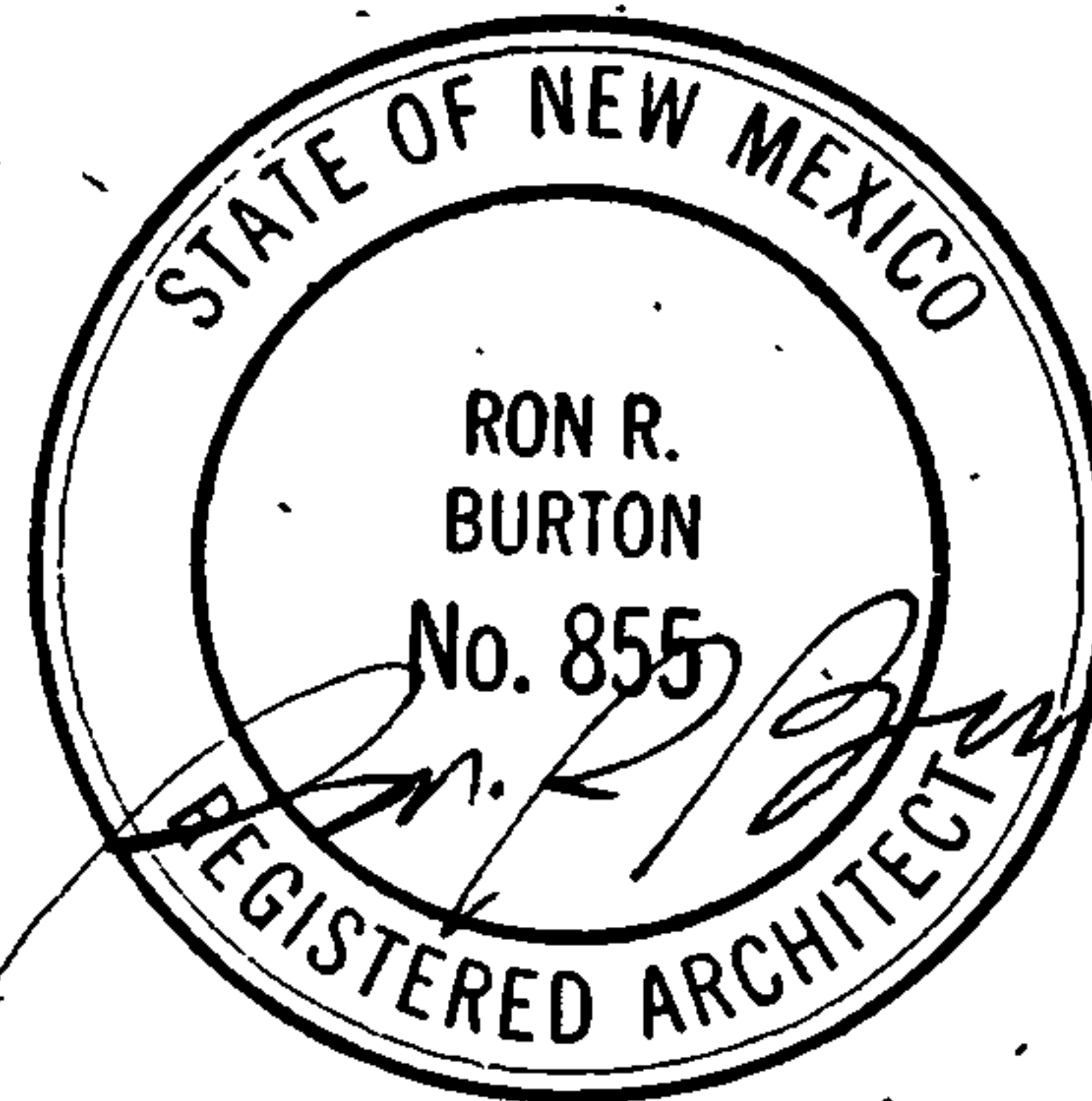
Memo:

To: Whom it may concern
From: Ron Burton, DWL Architects
Date: 8/17/2004

This memo is to certify that Phase IIa of the West Side Transit Facility is substantially complete and that the Service Building and Wash Building are located per the approved plan.

A handwritten signature in cursive script, appearing to read "Ron Burton".

Ron Burton



8-17-04



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 17, 2003

George Nemeth, PE
Smith Engineering Co.
6400 Uptown Blvd. Ste 500E
Albuquerque, NM 87110

**Re: Westside Transit Facility Addendum to the Master Drainage Plan
Engineer's Stamp dated 12-6-02, (J9/D16)**

Dear Mr. Nemeth,

Based on the information contained in your submittal dated 12-6-02, the above referenced plan is approved for Work Order approval. The construction plans should be designed to this plan.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE
Sr. Engineer, Planning Dept.
Development and Building Services

C: file



Smith Engineering Company

A Full Service Engineering Company

To: COA Hydrology

Date: 06-Dec-02

Project No: 100300 F

Reference: West Side Transit Facility - Phase 1

Attn: Brad Bingham

Master Drainage Plan Amendment

We are sending you:

☒ Attached

☐ Under Separate Cover

☐ Delivered by Hand

The following:

☐ Originals

☐ Prints

☐ Reproducibles

☐ Shop Drawings

☒ Reports

☐ Correspondence

☐ Other _____

QUANTITY	DESCRIPTION
1	copy of AMENDMENT, DECEMBER 2002

These are transmitted as indicated below:

☐ As Requested

☒ For Final Approval

☐ For Field Use

☐ For Your Information

☐ For Distribution

☐ Return Approved Copies

☒ For Review and Comment

☐ Returned For Correction

☐ _____

Remarks: Brad - Attached is the Master Drainage Plan Amendment for the referenced project. Please contact Pat Conley with questions, comments, or if you require additional information or copies of this report.

Sincerely,
Smith Engineering Company

cc: SEC file 100300 F

George Nemeth, PE

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/11/2002)

J-9/D16

PROJECT TITLE: West Side Transit Facility ZONE MAP/DRG. FILE#: J-9

DRB#: _____ EPC#: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: _____

CITY 8001 Davtona Road SW

ENGINEERING FIRM: Smith Engineering Company CONTACT: Pat Conley, PE

ADDRESS: 6400 Uptown Blvd. NE Suite 500E PHONE: (505) 884-0700

CITY, STATE: Albuquerque, NM ZIP CODE: 87110

OWNER: CITY OF ALBUQUERQUE - TRANSIT DEPT. CONTACT: Jess Ortiz

ADDRESS: 100 Alvarado Square PHONE: 724-3174

CITY, STATE: Albuquerque, NM ZIP CODE: _____

ARCHITECT: DWL Architects CONTACT: Ron Burton

ADDRESS: Central Ave. SE PHONE: 242-6202

CITY, STATE: Albuquerque, NM ZIP CODE: _____

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CITY, STATE: _____ ZIP CODE: _____

CONTRACTOR: CCM, Inc. CONTACT: Jonathan Ortega

ADDRESS: 8019 Edith NE PHONE: 440-0452

CITY, STATE: Albuquerque, NM ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

- ☒ DRAINAGE REPORT
- ☐ DRAINAGE PLAN
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEERS CERTIFICATION (HYDROLOGY)
- ☐ CLOMR\LOMR
- ☐ TRAFFIC CIRCULTAION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (TCL)
- ☐ ENGINEERS CERTIFICATION (DRB. APPR. SITE PLAN)
- ☐ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA / FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D. APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATION OF OCCUPANCY (PERM.)
- ☐ CERTIFICATION OF OCCUPANCY (TEMP.)
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☒ WORK ORDER APPROVAL

OTHER (SPECIFY) _____

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☒ YES
- ☐ NO
- ☐ COPY PROVIDED

RECEIVED
DEC 9 2002
HYDROLOGY SECTION

Date Submitted: 12-06-02 By: Smith Engineering Company

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5)
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

March 29, 2001

Loren Mainz, P.E.,
Head Hydrology Division
City of Albuquerque
600 2nd Street NW
Albuquerque, NM 87102

- **Case No:** J9-D016
- **Submittal dated:** February 8, 2001 by Smith
- **Project Title:** West Side Transit Facility
- **Location:** I-40 and Unser
- **Approval Type:** Master Drainage Plan
- **Note:** *This submittal concerns the development of the area surrounding the southwest quadrant of Unser/I-40 and suggests impacts to the existing Unser Ponds.*

Dear Mr. Mainz:

Based on the submittal stamped February 8th, 2001, the proposed master drainage plan concept does appear to be sufficient and can be approved at this time. There are, however, a few clarifications that may help to understand the project:

- Not all streets within the study area were addressed. It would be prudent to include suggested improvements for 94th Street, 90^h Street, Los Volcanes, and Bluewater.
- It appears that the southeast portion of the interchange at 98th Steet drains to a pond that discharges directly east into the study area. This area was not addressed.
- A proposed pond is shown on the northwest corner of the Los Volcanes/Unser intersection. This pond is not discussed in the report.
- No analysis was considered to upgrade the existing pond system.

If you have any questions regarding this letter or need any clarification concerning the above project, please feel free to call me at 296-0461.

Sincerely,

Mark H. Burak, P.E.
Hydrology Consultant

DEVELOPMENT & BUILDING SERVICE CENTER
ONE STOP SHOP
600 SECOND ST. N.W.

ATTENTION: _____

505-924-3900

Records Withdrawal Form

Project No. J-9/D016 Date: 2/28/05

Project Title: Westside Transit Facility

a. File b. Mylars c. Redlines/Comments
☒ d. Other Drainage Report + Amendment

Requested by: Scott Eddings Huitt-Zollars Phone No.: 892-5141
Name and Company

Comments:

Anticipated Return Date: _____

I hereby accept full responsibility for the security of the above noted records/plans until return receipt acknowledgement is completed. Records/plans will be returned to the Development and Building Services Center on or before the indicated anticipated return date.

Delivery Picked Up By:

Name: _____
Print

Organization: Academy Repro

Signed: _____

Date: _____

.....
Office Use Only

Return Acknowledged:

Received By: Andrew Garcia Date: 3-1-05
Print