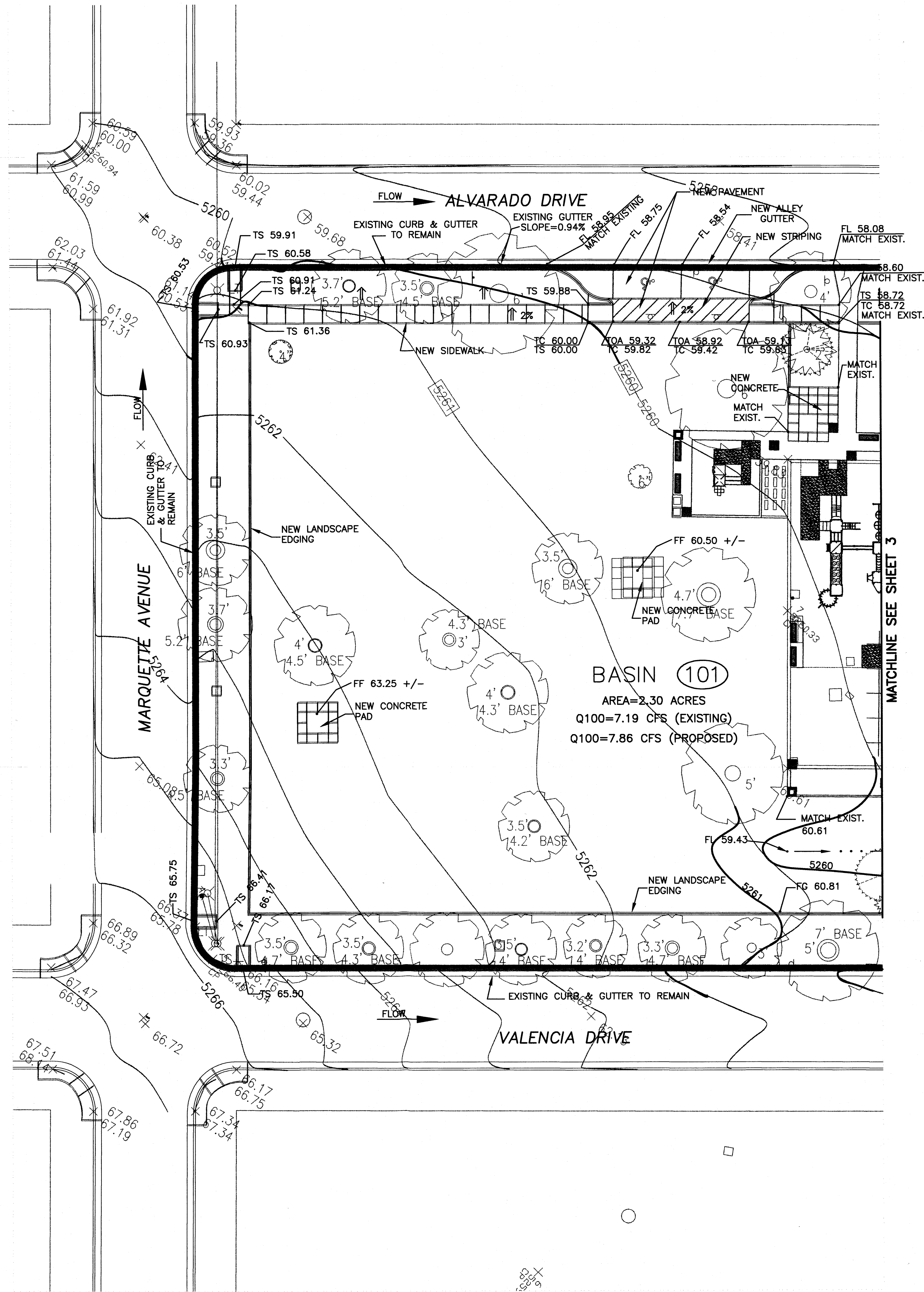




LEGEND

TC	TOP OF CURB ELEVATION
TS	TOP OF SIDEWALK ELEVATION
TOA	TOP OF ASPHALT ELEVATION
TOC	TOP OF CONCRETE ELEVATION
TW	TOP OF WALL ELEVATION
FL	FLOW LINE ELEVATION
FG	FINISHED GRADE ELEVATION
—	EXISTING FLOW DIRECTION
5072	EXISTING INTER. CONTOUR
5070	EXISTING INDEX CONTOUR
5074	PROPOSED INDEX CONTOUR
75.1	PROPOSED SPOT ELEVATION
—	EXISTING BASIN DESIGNATION
—	EXISTING BASIN BOUNDARY
—	PROPOSED BASIN BOUNDARY
—	PROPOSED SWALE
—	PROPOSED DIRECTION FLOW
—	PROPOSED GRASS / GROUND COVER
—	PROPOSED CONCRETE / PAVERS
—	FLOOD BOUNDARY (ZONE AO 1' DEPTH)

LEGAL DESCRIPTION

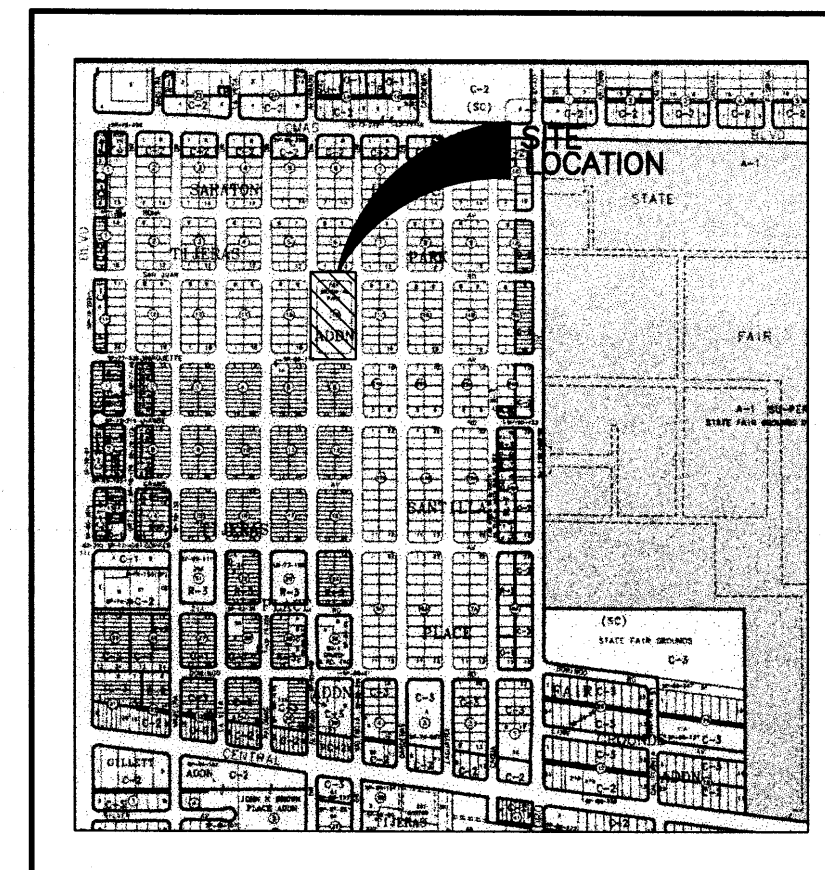
ALL OF BLOCK NUMBERED SIXTEEN (16), THERAS PARK ADDITION, AS THE SAME IS SHOWN AND DESIGNATED ON SAID PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON AUGUST 9, 1949 IN BOOK: C, PAGE: 158.

BENCH MARK

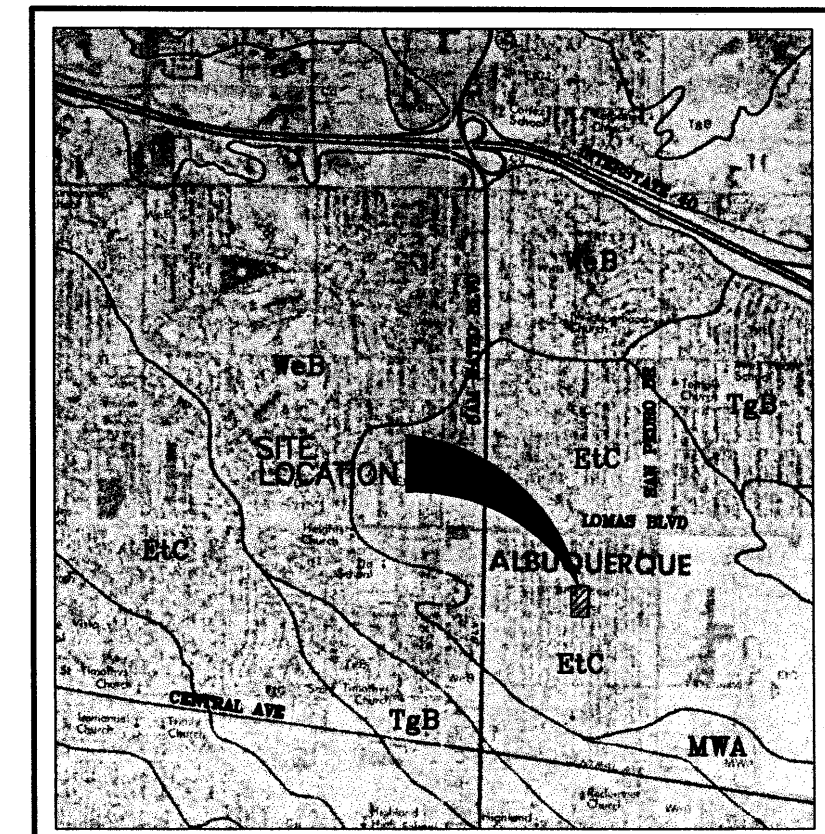
A.C.S. BENCHMARK "16-J18" LOCATED FLUSH WITH THE CURB IN THE SOUTH SIDE OF LOMAS BLVD. NE MEDIAN RETURN WEST OF ALVARADO DR. NE, ELEVATION = 5259.30 MSLD 1929

GRADING NOTES

- ALL GRADING AND CONSTRUCTION UNDER THIS PLAN TO BE CONSTRUCTED IN ACCORDANCE WITH THE "CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", LATEST EDITION.
- CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY COSTS INCURRED FOR REPAIRS SHALL BE THE COST OF THE CONTRACTOR.
- PAVING/ROADWAY GRADES SHALL BE +/- .05 FT. FROM SHOWN PLAN ELEVATIONS.
- PADS SHALL NOT VARY FROM A TRUE HORIZONTAL PLANE BY MORE THAN +/- .01 FOOT AT ANY POINT. THIS TRUE PLANE SHALL NOT VARY FROM THE SHOWN PAD ELEVATION BY +/- .02 FOOT, UNLESS PERMITTED BY OWNER.
- CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS AND GRADING OPERATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS AND INSPECTION APPROVALS NECESSARY FOR THE CONSTRUCTION OF THESE FACILITIES AND ALL GRADING OPERATIONS.
- THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
- UNLESS OTHERWISE SHOWN, DRAINAGE SWALES SHALL HAVE A MINIMUM 1% SLOPE IN THE DIRECTION OF FLOW.
- ALL SCARIFYING, EXCAVATION, AND COMPACTION, WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS.
- ADD 5200' TO ALL TRUNCATED ELEVATIONS TO GET TRUE ELEVATIONS.

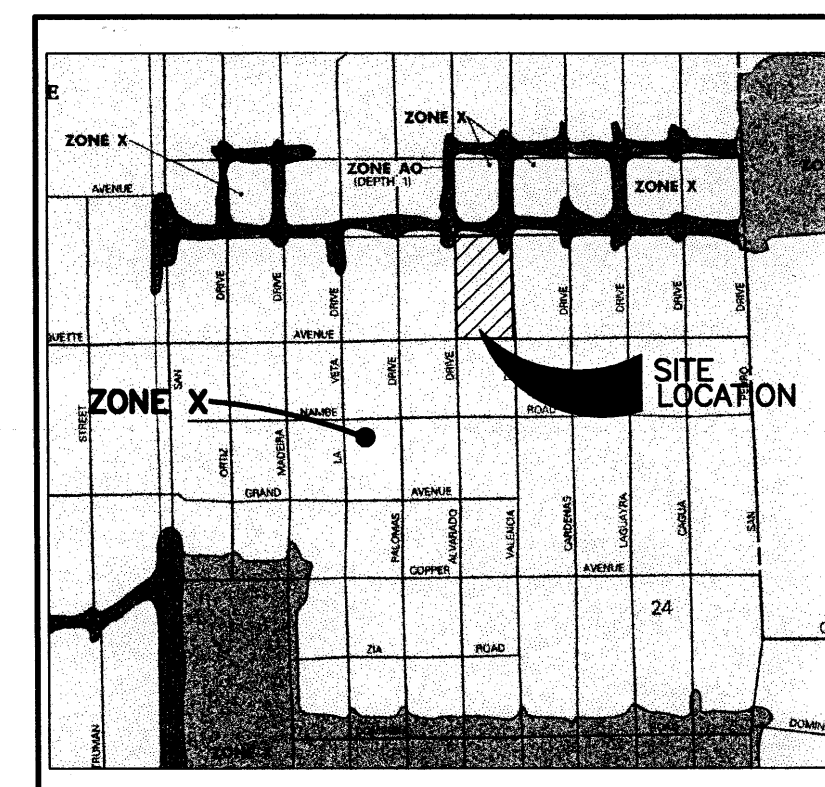


LOCATION MAP
ZONE ATLAS MAP NO. K-18-Z



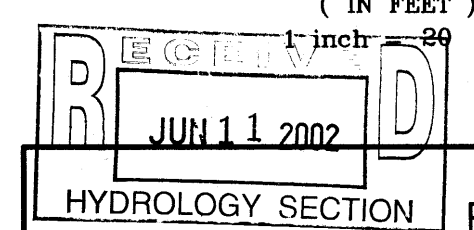
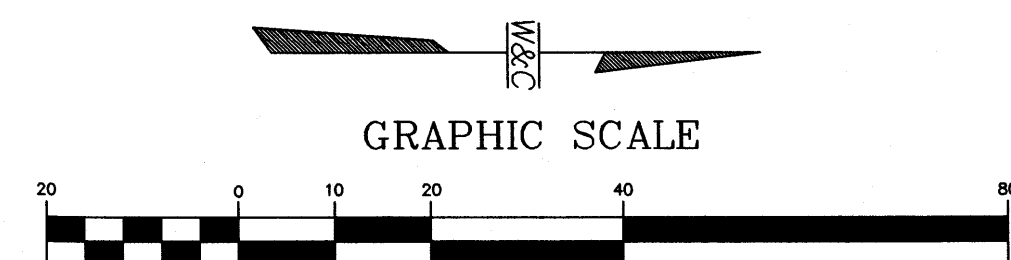
SOILS MAP

REFERENCE: SCS BERNALILLO COUNTY SOIL SURVEY
SHEET NO. 32



FLOOD INSURANCE MAP

REFERENCE: FLOOD INSURANCE STUDY
PANEL 354 OF 825



CITY OF ALBUQUERQUE
PARKS AND RECREATION
PLANNING AND DESIGN

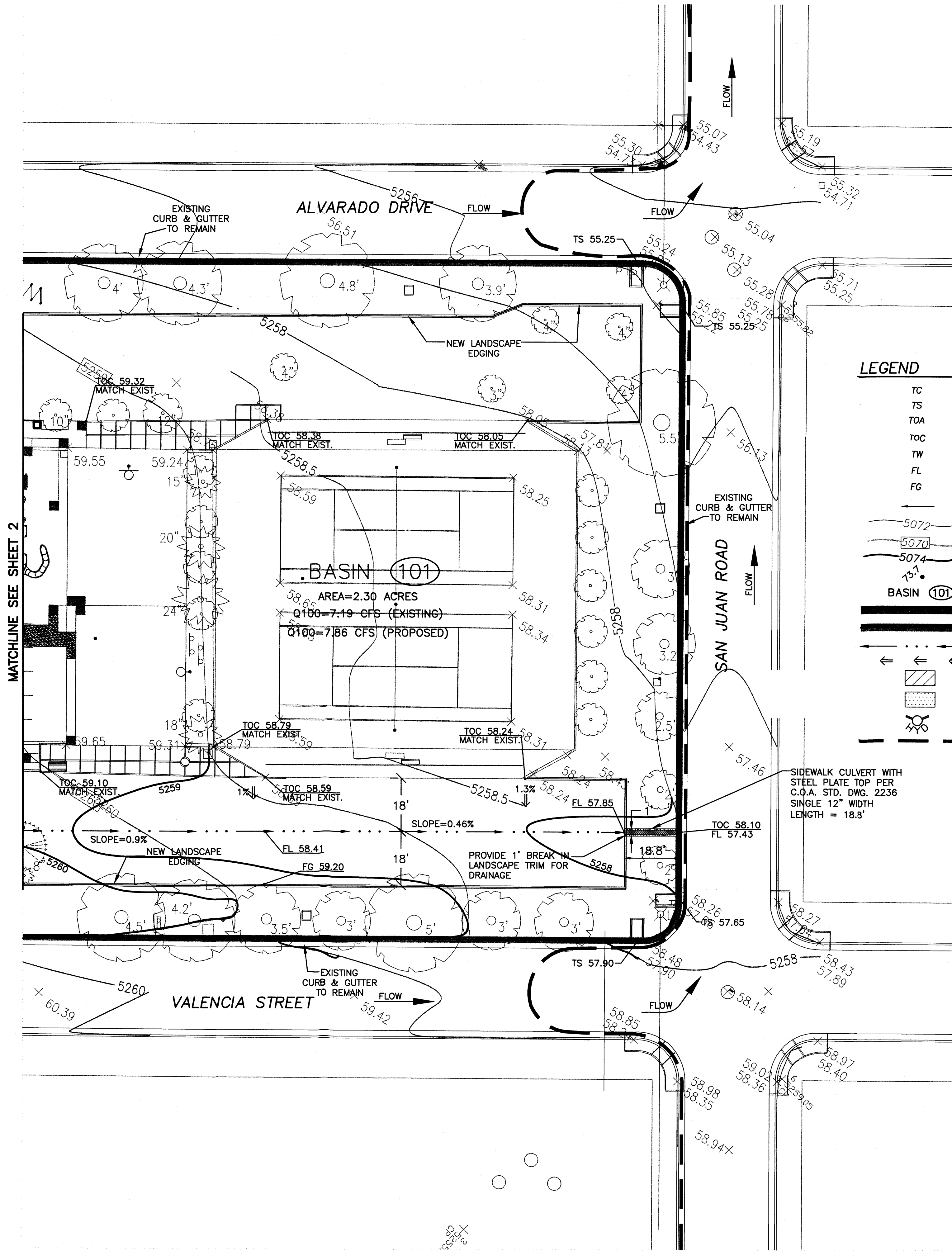
MARION FOX MEMORIAL PARK RENOVATION GRADING & DRAINAGE PLAN 1 OF 2

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet
6293.92	K-18-Z	2 OF 11

WILSON
& COMPANY

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	A.C.S. BENCHMARK "16-J18" LOCATED FLUSH WITH THE CURB IN THE SOUTH SIDE OF LOMAS BLVD. NE MEDIAN	DATE	FIELD NOTES	DATE	REBECCA S. LEE REGISTERED PROFESSIONAL ENGINEER 12872 6-11-2002	REVISIONS
INSPECTOR'S NAME	DATE	RETURN WEST OF ALVARADO DR. NE, ELEVATION = 5259.30 MSLD 1929	DATE	NO.	BY		
FIELD VERIFICATION BY	DATE						
COMMENTS	DATE						
RECORDED BY	DATE						
NO.							



DRAINAGE REPORT

Site Location: Marion Fox Memorial Park is located in the northeast heights at the intersection of Marquette Avenue and Alvarado Drive. The park consists of an entire city block in the Tijeras Park Addition subdivision. The proposed development includes renovation of the existing park. The work includes asphalt paving, concrete work, landscaping and the construction of two picnic table sites.

Methodology: Section 22.2 of the City of Albuquerque DPM was used in the hydrology analysis of the site. A principal design storm of 100-yr 6-hour event was used.

Existing Drainage Condition: The existing site consists of 2.30 acres of infill development. The total drainage area is 2.30 acres taken from back of curb along the existing roads. For the most part the existing park drains from south to north. The park will be considered one basin, Basin 101, because it ultimately all drains to the intersection of Alvarado Drive and San Juan Road. The flow then continues down San Juan Road. The project area is within zone 3 of the Development Process Manual. The 100-year discharge per acre for type "D" treatment is 5.02 cfs/acre.

Table 1: TREATMENT

Basin	Area (ac)	%A	%B	%C	%D	V ₃₆₀ (acre-ft)	Q ₁₀₀ (cfs)
101	2.30	0	78.2	0	21.8	0.236	7.19
Total	2.30					0.236	7.19

Table 1: Breakdown of existing land type for each of the basins, including its respective volumetric runoff and discharge value.

Proposed Conditions: The additions will have no effects on the current drainage patterns. Therefore the drainage is the same. New impervious surfaces such as sidewalk, concrete surfaces, and picnic table pads will increase the existing flows. A crusher fines surface will outline the entire park adding some treatment "C" areas.

Table 2: TREATMEN

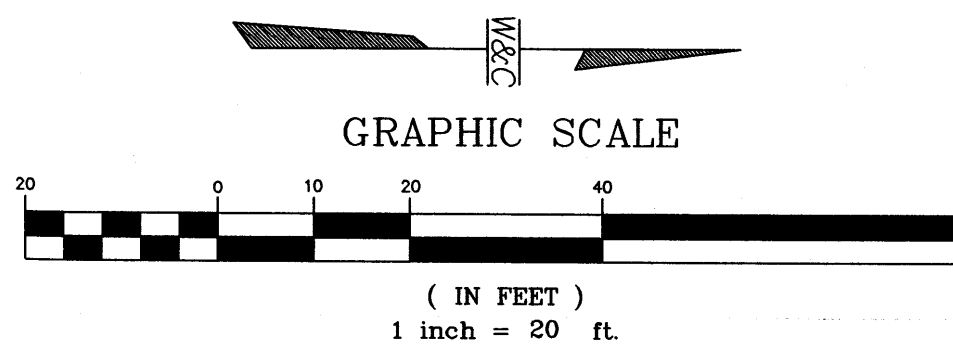
Basin	Area (ac)	%A	%B	%C	%D	V ₃₆₀ (acre-ft)	Q ₁₀₀ (cfs)
101	1.29	0	52.1	21.8	26.1	0.264	7.86
Total	5.36					0.264	7.86

Table 2: Breakdown of existing land type for each of the basins, including its respective volumetric runoff and discharge value.

Conclusions: The proposed development will increase the runoff by 0.67 cfs. This may be conservative, since the crusher fines area is being called a Treatment "C". The crusher fines will have a semi permeable geotextile fabric underneath to discourage weed growth. The proposed drainage patterns will remain the same as the existing drainage patterns. The park will continue to discharge onto Alvarado Drive and San Juan Road. The flow travels down San Juan Road where it is captured by two combination inlets near the intersection of San Juan Road and San Mateo Boulevard.

NOTE

1. SEE PREVIOUS SHEET FOR ALL GRADING NOTES



CITY OF ALBUQUERQUE PARKS AND RECREATION PLANNING AND DESIGN										
MARION FOX MEMORIAL PARK RENOVATION GRADING & DRAINAGE PLAN 2 OF 2										
Design Review Committee			City Engineer Approval			Last Design Update _____ _____ _____ _____ _____	Mo./Day/Yr.		Mo./Day/Yr.	
City Project No.			Zone Map No.			Sheet				
6293.92			K-18-Z					3 OF 11		

**WILSON
& COMPANY**[illegible]

I. INTRODUCTION AND EXECUTIVE SUMMARY

I. INTRODUCTION AND EXECUTIVE SUMMARY

THIS SUBMITTAL IS MADE IN SUPPORT OF A DRC WORK ORDER PROJECT FOR THE RENOVATION OF A RELATIVELY SMALL PORTION OF THIS EXISTING PARK SITE.

II. PROJECT DESCRIPTION

AS SHOWN BY THE VICINITY MAP, THE SITE IS LOCATED BETWEEN ALVARADO DRIVE NE AND VALENCIA DRIVE NE AND BETWEEN MARQUETTE AVENUE NE AND SAN JUAN ROAD NE. THE CURRENT LEGAL DESCRIPTION IS BLOCK 16, TIJERAS PARK ADDITION. AS SHOWN BY PANEL 354 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS PUBLISHED BY FEMA FOR BERNALILLO COUNTY, NEW MEXICO, SEPTEMBER 20, 1996, THIS SITE LIES ADJACENT TO A DESIGNATED FLOOD HAZARD ZONE (ZONE 0A - DEPTH 1) ASSOCIATED WITH OVERFLOW RUNOFF FROM SAN PEDRO NE ONTO SAN JUAN ROAD NE. ALTHOUGH THE DESIGNATED 0A ZONE (DEPTH 1) DOES NOT ENCRONCH UPON THE PROPOSED WORK AREA, IT WILL BE ADDRESSED HEREIN AS IT RELATES TO AVAILABLE DOWNSTREAM CAPACITY AND THE ANTICIPATED IMPACT OF THE PROPOSED DEVELOPMENT ON DOWNSTREAM CONDITIONS. THIS PROJECT DOES NOT PROPOSE TO CHANGE THE EXISTING CONDITIONS ALONG SAN JUAN NE. AS STATED ABOVE, THIS PROJECT INVOLVES ONLY A SMALL PORTION OF THE EXISTING PARK SITE. THE PROJECT CONSISTS OF THE RENOVATION OF AN EXISTING SAND PLAY AREA AND SIDEWALK CONSTRUCTION TO ENHANCE ACCESSIBILITY.

III. BACKGROUND DOCUMENTS

THE FOLLOWING DOCUMENT(S) WERE REVIEWED AND ASSOCIATED RESEARCH ACTIVITIES CONDUCTED AS PART OF THE EVALUATION OF DOWNSTREAM CONDITIONS AND OFFSITE FLOWS FOR THIS PROJECT:

A. STORM DRAIN INVESTIGATION REPORT FOR SAN PEDRO BOULEVARD AND THE NEW MEXICO FAIRGROUNDS? PREPARED FOR THE CITY OF ALBUQUERQUE. (PROJECT 4610-01) BY SMITH ENGINEERING COMPANY, MARCH, 1995. THIS REPORT IDENTIFIES THE STATE FAIR GROUNDS AS THE SOURCE OF FLOODING FOR SAN JUAN ROAD NE. THE PRE-EXISTING OVERFLOW FROM SAN PEDRO NE IS QUANTIFIED AS 242 CFS FOR THE 100 YEAR, 6 HOUR EVENT. IMPLEMENTATION OF OPTION 2 AS RECOMMENDED BY THIS REFERENCE REPORT WOULD REDUCE THE 100YEAR, 6 HOUR FLOW WITHIN SAN JUAN ROAD NE TO 62 CFS WITH A STREET CAPACITY OF 103 CFS. THE EFFECT OF THIS OPTION IS TO LIMIT THE FLOW CARRIED BY SAN JUAN ROAD NE TO THE MAXIMUM THAT CAN BE CONVEYED WITHIN THE EXISTING CURBS THEREBY EFFECTIVELY REDUCING THE FLOODING IDENTIFIED BY FEMA PANEL 354 AND REDUCING EXCESS STREET CAPACITY TO ACCEPT AND CONVEY ADDITIONAL DEVELOPED RUNOFF FROM LANDS WEST OF SAN PEDRO NE CURRENTLY DRAINING TO SAN JUAN ROAD NE.

B. PERSONAL INTERVIEW WITH MS. SUSAN CALONGNE, P.E., CITY/COUNTY FLOODPLAIN ADMINISTRATOR. MS. CALONGNE REPORTS THAT A LOMR HAS NOT BEEN SUBMITTED NOR APPROVED TO OFFICIALLY REMOVE THE FLOOD HAZARD ZONE DESIGNATION FROM SAN JUAN ROAD NE ADJACENT TO THIS SITE.

C. PERSONAL INTERVIEW WITH MR. CARLOS MONTOYA, P.E., PROJECT MANAGER, HYDROLOGY DESIGN DIVISION. MR. MONTOYA REPORTS THAT IMPROVEMENTS HAVE BEEN DRAINAGE CONSTRUCTED AT THE NORTHWEST CORNER OF THE STATE FAIR GROUNDS CONSISTING OF STORM DRAIN PIPING AND TWO DETENTION/SURGE PONDS. IT IS BELIEVED THAT THESE IMPROVEMENTS CONFORM WITH THE ABOVE REFERENCED REPORT BY SMITH ENGINEERING.

D. SITE VISIT BY THIS PREPARER ON MARCH 19, 2000, TO CONFIRM BY VISUAL OBSERVATION THAT SIGNIFICANT DRAINAGE IMPROVEMENTS HAVE BEEN CONSTRUCTED ON THE STATE FAIR GROUNDS IN APPARENT COMPLIANCE WITH THE ABOVE REFERENCED REPORT.

E. PERSONAL INTERVIEW WITH MR. DOUG ANDREWS, P.E., PROJECT ENGINEER, SMITH ENGINEERING COMPANY. MR. ANDREWS REPORTS THAT THE STATE FAIR HAS COMPLETED A PROJECT THAT ECHOES THE CONCEPT AND INTENT OF OPTION 2. THE SURGE/DETENTION PONDS WERE DESIGNED TO ACCOMMODATE THE 25 YEAR EVENT AS OPPOSED TO THE 100 YEAR EVENT SUGGESTED BY THE REPORT. THE NET EFFECT OF THIS CHANGE TRANSLATES INTO A 25%+/- DIFFERENCE WHICH WILL STILL REPRESENT AN OVERALL IMPROVEMENT IN DOWNSTREAM CONDITIONS HENCE FREING-UP AVAILABLE STREET CAPACITY.

IV. EXISTING CONDITIONS

AT PRESENT, THIS SITE IS ALREADY DEVELOPED AS A CITY PARK. EXISTING CONDITIONS ARE ILLUSTRATED BY THE DRAINAGE PLAN THAT SUPERIMPOSES THE PROPOSED IMPROVEMENTS ONTO THE EXISTING CONDITIONS TAKEN FROM THE TOPOGRAPHIC SURVEY PREPARED FOR THE CITY BY ALBUQUERQUE SURVEYING INC. RUNOFF GENERATED BY THE PARK DRAINS VIA SHEETFLOW FROM SOUTHEAST TO NORTHWEST DISCHARGING INTO ALVARADO AVENUE. THE EXISTING RUNOFF DRAINAGE DIRECTION IS TOWARD THE STREET TO THE INTERSECTION WITH SAN JUAN ROAD NE WHENCE THE COMBINED FLOWS ARE CONVEYED WEST WITHIN THE STREET NETWORK TO SAN MATEO BLVD NE WHERE THE RUNOFF IS INTERCEPTED BY AN EXISTING STORM DRAIN SYSTEM WITHIN THAT ROADWAY. THE EXISTING DRAINAGE PATTERNS DESCRIBED ABOVE HAVE BEEN DETERMINED BASED UPON VISUAL OBSERVATION OF EXISTING CONDITIONS. IN THIS PREPARATION, REVIEW OF THE SMITH ENGINEERING REPORT AND REVIEW OF CITY DRAINAGE FACILITIES MAP, PLATE K-18.

V. DEVELOPED CONDITIONS

THE PROPOSED CONSTRUCTION CONSISTS OF THE PAVING AND REGRADING OF A RELATIVELY SMALL PORTION OF THE SITE. THE DEVELOPED RUNOFF GENERATED BY THE RENOVATED PLAY AREA IMPROVEMENTS WILL CONTINUE TO DISCHARGE FROM THE SITE TO THE EXISTING DOWNSTREAM STREET AND STORM DRAINAGE NETWORK DESCRIBED ABOVE IN THE PRECEDING SECTION. THE PROPOSED SITE WORK WILL NOT ALTER THE HYDROLOGY OF THE SITE NOR WILL IT HAVE AN ADVERSE IMPACT ON EXISTING ONSITE DRAINAGE CONDITIONS OR EXISTING DOWNSTREAM CONDITIONS.

THE PROJECT ALSO INCLUDES THE CONSTRUCTION OF A MID-BLOCK HANDICAP RAMP ALONG THE EAST CURB OF ALVARADO NE. THE NEW HANDICAP RAMP WILL NOT INTERFERE WITH THE STREET HYDRAULICS OF ALVARADO DRIVE NE.

VI. GRADING PLAN

THE GRADING PLAN PREPARED BY DESIGN WORKSHOP INC. AND REVIEWED BY THIS PREPARER SHOWS 1.) EXISTING GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS AS SHOWN ON THE SURVEY PREPARED BY ALBUQUERQUE SURVEYING INC., 2.) PROPOSED GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 5'-0" INTERVALS, 3.) THE EXTENT OF THE PROPOSED IMPROVEMENTS, 4.) THE NATURE, TYPE AND CHARACTER OF THE PROPOSED IMPROVEMENTS AND 5.) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES. AS SHOWN BY THIS PLAN, THE ENTIRETY OF THE SITE IS ALREADY DEVELOPED. THE PROPOSED IMPROVEMENTS AFFECT ONLY A SMALL PORTION OF THE SITE. THE PLAN FURTHER ILLUSTRATES THAT THE DRAINAGE PATTERNS DESCRIBED IN THE SECTION ABOVE WILL NOT BE DISRUPTED AND THAT THE PROPOSED GRADING WILL NOT HAVE AN ADVERSE IMPACT ON DOWNSTREAM CONDITIONS.

VII. CALCULATIONS

CALCULATIONS ANALYZING THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT HAVE BEEN PREPARED FOR THIS PROJECT. THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY, 1993, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. AS SHOWN BY THE RESULTS TABULATED HEREOF, THERE WILL BE NO INCREASE IN THE PEAK DISCHARGE WITH A NEGLIGIBLE INCREASE IN RUNOFF VOLUME ASSOCIATED WITH THE PROPOSED CONSTRUCTION.

VIII. CONCLUSION

THE CONTINUED FREE DISCHARGE OF RUNOFF FROM THIS SITE TO ALVARADO DRIVE NE AND SAN JUAN ROAD NE IS APPROPRIATE DUE TO THE FOLLOWING FACTORS:

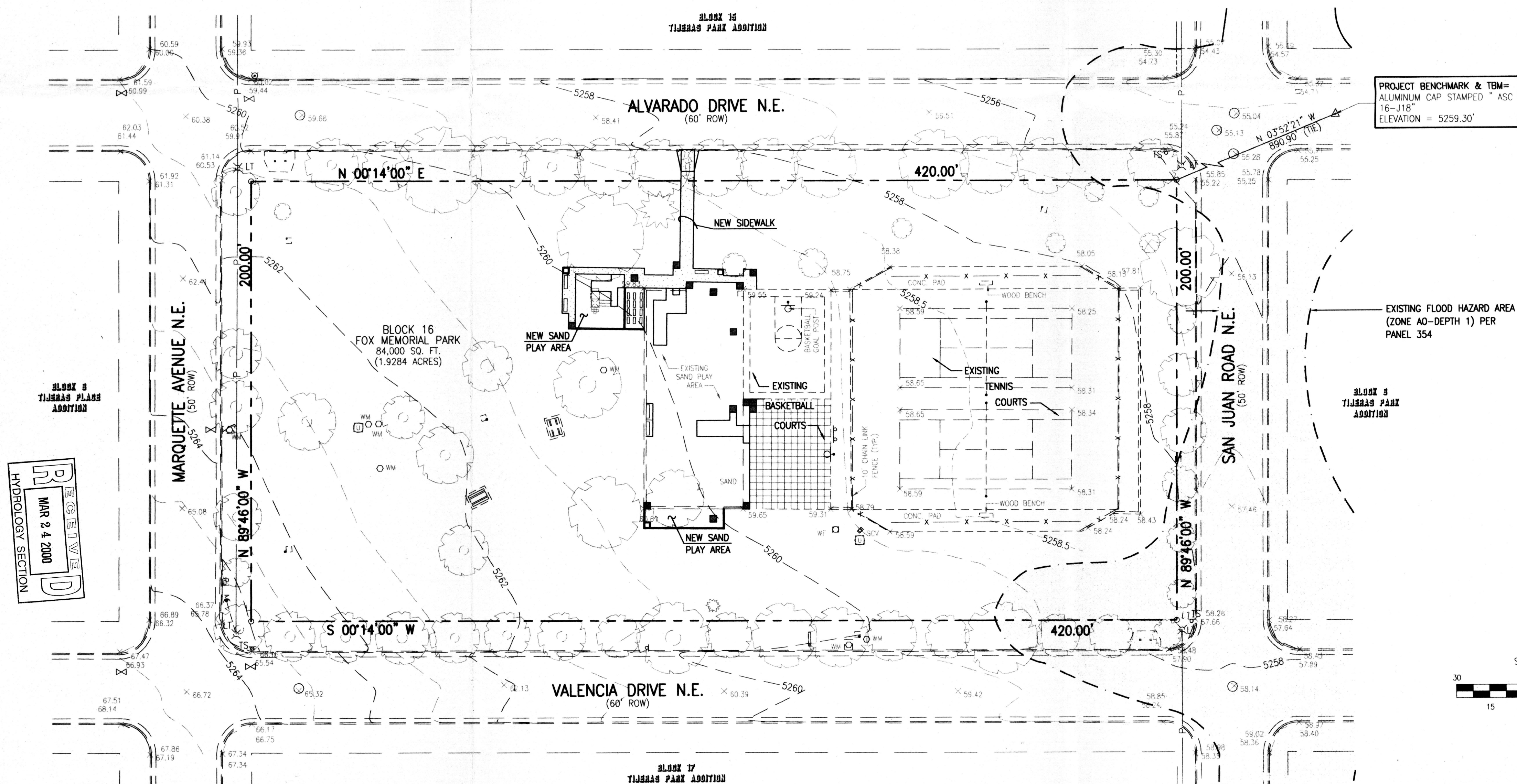
- A. MODIFICATION TO AN EXISTING SITE WITHIN AN INFILL AREA
 - B. NO INCREASE IN PEAK DISCHARGE GENERATED BY THE SITE
 - C. NEGLIGIBLE INCREASE IN DEVELOPED RUNOFF VOLUME GENERATED BY THE SITE
 - D. PROXIMITY TO DOWNSTREAM FACILITIES AND APPARENT DOWNSTREAM CAPACITY
 - E. NO IMPACT ON ADJACENT OR DOWNSTREAM FLOOD ZONES
- F. RECOGNITION OF THE REGIONAL COMPLEXITY OF THE STORM DRAINAGE IMPROVEMENTS WITHIN SAN PEDRO NE BY THE CITY AND WITHIN THE STATE FAIR GROUNDS BY THE STATE THAT HAVE COLLECTIVELY ALLEVIATED THE FLOODING IN SAN JUAN ROAD NE WHILE ENHANCING AVAILABLE DOWNSTREAM CAPACITY FOR THIS AND OTHER SITES WITHIN THE SURROUNDING DRAINAGE BASIN

ALL ONSITE IMPROVEMENTS ARE OWNED, OPERATED AND MAINTAINED BY THE CITY PARKS AND GENERAL SERVICES DEPARTMENT. THE DOWNSTREAM STREETS AND STORM DRAINAGE SYSTEMS ARE OWNED, OPERATED AND MAINTAINED BY THE CITY PUBLIC WORKS DEPARTMENT.

SUMMARY OF HYDROLOGIC DATA

PRECIPITATION ZONE	3
P ₃₆₀	2.60 IN
TOTAL AREA	1.93 AC

CONDITION	LAND TREATMENT AREAS (AC)				V ₁₀₀ (AC-FT)	Q ₁₀₀ (CFS)
	A	B	C	D		
EXISTING	0.10	1.44	0.00	0.39	83.90	5.9
DEVELOPED	0.12	1.40	0.00	0.41	8480	5.9



LEGAL DESCRIPTION:

FOX MEMORIAL PARK, BLOCK 16, TIJERAS PARK ADDITION

LEGEND

- | | |
|---|-------------------------|
|  | LARGE ELM TREE |
|  | SMALL DECIDUOUS TREE |
|  | EVERGREEN TREE |
|  | WATER METER |
|  | POWER POLE WITH LIGHT |
|  | SPRINKLER CONTROL VALVE |
|  | WATER FAUCET |
|  | EXISTING SPOT ELEVATION |
|  | MANHOLE UNDETERMINED |
|  | SANITARY SEWER MANHOLE |
|  | TRAFFIC SIGN |
|  | FLOOD ZONE LIMITS |
|  | NEW CONCRETE |

NOTE:

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN IS BASED UPON A SURVEY PERFORMED BY ALBUQUERQUE SURVEYING CO., INC., NOVEMBER 20, 1999.

DESIGNWORKSHOP

901 Rio Grande NW
Suite E130
Albuquerque, NM
87104
(Tel.) 505.243.8333
(Fax) 505.243.8337

Jura
99.078.2

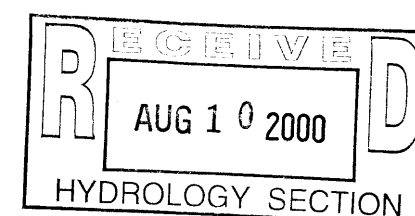
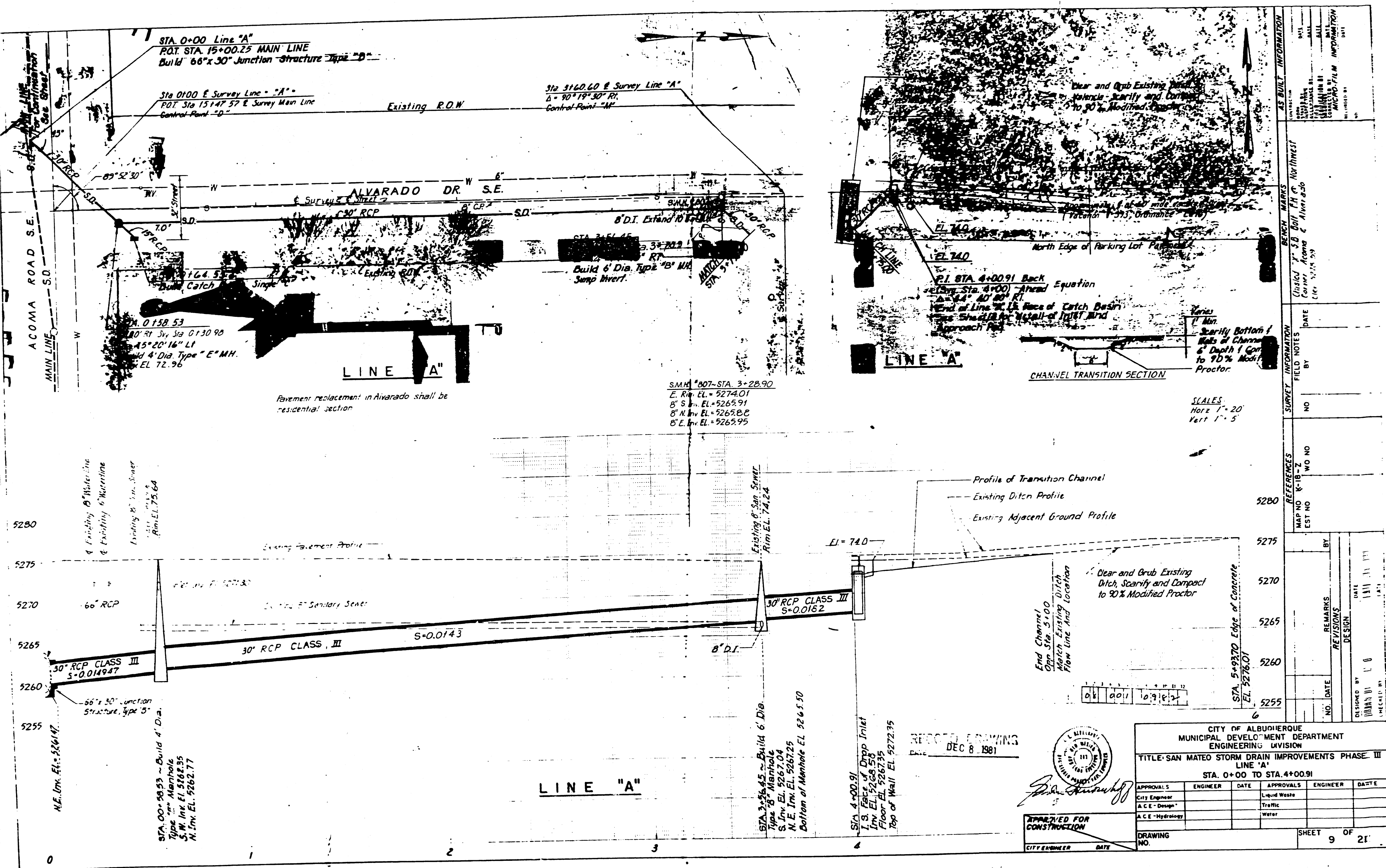
JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6010-B MIDWAY PARK BLVD. N.E.
☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐ ENGINEERS ☐ SURVEYORS (505) 345-4250

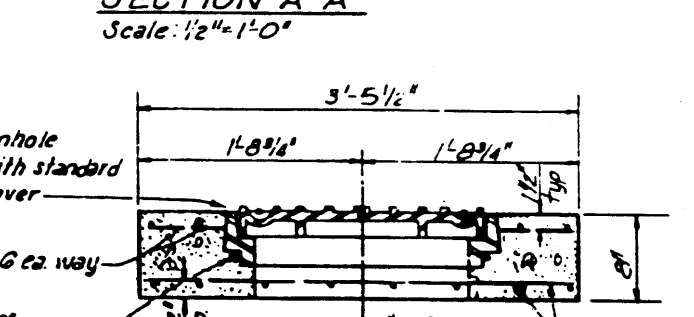
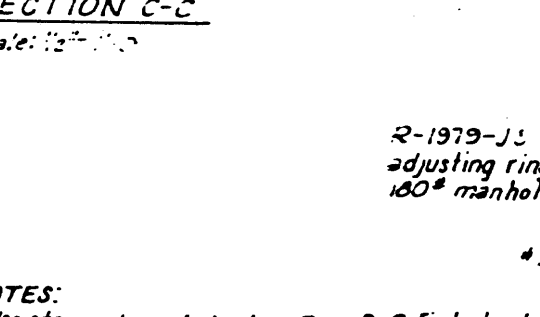
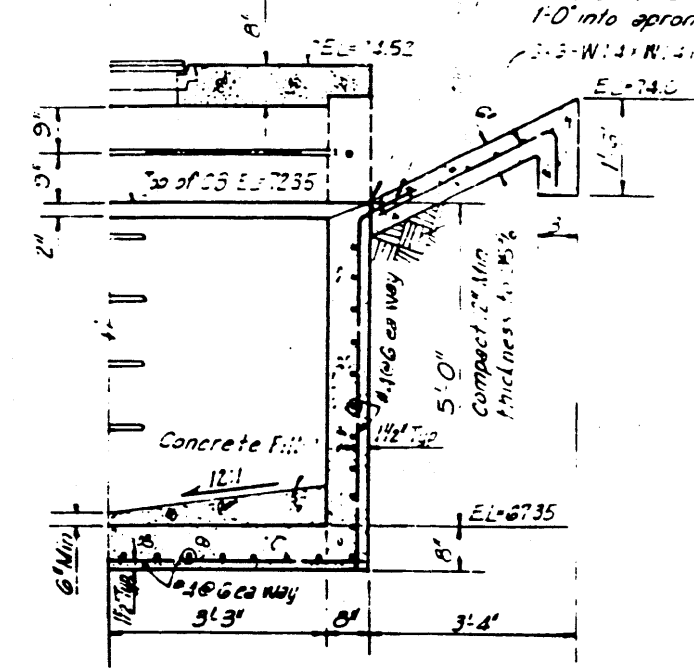
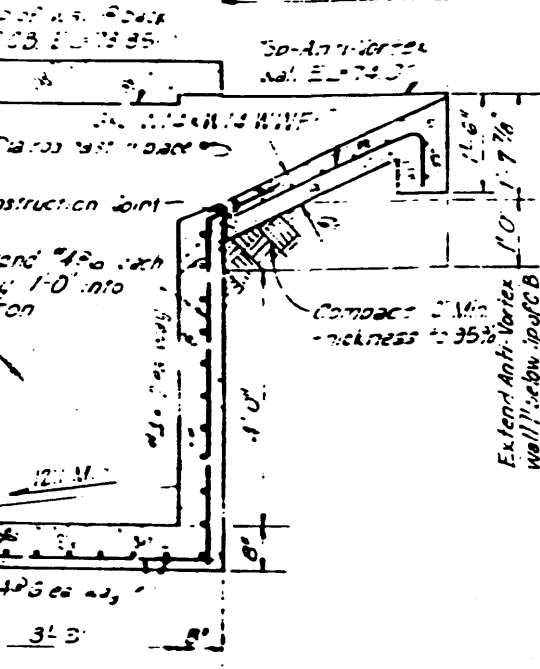
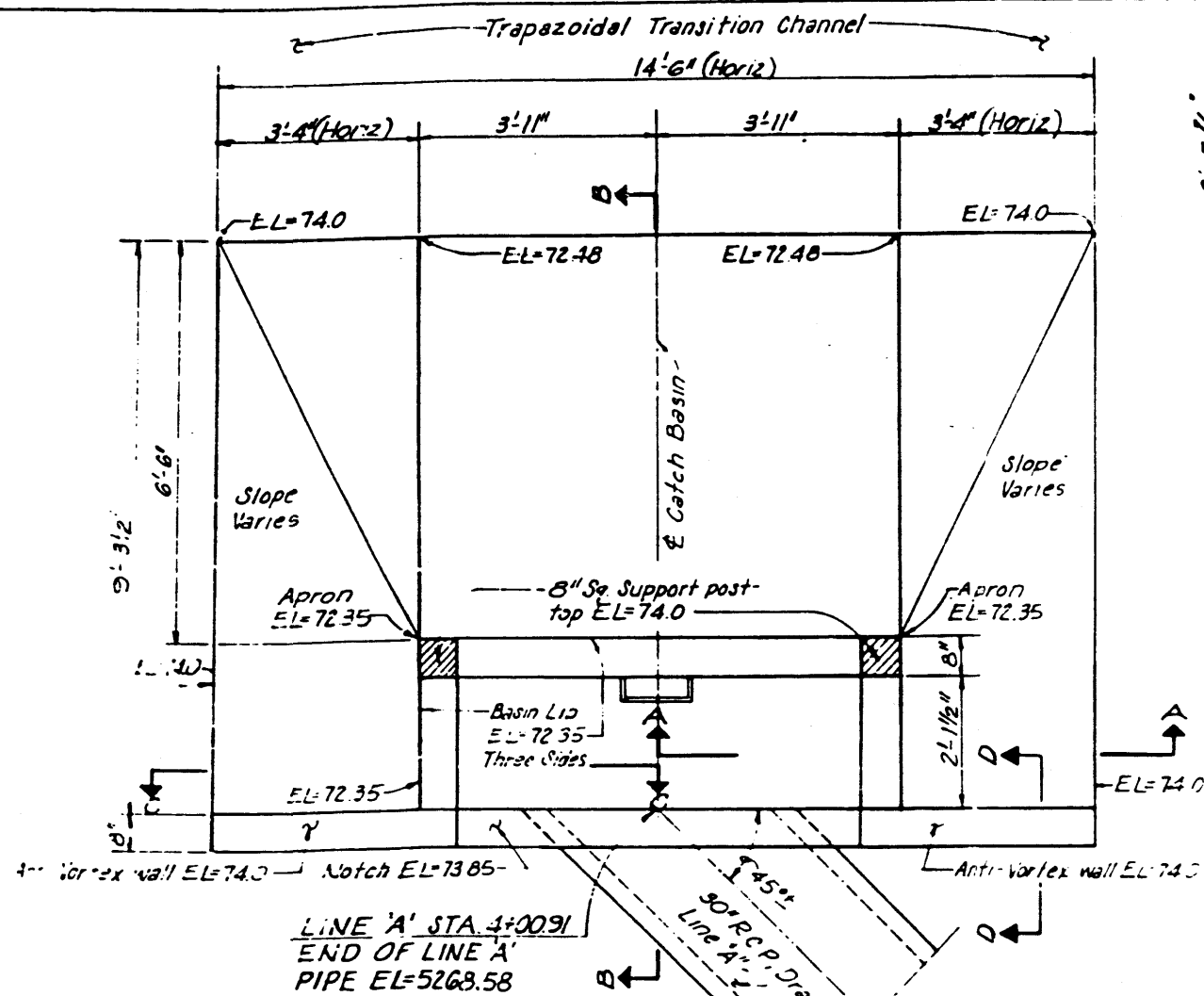
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: DRAINAGE PLAN
FOX MEMORIAL PARK

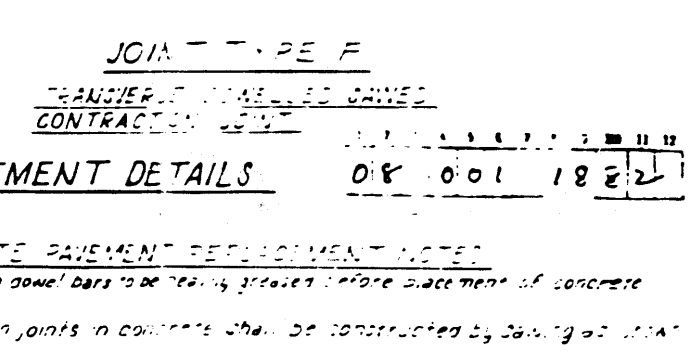
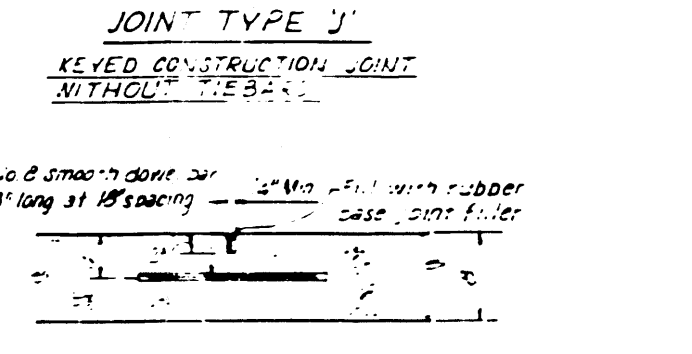
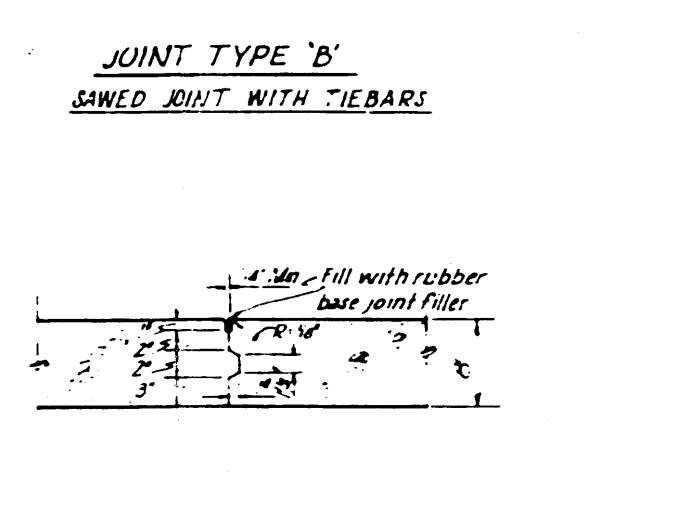
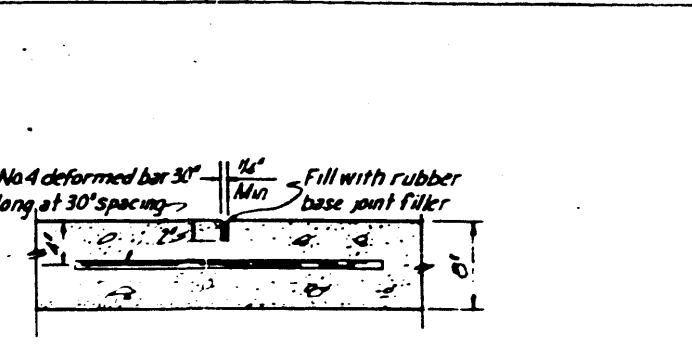
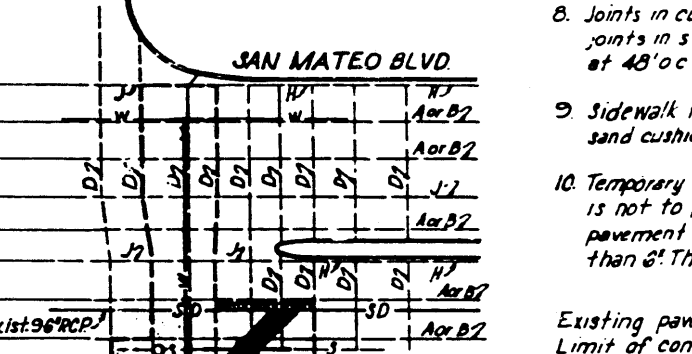
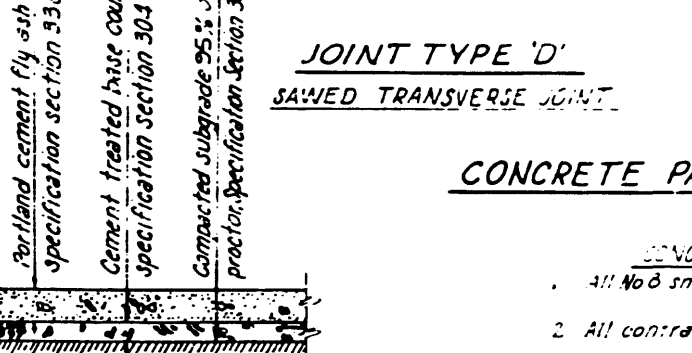
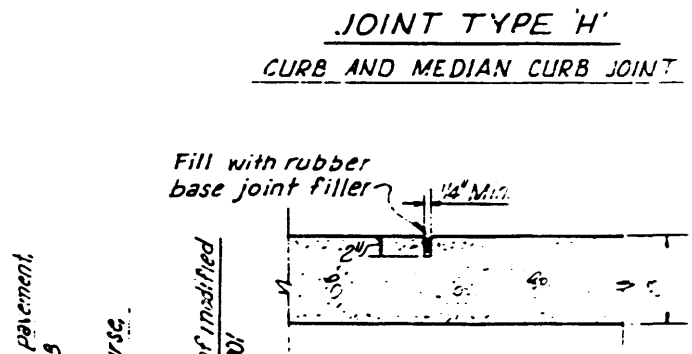
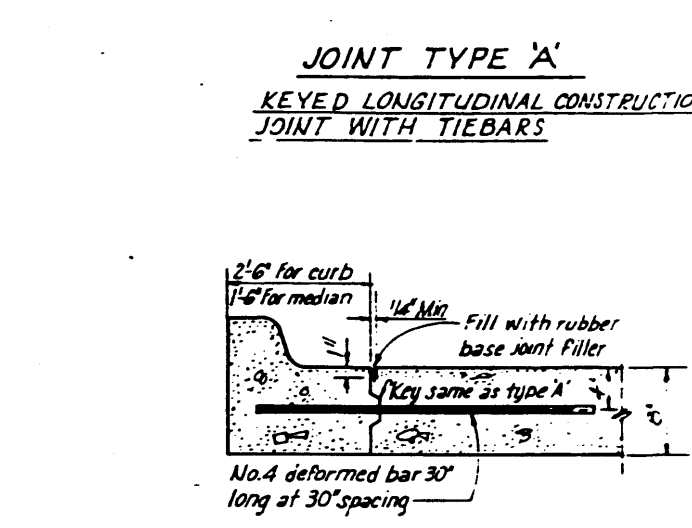
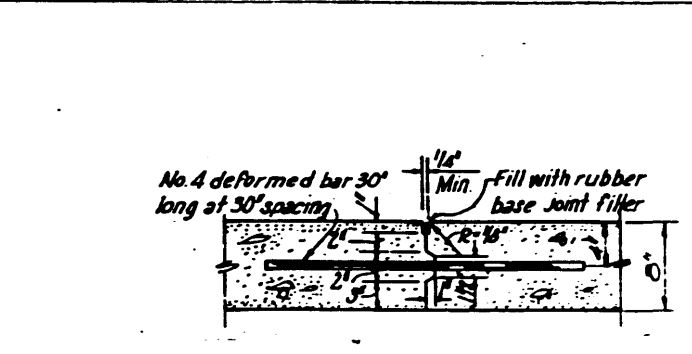
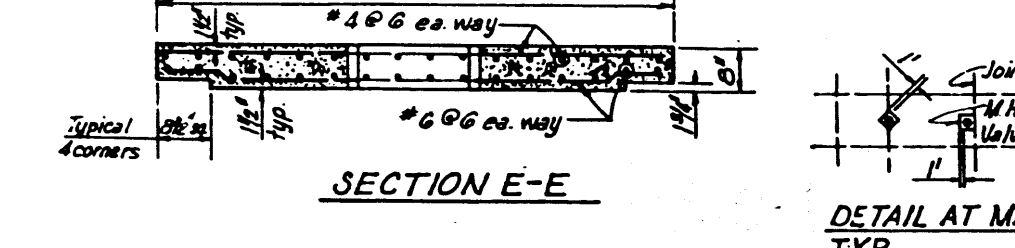
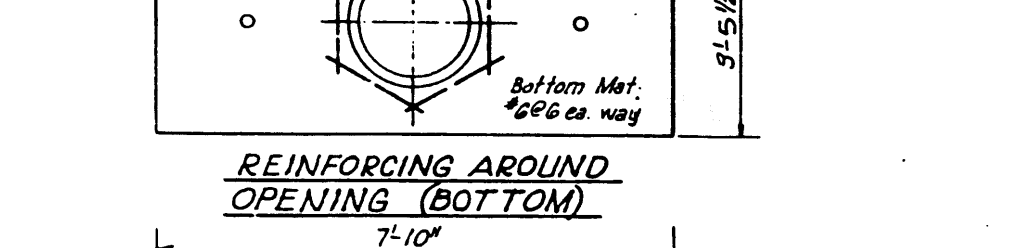
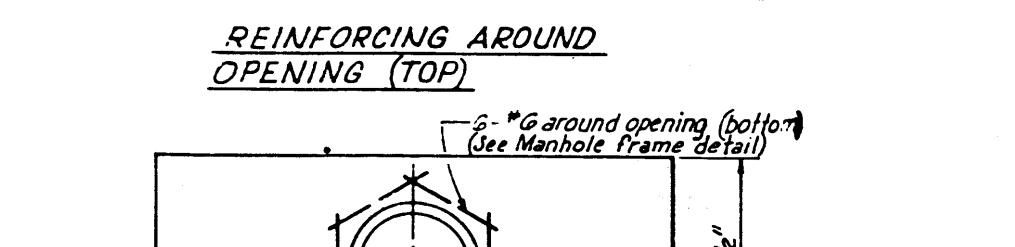
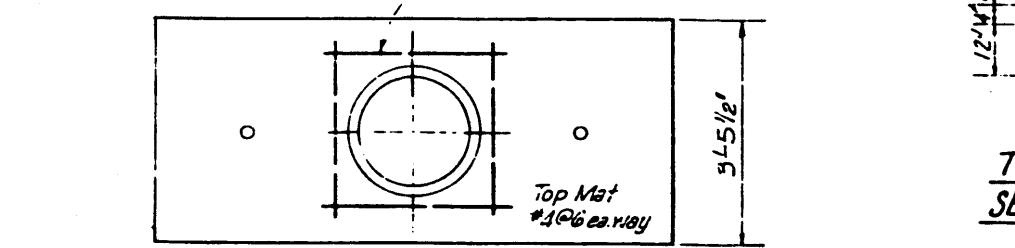
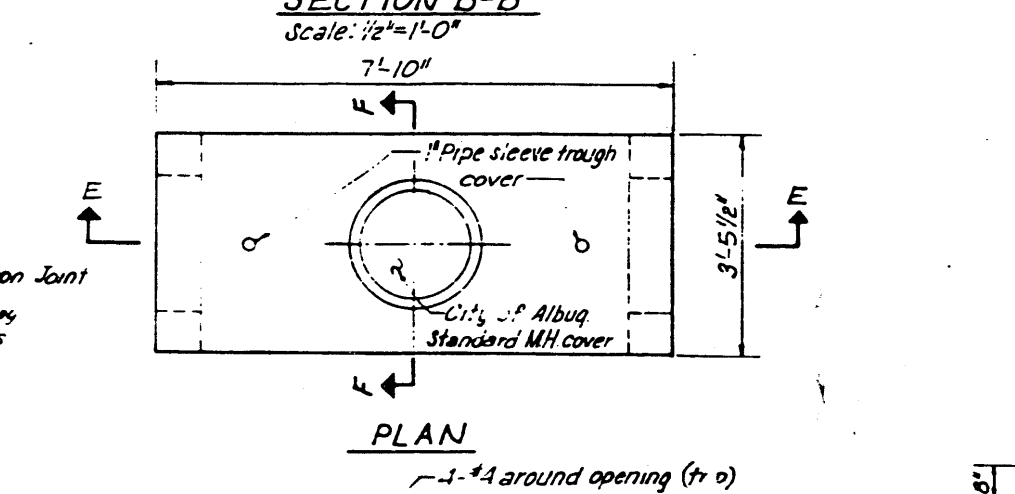
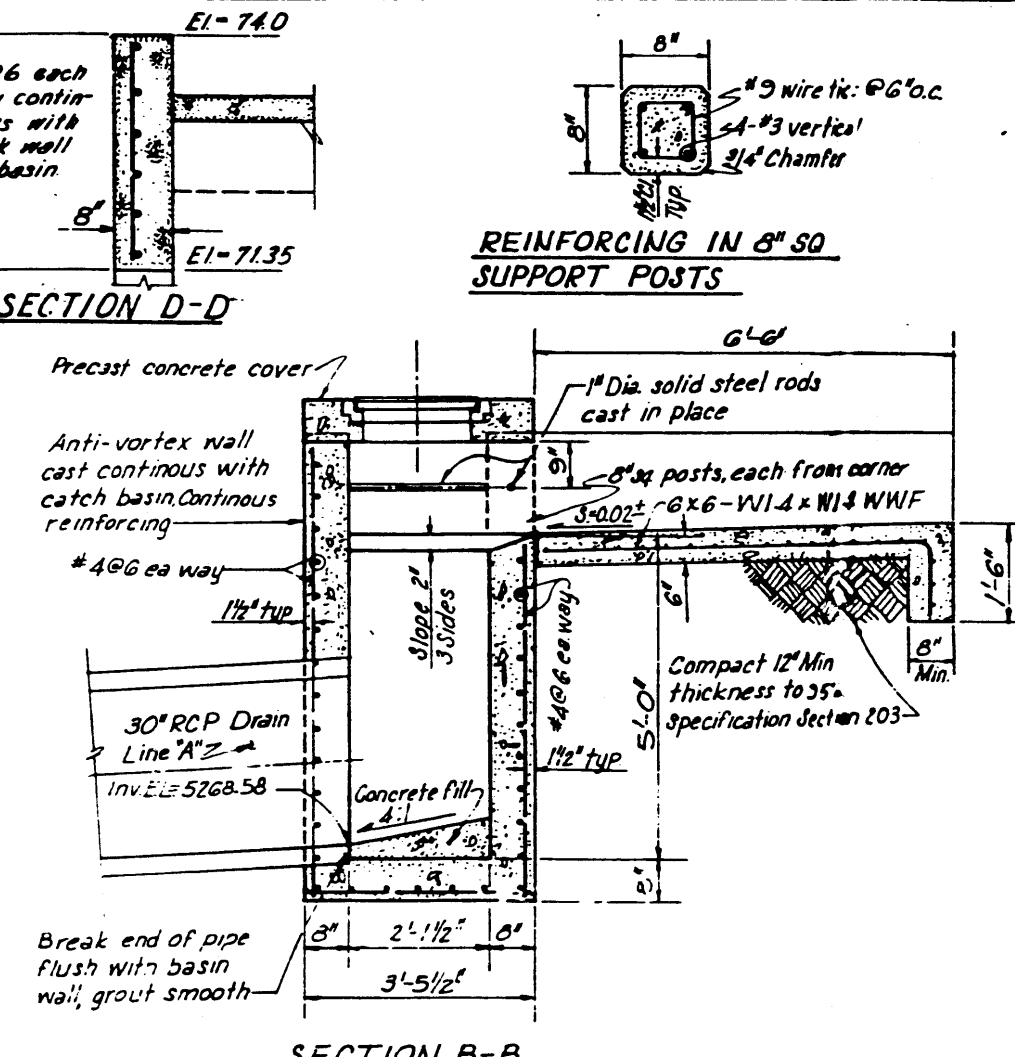
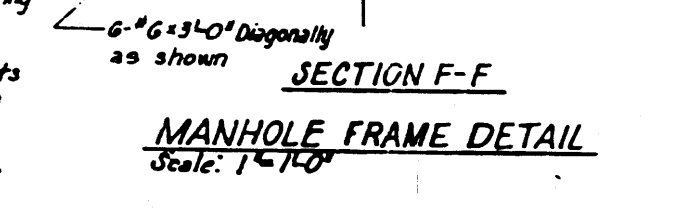
Design Review Committee	City Engineer Approval
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City Project No.	629391	Zone Map No.	K-18	Sheet	2	Of	7
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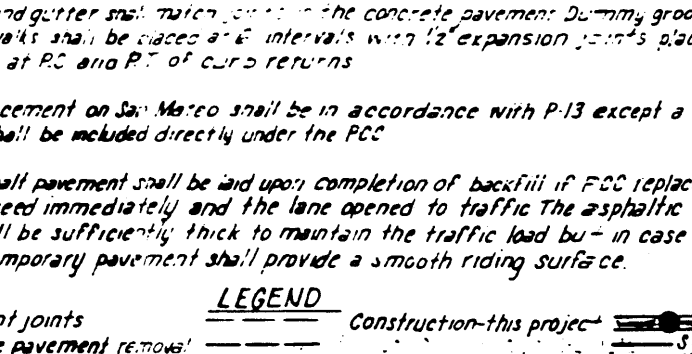




NOTES:
1. Use standard manhole steps, Dwg. S-9. First step to be 3" below edge of catch basin and shall protrude 7" Spacing shall be 12" o.c. last step 18" Max. from floor.
2. Exposed steel shall be cleaned of scale, rust etc and painted with one coat of red oxide and two finish coats of Aluminum paint (AASNO M69)
3. Basic catch basin dimensions and reinforcing are similar to double 'D' catch basin.



- All No. 6 smooth done bars to be fully grouted before placement of concrete.
- All contraction joints in concrete shall be constructed by sawing at 12'.
- All pavement removal shall extend to existing joint.
- Remove existing concrete pavement & expose existing reinforcing. Straighten exposed reinforcing.
- Use same joint types as existing pavement.
- Match grade, slope and finish of existing pavement.
- Concrete pavement to be constructed using high early strength port and cement. Median noses and curb returns may be poured monolithically with the pavement. Payment for median nose and curb return concrete will be made at unit price bid for curb and gutter, no compensation will be made for high early strength concrete.
- Joints in curb and gutter shall match joints in the concrete pavement. Dummy groove joints in sidewalks shall be placed at 6' intervals with 12" expansion joints placed at 48' o.c. and at P.C. and P.T. of curb returns.
- Sidewalk replacement on San Mateo shall be in accordance with P-13 except a 4" sand cushion shall be included directly under the P.C.
- Temporary asphalt pavement shall be laid upon completion of backfill if FCC replacement is not to proceed immediately and the lane opened to traffic. The asphaltic pavement shall be sufficiently thick to maintain the traffic load but in case no less than 6" The temporary pavement shall provide a smooth riding surface.



APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
ACE - Design			Traffic		
ACE - Hydrology			Water		

DRAWING NO. SHEET 18 OF 21

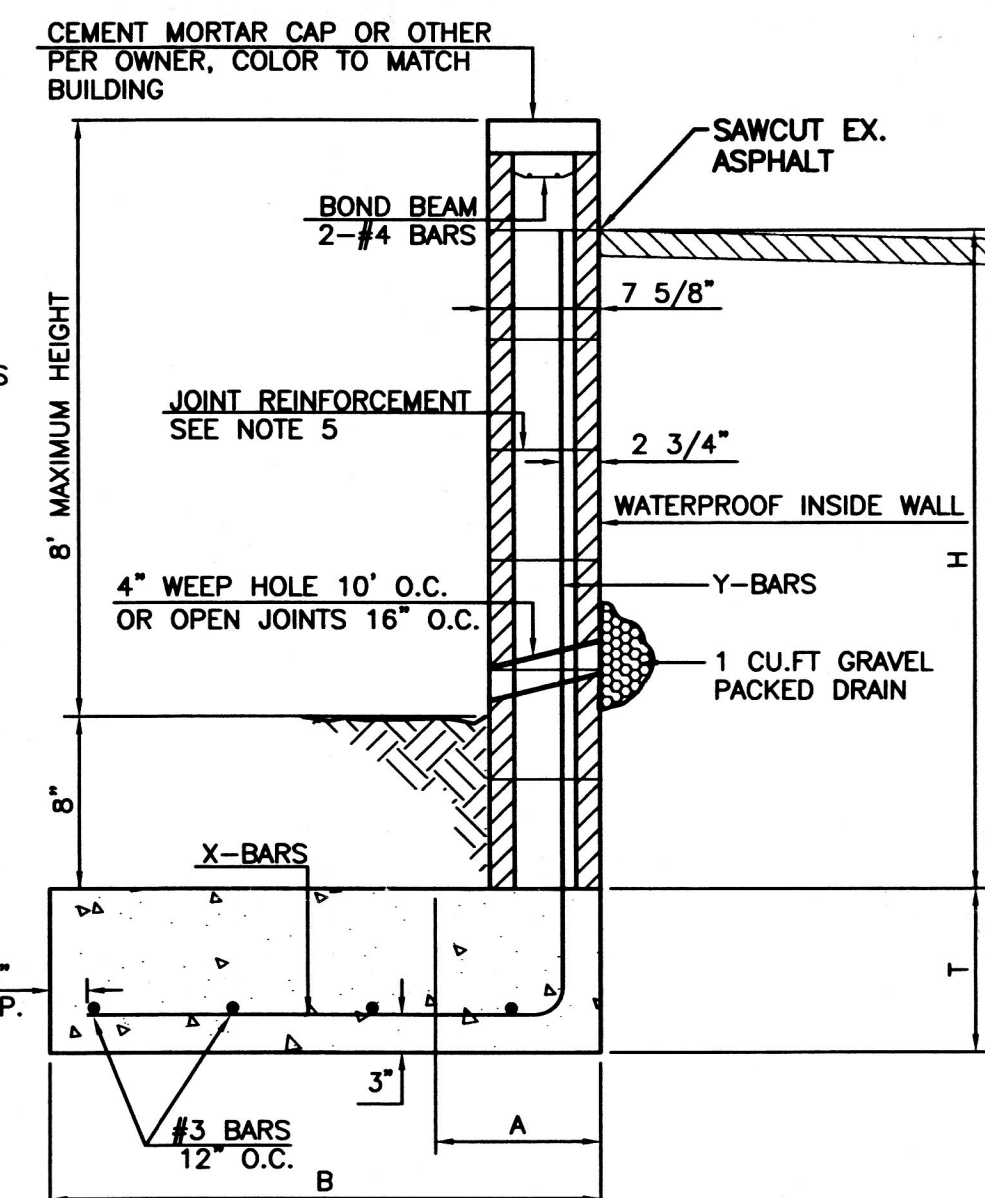
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EROSION CONTROL NOTES:

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

GENERAL NOTES:

1. ALL CONCRETE IS TO BE 3000 PSI @ 28 DAYS.
2. MINIMUM COMPACTION UNDER FOOTINGS IS TO BE 95% PER ASTM. D 1557 FOR A DEPTH OF 12" MOISTURE CONTENT IS TO BE $\pm 2.0\%$.
3. BACK FILL AGAINST WALLS IS TO BE HAND-PLACED AND COMPACTED.
4. ALL BARS ARE TO BE GRADE 60, ASTM 615.
5. TRUSS TYPE DRAIN-O-WALL EVERY OTHER COURSE.
6. USE EITHER EXPANSION JOINTS ON 20' CENTERS OR PILASTERS EVERY 12'.
7. 30 BAR DIAMETER LAPS TYPICAL.
8. DRAIN-O-WALL HORIZONTAL JOINT REINFORCEMENT 16" O.C.
9. OPEN JOINTS 16" O.C. TYPICAL AT FIRST COURSE.
10. OWNER TO SELECT MASONRY COLOR AND/OR FINISH.
11. SOLID MASONRY CAP COURSE TYPICAL.
12. WATER PROOF WALL.

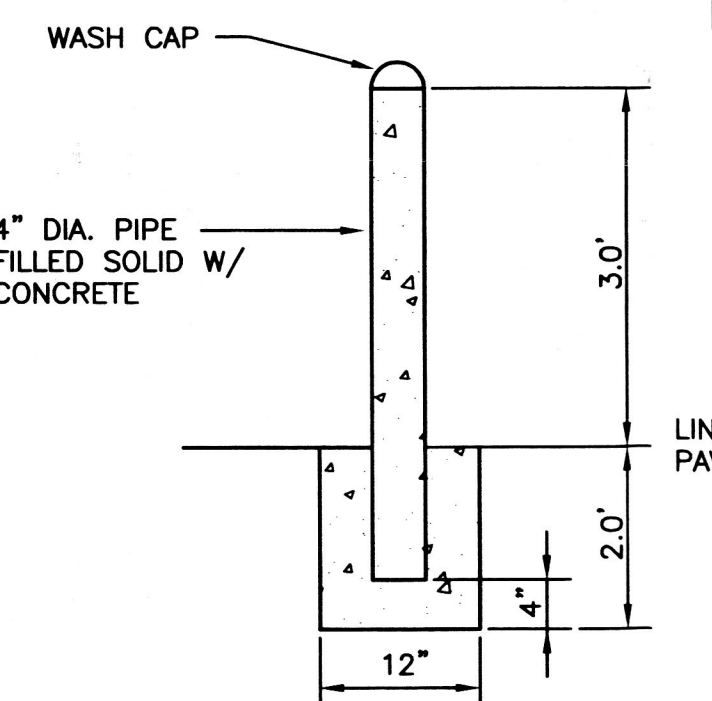


8 INCH REINFORCED CONCRETE MASONRY WALL (FOR RETAINING PORTION ONLY)

H	B	T	Y-BARS	X-BARS
ft.-in.	ft.-in.	in.		
1'-4"	1'-9"	9"	#4 @ 24" O.C.	
2'-0"	2'-0"	9"	#4 @ 24" O.C.	
2'-8"	2'-6"	9"	#4 @ 24" O.C.	
3'-4"	3'-9"	12"	#4 @ 16" O.C.	#4 @ 16" O.C.
4'-0"	3'-3"	12"	#4 @ 16" O.C.	#4 @ 16" O.C.

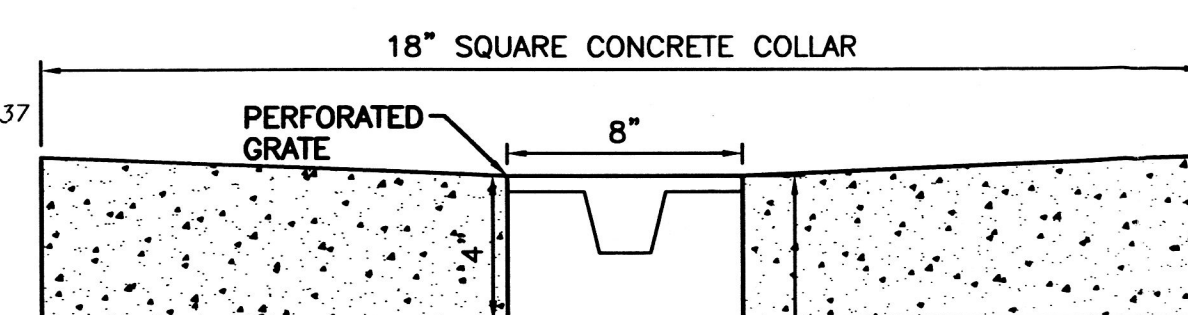
L-FOOTING RETAINING WALL DETAIL

NTS



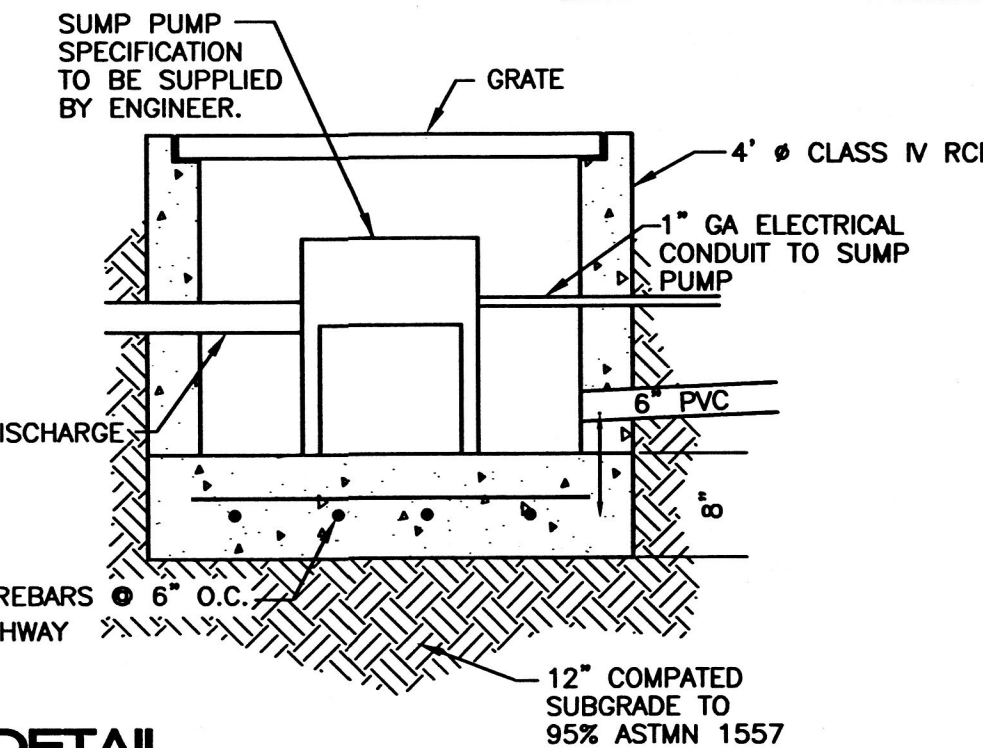
PIPE BOLLARD DETAIL

NTS



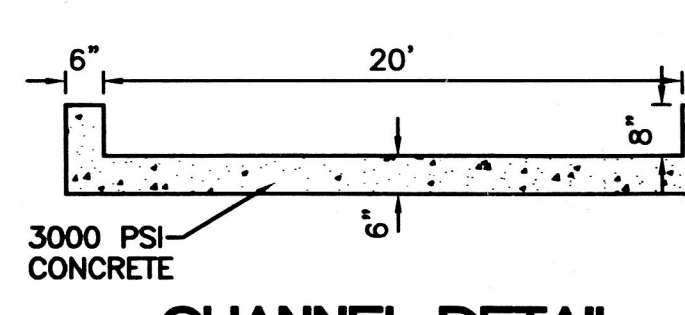
INLINE DRAIN DETAIL

NTS



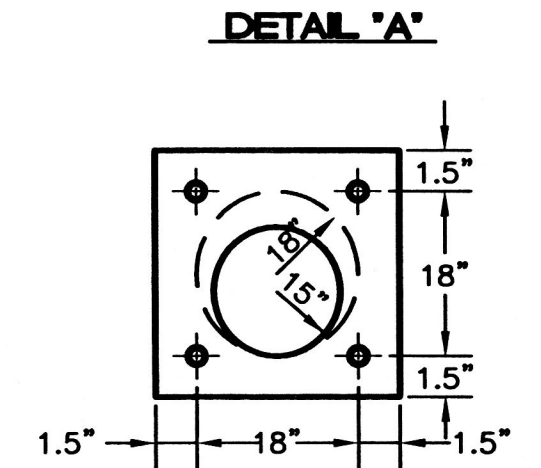
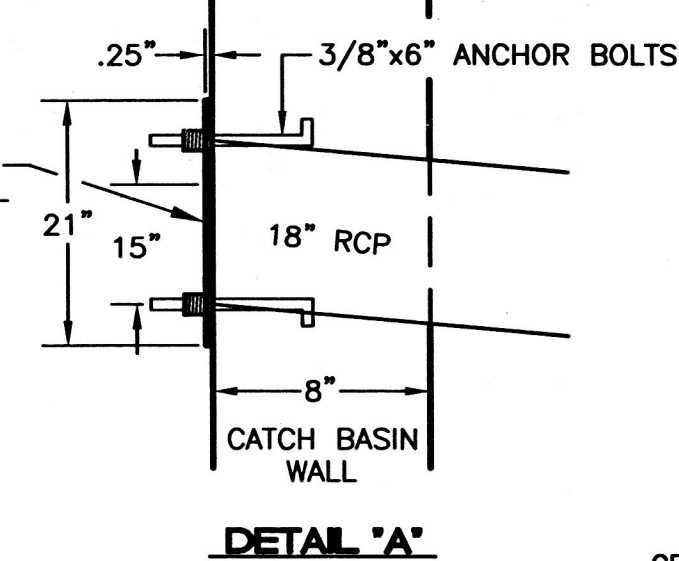
SUMP PUMP DETAIL

NTS

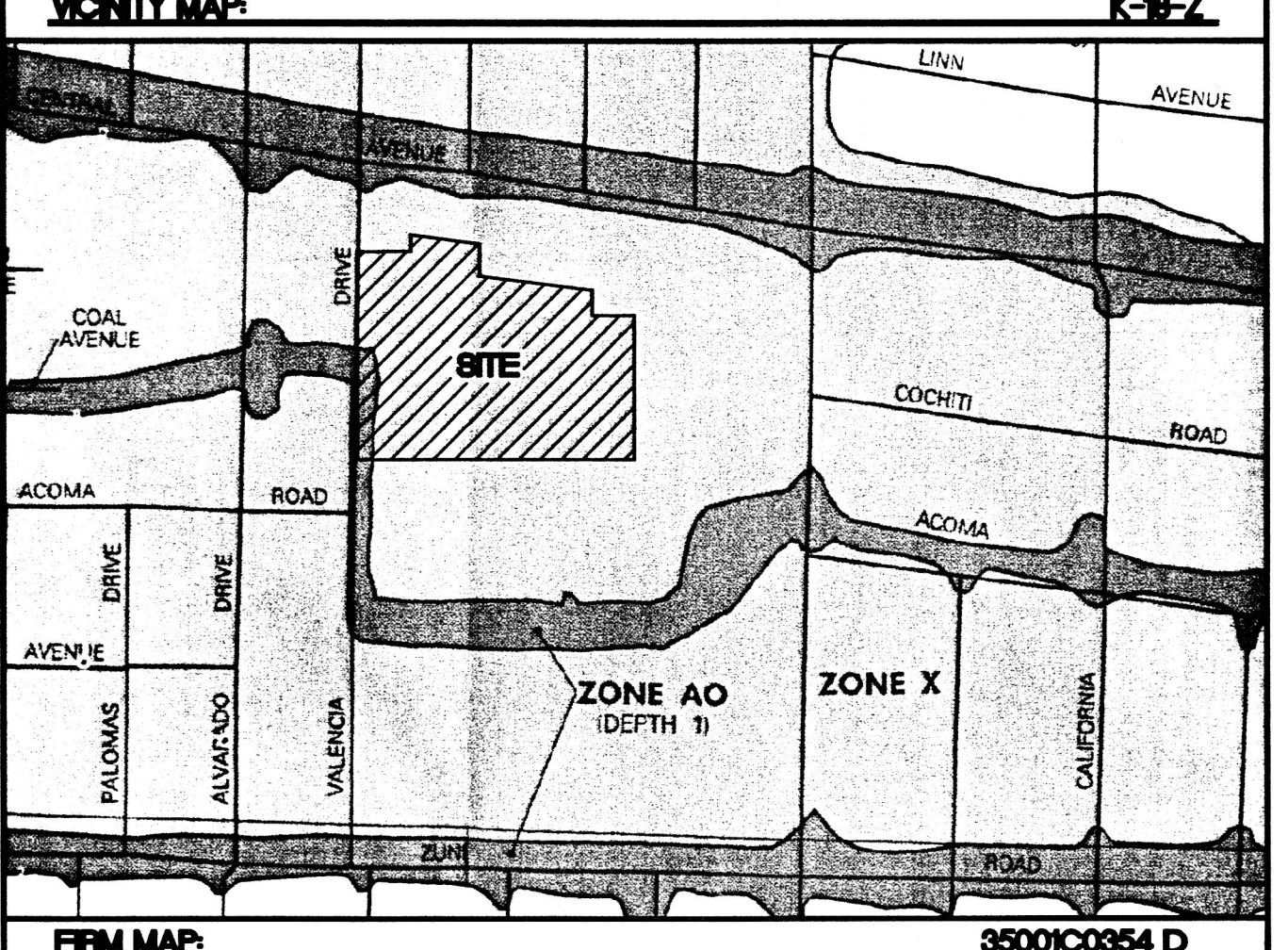
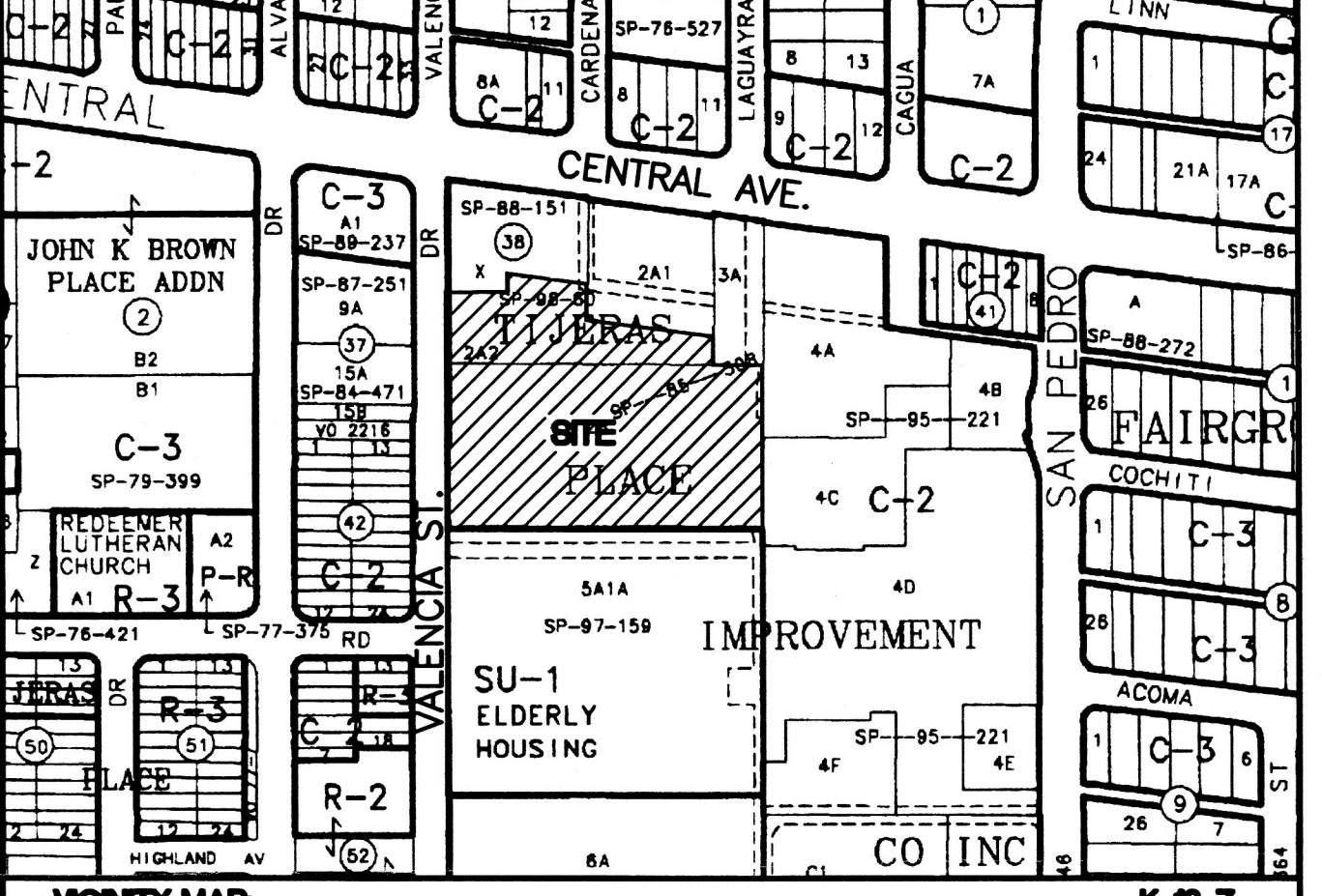
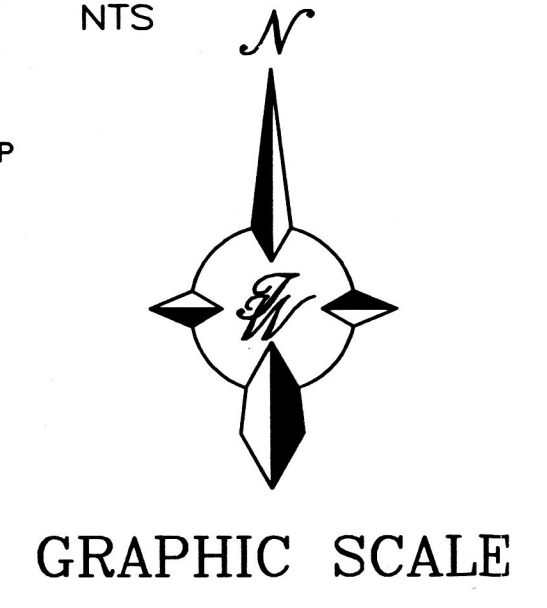


CHANNEL DETAIL

NTS



NTS



ROUGH GRADING APPROVAL

DATE

ENGINEER'S SEAL

VALENCIA APARTMENTS

GRADING AND DRAINAGE PLAN

TIERRA WEST, LLC

8509 JEFFERSON NE
ALBUQUERQUE, NEW MEXICO 87113
(505)858-3100

DRAWN BY JDN

DATE 08-08-00

2003GR.DWG

SHEET #

JOB # 200003