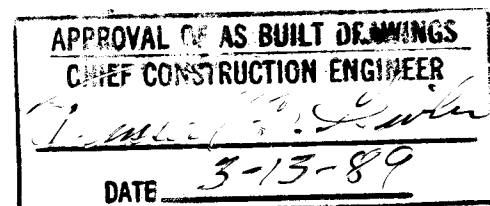


CITY OF ALBUQUERQUE

CROSSING STRUCTURES
FOR
MORNINGSIDE DR. NE.
AND
MONROE ST. NE.
OVER THE HAHN ARROYO

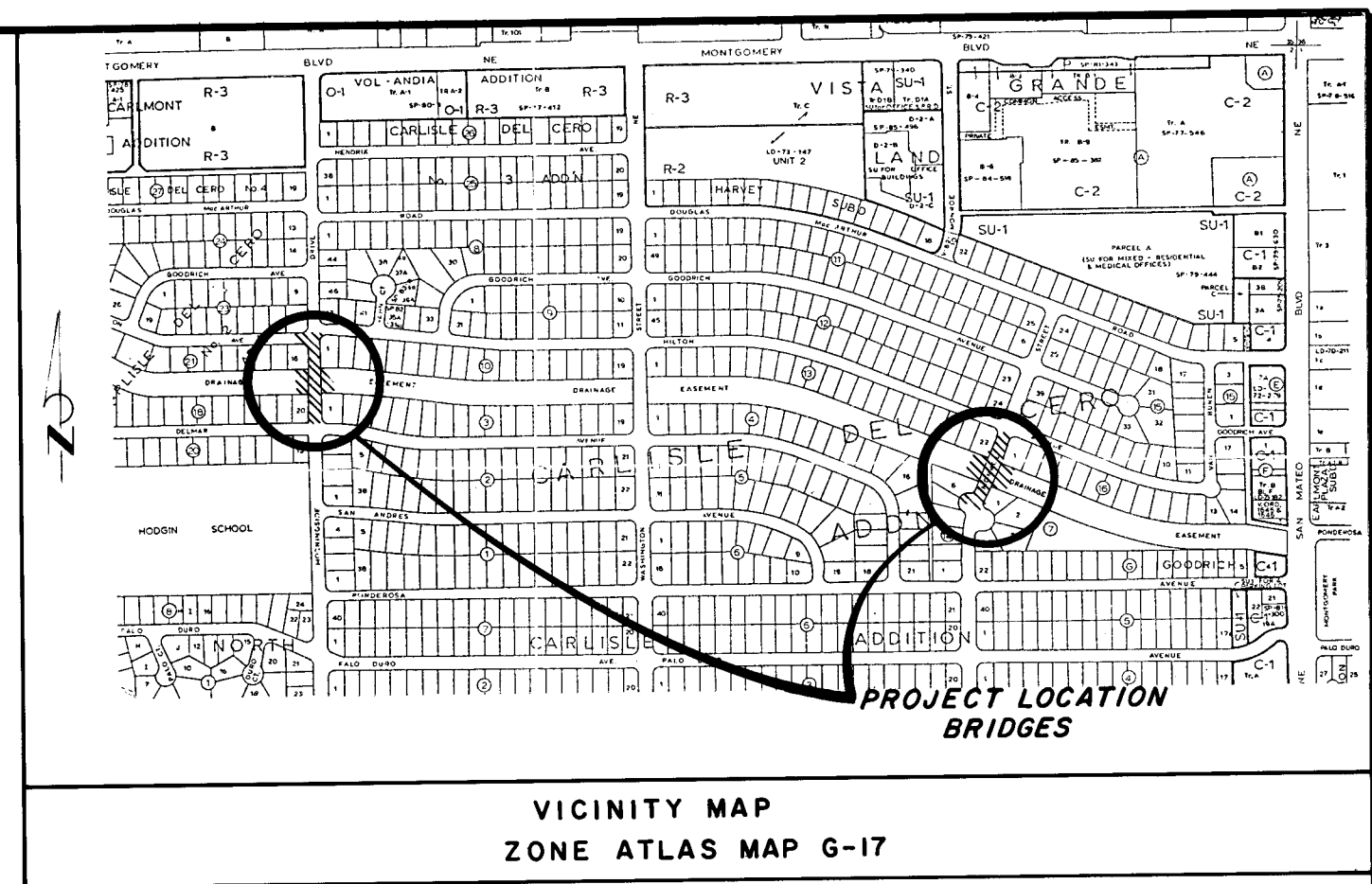
INDEX TO DRAWINGS

- 1.) TITLE SHEET, VICINITY MAP & GENERAL NOTES
- 2.) EXISTING CONDITIONS, BARRICADING PLAN & LIMITS OF REMOVAL FOR MORNINGSIDE DRIVE
- 3.) EXISTING CONDITIONS, BARRICADING PLAN & LIMITS OF REMOVAL FOR MONROE STREET
- 4.) MORNINGSIDE DRIVE, PLAN & PROFILE
- 5.) MONROE STREET, PLAN & PROFILE
- 6.) STORM SEWER & CHANNEL, PLAN & PROFILE
- 7.) STORM SEWER & STREET DETAILS
- 8.) STORM SEWER & CHANNEL DETAILS
- 9.) BRIDGE GENERAL NOTES & ESTIMATED QUANTITIES
- 10.) SUPER STRUCTURE DECK PLAN
- 11.) MORNINGSIDE DR. ABUTMENT & WINGWALL DETAILS
- 12.) MONROE ST. ABUTMENT & WINGWALL DETAILS
- 13.) PEDESTRIAN BRIDGE ABUTMENT REPLACEMENT DETAILS
- 14.) EXCAVATION AND BACKFILL FOR BRIDGES, WALLS & CBC'S
- 15.) METAL RAILING GENERAL NOTES & TYPICAL DETAILS



26 30780189

Set N°
Date

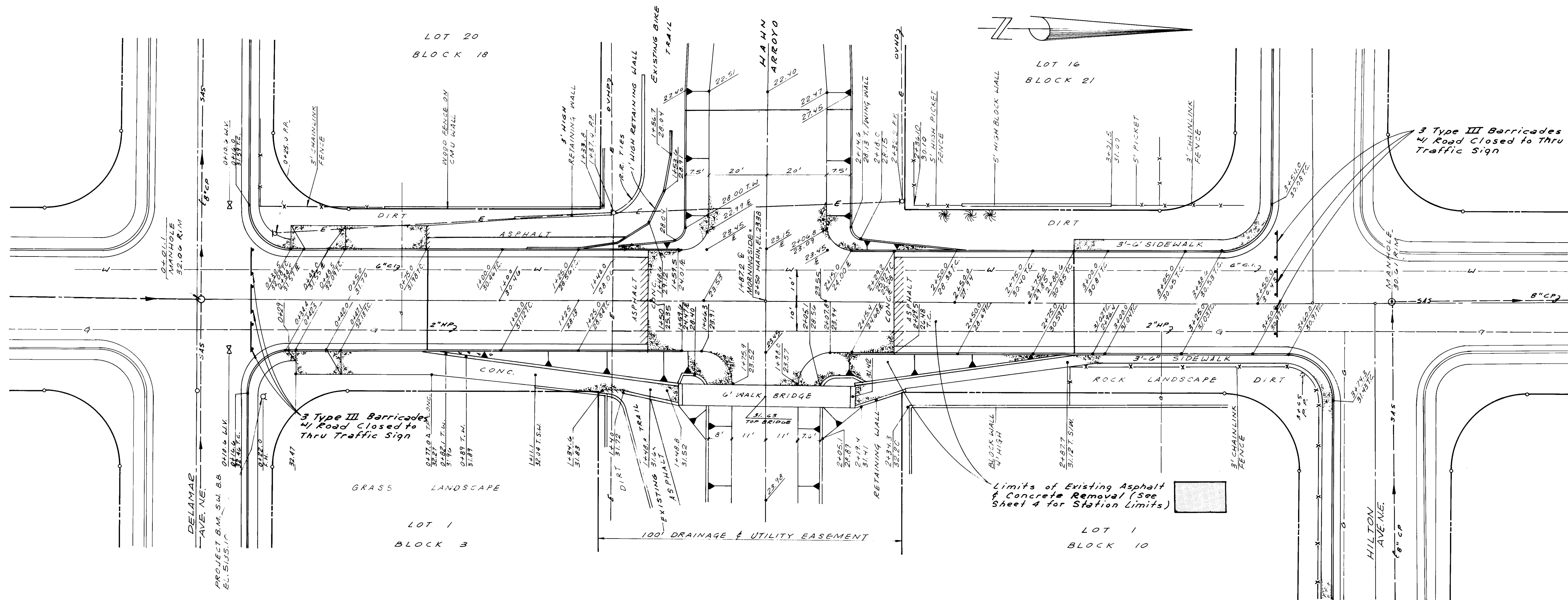


GENERAL NOTES

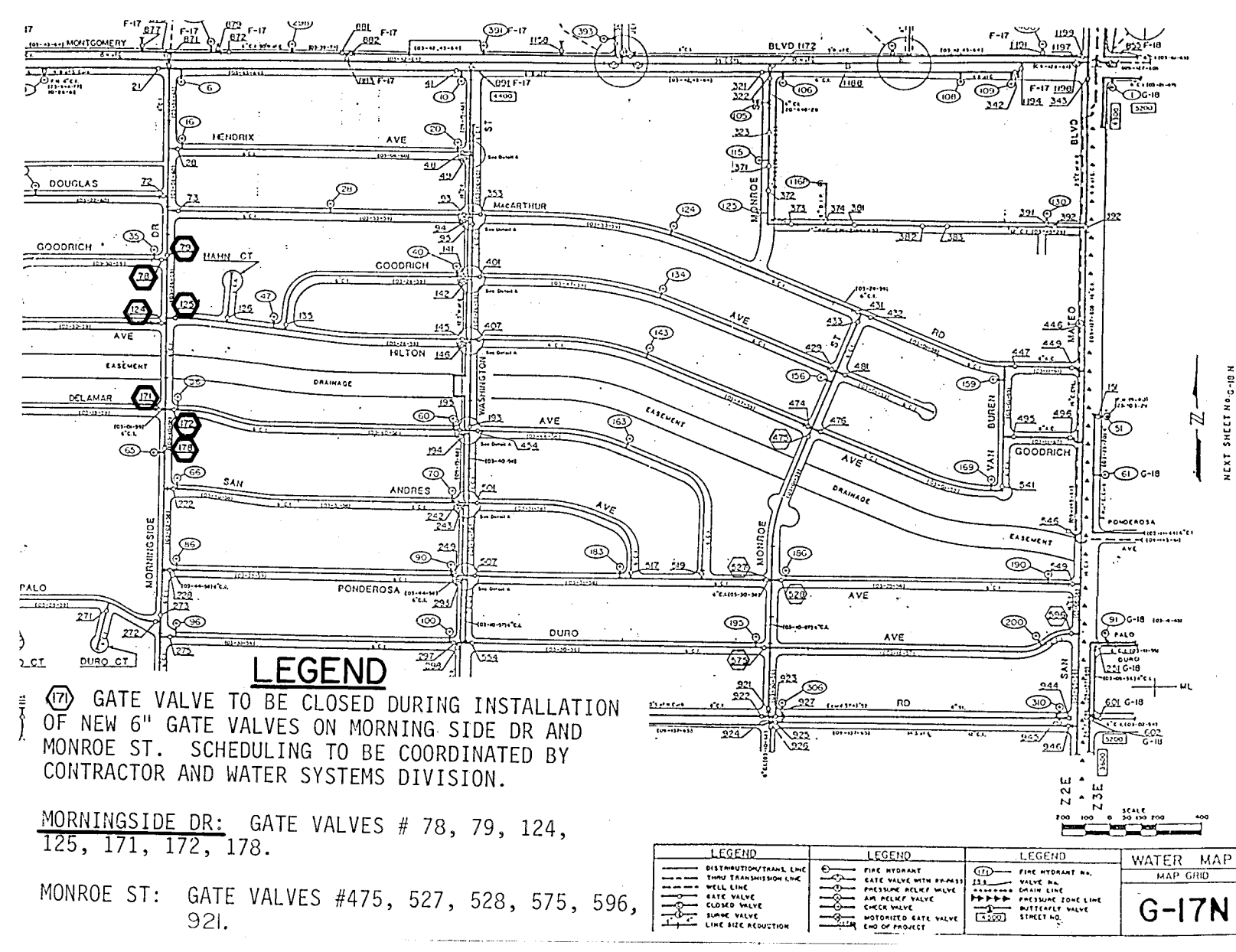
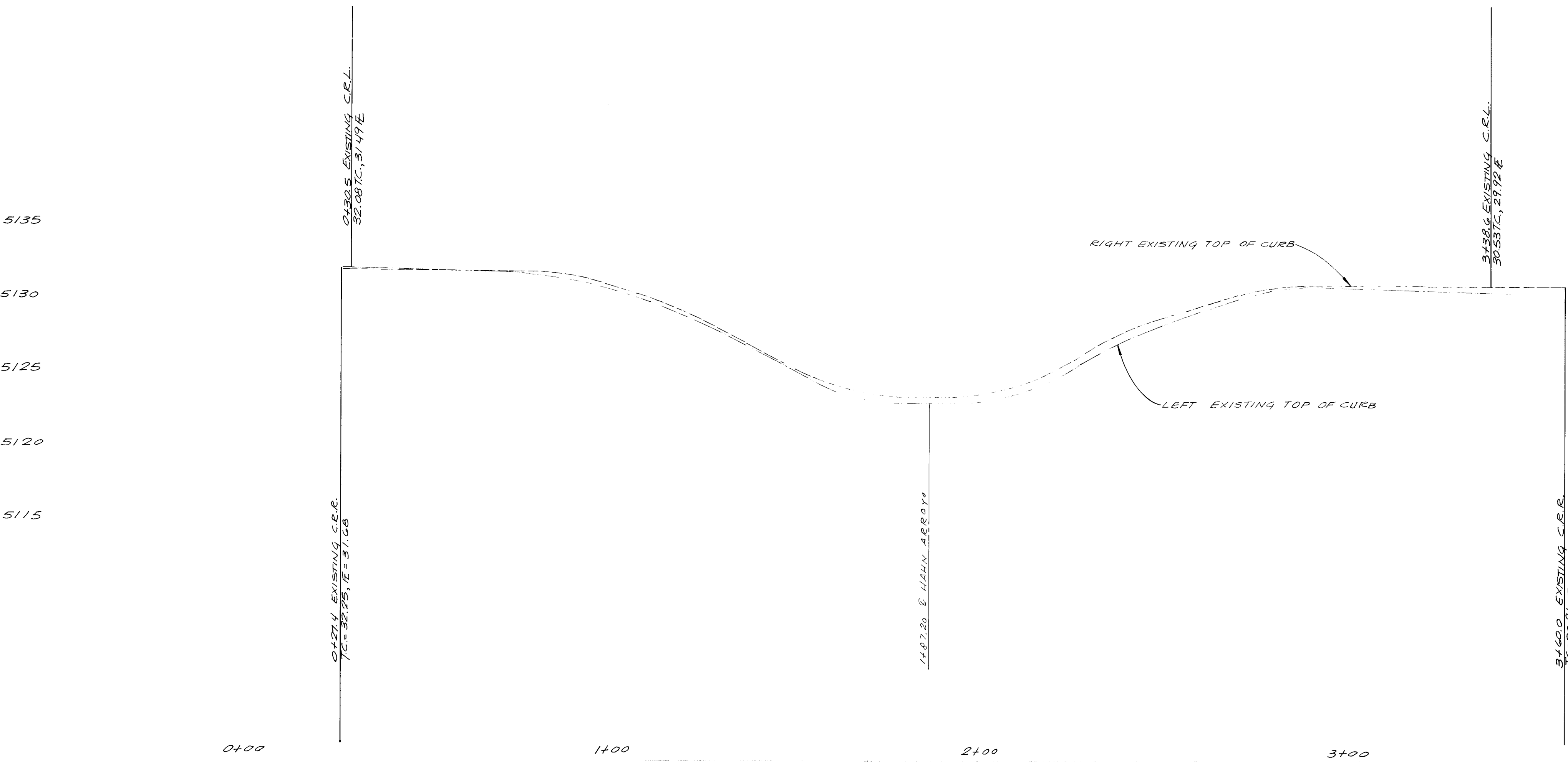
1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR IN THE SPECIAL PROVISIONS OF THE CONTRACT, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS - PUBLIC WORKS CONSTRUCTION - 1986 EDITION.
2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATION SERVICE, 765-1234, FOR LOCATING OF EXISTING UTILITIES.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY. CONTRACTOR TO ALLOW TWO WEEKS FROM TIME OF NOTIFICATION TO START OF RELOCATION BY UTILITY COMPANY CREWS.
4. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
6. TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE FIELD ENGINEER.
7. SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
8. IF CURB IS DERESSED FOR A DRIVEPAD OR HANDICAP RAMP, THE DRIVEPAD OR RAMP SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF THE CURB GUTTER.
9. ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
10. DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS SPECIFIED IN SECTION 6.14 OF THE GENERAL CONDITIONS IN THE CITY OF ALBUQUERQUE - STANDARD SPECIFICATIONS - PUBLIC WORKS CONSTRUCTION - 1986 EDITION.
11. CONTRACTOR SHALL OBTAIN BARRICADING PERMIT PRIOR TO ANY WORK ON MONROE STREET AND MORNINGSIDE DRIVE.
12. SEE BRIDGE GENERAL NOTES ON SHEET 9.
13. DURING THE MONTH OF JULY, AUGUST, SEPTEMBER, THE CONTRACTOR SHALL PROVIDE A EROSION & DIVERSION PLAN FOR SAFE PASSAGE OF THE 10 YEAR DESIGN FLOOD.
14. EXISTING WALK BRIDGE AND BIKE PATH TO REMAIN OPEN TO THE PUBLIC DURING CONSTRUCTION OF THE PROPOSED BRIDGE. THE ADJUSTMENTS ON THE PEDESTRIAN BRIDGE MAY ONLY BE REPAIRED AFTER PEDESTRIAN ACCESS EXIST ACROSS THE PROPOSED MAIN BRIDGE. THE CONTRACTOR IS TO PROVIDE CHAIN LINK FENCING TO SEPARATE THESE PATHS FROM THE CONSTRUCTION ACTIVITY FOR THE SAFETY OF THE PEDESTRIANS. THE CONTRACTOR IS TO ALSO PRESENT A PLAN FOR THIS FENCING AT THE PRE-CONSTRUCTION MEETING TO THE PROJECT ENGINEER FOR HIS APPROVAL. THE FENCING PLAN AND THE CHAIN LINK FENCING SHALL BE INCIDENTAL TO THE COST FOR OTHER ITEMS OF WORK.
15. THE EXISTING POWER POLE AT THE NORTHWEST CORNER OF THE HAHN ARROYO AND MONROE STREET SERVES AN EXISTING SINGLE STREET LIGHT ON THE SOUTH SIDE OF THE HAHN ARROYO. THE CONTRACTOR IS TO CONTACT DOM FERRIS AT PHN (761-3489) TO DISCONNECT THIS STREET LIGHT CIRCUIT PRIOR TO CONSTRUCTION, ALSO TO RECONNECT UPON CONSTRUCTION COMPLETION IF THIS CIRCUIT IS FOUND TO CONFLICT WITH CONSTRUCTION.
16. IF THE CONTRACTOR DESIRES, HE MAY REQUEST TO PHN TO RUBBER SLEEVE THE EXISTING THREE PHASE WIRES WHICH CROSS MORNINGSIDE ALONG THE SOUTH SIDE OF THE HAHN ARROYO. THIS WILL BE DONE AT NO COST TO THE CONTRACTOR.
17. NUMEROUS GAS LINE CONFLICTS EXIST THROUGHOUT THIS PROJECT. THE GAS COMPANY OF NEW MEXICO IS TO RELOCATE THE 2" GAS MAINS ALONG BOTH MORNINGSIDE AND MONROE AT THE HAHN ARROYO CROSSING ONLY ONE TIME TO A PERMANENT LOCATION. THE GAS LINES WILL BE RELOCATED DURING THE EARLY STAGES OF THE CROSSING STRUCTURE PROJECT ONCE THE CONTRACTOR HAS REMOVED THE CONCRETE CHANNEL LIVING. IT WILL BE PREFERABLE THAT THE GAS LINE RELOCATIONS AT THE HAHN ARROYO BE CONCURRENT WITH THE WATERLINE RELOCATIONS. THE GAS LINE WILL BE DEDICATED TO THE EAST AT BOTH PROPOSED STRUCTURES AT AN ADEQUATE DEPTH BELOW THE CONCRETE CHANNEL. THIS WILL RELOCATE THE GASLINE TO AVOID ALL CONFLICTS WITH THE BRIDGE STRUCTURES AND THE PILLINGS.
18. ADDITIONAL CONFLICTS MAY OCCUR BETWEEN THE GASLINES AND THE PROPOSED STORM DRAIN SYSTEM AT MORNINGSIDE DRIVE. THE CONTRACTOR IS TO POT-HOLE THE FOUR OR FIVE EXPECTED CONFLICT LOCATIONS AT THE START OF THE PROJECT. UPON VERIFICATION OF A CONFLICT, THE CONTRACTOR WILL NOTIFY THE GAS COMPANY OF NEW MEXICO TO RELOCATE OR DODGE THEIR FACILITIES. THE GAS COMPANY OF NEW MEXICO WILL NEED TWO WEEKS LEAD TIME FROM THE TIME OF VERIFICATION OF A CONFLICT BY THE CONTRACTOR TO THE START OF THEIR RELOCATION EFFORTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCE CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE HIS ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK. ANY DAMAGE TO LINES, VALVES, METERS, ETC., WILL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THIS EXPENSE.

RECORD DRAWING

Rev.	Sheets	City Engr.	Date	User Dept.	Date	User Dept.	Date
Approval of Revisions							
3078		TERRA ENGINEERING CONSULTANTS INC.		Approved For Construction			
Set N°		3078		Sheet 1 of 5			
Date		3078		CITY ENGINEER 2-8-80			



MORNINGSIDE DRIVE NE.



WATER DISTRIBUTION SYSTEM SHUT-OFF PLAN

RECORD DRAWING

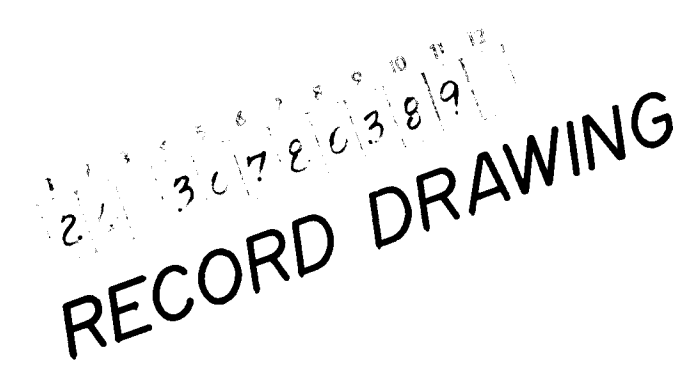
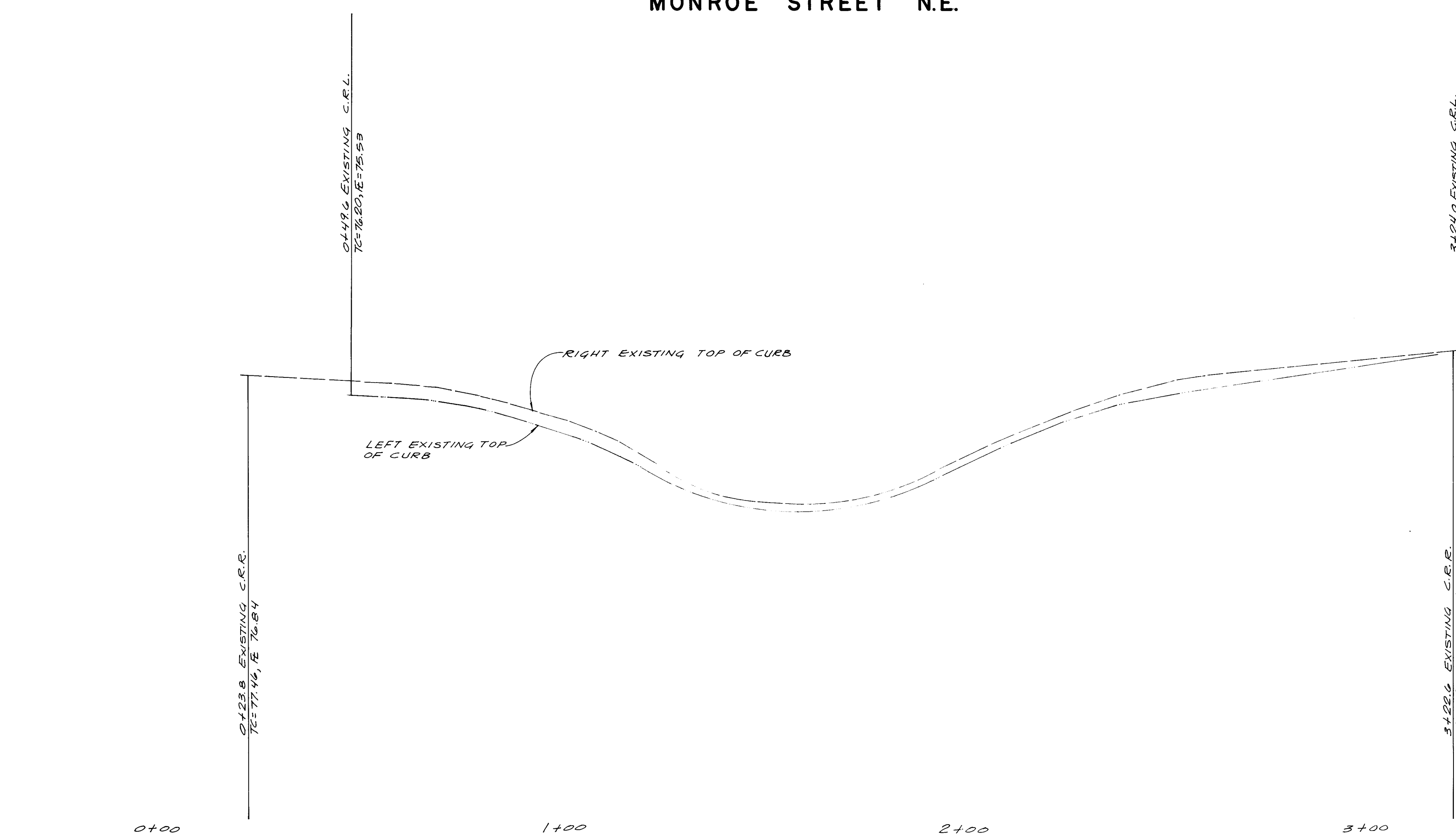
EXISTING CONDITIONS, BARRICADING PLAN
8. LIMITS OF REMOVAL FOR MORNINGSIDE DRIVE

3078

BENCHMARK USED FOR THESE PLANS IS
ACS "S-617A", A "X" CHISELED ON THE
NW CORNER BOLT OF A FIRE HYDRANT
LOCATED AT THE INTERSECTION OF
MORNINGSIDE DR. & MORNINGSIDE DRIVE
N.E. IN THE SOUTHEAST QUADRANT OF
THE INTERSECTION.

[Handwritten signature]

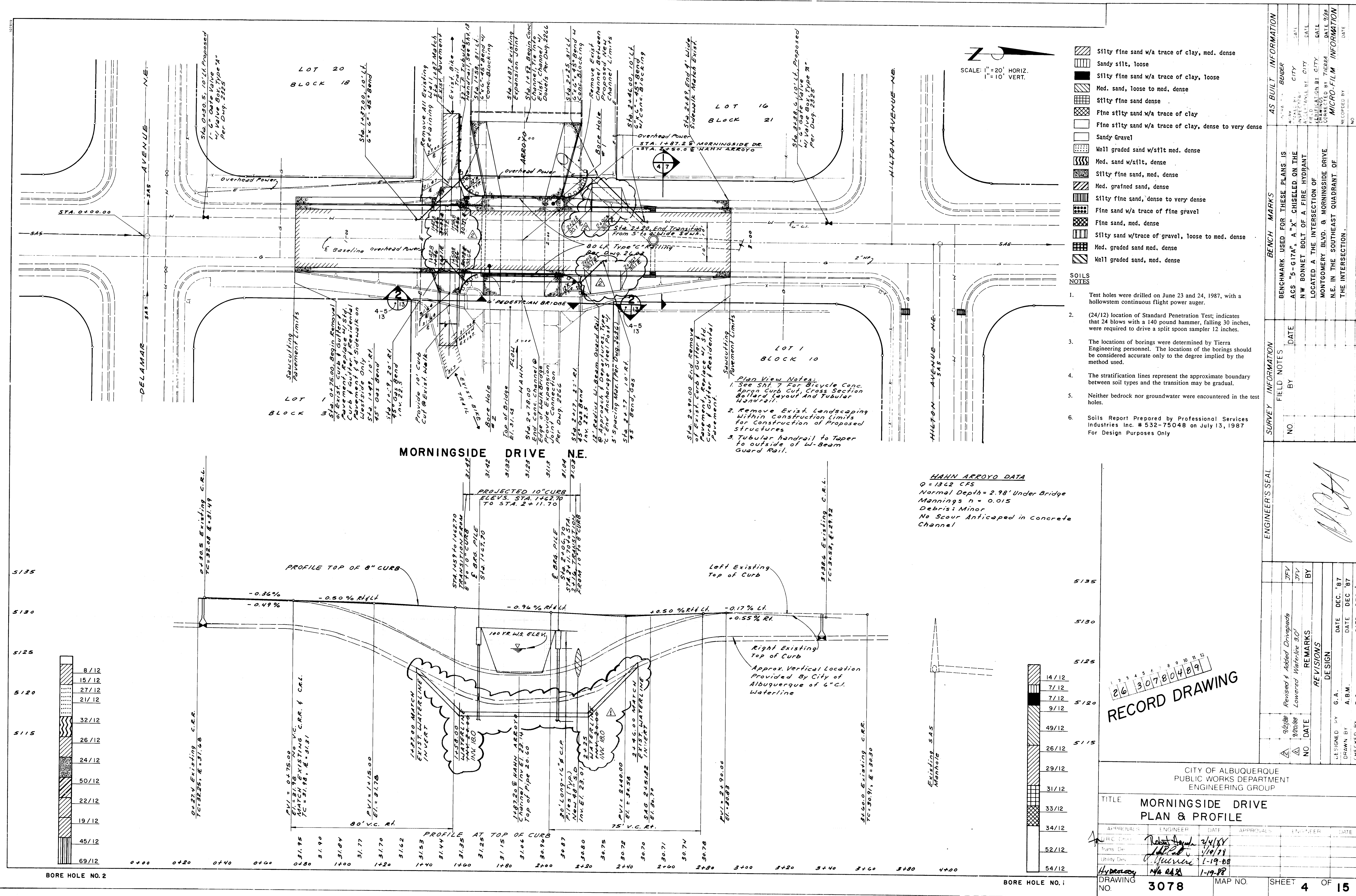
DEC '87
DEC '87
DEC '87
G.A.
A.B.M.
R.C.

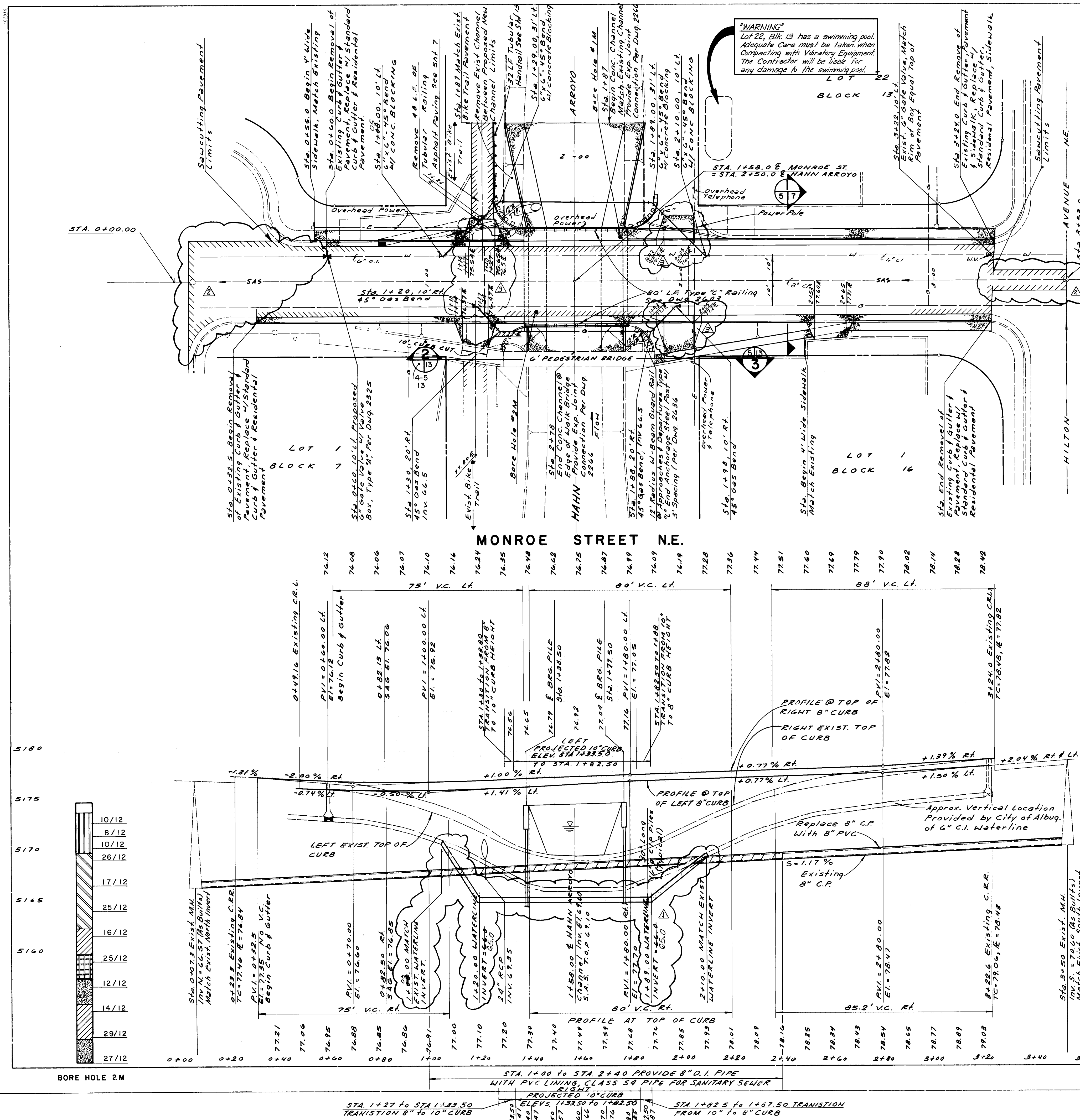


Hydrology M/A RAB 1-19-88
3078

BENCHMARK USED FOR THESE PLANS IS
ACS "5 - F17A", A SQUARE CHISELED ON
TOP OF CONCRETE AT THE NORTHSIDE OF
MONTGOMERY BLVD. NE, OPPOSITE THE JUNCTION
WITH MONROE STREET.

G. A.
A.B.M.
R.C.



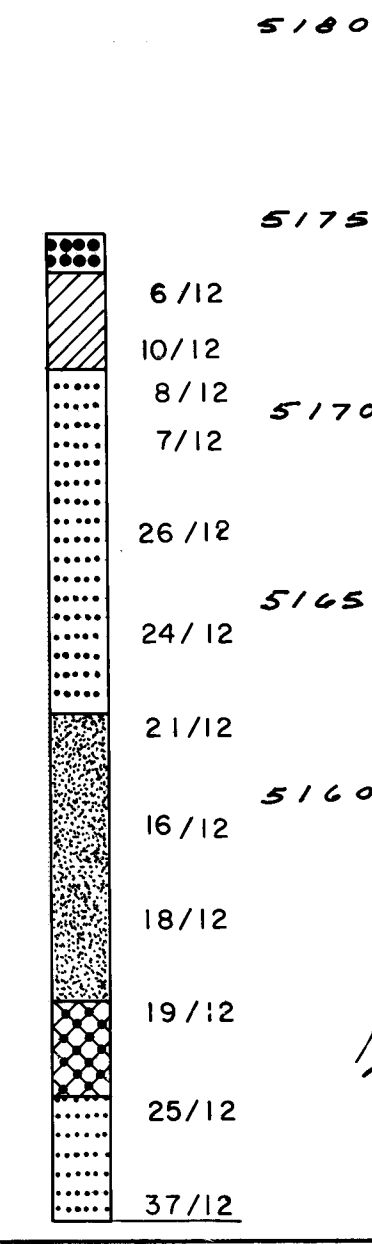


SCALE: 1" = 20' HORIZ.
1" = 5' VERT.

- SOILS NOTES**
- Silty fine sand w/a trace of clay, med. dense
 - Sandy silt, loose
 - Silty fine sand w/a trace of clay, loose
 - Med. sand, loose to med. dense
 - Silty fine sand dense
 - Fine silty sand w/a trace of clay
 - Fine silty sand w/a trace of clay, dense to very dense
 - Sandy Gravel
 - Well graded sand w/silt med. dense
 - Med. sand w/silt, dense
 - Silty fine sand, med. dense
 - Med. graded sand, dense
 - Silty fine sand, dense to very dense
 - Fine sand w/a trace of fine gravel
 - Fine sand, med. dense
 - Silty sand w/trace of gravel, loose to med. dense
 - Med. graded sand med. dense
 - Well graded sand, med. dense

- Plan View Notes:**
- See Sht. 7 For Bicycle Concrete Barrier, Curb, Cross Section, Bollard Layout and Tubular Handrail Details.
 - Remove Exist Landscaping within Construction Limits as needed for Construction of Proposed Structure.
 - Tubular Handrail to Taper to Outside of W-Beam Guard Rail.

MANN ARROYO DATA
Q = 1284 CFS
Normal Depth = 2.94 Under Bridge
Mannings n = 0.015
Debris: Minor
No Scour Anticipated in Concrete Channel



RECORD DRAWING
26 30 78 05 89

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE
MONROE STREET N.E.
PLAN & PROFILE

DESIGNER
Hydrocon
1-19-88

DATE
1-19-88

DRAWING NO.
3078

MAP NO.
SHEET 5 OF 15

ENGINEER'S SEAL

DESIGN
DATE DEC 87
DRAWN BY A.B.M.
CHECKED BY R.C.

FIELD NOTES
NO. BY DATE

BENCH MARKS
BENCHMARK USED FOR THESE PLANS IS
ACS 5-FITA-A SQUARE CHISELED ON
TOP OF CONCRETE AT THE NORTHSIDE OF
MONTGOMERY BLVD. NE OPPOSITE THE JUNCTION
WITH MONROE STREET.

AS BUILT INFORMATION
NO. BY DATE

MONROE STREET NE.

[illegible]

5.175

5.170

5.165

5.160

0+00 0+20 0+40 0+60 0+80 1+00 1+20 1+40 1+60 1+80 2+00

68.0 LK 24' RCP 5.2.00%

Note: All RCP to be Class III

5.160 RCP 0.141

141.000

HAHN ARROYO PROFILE @ MORNINGSIDE DR.

Notes:

- 1) For Waterline or Gasline Conflicts, Notify Storm Sewer See Sheet 7 For Details
- 2) Prior to Construction, the Contractor Shall Excavate and Verify the Horizontal and Vertical Locations of All Gaslines. Should a Conflict Exist, the Contractor Shall Notify the Engineer and Gas Co. of New Mexico. The Gas Co. of N.M. Contact Person is David Silva 889-2552. The Contractor is to Allow Two Weeks (2) From Time of Notification to Start of Relocation by Utility Co. Crews

RECORD DRAWING
26 30780689

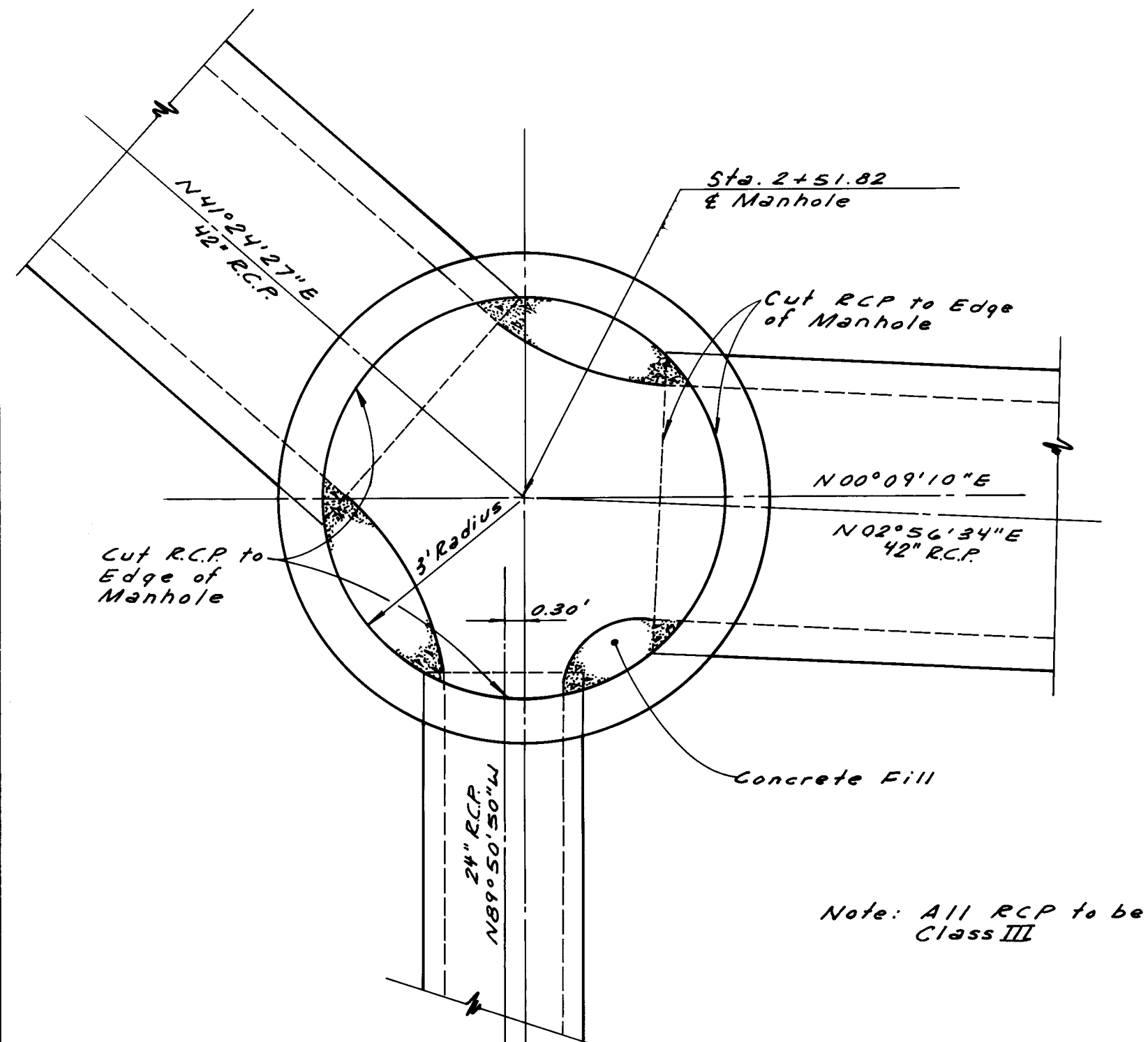
**CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING**

TITLE STORM SEWER & PLAN & PRO

APPROVALS	ENGINEER	DATE	APPROVALS
DRG Check	DRM	2/1/88	
Specs Dev	PLC	1/8/88	
Utility Dept	Williams	1-14-88	
Hydrogeology	Benjamin	1-19-88	

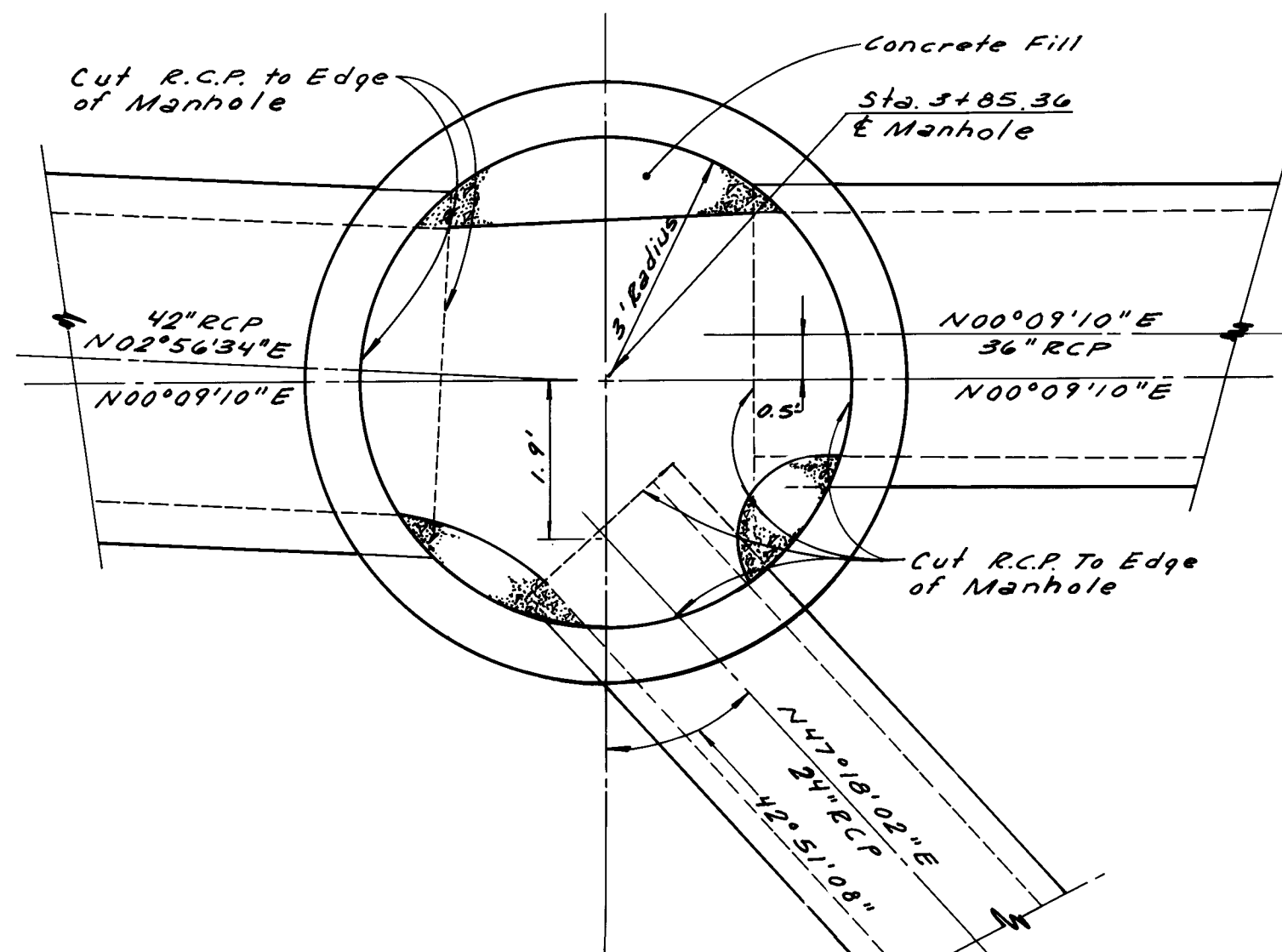
RECORD DRAWING

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: STORM SEWER & CHANNEL PLAN & PROFILE					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
 JRC Chair Trans. Div. Utility Dept. 	 JRC 	2/1/88 1/5/88 1-10-88			
DRAWING NO.	3078	MAP NO.	SHEET	6	OF 15



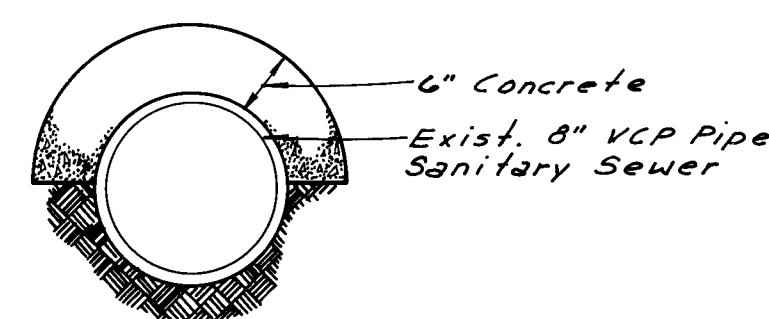
MANHOLE "A"

SEE DWG. 2101 CITY SPECS FOR STRUCTURAL DETAIL
SCALE: 1" = 2'-0"



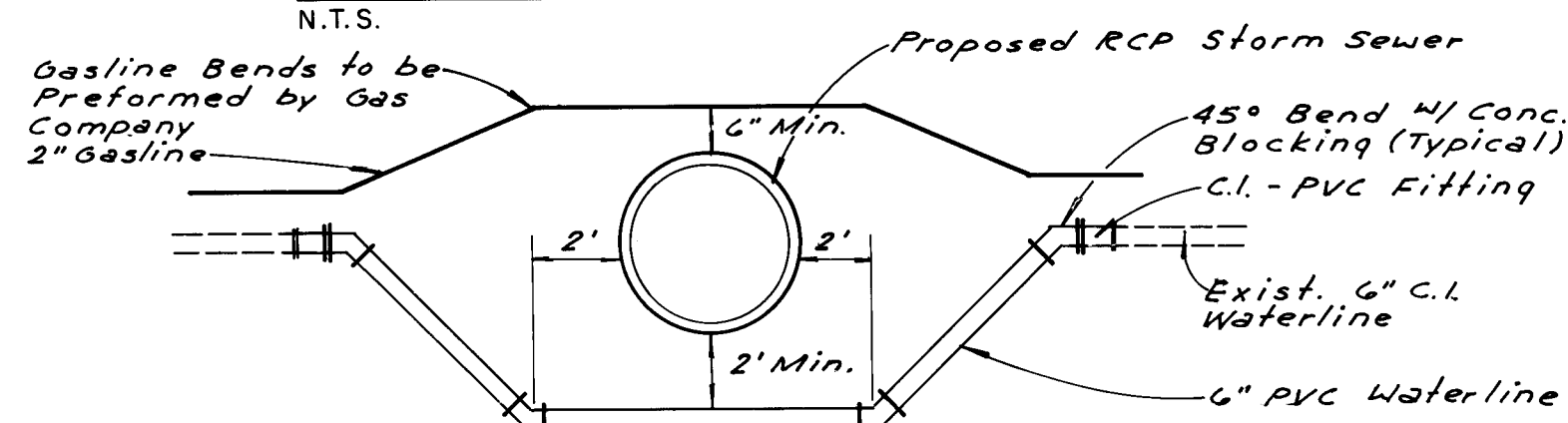
MANHOLE "B"

SEE DWG. 2101 CITY SPECS FOR STRUCTURAL DETAIL
SCALE: 1" = 2'-0"



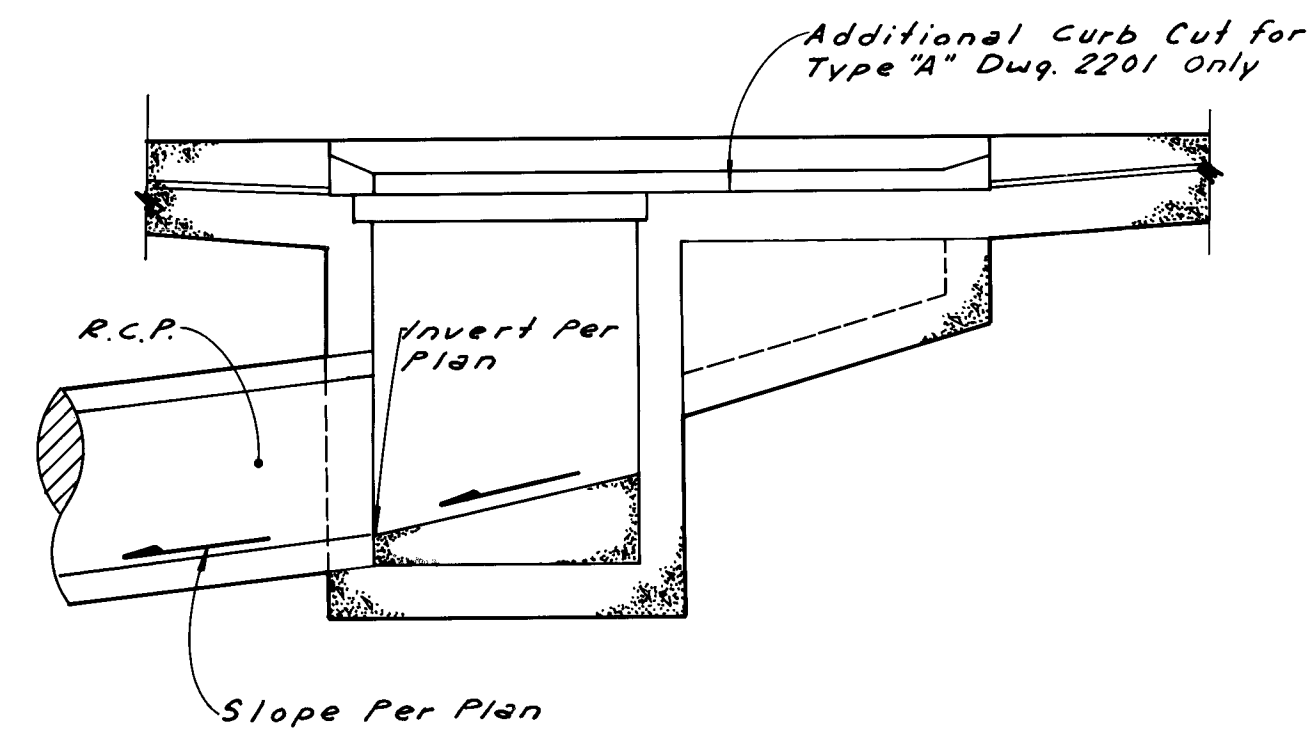
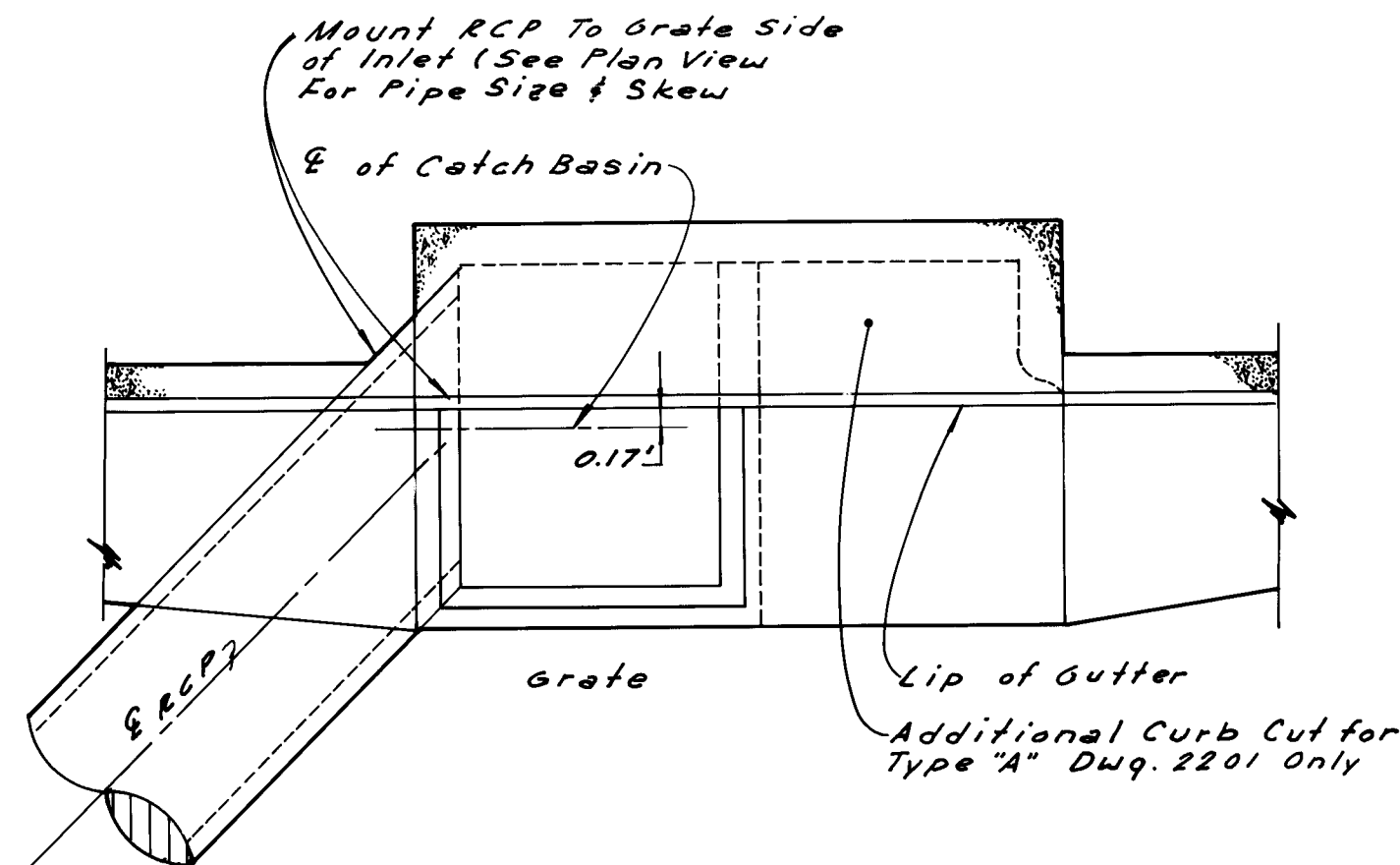
CONCRETE CAP FOR SANITARY SEWER

N.T.S.



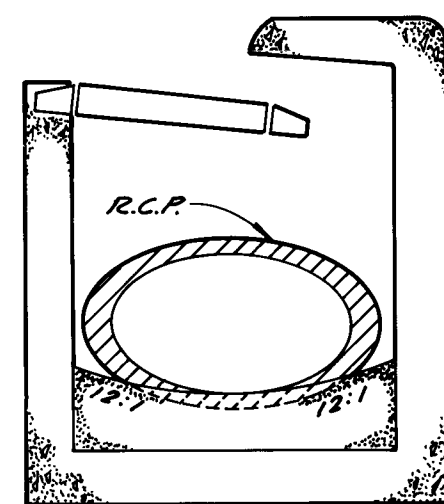
WATERLINE OR GASLINE CONFLICTS WITH STORM SEWER

N.T.S.



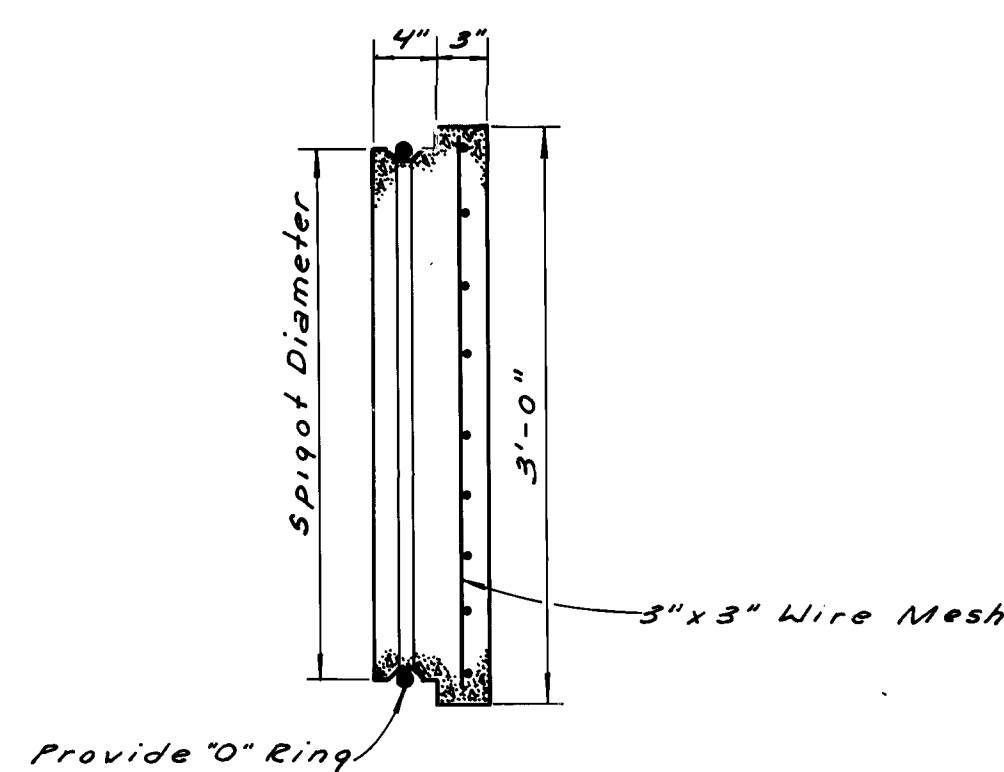
ALTERATION DRAWING 2201

SEE DWG. 2201 CITY SPECS FOR STRUCTURAL DETAIL
N.T.S.



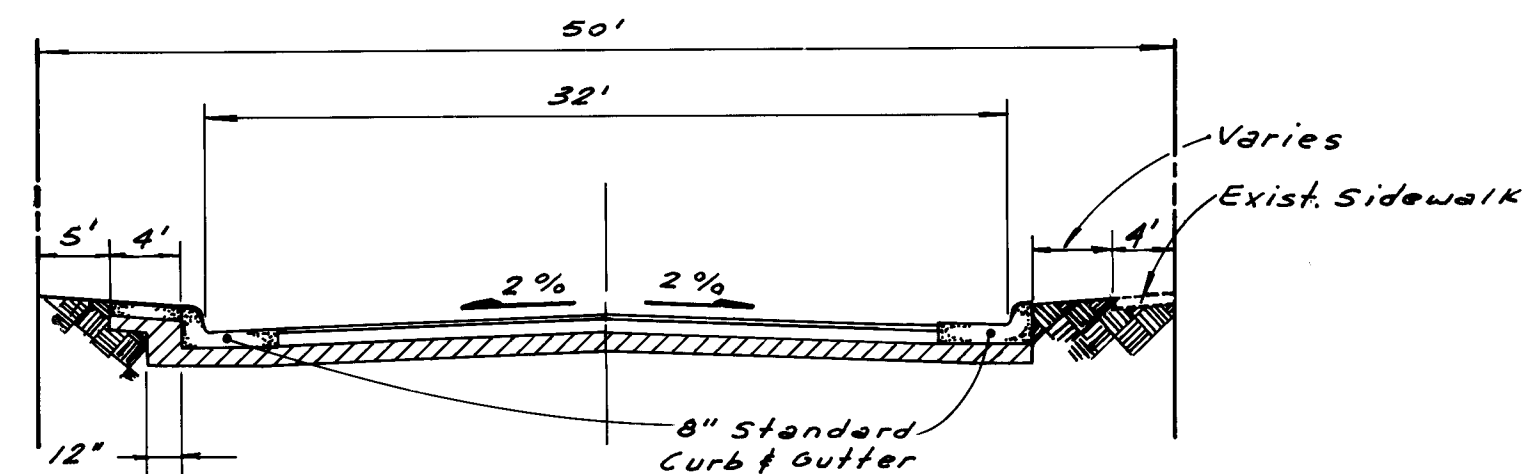
ALTERATION DRAWING 2202

SEE DWG. 2202 CITY SPECS FOR STRUCTURAL DETAIL
N.T.S.



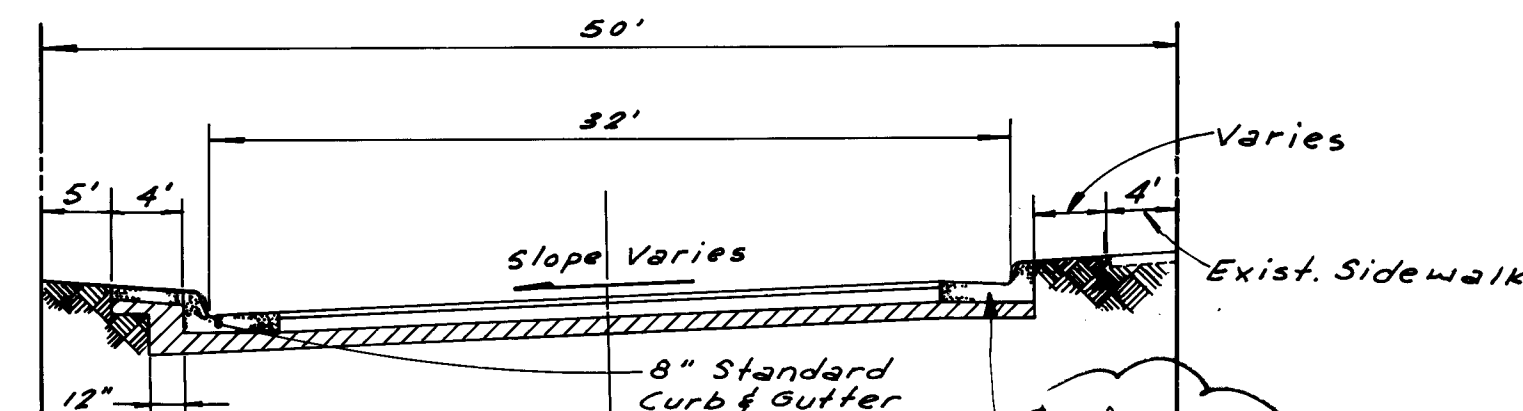
RCP PLUG

PLUG SHALL BE INCIDENTAL TO COST OF STORM DRAIN SYSTEM.
N.T.S.



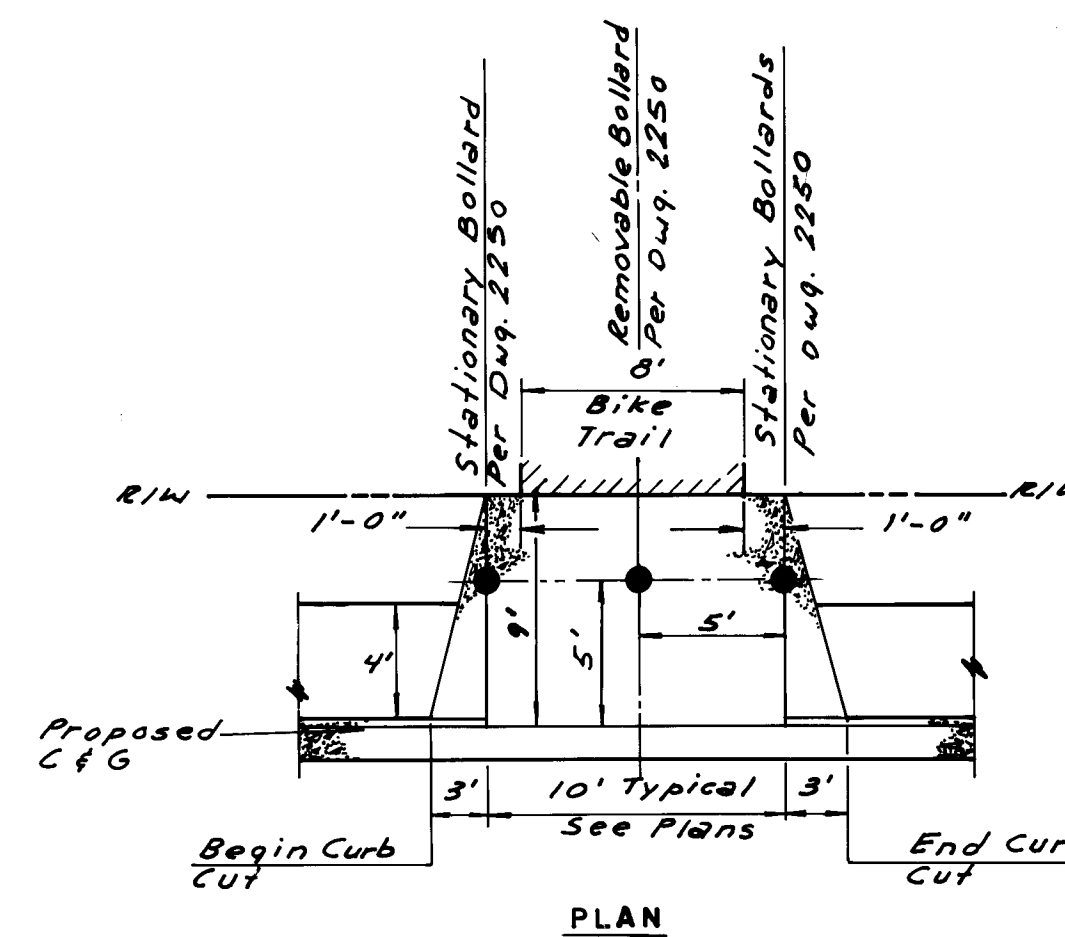
MORNINGSIDE DRIVE SECTION 1

SEE DRAWING 2405 FOR PAVEMENT SECTION

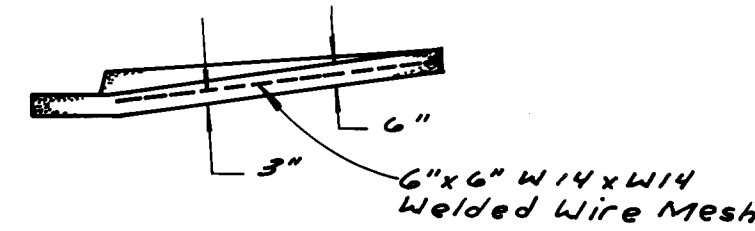


MONROE STREET SECTION 5

SEE DRAWING 2405 FOR PAVEMENT SECTION



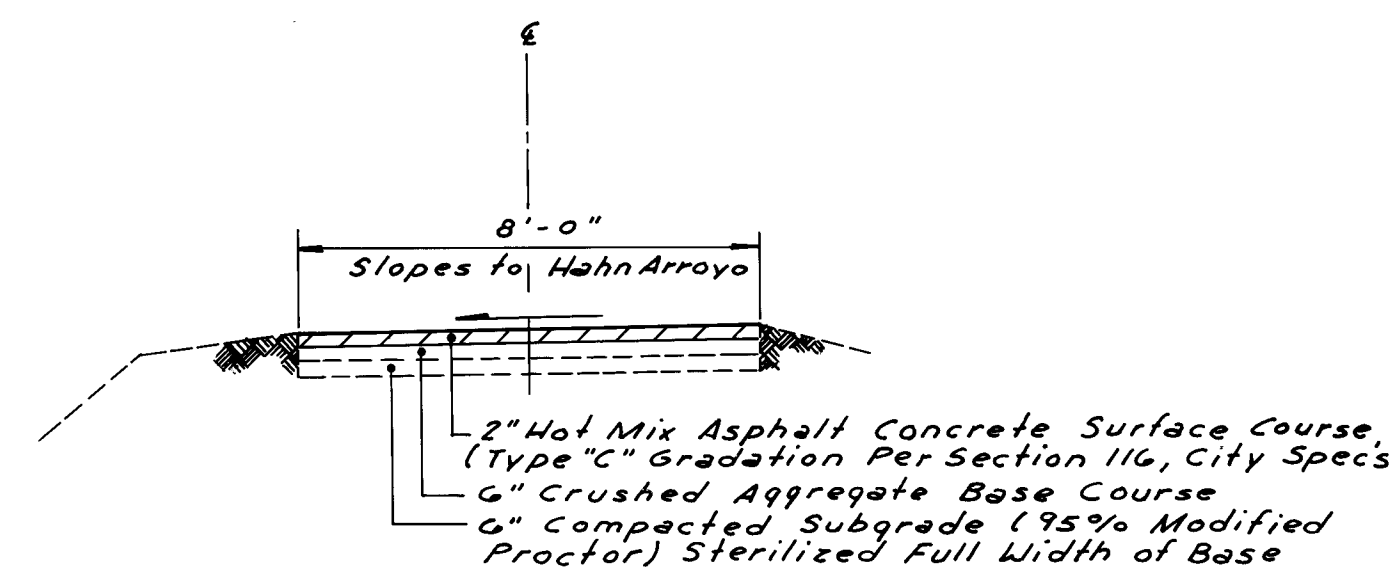
FRONT VIEW



CROSS SECTION

CURB CUT @ STREET CROSSING

SEE DRAWING 2425 FOR DETAIL
NO SCALE



TYPICAL BIKE TRAIL SECTION

N.T.S.

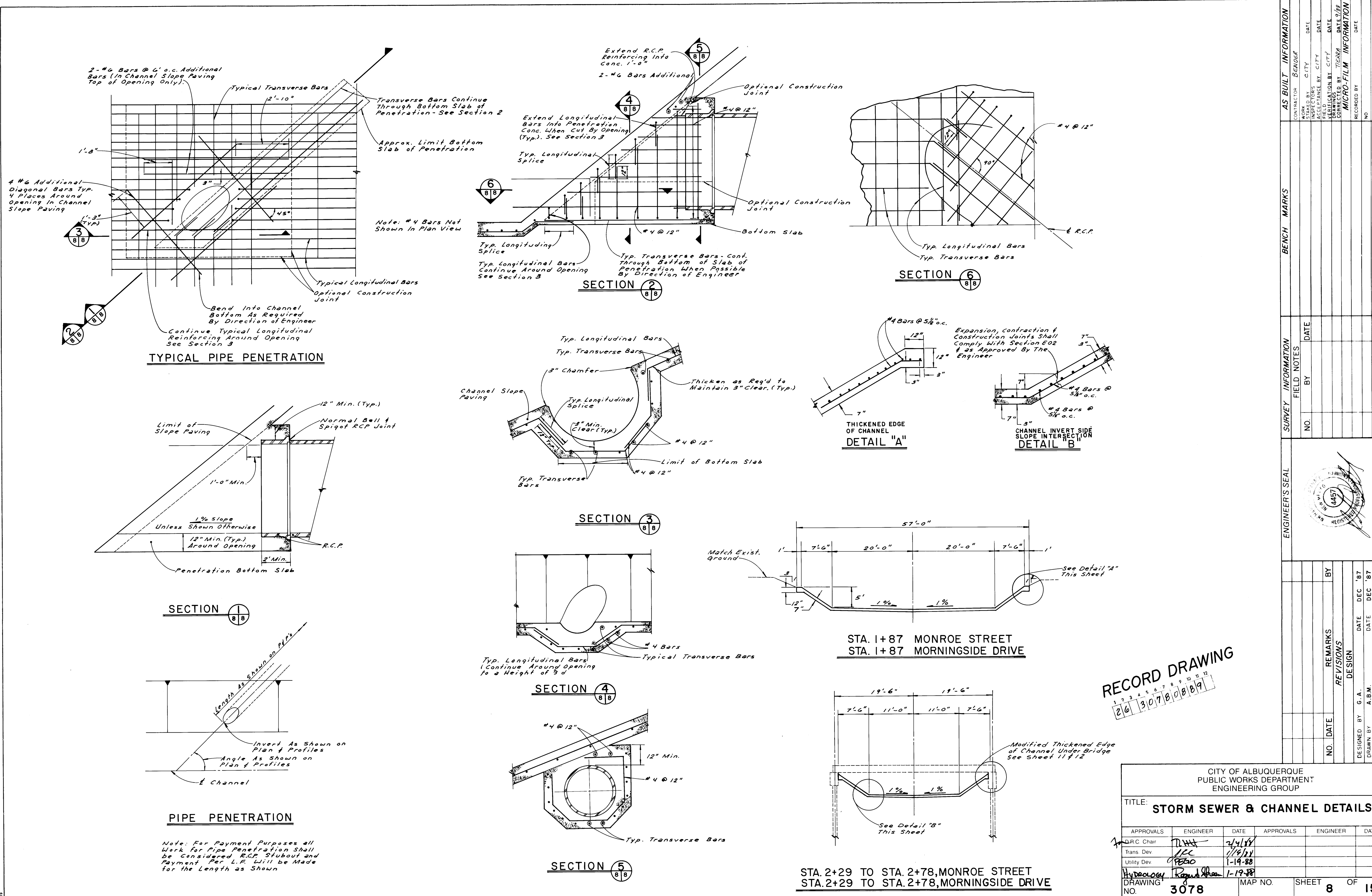
AS BUILT INFORMATION			BENCH MARKS			SURVEY INFORMATION			ENGINEER'S SEAL		
CONTRACTOR	BY	DATE	NO.	BY	DATE	NO.	BY	DATE			
INSPECTOR'S	BY	DATE	NO.	BY	DATE	NO.	BY	DATE			
ACCEPTANCE BY CITY	DATE		NO.	BY	DATE	NO.	BY	DATE			
VERIFICATION BY CITY	DATE		NO.	BY	DATE	NO.	BY	DATE			
DATE 9/88			NO.	BY	DATE	NO.	BY	DATE			
DATE 9/88			NO.	BY	DATE	NO.	BY	DATE			
DATE 9/88			NO.	BY	DATE	NO.	BY	DATE			
DATE 9/88			NO.	BY	DATE	NO.	BY	DATE			

RECORD DRAWING

1 2 3 4 5 6 7 8 9 10 11 12

26 310780789

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: STORM SEWER & STREET DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair		2/4/88			
Trans. Dev.		1/18/88			
Utility Dev.		1-19-88			
Hydrology		1-19-88			
DRAWING NO.	3078	MAP NO.	SHEET 7 OF 15		



AS BUILT INFORMATION				BENCH MARKS				SURVEY INFORMATION				ENGINEER'S SEAL			
CONTRACTOR	BENDER	DATE		NO.	BY	DATE		NO.	BY	DATE					
INSPECTOR'S	DATE														
ACCEPTANCE BY	CITY	DATE													
VERIFICATION BY	CITY	DATE													
CORRECTED BY	TIERRA	DATE													
MICRO-FILM INFORMATION															
RECORDED BY	NO.	DATE													

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: STORM SEWER & CHANNEL DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair	<i>[Signature]</i>	2/4/88			
Trans. Dev.	<i>[Signature]</i>	1/18/88			
Utility Dev.	<i>[Signature]</i>	1-19-88			
DRAWING NO.	3078	MAP NO.		SHEET	8 OF 15

GENERAL NOTES:

1. WORKMANSHIP AND MATERIAL SHALL CONFORM TO CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION.
2. CONCRETE FOR STRUCTURAL CAST-IN-PLACE CONCRETE USE CLASS A. CHAMFER ALL EXPOSED EDGES OF CONCRETE STRUCTURES 3/4 INCH UNLESS NOTED OTHERWISE ON THE DETAILS.
3. REINFORCING BARS. ALL REINFORCING BARS SHALL CONFORM TO AASHTO M-31, GRADE 60, UNLESS NOTED OTHERWISE ON THE DETAILS. DIMENSIONS REFER TO CENTERLINE OF BAR UNLESS NOTED OTHERWISE ON THE DETAILS.
4. STRUCTURAL STEEL TO BE CARBON STEEL CONFORMING TO AASHTO SPECIFICATIONS M-183 UNLESS NOTED OTHERWISE ON THE DETAILS. SHOP PLANS MUST BE APPROVED BY THE ENGINEER BEFORE FABRICATION IS STARTED.
5. FOUNDATION DATA. FOUNDATION DATA SHOWN ON PLANS ARE FOR DESIGNERS ONLY. THE ENGINEER IS NOT RESPONSIBLE FOR ANY INTERPRETATION OR ASSUMPTIONS MADE BY THE CONTRACTORS BASED ON THIS INFORMATION.
6. CONTRACTOR SHALL VERIFY IN THE FIELD ALL DIMENSIONS, ELEVATIONS AND DETAILS PERTAINING TO THE EXISTING STRUCTURE WHICH WILL BE INVOLVED IN THE NEW CONSTRUCTION, BEFORE PROCEEDING WITH THE NEW WORK.
7. TOP OF CONCRETE DECK ELEVATION AT ANY DESIRED POINTS WILL BE FURNISHED BY THE BRIDGE INSPECTOR UPON REQUEST.
8. ALL PREFORMED BITUMINOUS JOINT FILLER SHALL CONFORM TO AASHTO SPECIFICATION M-213. COST OF JOINT FILLER IS INCIDENTAL TO THE COMPLETION OF THE WORK AND NO DIRECT PAYMENT WILL BE MADE THEREFORE.
9. METAL BRIDGE RAILING POSTS AND TUBES SHALL RECEIVE ONE PRIME COAT OF RED LEAD IN CONFORMANCE WITH SECTION 815 OF THE STANDARD SPECIFICATIONS AND TWO COATS OF PAINT CONFORMING TO AASHTO M-70, TYPE 1, CLASS B. PAINT SHALL BE TINTED COLOR SAMPLES SHALL BE SUBMITTED TO THE CITY FOR APPROVAL.

10. STRUCTURAL PRECAST/PRESTRESSED CONCRETE

CONFORM TO CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS SECTION 512, PRECAST PRESTRESSED CONCRETE MEMBERS.

10.1 GENERAL

- A. STRUCTURAL PRECAST/PRESTRESSED CONCRETE CONSTRUCTION SHALL INCLUDE MANUFACTURE, TRANSPORTATION, AND INSTALLATION, AS REQUIRED FOR THE PRECAST PORTIONS OF THE STRUCTURE AS SHOWN AND SPECIFIED, INCLUDING BOTH CONVENTIONALLY AND REINFORCED AND PRETENSIONED MEMBERS
- B. WORK SPECIFIED ELSEWHERE:
1. GROUTING
2. INSERT AND FITTINGS TO BE INSTALLED BY OTHER TRADES

10.2 STANDARDS

- A. MANUFACTURE, TRANSPORTATION AND INSTALLATION SHALL BE BY A COMPANY SPECIALIZING IN PROVIDING PRECAST PRODUCTS AND SERVICES NORMALLY ASSOCIATED WITH PRECAST PRESTRESSED CONCRETE CONSTRUCTION.
- B. THE FOLLOWING SPECIFICATIONS, STANDARDS AND CODES, LATEST EDITIONS SHALL GOVERN WITH MODIFICATIONS AS SPECIFIED HEREIN:
1. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, AASHTO
2. AWS D12.1 RECOMMENDED PRACTICES FOR WELDING REINFORCING STEEL, METAL INSERT AND CONNECTIONS IN REINFORCED CONCRETE CONSTRUCTION.

10.3 SHOP DRAWINGS AND SUBMITTALS

- A. THE MANUFACTURER SHALL PREPARE AND SUBMIT TO THE ENGINEER 6 SETS OF SHOP DRAWINGS FOR APPROVAL AND SHALL NOT PROCEED WITH MANUFACTURE PRIOR TO APPROVAL OF DRAWINGS BY THE ENGINEER AND GENERAL CONTRACTOR.
- B. SHOP DRAWINGS SHALL BE COMPLETE AND SHALL INCLUDE A LAYOUT PLAN; CONNECTION AND ANCHORAGE DETAILS; SIZE AND LOCATION OF REINFORCING STEEL, PRESTRESSING STRAND AND INSERT; AND MEMBER IDENTIFICATION MARKS. THESE IDENTIFICATION MARKS SHALL APPEAR ON THE MANUFACTURED UNITS TO FACILITATE CORRECT FIELD PLACEMENT.
- C. 6 SETS OF DESIGN CALCULATIONS, OR GRAPHIC DESIGN OF MANUFACTURER'S STANDARD UNITS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- D. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO CHECK THE SHOP DRAWINGS AND TO ENSURE THEIR CONFORMANCE WITH THE OVERALL BUILDING DIMENSIONS, AND TO RESOLVE ANY CONFLICTS BETWEEN THE PRECAST/PRESTRESSED CONCRETE WORK, HIS WORK AND THAT OF OTHER TRADES, PRIOR TO HIS APPROVAL OF THE SHOP DRAWINGS.

10.4 TESTING

- A. SAMPLING AND TESTING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S STANDARD PROCEDURE, SUBJECT TO APPROVAL BY THE ENGINEER.

10.5 DESIGN

- A. PRECAST/PRESTRESSED CONCRETE SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, AASHTO. DESIGN SUPPORT LIVE AND DEAD LOADS INDICATED IN THE DRAWINGS.

10.6 CONCRETE STRENGTH:

- A. CONCRETE STRENGTH SHALL CONFORM TO THE REQUIREMENTS FOR RELEASE STRENGTH AND 28-DAY STRENGTH SHOWN ON THE STRUCTURAL DRAWINGS OR IN APPROVED DESIGN CALCULATIONS

10.7 PRESTRESS FORCE:

- A. TENSIONING AND RELEASING OF STRESSING STRAND MAY BE BY EITHER SINGLE OR MULTIPLE STRAND PROCEDURES.

10.8 OPENINGS:

- A. WHERE PRACTICAL, PRIMARILY ON THIN SECTIONS, THE MANUFACTURER SHALL ONLY PROVIDE FOR THOSE OPENINGS, 6 IN. OR LARGER AS SHOWN ON THE STRUCTURAL DRAWINGS. OTHER OPENINGS, INSERT, AND FITTINGS SHALL BE LOCATED, FURNISHED, AND INSTALLED BY THE TRADE REQUIRING SAME AFTER THE PRECAST/PRESTRESSED PRODUCTS HAVE BEEN ERECTED.

10.9 ATTACHMENTS:

- A. SUBJECT TO APPROVAL OF THE ENGINEER, PRECAST/PRESTRESSED PRODUCTS MAY BE DRILLED OR "SHOT" PROVIDED NO CONTACT IS MADE WITH THE PRESTRESSING STEEL. SHOULD SPALLING OCCUR, IT SHALL BE REPAIRED BY THE TRADE DOING THE DRILLING OR SHOOTING.

10.10 TOLERANCES:

- A. THE DIMENSIONS OF PRODUCTS SHALL BE AS SHOWN ON THE PLANS. PRODUCTS SHALL BE FABRICATED AND FURNISHED TO THE FOLLOWING TOLERANCES: CASTING TOLERANCE TO BE IN ACCORDANCE WITH THE LATEST EDITION OF P.C.I. QUALITY CONTROL MANUAL MNL-116.

10.11 FINISHES:

- A. STANDARD UNDERSIDE: RESULTING FORM CASTING AGAINST APPROVED FORMS USING GOOD INDUSTRY PRACTICE IN CLEANING OF FORMS, DESIGN OF CONCRETE MIX, PLACING AND CURING. SMALL FURNACE HOLES CAUSED BY AIR BUBBLES, NORMAL FORM JOINT MARKS, AND MINOR CHIPS AND SPALLS WILL BE TOLERATED, BUT NO MAJOR OR UNSIGHTLY IMPERFECTIONS, HONEYCOMB, OF STRUCTURAL DEFECTS WILL BE PERMITTED.
- B. STANDARD TOP: RESULT OF VIBRATING SCREED AND ADDITIONAL HAND FINISHING AT PROJECTIONS. NORMAL COLOR VARIATIONS, MINOR INDENTATIONS DUE TO REQUIRED COVERING, AND MINOR CHIPS AND SPALLS WILL BE PERMITTED. NO MAJOR IMPERFECTIONS, HONEYCOMB, OR STRUCTURAL DEFECTS WILL BE PERMITTED.
- C. EXPOSED VERTICAL ENDS: STRANDS SHALL BE RECESSED AND THE ENDS OF THE MEMBER WILL RECEIVE SACKED FINISH.

10.12 TRANSPORTING

- A. CARE SHALL BE USED IN TRANSPORTING PRECAST/PRESTRESSED UNITS TO THE JOBSITE. MEMBERS SHALL BE HANDLED IN SUCH MANNER AS TO PREVENT EXCESSIVE STRESSES, SPALLING OR UNDERSIRABLE CRACKING.

10.13 QUALIFIED ERECTOR:

- A. INSTALLATION OF PRECAST/PRESTRESSED CONCRETE SHALL BE PERFORMED BY THE MANUFACTURER OR A COMPETENT ERECTION CONTRACTOR HAVING EXPERIENCE IN THE ERECTION OF THIS TYPE OF MATERIAL. MEMBERS SHALL BE LIFTED BY MEANS OF SUITABLE LIFTING DEVICES AT POINTS PROVIDED BY THE MANUFACTURER. TEMPORARY SHORING AND BRACING, IF NECESSARY, SHALL COMPLY WITH MANUFACTURER'S RECOMMENDATIONS.

10.14 ALIGNMENT:

- A. MEMBERS SHALL BE PROPERLY ALIGNED AND LEVELED AS REQUIRED BY THE APPROVED SHOP DRAWINGS. VARIATIONS BETWEEN ADJACENT MEMBERS SHALL BE REASONABLY LEVELED OUT BY ACTING, LOADING, OR ANY OTHER FEASIBLE METHOD AS RECOMMENDED BY THE MANUFACTURER AND ACCEPTABLE TO THE ENGINEER.

10.15 REPAIR:

- A. MEMBERS DAMAGED DURING ERECTION MAY BE REPAIRED PROVIDING SUCH DAMAGE DOES NOT IMPAIR THE STRUCTURAL ADEQUACY OR APPEARANCE.

DESIGN DATA

DESIGN IS IN ACCORDANCE WITH AASHTO SPECIFICATIONS, DATED 1983 & INTERIMS TO DATE.

DESIGN STRESSES:
STRUCTURAL STEEL: AASHTO M-183, $f_s=20,000$ PSI
REINFORCED CONCRETE: $f'_c=3,000$ PSI @ 21 DAYS
 $f'_c=1,200$ PSI, $f_s=24,000$ PSI
 $n=10$

LIVELOAD: HS 20-44
WEARING SURFACE: 1/4" MONOLITHIC CONCRETE PLUS 30 PSF ALLOWANCE FOR WEAR SURFACE.

HORIZONTAL EARTH PRESSURE: 36#/CU. FT. EQUIVALENT FLUID PRESSURE AND 2 FOOT SURCHARGE.

WIND VELOCITY: 80 M.P.H.

PRECAST PRESTRESSED CONCRETE: DESIGN ACCORDING TO AASHTO SPECIFICATION, DATED 1983 & INTERIMS TO DATE. $f'_c=5,000$ PSI
 $f'_c=1=4,350$ PSI. 1/2"Ø HIGH STRENGTH SEVEN-WIRE STRAND:
 $f'_s=41,300$ lbs PER STRAND, $f_{sy}=35,100$ lbs. PER STRAND.

DRAWINGS REQUIRED:

GENERAL NOTES AND ESTIMATED QUANTITIES
STRUCTURE PLAN AND PROFILE
GIRDER PLAN AND SECTION
ABUTMENT DETAILS

METAL BRIDGE RAILING - TYPE C
EXCAVATION AND BACKFILL
FOR BRIDGES SERIAL BEB-001-04

SUPPLEMENTAL SPECIFICATION

SPECIFICATION FOR AUGERED-PRESSURE GROUTED PILING INSTALLATION.

11. L3 x L3 x 1/4 NOSING, ELASTOMERIC BEARING PAD, COMPRESSION JOINT, WATERPROOFING MEMBRANE, BITUMINOUS JOINT FILLER SHALL BE INCIDENTAL TO THE COST OF OTHER ITEMS FOR THE COMPLETION OF THE WORK AND NO DIRECT PAYMENT WILL BE MADE THEREFOR.

12. REBAR SHALL BE INCIDENTAL TO THE COST OF CONCRETE.

ESTIMATED QUANTITIES

ITEM	UNIT	MORNINGSIDE				MONROE			
		SUPERSTRUCTURE	NORTH ABUT.	SOUTH ABUT.	TOTAL	SUPERSTRUCTURE	NORTH ABUT.	SOUTH ABUT.	TOTAL
STRUCTURE EXCAVATION FOR BRIDGES	CU.YDS.		10	10	20		10	10	20
PRECAST/PRESTRESSED BEAM UNITS -18"x 60"	LIN.FT.	280			280	280			280
SUPERSTRUCTURE CONCRETE, BRIDGE SIDEWALK AND CURB, CLASS A	CU.YDS.	9.3			9.3	9.3			9.3
METAL RAILING, TYPE C	LIN.FT.	97.7			97.7	97.7			97.7
AUGERED CAST-IN-PLACE CONCRETE PILES	LIN.FT.		210	210	420		210	210	420
SUBSTRUCTURE CONCRETE, CLASS A	CU.YDS.		12.48	12.48	24.96		13.82	14.09	27.91

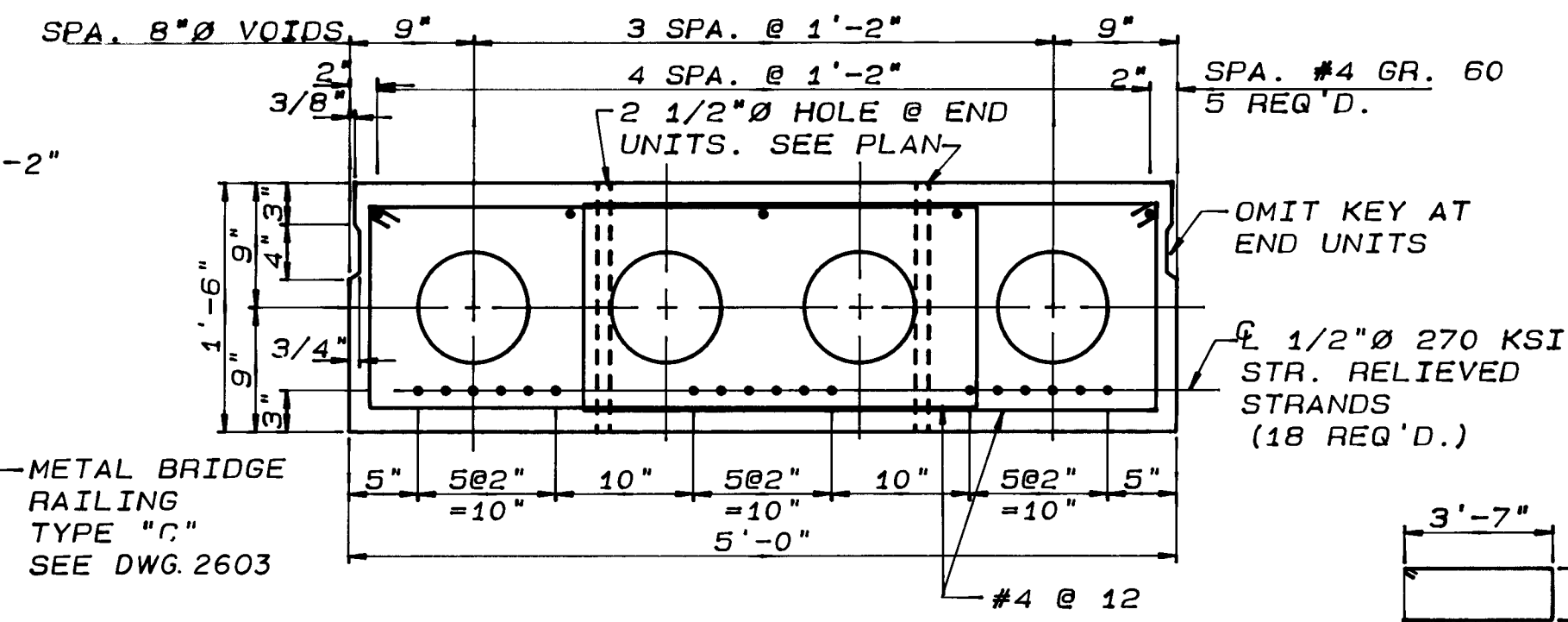
RECORD DRAWING
26 9107809819

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: **BRIDGE GENERAL NOTES & ESTIMATED QUANTITIES**

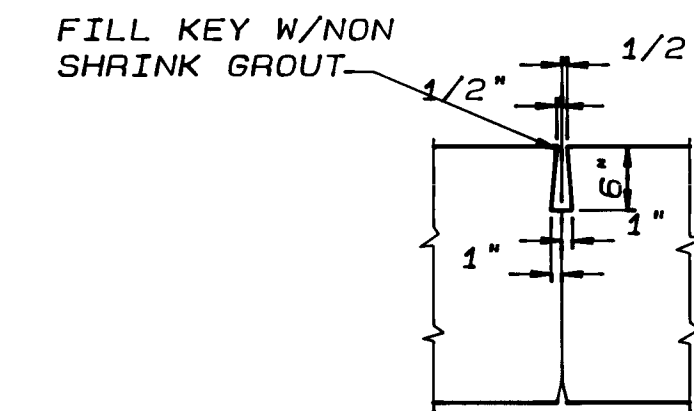
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>Robert J. ...</i>	2/1/88	Liquid Waste	<i>PEGO</i>	1-19-88
A.C.E. Design	<i>...</i>	"	Traffic	<i>ELC</i>	1/19/88
A.C.E. - Hydrology	<i>...</i>	1-17-88	Water	<i>PEGO</i>	1-19-88

DRAWING NO. **3078** MAP NO. SHEET **9** OF **15**

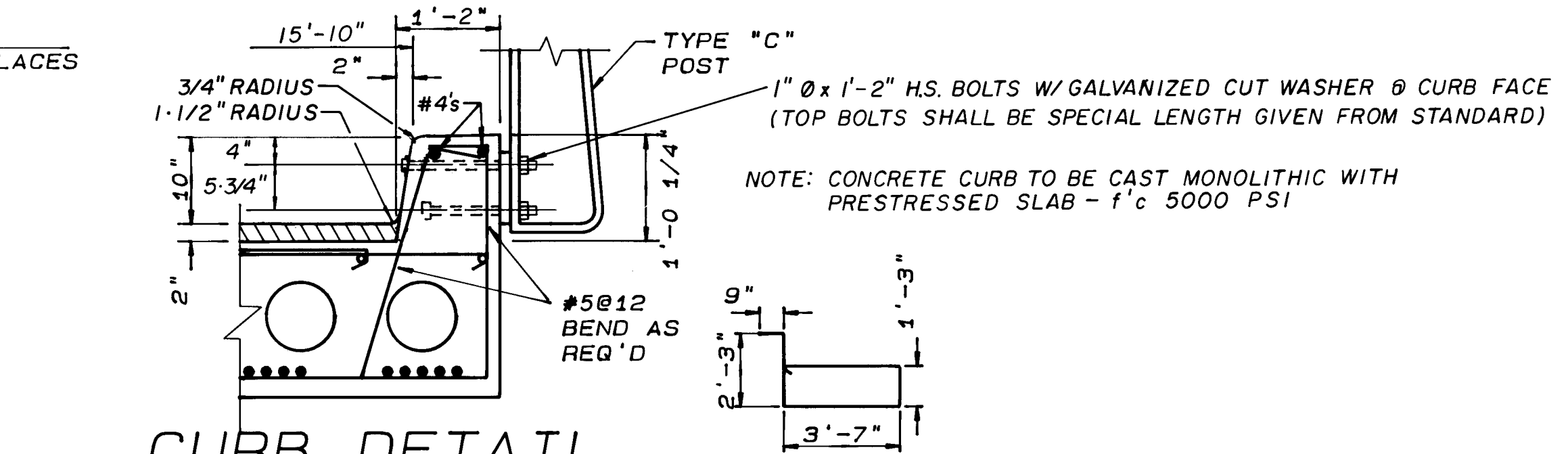


SCALE 1"=1'-0"

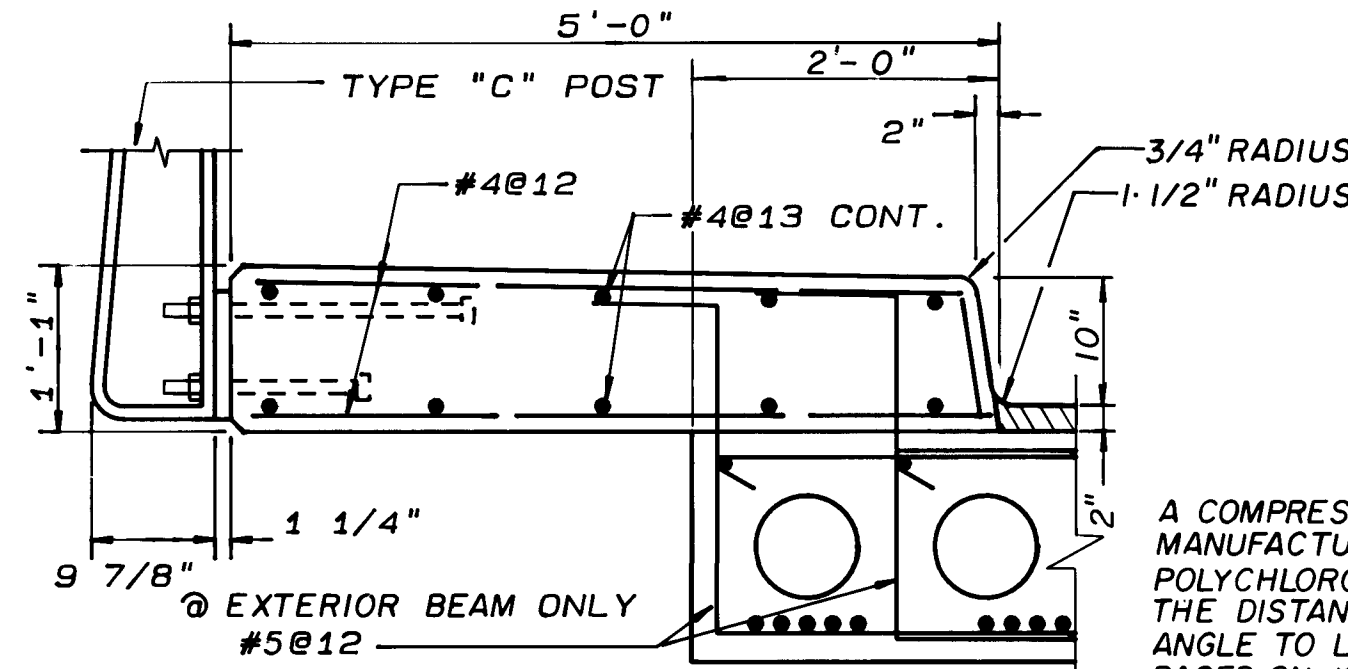
NOTE: SEE STIRRUP
EXTENSION REQMTS.
AT SIDEWALK & CURB
BEAM UNITS ONLY



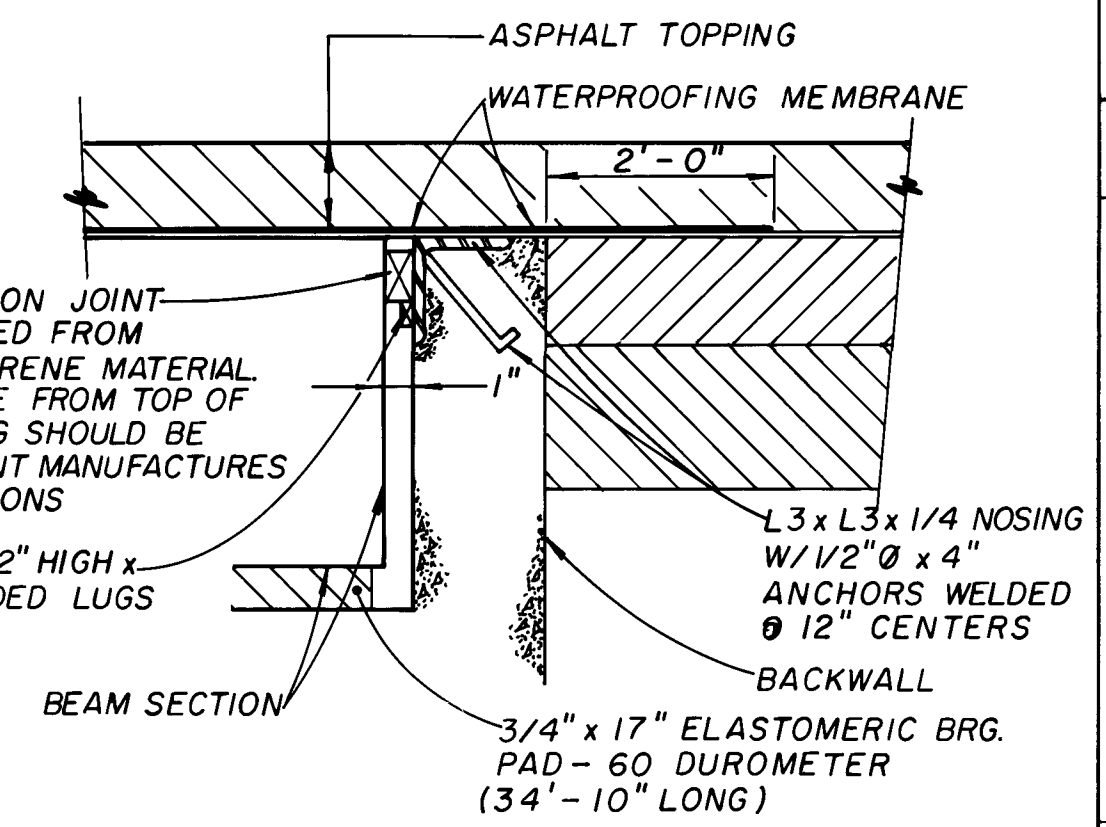
DETAIL 1
TYP. 6 PLACES



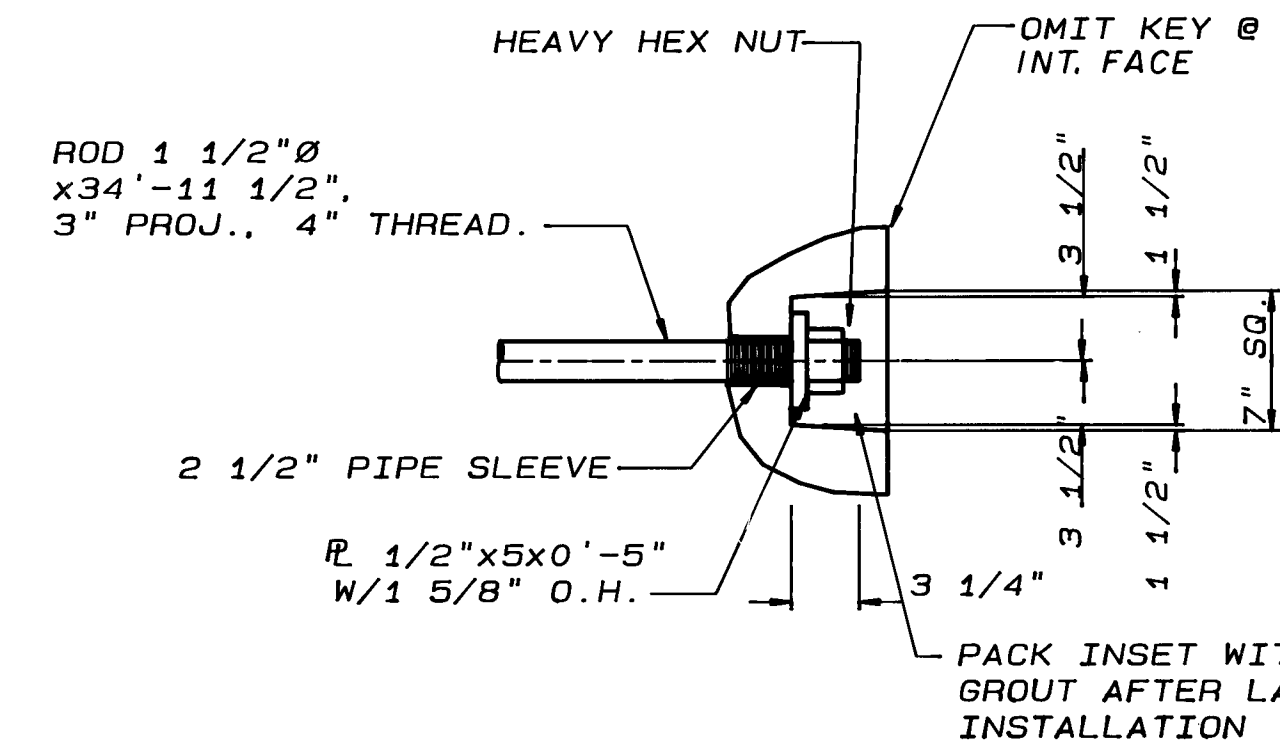
SCALE 3-4"=1"-0



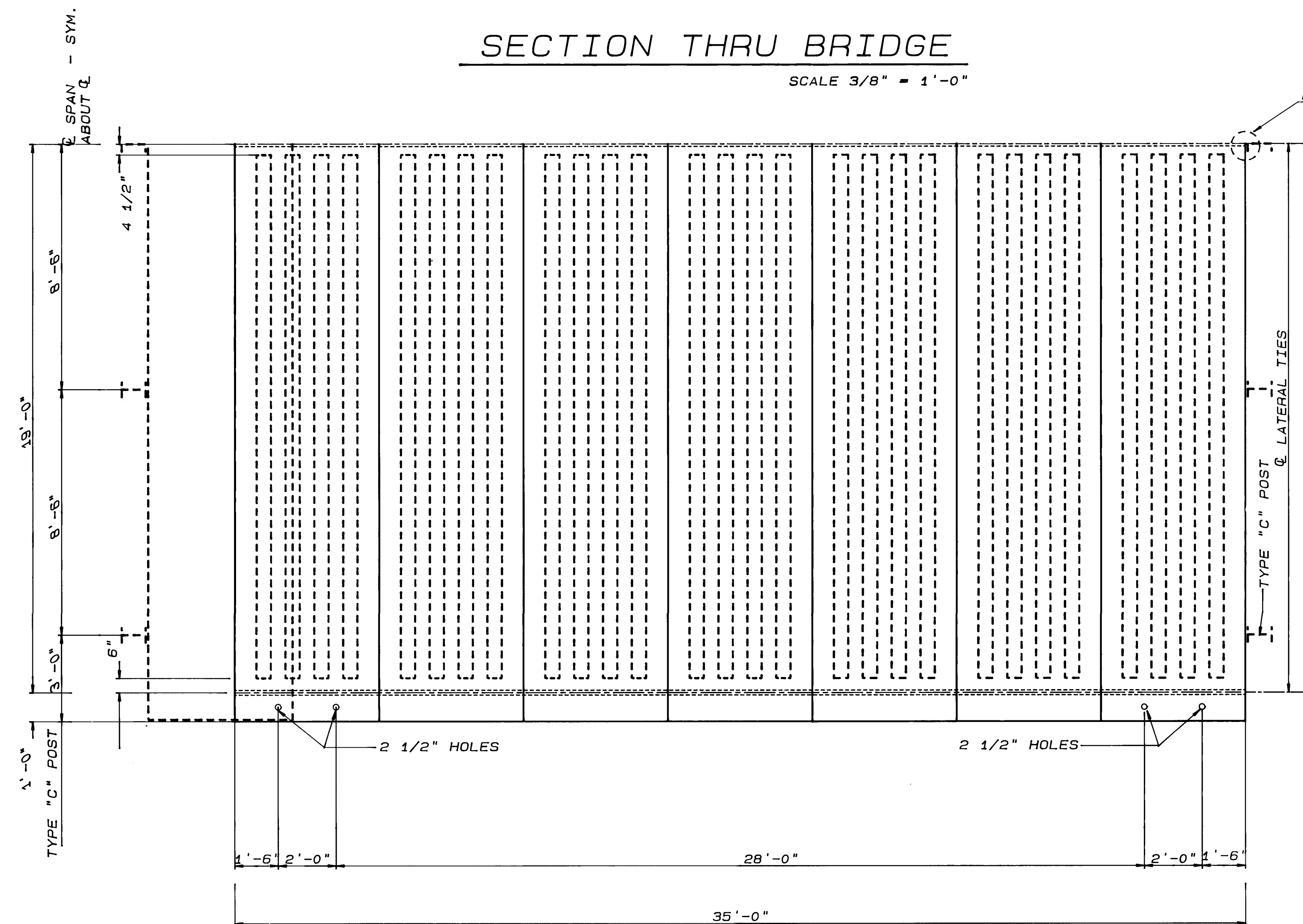
SCALE 3-4"=1"-0



N. T. S.

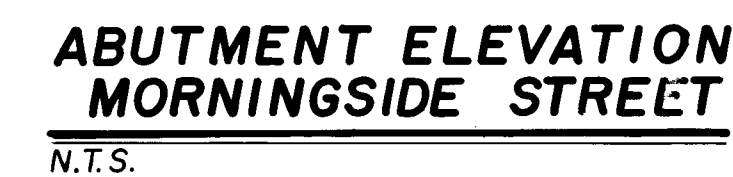


DETAIL 1 26 36
LATERAL TIE AND INSET

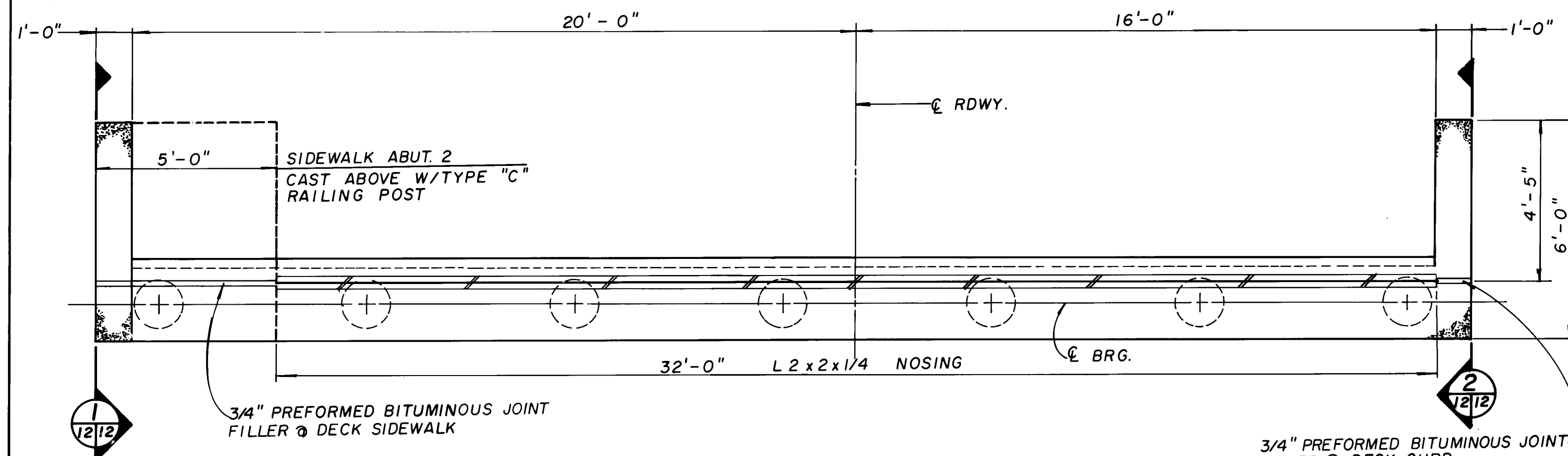


SCALE 3/8" = 1'-0"

SHEET 10 OF 15			DECK PLAN DIVISION DEPARTMENT OFFICE		
DESIGNED BY C.S. DRAWN BY — CHECKED BY R.C.			DATE DEC '87 DATE — DATE DEC '87		
DESIGN			REVISIONS		
NO.	DATE	REMARKS	BY		
			ENGINEER'S SEAL		
SURVEY FIELD NOTES NO. BY DATE			BENCH MARKS		
AS BUILT INFORMATION CONTRACTOR BENDER WORK STARTED BY CITY DATE INSPECTIONS ACCEPTANCE BY CITY DATE VERIFICATION BY CITY DATE DRAWINGS CONTROLLED BY TIER 904 DATE 9/88 MICRO-FILM INFORMATION RECORDED BY DATE NO					

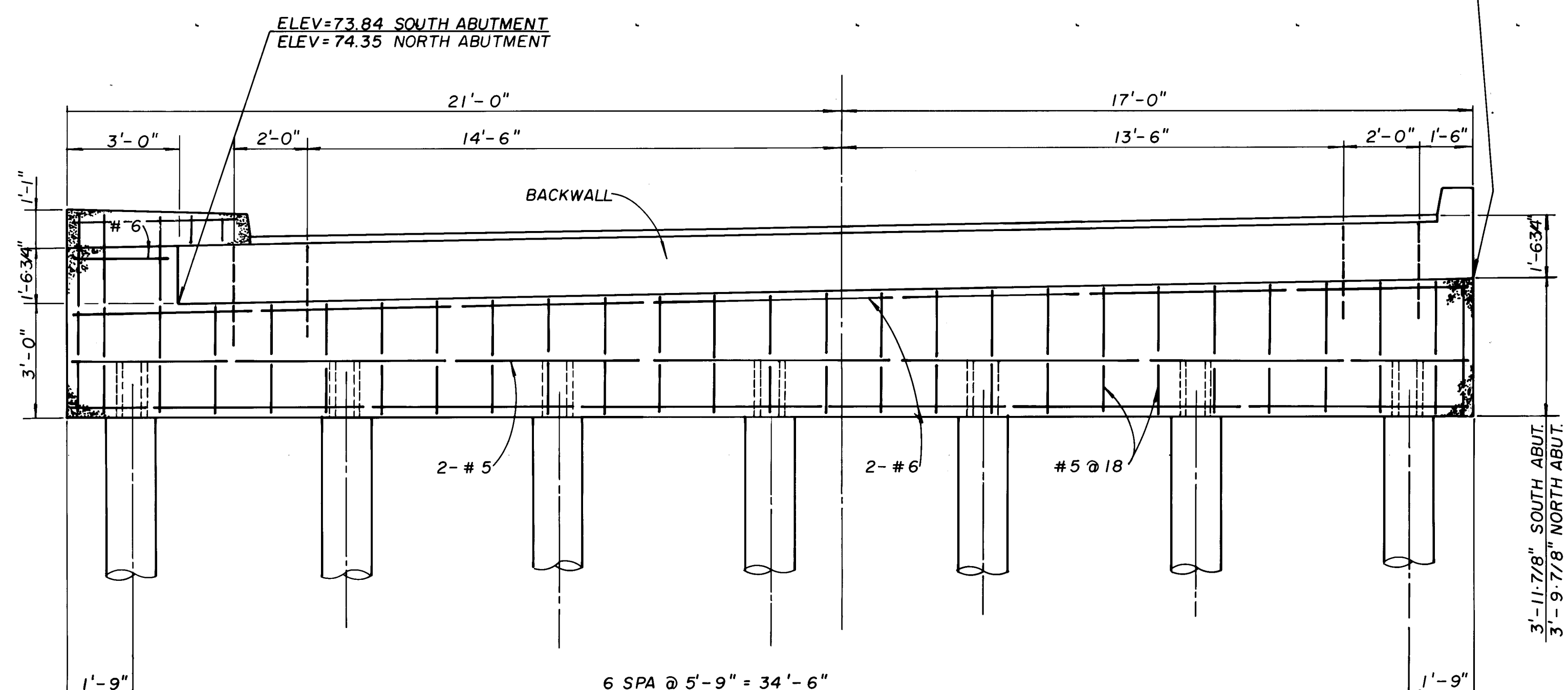


CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
TITLE: MORNINGSIDE DRIVE ABUTMENT & WINGWALL DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	2/1/88	Liquid Waste	PEGO	1-19-88
A C E - Design	<i>[Signature]</i>		Traffic	<i>[Signature]</i>	1/14/88
A C E - Hydrology	<i>[Signature]</i>	1-19-88	Water	PEGO	1-19-88
DRAWING NO. 3078		MAP NO.		SHEET 11 OF 15	



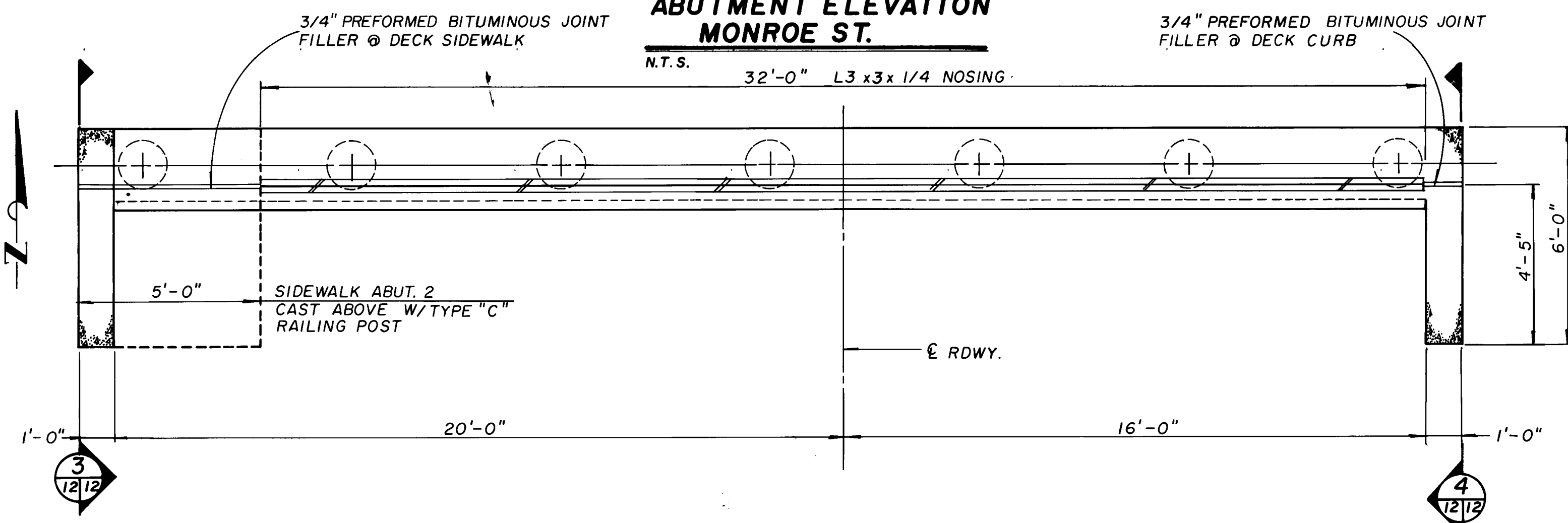
NORTH ABUTMENT PLAN
N.T.S.

3/4" PREFORMED BITUMINOUS JOINT FILLER @ DECK CURB
ELEV. = 74.75 SOUTH ABUTMENT
ELEV. = 75.11 NORTH ABUTMENT

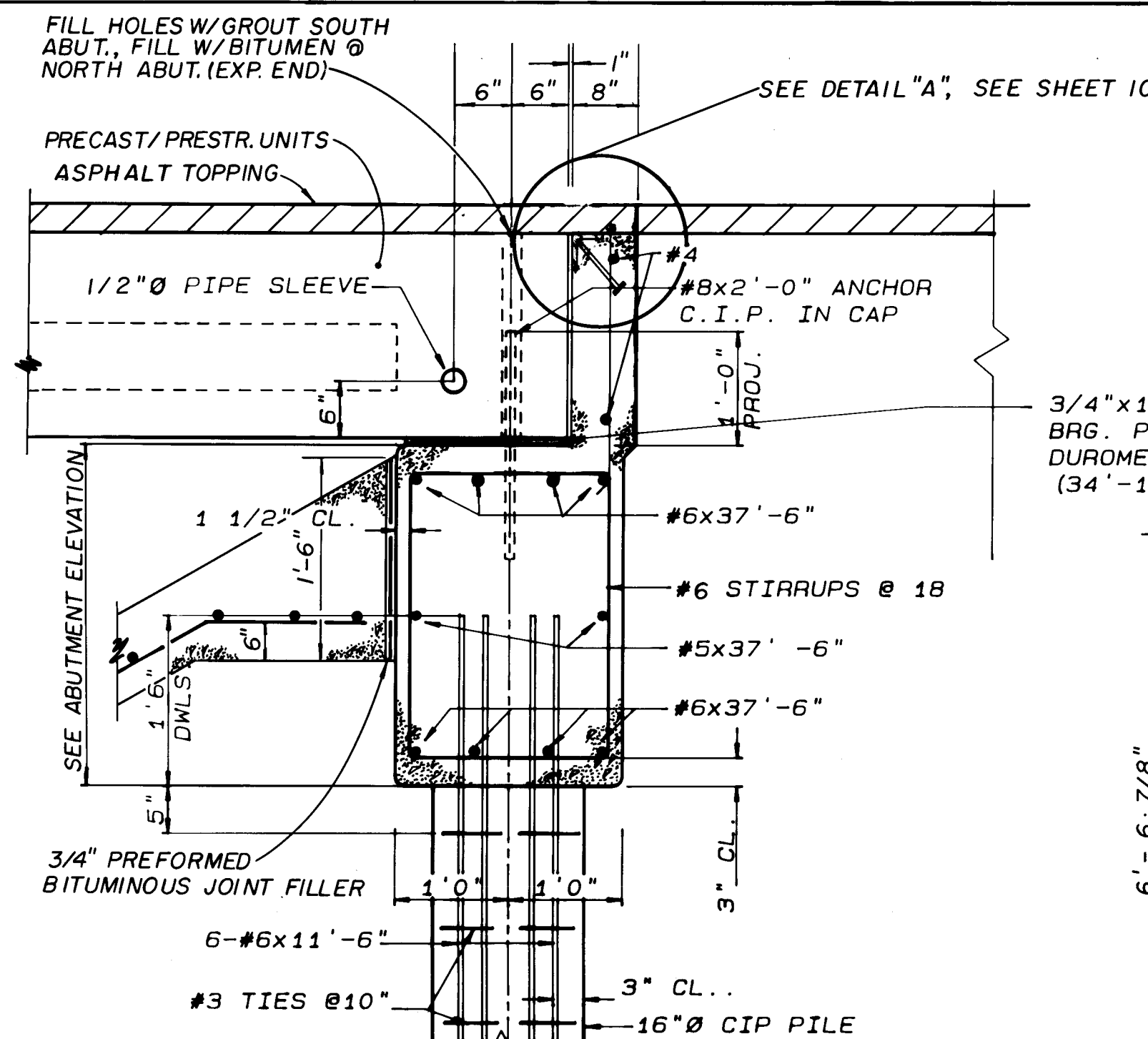


**ABUTMENT ELEVATION
MONROE ST.**
N.T.S.

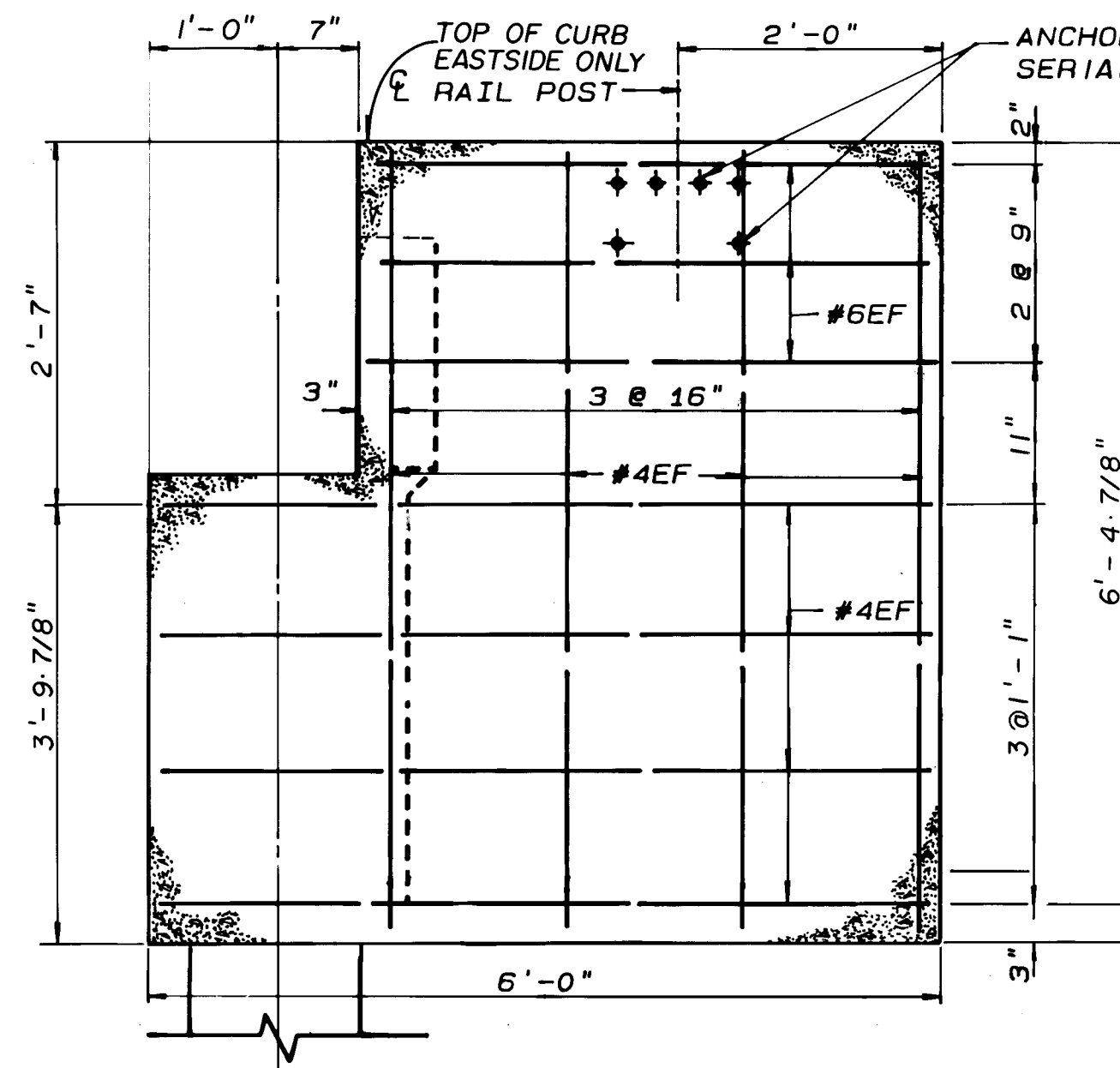
3/4" PREFORMED BITUMINOUS JOINT FILLER @ DECK CURB



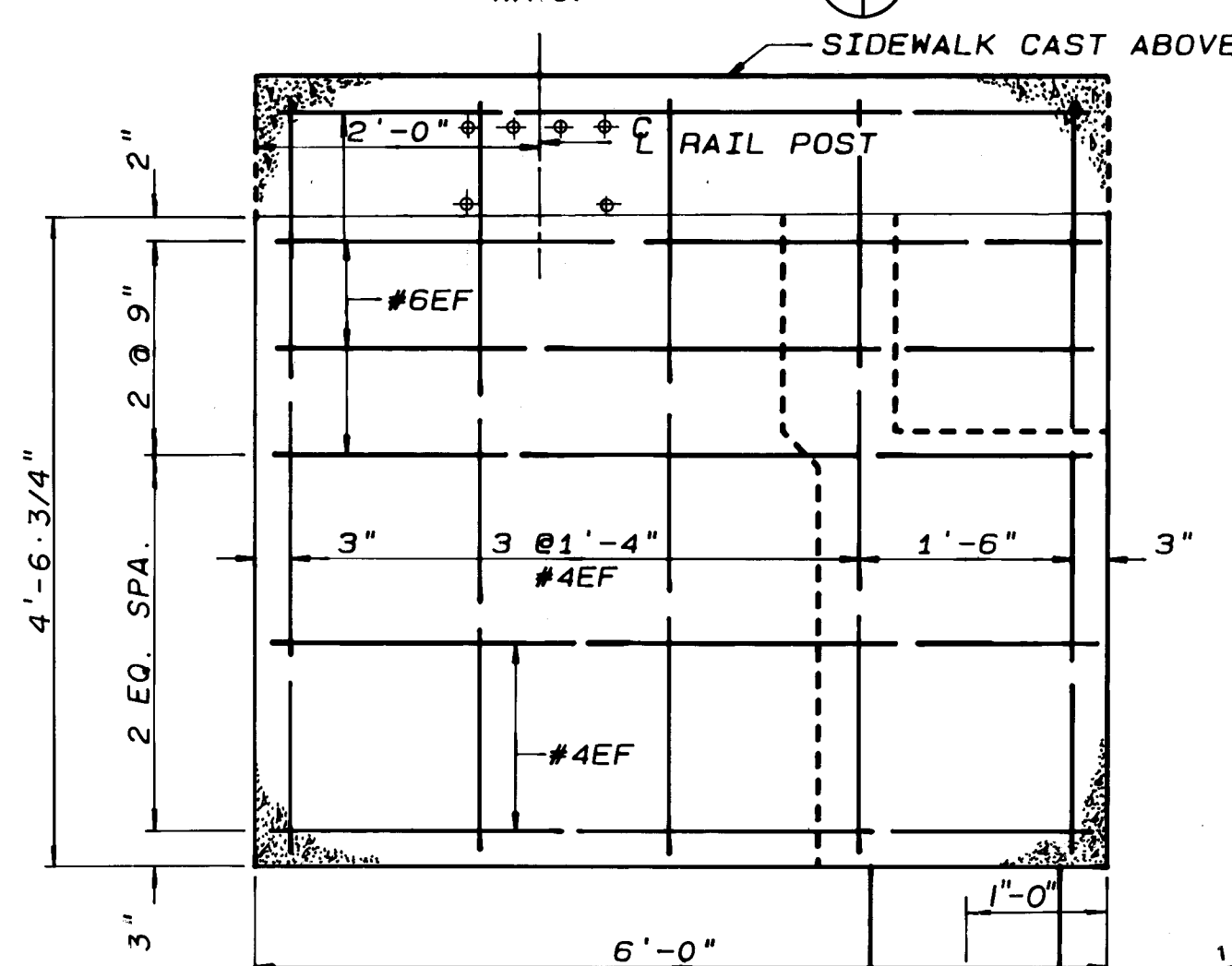
SOUTH ABUTMENT PLAN
N.T.S.



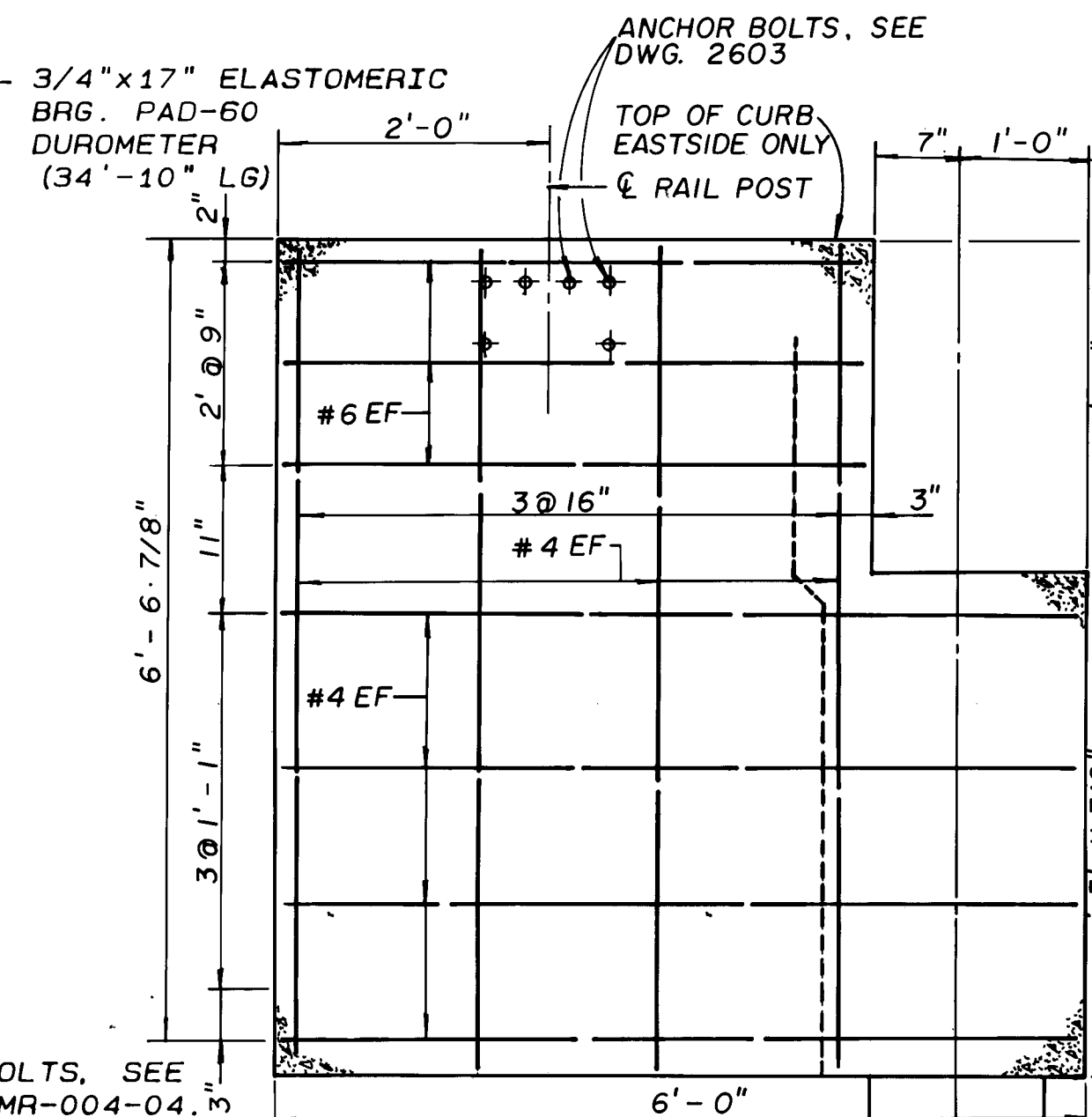
ABUTMENT SECTION
N.T.S.



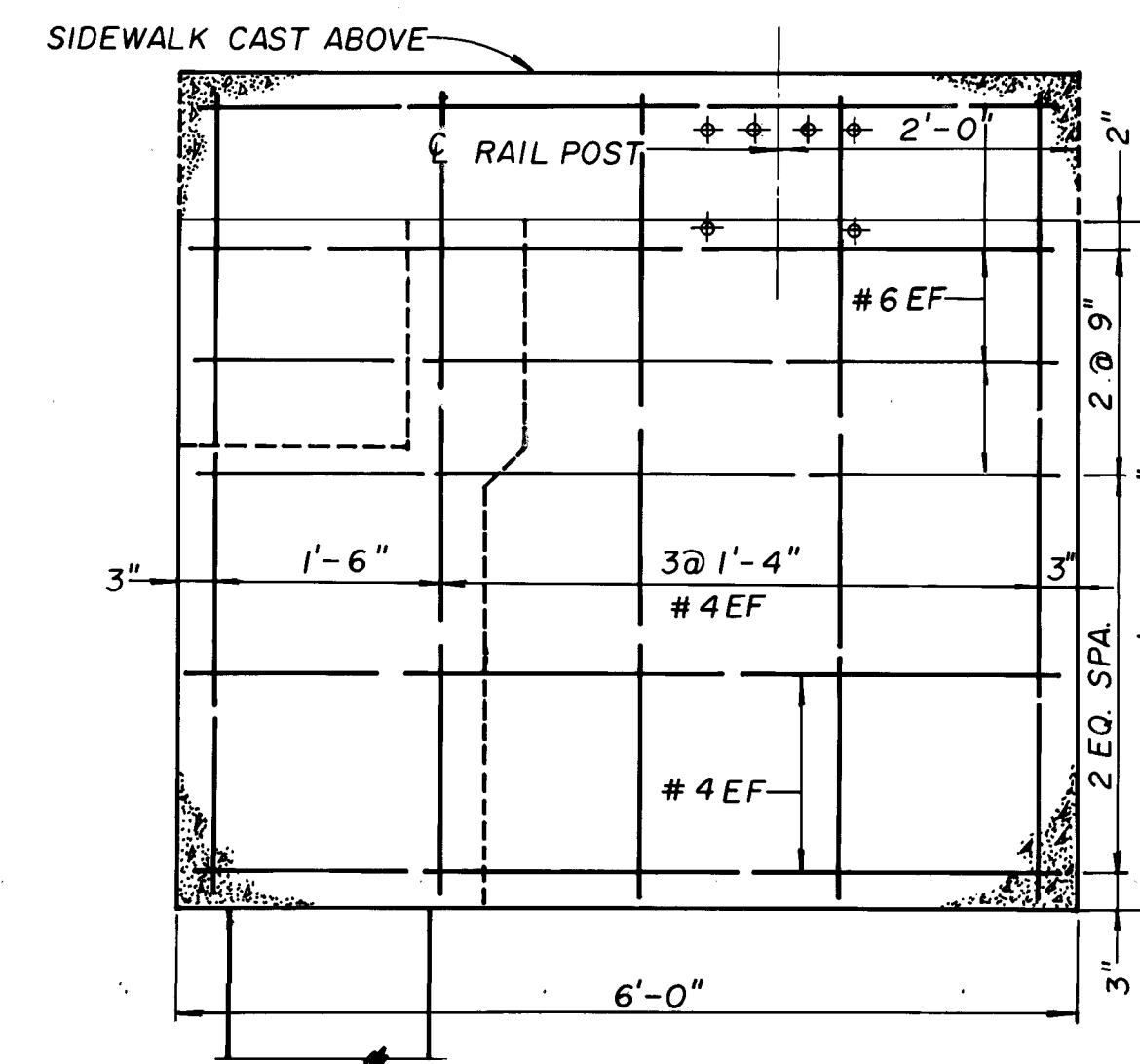
SECTION 2
N.T.S.



SECTION 1
N.T.S.



SECTION 4
N.T.S.



SECTION 3
N.T.S.

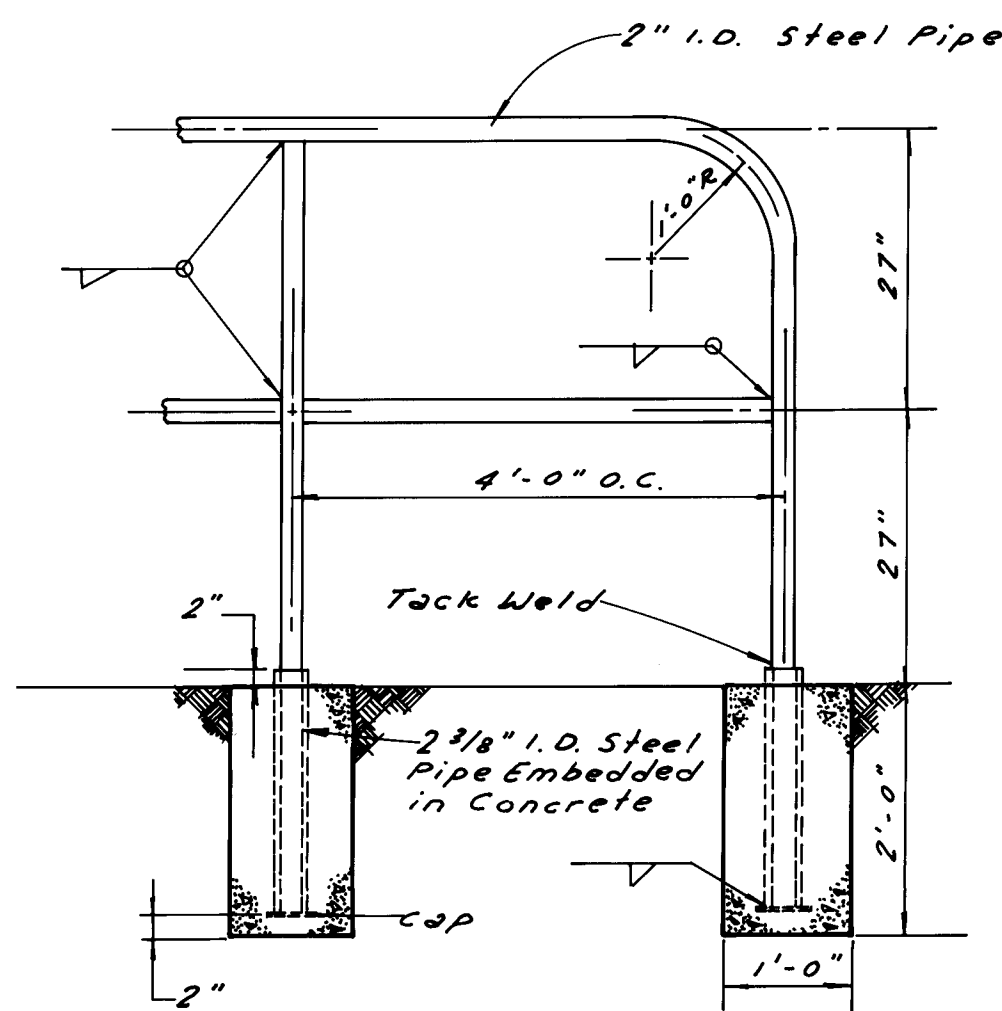
RECORD DRAWING

CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION			
TITLE: MONROE STREET ABUTMENT & WINGWALL DETAILS			
APPROVALS	ENGINEER	DATE	APPROVALS
City Engineer	Robert Lopez	2/1/88	Liquid Waste
A.C.E. Design	DAVE	1/19/88	Traffic
A.C.E. Hydrology	N/A	1-19-88	Water
DRAWING NO. 3078		MAP NO.	SHEET 12 OF 15

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
1	12/12	1	12/12	1	12/12	1	12/12
2	12/12	2	12/12	2	12/12	2	12/12
3	12/12	3	12/12	3	12/12	3	12/12
4	12/12	4	12/12	4	12/12	4	12/12
5	12/12	5	12/12	5	12/12	5	12/12
6	12/12	6	12/12	6	12/12	6	12/12
7	12/12	7	12/12	7	12/12	7	12/12
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9	12/12	9	12/12	9	12/12	9	12/12
10	12/12	10	12/12	10	12/12	10	12/12
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12	12/12	12	12/12	12	12/12	12	12/12

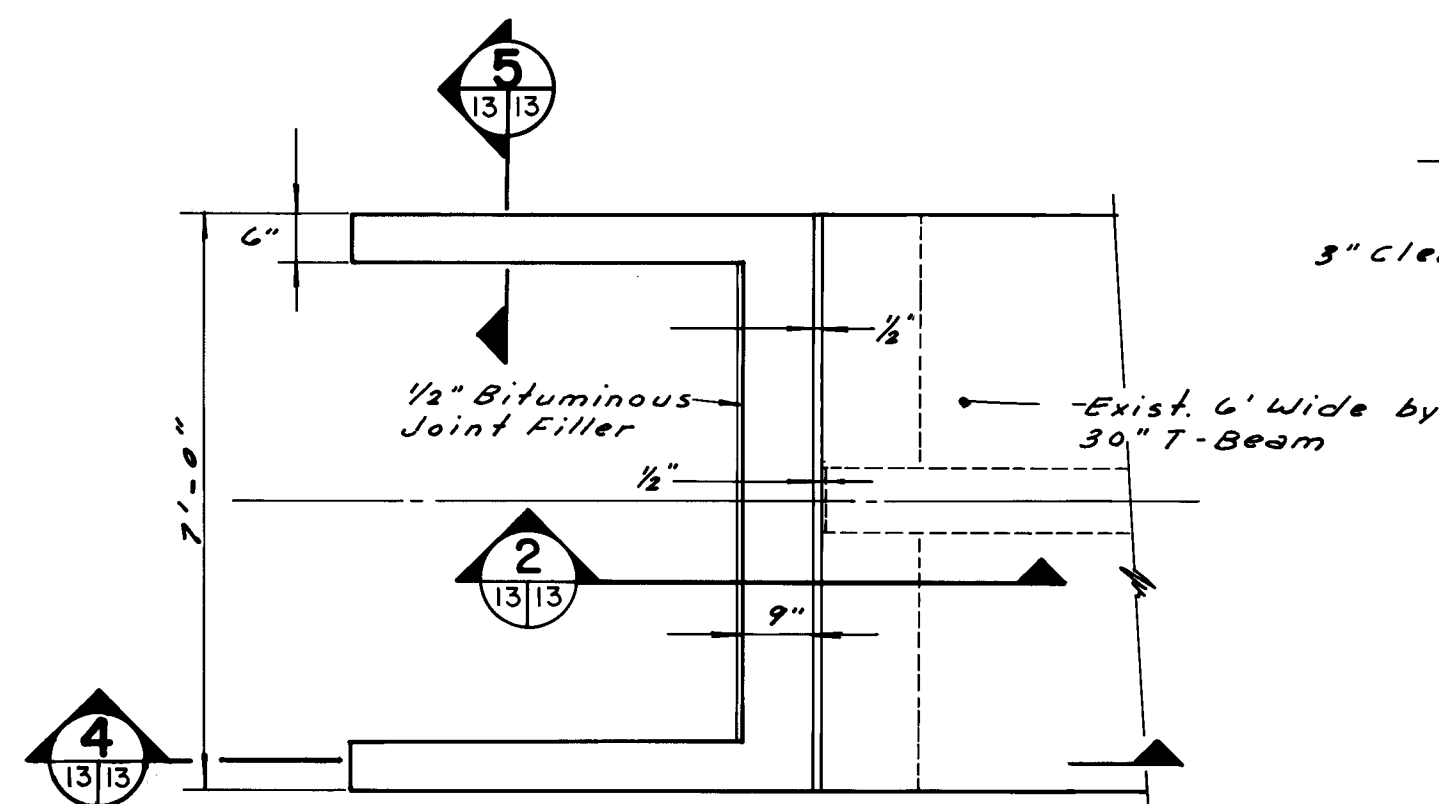
Handrail Notes

- Specifications for 2" I.D. Standard Weight Seamless Steel Pipe, ASTM Designation A53-55
- All Steel Handrail Shall Receive Prime Coat of Red Lead Paint and Two (2) Field Coats of Aluminum Paint, Conforming With Requirements of Section 157 City Specs.



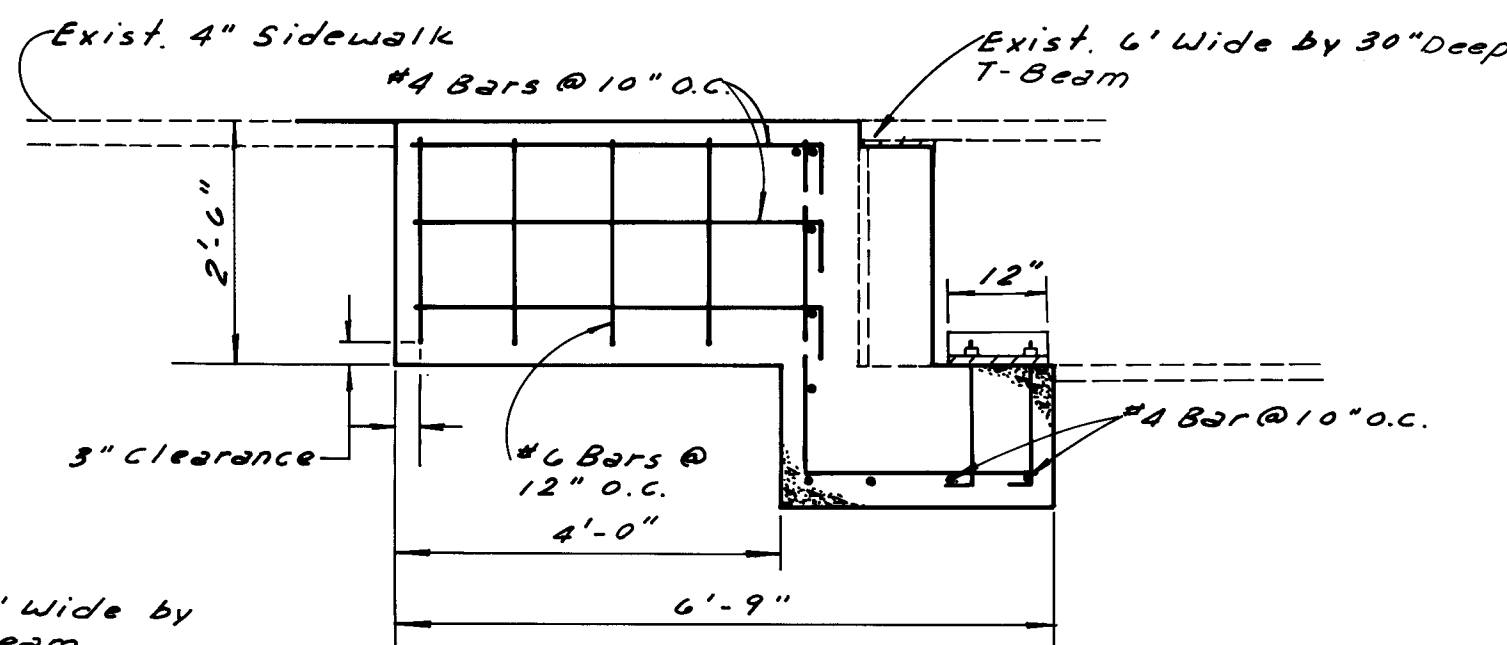
TUBULAR HANDRAIL DETAIL

N.T.S.



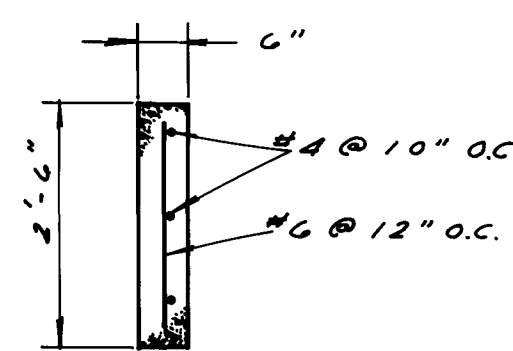
PLAN ABUTMENT WINGWALL

SCALE: 1" = 2'-0"



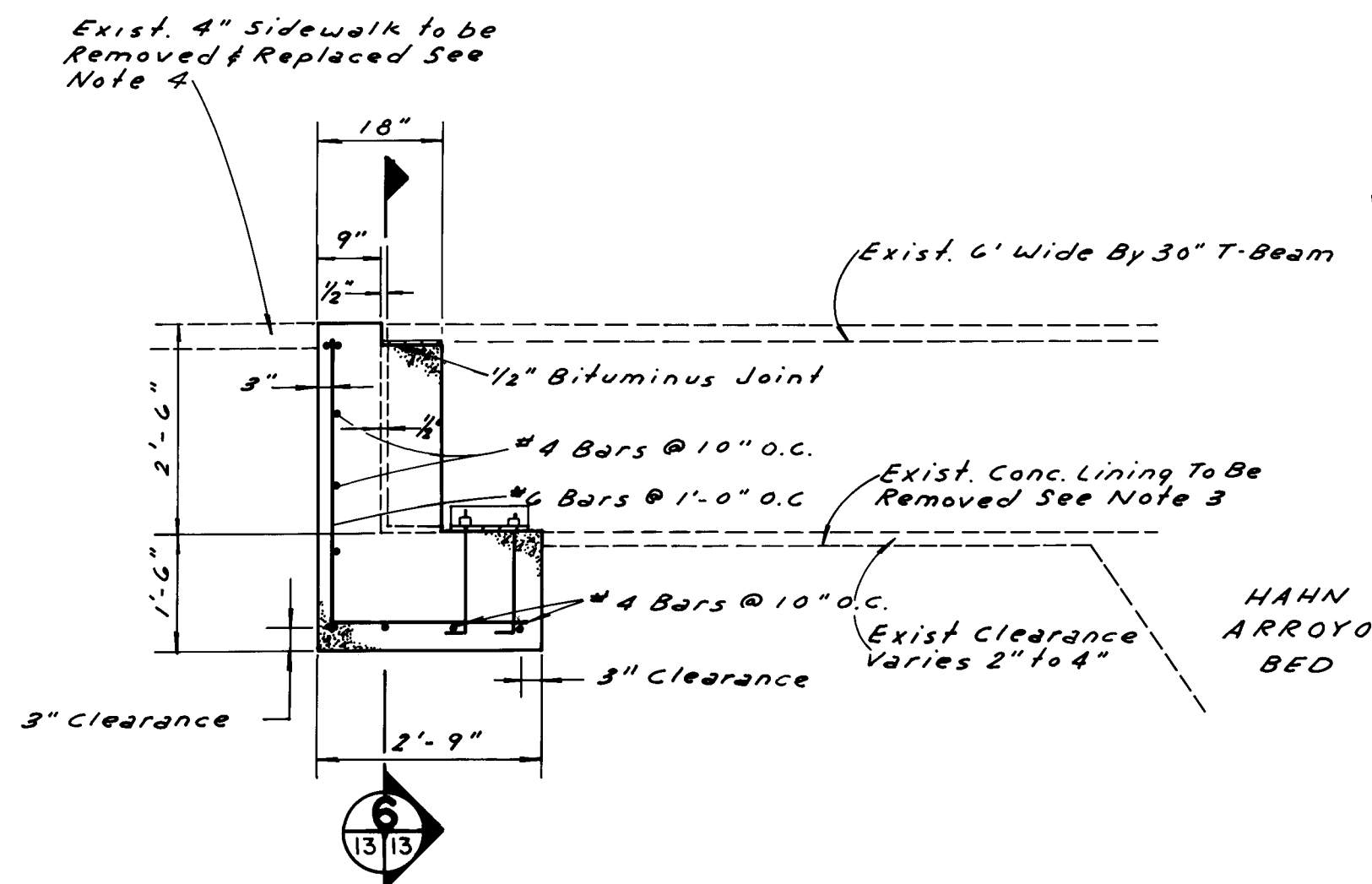
SECTION 4

SCALE: 1" = 2'-0"



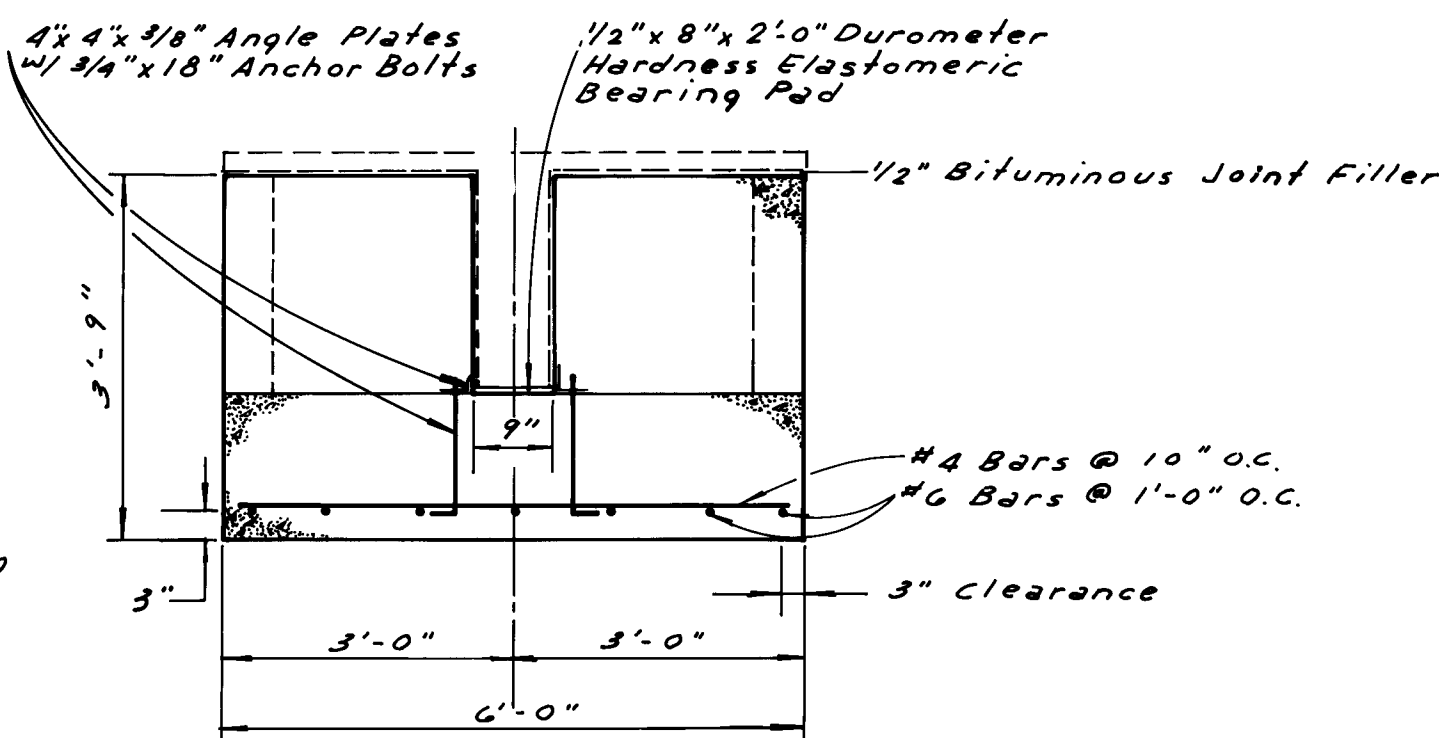
SECTION 5

SCALE: 1" = 2'-0"



ABUTMENT PEDESTRAIN BRIDGE

SCALE: 1" = 2'-0"



SECTION 6

SCALE: 1" = 2'-0"

PEDESTRIAN BRIDGE ABUTMENT CONSTRUCTION NOTES:

- Prior to foundation placement, the existing soils should be overexcavated a minimum of three (3) feet. The overexcavation should extend a minimum of two (2) feet on either side of the footing line. The exposed natural ground at the bottom of the excavation should be scarified, moisture conditioned to near optimum (+2%) moisture content and compacted to a minimum of 95% of maximum density as determined by ASTM D-1557.

The fill materials shall be gravel, sand, silty, or clay mixtures which have a plasticity index not greater than twenty-five (25) and a liquid limit not greater than twelve (12). Material larger than six (6) inches shall not be placed in the fill, and material larger than four (4) inches shall not be placed within one (1) foot of the bearing surfaces of footing. Materials shall be approved by the Soils Engineer. Should the use of vibratory compaction techniques threaten the structural integrity of nearby buildings or bridge, a heavy static roller may be used.

- The existing walk bridge is to be removed from the existing abutments and set aside were it will not damage the existing concrete channel. Before construction of the new abutments can take place.

- The existing concrete lining is to be sawcut adjacent to the existing abutments with enough area for the construction of the new abutments. Replace existing concrete lining and provide a pre-molded joint between the new abutment and concrete channel lining.

- Replace existing sidewalk above new abutment wingwalls, match sidewalk grade with the T-Beam grade after the T-Beam is reset into the new abutment.

RECORD DRAWING

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: PEDESTRAIN BRIDGE DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DR. C. Chair	DATE	2/4/88			
Trans. Dev	DATE	1/19/88			
Utility Dev	DATE	1-19-88			
Hydrology	DATE	1-19-88			
DRAWING NO.	3078	MAP NO.		SHEET 13 OF 15	

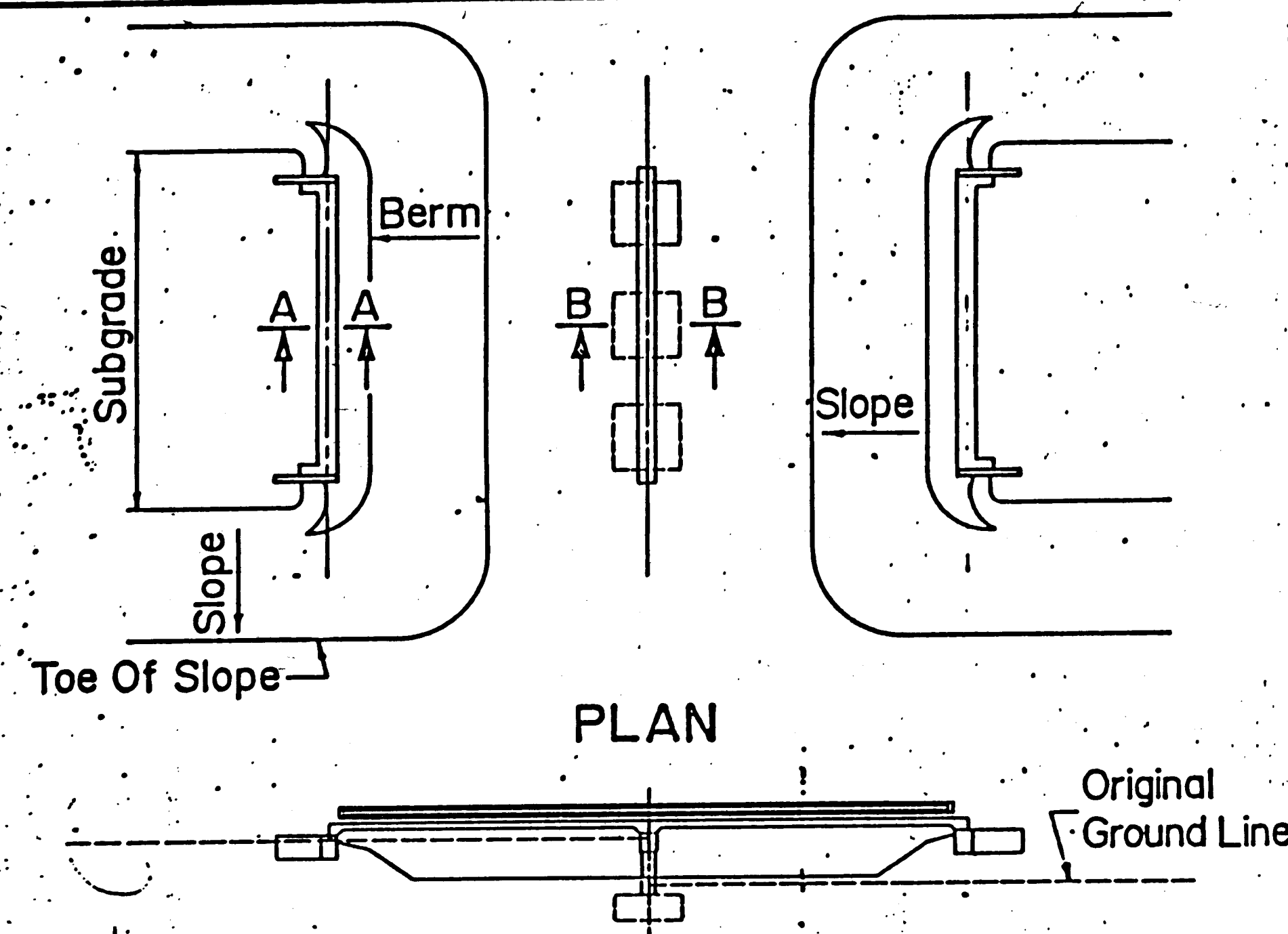
THIS SERIAL REVISED. 11-1-80

*SEE NOTE #3

F.H.W.A. Project No.	STATE	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		

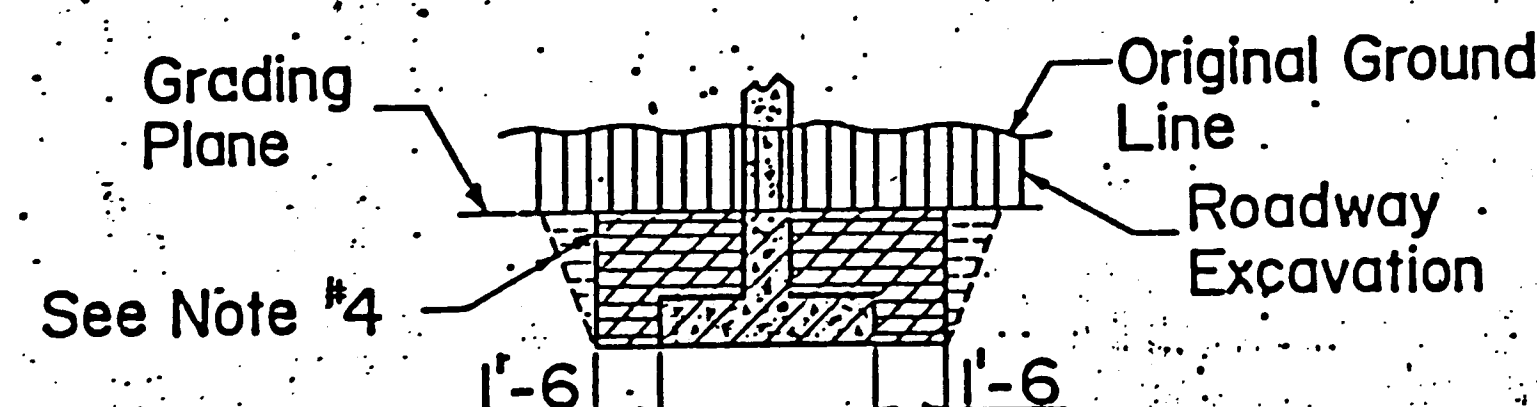
GENERAL NOTES

1. Earthwork shall be in accordance with Section 210 of the Specifications unless otherwise noted.
2. Compact Roadway Embankment 1.0' (Min.) above bottom of abutment. Excavation to bottom of abutment elevation shall be delayed until the contractor is ready to place the abutment forms and concrete.
3. All Details are shown with the Roadway Embankment placed first and the structural backfill material placed on top of it. The contractor shall use this placement order so the structural backfill can be compacted to the maximum density required. No embankment material shall be within 2'-0" of the concrete structure.
4. Where the site of work or character of material to be excavated requires a slope less than vertical and the contractor obtains approval from the Engineer to make a cut less than vertical, instead of using cofferdams, the slope of the cut shall not be steeper than the stability of the material permits. This additional excavation and backfill, beyond a vertical cut, shall be considered incidental to the completion of the work and no additional payment will be made therefor.
5. Grading Plane is the surface to which precise grading is finished such as subgrade under the template section of a road, roadway side slopes, ditches adjacent to piers, ditch slopes at wingwalls, subgrade under abutments and retaining walls.

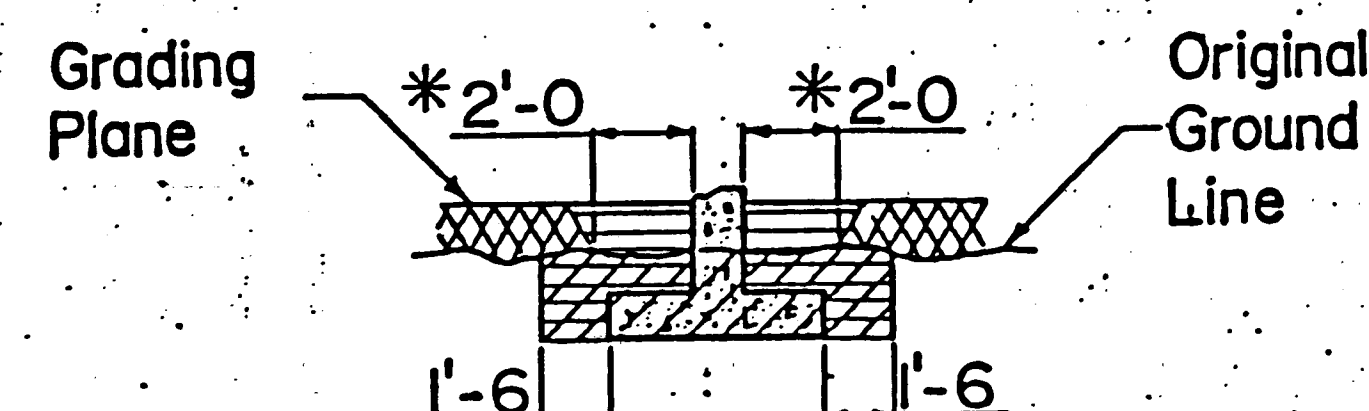


HALF ELEVATION
IN CUT SECTION
PROFILE

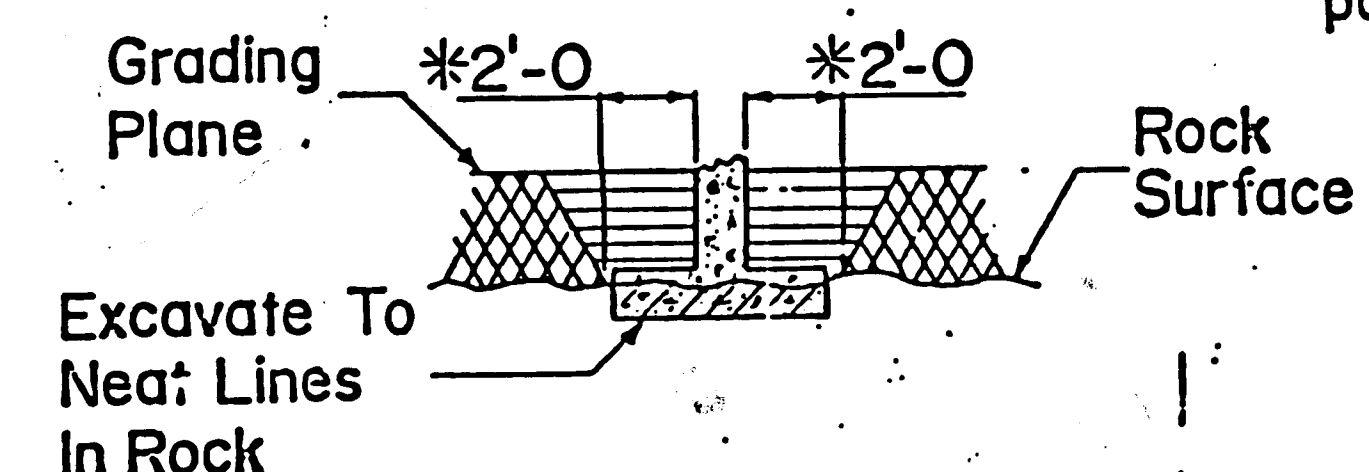
HALF ELEVATION
IN FILL SECTION
PROFILE



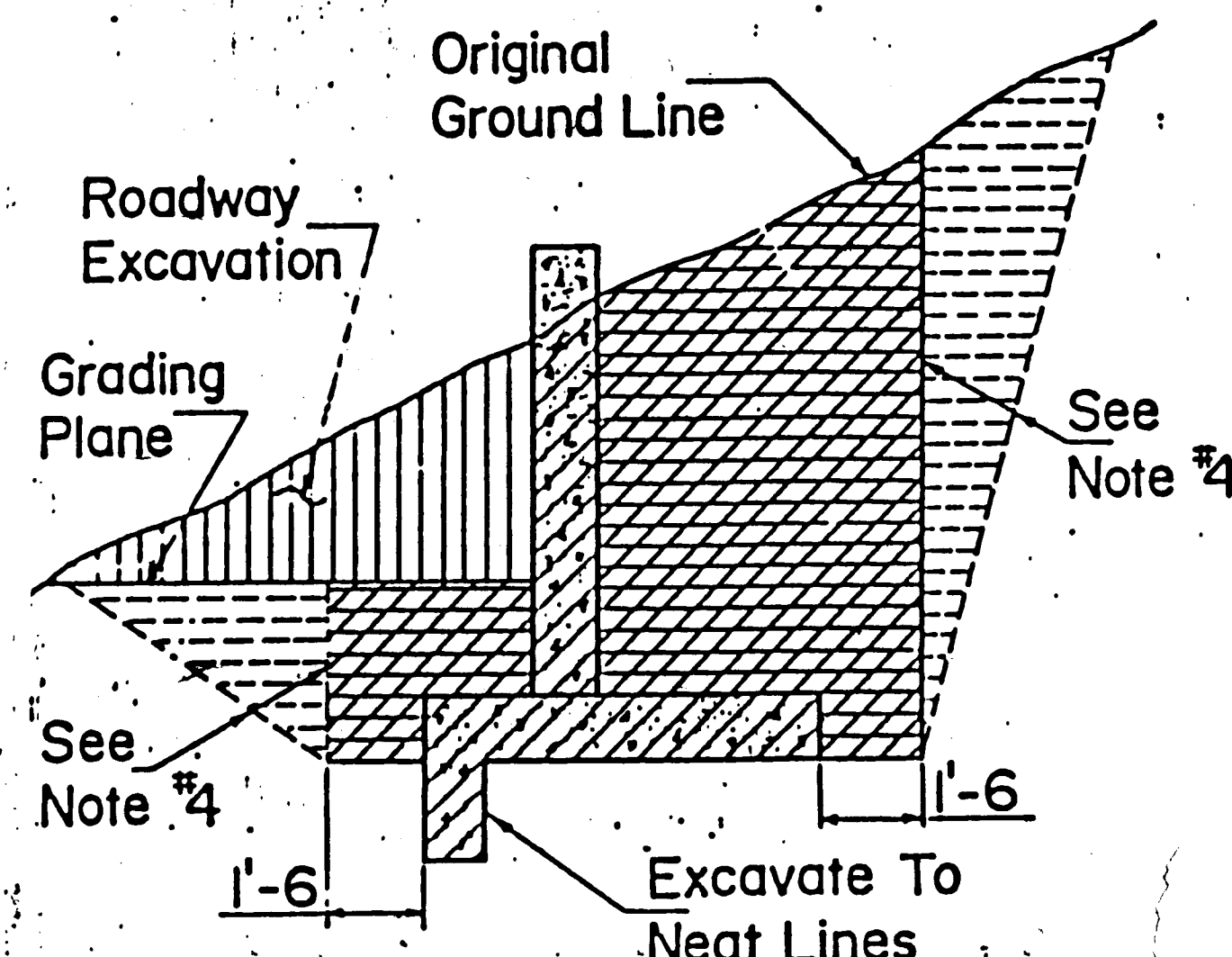
IN CUT SECTION
SECTION B-B



IN FILL SECTION
SECTION B-B

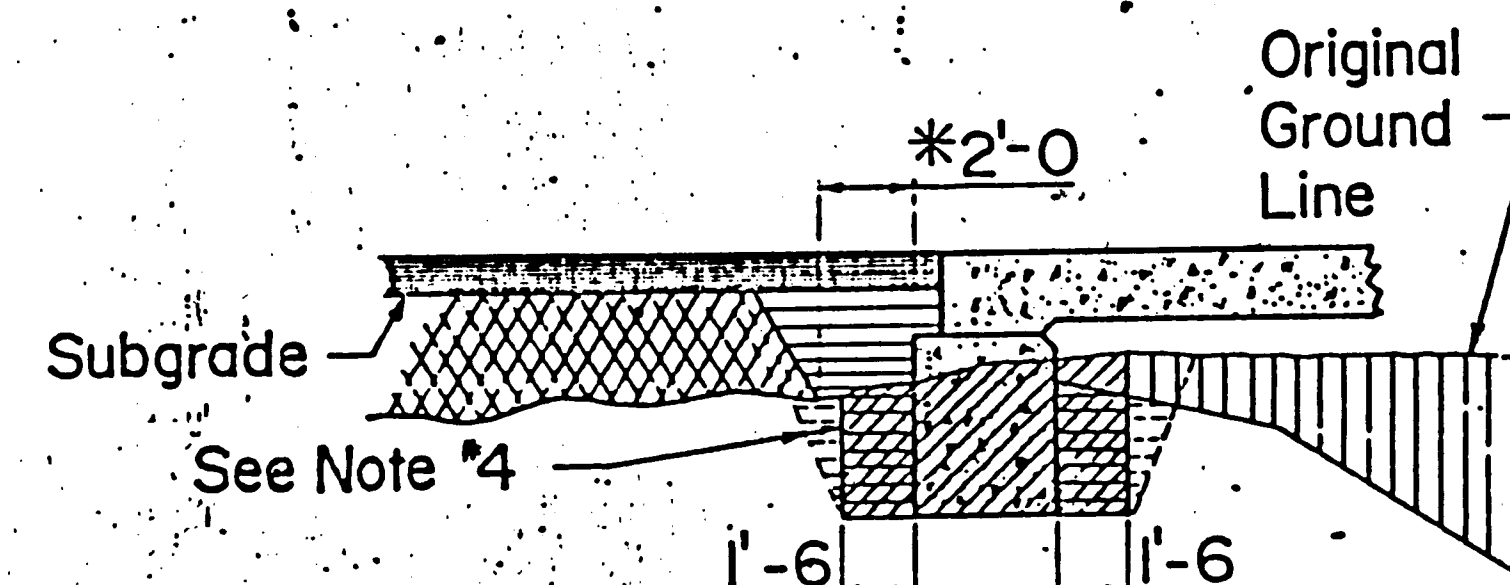


EXCAVATION IN ROCK
SECTION B-B

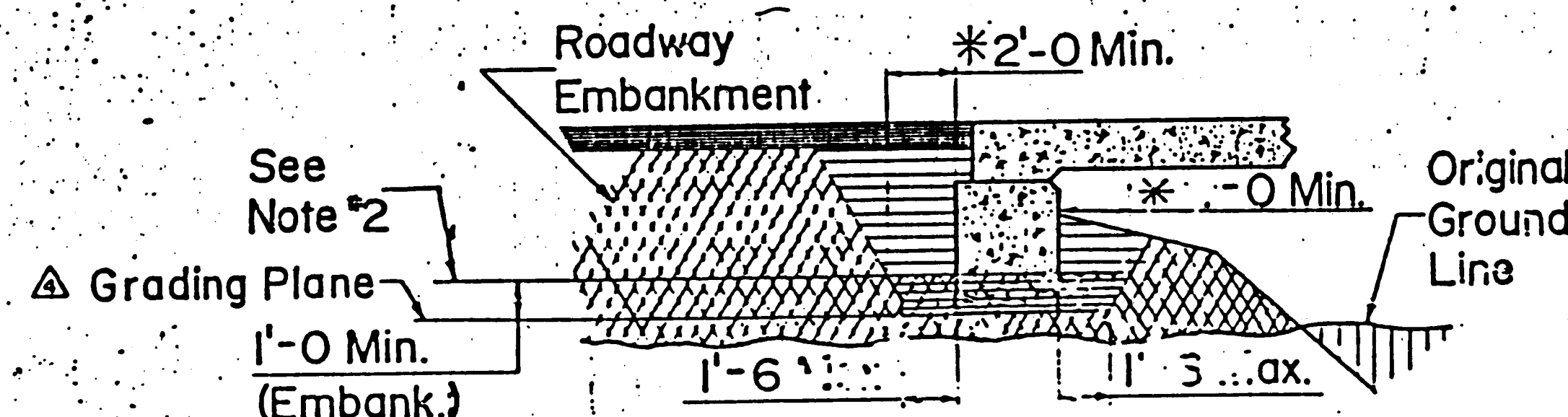


RETAINING WALLS

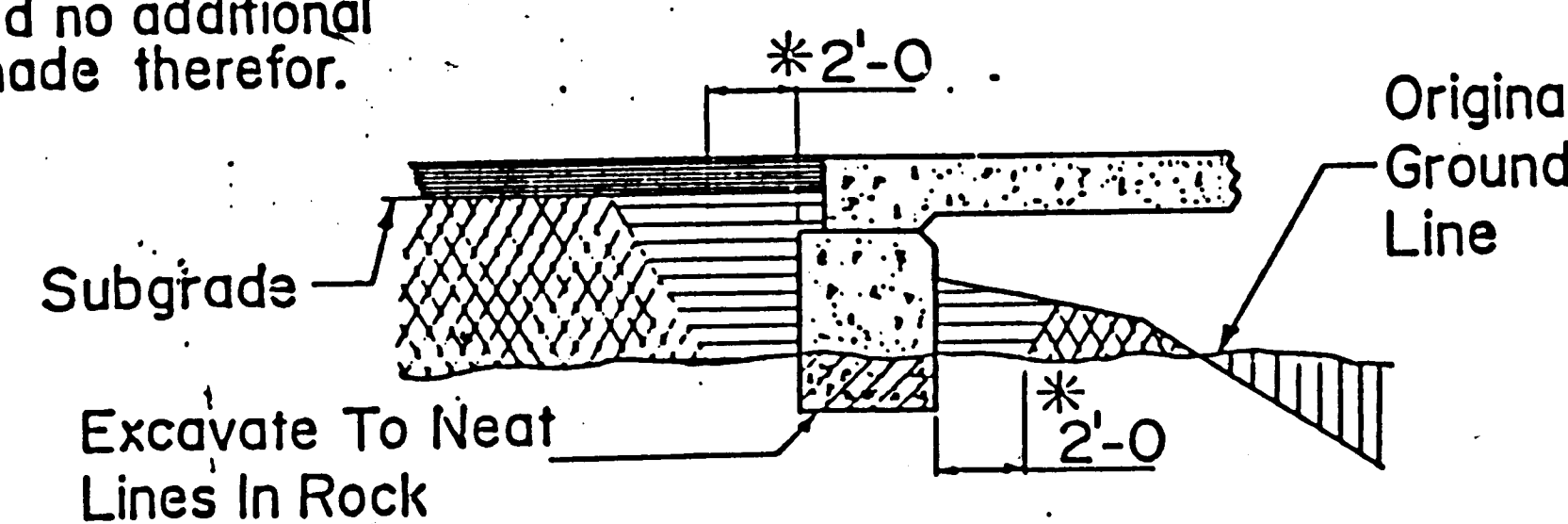
Note: Earthwork for CBC's to be in accordance with
Section 206 of the Specifications.



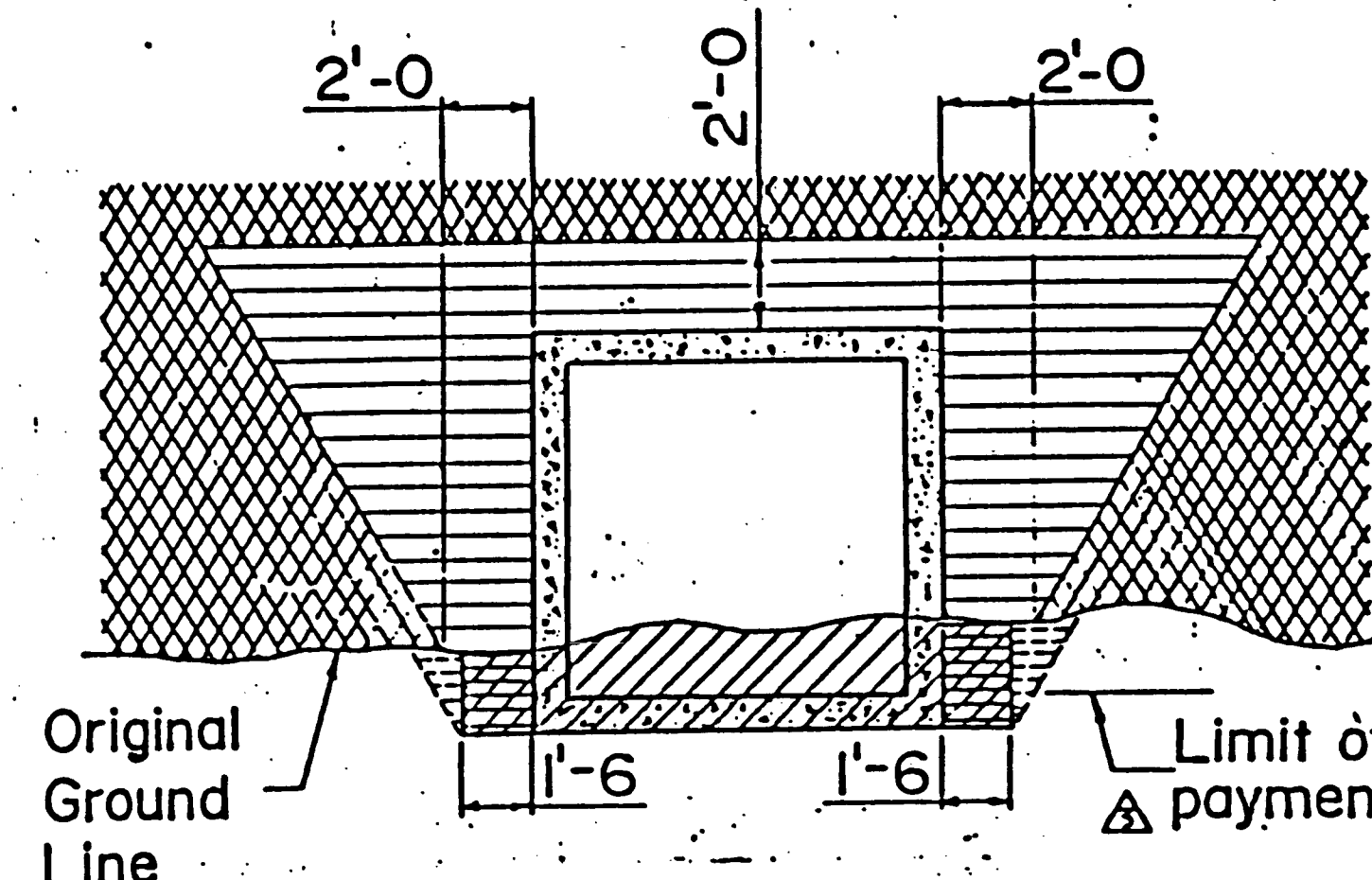
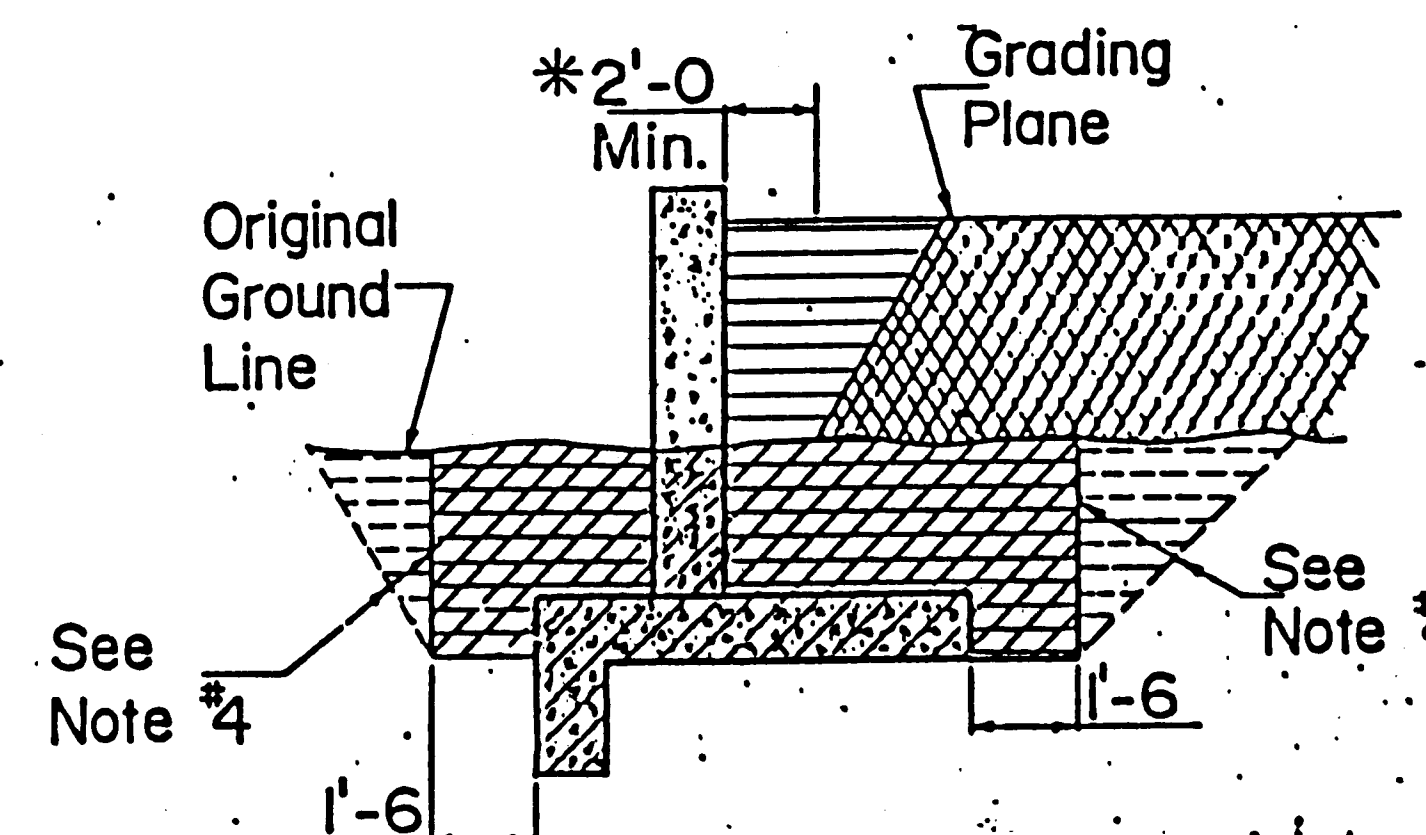
EXCAVATION NORMAL
SECTION A-A



EXCAVATION IN FILL SECTION
SECTION A-A



EXCAVATION IN ROCK
SECTION A-A



Horizontal Lined Areas Indicate Backfill For
The Full Length Of CBC's.

METHOD OF PLACING BACKFILL AROUND CBC's

LEGEND

- Roadway Excavation
- Roadway Embankment
- Structure Backfill
- Structure Excavation

IDENT. NO.	DESCRIPTION	DATE	BY
1	FILL SECTION A-A ~ GENERAL NOTE 5	11-7-80	ERD
2	ADDED NOTE TO CBC DETAIL	1-4-80	ERD
3	REVISED GENERAL NOTE #1	1-4-80	ERD
4	REVISED TITLE	1-4-80	ERD
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
EXCAVATION AND BACKFILL FOR BRIDGES, WALLS AND CBC's			
DESIGNED BY J.D.G.	APPROVAL RECOMMENDED -	BRIDGE ENGINEER	DATE
DRAWN BY A.J.S.	APPROVED	DIRECTOR PROJ DEVELOPMENT	DATE
CHECKED BY ERD			
SERIAL BEB-001-04			

RECORD DRAWING

SHEET 14 OF 18

26 30781489

1. Design in accordance with 1977 AASHTO Specifications.
2. All rails to be parallel to grade unless otherwise shown.
3. See structure details for post spacing and other details not shown.
4. Details shown are for steel only. A steel or aluminum railing of an alternate design may be substituted for the railing shown on these sheets provided the alternate design is approved by the Engineer before fabrication.
5. Steel rail tubes shall conform to the requirements of ASTM designation A500 or A501. Post spacing shown on the plans is based on the use of TS5x3x.1875 conforming to the requirements of ASTM designation A500 grade B. If the contractor elects to use tubes of another grade, the post spacing shown on the plans will be revised by the Bridge Design Section.
6. Metal railing will be paid for at the unit price per foot.
7. Terminal connector shall be AASHTO-ARBA STD HM-TF 13/RE-8, shall conform to AASHTO Specification M-180 be galvanized and of class B sheet thickness
8. Caulking compound used under gutter channels and rail post base plates shall be a single component cold applied, non sagging compound having either a silicone rubber base or a synthetic rubber base of the chemically curing type and shall conform to the requirements of Federal Specifications TT-S-001543 A or TT-S-230C.

6	STRENGTHENED RAIL-POST CONNECTION	12-6-80 I.E.R.
5	CHANGED SERIAL DESIGNATION	10-26-79 I.E.R.
4	ADDED TYPE "C" TO CONNECTION DETAIL	4-19-75 P.A.
3	CHANGED GUARDRAIL TO METAL BARR. DEL. BRIDGE	3-6-85 P.A.
2	ADDED GENERAL NOTE NO. 8	10-25-82 I.E.R.
1	UPDATE 1/2" THREAD	3-13-81 I.E.R.
IDENT NO.	DESCRIPTION	DATE
REVISIONS (OR CHANGE NOTICES)		

△ METAL RAILING
GENERAL NOTES & TYPICAL DETAILS

DESIGNED BY C. V.	APPROVAL <u>H. Jackson</u> <u>2-10-76</u>
DRAWN BY G. V.	RECOMMENDED BRIDGE ENGINEER DATE
CHECKED BY H. G.	APPROVED <u>H. Jackson</u> <u>3-7-76</u>
	ENGINEER / OF DESIGN DATE

AS SERIAL BMR-001-10

