

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO)



OFFICIAL SEAL
JOAN BARTEAU
NOTARY PUBLIC - STATE OF NEW MEXICO
Notary Public Filed with Secretary of State
My Commission Expires

I, Patrick J. Conley, state that I am a Registered Professional Engineer, qualified in Civil Engineering and that the accompanying plans consisting of 29 sheets were prepared by me or under my direction and are true and correct to the best of my knowledge and belief.

Patrick J. Conley, P.E.
New Mexico Registered Professional Engineer
No. 10141

Subscribed and sworn to before me this 10 day of JANUARY, 1994.

My commission expires September 29, 1994
Joan Barteau
Notary Public

STATE OF NEW MEXICO)
COUNTY OF SANTA FE)

I hereby certify that the accompanying Plans and Specifications have been duly examined by me and approved as to form and content and were duly accepted for filing on the day of 19__.

State Engineer

MENAU DETENTION DAM

City of Albuquerque Applicant located in Bernalillo County, State of New Mexico. All sources true, the undersigned, City of Albuquerque Claimant, whose post office address is P.O. Box 1293, Albuquerque, County of Bernalillo, State of New Mexico, has caused to be located by a qualified Registered Engineer the Menaul Detention Dam, as hereinafter described and indicated, hereby makes these severed statements relative there and offers this map and statements for acceptance and filing in compliance with the laws of the State of New Mexico.

The center of the outlet structure trash rack of Menaul Detention Dam is situated in Section 9, Township 10 North, Range 4 East N.M.P.M. at a point whose modified State Plane Coordinate N.M. Central Zone X = 496,799.66 Y = 385,498.32.

The Menaul Detention Dam has the following properties:

Storm Event	100	YR
Maximum height above foundation	28	FL
Length	900	Ft.
Maximum width at base	175	Ft.
Crest width	15	Ft.
Slope upstream face	3:1	
Slope downstream face	10:1	
Elevation at crest of dam	5006.00	Ft.
Elevation at spillway crest	4998.00	Ft.
Elevation of bottom of trash rack	4982.60	Ft.
Elevation of flow line of outlet conduit	4978.50	Ft.
Freeboard	8.00	Ft.
Width of spillway	80	Ft.
Discharge capacity of emergency spillway at elevation	5003.44	Ft.
Outlet conduit size and type	54-INCH RCP	
Outlet conduit capacity (controlled)	40	CFS
Evacuation Time	91	HR.
Drainage area	6900	Sq. mi.
Orifice plate controls to conduit	24-inch Riser	
HAZARD CLASSIFICATION	C	

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO)

I, CARLOS A. MONTAÑA
on behalf of the City of Albuquerque, being first duly sworn upon my oath, state that I have read and examined the accompanying maps and statements (maps and statements consisting of 22 sheets) and know the contents thereof and representations thereon, and state that the same are true to the best of my knowledge and belief.

Carlos A. Montaña
Authority Claimant

Subscribed and sworn to before me this 8th day of January, 1994.

My commission expires May 4, 1994
Shirley A. Wood
Notary Public



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT PLANS FOR CONSTRUCTION

MENAU DETENTION BASIN AND STORM DRAIN (PHASE I)

INDEX TO DRAWINGS

SHEET NO.	TITLE
1	TITLE SHEET
2	PROJECT LOCATION MAP
3	GENERAL NOTES, LEGEND, AND ABBREVIATIONS
4	DRAINAGE BASIN MAP
5	HYDROLOGY
6	BORING LOGS: BASIN
7	DETENTION BASIN LAYOUT PLAN
8	DETENTION BASIN GRADING PLAN
9	DAM CROSS SECTION
10	KEY TRENCH PLAN AND PROFILE
11	EMERGENCY SPILLWAY DETAILS
12	INLET STRUCTURE SECTIONS AND DETAILS
13	BASIN SECTIONS AND DETAILS
14	DETENTION BASIN SECTIONS AND DETAILS
15	DRAINAGE CHANNEL PLAN & PROFILE

SHEET NO.	TITLE
16	DRAINAGE CHANNEL PLAN & PROFILE
17	DRAINAGE CHANNEL PLAN & PROFILE
18	DRAINAGE CHANNEL PLAN & PROFILE
19	CHANNEL CROSS SECTIONS
20	INLET STRUCTURE SECTIONS
21	INLET STRUCTURE SECTIONS AND DETAILS
22	CHANNEL SECTIONS AND DETAILS
23	CHANNEL SECTIONS AND DETAILS
24	CHANNEL SECTIONS & MISC. DETAILS
25	MONITORING STATION DETAILS
26	FILTER BED SYSTEM DETAILS
27	TRAFFIC CONTROL TC1: BROADBENT
28	TRAFFIC CONTROL TM-2.1: SIGNAGE
29	TRAFFIC CONTROL TM-2.2: SIGNAGE

APPROVAL OF AS-BUILT DRAWINGS
CHIEF CONSTRUCTION ENGINEER
Daniel B. Smith
DATE 4-20-95

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
26	42	52	9	00	1	9	5							

1	7, 8, 10			C. Montaña	2-3-94	William J. Balch	2-3-94
2	7			C. Montaña	2-4-94	William J. Balch	2-3-94
REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE

APPROVAL OF REVISIONS

	 Smith Engineering Company Engineering & Architectural Design Services 6000 Uptown Boulevard, N.E. Suite 6000 Albuquerque, New Mexico 87110	APPROVED FOR CONSTRUCTION Signature C.E.
	PROJECT NO. 4252.90	SHEET / OF 29

- 1
- THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A DETAILED CONSTRUCTION SCHEDULE TO THE CITY CONSTRUCTION COORDINATION DIVISION. TWO (2) DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF SPECIFICATIONS.
- 2
- THE CONTRACTOR SHALL NOTIFY THE FIELD ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK, IN ORDER THAT THE FIELD ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF A MONUMENT IS DISTURBED. REPLACEMENT SHALL BE DONE ONLY BY THE FIELD ENGINEER. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4 OF SPECIFICATIONS.
- 3
- THE SPECIFICATIONS USED FOR THIS PROJECT ARE THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION, *UPDATE NO. 4*.
- 4
- ALL NEW MANHOLES SHALL BE TYPE "E" (COA DWG. 2102) UNLESS OTHERWISE NOTED ON THE PLANS.
- 5
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL DEBRIS, INCLUDING, BUT NOT LIMITED TO HAZARDOUS WASTE AT DISPOSAL SITES APPROVED BY GOVERNMENTAL AGENCIES REGULATING THE DISPOSAL OF SUCH MATERIALS.
- 6
- ALL WATER VALVE BOXES AND MANHOLES IN THE STREET CONSTRUCTION ARE TO BE ADJUSTED TO FINISH GRADE AND SHALL BE MEASURED AND PAID PER EACH.
- 7
- SUBGRADE PREPARATION UNDER SIDEWALKS AND DRIVE PADS, AND SUBGRADE AND SUBBASE PREPARATION UNDER CURB AND GUTTER SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF SUCH, AND NO DIRECT PAYMENT SHALL BE MADE FOR THOSE ITEMS OF WORK.
- 8
- THE WATER SYSTEMS DIVISION (823-4200) SHALL BE NOTIFIED THREE (3) WORKING DAYS IN ADVANCE OF ANY WORK WHICH MAY AFFECT THE EXISTING PUBLIC WATER FACILITIES. REFER TO SECTION 18 OF SPECIFICATIONS.
- 9
- ALL EXCAVATION SHALL BE GOVERNED BY FEDERAL, STATE AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 10
- ALL SIGNS AND CODING WILL BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" CURRENT EDITION PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION.
- 11
- THE CONTRACTOR IS TO EXERCISE CARE TO AVOID DISTURBING ANY EXISTING UNDERGROUND UTILITIES. IT SHALL BE HIS RESPONSIBILITY TO COORDINATE WITH THE UTILITY COMPANIES IN ORDER TO PREVENT ANY SERVICE DISRUPTION. SEE SECTION 18 "UTILITIES", CITY OF ALBUQUERQUE, STANDARD SPECIFICATIONS FOR CONTRACTOR REQUIREMENTS.
- 12
- WHEN ABUTTING NEW PAVEMENT TO EXISTING INTERSECTING STREETS, SAW CUT EXISTING PAVEMENT TO A STRAIGHT LINE AND AT RIGHT ANGLES AND REMOVE ANY BROKEN OR CRACKED PAVEMENT. NO DIRECT PAYMENT SHALL BE MADE FOR SAW CUTTING.
- 13
- ALL GAS VALVES, GAS MANHOLES, ELECTRICAL MANHOLES, TELEPHONE MANHOLES, AND UTILITY POLES WILL BE ADJUSTED TO GRADE BY EACH UTILITY COMPANY. CONTRACTOR SHALL COORDINATE THROUGH CITY UTILITY COORDINATOR.
- 14
- WHEN REMOVAL OF EXISTING CURB AND GUTTER OR SIDEWALK IS REQUIRED, REMOVE BACK TO NEAREST SUITABLE JOINT UNLESS OTHERWISE DIRECTED BY THE CITY FIELD ENGINEER.
- 15
- THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES BY CALLING NEW MEXICO ONE CALL SYSTEM 260-1990 TWO (2) WORKING DAYS PRIOR TO COMMENCING WORK IN AREAS NEAR UNDERGROUND UTILITY LINES.
- 16
- CONTRACTOR SHALL MAKE ALL WATER VALVES AND MANHOLES ACCESSIBLE TO THE CITY AT ALL TIMES.
- 17
- CONTRACTOR SHALL PLACE BITUMINOUS MATERIAL WITH THE USE OF A LAYDOWN MACHINE WHERE PAVEMENT IS 10 FEET IN WIDTH OR WIDER.
- 18
- ALL SUBGRADE AND SUBBASE MATERIAL ENCOUNTERED IN PAVEMENT REMOVAL AND REPLACEMENT THAT IS DETERMINED BY THE FIELD ENGINEER TO MEET THE SPECIFICATIONS, CAN BE REUSED. HOWEVER, THE MATERIAL WILL BE PROCESSED AND COMPACTED TO MEET MOISTURE CONTENT AND PERCENT COMPACTION REQUIRED BY THE SPECIFICATIONS.
- 19
- CONTRACTOR SHALL NOT PAVE OVER ANY SURFACE FEATURE, I.E., GAS VALVE, MANHOLE COVER, ETC. WITHOUT PRIOR APPROVAL FROM THE CITY FIELD ENGINEER.
- 20
- CONTRACTOR SHALL CONFINE HIS WORK WITHIN THE CONSTRUCTION EASEMENT LIMITS AND/OR RIGHT-OF-WAY.
- 21
- ALL WATER VALVES AND FIRE HYDRANTS REMOVED TO BE SALVAGED AND RETURNED TO THE C.O.A.
- 22
- MINIMUM BOTTOM WIDTH OF TRENCHES FOR RIGID PIPE SHALL BE EQUAL TO THE OUTSIDE DIAMETER PLUS 16 INCHES. SIDE SLOPES SHALL BE 1:1 BEDDING MATERIAL SHALL BE CLASS II, III, OR IV UNLESS OTHERWISE SPECIFICALLY NOTED ON THE PLANS.
- 23
- MINIMUM BOTTOM WIDTH OF TRENCHES FOR NON-RIGID PIPE SHALL BE EQUAL TO THE OUTSIDE DIAMETER PLUS 12 INCHES. SIDE SLOPES SHALL BE 1:1. BEDDING MATERIAL SHALL BE CLASS I, II, OR III.
- 24
- THE CONTRACTOR AGREES TO TAKE NECESSARY SAFETY PRECAUTIONS AS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES TO PROTECT PEDESTRIAN AND VEHICULAR TRAFFIC IN THE CONSTRUCTION AREA, WHICH INCLUDE BUT ARE NOT LIMITED TO: MAINTAINING ADEQUATE WARNING SIGNS, BARRICADES, LIGHTS, GUARD FENCES, WALKS AND BRIDGES.

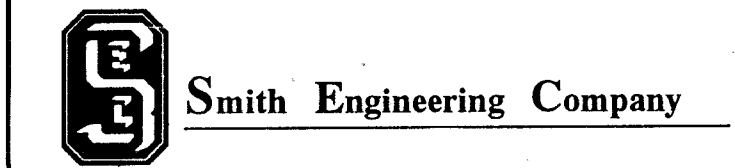
- 25
- ALL STRUCTURAL CONCRETE TO BE ⁴⁰⁰⁰~~6000~~ PSI UNLESS OTHERWISE NOTED ON PLANS.
- 26
- ALL REINFORCING STEEL TO BE GRADE 60.
- 27
- ALL EXPOSED CONCRETE EDGES SHALL HAVE A 1" CHAMFER UNLESS OTHERWISE NOTED.
- 28
- ALL SPLICES IN REINFORCING STEEL TO BE 2-FOOT 6-INCH MINIMUM UNLESS OTHERWISE NOTED.
- 29
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST BETWEEN THE FIELD INFORMATION AND THE PLANS, THE CONTRACTOR SHALL NOTIFY THE CITY FIELD ENGINEER SO THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.
- 30
- THE REPLACEMENT OF THE EXISTING UTILITIES AND THE INSTALLATION OF NEW UTILITY LINES WILL BE COMPLETED IN ADVANCE OF STARTING THE PAVEMENT WORK. TEMPORARY PAVEMENT WILL BE PLACED IN ALL TRENCHES REQUIRED FOR THE UTILITY REPLACEMENTS IN THOSE AREAS THAT MUST MAINTAIN TRAFFIC UNTIL THE PAVEMENT WORK STARTS IN EACH AREA. TEMPORARY STRIPING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 31
- TACK COAT FOR SURFACE COURSE REQUIREMENTS SHALL BE DETERMINED BY THE CITY FIELD ENGINEER.
- 32
- THE CONTRACTOR SHALL CONTACT THE CITY OF ALBUQUERQUE TRAFFIC DIVISION 764-1599, ONE (1) WEEK IN ADVANCE OF ANY CHANGES REQUIRED IN THE TRAFFIC SIGNALIZATION OF THIS PROJECT. ALL WORK ASSOCIATED WITH NEW TRAFFIC SIGNALIZATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 33
- ALL NEW STREET PAVING, DRIVEWAYS, SIDEWALKS, AND CURB AND GUTTERS, ABUTTING EXISTING AREAS SHALL MATCH THE ELEVATION OF THOSE AREAS.
- 34
- PERMANENT PAVEMENT STRIPING AND MARKINGS SHALL BE PLACED BY THE CONTRACTOR. ROAD SHALL NOT BE OPENED TO TRAFFIC UNTIL IT IS STRIPED. ALL STRIPING, PAVEMENT MARKINGS INCLUDING CROSSWALKS, ARROWS AND LINE MARKINGS ARE TO BE CONSTRUCTED OF HOT PLASTIC OR COLD PLASTIC IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 35
- ALL EXCAVATED MATERIAL THAT IS NOT REQUIRED TO BE REUSED MUST BE REMOVED FROM THE PROJECT AREA WITHIN FOUR DAYS OF EXCAVATION. SPOIL PILES WILL BE ALLOWED ONLY AS DIRECTED BY THE CITY FIELD ENGINEER.
- 36
- THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH ALL OTHER CONTRACTORS AND UTILITY COMPANIES WORKING IN THE SAME AREA. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE THEIR ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCE CAUSED BY UTILITY COMPANY WORK CREWS. *HOWEVER, A CONTRACT EXTENSION MAY BE ALLOWED AS DELINEATED FOR COA STD.*
- 37
- ALL PERMANENT AND CONSTRUCTION EASEMENTS ON PRIVATE PROPERTY WILL BE OBTAINED BY THE CITY OF ALBUQUERQUE PRIOR TO THE BEGINNING OF CONSTRUCTION.
- 38
- EXISTING MEDIAN CURB AND GUTTER AND STANDARD CURB AND GUTTER, NOT DISTURBED BY CONTRACTOR, BUT OUT OF ALIGNMENT, DISPLACED VERTICALLY, BADLY BROKEN AND/OR DETERIORATED, WILL BE REPLACED AS DIRECTED BY THE CITY FIELD ENGINEER AND PAID FOR AT CONTRACT UNIT PRICES.
- 39
- ALL TRAFFIC CONTROL DEVICES REQUIRED FOR DRIVEWAY CLOSURES, UTILITY CONSTRUCTION OR FOR OTHER REASONS AND NOT SHOWN ON THE SIGNING PLANS SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE PAID AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS AND BID PROPOSAL. PRIOR TO PLACING THE TRAFFIC CONTROL DEVICES, THE CONTRACTOR SHALL NOTIFY THE AFFECTED OWNERS IN ACCORDANCE WITH THE SPECIFICATIONS. CONTRACTOR MUST MAKE PROVISIONS TO PROVIDE ACCESS TO PROPERTIES. REFER TO SECTION 19 OF THE SPECIFICATIONS.
- 40
- ALL UTILITY LINES WHICH ARE NOT SPECIFICALLY DESIGNATED TO BE REMOVED AND REPLACED ON THE PLANS, SHALL BE MAINTAINED IN SERVICE. SHORING, SHEETING AND OTHER MEANS OF SUPPORT SHALL BE EMPLOYED BY THE CONTRACTOR TO PREVENT DAMAGE OR LOSS OF THESE EXISTING UTILITIES. BEAM AND CABLE OR OTHER ADEQUATE SUPPORTS SHALL BE USED FOR TEMPORARY SUPPORT OF ALL UTILITY LINES WHICH CROSS THE TRENCH. ANY DAMAGE TO EXISTING UTILITIES SHALL PROMPTLY BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY SIGNIFICANT DEVIATION OF EXPOSED UTILITIES FROM THE LOCATIONS SHOWN ON THE PLANS SO THAT CONFLICTS CAN BE RESOLVED IN A TIMELY MANNER.
- 41
- THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PAVING OR CURB AND GUTTER DURING CONSTRUCTION, APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS, AND SHALL REPAIR OR REPLACE SAME AT HIS OWN EXPENSE. HE SHALL SUITABLY PROTECT THE CURB AND GUTTER FROM INCIDENTAL SPLASHING DURING THE TACK COAT APPLICATION AND SHALL BE RESPONSIBLE FOR CLEANING SAME AT HIS OWN COST SHOULD SPLASHING OCCUR.
- 42
- ALL ABANDONED UTILITY LINES WHICH ARE EXPOSED AS A RESULT OF CONSTRUCTION SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- 43
- STATIONS OF STORM DRAIN INLETS ARE TO THE CENTER OF GRATE. ALL STORM DRAIN INLETS SHALL BE TYPE "A" UNLESS OTHERWISE NOTED ON THE PLANS.
- 44
- NOT USED.*
- 45
- PRE-WETTING OF THE EMBANKMENT FOUNDATION AND KEY TRENCH SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF THE EMBANKMENT. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.
- 46
- SHORING COSTS SHALL BE CONSIDERED INCIDENTAL TO THE TRENCH AND BACKFILL COSTS.
- 47
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING NPDES PERMITS REQUIRED BY APPLICABLE CITY, STATE, AND FEDERAL REGULATIONS.

- 48
- THE FOLLOWING BENCH MARKS WERE USED FOR CONTROL FOR THE PROJECT: #1) BRASS CAP "9-H15 1979" LOCATED IN THE MEDIAN STRIP OF CANDELARIA BOULEVARD EAST OF LOCUST STREET, ELEVATION = 5034.93 (SPIRIT). #2) BRASS CAP "NDC 20-1" LOCATED 450 FEET SOUTH OF THE INTERSECTION OF I-40 AND UNIVERSITY BOULEVARD, ELEVATION = 5112.20 (TRIGONOMETRIC). #3) BRASS CAP "12-H16 1979" LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF CANDELARIA AND PRINCETON, ELEVATION = 5088.32 (SPIRIT). #4) BRASS CAP "STA 140-12" LOCATED WEST OF THE NORTH DIVERSION CHANNEL BETWEEN THE EAST AND WEST BOUND LANES OF MENAUL BOULEVARD, ELEVATION = 5114.549 (SPIRIT). #5) BRASS CAP "CANDELARIA 1969" LOCATED NORTHEAST OF THE INTERSECTION OF CANDELARIA AND THE I-25 FRONTAGE ROAD, ELEVATION = 5088.095 (SPIRIT).
- 49
- ALL ASPHALTIC CONCRETE SHALL BE MINIMUM 1800 LB. STABILITY AND COMPACTED TO 95% MODIFIED MARSHALL DENSITY UNLESS OTHERWISE NOTED ON THE PLANS.
- 50
- ALL STORM DRAIN AND CONNECTOR PIPE SHALL BE CLASS IV REINFORCED CONCRETE PIPE UNLESS OTHERWISE NOTED ON THE PLANS.
- 51
- ALL RIP-RAP MATERIAL USED ON THIS PROJECT SHALL BE A NATURAL ROCK MATERIAL CONFORMING TO THE SIZE AND MATERIAL PROPERTY REQUIREMENTS SET FORTH IN THE COA STANDARD SPECIFICATIONS. NO BROKEN CONCRETE OR RUBBLE WILL BE ACCEPTED.
- 52
- THE TERM "REMOVE" USED IN KEYED NOTES ON THIS PLAN SET INCLUDES THE DISPOSAL OF SAID MATERIAL IN ACCORDANCE WITH THE COA STANDARD SPECIFICATIONS, LATEST EDITION.
- 53
- PAYMENT FOR ALL ENGINEERED FILL AND SUBGRADE PREPARATION COMPLETE AND IN-PLACE, FOR STRUCTURES SHOWN IN THIS PLAN SET SHALL BE CONSIDERED INCIDENTAL TO THE EARTHWORK COSTS FOR THE BASIN AND THE CHANNEL.
- 54
- TREE REMOVAL PAYMENT SHALL BE AS DELINEATED IN THE COA STANDARD SPECIFICATIONS, EXCEPT IF A TREE HAS MORE THAN ONE TRUNK OF THE ROOT SYSTEM AT 3' ABOVE EXISTING GRADE, PAYMENT FOR SAID TREE SHALL BE FOR ONE TREE WITH THE LARGER OF THE TWO TRUNKS USED AS THE BASIS FOR PAYMENT.

LEGEND

- TEMPORARY BENCH MARK
- X-X
- EXISTING CHAIN LINK FENCE
- ~~OHE 2~~
- EXISTING OVERHEAD ELECTRICAL
- N-G
- EXISTING WATER LINE
- SAS
- EXISTING SANITARY SEWER
- G
- EXISTING GAS LINE
-
- EXISTING TREE
-
- EXISTING CONCRETE PAVEMENT
-
- NEW CONCRETE PAVEMENT
-
- EXISTING ASPHALT PAVEMENT
-
- EXISTING RETAINING WALL
-
- NEW RETAINING WALL
-
- EXISTING WATER VALVE OR F.H. NUMBER
-
- PROPERTY LINE
-
- RIGHT-OF-WAY LINE
-
- TOP OF CURB
-
- TOP OF GRATE
-
- INVERT
-
- DRIVE PAD
-
- SIDEWALK
-
- TOP OF WALL
- C.O.A.
- CITY OF ALBUQUERQUE
-
- EXISTING SPOT ELEVATION
-
- NEW SPOT ELEVATION
-
- FINISHED FLOOR
-
- DIRECTION OF FLOW
-
- EXISTING DRAIN PIPE
-
- EXISTING UNDERGROUND ELECTRICAL
- EXISTING-WATER LINE
- EXISTING-GAS LINE
- EXISTING-CONCRETE PAVEMENT
- NEW-CONCRETE PAVEMENT
- NEW ASPHALT PAVEMENT
-
- BREAK LINE
-
- X = SECTION #
- Y = SHEET # CUT
- Z = SHEET # SHOWN

AS-BUILT
SIGN *Reddy*
DATE *2/11/95*



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: MENAUL DETENTION BASIN AND STORM DRAIN					
GENERAL NOTES AND LEGEND					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>W. B. B. B.</i>	1-13-94	WATER	<i>William Balch</i>	11-26-93
TRANSPORTATION	<i>W. B. B. B.</i>	12-25-94	WASTEWATER	<i>William Balch</i>	11-26-93
HYDROLOGY	<i>C.A.M.</i>	11-23-93			
PROJECT NO. 4252.90		MAP NO. H-15,H-16		SHEET 3 OF 29	

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 42 52 91 03 15



LEGEND

4. ZACHUNG
 ——— BASIS, BOUNDARY
 ———> HYDROLOGIC ZONING

AS-BUILT
SIGN 12/1/95
DATE 4/1/95

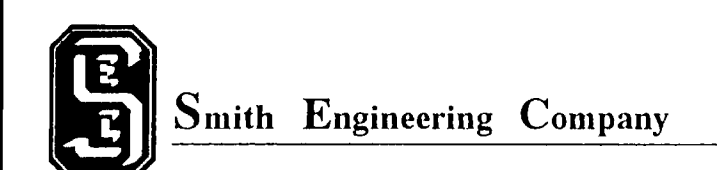
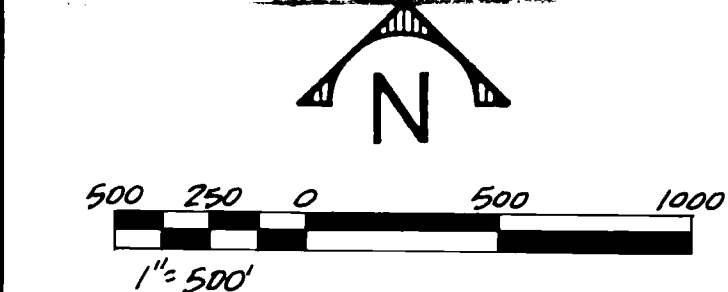
DRAINAGE BASIN DATA

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100	1.0	1.0

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4	60	0	174
5	64	0	175
6	68	0	176
7	72	0	177
8	76	0	178
9	80	0	179
0	84	0	180
1	88	0	181
2	92	0	182
3	96	0	183
4	100	0	184
5	104	0	185
6	108	0	186
7	112	0	187
8	116	0	188
9	120	0	189
0	124	0	190
1	128	0	191
2	132	0	192
3	136	0	193
4	140	0	194
5	144	0	195
6	148	0	196
7	152	0	197
8	156	0	198
9	160	0	199
0	164	0	200
1	168	0	201
2	172	0	202
3	176	0	203
4	180	0	204
5	184	0	205
6	188	0	206
7	192	0	207
8	196	0	208
9	200	0	209
0	204	0	210
1	208	0	211
2	212	0	212
3	216	0	213
4	220	0	214
5	224	0	215
6	228	0	216
7	232	0	217
8	236	0	218
9	240	0	219
0	244	0	220
1	248	0	221
2	252	0	222
3	256	0	223
4	260	0	224
5	264	0	225
6	268	0	226
7	272	0	227
8	276	0	228
9	280	0	229
0	284	0	230
1	288	0	231
2	292	0	232
3	296	0	233
4	300	0	234
5	304	0	235
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7	312	0	237
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0	324	0	240
1	328	0	241
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6	388	0	256
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1	408	0	261
2	412	0	262
3	416	0	263
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0	444	0	270
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8	516	0	288
9	520	0	289
0	524	0	290
1	528	0	291
2	532	0	292
3	536	0	293
4	540	0	294
5			

NOTE:
FOR INFORMATION ONLY

26 4252.900495



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: MENAUL DETENTION BASIN AND STORM DRAIN

DRAINAGE BASIN MAP

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		11-23-91	WATER	N.A. <i>h.d.b.</i>	11-30-91
TRANSPORTATION	<i>N/A h.d.b.</i>	10-9-91	WASTEWATER	<i>N.A. h.d.b.</i>	11-30-91
HYDROLOGY	<i>h.d.m.</i>	11-23-91			

PROJECT NO.	4252.90	MAP NO. H-15, H-16	SHEET 4	OF 29
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SCANNED BY
BY LASON



NOTES:

1. BOTTOM OF BASIN ELEVATION EQUALS TOP OF SAND FILTER SYSTEM.
2. DEPTH OF WATER IN BASIN @ 96 HOURS IS 0.07 FEET.
3. INFLOW - OUTFLOW GRAPHS ARE PLOT @ TIME SCALE FOR CLARITY.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
26			42	52				900	595					

AS-BUILT SIGN <u><i>PdH/Cg</i></u> DATE <u>1/11/95</u> Smith Engineering Company										ENGINEER'S SEAL PROJECT NO. 89-01-06										SURVEY INFORMATION <table border="1" style="width: 100%;"> <tr> <th>NO.</th> <th>BY</th> <th>DATE</th> </tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table> BENCH MARKS <table border="1" style="width: 100%;"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table> AS BUILT INFORMATION CONTRACTOR RMCI, INC. WORK ORDER C.O.A. STARTED BY J.A.O. DATE INSPECTED BY J.A.O. DATE FIELD CHANGE BY J.A.O. DATE VERIFICATION BY DATE CORRECTED BY DATE MICRO-FILM INFORMATION RECORDED BY DATE NO 										NO.	BY	DATE																																					
NO.	BY	DATE																																																																			
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP										TITLE: MENAUL DETENTION BASIN AND STORM DRAIN																																																											
HYDROLOGY																																																																					
APPROVALS		ENGINEER		DATE		APPROVALS		ENGINEER		DATE																																																											
DRC CHAIRMAN		<i>S.A. Goodrich</i>		1-13-94		WATER		<i>N.A. [Signature]</i>		11-30-93																																																											
TRANSPORTATION		<i>N.A. RHD</i>		1-05-94		WASTE WATER		<i>N.A. [Signature]</i>		11-30-93																																																											
HYDROLOGY		<i>CAM</i>		11-23-93																																																																	
PROJECT NO. 4252.90				MAP NO. H-15, H-16				SHEET 5 OF 29																																																													



CURVE DATA

1	$\Delta = 45^\circ 42' 55''$ $R = 250'$ $L = 109.47'$ $T = 105.38'$	2	$\Delta = 51^\circ 45' 00''$ $R = 250'$ $L = 225.80'$ $T = 121.25'$
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24. PLACE CLASS 'A' SEEDING UPON COMPLETION OF GRADING OF THE DAM FACES AND THE SLOPES AS SHOWN ON THE SEEDING PLAN ON SHEET 26. NO SEEDING WILL BE REQUIRED ON THE MENAUL SCHOOL PROPERTY.
25. CONSTRUCT JOGGING PATH ALONG TOP OF BASIN. SEE SECTION 8/14.
26. EXISTING PIPE GATE TO REMAIN.
27. CONSTRUCT 24-INCH RCP STORM DRAIN. SEE SHEET 9 FOR PLAN AND PROFILE.
28. APPROXIMATELY 45 LF OF EXISTING 24-INCH GMP TO REMAIN.
29. INSTALL APPROXIMATELY 40 LF OF 24-INCH GMP (RELOCATED).
30. CONSTRUCT GABION SEDIMENTATION STRUCTURE. SEE SHEET 26.
31. CONSTRUCT ELBOW IN 24-INCH GMP. SET INVERT AT 87.00. SEE DETAIL E/10.
32. CONSTRUCT MONITORING STATION. SEE SHEET 9 FOR LOCATION AND SHEET 25 FOR DETAILS.
33. CONNECT NEW 42-INCH RCP TO EXISTING J-BOX AT INVERT 78.42. SEE DETAIL E/10. NOT USED.
34. END SOUTH JOGGING PATH AT BOTTOM OF DAM FACE.
35. STOCKPILE EXCESS EXCAVATION IN THIS AREA AS DESIGNATED BY THE COA FIELD ENGINEER.
36. EXISTING DOWN GUY TO REMAIN. COORDINATE WITH PNM WHEN WORKING AROUND EXISTING POWER POLES.
37. NEW 4-FOOT DIAMETER PRECAST 'T' MANHOLE OVER 66-INCH T-LOK RCP.
38. REMOVE AND DISPOSE OF EXISTING 4-FOOT DIAMETER MANHOLE.
39. REMOVE AND DISPOSE OF APPROXIMATELY 85 LF OF EXISTING 48-INCH RCP SAS LINE (NORTH AND SOUTH 'LEGS' OF LINE).
40. TIE NEW 66-INCH T-LOK LINE INTO EXISTING MANHOLE. MATCH EXISTING 48-INCH INVERT. VERIFY EXISTING INVERT ELEVATION.
41. INSTALL 66-INCH T-LOK BENDS AT THESE LOCATIONS: MATCH DELTA'S SHOWN ON PLAN. VERIFY DELTA'S PRIOR TO INSTALLATION. 4 - 45-DEGREE BENDS SUPPLIED BY CITY. CONTRACTOR TO PURCHASE OTHER BENDS AS REQUIRED BY THE PLAN.
42. INSTALL APPROXIMATELY 1240 LF OF CITY SUPPLIED 66-INCH T-LOK LINED SAS LINE. CONSTRUCT AT CONSTANT SLOPE OVER LENGTH OF NEW INSTALLATION. PROVIDE BY-PASS PUMPING AS REQUIRED FOR INSTALLATION.
43. ABANDON EXISTING MANHOLE IN-PLACE. AFTER FILLING ABANDONED 48-INCH SAS WITH GROUT, BACKFILL REMAINING DEPTH OF MANHOLE WITH 66-INCH LEAM FILL.
44. REMOVE AND DISPOSE OF EXISTING 6-FOOT CHAINLINK FENCE AS REQUIRED FOR CONSTRUCTION OF BASIN. INSTALLATION TO INCLUDE NEW POSTS. INSTALL NEW 6-FT. CHAINLINK FENCE.
45. EAST 'LEG' OF NEW 66-INCH SAS LINE TO PARALLEL EAST 'LEG' OF EXISTING SAS. OFFSET NEW 66-INCH LINE 35 FEET TO THE WEST FROM EXISTING SAS ALIGNMENT.
46. POINT OF TERMINATION FOR REMOVE AND DISPOSE OF EXISTING 48-INCH SAS LINE. EXISTING 48-INCH SAS LINE EAST OF THESE TERMINATION POINTS TO BE ABANDONED IN-PLACE.
47. INSTALL APPROX. 9-DEGREE, 66-INCH T-LOK BEND. VERIFY DELTA PRIOR TO INSTALLATION. (STA. 11+70).
48. FILL EAST 'LEG' OF EXISTING 48-INCH SAS LINE BETWEEN TERMINATION POINTS WITH GROUT.
49. CONSTRUCT NEW 4-FOOT DIA. SAS MANHOLE AND APPROX. 30 LF OF NEW 8-INCH SDR 35 SAS LINE. TIE NEW SAS LINE INTO 'T' MANHOLE OF NEW 66-INCH SAS LINE. SLOPE OF NEW 8-INCH SAS TO MATCH EXISTING.

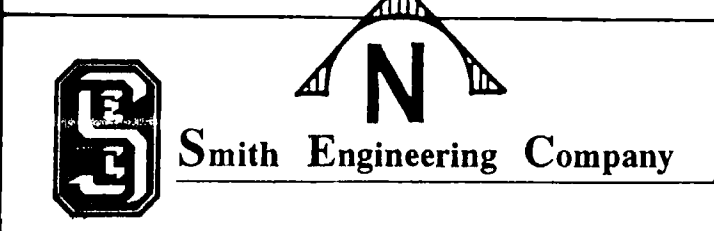
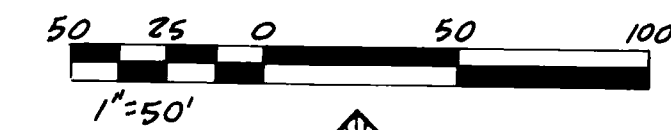
50. 33° BEND @ 21+45.2 - 66' SAS.
51. SAS (NEW) @ 21+45.2 - 66' SAS.
52. NEW SAS J-BOX, STA. 21+87.12, RIM+03.45

NOTE: CITY SURVEYOR SET 7 BENCH MARKS. * CONTACT CITY SURVEYOR FOR BENCHMARK DATA.

1. 2 BENCH MARKS SET ON DAM BETWEEN 4+93 THRU 8+60.
2. 1 BENCH MARK SET AT SPILLWAY ON WEIR.
3. 3 BENCH MARKS SET ON DAM BETWEEN 10+50 THRU 14+97.
4. 1 BENCH MARK SET ON BASIN INLET STRUCTURE.

KEYED NOTES

- CONSTRUCT 20-FOOT CTB ACCESS ROAD AND SHOULDERS FROM CREST OF DAM TO BOTTOM OF BASIN. SEE DETAIL G/13. MAINTAIN 10:1 SLOPE TO BOTTOM OF BASIN.
- DAM FACE, SEE DETAIL F/13.
- CONSTRUCT 42-INCH RCP OUTLET STRUCTURE, SEE DETAIL E/14.
- CONSTRUCT NEW 6-FOOT CHAINLINK FENCE PER COA DWG. 2252.
- SEE SHEET 9 FOR LAYOUT THIS AREA.
- CONSTRUCT 12-FOOT CONCRETE LOW-FLOW SWALE. SEE DETAIL D/13.
- EXISTING 6-FOOT CHAINLINK FENCE TO REMAIN, EXCEPT AS MARKED.
- CONSTRUCT EMERGENCY SPILLWAY. SEE SHEET NO. 11.
- CONSTRUCT TRASH RACK. SEE SHEET NO. 12.
- CONSTRUCT BASIN INLET STRUCTURE. SEE SHEET NO. 20, 21, AND 21A.
- SAWCUT AND REMOVE EXISTING CONCRETE CHANNEL TO EXISTING BASIN. SEE DETAIL B/14.
- INSTALL APPROXIMATELY 54 LF 24-INCH RCP (RELOCATED).
- REMOVE AND DISPOSE OF APPROXIMATELY 25 LF OF EXISTING 42-INCH RCP.
- REMOVE AND DISPOSE OF APPROXIMATELY 50 LF OF EXISTING 24-INCH GMP RCP.
- CONSTRUCT NEW CONCRETE CHANNEL. SEE DETAIL B/14.
- CONSTRUCT TYPE-B DOUBLE-BOTTOM BASIN PER COA DWG. 2252. SECTION 1, SHEET 9.
- MODIFY EXISTING J-BOX FOR NEW 40-INCH RCP. SEE DETAIL C/13.
- CONSTRUCT 54-INCH PRINCIPAL SPILLWAY AND MANHOLES. SEE SHEET 9 FOR PLAN AND PROFILE.
- CONSTRUCT 24-INCH RCP OUTFALL. SEE DETAIL A/14, E/14.
- CONSTRUCT APPROXIMATELY 25 LF OF RETAINING WALL ON EACH SIDE OF THE PRINCIPAL SPILLWAY. SEE DETAIL D/14.
- REMOVE AND RELOCATE EXISTING GABIONS TO END OF NEW CONCRETE CHANNEL. INSTALL NEW RCP.
- CONNECT RELOCATED 24-INCH RCP TO EXISTING 24-INCH GMP AT INVERT 100.00. WELD NEW CONNECTION.
- 12-INCH BASE COURSE. 12-INCH CEMENT-TREATED BASE COURSE COMPACTED TO 95% ASTM D-1557 OVER 12-INCH SUBGRADE COMPACTED TO 95% ASTM D-1557.
- CONTRACTOR TO PROVIDE ACCESS TO COA SURVEYOR FOR PLACEMENT OF MONUMENT ON TOP OF WALL OF EMERGENCY SPILLWAY. MONUMENT TO BE CAST INTO WALL AT CENTERLINE OF DAM. COORDINATE THIS WORK WITH THE COA SURVEYOR.



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: MENAUL DETENTION BASIN AND STORM DRAIN					
DETENTION BASIN LAYOUT PLAN					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	[Signature]	11-13-94	WATER	[Signature]	11-13-94
TRANSPORTATION	[Signature]	1-05-94	WASTEWATER	[Signature]	11-13-94
HYDROLOGY	[Signature]	11-13-94			
PROJECT NO. 4252.90		MAP NO. H-15.H-16		SHEET 7 OF 29	

ADDENDUM # 3



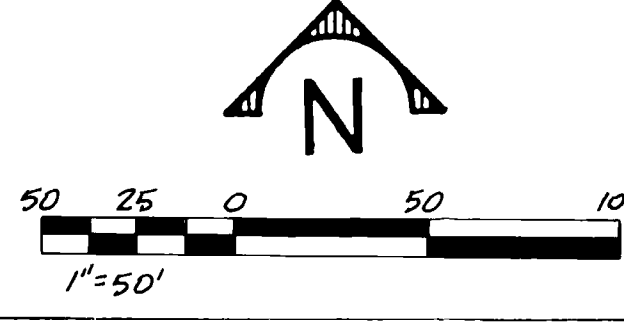
KEYED NOTES

- ADJUST MANHOLE RIM TO GRADE.
- CONTRACTOR TO PROVIDE AND INSTALL APPROXIMATELY 800 LF TEMPORARY CONSTRUCTION FENCING. COORDINATE LOCATION WITH COA ENGINEER. CONTRACTOR SHALL REMOVE TEMPORARY FENCE AFTER CONSTRUCTION IS COMPLETE.
- MODIFY EXISTING STORM DRAIN OUTFALLS INTO BASIN. SEE SHEET 7.
- CONSTRUCT SAND FILTER SYSTEM AND GABION SEDIMENT STRUCTURE. SEE SHEET 26.
- SEE SHEET 16 FOR CONTINUATION OF GRADES.
- SEE SHEET 15 FOR PLAN AND PROFILE OF INLET STRUCTURE AND DETAILED GRADING AROUND STRUCTURE.
- MAINTAIN 10:1 SLOPE FOR ACCESS RAMPS INTO BASIN.
- CLEAR AND GRUB WORK AREA IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. REMOVE AND DISPOSE OF ASPHALT AND CONCRETE RUBBLE, TRASH, TREES, AND BOULDERS. THE CONTRACTOR IS ENCOURAGED TO VISIT THE SITE TO VERIFY THE EXTENT OF THE REMOVALS.
- IF FINAL GRADES ARE CUT ONLY, THE TOP 12 INCHES SHALL BE SCARIFIED AND COMPACTED TO 90% OF ASTM D-1557.
- CONTRACTOR SHALL USE ALL CAUTION WHEN WORKING IN THE AREA OF THE EXISTING 42-INCH SAS LINE.

AS-BUILT
SIGNATURE
DATE 4/8/95

SEE SHT. 7 FOR
INSTALLATION OF
NEW SANITARY
SEWER LINE

NO ADDITIONAL PAYMENT WILL BE MADE FOR SUBGRADE PREPARATION, ENGINEERED FILL, PROCESSING, PLACEMENT, AND COMPACTION FOR STRUCTURES, ACCESS ROADS, AND JOGGING PATHS AS SHOWN ON THE PLANS. THE COST FOR SUCH WORK SHALL BE INCIDENTAL TO THE PAYMENT FOR THE BID ITEM "EXCAVATION, BACKFILL, AND COMPACTION IN THE BASIN AND CHANNEL."

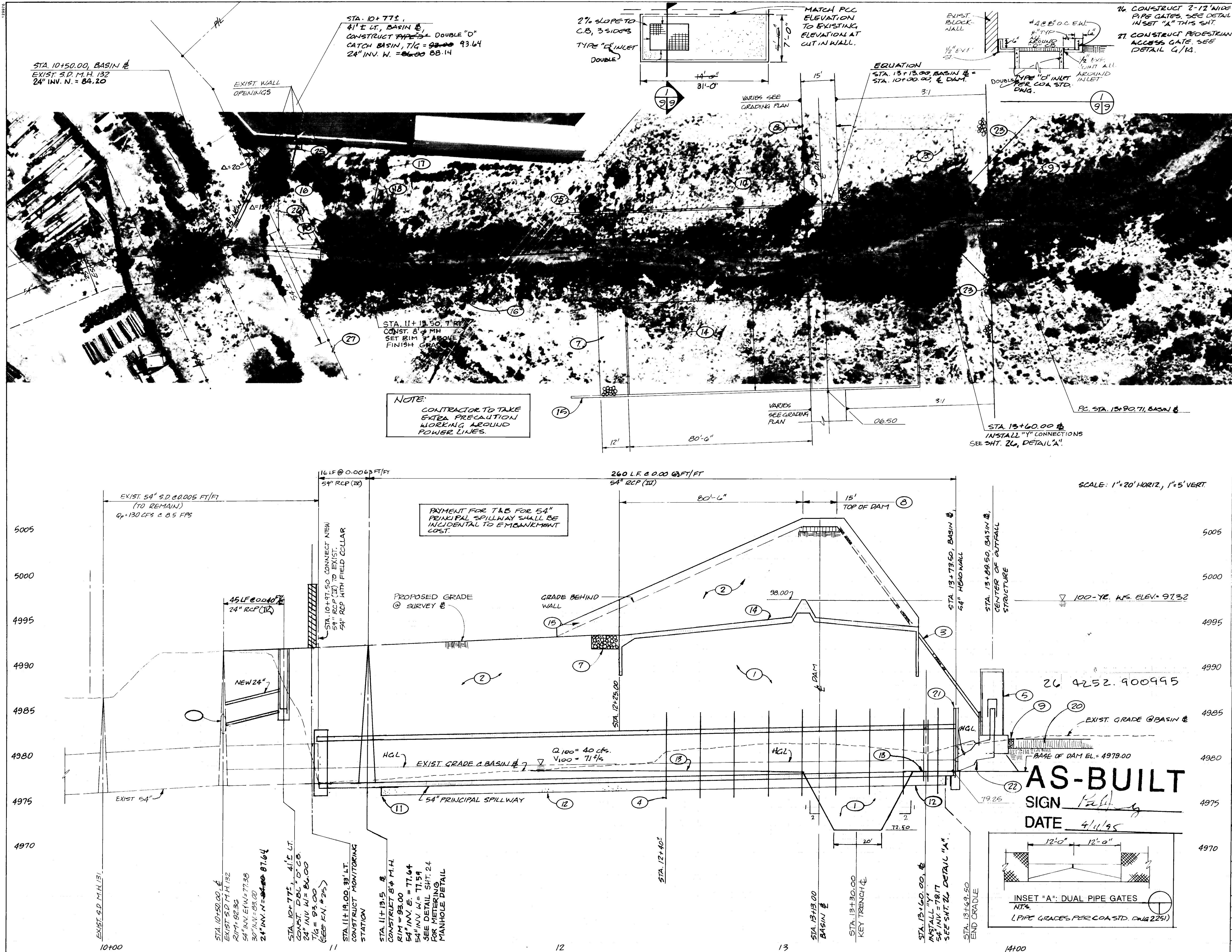


Smith Engineering Company

APPROVALS			APPROVALS		
ENGINEER	DATE		ENGINEER	DATE	
DRC CHAIRMAN			WATER		
TRANSPORTATION			WASTEWATER		
HYDROLOGY					
PROJECT NO.	4252.90		MAP NO.	H-15.H-16	
			SHEET	8	OF 29

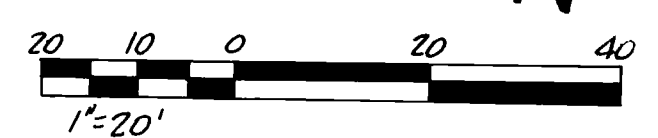
ADDENDUM #2

132974



KEYED NOTES

- EMBANKMENT FILL. COMPACT TO 95% ASTM D-1557.
- GENERAL FILL. COMPACT TO 95% ASTM D-1557.
- DAM FACE, SEE DETAIL F/13.
- CONSTRUCT CONCRETE ANTI-SEEPAGE COLLARS AT 16-FOOT O.C. SEE DETAIL A/14.
- CONSTRUCT TRASH RACK AND PRINCIPAL SPILLWAY. SEE SHEET 12 FOR DETAILS OF TRASH RACK.
- NOT USED
- CONSTRUCT CODE "D" GABIONS. STAKE PER COA DWG. 2270.
- CONSTRUCT 15-FOOT GRAVEL BASE COURSE ROAD. SEE DETAIL F/14.
- CONSTRUCT CODE "D" GABIONS NEXT TO PRINCIPAL SPILLWAY. SEE DETAIL A/12.
- CONNECT NEW 54" RCP TO EXIST. W/ FIELD COLLAR.
- BEGIN CRADLE @ STA. 11+20.
- CONSTRUCT PIPE CRADLE. SEE DETAIL C/14.
- 12-INCH EMBANKMENT SUBGRADE. PRE-WET AND COMPACT THE EMBANKMENT SUBGRADE PER SUPPLEMENTARY SPECIFICATIONS.
- CONSTRUCT EMERGENCY SPILLWAY. SEE DETAILS SHEET 11.
- CONSTRUCT APPROXIMATELY 25 LF OF RETAINING WALL EACH SIDE OF EMERGENCY SPILLWAY. SEE DETAIL D/14.
- EXISTING OVERHEAD ELECTRIC.
- CONSTRUCT MONITORING STATION. SEE SHEET 25.
- INSTALL APPROX. 33 LF OF 3-INCH DIAMETER SCHEDULE 40 PVC CONDUIT AT 3' BURY.
- 3-INCH PVC INVERT = 4990.50. GROUT AROUND PENETRATION.
- SAND FILTER BED. SEE LAYOUT AND DETAILS SHEET 26.
- CONSTRUCT 54-INCH PRINCIPAL SPILLWAY HEADWALL. SEE DETAIL A/12.
- CONSTRUCT PRINCIPAL SPILLWAY RISER AND HOODED INLET. SEE SHEET 12.
- 12-INCH SCH. 40 PVC SAND FILTER DRAIN SYSTEM. SEE SHEET 26 FOR DETAILS AND ALIGNMENT.
- INSTALL NEW 42-INCH RCP DRAIN. SEE SHEET 7.
- SEE DETAIL INSET TOP THIS PAGE FOR RCP RUNDOWN.



AS-BUILT
SIGN *Pat*
DATE 4/1/95

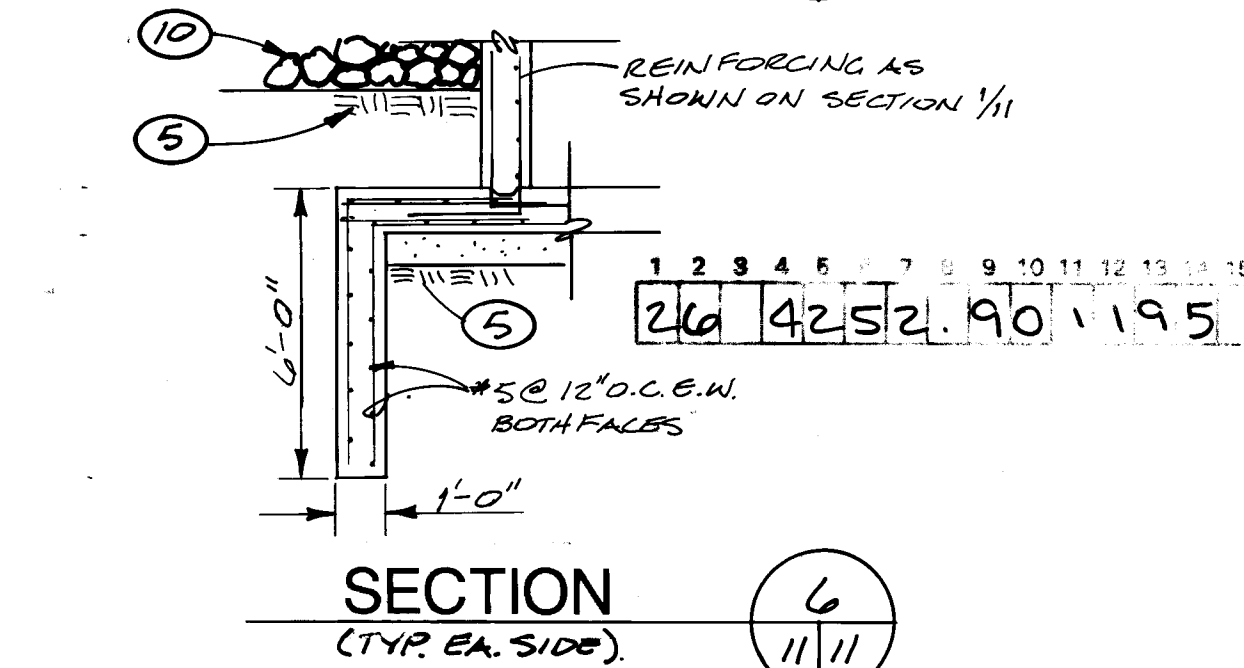
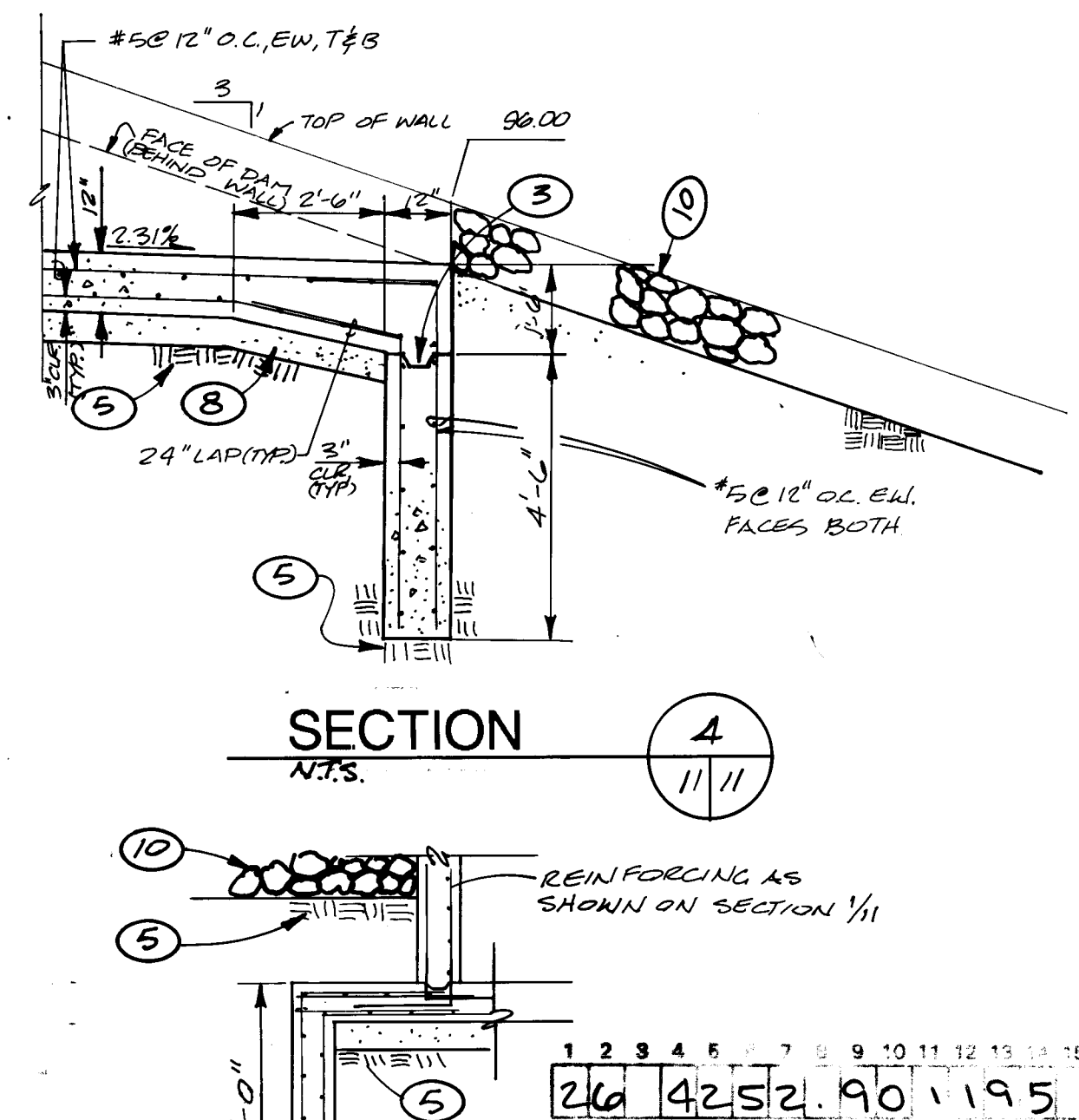
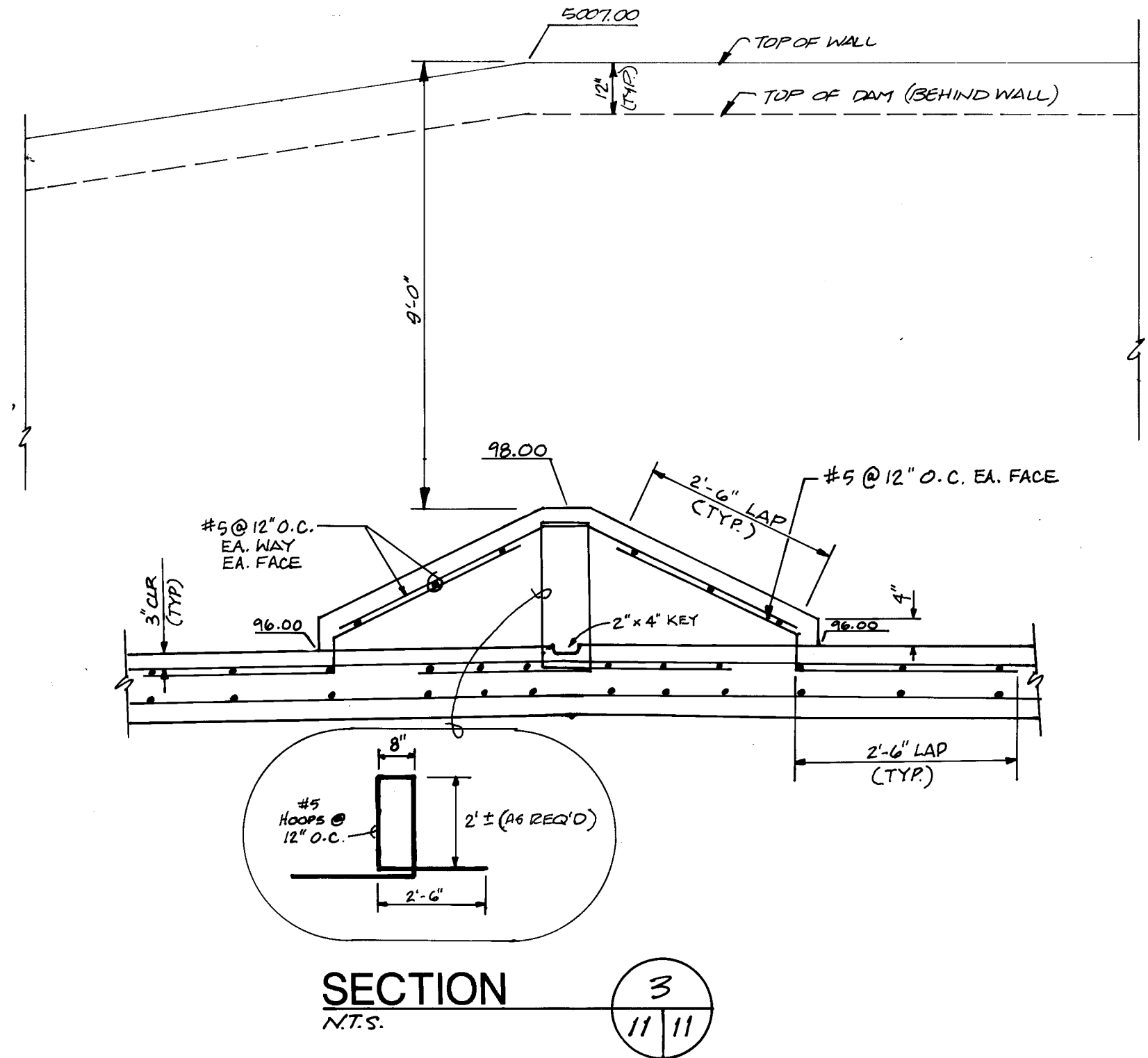
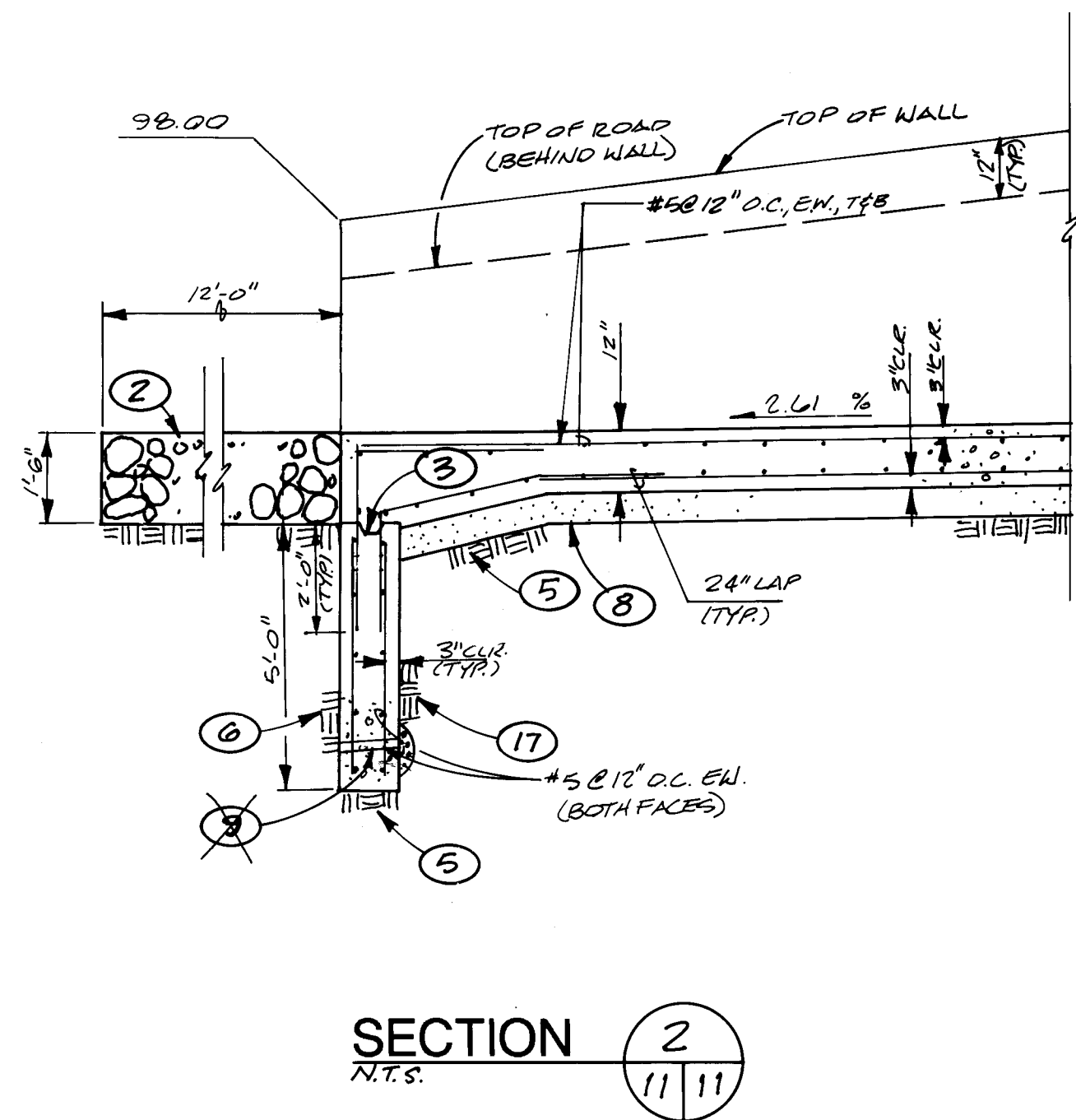
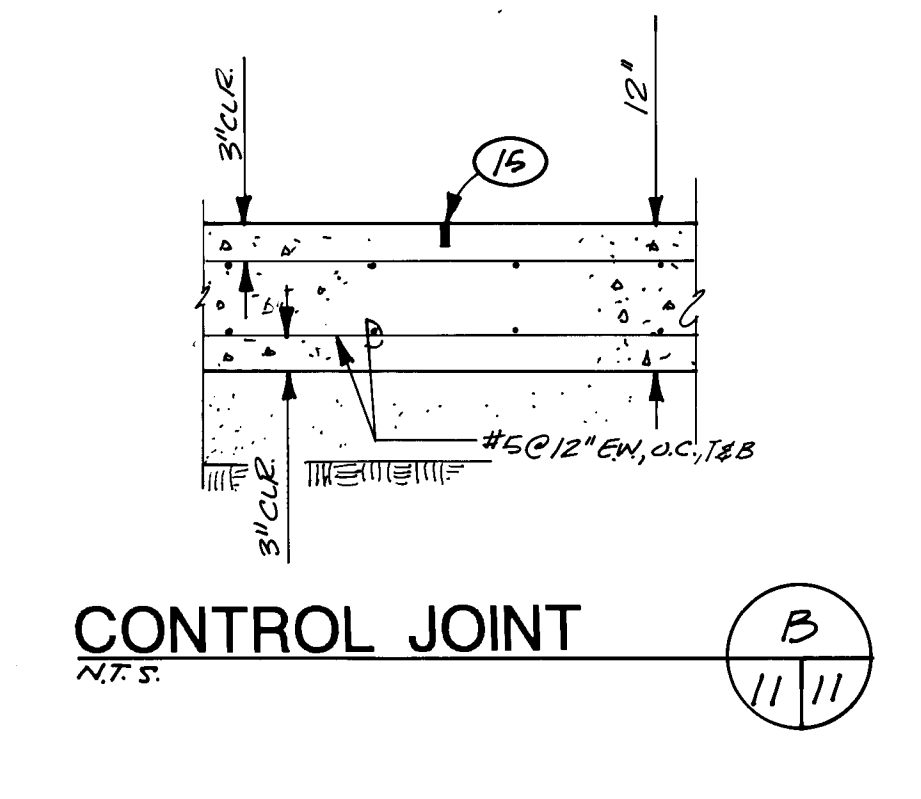
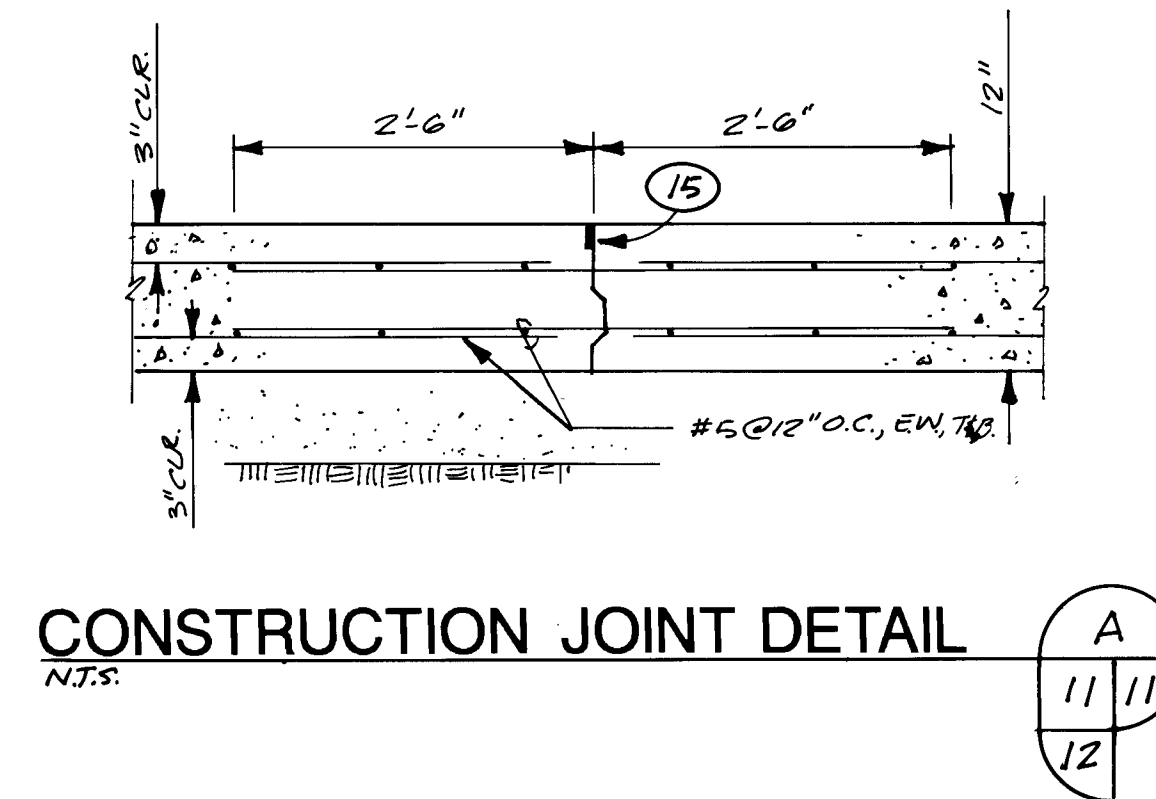
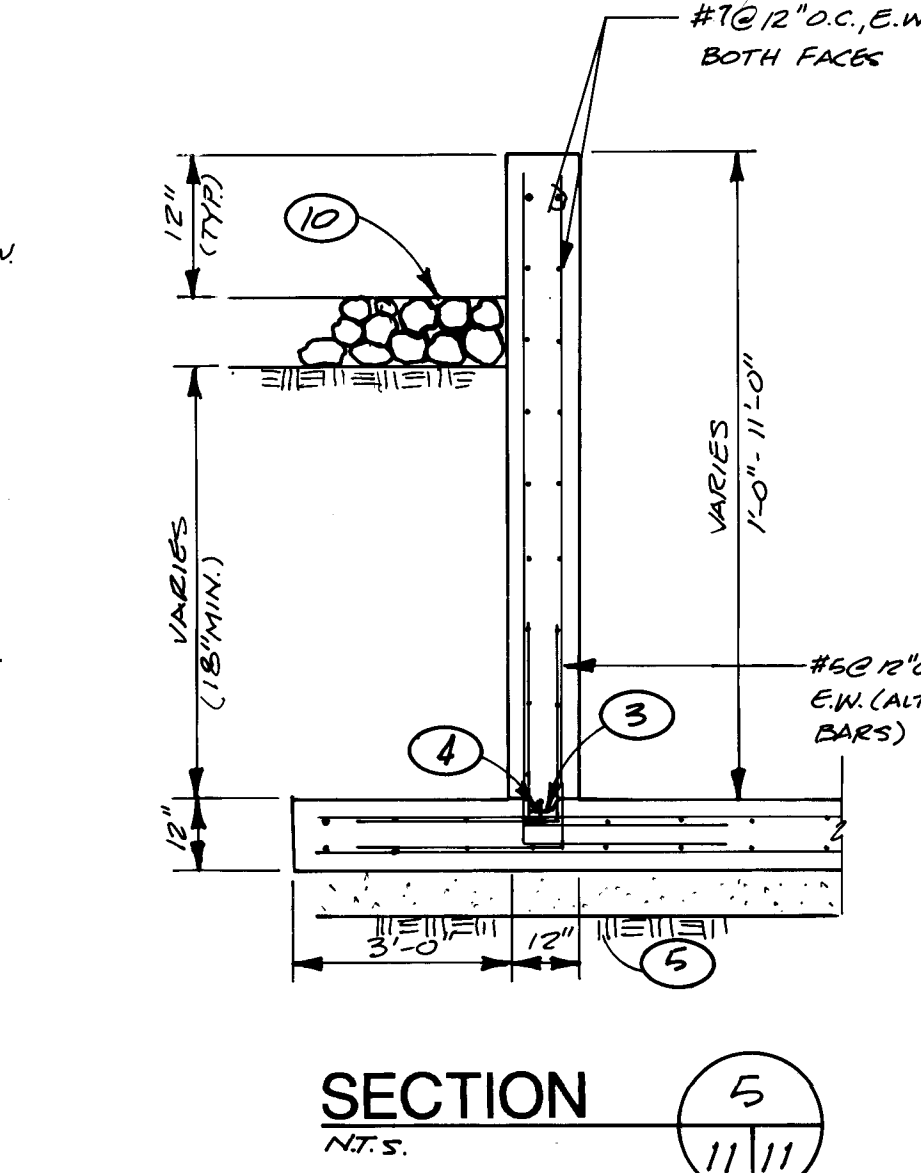
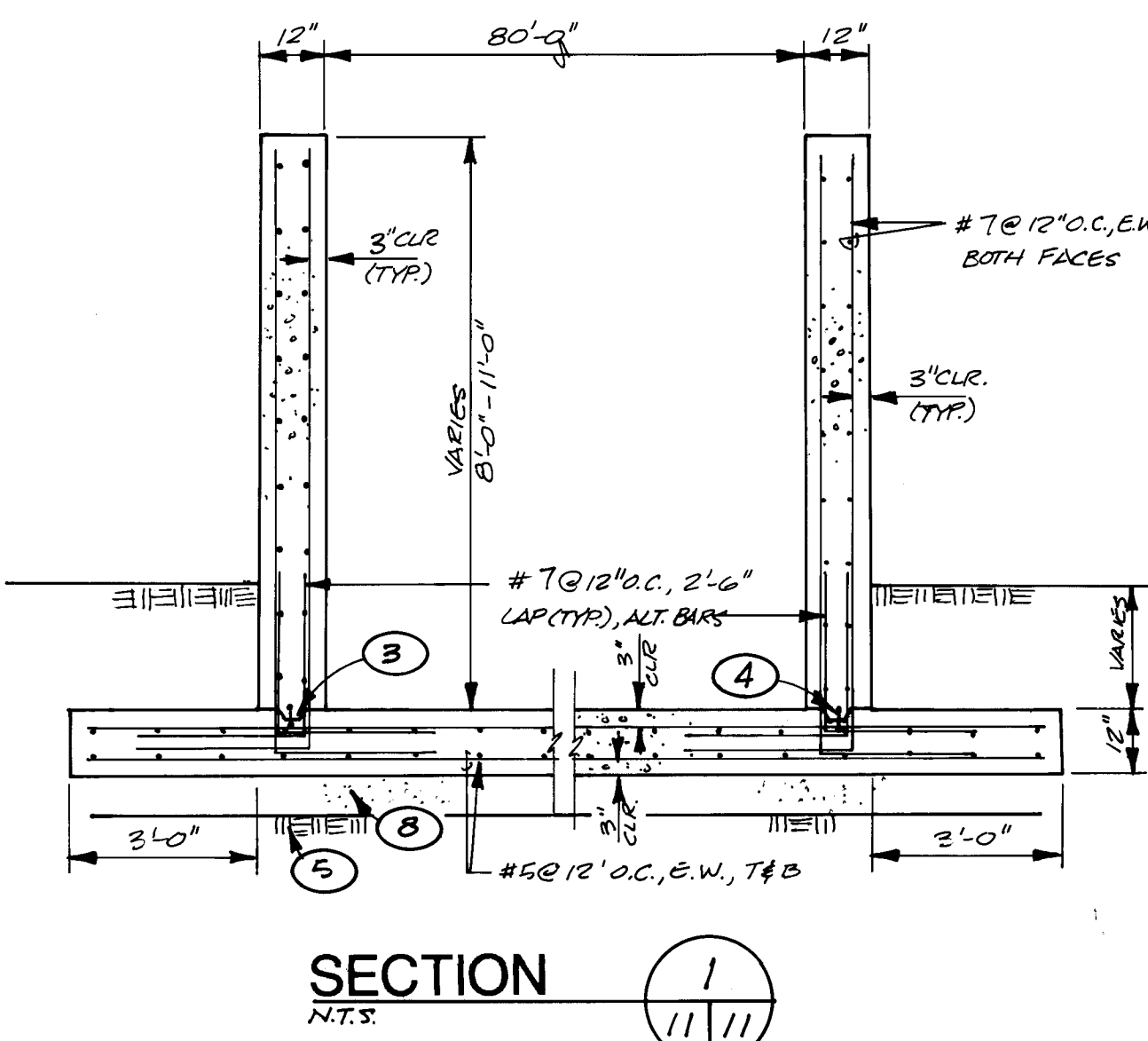
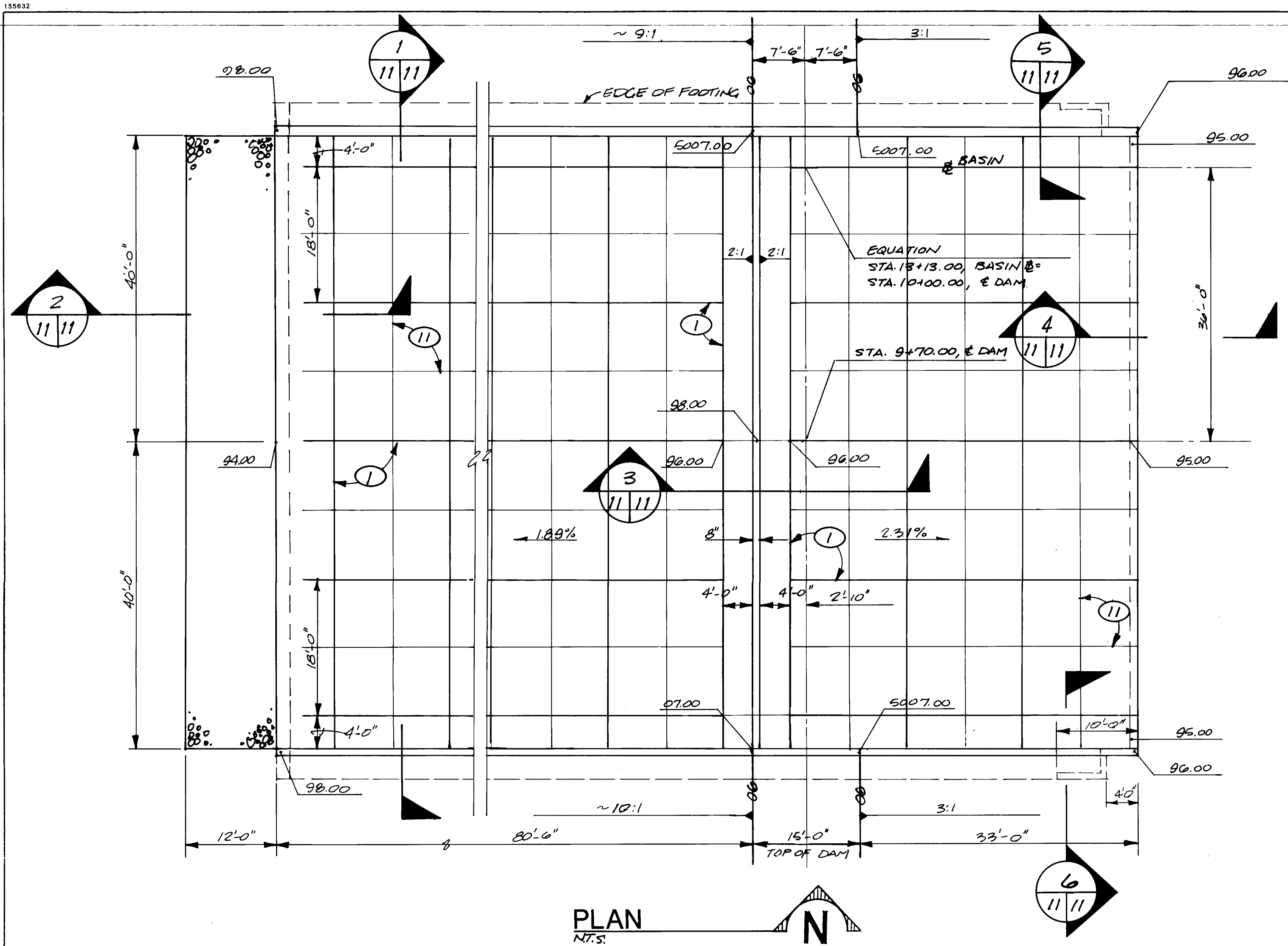
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

DAM CROSS SECTION

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN			WATER		
TRANSPORTATION			WASTEWATER		
HYDROLOGY					

PROJECT NO. 4252.90
MAP NO. 15.H-16
SHEET 9 OF 29

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	R.M.C.I. INC.	WEST ON CANDELARIO 0.2 MILES FROM THE INTERSECTION OF 125 AND CANDELARIO STANDARD A.C.S. BRASS TABLET STAMPED "9-HIS 1979" SET 0.1 FEET ABOVE GROUND. SPIRIT LEVEL ELEVATION (SLD 1929) 5034.93.	NO.	DATE	PROJECT NO. 89-01-06		DESIGNED BY RUC DRAWN BY RUC CHECKED BY RUC
INSET BY	C.O.A.		NO.	DATE			
INSET BY	J.A.O.		NO.	DATE			
INSET BY	J.A.O.		NO.	DATE			
MICRO-FILM INFORMATION		REVISIONS		DATE		DATE	
RECORDED BY		DATE		DATE		DATE	



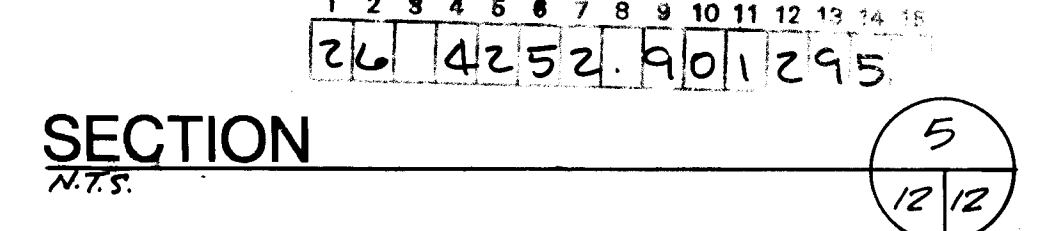
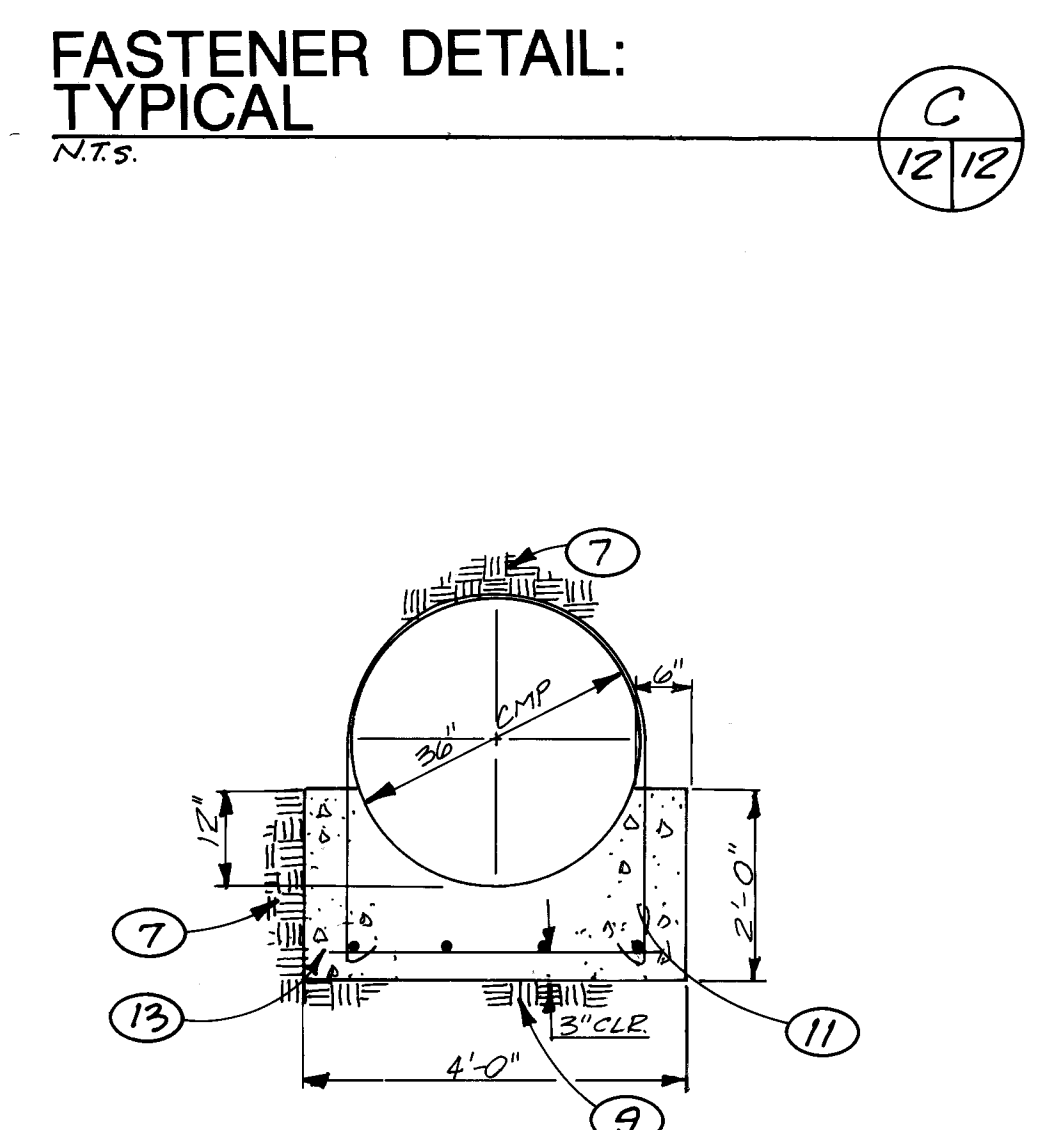
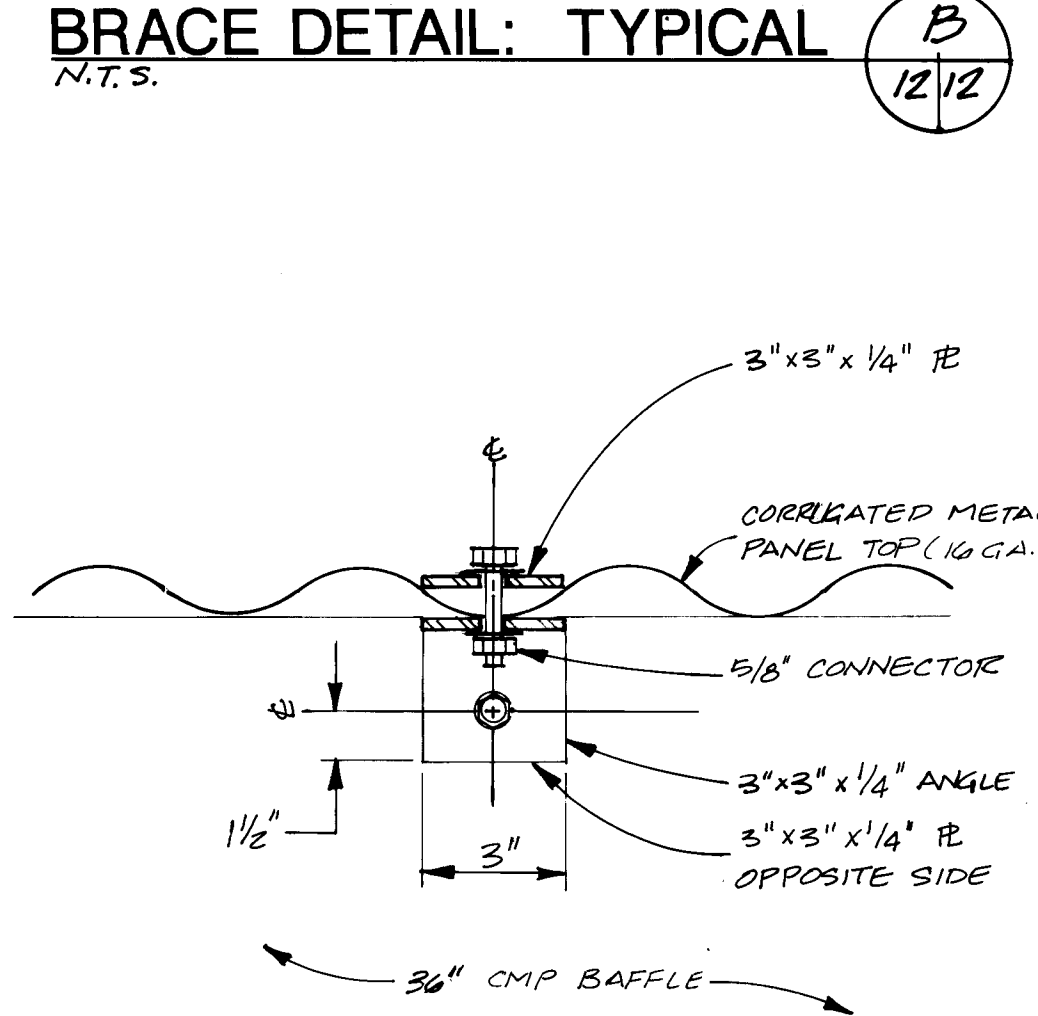
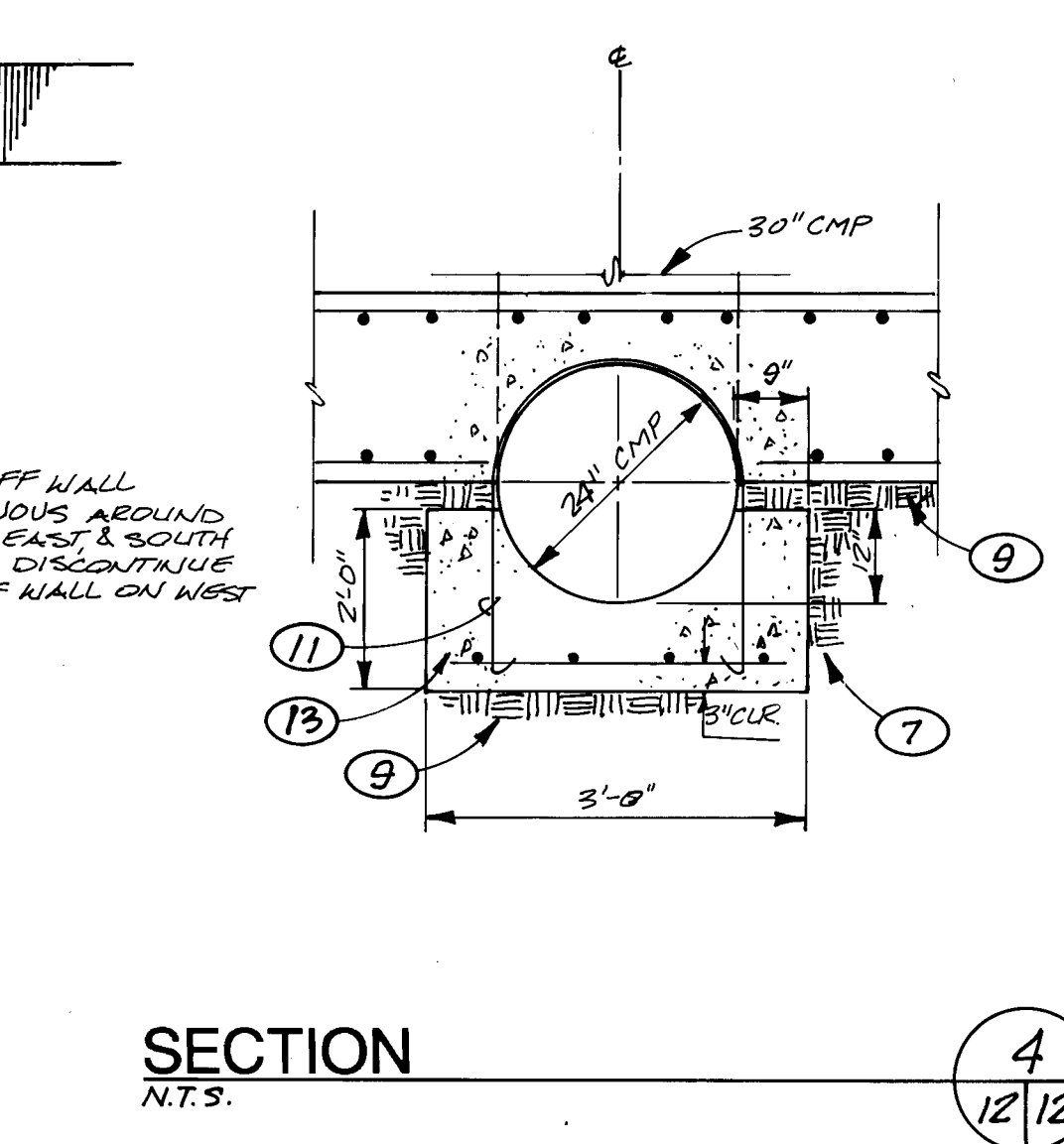
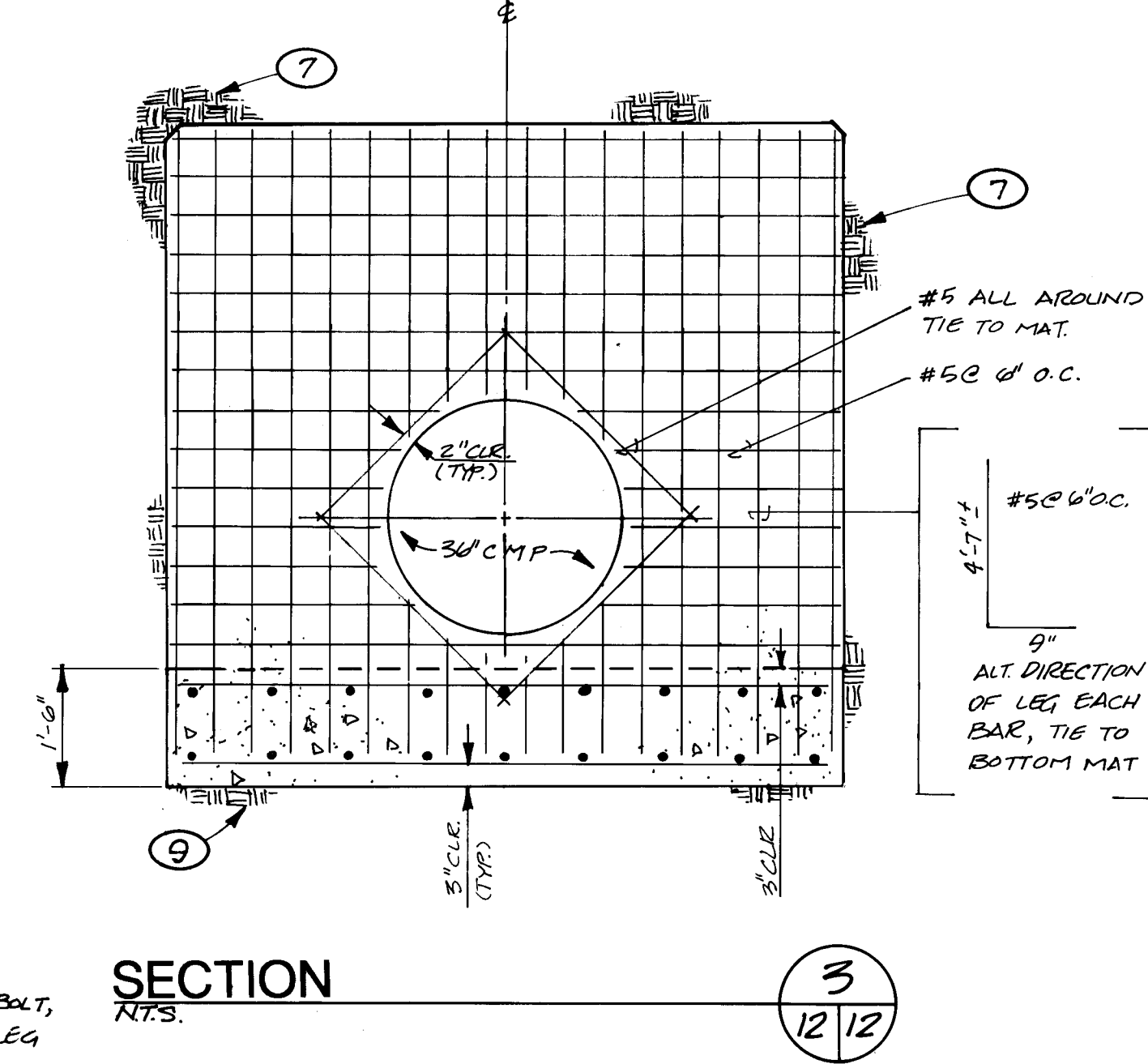
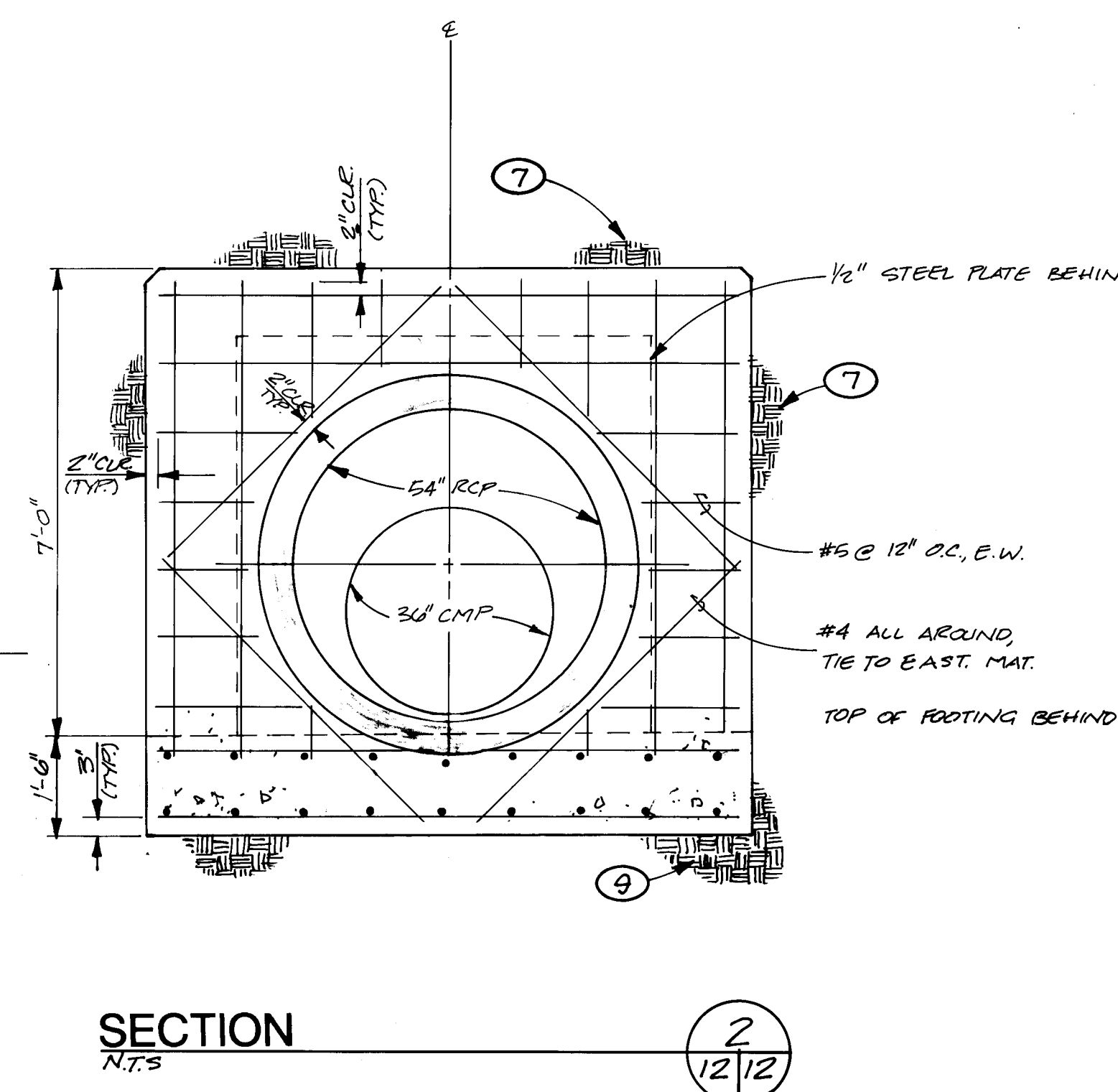
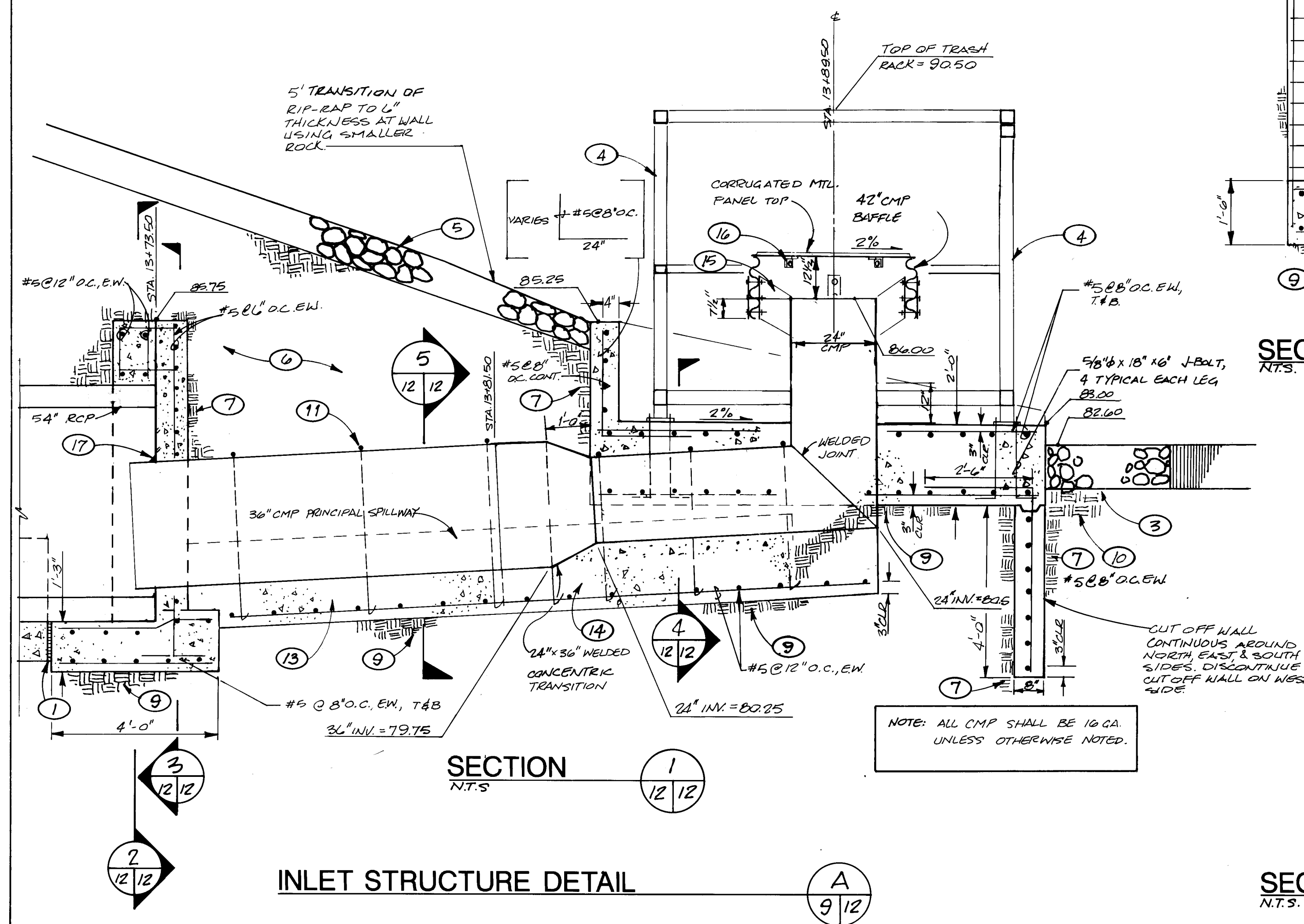
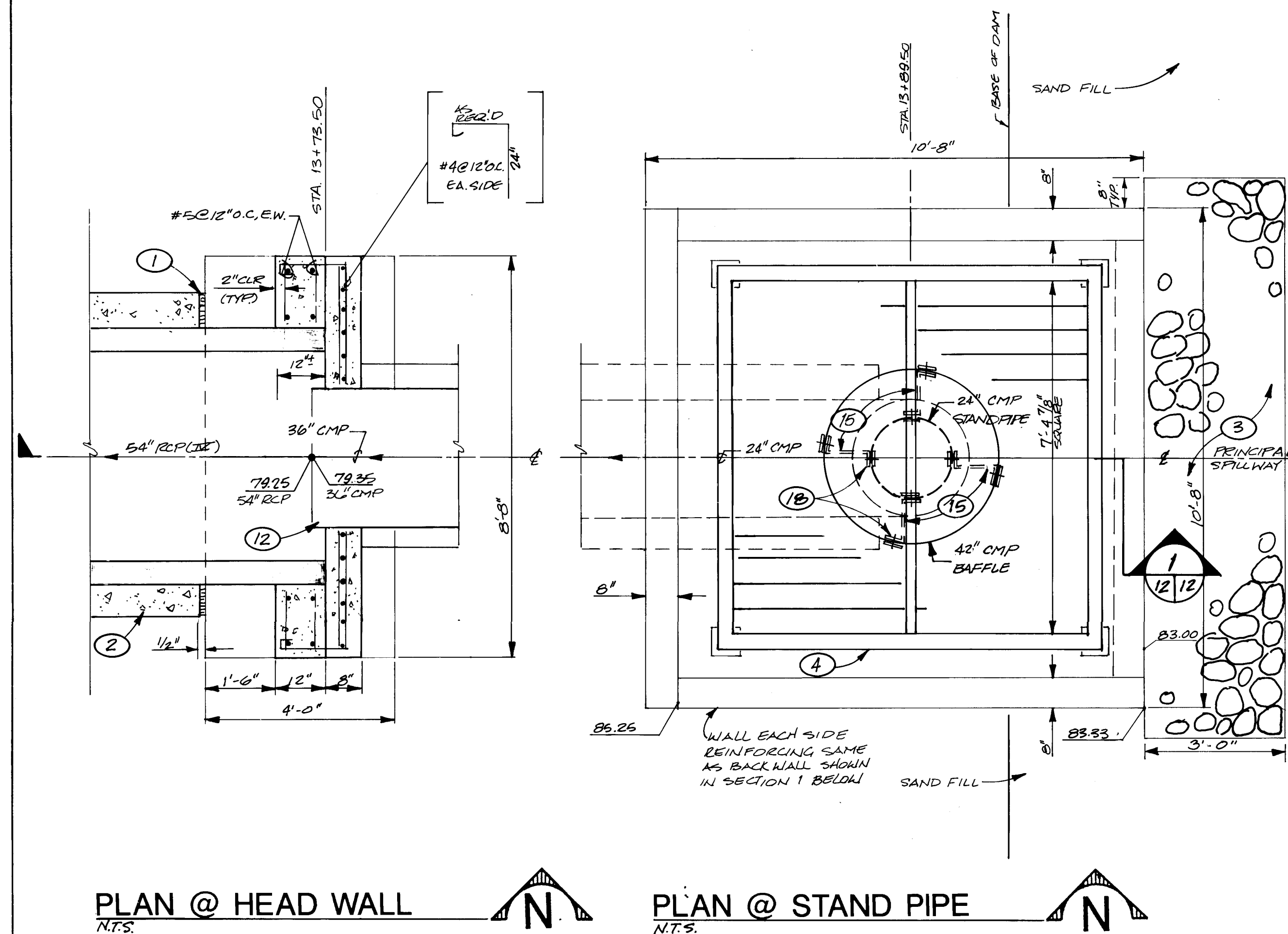
- KEYED NOTES**
- CONSTRUCTION JOINT AT 18-FEET O.C. SEE DETAIL A/11.
 - CONSTRUCT CODE "D" GABIONS. STAKE PER COA DWG. 2270.
 - 2' x 4' KEY (TYPICAL).
 - 6-INCH PVC WATERSTOP (TYPICAL).
 - 18-INCH STRUCTURAL FILL. COMPACT TO 95% ASTM D-1557. IF THE STRUCTURE IS OVER EMBANKMENT FILL, THE REQUIREMENTS FOR EMBANKMENT FILL WILL TAKE PRECEDENCE.
 - GENERAL FILL. COMPACT TO 95% ASTM D-1557.
 - NOT USED.
 - 6-INCH TYPE II BASE COURSE. COMPACT TO 95% ASTM D-1557.
 - 4-INCH DIAMETER PVC WEEP HOLE AT 18-FEET O.C.
 - DAM FACE. SEE DETAIL F/13.
 - PROVIDE CONTRACTION JOINT AT 18-FEET O.C. SEE DETAIL B/11.
 - NOT USED.
 - NOT USED.
 - NOT USED.
 - 3/8-INCH x 2-INCH FORMED GROOVE OR 1/4-INCH x 2-INCH SAWED GROOVE WITH SILICONE SEALANT (DAM-550 OR -880, SL-1).

AS-BUILT
SIGN *[Signature]*
DATE 4/11/95

NO ADDITIONAL PAYMENT WILL BE MADE FOR SUBGRADE PREPARATION, ENGINEERED FILL PROCESSING, PLACEMENT AND COMPACTION FOR STRUCTURES, ACCESS ROADS, AND JOGGING PATHS AS SHOWN ON THE PLANS. THE COST FOR SUCH WORK SHALL BE INCIDENTAL TO THE PAYMENT FOR THE BID ITEM "EXCAVATION, BACKFILL, AND COMPACTION IN THE BASIN AND CHANNEL."

Smith Engineering Company

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: MENAUL DETENTION BASIN AND STORM DRAIN					
EMERGENCY SPILLWAY DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>[Signature]</i>	1-13-94	WATER	<i>[Signature]</i>	12-30-93
TRANSPORTATION	<i>[Signature]</i>	1-05-94	WASTE WATER	<i>[Signature]</i>	12-30-93
HYDROLOGY	<i>[Signature]</i>	11-22-93			
PROJECT NO. 4252.90		MAP NO. H-15, H-16		SHEET 11 OF 29	



KEYED NOTES

- 1/2" EXPANSION JOINT WITH MASTIC SEALER ALL AROUND AT INTERSECTION OF CRADLE AND HEADWALL.
- PIPE CRADLE. SEE DETAIL C/14.
- CODE "D" GABIONS OVER COMPACTED SUBGRADE. STAKE PER COA STD. DWG. 2270.
- CONSTRUCT TRASH RACK. SEE DETAIL H/13.
- DAM FACE. SEE DETAIL F/13.
- EMBANKMENT FILL. SEE SHEETS 9 AND 10 AND SPECIFICATIONS FOR COMPACTION REQUIREMENTS.
- BACKFILL. COMPACT PER EMBANKMENT FILL REQUIREMENTS.
- NOT USED.
- 24" ENGINEERED FILL. COMPACT TO 95% ASTM D-1557.
- 6-INCH SUBGRADE. COMPACT TO 90% ASTM D-1557.
- #4 EPOXY COATED REBAR TIES AT 36-INCHES O.C.
- INSTALL 36-INCH CMP 4-INCHES INTO 54-INCH RCP.
- CONCRETE CRADLE FOR CMP.
- CONSTRUCT 12-INCH TRANSITION FROM 36-INCH WIDE CRADLE TO 48-INCH WIDE CRADLE.
- BAFFLE HOOD BRACE. SEE DETAIL B/12.
- ATTACH PANEL TOP TO BAFFLE HOOD WITH FOUR FASTENERS AT 90-DEGREES O.C. SEE DETAIL C/12.
- SEAL ALL AROUND CMP WITH MASTIC.
- 3" x 12" x 1/4" 16-GAUGE STEEL PLATE, TYPICAL EACH BRACE. PRIME AND PAINT.

AS-BUILT
SIGN *[Signature]*
DATE 4/10/95

NO ADDITIONAL PAYMENT WILL BE MADE FOR SUBGRADE PREPARATION, ENGINEERED FILL PROCESSING, PLACEMENT, AND COMPACTION FOR STRUCTURES, ACCESS ROADS, AND JOGGING PATHS AS SHOWN ON THE PLANS. THE COST FOR SUCH WORK SHALL BE INCIDENTAL TO THE PAYMENT FOR THE BID ITEM "EXCAVATION, BACKFILL, AND COMPACTION IN THE BASIN AND CHANNEL."

Smith Engineering Company

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: MENAUL DETENTION BASIN AND STORM DRAIN					
INLET STRUCTURE DETAIL					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	B. G. A.	1-13-94	WATER	NA	7/93
TRANSPORTATION	W. B. RHO	1-05-94	WASTE WATER	NA	7/93
HYDROLOGY	C. M.	11-28-92			
PROJECT NO.	4252.90	MAP NO.	H-15, H-16	SHEET	12 OF 29

STORM DRAIN									
DETAIL									
SOILS		ENGINEER				DATE			
NA		7/93				1-20-93			
WATER		ENGINEER				DATE			
NA		7/93				1-20-93			
SHEET		OF							
-16		12				29			

ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
		FIELD NOTES		DATE		CONTRACTOR	
		BY		DATE		WORK D. BY	
		NO.		DATE		INSPECTOR'S	
		10263		10/91		J. A. O.	
						C.O.A.	
				WEST ON CANDELARIA 0.2 MILES FROM THE INTERSECTION		DATE	
				OF I-25 AND CANDELARIA STANDARD A.C.S. BRASS		DATE	
				TABLET STAMPED 9-15-1979 SET 0.1 FEET ABOVE		DATE	
				GROUND. SPIRIT LEVEL ELEVATION (SLD 1929) 5034.93.		DATE	
				CORRECTED BY		DATE	
				DRAWINGS		DATE	
				MICRO-FILM INFORMATION		DATE	
				RECORDED BY		DATE	
				NO		DATE	

PROJECT NO. 89-01-06

DESIGNED BY	PJC	DATE	7/93
DRAWN BY	CTN	DATE	7/93
CHECKED BY	PJC	DATE	8/93



NTS



- 1 #5 x 14" DOWEL AT 8-INCH O.C.
AROUND OPENING. SET 6-INCHES INTO
EXISTING WALL WITH EPOXY.
- 2 FILL EXISTING 4' x 4' OPENING WITH
CONCRETE.
- 3 #4 AT 8-INCH O.C. E.W.
- 4 EMBANKMENT FILL. COMPACT TO 95%
ASTM D-1557.
- 5 12-INCHES DUMPED RIP-RAP, d₅₀ = 6-
INCHES.
- 6 6-INCH AGGREGATE GRAVEL BASE
COURSE. COMPACT TO 95% ASTM
D-1557.
- 7 SAND FILTER SYSTEM OVER NATURAL
SUBGRADE. SEE SHEET 26 FOR
LAYOUT AND DETAILS.
- 8 6" TYPE II AGGREGATE BASE COURSE.
COMPACT TO 95% ASTM D-1557.
- 9 6" SUBGRADE. COMPACT TO 95% ASTM
D-1597.
- 10 GRADE @ 4:1 SLOPE AWAY FROM
SWALE.
- 11 BACKFILL. COMPACT TO 90% ASTM D-
1557.
- 12 MATCH FUTURE GRADE. DISTANCE
AWAY FROM SWALE VARIES.
- 13 TYPE II CONCRETE SWALE PER COA
DWG. 2260. SEE GRADING PLAN FOR
INVERTS.
- 14 CROUT AROUND PIPE AFTER
INSTALLATION. NOT USED.

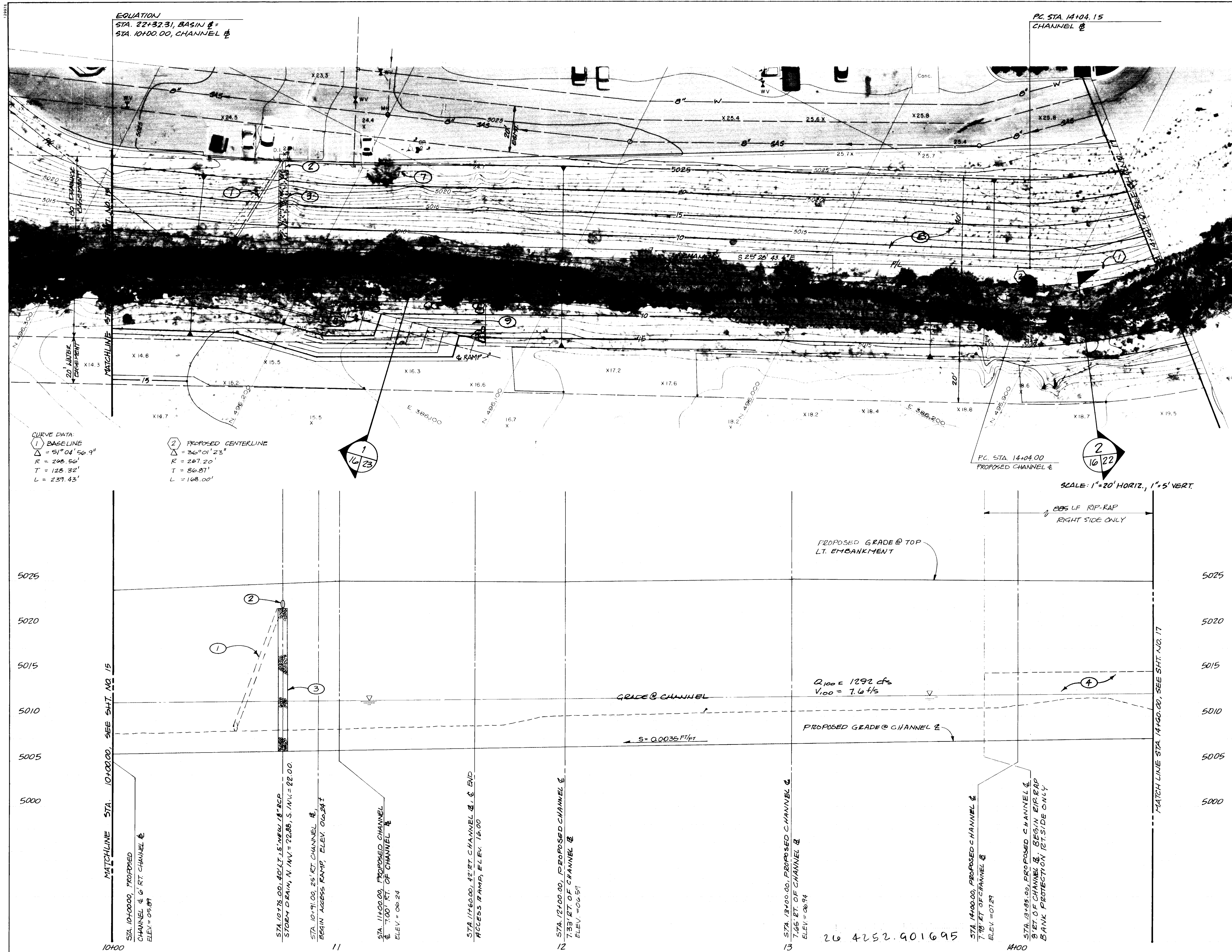
NO ADDITIONAL PAYMENT WILL BE MADE FOR SUBGRADE PREPARATION, ENGINEERED FILL PROCESSING, PLACEMENT, AND COMPACTION FOR STRUCTURES, ACCESS ROADS, AND JOGGING PATHS AS SHOWN ON THE PLANS. THE COST FOR SUCH WORK SHALL BE INCIDENTAL TO THE PAYMENT FOR THE BID ITEM "EXCAVATION, BACKFILL, AND COMPACTION IN THE BASIN AND CHANNEL."



TITLE: MENAUL DETENTION BASIN AND STORM DRAIN

BASIN SECTIONS & DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRG CHAIRMAN	<i>S. A. S.</i>	<i>1-13-94</i>	WATER	<i>N.A. WGB</i>	<i>11-30-93</i>
TRANSPORTATION	<i>W.D. RHO</i>	<i>1-05-94</i>	WASTE WATER	<i>N.A. WGB</i>	<i>11-30-93</i>
HYDROLOGY	<i>CAM</i>	<i>11-23-93</i>			
PROJECT NO. 4252.90		MAP NO. H-15, H-16		SHEET 13 OF 29	

SCANNED
BY LGS-ON



KEYED NOTES

- 1 REMOVE EXISTING 18-INCH RCP DRAIN BACK TO CATCH BASIN.
- 2 5-FOOT OF NEW 18-INCH RCP DRAIN (RELOCATED).
- 3 CONSTRUCT RIP-RAP RUNDOWN. SEE DETAIL B/22.
- 4 DUMPED RIP-RAP, d50 = 9". SEE SECTION 2/22.
- 5 CONSTRUCT ACCESS RAMP, SLOPE = 7:1.
- 6 START OF RAMP, STA. 10+91.00, 25' RIGHT.
- 7 TREE TO REMAIN, REMOVED
- 8 CLEAR AND GRUB CHANNEL TO LIMITS OF GRADING WITHIN THE EASEMENT. REMOVE AND DISPOSE OF RUBBLE, TRASH, AND TREES UNLESS OTHERWISE NOTED ON PLANS.
- 9 CONSTRUCT RIP-RAP SLOPE PROTECTION ALONG LENGTH OF ACCESS RAMP. SEE SECTION 1/23.

AS BUILT INFORMATION

CONTRACTOR: RMCT, INC.

INSPECTOR: C.O.A.

DATE: 4/93

WEST ON CANDELARIA 0.2 MILES FROM THE INTERSECTION OF I-25 AND CANDELARIA, STANDARD A.C.S. BRASS

TABLET STAMPED "9-H15 1979" SET 0.1 FEET ABOVE GROUND. SPIRIT LEVEL ELEVATION (GLD 1928) 5334.93.

MICRO-FILM INFORMATION

RECORDED BY: NO

SURVEY INFORMATION

FIELD NOTES

NO. 10288

BY: GEORGE MARQUEZ JR.

DATE: 4/93

ENGINEER'S SEAL

PROJECT NO. 89.01.06

AS-BUILT SIGN

DATE: 4/93

REVISIONS

NO. DATE REMARKS

DESIGN

DESIGNED BY: PJC

DRAWN BY: STN

CHECKED BY: PAC

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: MENDAL DETENTION BASIN AND STORM DRAIN

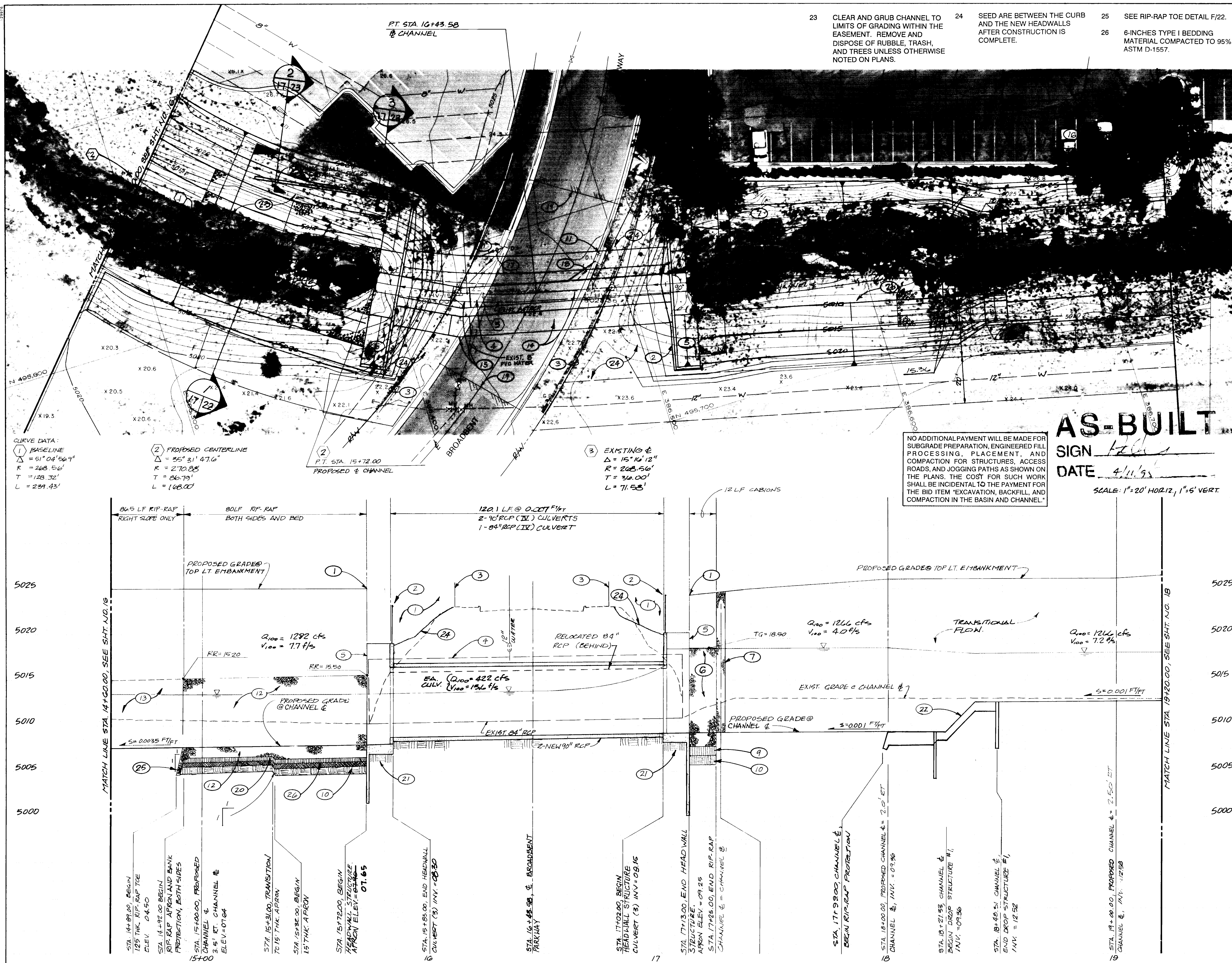
DRAINAGE CHANNEL PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN			WATER		
TRANSPORTATION	N/A RMD	1-05-99	WASTEWATER		
HYDROLOGY					

PROJECT NO. 4252.90

MAP NO. H-15, H-16

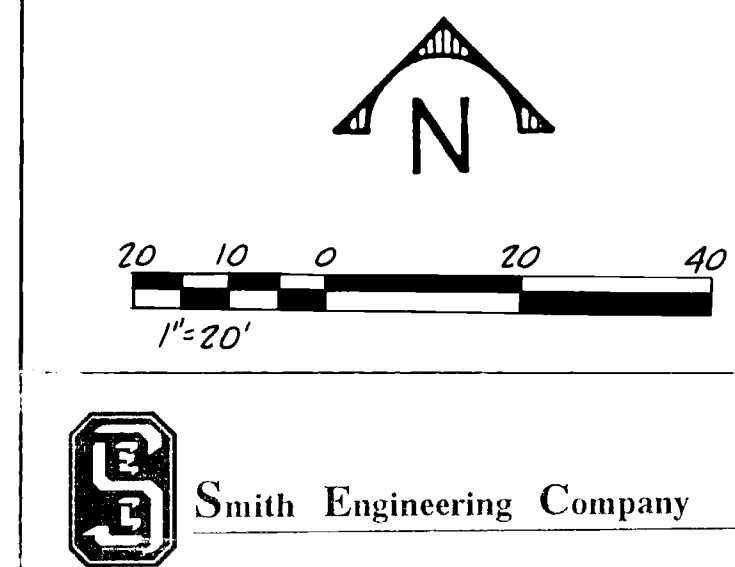
SHEET 16 OF 29



- | | | | | | |
|----|--|----|---|----|--|
| 23 | CLEAR AND GRUB CHANNEL TO LIMITS OF GRADING WITHIN THE EASEMENT. REMOVE AND DISPOSE OF RUBBLE, TRASH, AND TREES UNLESS OTHERWISE NOTED ON PLANS. | 24 | SEED ARE BETWEEN THE CURB AND THE NEW HEADWALLS AFTER CONSTRUCTION IS COMPLETE. | 25 | SEE RIP-RAP TOE DETAIL F/22. |
| | | | | 26 | 6-INCHES TYPE I BEDDING MATERIAL COMPACTED TO 95% ASTM D-1557. |

○ KEYED NOTES

- SEE GRADING PLAN FOR CONTINUATION OF GRADES.
2. INSTALL ^{6 FT.} ~~48 INCH~~ HIGH CHAINLINK FENCE ALONG TOP OF HEADWALLS. SEE DETAIL E/23 FOR LOCATION OF FENCE POSTS.
3. REMOVE AND REPLACE EXISTING CHAINLINK FENCE.
4. REMOVE APPROXIMATELY 140 LF OF EXISTING 84-INCH RCP. REINSTALL APPROXIMATELY 120 LF OF 84-INCH RCP. INSTALL NEW GASKETS WHEN REINSTALLING THE 84-INCH PIPE. PATCH HOLES LEFT IN 84-INCH PIPE FROM CONNECTOR PIPES BEFORE INSTALLATION.
5. CONSTRUCT HEADWALL. SEE DETAIL D/22 AND ELEVATION B/23.
6. CONSTRUCT CODE "F" GABIONS. ~~STAKE~~ PER COA DWG. 2270.
7. CONSTRUCT RIP-RAP RUNDOWN. ^{✓ GROUTED} SEE DETAIL B/22.
8. ~~NOT USED~~
9. ¹² ~~6 INCH~~ TYPE II BASE COURSE. COMPACT TO 95% ASTM D-1557.
10. 12-INCH SUBGRADE. COMPACT TO 95% ASTM D-1557.
11. REMOVE EXISTING CATCH BASIN AND CONNECTOR PIPE. CONSTRUCT NEW TYPE "A" CATCH BASIN. MATCH EXISTING GRADES AND INVERTS.
12. CONSTRUCT RIP-RAP CHANNEL PROTECTION. SEE SECTION 1/22.
13. CONSTRUCT RIP-RAP SLOPE PROTECTION, ~~RIGHT~~ SIDE OF CHANNEL ONLY. SEE SECTION 2/22.
14. INSTALL 120 LF 90-INCH RCP (IV) CULVERT (2).
15. INSTALL 15" BEND (90-INCH, 2 TYPICAL)
16. LANDSCAPING TO REMAIN.
17. INSTALL ¹⁴ ~~APPROXIMATELY 16~~ LF 24-INCH RCP CONNECTOR PIPE. TIE INTO 84-INCH RCP AT STA. 16 + 18 ±, INVERT = 12.50.
18. INSTALL ⁸ ~~APPROXIMATELY 16~~ LF 24-INCH RCP CONNECTOR PIPE. TIE INTO NEW MIDDLE 90-INCH RCP AT STA. 16 + 30 ±, INVERT = 12.50.
19. PAVEMENT AND CURB-AND-GUTTER PAYMENT LIMITS. NEW CONSTRUCTION TO MATCH EXISTING GRADES.
20. 6-INCHES TYPE II FILTER MATERIAL.
21. 24-INCHES ENGINEERED FILL. COMPACT TO 95% ASTM D-1557.
22. CONSTRUCT GROUTED RIP-RAP DROP STRUCTURE WITH DUMPED RIP-RAP APPROACH AND EXIT. SEE SECTION 3/22.



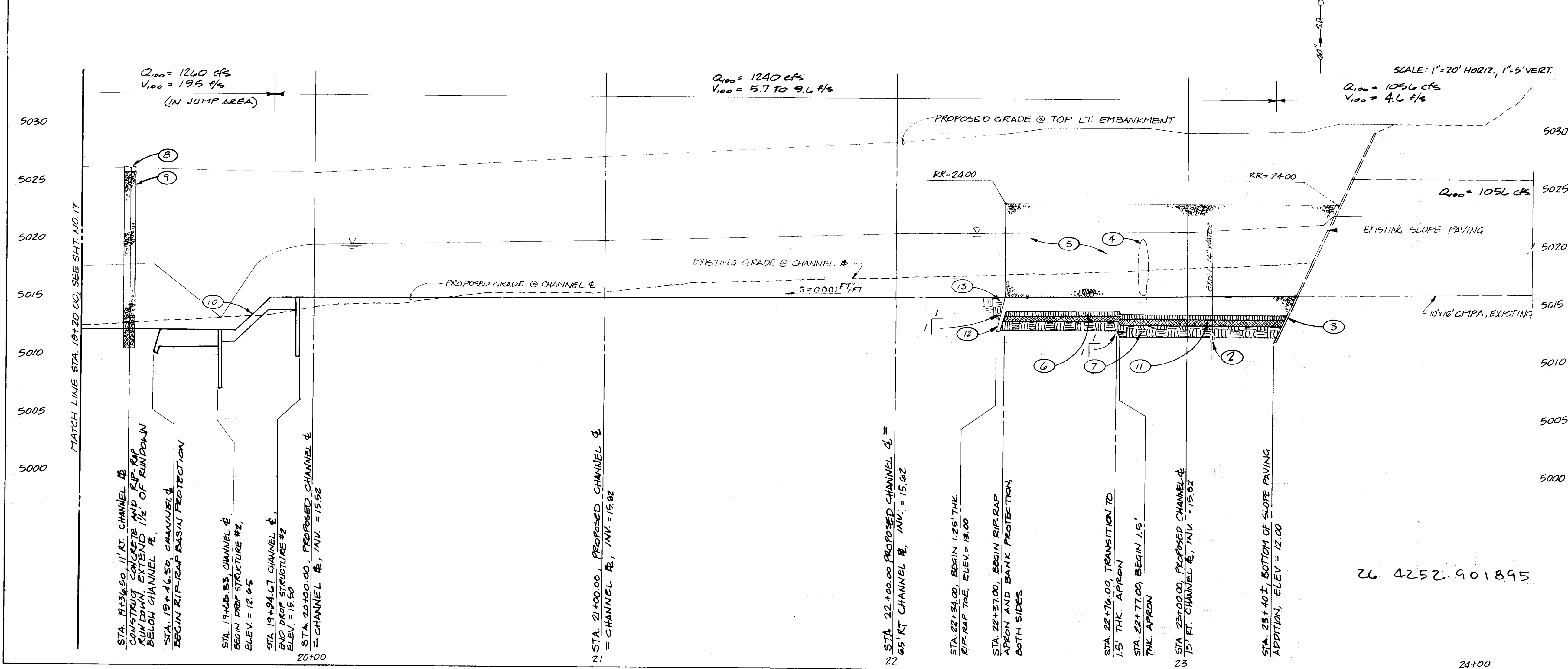
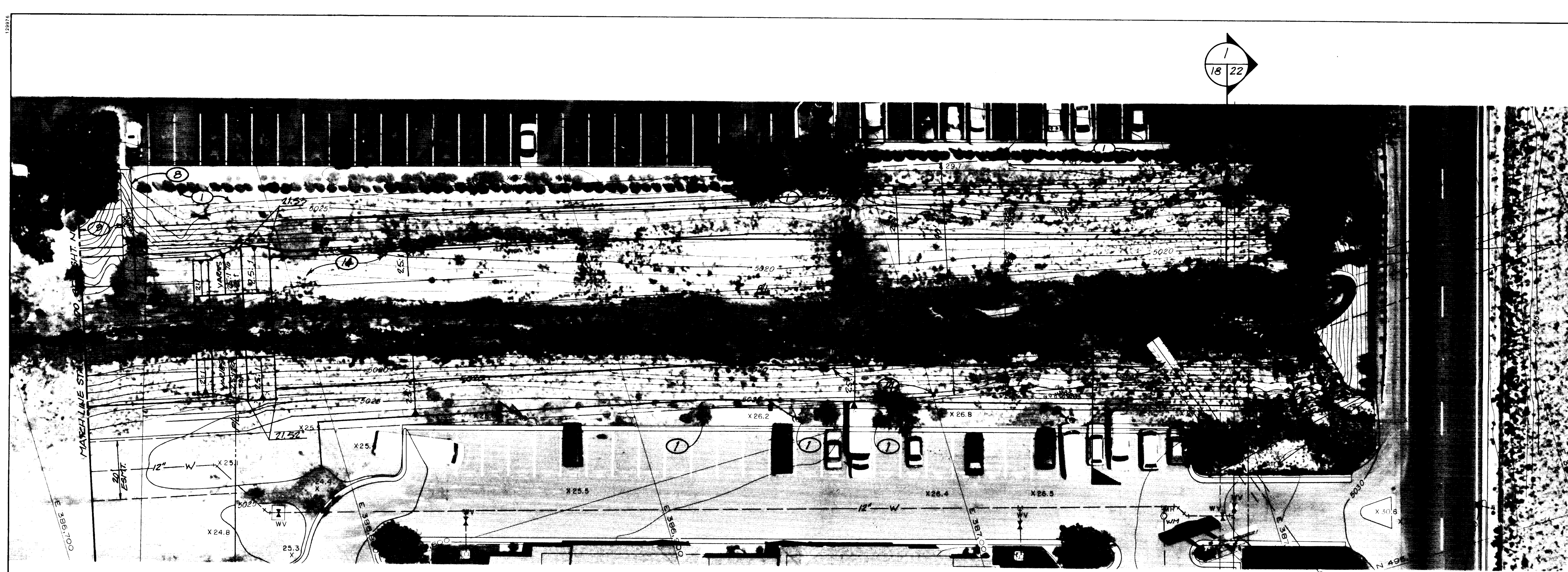
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

DRAINAGE CHANNEL PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		11/25/99	WATER	Michael Walsh	11/25/99
TRANSPORTATION	N/A RHP	1/5/99	WASTEWATER	Michael Walsh	11/25/99
HYDROLOGY	N/A	11/25/99			

PROJECT NO. 4252.90	MAP NO. H-15,H-16	SHEET 17 OF 29
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[illegible]



KEYED NOTES

- EXISTING TREES, SHRUBS AND LANDSCAPING TO REMAIN ALONG TOP OF CHANNEL, EACH SIDE.
- CONTRACTOR TO VERIFY TOP-OF-PIPE ELEVATION. NOTIFY COA FIELD ENGINEER IF LOCATION VARIES FROM WHAT IS INDICATED ON THE PLANS SUCH THAT FIELD ADJUSTMENT OF WATERLINE MAY BE MADE.
- EXTEND EXISTING SLOPE PAVING. SEE DETAIL A/22.
- EXISTING 60-INCH RCP AND CUTOFF WALL TO REMAIN.
- CONSTRUCT DUMPED RIP-RAP CHANNEL PROTECTION. SEE SECTION 1/22.
- 6-INCHES TYPE II FILTER MATERIAL.
- 12-INCH SUBGRADE. COMPACT TO 90% ASTM D-1557.
- CONSTRUCT 16 LF CONCRETE RUNDOWN, SEE DETAIL D/23. MATCH UPSTREAM INVERT TO EXISTING CURB CUT INVERT IN PARKING AREA.
- CONSTRUCT GRouted RIP-RAP RUNDOWN. SEE DETAIL B/22.
- CONSTRUCT GRouted RIP-RAP DROP STRUCTURE WITH DUMPED RIP-RAP APPROACH AND EXIT. SEE SECTION 3/22.
- 6-INCHES TYPE I FILTER MATERIAL COMPACT TO 95% ASTM D-1557.
- CONSTRUCT RIP-RAP TOE AT DOWNSTREAM END OF BLANKET. BOTTOM TOE ELEVATION = 13.50. SEE DETAIL F/22.
- BACKFILL. COMPACT TO 90% ASTM D-1557.
- CLEAR AND GRUB CHANNEL TO LIMITS OF GRADING WITHIN THE EASEMENT. REMOVE AND DISPOSE OF RUBBLE, TRASH, AND TREES UNLESS OTHERWISE NOTED ON PLANS.

AS-BUILT SIGN

DATE 4/11/95

NO ADDITIONAL PAYMENT WILL BE MADE FOR SUBGRADE PREPARATION, ENGINEERED FILL, PROCESSING, PLACEMENT, AND COMPACTION FOR STRUCTURES, ACCESS ROADS, AND JOGGING PATHS AS SHOWN ON THE PLANS. THE COST FOR SUCH WORK SHALL BE INCIDENTAL TO THE PAYMENT FOR THE BID ITEM "EXCAVATION, BACKFILL, AND COMPACTION IN THE BASIN AND CHANNEL."

Smith Engineering Company

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
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2	10/91	2	10/91	2	10/91	2	10/91
3	10/91	3	10/91	3	10/91	3	10/91
4	10/91	4	10/91	4	10/91	4	10/91
5	10/91	5	10/91	5	10/91	5	10/91
6	10/91	6	10/91	6	10/91	6	10/91
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11	10/91	11	10/91	11	10/91	11	10/91
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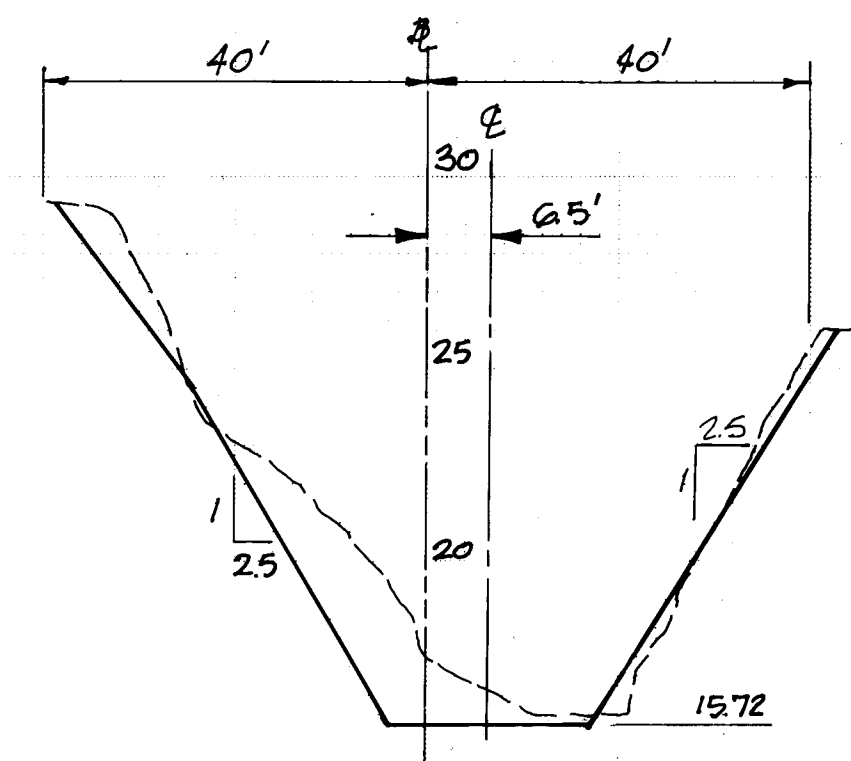
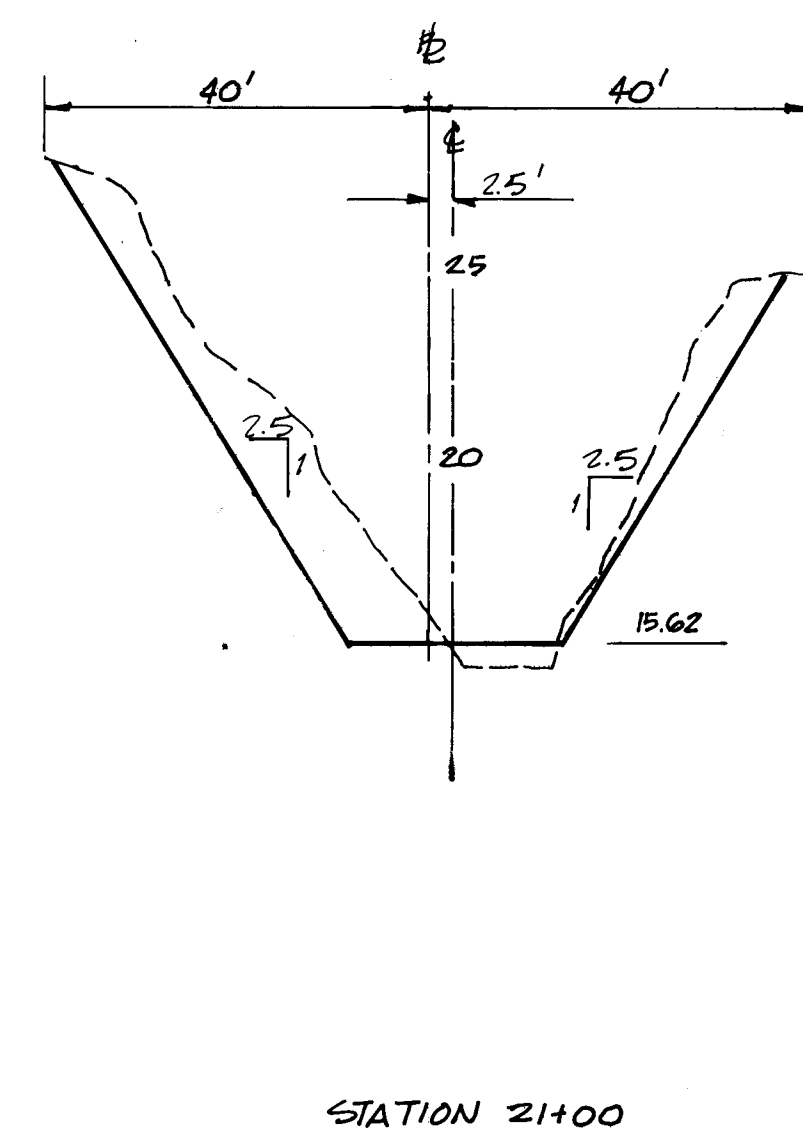
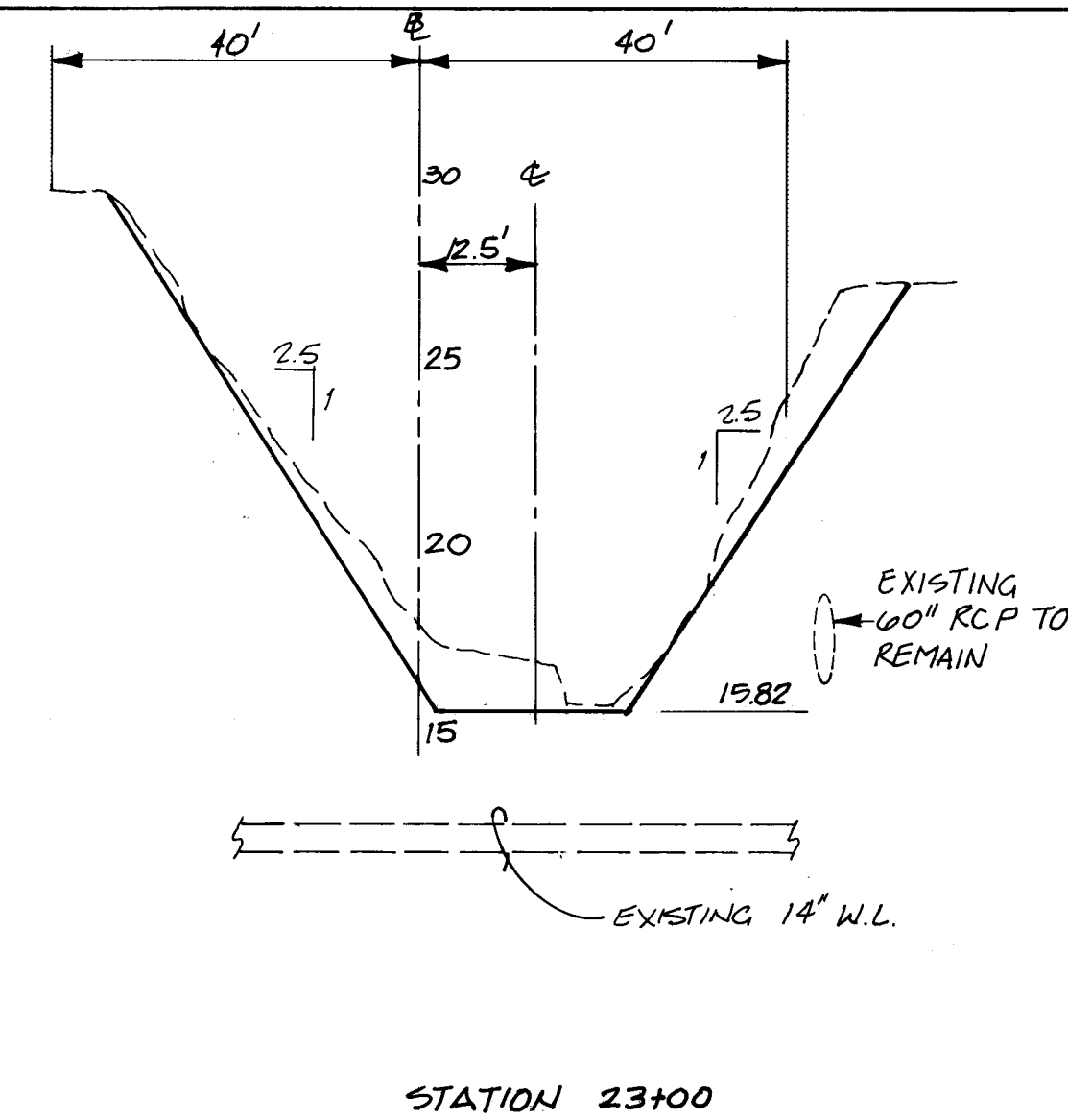
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: MEAU DETENTION BASIN AND STORM DRAIN

DRAINAGE CHANNEL PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN			WATER		
TRANSPORTATION			WASTEWATER		
HYDROLOGY					

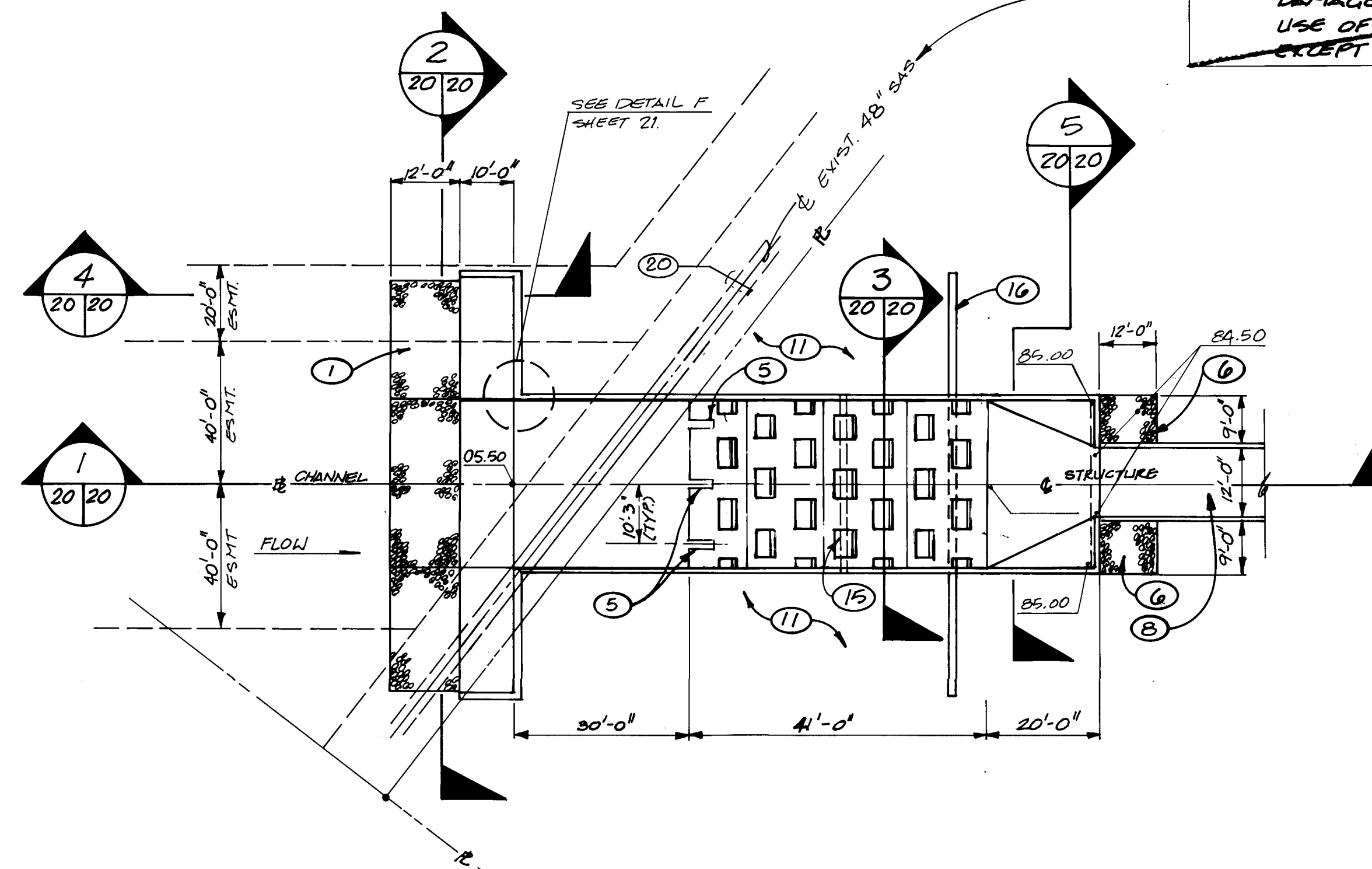
PROJECT NO.	MAP NO.	SHEET	OF
4252.90	H-15-H-16	18	29



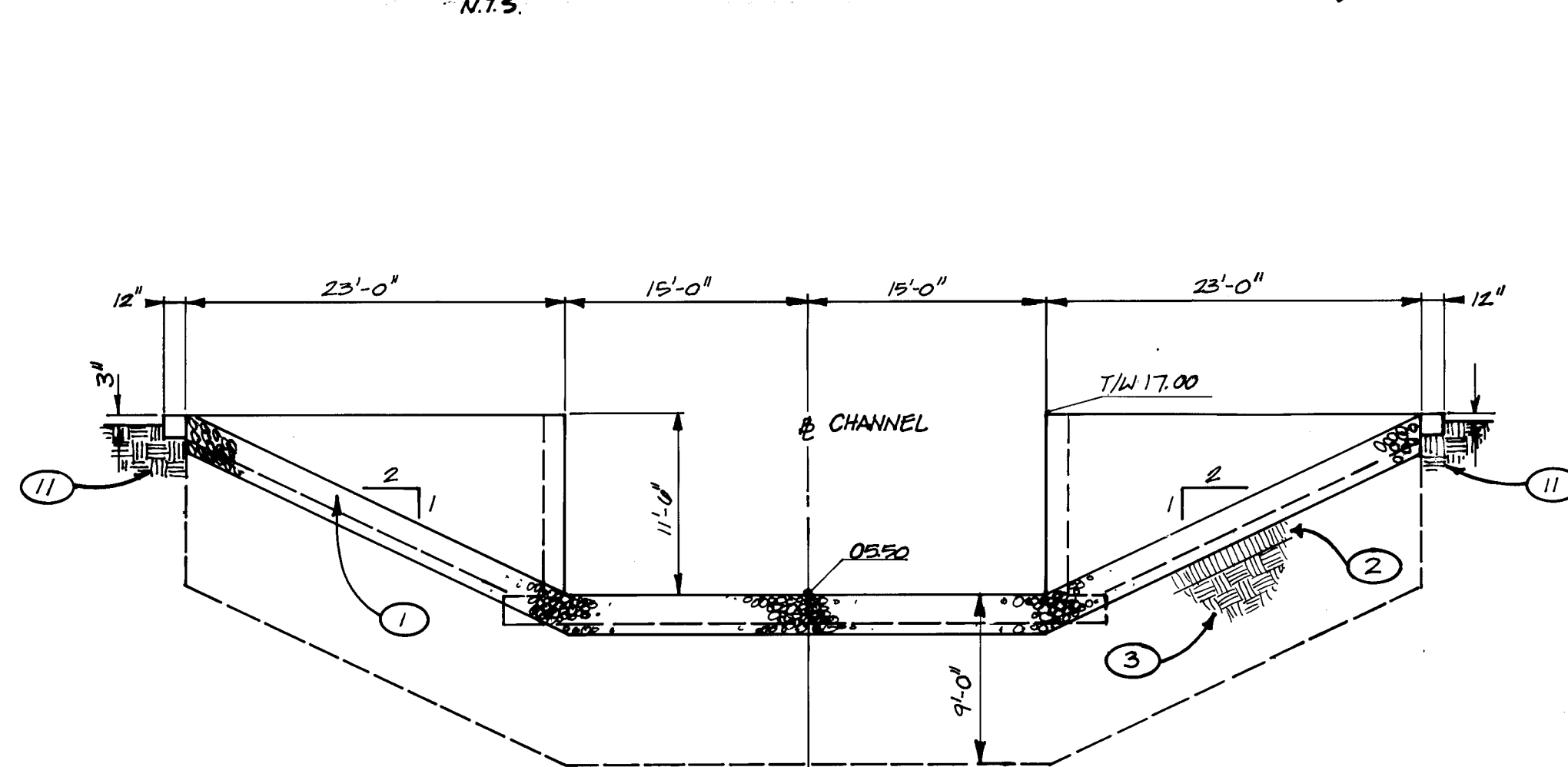
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: MANAUL DETENTION BASIN AND STORM DRAIN					
CHANNEL CROSS-SECTIONS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	B. G. B.	1-13-94	WATER	William Baker	11-30-93
TRANSPORTATION	N/A RHD	1-05-94	WASTEWATER	William Baker	11-30-93
HYDROLOGY	Cam	11-03-93			
PROJECT		MAP NO.	SHEET OF		
NO. 4252-90		H-15, H-16	19 29		

SCANNED BY
BY LASON

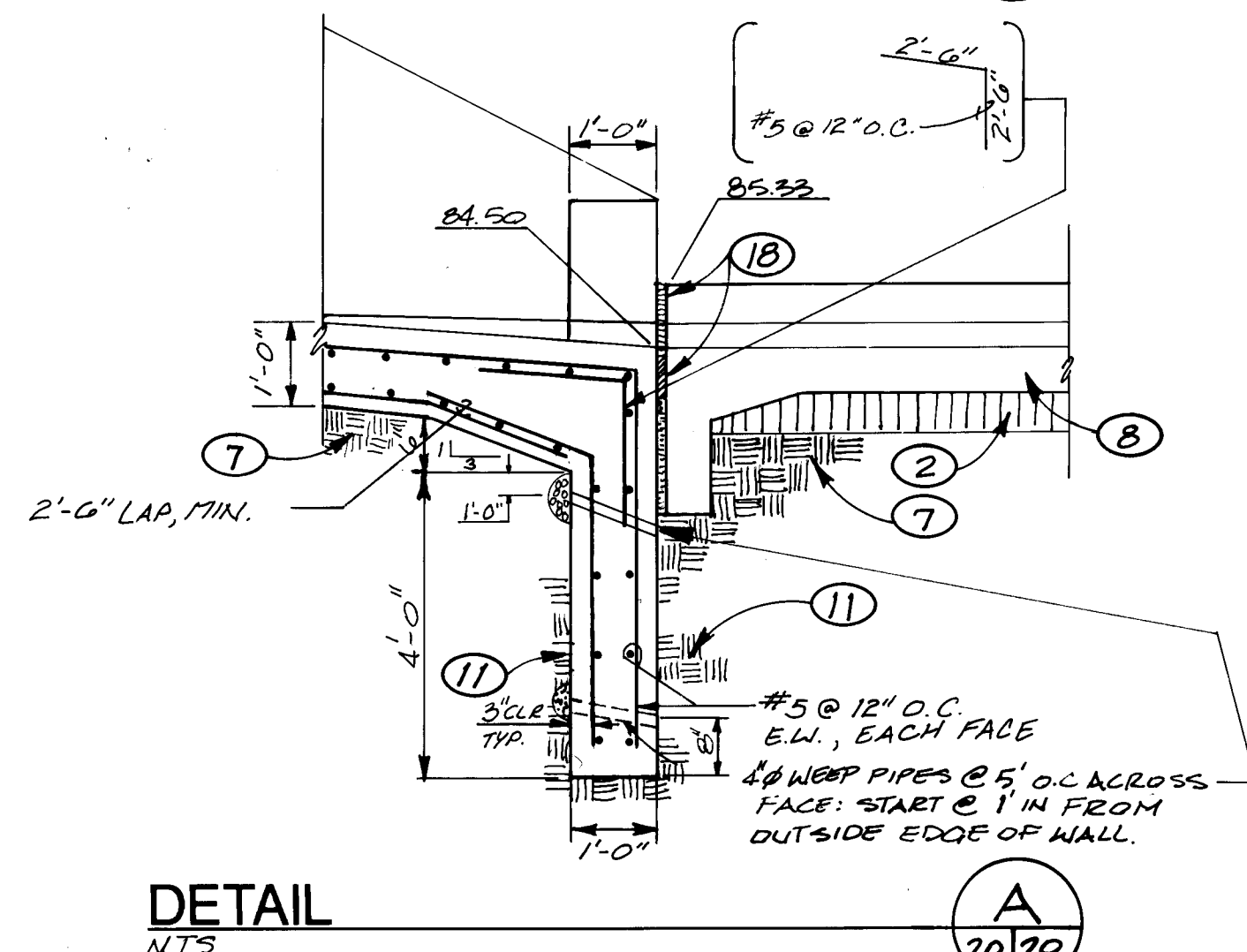
NOTES:
CONTRACTOR TO TAKE EXTRA PRECAUTIONS NOT TO
DAMAGE EXIST. 42" SAS UNDER INLET STRUCTURE.
USE OF VIBRATORY EQUIPMENT PROHIBITED IN THIS AREA
EXCEPT WITH PERMISSION FROM C.O.A. ENGINEER



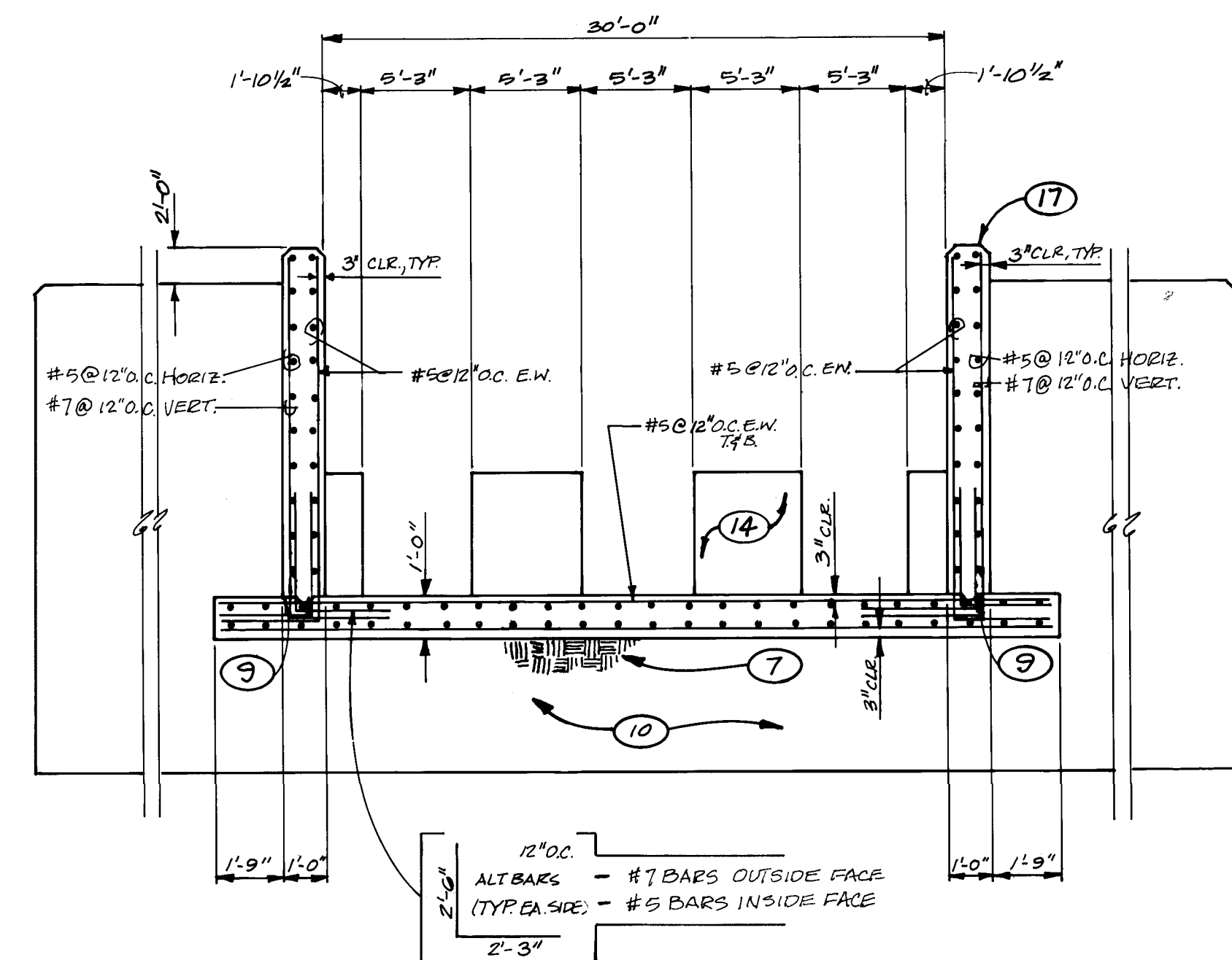
INLET STRUCTURE PLAN
N.T.S.



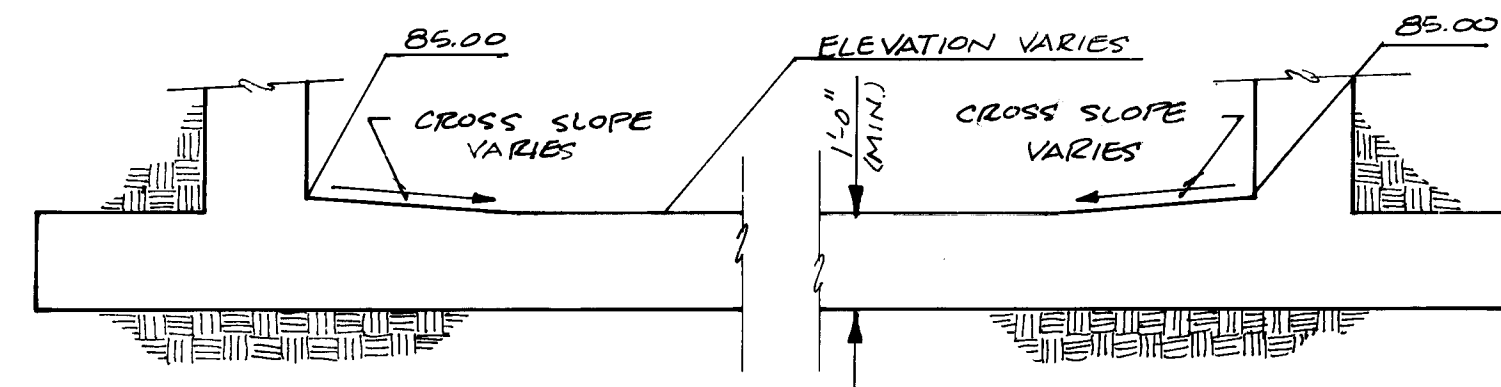
SECTION
N.T.S.



DETAIL
N.T.S.

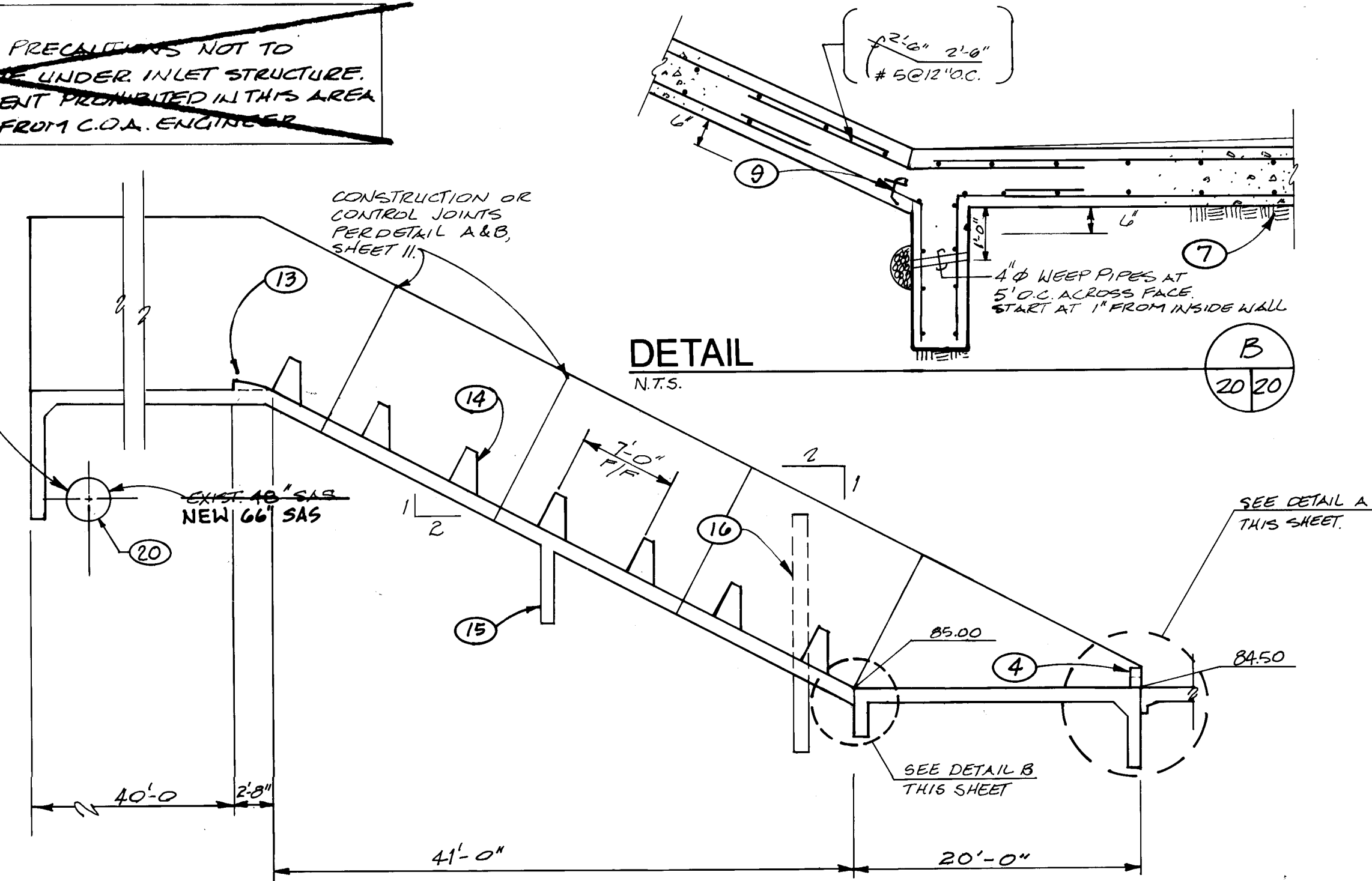


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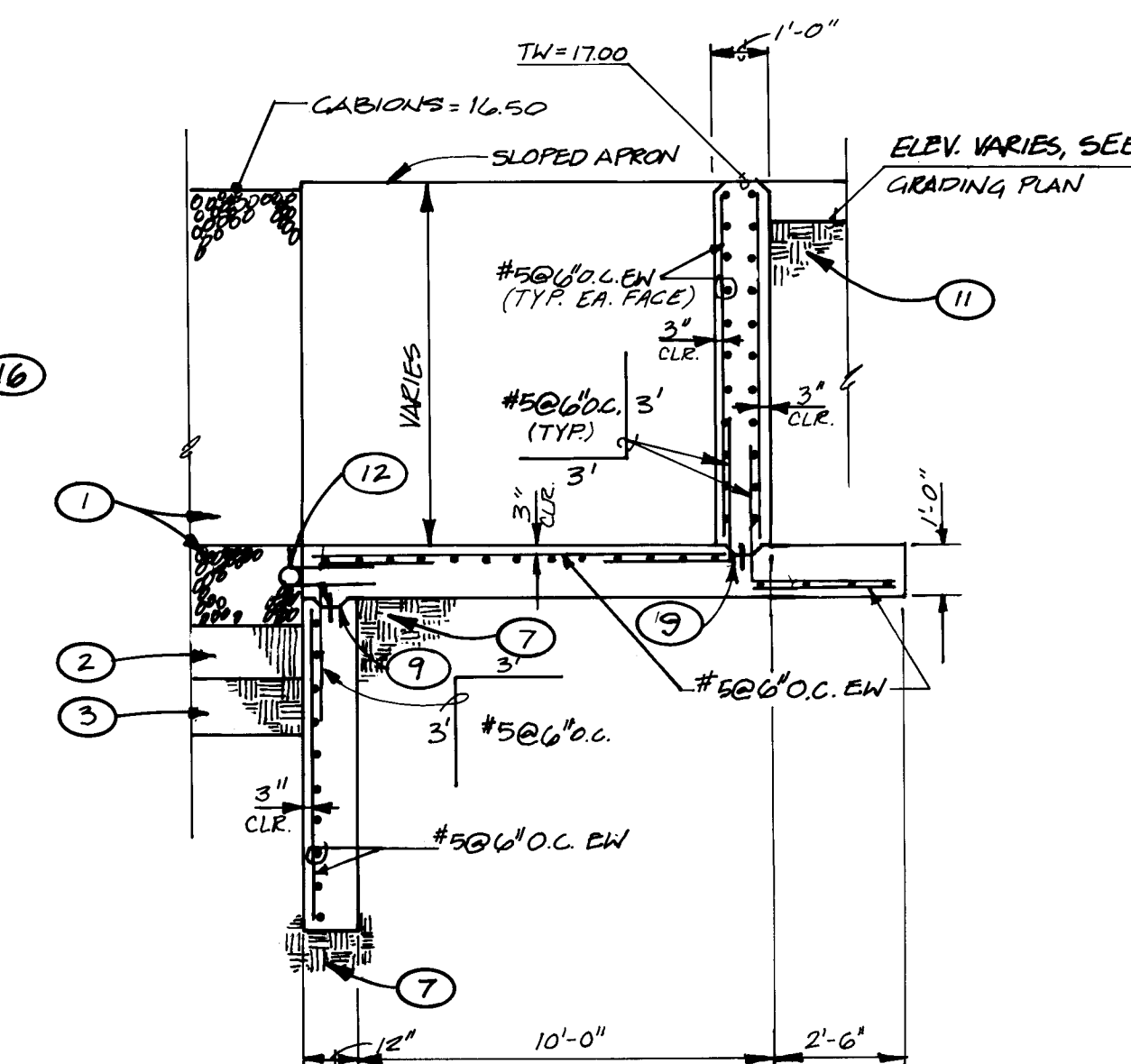


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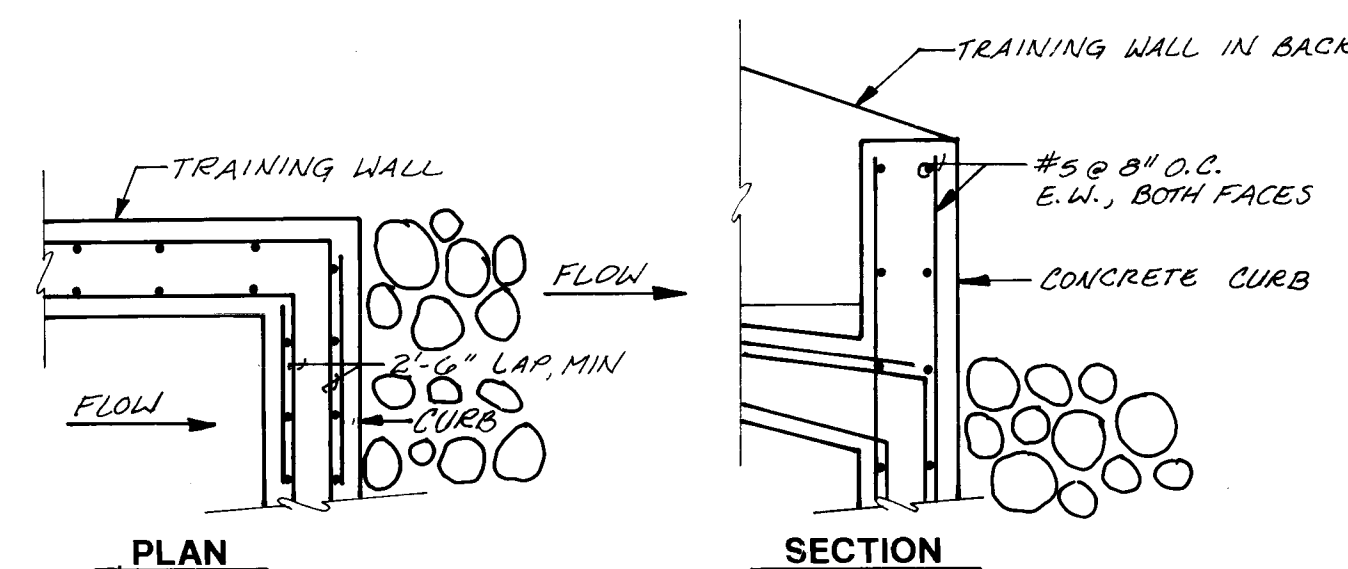
SECTION
N.T.S.



DETAIL
N.T.S.



SECTION
N.T.S.



DETAIL
N.T.S.

KEYED NOTES

- CONSTRUCT CODE "F" GABIONS.
STAKE PER COA DWG. 2270.
- 12-INCH BASE COURSE, CLASS II.
COMPACT TO 95% ASTM D-1557.
- 12-INCH SUBGRADE. COMPACT TO
95% ASTM D-1557.
- SEE DETAIL C/20 FOR REINFORCING IN
CURB.
- 12-INCH WIDE LOW FLOW NOTCH (3
TYPICAL).
- 24-INCHES DUMPED RIP-RAP, d50
= 9-INCHES. PLACE ON
NATURAL SUBGRADE.
- 24-INCHES OF STRUCTURAL FILL.
COMPACT TO 95% ASTM D-1557 IN 6-
INCH LIFTS.
- CONSTRUCT LOW FLOW SWALE IN
BASIN PER COA STD. DWG. 2260 AND
DETAIL D/13.
- 2" x 4" KEYED JOINT.
- WINGWALL CONTINUOUS UNDER
STRUCTURE.
- BACKFILL COMPACTED TO 90% ASTM D-
1557.
- GABION TIE-DOWN. SEE DETAIL G/21.
- SILL. SEE DETAIL B/21.
- TYPICAL BAFFLE. SEE DETAIL
C/21.
- SHEAR WALL. SEE DETAIL D/21.
- WINGWALL. SEE DETAIL E/21.
- SEE DETAIL F/21 FOR HEADWALL-
TRAINING WALL REINFORCING
DETAIL.
- 1/2-INCH WIDE EXPANSION JOINT
AT INTERFACE OF STRUCTURE
AND LOW-FLOW SWALE. SEAL
TOP OF EXPANSION JOINT WITH
1/2-INCH WIDE BY 1-INCH DEEP
MASTIC.
- 6-INCH WIDE PVC WATERSTOP ACROSS
STRUCTURE.
- R & D EXIST. 48" SAS. CONSTRUCT
NEW 66" SAS. SEE SHEETS 7 & 8.

AS-BUILT
SIGN Patricia C. [Signature]
DATE EX. 4/11/95

NO ADDITIONAL PAYMENT WILL BE MADE FOR
SUBGRADE PREPARATION, ENGINEERED FILL
PROCESSING, PLACEMENT, AND
COMPACTION FOR STRUCTURES, ACCESS
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THE PLANS. THE COST FOR SUCH WORK
SHALL BE INCIDENTAL TO THE PAYMENT FOR
THE BID ITEM "EXCAVATION, BACKFILL, AND
COMPACTION IN THE BASIN AND CHANNEL."



Smith Engineering Company

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: MENAUL DETENTION BASIN AND STORM DRAIN

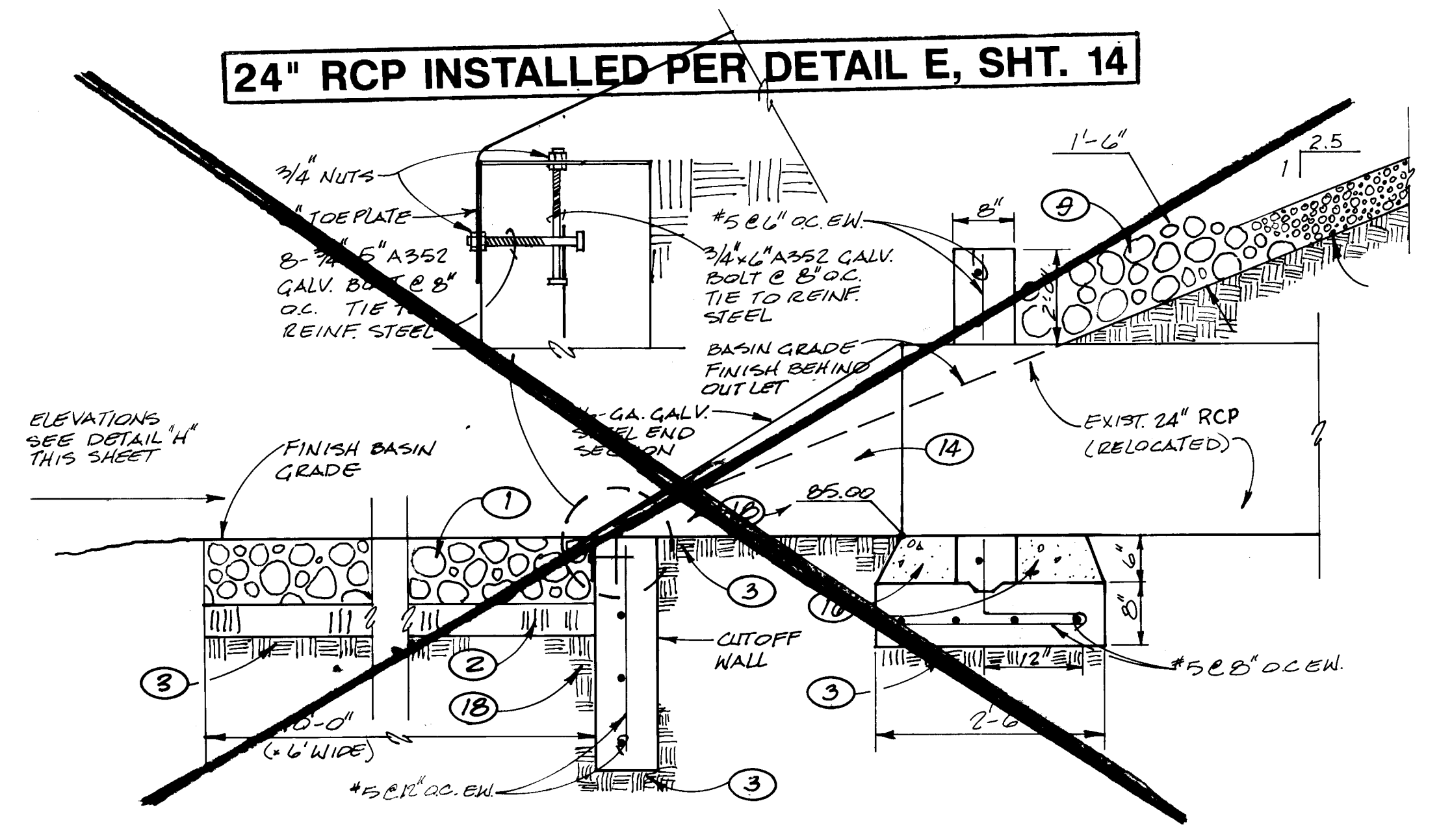
INLET STRUCTURE SECTIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRG CHAIRMAN	<u>B. A. [Signature]</u>	<u>1-13-94</u>	WATER	<u>N.A. [Signature]</u>	<u>11-30-93</u>
TRANSPORTATION	<u>N/A RHO</u>	<u>1-05-94</u>	WASTE WATER	<u>N.A. [Signature]</u>	<u>11-30-93</u>
HYDROLOGY	<u>C. A. [Signature]</u>	<u>1-13-93</u>			
PROJECT NO.	4252.90	MAP NO. H-15.H-16	SHEET	20	OF 29

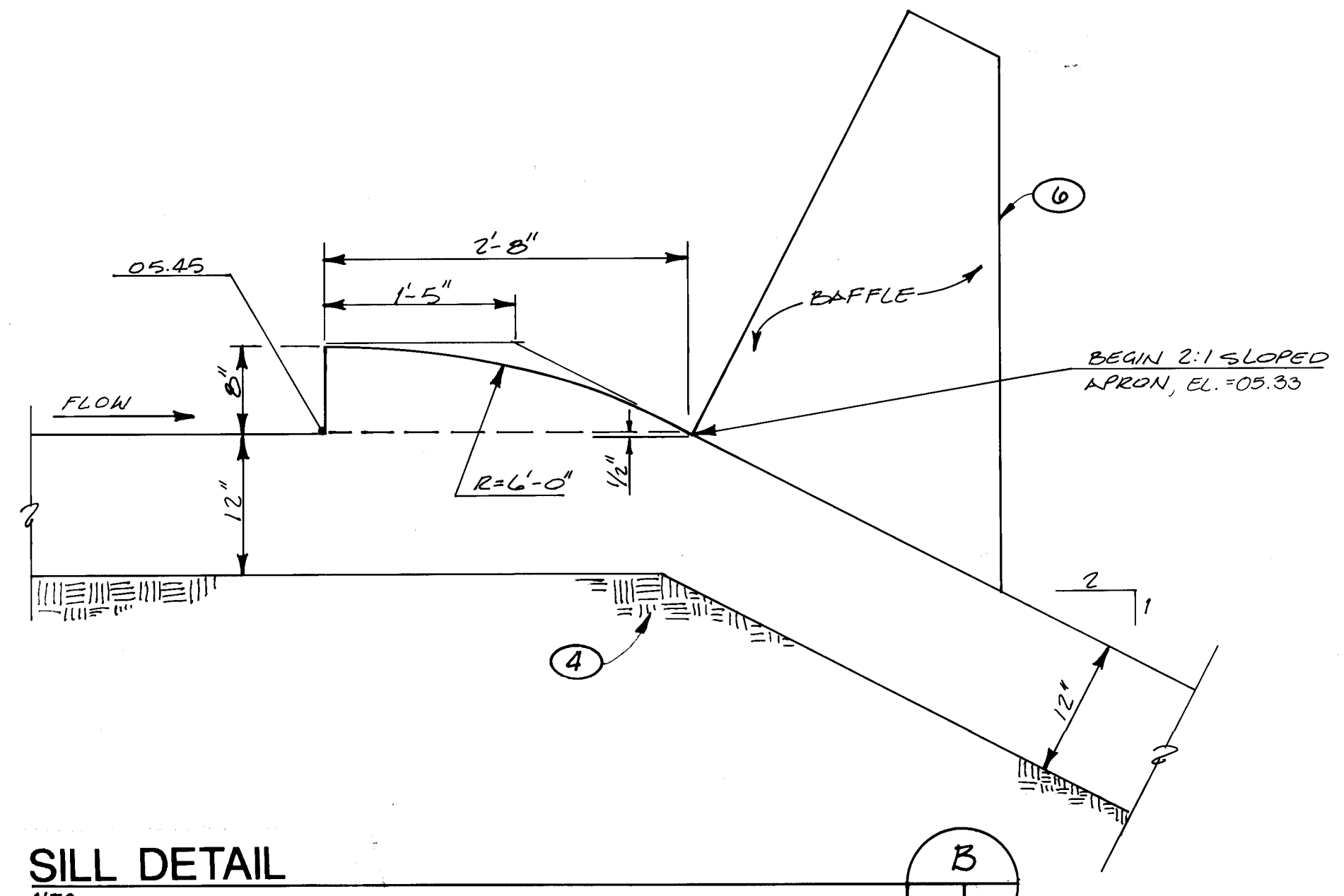
AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		FIELD NOTES	
CONTRACTOR	<u>CHC, INC.</u>	WEST ON CANDELARIA 0.2 MILES FROM THE INTERSECTION		NO.	10088	DATE	10/91
WORKED BY	<u>C.O.A.</u>	INSPECTED BY		BY	<u>GEORGE MARQUEZ, JR.</u>		
ACCEPTANCE DATE	<u>11-30-93</u>	TABLET STAMPED 9-HIS 1979 SET 0.1 FEET ABOVE					
FIELD ACCEPTANCE DATE	<u>11-30-93</u>	GROUND. SPIRIT LEVEL ELEVATION (SLD 1929) 9034.93.					
DATE							
DATE							
DATE							
DATE							
DATE							

ENGINEER'S SEAL		PROJECT NO.	
DATE	<u>4/11/95</u>	89-01-06	

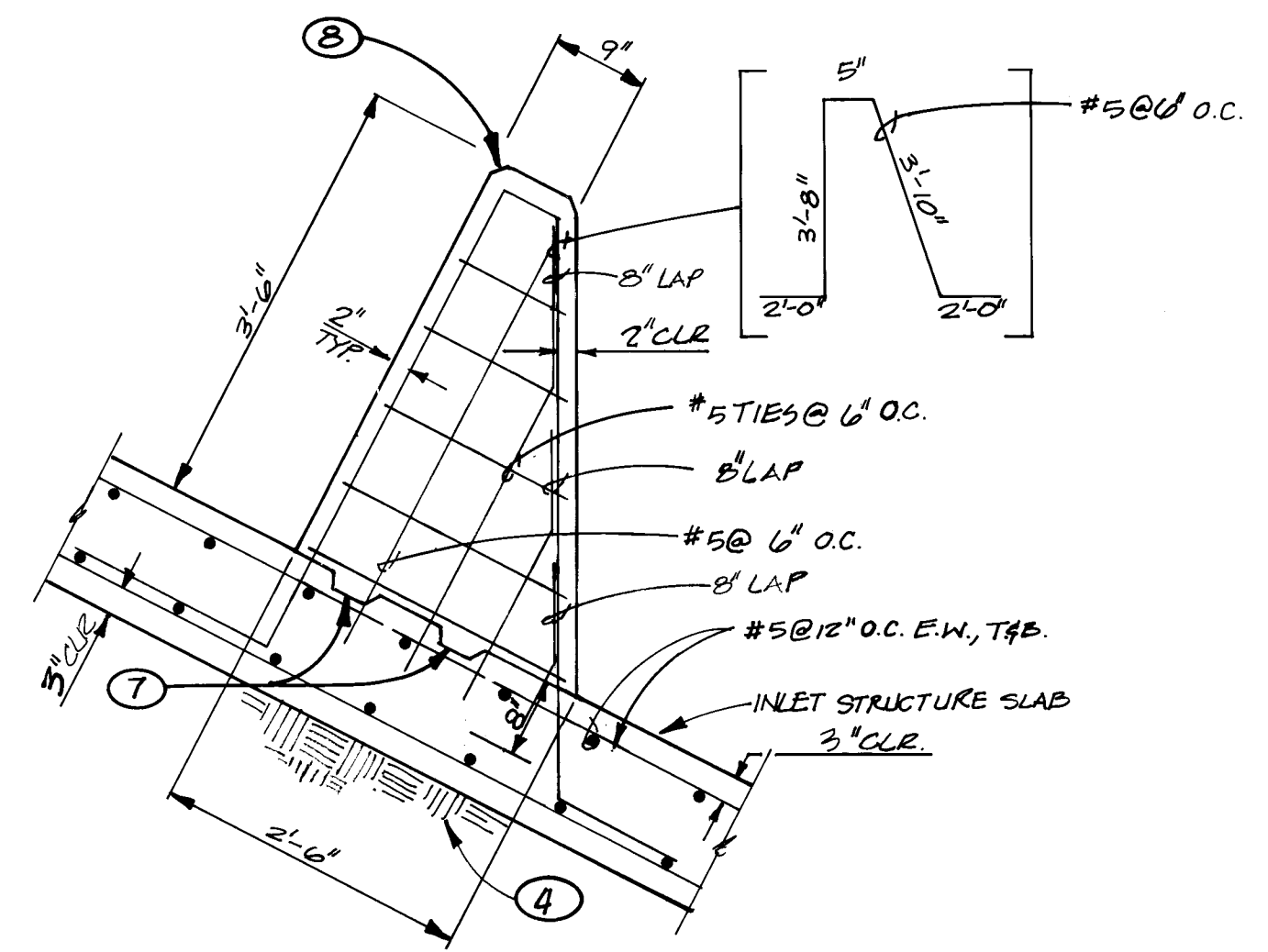
REVISIONS		DESIGN	
NO.	DATE	REMARKS	BY
1			
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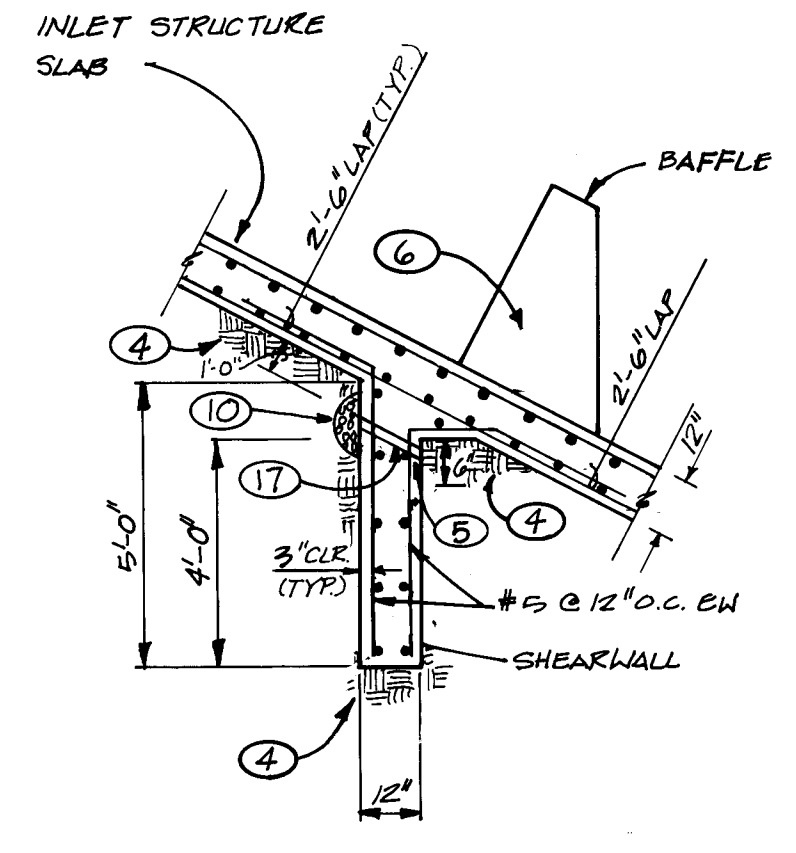
24" RCP OUTLET DETAIL
N.T.S. (OUTFALL TO BASIN) A
7/21



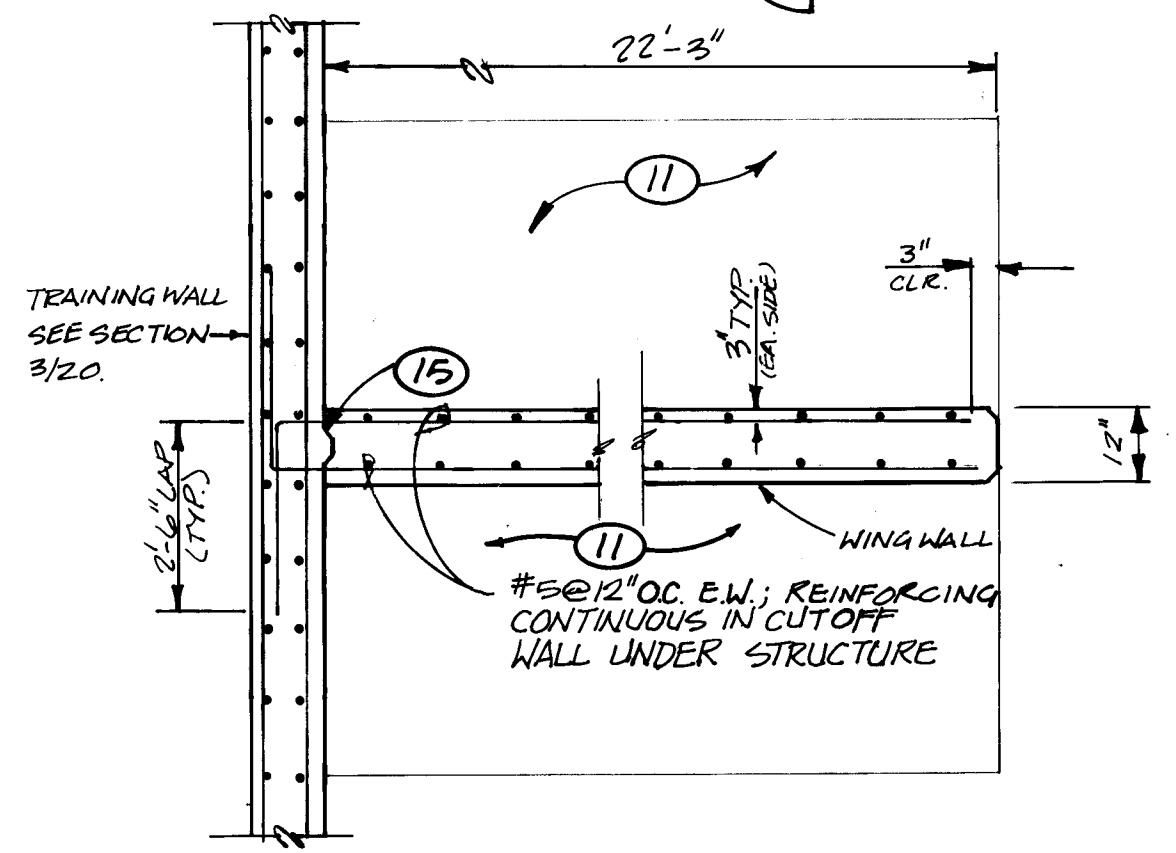
SILL DETAIL
N.T.S. B
15/21
20
21



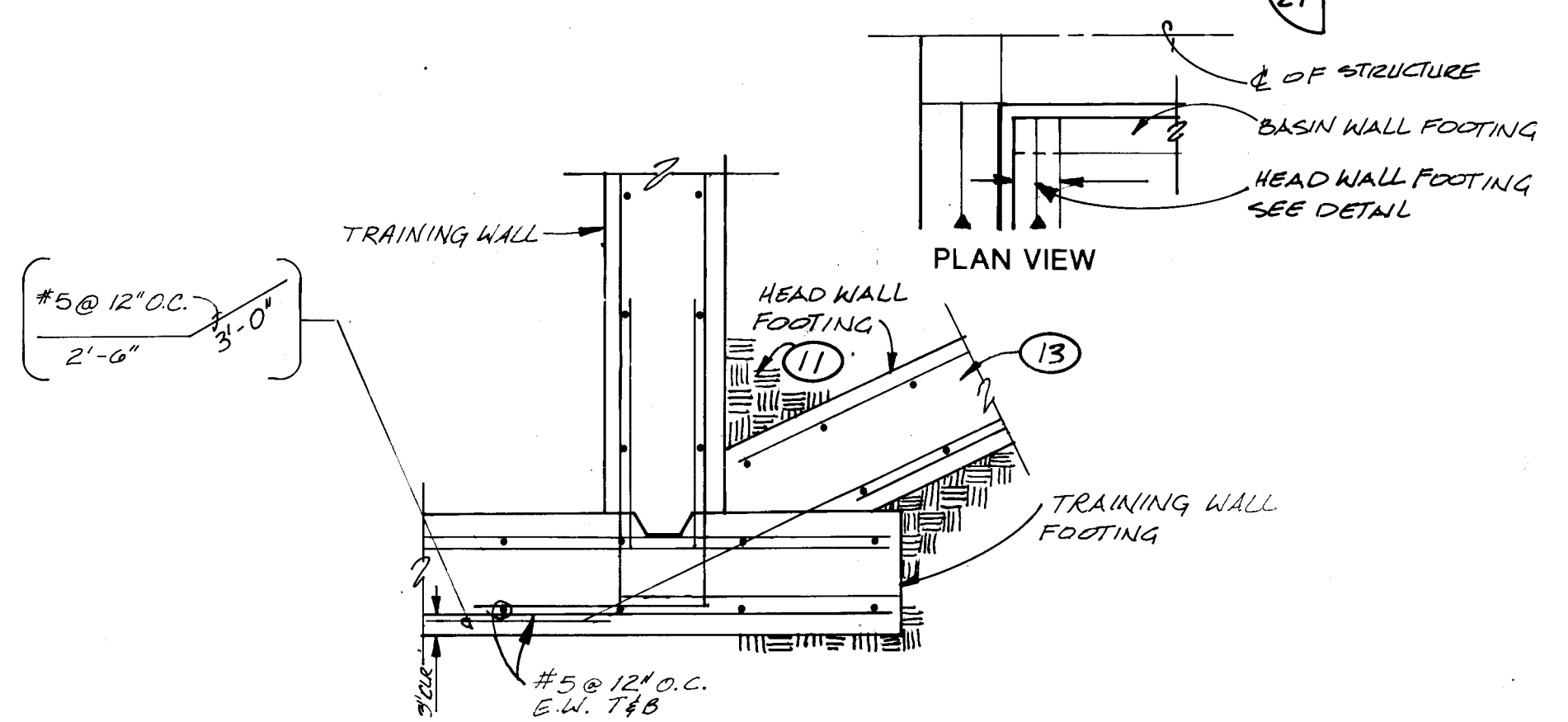
BAFFLE DETAIL
N.T.S. C
20/21
21



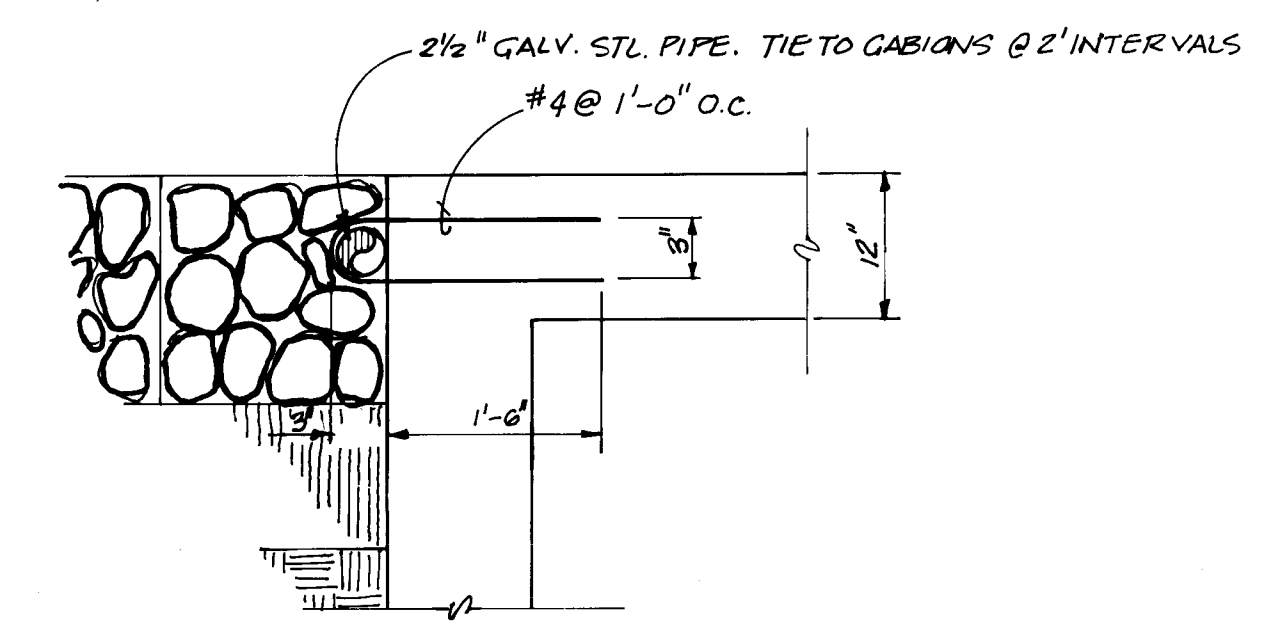
SHEARWALL DETAIL
N.T.S. D
20/21



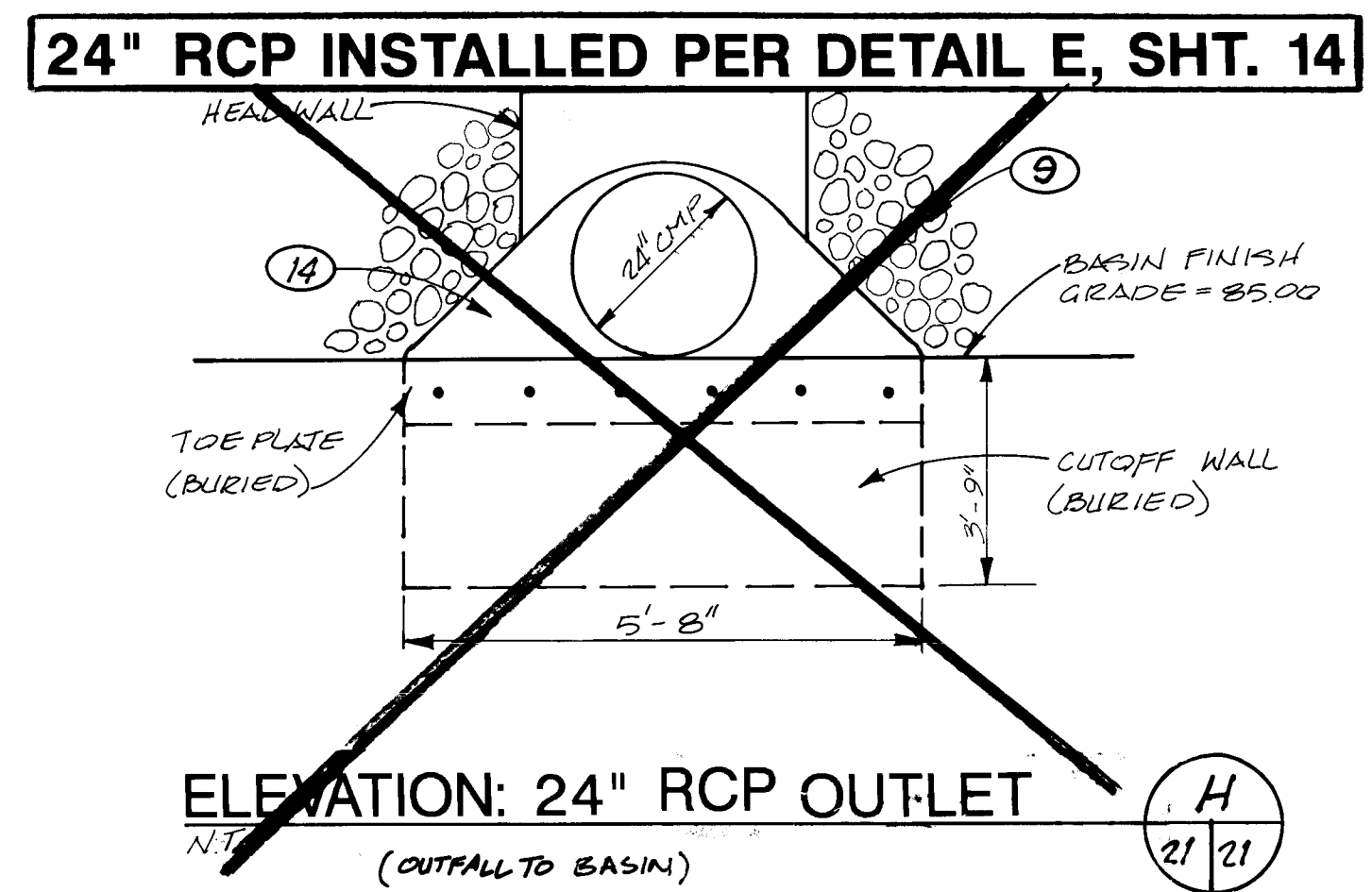
WINGWALL / TRAINING WALL INTERFACE
N.T.S. E
15/20
21



HEADWALL FOOTING / STILLING BASIN FOOTING INTERFACE
N.T.S. F
21/21



GABION-TO-INLET TIE DETAIL
G
20/21



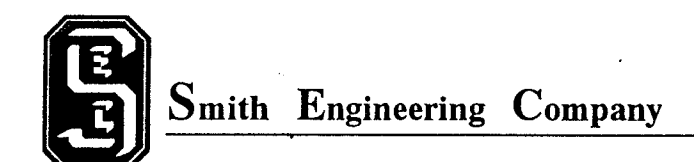
ELEVATION: 24" RCP OUTLET
N.T.S. (OUTFALL TO BASIN) H
21/21

KEYED NOTES

- 1 DUMPED RIP-RAP 12-INCHES THICK, d50 = 6-INCHES.
- 2 6-INCHES TYPE II BEDDING MATERIAL.
- 3 12-INCH SUBGRADE COMPACTED TO 90% ASTM D-1557.
- 4 24-INCHES ENGINEERED FILL. COMPACT THE FILL TO 95% ASTM D-1557 IN 6-INCH LIFTS.
- 5 INSTALL WEEPHOLES AT 6-FOET O.C. STARTING AT 1'-0" IN FROM WALL.
- 6 BAFFLE. SEE DETAIL C/21 THIS SHEET.
- 7 2' x 4' KEYS, TYPICAL EACH BAFFLE.
- 8 1-INCH CHAMFER, TYPICAL.
- 9 DUMPED RIP-RAP AROUND HEADWALL, d50 = 6-INCHES.
- 10 2-CUBIC FEET OF GRAVEL AND FILTER CLOTH PER COA SPECIFICATIONS.
- 11 BACKFILL COMPACTED TO 90% ASTM D-1557.
- 12 NOT USED.
- 13 HEADWALL FOOTING. SEE SECTION 3/20.
- 14 16-GAUGE GALVANIZED METAL OUTLET FOR 24-INCH CMP.
- 15 SEE DETAIL C/21A FOR FOOTING DETAILS.
- 16 CONCRETE FILL UNDER PIPE PER GSA STD. DWG. 2101.
- 17 4-INCH DIAMETER SCH. 40 PVC WEEP PIPE SET AT 2% SLOPE FROM GRAVEL. **PLATE 2.5' O.C.**
- 18 BACKFILL COMPACTED TO 90% ASTM D-1557.

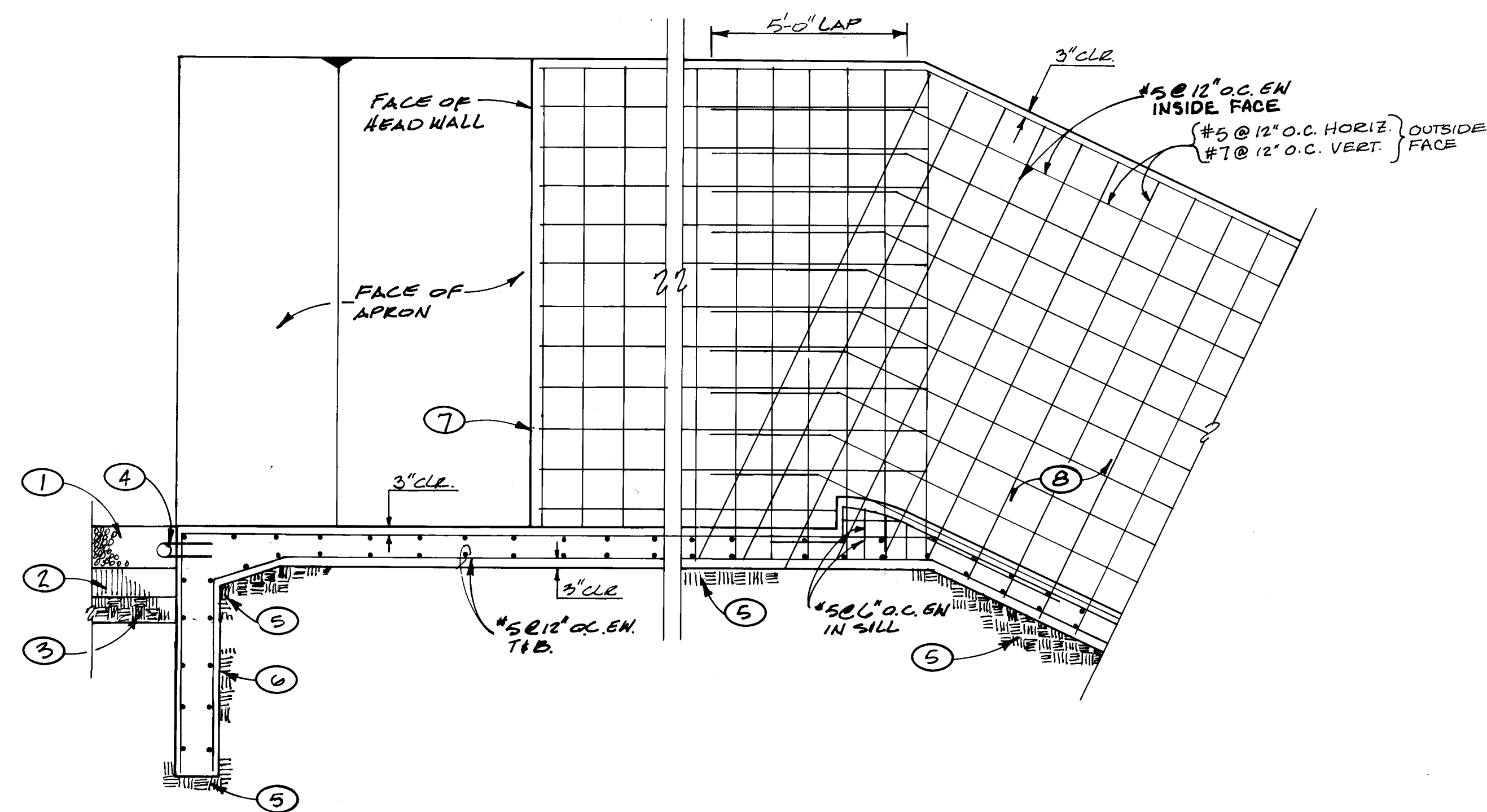
AS-BUILT
SIGN W.H.C.
DATE 4/11/95

NO ADDITIONAL PAYMENT WILL BE MADE FOR SUBGRADE PREPARATION, ENGINEERED FILL PROCESSING, PLACEMENT, AND COMPACTION FOR STRUCTURES, ACCESS ROADS, AND JOGGING PATHS AS SHOWN ON THE PLANS. THE COST FOR SUCH WORK SHALL BE INCIDENTAL TO THE PAYMENT FOR THE BID ITEM "EXCAVATION, BACKFILL, AND COMPACTION IN THE BASIN AND CHANNEL."

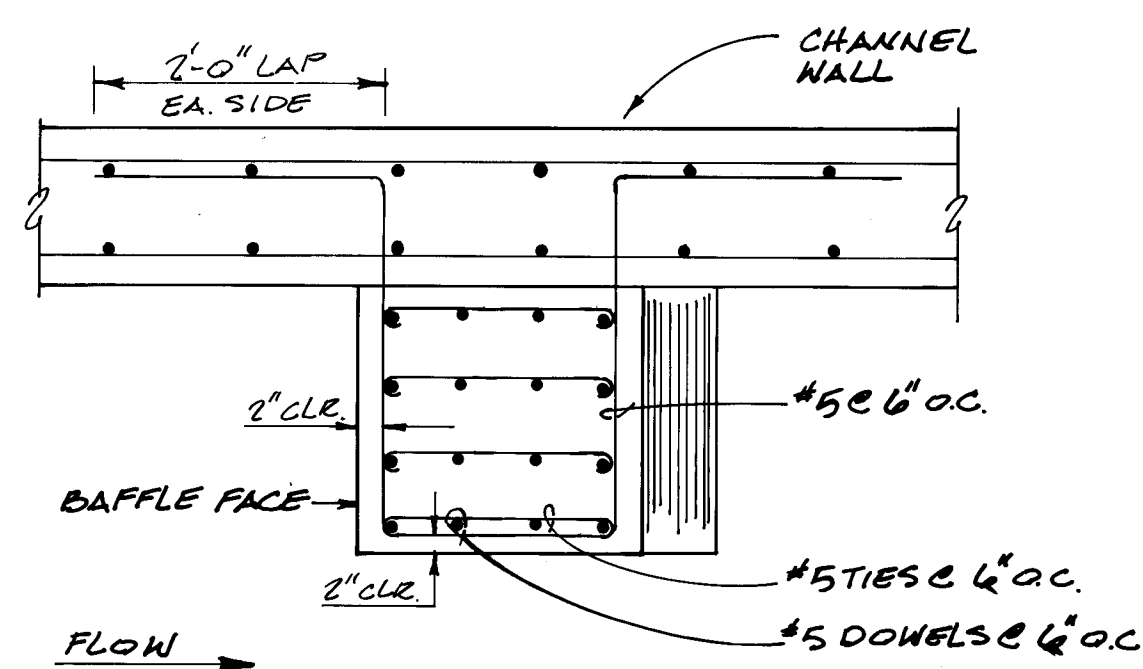


CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: MENAUL DETENTION BASIN AND STORM DRAIN					
INLET STRUCTURE DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRG CHAIRMAN	<u>J.A. Sandoval</u>	<u>1-13-94</u>	WATER	<u>N.A. 2/2/95</u>	<u>11-30-93</u>
TRANSPORTATION	<u>N.A. RHO</u>	<u>1-05-94</u>	WASTE WATER	<u>N.A. 2/2/95</u>	<u>11-30-93</u>
HYDROLOGY	<u>L.A.M.</u>	<u>11-23-93</u>			
PROJECT NO. 4252.90			MAP NO. H-15, H-16		
SHEET 21 OF 29			DESIGNED BY <u>PJC</u> DRAWN BY <u>CTM, MGA</u> CHECKED BY <u>PJC</u>		

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		PROJECT NO. 89-01-06	
CONTRACTOR	DATE	WORK BY	DATE	FIELD NOTES	DATE	NO.	BY	REMARKS	DATE
RMCI, INC.		WEST ON CANDELARIA 0.2 MILES FROM THE INTERSECTION OF I-25 AND CANDELARIA STANDARD A.C.S. BRASS	10/91	George Mendez	10/91	12039	George Mendez	10/91	10/91
C.O.A.		TABLET STAMPED "9-H15 1979" SET 0.1 FEET ABOVE GROUND. SPIRIT LEVEL ELEVATION (SLD 1929) 8034.93.							
DATE		DATE		DATE					
DATE		DATE		DATE					
DATE		DATE		DATE					
DATE		DATE		DATE					

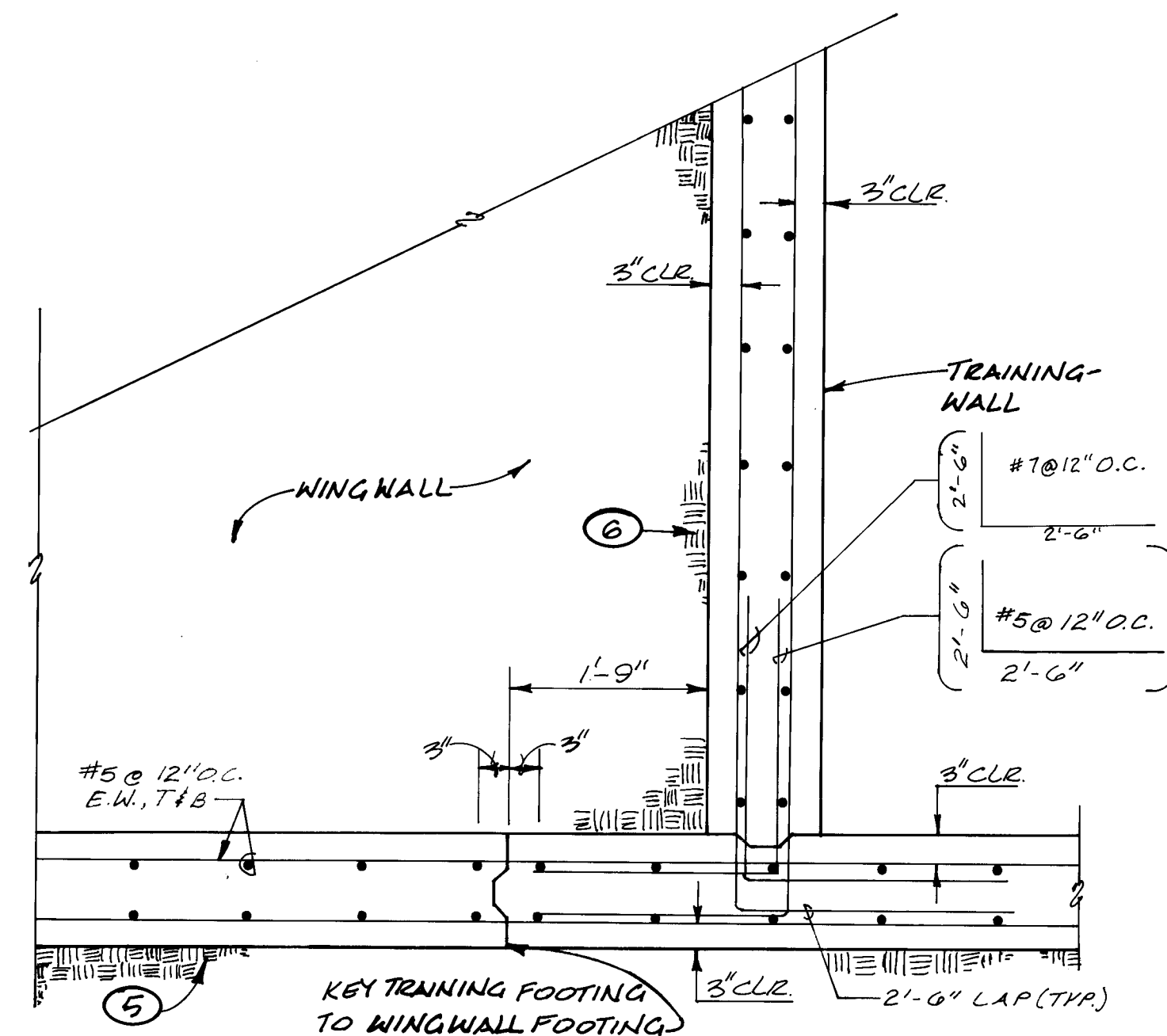


TRAININGWALL DETAIL

A
15 21A

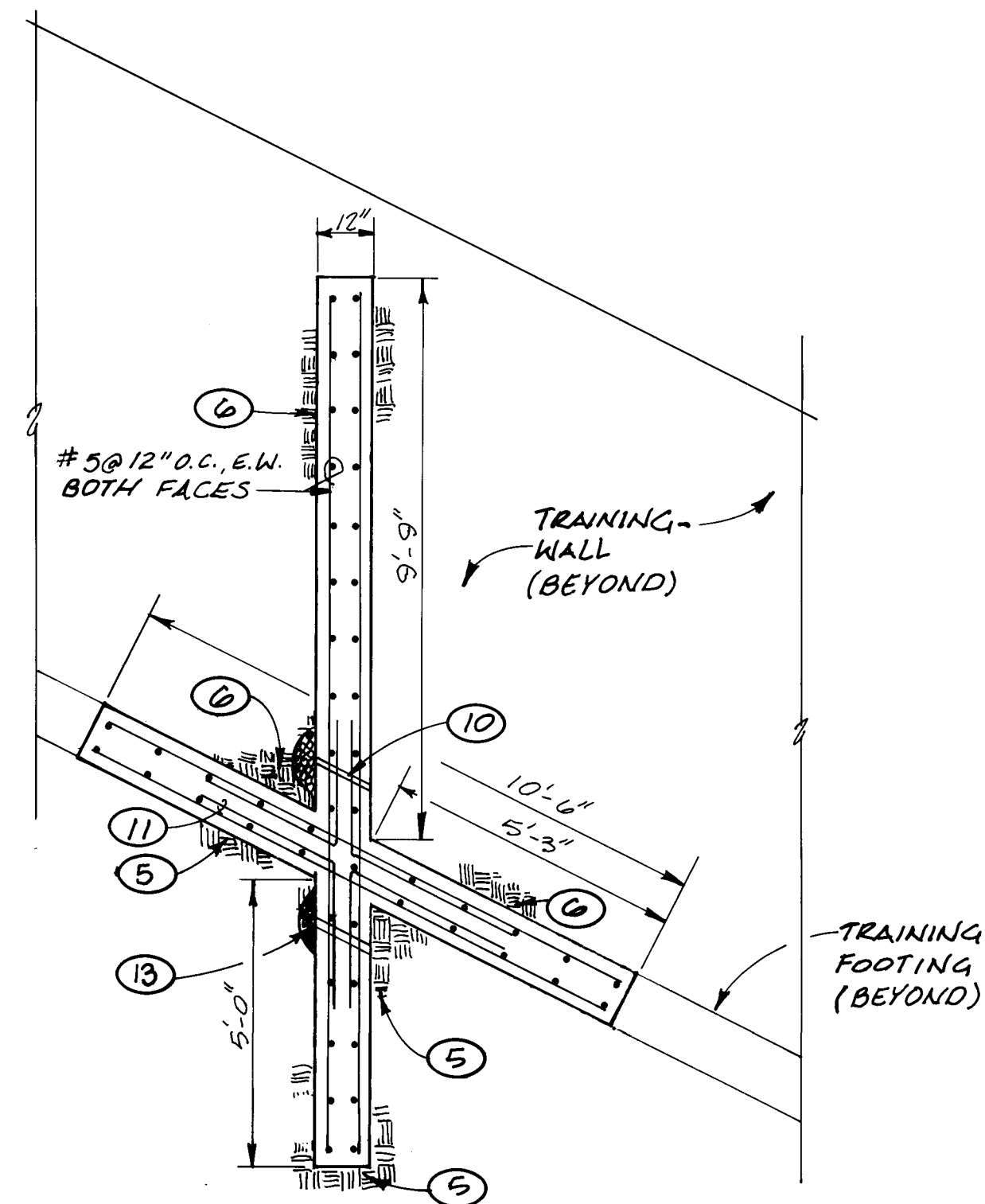
PARTIAL BAFFLE / TRAININGWALL DETAIL

N.T.S.

B
21 21A

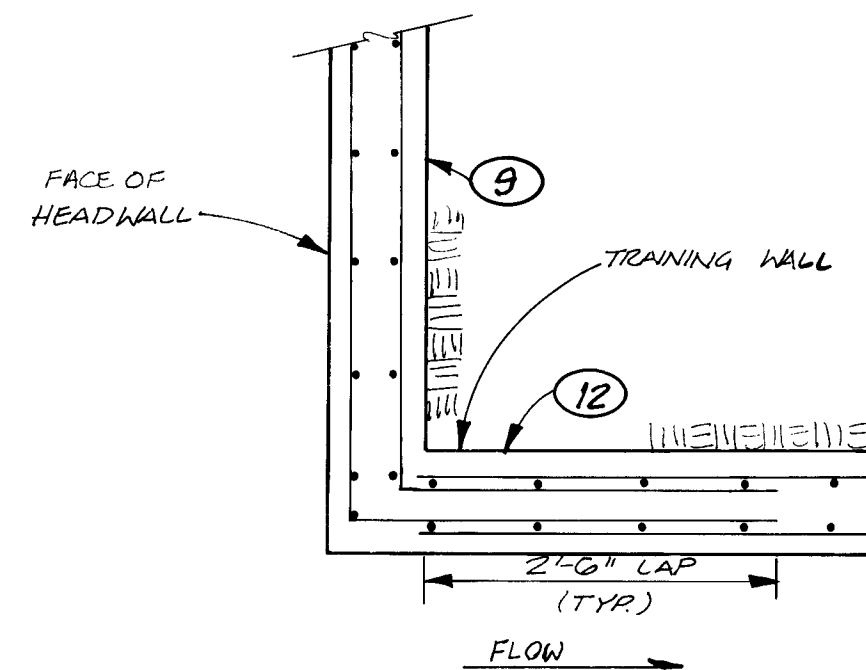
WINGWALL FOOTING TO TRAININGWALL FOOTING

N.T.S.

C
21 21A

WINGWALL FOOTING CROSS-SECTION

N.T.S.

1
21 21A

HEADWALL / TRAINING WALL INTERSECTION PLAN

N.T.S.

D
21- 21-
A A

KEYED NOTES

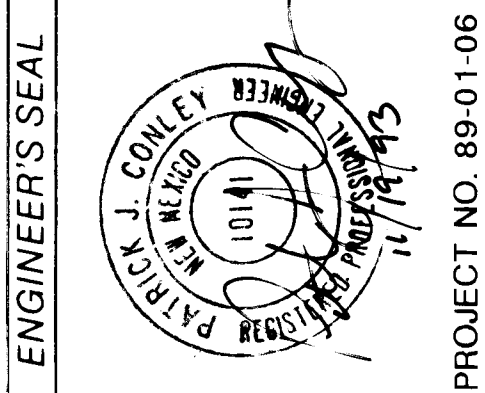
- CONSTRUCT CODE "F" GABIONS. STAKE PER COA STD. DWG. 2270.
- 6-INCHES TYPE II BASE COURSE COMPACTED TO 95% ASTM D-1557.
- 6-INCHES SUBGRADE COMPACTED TO 90% ASTM D-1557.
- GABION TIE. SEE DETAIL G/21.
- 24-INCHES COMPACTED ENGINEERED FILL. COMPACT TO 95% ASTM D-1557 IN 6-INCH LIFTS.
- BACKFILL COMPACTED TO 95% ASTM D-1557.
- SEE DETAIL D/21A THIS SHEET FOR HEADWALL/TRAINING WALL INTERSECTION.
- TRAINING WALL.
- SEE SHEET 20 FOR HEADWALL REINFORCING DETAILS.
- INSTALL WEEP PIPES 6-INCHES ABOVE FOOTING AT 5'-FEET O.C. DETAIL SAME AS FOR SHEARWALL WEEP PIPE, DETAIL D/21.
- #5 REINFORCING STEEL AT 12-INCHES O.C. WITH 36-INCH LEGS (4 TYPICAL EACH FOOT).
- TRAINING WALL, SEE DETAIL A/21A THIS SHEET FOR REINFORCING.
- INSTALL WEEP PIPES 8-INCHES ABOVE BOTTOM OF WALL AT 5' O.C. DETAIL SAME AS FOR SHEARWALL, D/21.

BENCH MARKS		AS BUILT INFORMATION	
WEST ON CANDELARIA 0.2 MILES FROM THE INTERSECTION OF I-25 AND CANDELARIA STANDARD A.C.S. BRASS TABLET STAMPED 9-11-15 1979' SET 0.1 FEET ABOVE GROUND. SPIRIT LEVEL ELEVATION (SLD 1929) 5034.93.	CONTRACTOR	ENOT LOG.	
	WORK ORDER NO.	C.O.A. DATE	
	DATE	DATE	
	ACCEPTANCE BY	J.A.O. DATE	
	FIELD LOCATION BY	DATE	
CORRECTED BY	DATE		
	DATE		
RECORDED BY	DATE		
NO	DATE		

AS-BUILT
SIGN *P. J. Conley*
DATE 4/11/95

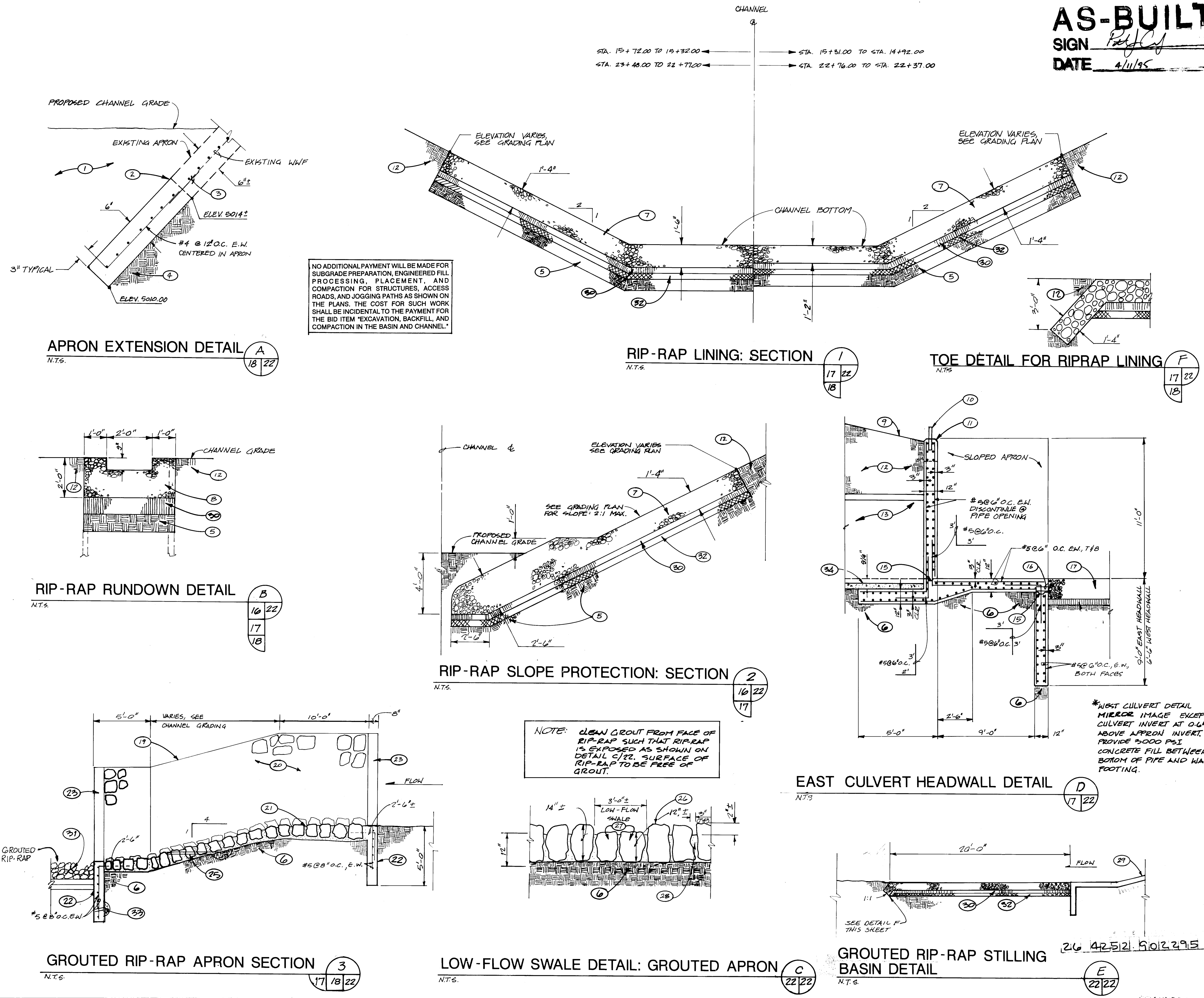
- KEYED NOTES**
- DUMPED RIP-RAP AND BACKFILL. SEE CHANNEL PLAN AND PROFILE, SHEET 18.
 - CLEAN EXISTING APRON BEFORE PLACING APRON EXTENSION.
 - EPOXY 24-INCH #4 DOWEL 12-INCHES INTO EXISTING APRON @ 12 INCH O.C.
 - 6-INCH SUBGRADE COMPACT TO 90% ASTM D-1557.
 - 12-INCH SUBGRADE. COMPACT TO 95% ASTM D-1557.
 - 24-INCHES ENGINEERED FILL. COMPACT TO 95% ASTM D-1557.
 - DUMPED RIP-RAP, d50 = 9".
 - GABION RUNDOWN, d50 = 6". STAKE @ 5-FOOT O.C. DOWN LENGTH OF SLOPE. PER COA DWG. 2270. GROUTED RIP-RAP.
 - GRADING VARIES. SEE CHANNEL PLAN AND PROFILE, SHEET 17.
 - 6-FOOT CHAINLINK FENCE. FENCE AND POST PER COA STD. DWG. 2252. SEE DETAIL A/23 FOR MOUNTING DETAIL.
 - 1-INCH CHAMFER, TYPICAL.
 - BACKFILL. COMPACT TO 90% ASTM D-1557.
 - RCP CULVERT.
 - NOT USED.
 - 2' x 4' KEY, TYPICAL.
 - GABION TIE-DOWN. SEE DETAIL G/21.
 - CONSTRUCT TYPE "F" GABIONS. STAKE PER COA DWG. 2270.
 - NOT USED.
 - ELEVATION VARIES, SEE CHANNEL PLAN AND PROFILE.
 - CONTINUE GROUTED RIP-RAP UP SIDE SLOPES. INSTALL WEEP PIPES ALONG BASE OF SIDE SLOPES AT 5' O.C. ALONG LENGTH. SEE DETAIL C/23.
 - 3-FOOT LOW-FLOW SWALE. SEE DETAIL G/22.
 - CONSTRUCT CUT-OFF WALL.
 - CONTINUE CUT-OFF WALL UP SIDE SLOPES.
 - NOT USED.
 - 3-INCH DIAMETER PVC WEEP PIPE @ 2% SLOPE TO OUTFALL. 6" @ 5-FOOT ON-CENTER. SEE DETAIL G/23.
 - EXPOSE RIP-RAP 2" ABOVE FINISH GROUT LEVEL.
 - EXPOSE RIP-RAP 1/2" ABOVE FINISH GROUT LEVEL.
 - 12-INCH GROUT, 4,000 PSI @ 28 DAYS.
 - GROUTED RIP-RAP APRON. SEE SECTION 3 THIS SHEET.
 - 6-INCH TYPE II FILTER MATERIAL.
 - GROUTED RIP-RAP STILLING BASIN. SEE DETAIL E/22.
 - 6-INCH TYPE I FILTER MATERIAL. COMPACT TO 95% ASTM D-1557.
 - 4-INCH PVC WEEP PIPE AT 5' O.C. ACROSS FACE OF CUTOFF WALL.

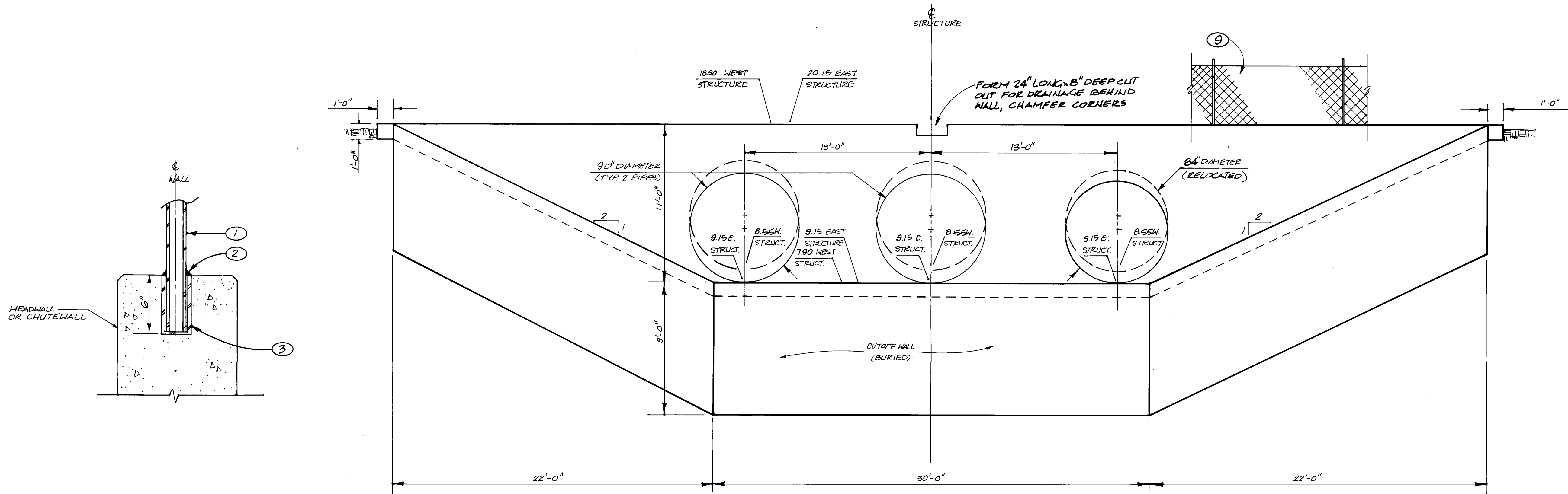
AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS	
CONTRACTOR	EMCI, INC.	DATE	10/91	NO.	10283	DATE	8/93	NO.	DATE
INSPECTOR'S	C.O.A.	DATE	10/91	BY	GEORGE HARRIS JR	DATE	8/93	BY	DATE
FIELD	J.A.O.	DATE	10/91	REMARKS	DESIGN	DATE	8/93	DESIGNED BY	DATE
VERIFICATION	BY	DATE	10/91	REVISIONS	DESIGN	DATE	8/93	DRAWN BY	DATE
CORRECTED	BY	DATE	10/91	REVISIONS	DESIGN	DATE	8/93	CHECKED BY	DATE
MICRO-FILM	INFORMATION	NO.							
RECORDED	BY	DATE							



Smith Engineering Company

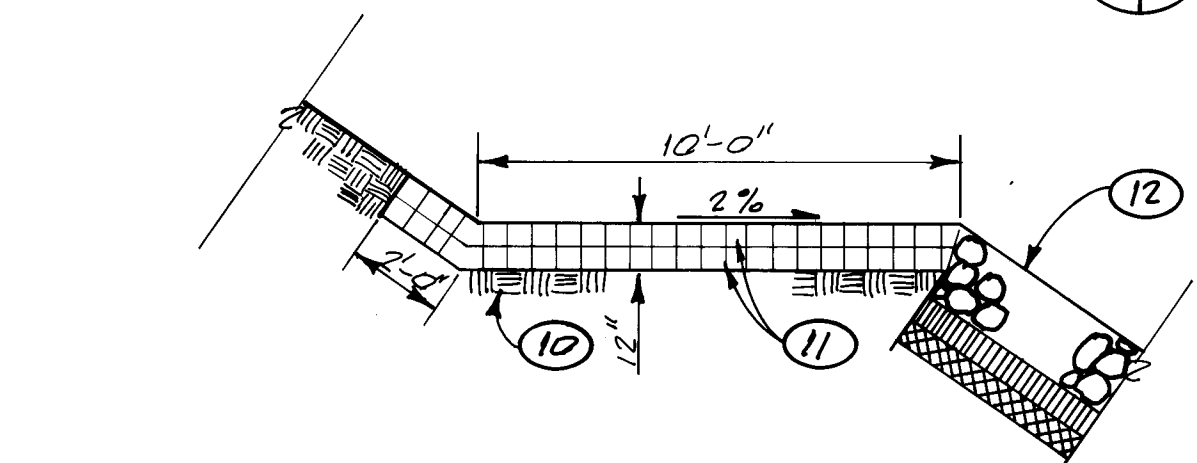
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: MENAUL DETENTION BASIN AND STORM DRAIN					
CHANNEL SECTIONS AND DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	B.G.S.	1-13-94	WATER	N.A. MGB	11-30-93
TRANSPORTATION	N/A RHD	1-25-94	WASTE WATER	N.A. MGB	11-30-93
HYDROLOGY	CAM	11-28-93			
PROJECT NO.	4252.90	MAP NO.	H-15, H-16	SHEET	22 OF 79





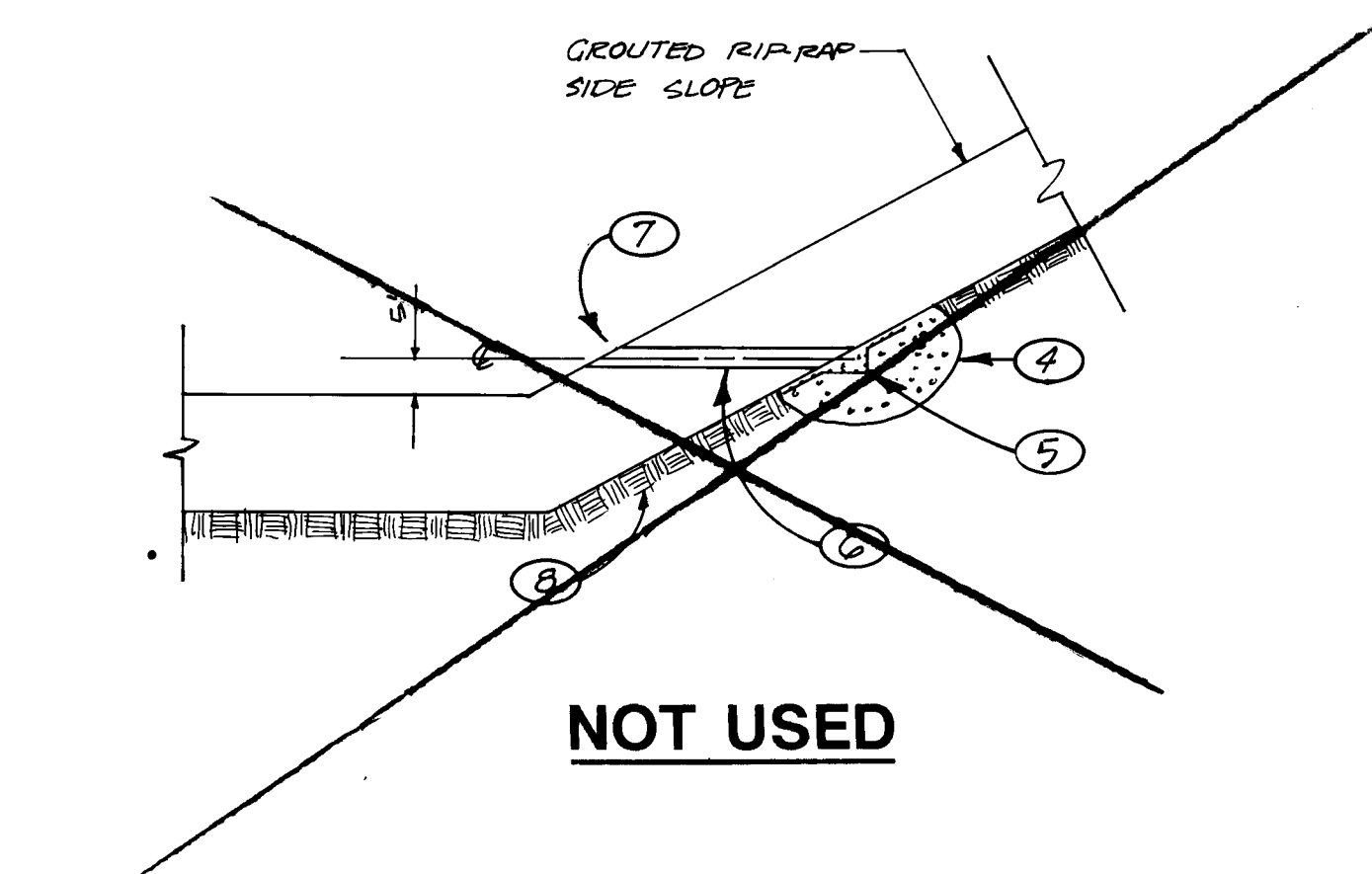
FENCE MOUNTING DETAIL

N.T.S. (HEADWALLS, INLET STRUCTURE, EMER. SPILLWAY)



SECTION: CHANNEL ACCESS RAMP

N.T.S.

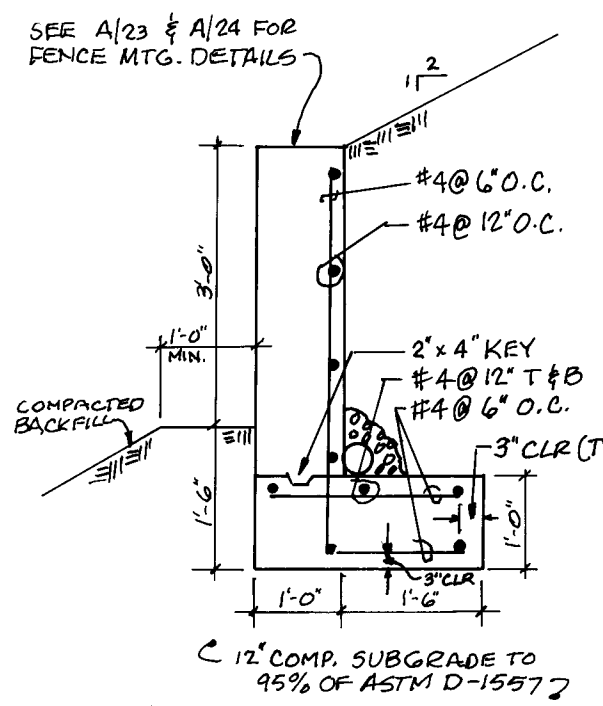


WEEP PIPE DETAIL: GROUTED RIP-RAP SLOPE

N.T.S.

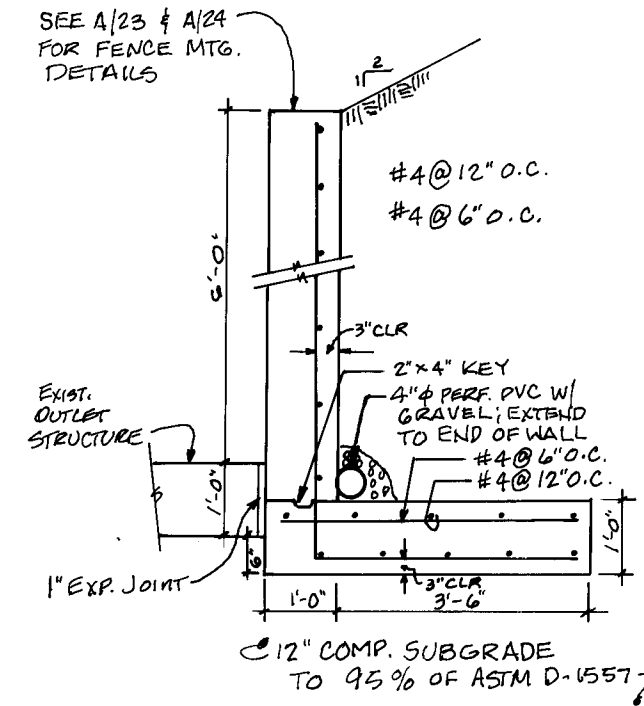
BROADBENT PARKWAY HEADWALL ELEVATION: EAST & WEST STRUCT

N.T.S.



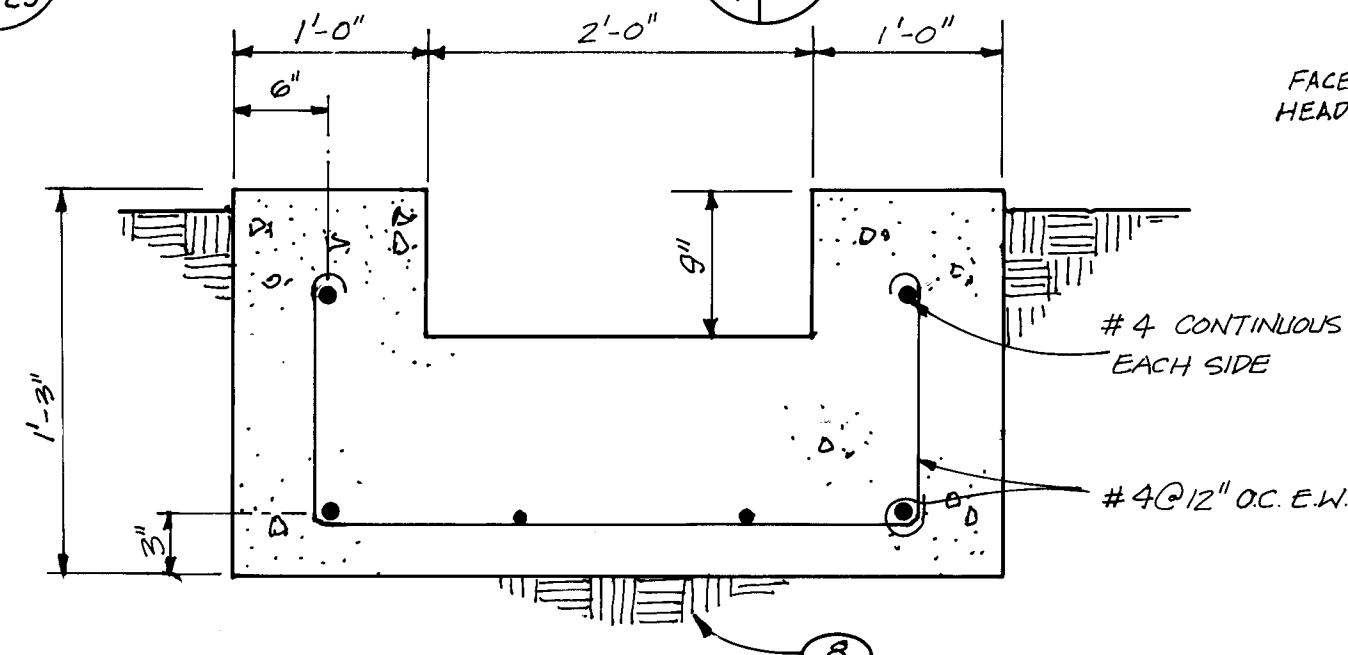
SECTION: RETAINING WALL

N.T.S.



SECTION: RETAINING WALL

N.T.S.

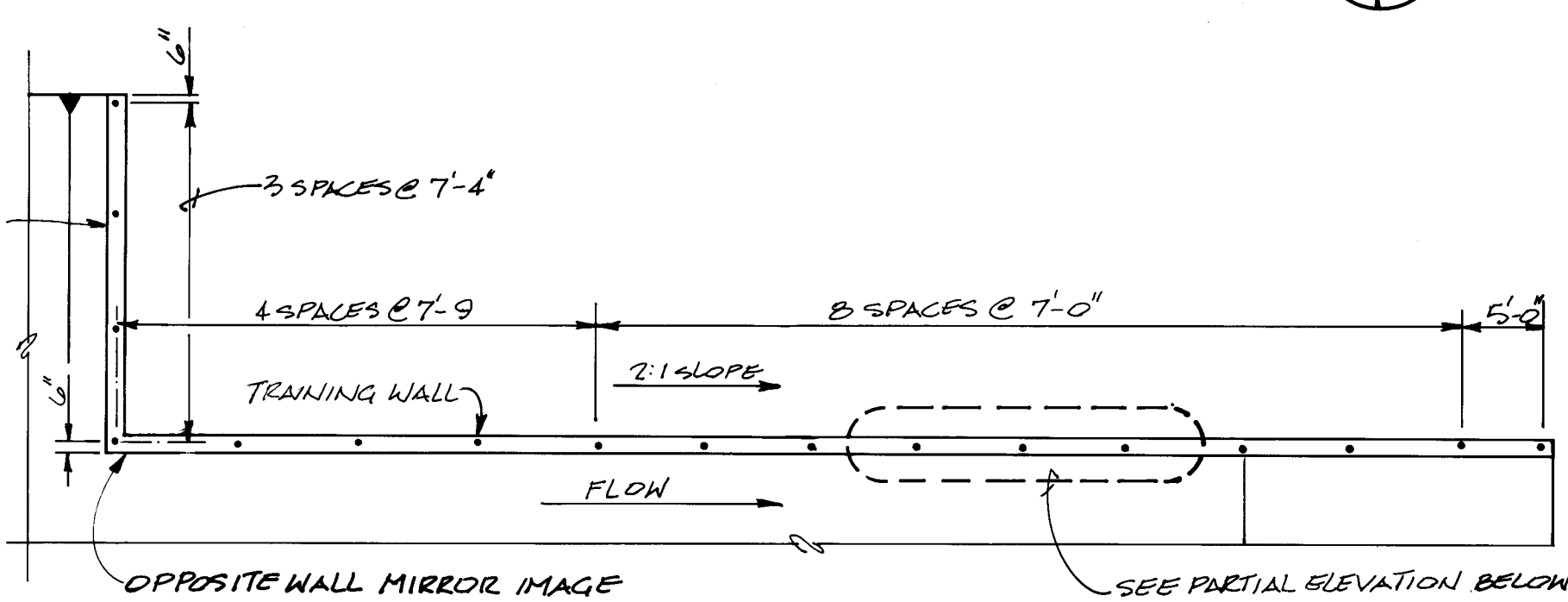


CONCRETE RUNDOWN DETAIL

N.T.S.

FENCE POST LOCATION AT CULVERT HEADWALL (EAST & WEST)

N.T.S. (PLAN VIEW)



FENCE POST LOCATION AT INLET STRUCTURE

N.T.S. (PLAN VIEW)



KEYED NOTES

- 2 1/2-INCH DIAMETER FENCE POST, CQ40 HEAVY DUTY. GREASE INSIDE OF SLEEVE BEFORE WELDING POST INTO PLACE. MESH TO BE 6 FEET HIGH AND INSTALLED PER COA DWG. 2252.
- SPOT WELD FOUR SIDES, TYPICAL EACH POST.
- 3-INCH DIAMETER SLEEVE CAST INTO WALL OR HEADWALL.
- 2 CUBIC FEET OF GRAVEL AND FILTER CLOTH PER COA SPECIFICATIONS.
- 1/4-INCH GALVANIZED WIRE MESH.
- 4-INCH DIAMETER SCH. 40 PVC PIPE. SLOPE 2% TO CHANNEL. INSTALL @ 5 FEET O.C. ALONG LENGTH OF STRUCTURE EACH SIDE.
- END OF PVC TO BE FLUSH WITH SLOPE.
- COMPACTED SUBGRADE PER COA SPECIFICATIONS.
- 6-FOOT HIGH CHAINLINK FENCE PER COA STD. DWG. 2252. SEE DETAIL E, THIS SHEET, FOR POST LOCATION.
- 6-INCH SUBGRADE. COMPACT TO 90% ASTM D-1557.
- 2-8 INCH LIFTS OF BASE COURSE COMPACTED TO 95% ASTM D-1557.
- RIP-RAP SLOPE PROTECTION PER SECTION 2/22.

ENGINEER'S SEAL				SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION			
				FIELD NOTES		WEST ON CANDELARIA 0.2 MILES FROM THE INTERSECTION OF I-25 AND CANDELARIA, STANDARD A.C.S. BRASS		CONTRACTOR			
				NO.	BY			DATE	DATE		
				10283	GEORGE MARQUEZ JR.	10/91	WORK STARTED BY				
							DATE				
							ACCEPTANCE BY				
							DATE				
							FIELD VERIFICATION BY				
							DATE				
							CORRECTED BY				
							DATE				
							RECORDED BY				
							DATE				
							NO.				
				PROJECT NO. 89-01-06							

APPROVE		DATE		DESIGNED		DATE		DRAWN BY		DATE		CHECKED BY		DATE	
ARTMENT		11-30-93		BY PJC		4/93		CTM/MCA		4/93		PJC		2/93	
GROUP															

ARM DRAIN			SHEET 23 OF 29					
VALVES			ENGINEER			DATE		
N.A. MGB			N.A. MGB			11-30-93		
ATER			N.A. MGB			11-30-93		

AS-BUILT
SIGN *[Signature]*
DATE *4/11/95*

Smith Engineering Company

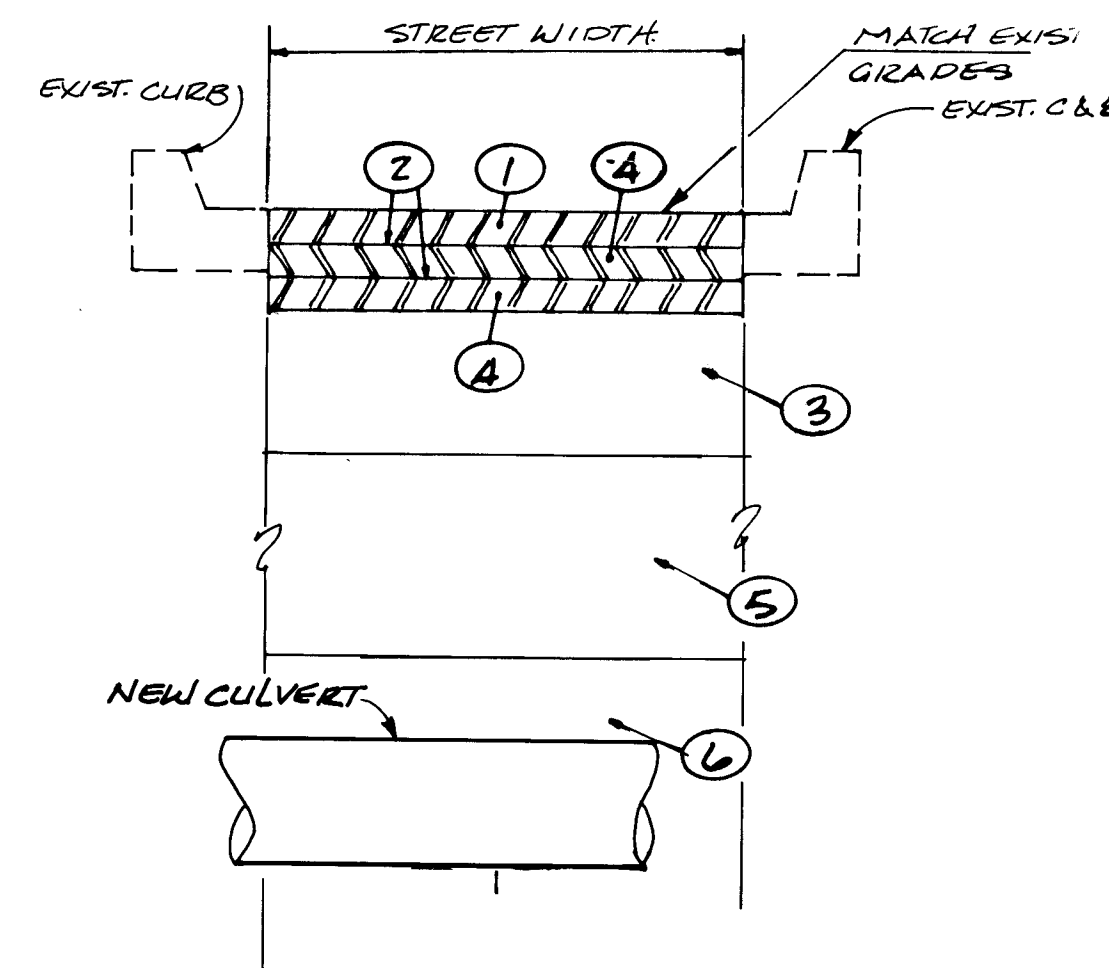
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: MENAUL DETENTION BASIN AND STORM DRAIN

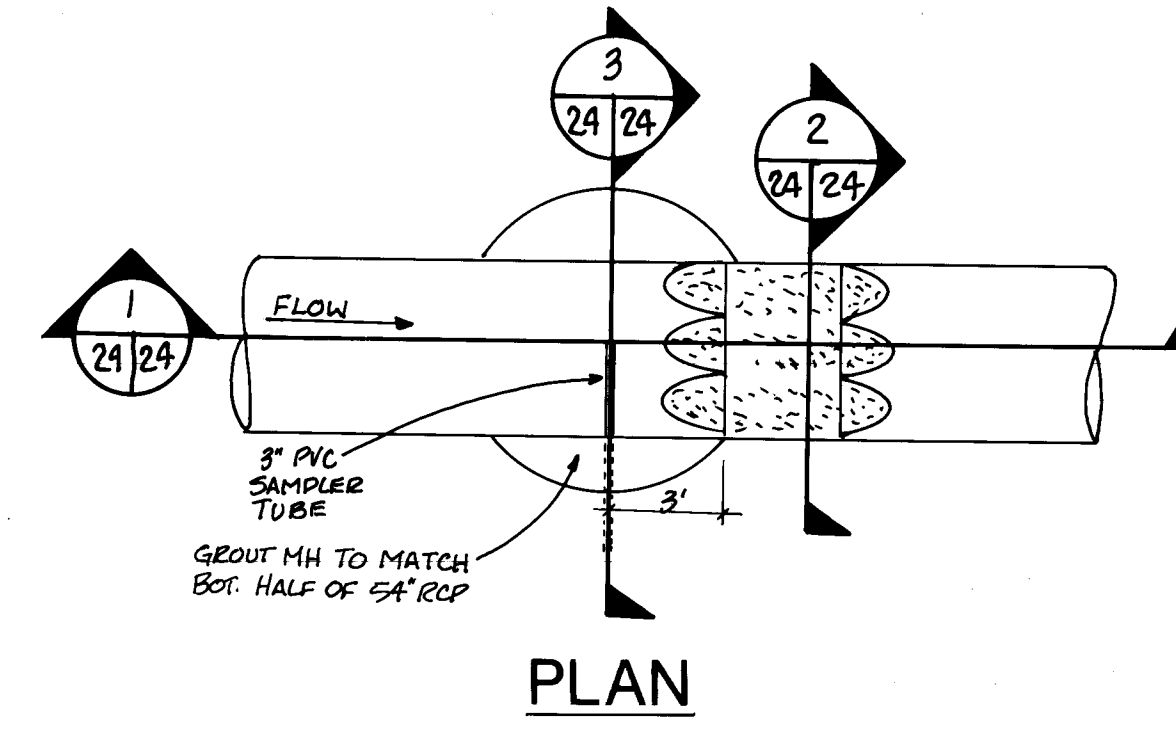
CHANNEL SECTIONS & DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRG CHAIRMAN	<i>B. G. A.</i>	1-13-94	WATER	<i>N. A. B.</i>	11-30-93
TRANSPORTATION	<i>N/A RHD</i>	10-5-94	WASTE WATER	<i>N/A MGB</i>	11-30-93
HYDROLOGY	<i>C.A.M.</i>	11-22-93			

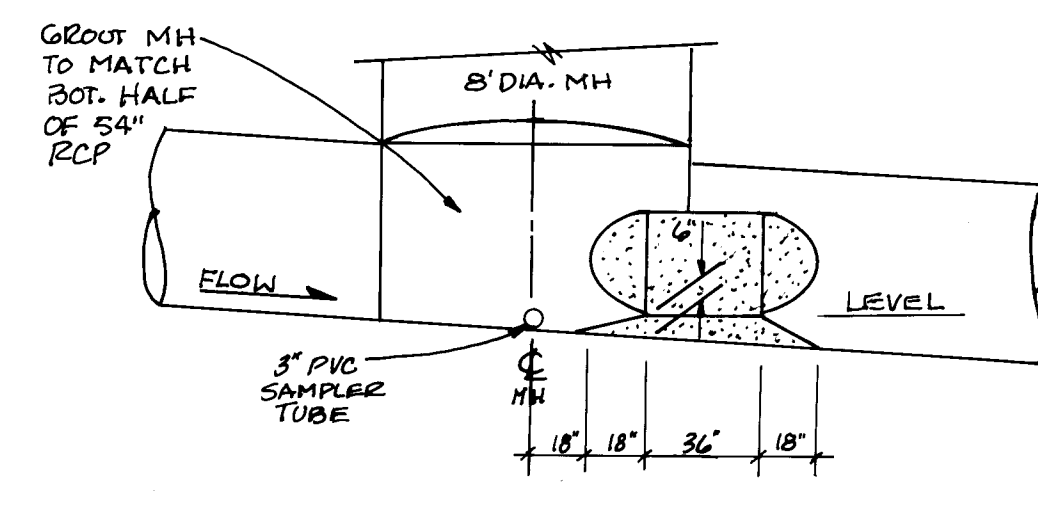
PROJECT NO. 4252.90 MAP NO. H-15, H-16 SHEET 23 OF 29



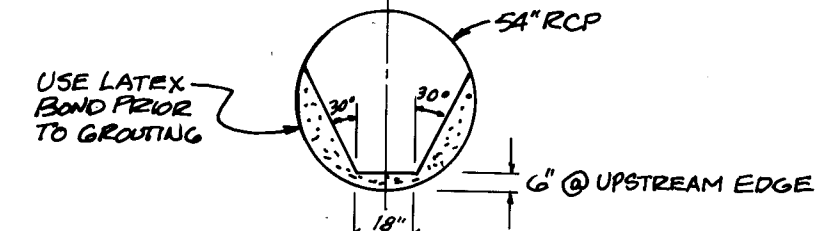
ASPHALT PAVEMENT REPLACEMENT DETAIL
NTS (BROADBENT) A 17/24



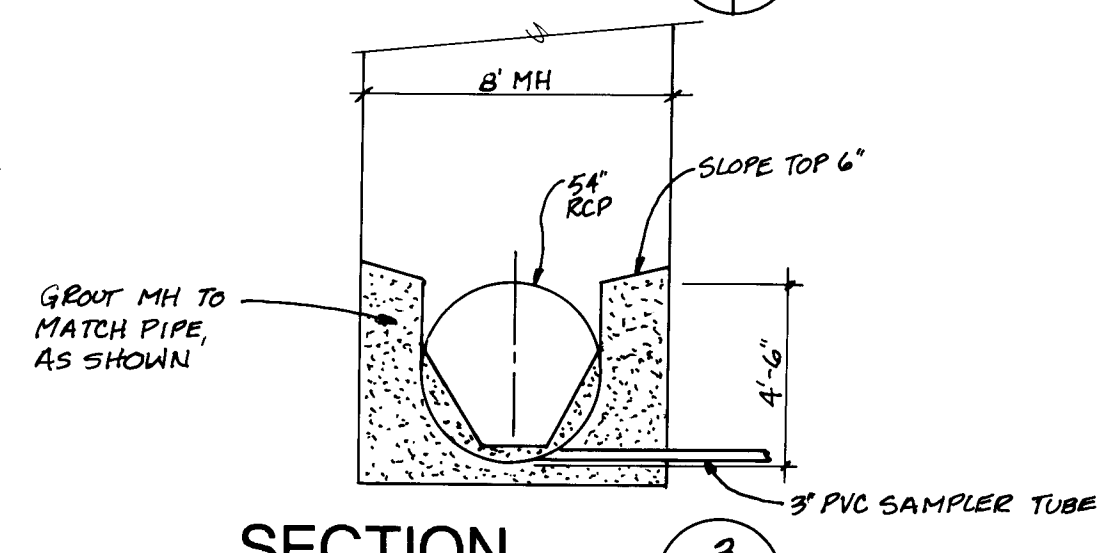
PLAN



SECTION 1 24/24

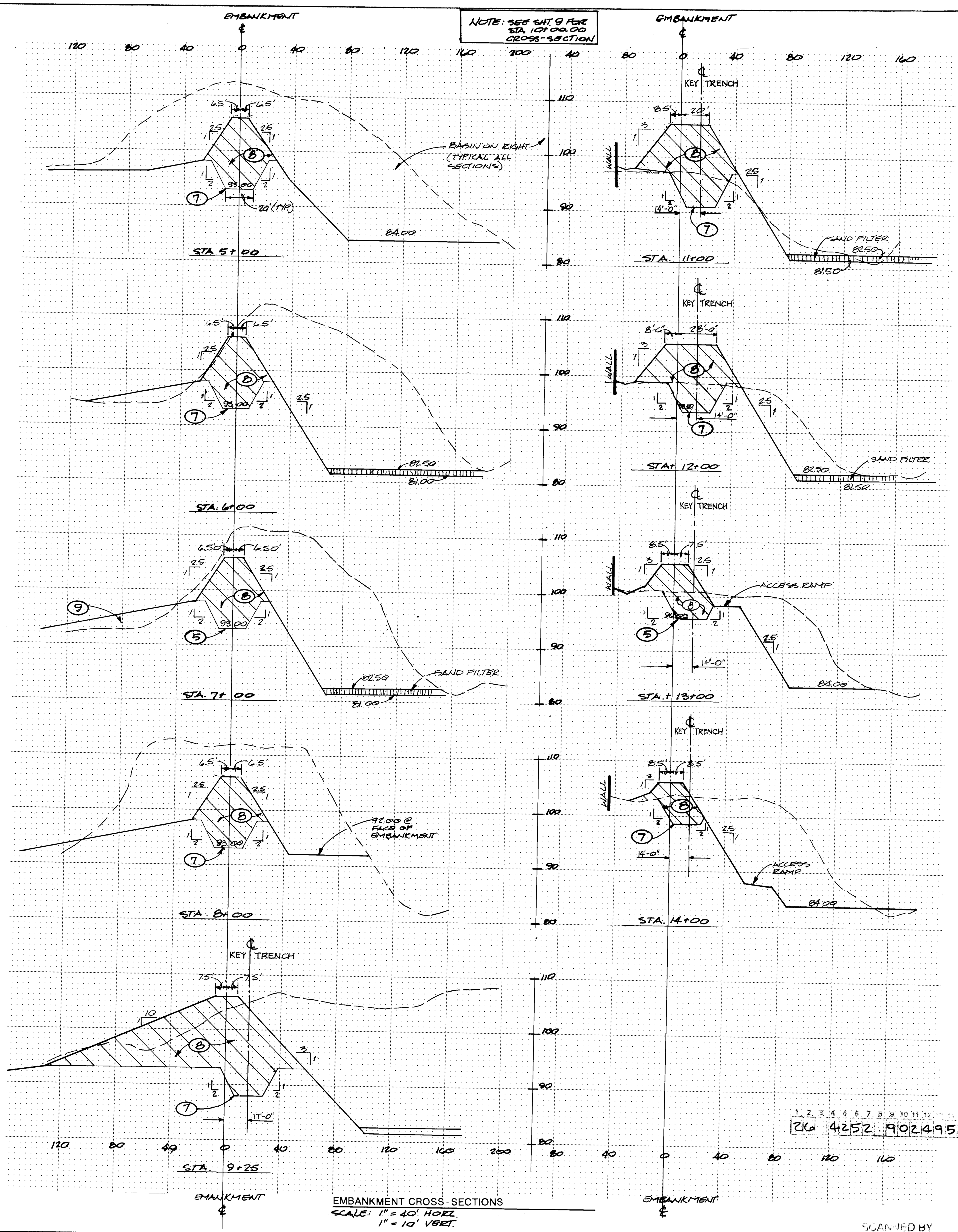


SECTION 2 24/24



SECTION 3 24/24

SAMPLING MANHOLE
AT STA. 11+13.50 B 9/24



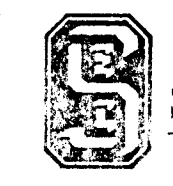
EMBankment CROSS-SECTIONS
SCALE: 1" = 40' HORIZ.
1" = 10' VERT.

KEYED NOTES

- 1 1/2-INCH AC SURFACE COURSE, 1,800 LB. STABILITY. COMPACT TO 95% MOD. MARSHALL.
- 2 TACK COAT.
- 3 TYPE II, 6-INCH BASE COARSE. COMPACT TO 95% ASTM D-1557.
- 4 2 1/2-INCH AC BASE COURSE 1,800 LB. STABILITY. COMPACT TO 95% MOD. MARSHALL.
- 5 8-INCH SUB-BASE. COMPACT TO 95% ASTM D-1557.
- 6 BACKFILL PER COA SPECIFICATIONS.
- 7 KEY TRENCH. PRE-WET IN ACCORDANCE WITH SUPPLEMENTARY SPECIFICATIONS.
- 8 EMBANKMENT FILL, MATERIAL AND COMPACTION IN ACCORDANCE WITH SUPPLEMENTARY SPECIFICATIONS.
- 9 GENERAL FILL ON MENAUL SCHOOL PROPERTY. COMPACT TO 90% ASTM D-1557. SEE SHEET 8 FOR EXTENT OF GRADING ON MENAUL SCHOOL PROPERTY.

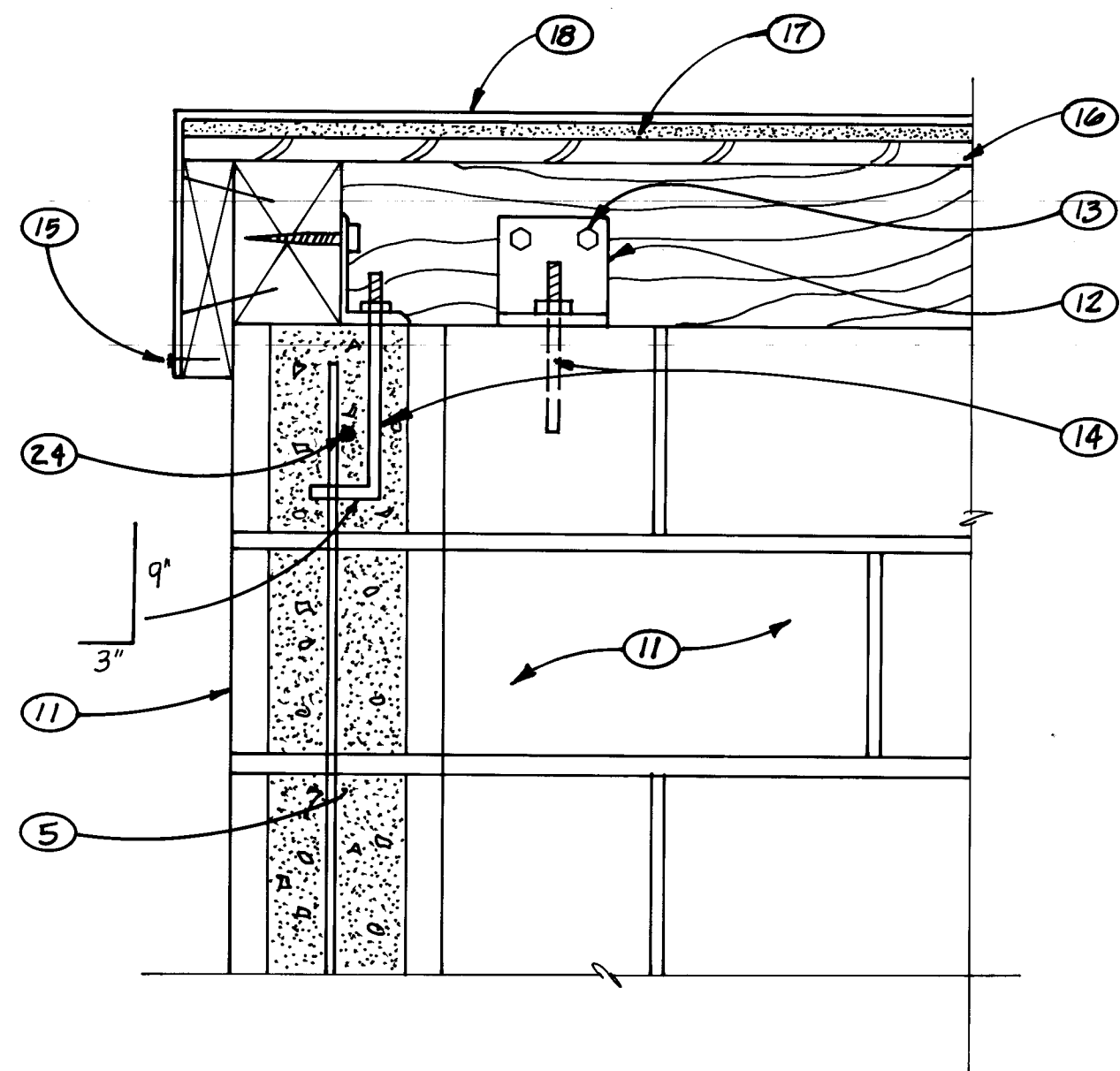
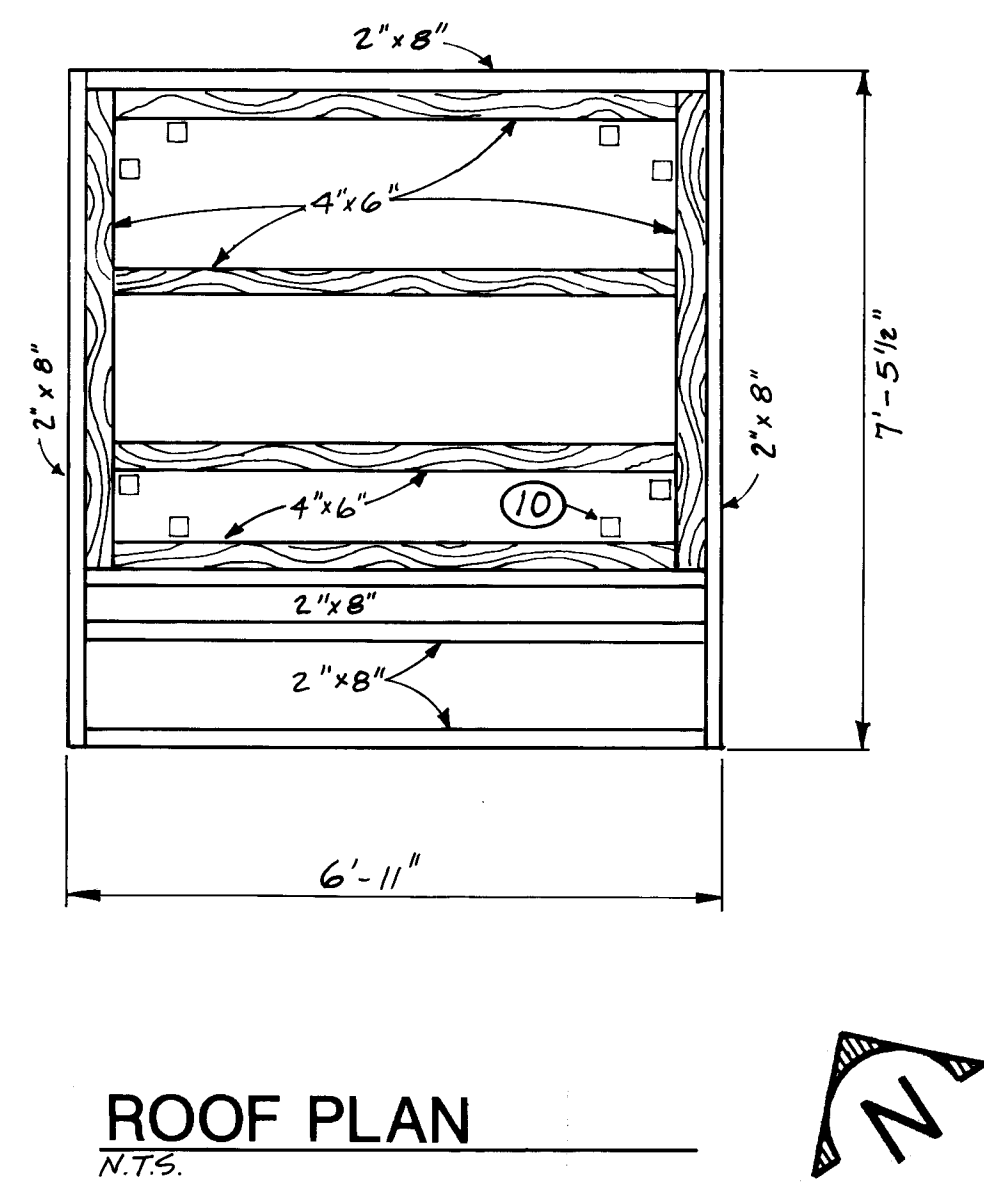
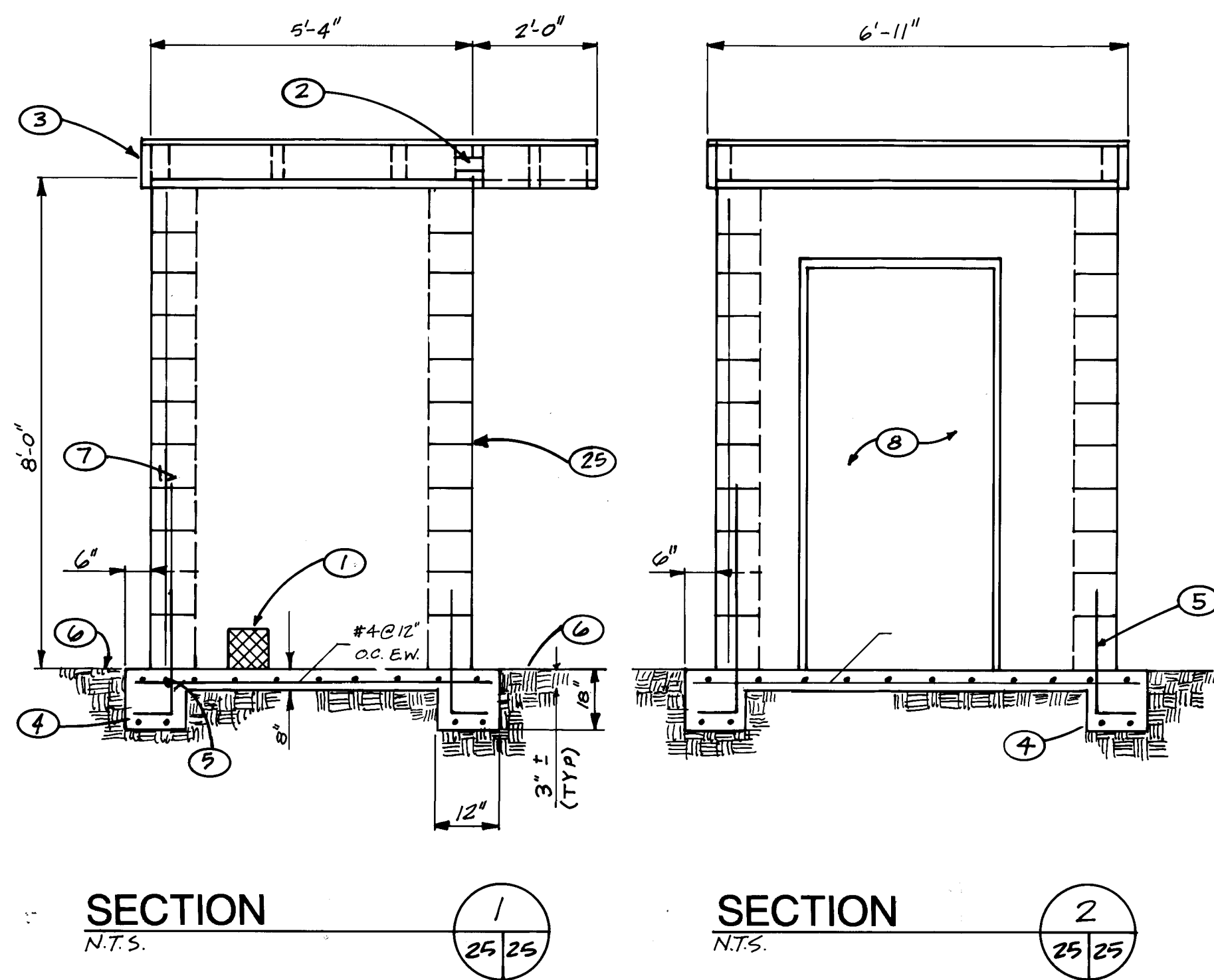
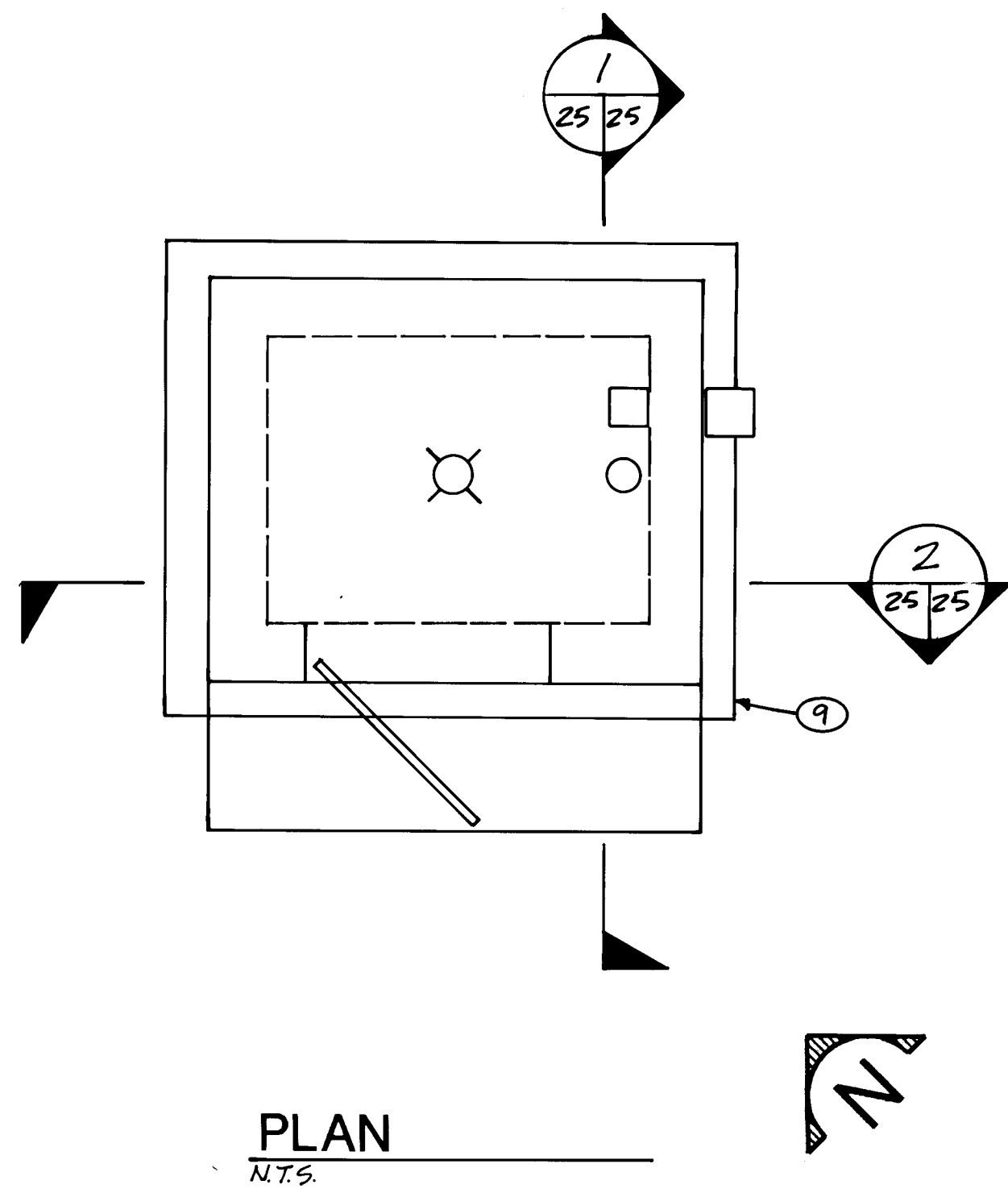
AS BUILT INFORMATION		CONTRACTOR		DATE	
WEST ON CANDELARIA 0.2 MILES FROM THE INTERSECTION OF I-25 AND CANDELARIA STANDARD A.C.S. BRASS		C.O.A.		DATE	
TABLET STAMPED 9-H15 1979 SET 0.1 FEET ABOVE GROUND. SPIRIT LEVEL ELEVATION (SLD 1999) 5034.93.		FIELD BY		DATE	
MICRO-FILM INFORMATION		RECORDED BY		DATE	
REVISIONS		NO.		DATE	
DESIGNED BY RAC		DATE 92-93		DATE 8/93	
DRAWN BY RAC		DATE 92-93		DATE 8/93	
CHECKED BY RAC		DATE 92-93		DATE 8/93	
PROJECT NO. 4252.90		MAP NO. H-15, H-16		SHEET 24 OF 29	

AS-BUILT
SIGN *[Signature]*
DATE 4/11/95

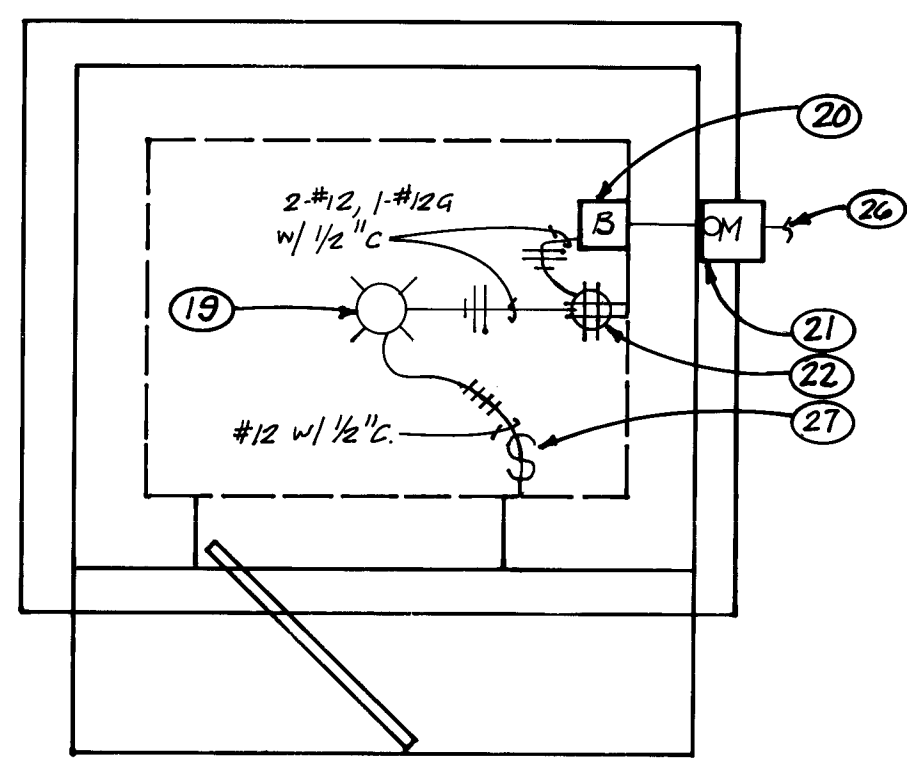


Smith Engineering Company

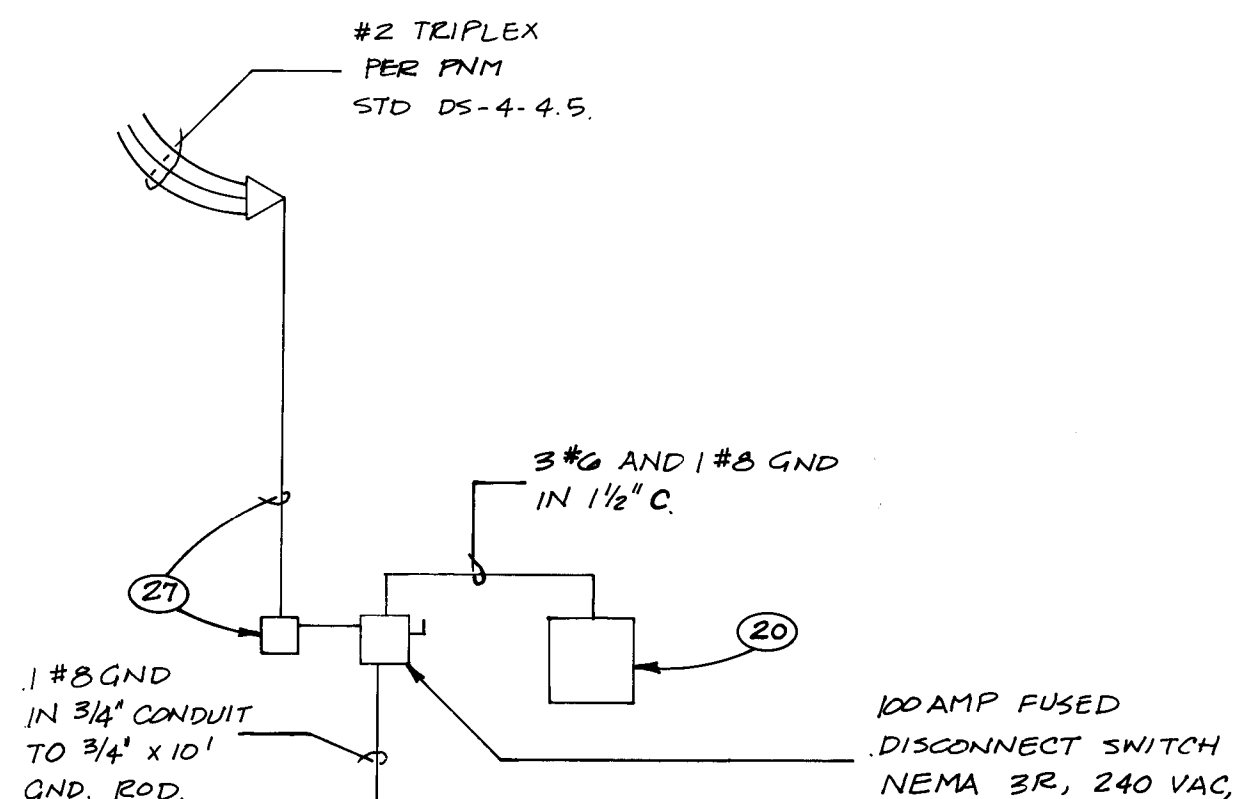
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: MENAUL DETENTION BASIN AND STORM DRAIN					
EMBankment SECTIONS & MISC.DTL'S.					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRG CHAIRMAN	<i>[Signature]</i>	1-13-94	WATER	<i>[Signature]</i>	11-30-93
TRANSPORTATION	<i>[Signature]</i>	1-05-94	WASTE WATER	<i>[Signature]</i>	11-30-93
HYDROLOGY	CAM	11-23-93			
PROJECT NO.	4252.90	MAP NO.	H-15, H-16	SHEET	24 OF 29



ROOF-WALL CONNECTION
N.T.S.



ELECTRICAL FLOOR PLAN
N.T.S.



1-LINE DIAGRAM

AS-BUILT
SIGN *[Signature]*
DATE 4/11/95

KEYED NOTES

- EXTRUDED METAL 1/4-INCH MESH SCREEN.
- AIR VENTS, THREE TYPICAL WITH 1/4-INCH MESH OVER OPENING.
- SEE DETAIL A THIS SHEET.
- 1-#4 HORIZONTAL, CONTINUOUS.
- #4 VERTICAL @ 16-INCH O.C.

KEYED NOTES

- GRADE AWAY FROM STRUCTURE MINIMUM 1/4-INCH/FOOT ALL DIRECTIONS.
- #5 @ 16" O.C. MINIMUM 2'-6" LAP WITH FOOTING REINFORCING.
- 3'-0" x 6'-8" STEEL DOOR AND FRAME.
- SEE BASIN LAYOUT PLAN FOR BUILDING LOCATION AND ORIENTATION.
- FRAMING ANCHORS, 8 TYPICAL.
- 8" x 8" x 16" CMU BLOCK. FILL ALL CELLS WITH 3000 PSI CONCRETE.
- 3" x 3" x 1/4" ANGLE, 4-INCHES LONG. DRILL 2-1/2-INCH DIAMETER AND 1-5/8-INCH DIAMETER HOLES. USE 2 ANCHOR ANGLES EACH WALLS.
- 2-3/8-INCH DIAMETER x 3'-2" LAG SCREWS.
- 1/2-INCH DIAMETER ANCHOR BOLT.
- #8 x 1-1/4-INCH TAMPER-PROOF SCREWS @ 8-INCH O.C., FULL PERIMETER. PAINT WITH LIGHT GRAY PRIMER ONLY.
- 3/4-INCH CDX PLYWOOD SHEATHING.
- 1/2-INCH EXPANDED STYRENE.
- 16-GA. STEEL WITH FULL WELDED FACIA RETURN (ONE PIECE UNIT). PAINT WITH LIGHT GRAY PRIMER ONLY.
- FURNISH AND INSTALL 100 WATT INCANDESCENT LIGHT FIXTURE WITH GLASS GLOBE IN A KEYLESS LIGHT HOLDER, CONDUIT AND WIRE, SIZE AS SHOWN ON FLOOR PLAN.
- LOAD CENTER RATED 70 AMPERES, 120/240 VAC, 10, 3W, W/2 EA. 20A/1P, GFCI BREAKERS RATED 10,000 AIC MINIMUM. ONE CIRCUIT SHALL SERVE QUADPLEX AND ANOTHER SHALL SERVE LIGHTING. NEMA 3R.
- FURNISH AND INSTALL METER SOCKET, CONDUIT & WIRE FROM METER TO BREAKER.
- INSTALL TWO (2) GFI DUPLEX RECEPTACLES, HUBBELL MODEL #GF5262, IN A #4 - S BOX WITH HUBBELL #PB2X COVER PLATE. MOUNT 12" A.F.F.
- PNM TO SUPPLY POWER AND MAKE CONNECTION TO METER WEATHERHEAD.
- 1 - #4 HORIZONTAL BAR, TOP & BOTTOM COURSE AND AT LENTIL BEAM.
- JOINT REINFORCING AT 8" O.C. VERTICAL.
- 12" SUBGRADE COMPACTED TO 95% ASTM D-1557
- FURNISH AND INSTALL 2" RIGID GALVANIZED CONDUIT WITH WEATHERHEAD UP THROUGH EAVE OF BUILDING ROOF. SEE PNM "ELECTRIC SERVICE GUIDE" STANDARD DS-4-3.0 FOR INSTALLATION.
- FURNISH AND INSTALL SINGLE POLE LIGHT SWITCH, BOX, COVER PLATE, WIRE & CONDUIT TO FIXTURE. SIZE AS SHOWN ON PLANS.



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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

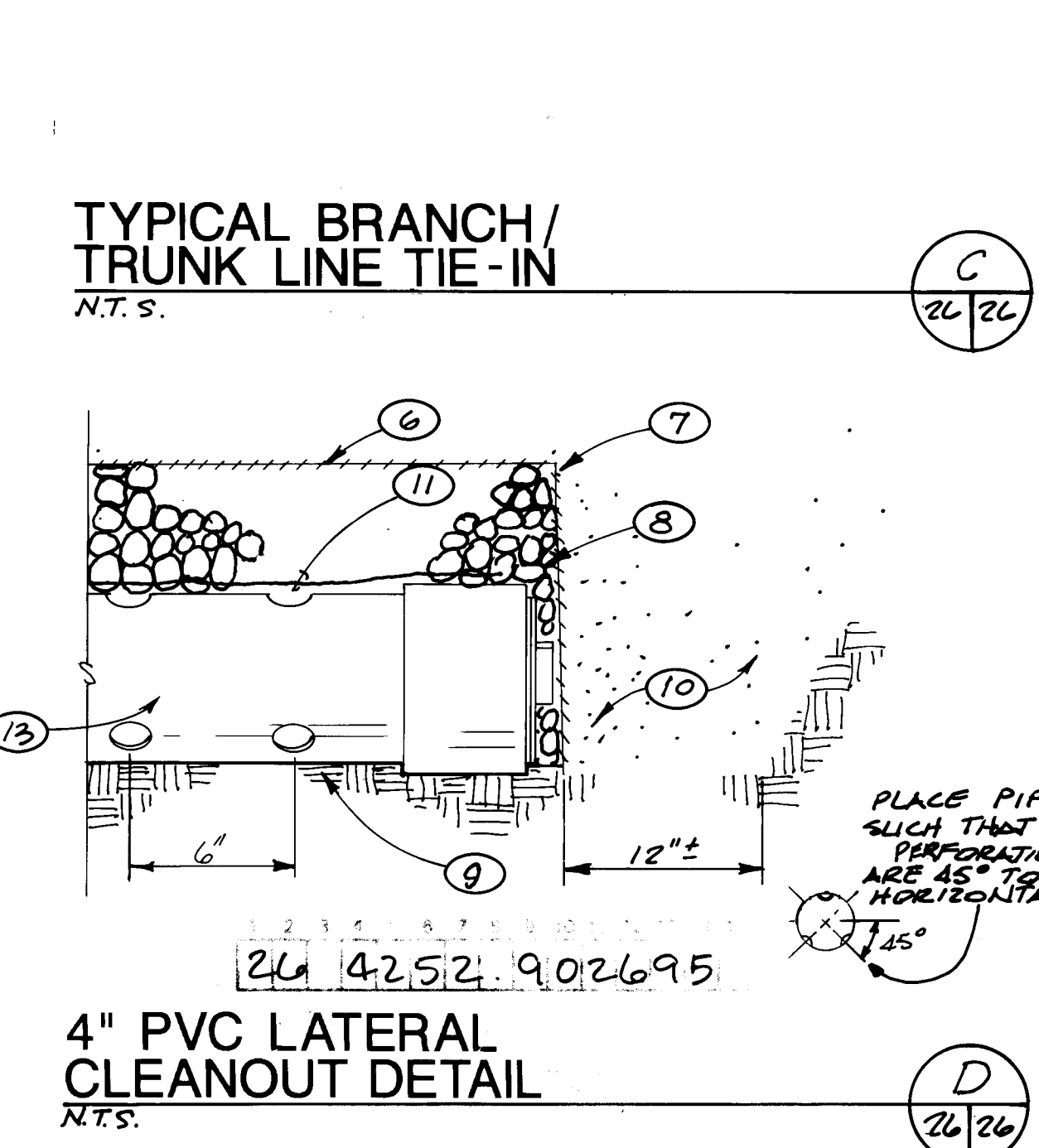
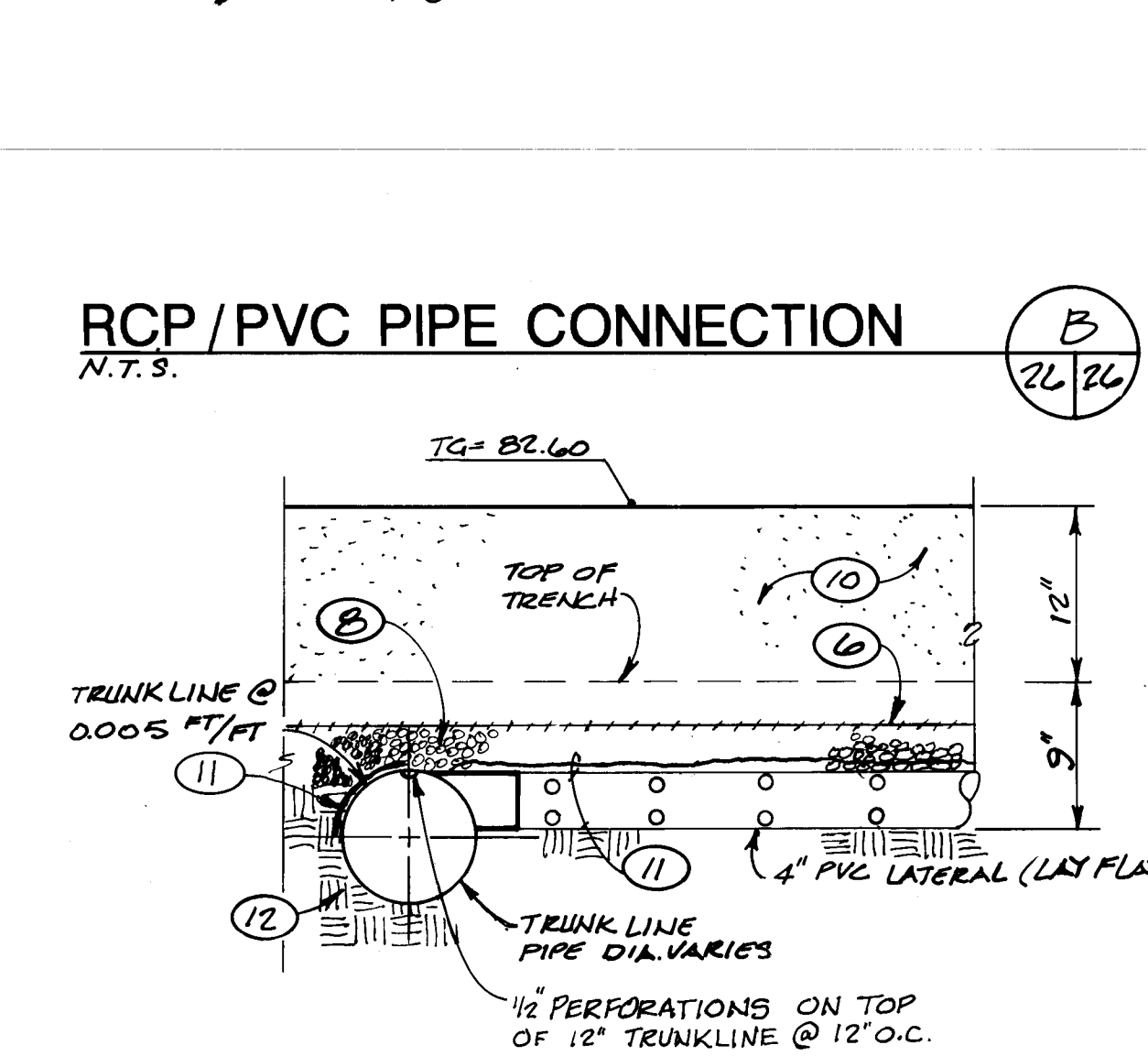
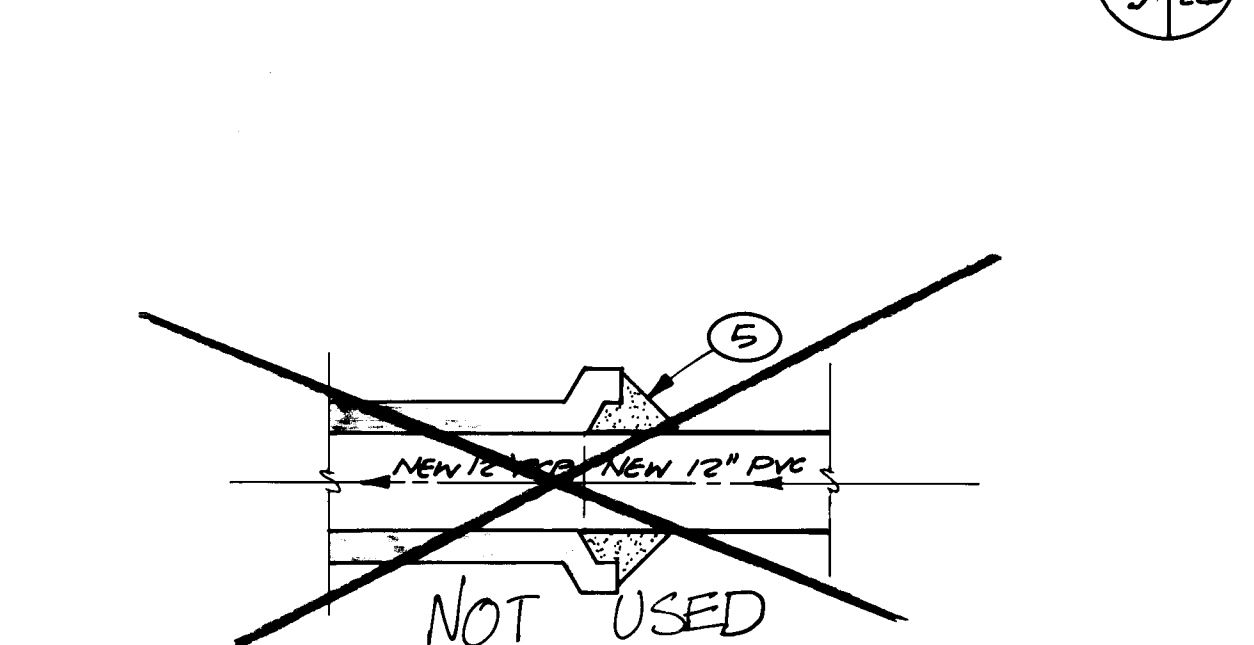
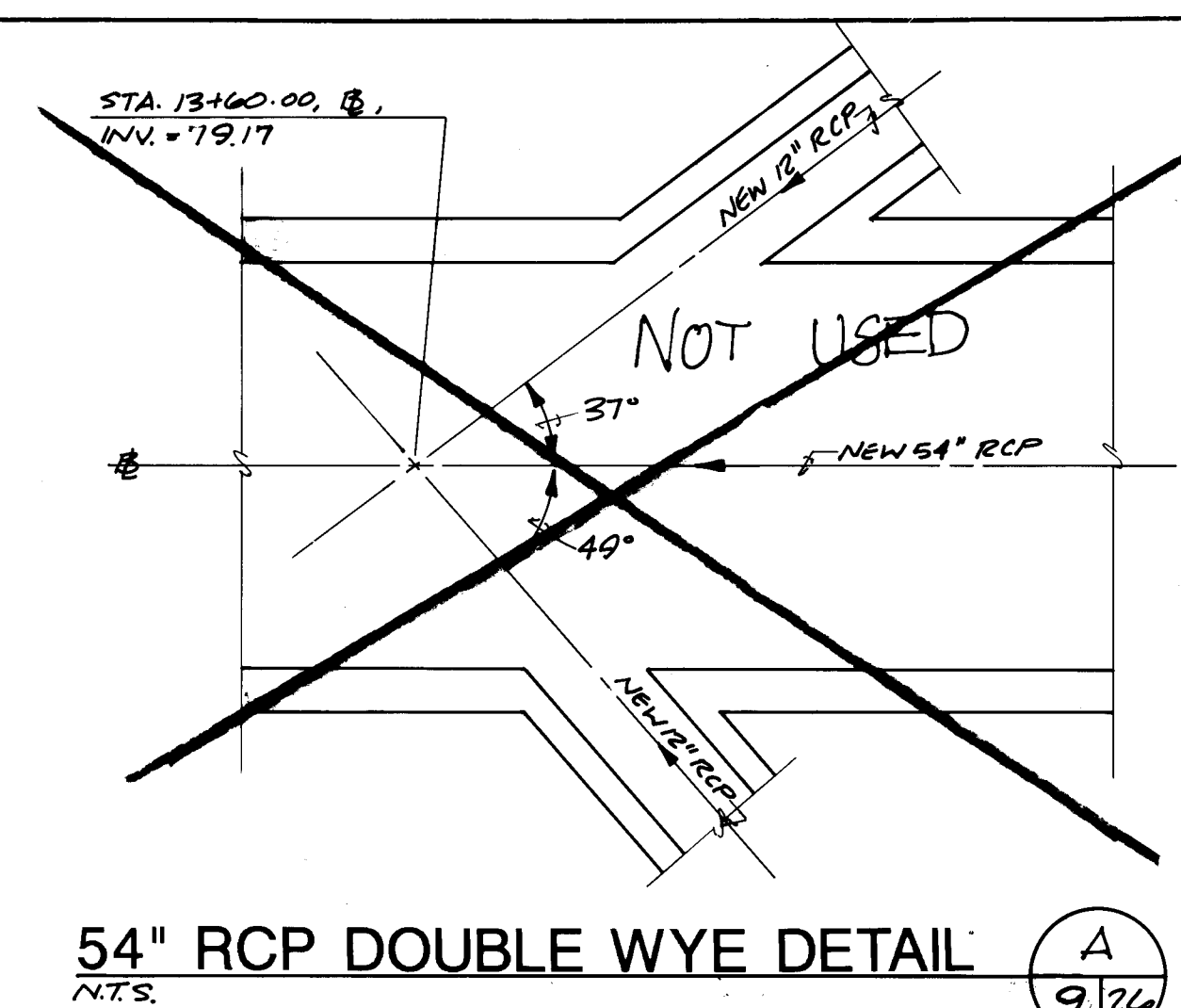
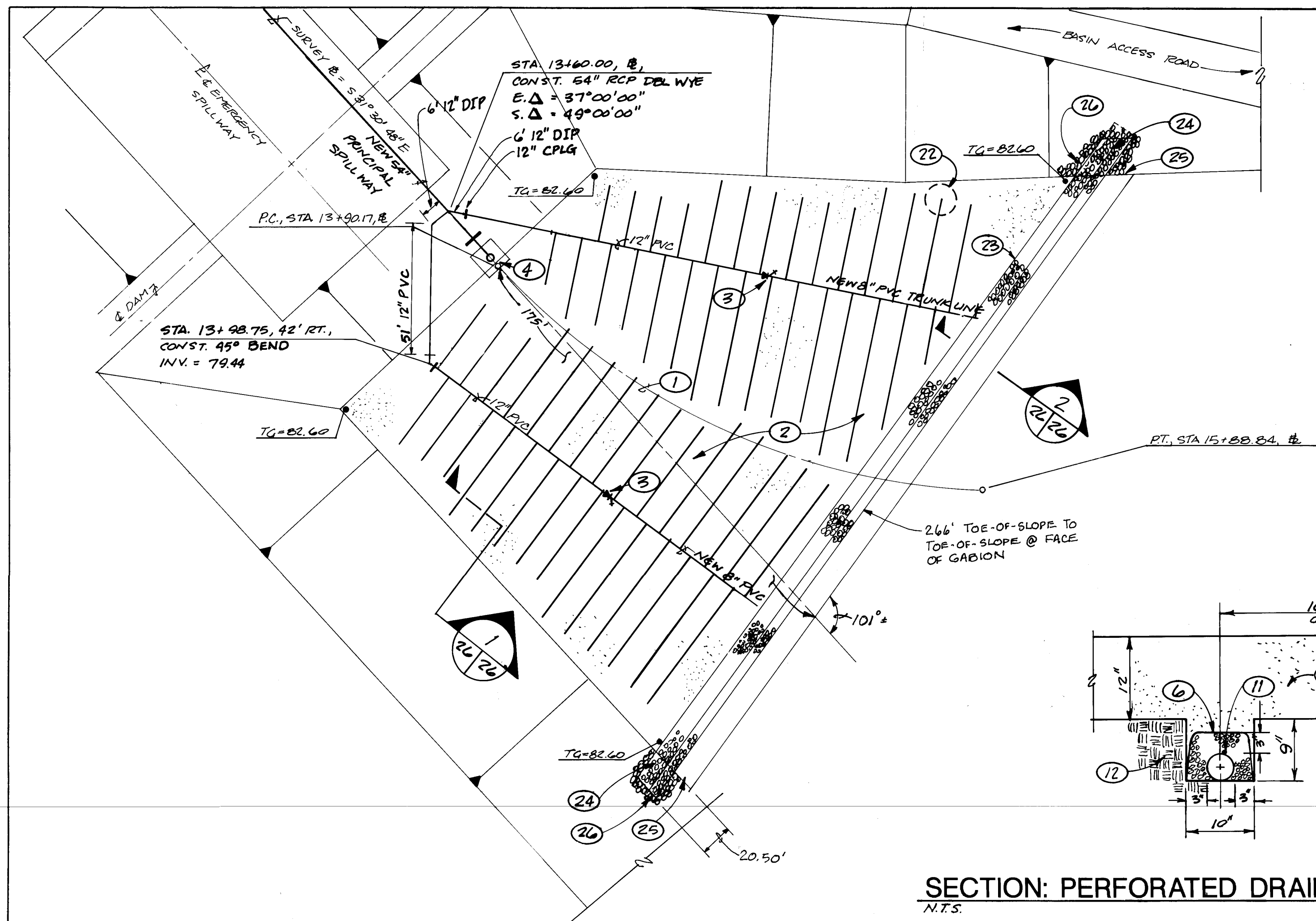
TITLE: MENAUL DETENTION BASIN AND STORM DRAIN

MONITORING STATION DETAILS

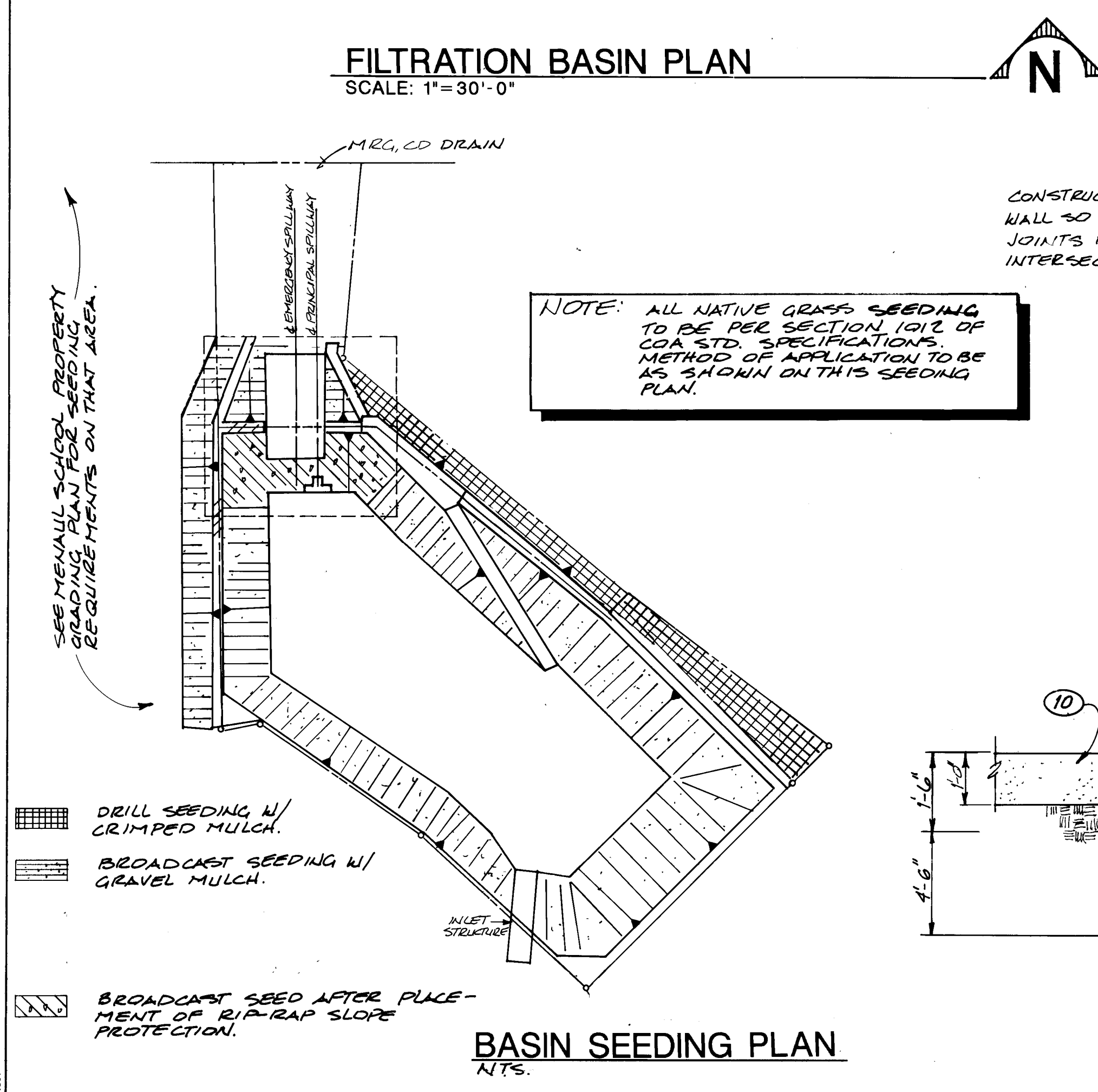
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	B. J. A.	1-13-94	WATER	N.A. J. J. B.	11-30-93
TRANSPORTATION	R. J. A.	1-05-94	WASTE WATER	N.A. J. J. B.	11-30-93
HYDROLOGY	C. A. M.	11-03-93			

PROJECT NO.	4252.90	MAP NO.	H-15,H-16	SHEET	25	OF	29
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SCANNED BY
BY LASON



KEYED NOTES:									
1	SURVEY CENTERLINE	13	4-INCH DIAMETER SCHEDULE 40 PVC PERFORATED PIPE. PERFORATIONS TO BE 1/2" DIAMETER AT 90-DEGREE INTERVALS AROUND CIRCUMFERENCE-OF-PIPE. LATERAL SPACING OF PERFORATIONS SHALL BE 6-INCHES.	21	BACKFILL COMPACTED TO 90% ASTM D-1557.	25	TERMINATE THE CONCRETE SLAB AT THE TOE OF THE SLOPE.	29	PROJECT NO. 89-01-06
2	SAND FILTER BED. SEE DETAILS THIS SHEET AND SPECIFICATIONS.	14	4" x 4" x 3/8" x 10'-9" LONG ANGLE AT 6- FEET ON-CENTER. PRIME AND PAINT WHITE. TIE TO GABIONS AT 12-INCH SPACING VERTICALLY.	22	TERMINATE 4-INCH PVC PIPING. SEE DETAIL D THIS SHEET (TYPICAL ALL 4-INCH TERMINATIONS).	26	PLACE DUMPED RIP-RAP 5- FEET IN ALL DIRECTIONS AROUND THE GABION BASKETS AT THE TOE OF THE SLOPE IN THE BASIN.	30	DATE 6/93
3	INSTALL 8"x12" REDUCER AND CLEANOUT.	15	TYPE "C" GABIONS. ALTERNATE VERTICAL JOINTS WITH TYPE "D" GABIONS.	23	SEE ELEVATION E THIS SHEET FOR TYPICAL BAY ELEVATION FOR RIP-RAP WALL.	27	REVISIONS	31	DATE 6/93
4	PRINCIPAL SPILLWAY STRUCTURE. SEE SHEET 12.	16	TYPE "D" GABIONS. ALTERNATE VERTICAL JOINTS WITH TYPE "C" AND "A" GABIONS.	24	MODIFY GABION BASKETS SUCH THAT THE BOTTOMS MATCH THE SLOPE OF THE GROUND THEY ARE PLACED ON.	28	DESIGNED BY P/C	32	DATE 6/93
5	3000-PSI GROUT AROUND PVC/RCP INTERFACE.	17	TYPE "A" GABIONS.	25	TERMINATE THE CONCRETE SLAB AT THE TOE OF THE SLOPE.	29	DRAWN BY CTN/CJC	33	DATE 6/93
6	FILTER FABRIC OVER ROCK. SEE SPECIFICATIONS.	18	NOT USED.	26	PLACE DUMPED RIP-RAP 5- FEET IN ALL DIRECTIONS AROUND THE GABION BASKETS AT THE TOE OF THE SLOPE IN THE BASIN.	30	CHECKED BY P/C	34	DATE 6/93
7	TURN FILTER FABRIC DOWN 90 DEGREES AT 3-INCHES PAST CLEANOUT.	19	6-INCH SUBGRADE COMPACTED TO 90% ASTM D-1557.	27	REVISIONS	31	PROJECT NO. 89-01-06	35	DATE 6/93
8	ROCK FILTER. SEE SPECIFICATIONS.	20	6-INCH ENGINEERED FILL COMPACTED TO 95% ASTM D-1557.	28	DESIGNED BY P/C	32	PROJECT NO. 89-01-06	36	DATE 6/93
9	NATURAL GRADE. NO COMPACTION REQUIRED.	21	BACKFILL COMPACTED TO 90% ASTM D-1557.	29	DRAWN BY CTN/CJC	33	PROJECT NO. 89-01-06	37	DATE 6/93
10	CLEAN SAND FILTER MATERIAL. SEE SPECIFICATIONS.	22	TERMINATE 4-INCH PVC PIPING. SEE DETAIL D THIS SHEET (TYPICAL ALL 4-INCH TERMINATIONS).	30	CHECKED BY P/C	34	PROJECT NO. 89-01-06	38	DATE 6/93
11	METALLIC LINE LOCATOR TAPE PER COA STANDARD SPECIFICATIONS.	23	SEE ELEVATION E THIS SHEET FOR TYPICAL BAY ELEVATION FOR RIP-RAP WALL.	31	PROJECT NO. 89-01-06	35	PROJECT NO. 89-01-06	39	DATE 6/93
12	NATURAL GRADE AROUND PERFORATED PVC PIPE.	24	MODIFY GABION BASKETS SUCH THAT THE BOTTOMS MATCH THE SLOPE OF THE GROUND THEY ARE PLACED ON.	32	PROJECT NO. 89-01-06	36	PROJECT NO. 89-01-06	40	DATE 6/93



SECTION: PERFORATED DRAIN LAY-OUT
N.T.S.

RCP / PVC PIPE TRUNK LINE CONNECTION
N.T.S.

TYPICAL BAY ELEVATION
N.T.S.

TYPICAL BRANCH/ TRUNK LINE TIE-IN
N.T.S.

SECTION: GABION WALL
N.T.S.

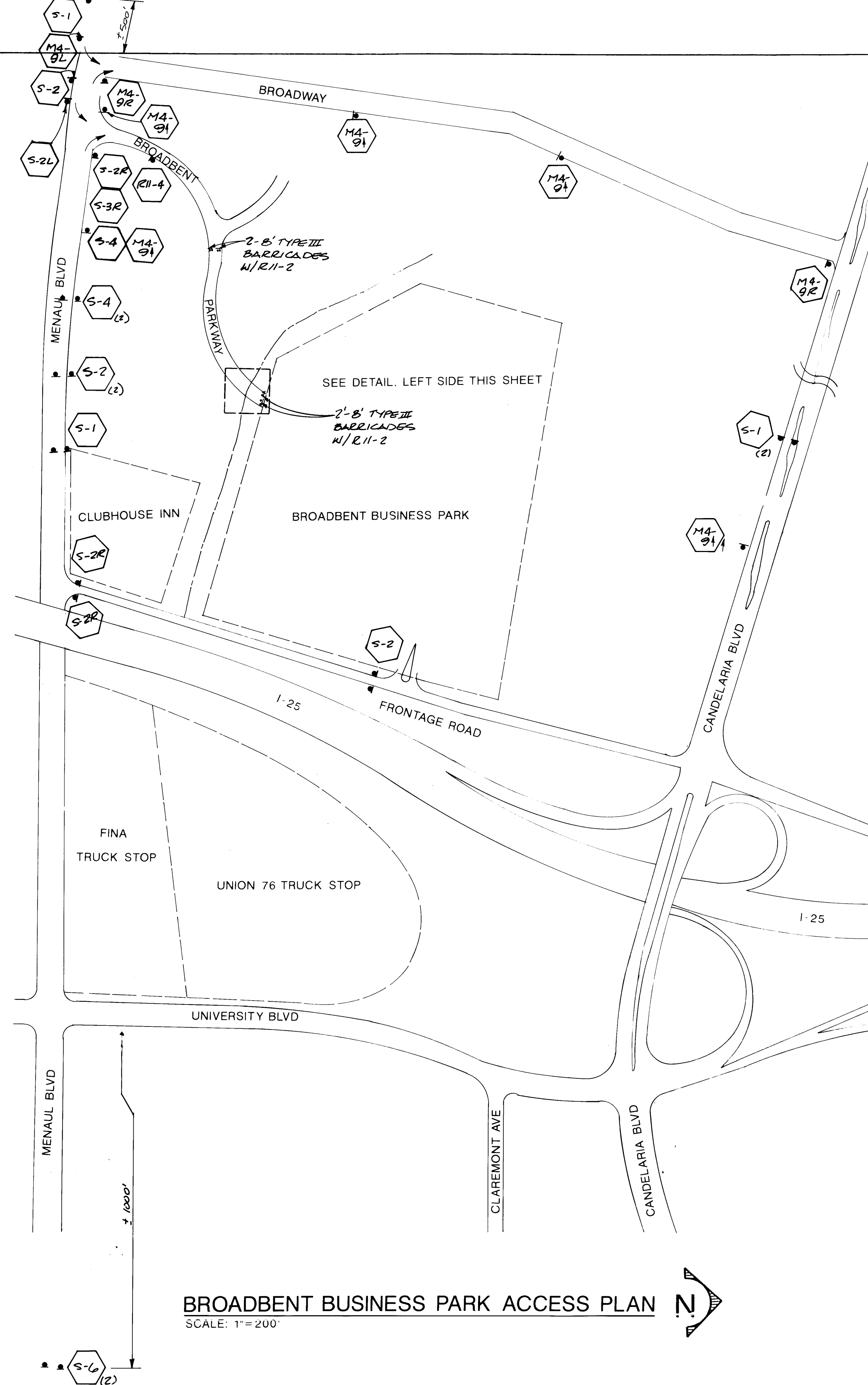
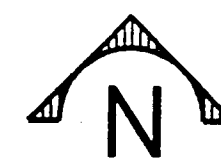
4" PVC LATERAL CLEANOUT DETAIL
N.T.S.

FILTRATION BASIN PLAN
SCALE: 1"=30'-0"

BASIN SEEDING PLAN
N.T.S.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP									
TITLE: MENAUL DETENTION BASIN AND STORM DRAIN									
FILTER BED SYSTEM DETAIL									
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE	APPROVALS
DRG CHAIRMAN	B. G. S.	1-13-94	WATER	N.A.	11-30-93	DRG CHAIRMAN	B. G. S.	1-13-94	WATER
TRANSPORTATION	N/A RHD	1-09-94	WASTE WATER	N.A.	11-30-93	TRANSPORTATION	N/A RHD	1-09-94	WASTE WATER
HYDROLOGY	C.M.	1-23-93				HYDROLOGY	C.M.	1-23-93	
PROJECT NO.	4252.90	MAP NO. H-15-H-16	SHEET 26	OF 29		PROJECT NO.	4252.90	MAP NO. H-15-H-16	SHEET 26

SCALE: 1"=20'



SCALE: 1"=200'



26 4252.902795

- 1 THIS DETOUR PHASE SHALL NOT BE INCORPORATED WHILE ANY OTHER DETOURING IS PRESENT ON UNIVERSITY BOULEVARD FROM MENAUL TO CANDELARIA.
- 2 SIGNS SHOWN IN THE CENTER OF THE STREET SHALL BE PLACED IN THE CENTER OF THE EXISTING RAISED MEDIAN ON MENAUL BOULEVARD OR CANDELARIA BOULEVARD DIRECTLY ACROSS FROM ACCOMPANYING SIGN.
- 3 ADDITIONAL ACCESS SIGNS FOR BUSINESSES MAY BE REQUIRED UPON REQUEST BY BUSINESS OWNER AND APPROVAL OF CONSTRUCTION COORDINATOR.

1 8'-TYPE III BARRICADES WITH
LIGHTS.

[illegible]

AS-BUILT
SIGN Pay/G
DATE 4/11/95

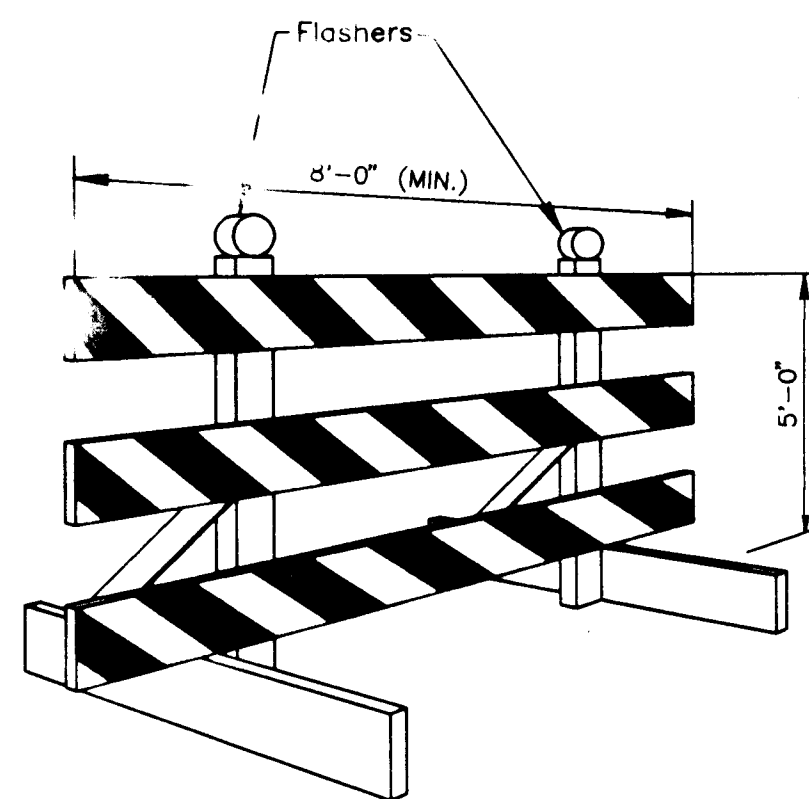
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: MENAU DETENTION BASIN & STORM DRAIN

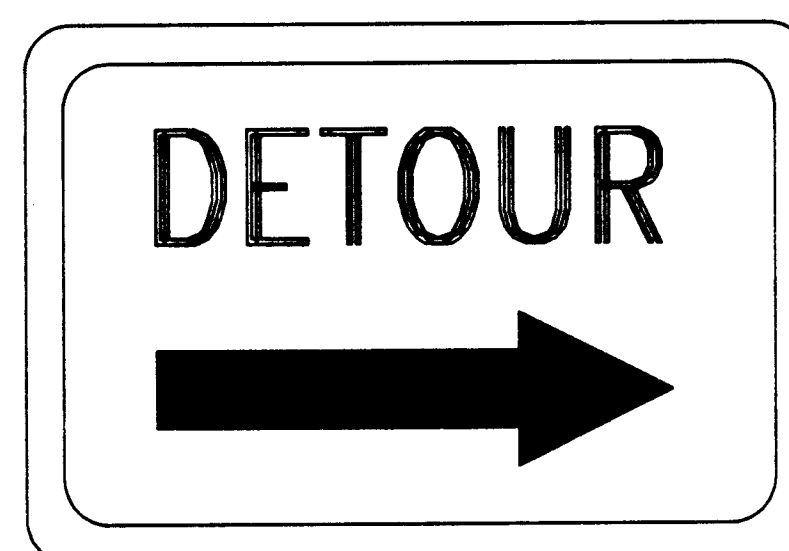
TRAFFIC CONTROL :TC1

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>S. J. A.</i>	1-13-94	WATER	<i>N.A. Zyg B</i>	11-30-93
TRANSPORTATION	<i>N/A RHO</i>	1-05-94	WASTE WATER	<i>N.A. Zyg B</i>	11-30-93
HYDROLOGY	<i>CAM</i>	11-23-93			

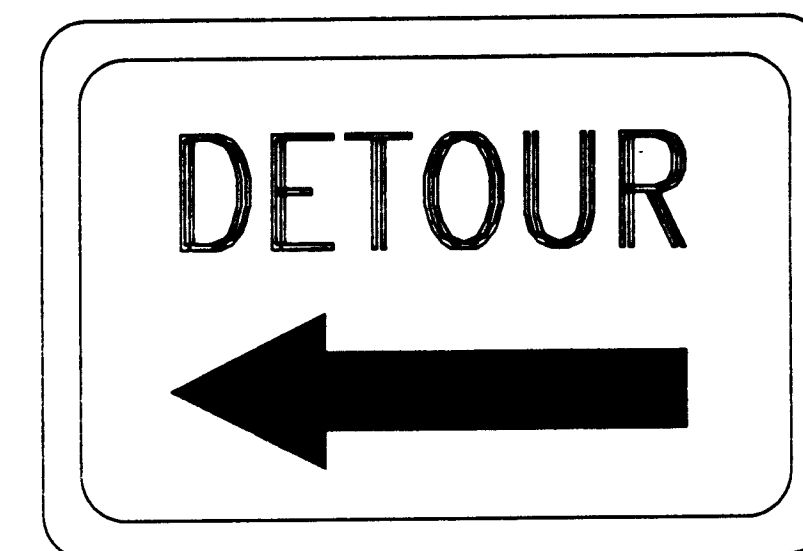
PROJECT NO. 4252.90	MAP NO. H-15, H-16	SHEET 27 OF 29
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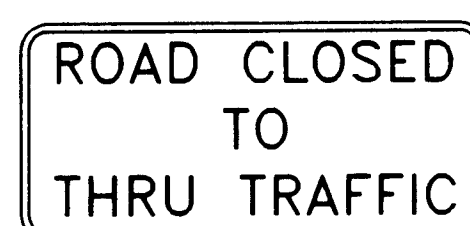
TYPE III BARRICADE



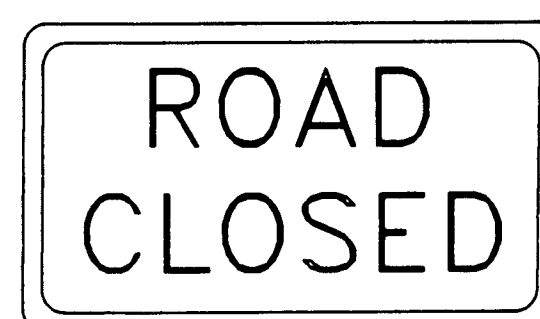
M4-9R
(30" x 24")



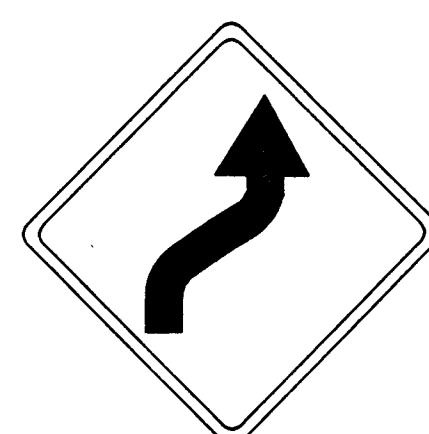
M4-9L
(30" x 24")



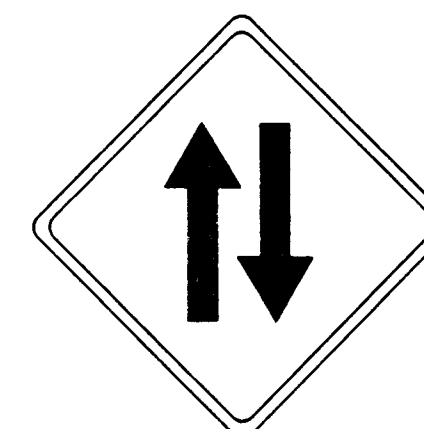
R11-4
60" X 30"



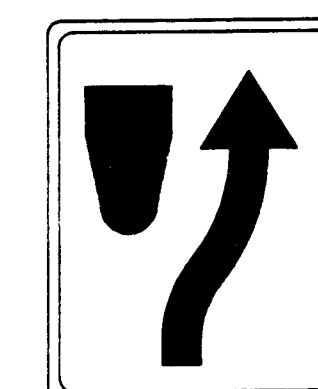
R11-2
(48" x 30")



W1-4R
30" X 30"



W6-3
30" X 30"



R4-7
24" X 30"



W13-1
(18" X 18")
(24" X 24")



W20-5
(48" x 48")
*500 FT
*1000 FT



W20-1
(48" x 48")



R4-7a
24" X 30"



R4-7b
24" X 30"

STANDARD M.U.T.C.D. SIGN FACES

NO SCALE

menaul.dwg

AS-BUILT
SIGN Page
DATE 4/14/95

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: MENAUL DETENTION BASIN & STORM DRAIN
SIGN FACE DETAIL SHEET: TM-2.1

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<u>R. G. H.</u>	<u>1-13-94</u>	WATER	<u>N.A. 3/2/94</u>	<u>11-20-92</u>
TRANSPORTATION	<u>W. B. 2/10</u>	<u>1-25-94</u>	WASTE WATER	<u>N.A. 3/2/94</u>	<u>11-20-92</u>
HYDROLOGY	<u>C.M.</u>	<u>1-23-92</u>			

PROJECT NO.	4252.90	MAP NO.	H-15, H-16	SHEET NO.	<u>23</u> OF <u>23</u>
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AS-BUILT INFORMATION			
CONTRACTOR	<u>RACE</u>	DATE	
WORK	<u>CEA</u>	DATE	
INSPECTOR'S		DATE	
FIELD		DATE	
VERIFICATION BY		DATE	
CORRECTED BY		DATE	
MICRO-FILM INFORMATION			
RECORDED BY		DATE	
NO.			

SURVEY INFORMATION	
FIELD NOTES	DATE
BY	
NO.	

ENGINEER'S SEAL	
PROJECT NO. 89-01-06	

REVISIONS	
NO.	DATE
DESIGNED BY: TOB	DATE: 5/93
DRAWN BY: TOB	DATE: 5/93
CHECKED BY: TOB	DATE: 5/93

