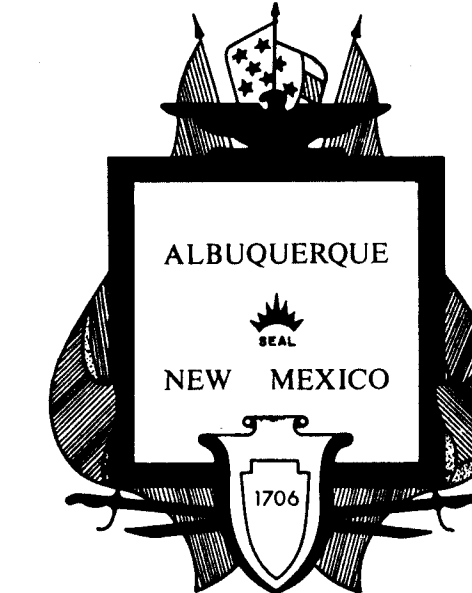
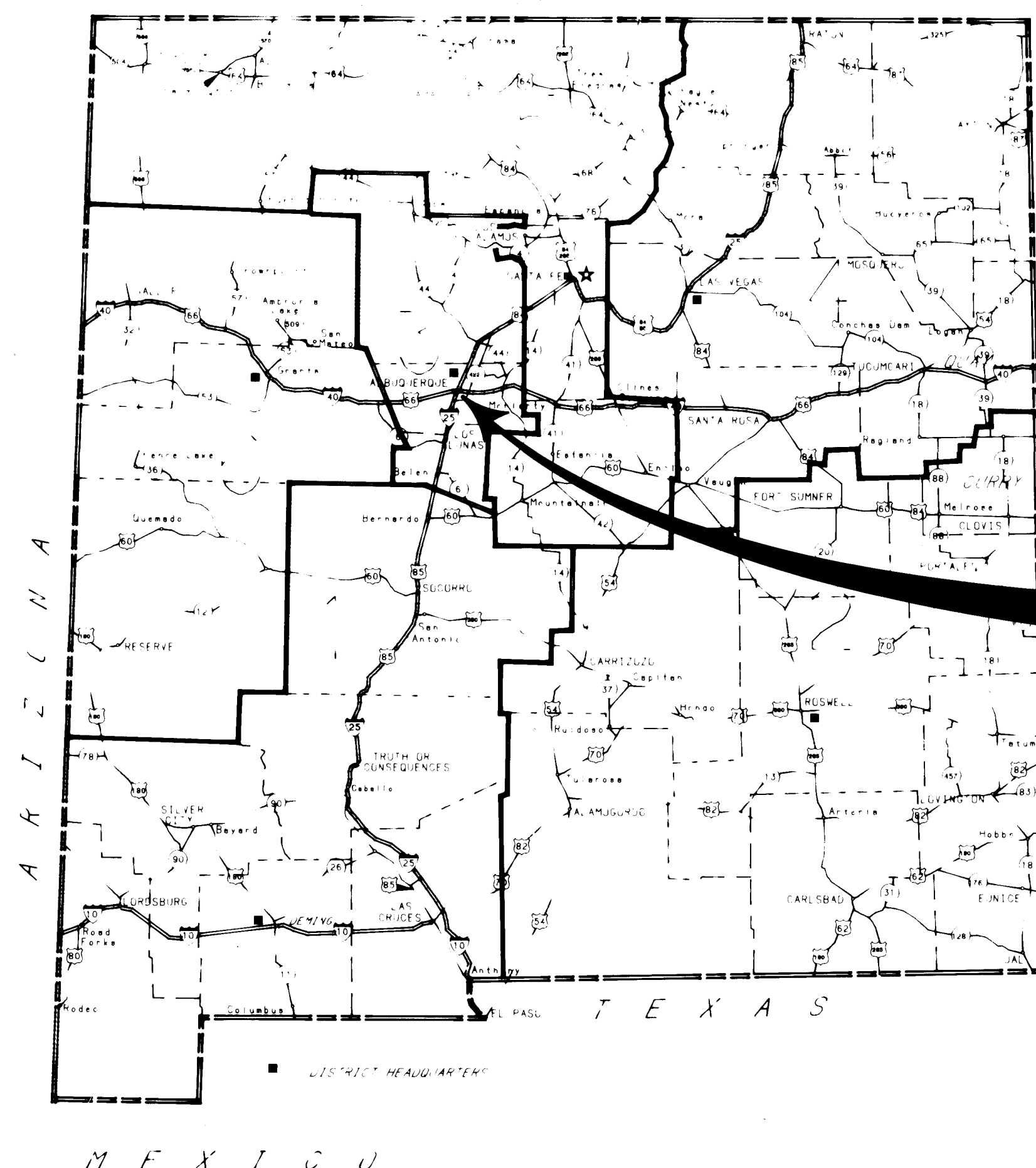
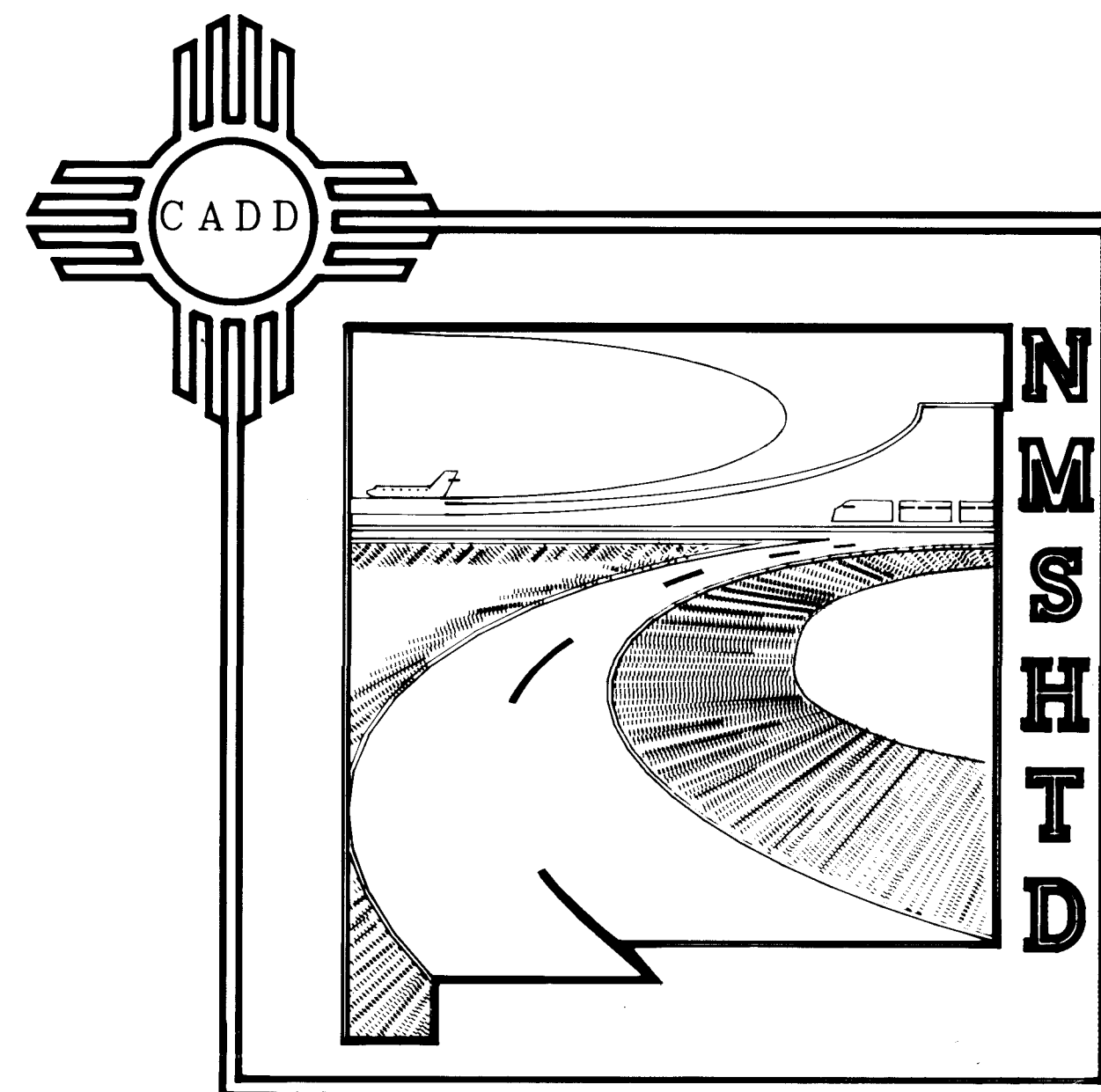


NEW MEXICO STATE HIGHWAY & TRANSPORTATION DEPARTMENT CONSTRUCTION PLANS

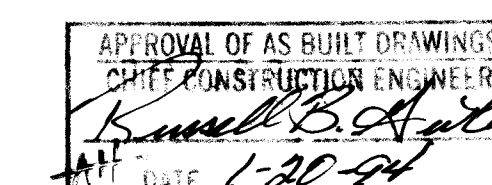
CAQ-4040 (2)
CITY OF ALBUQUERQUE
PROJECT NO. 3672
BERNALILLO COUNTY
CN: 2428



APPROVED: *Matthew Whalen* DATE: 3/16/92
CITY ENGINEER, CITY OF ALBUQUERQUE



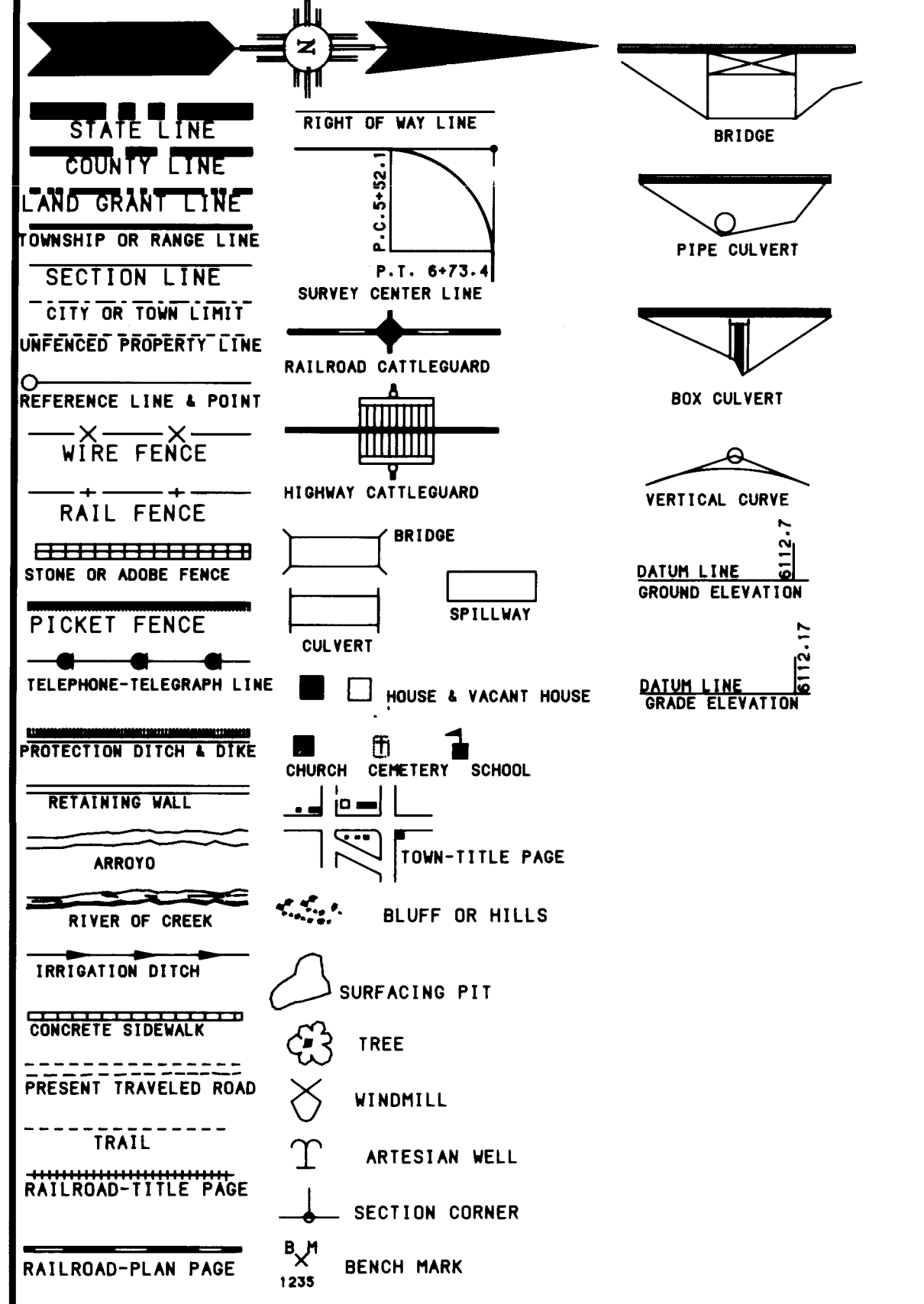
CAQ
TPS-4040(2)
LOMAS/BROADWAY
INTERSECTION IMPROVEMENTS



C of A PWD Maps & Records
1 2 3 4 5 6 7 8 9 10 11 12
26 36 72 01 94

APPROVED: *Ronald E. Laines* DATE: 7-2-92
DESIGN DIVISION DIRECTOR
P.E. NO. 6409

CONVENTIONAL SIGNS
ON PLAN ON PROFILE



BOOK NUMBERS

SCALES { PLAN 1" = 30'
PROFILE 1" = 10'
LAYOUT 1" = 30'

SHIPPING POINTS
ALBUQUERQUE

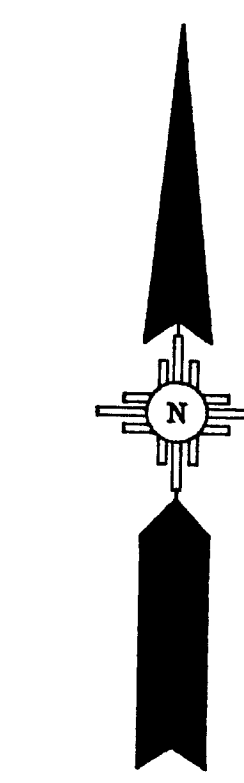
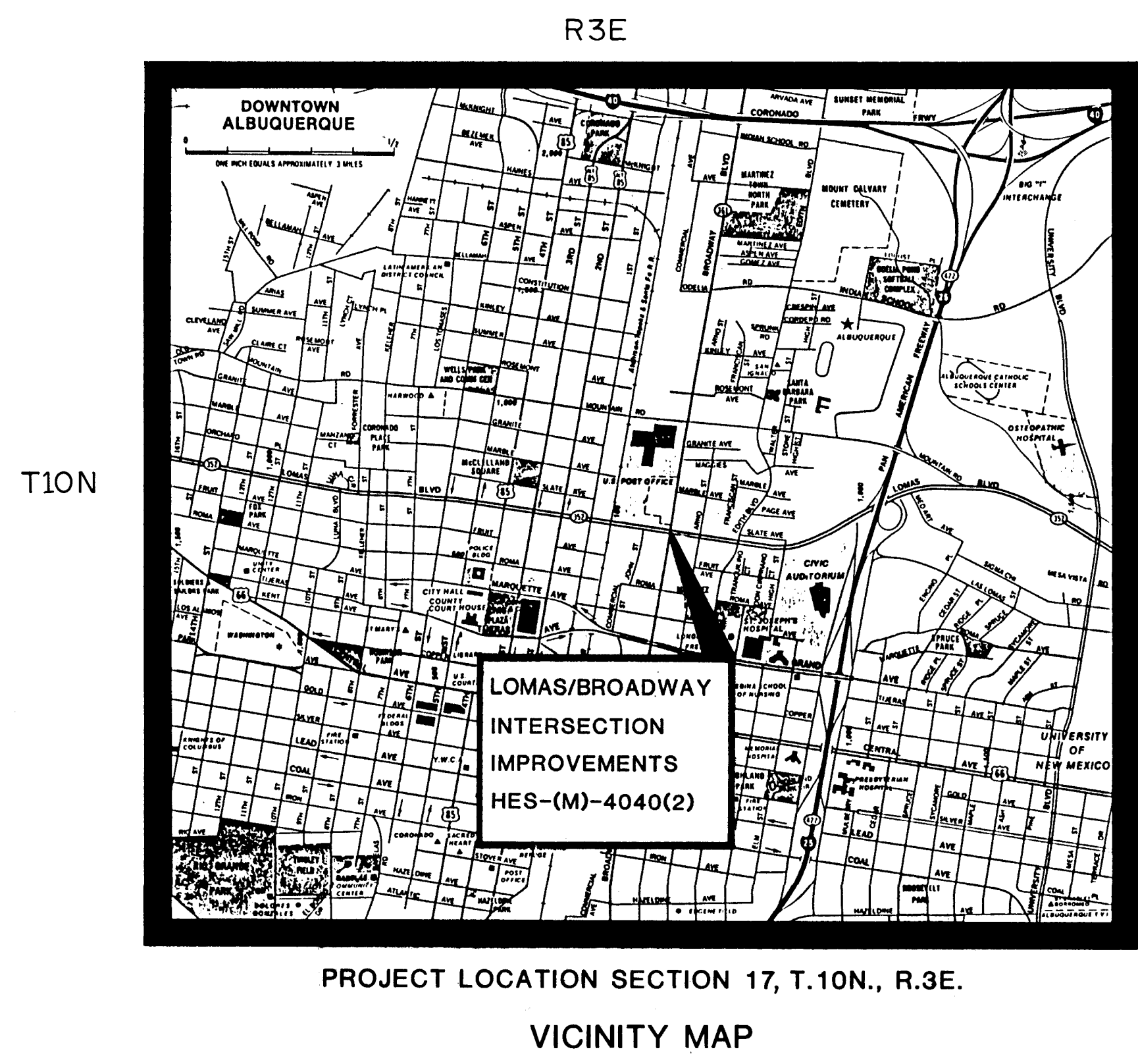
THE 1984 EDITION OF NEW MEXICO STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SHALL GOVERN CONSTRUCTION OF THIS PROJECT.

LEGEND

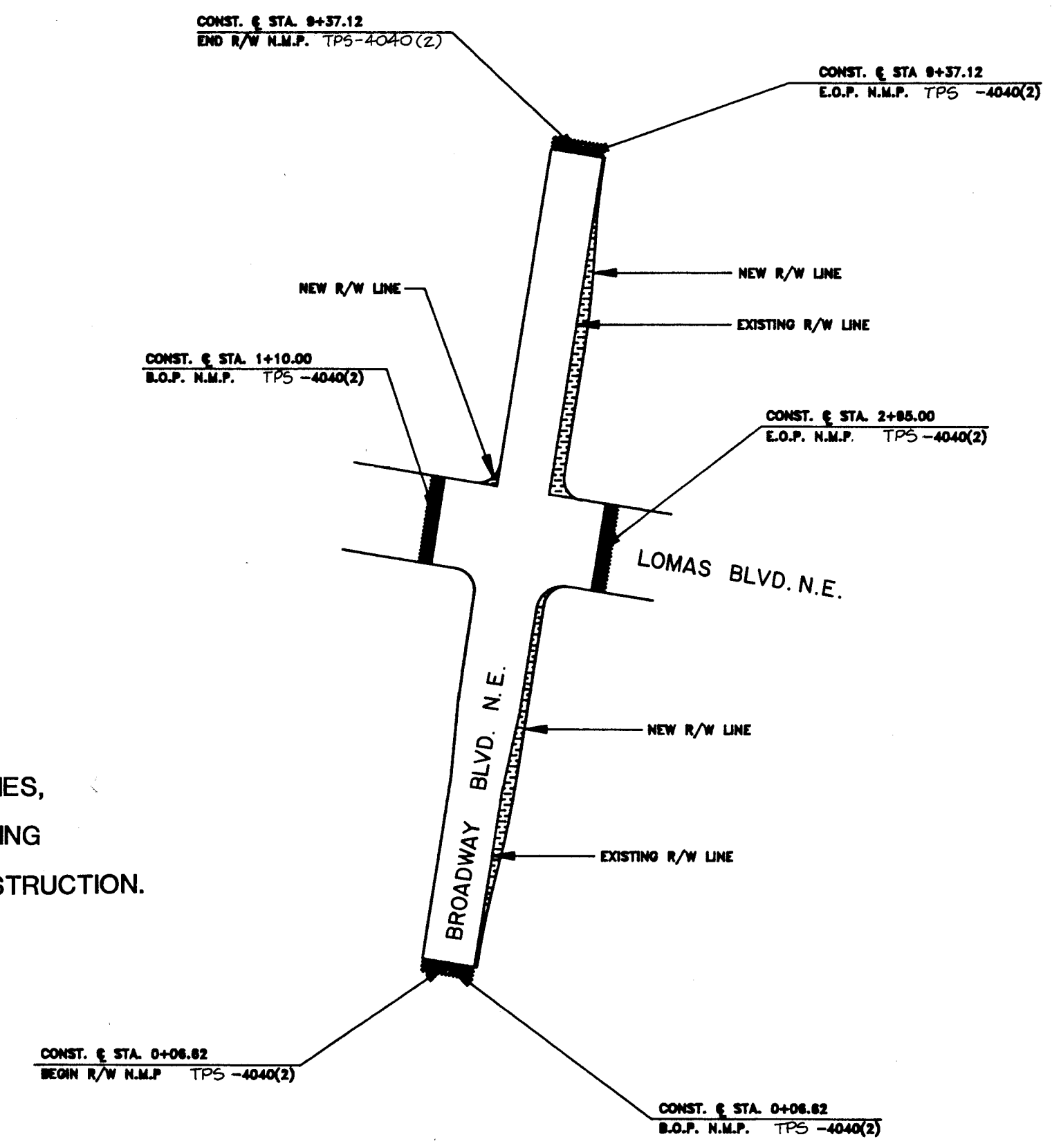
THIS CONTRACT	=====
BITUMINOUS SURFACED	-----
GRAVEL SURFACED	-----
GRADED AND DRAINED	=====
UNIMPROVED	=====
PRIMITIVE	=====
CONCRETE SURFACED	=====

LENGTH OF PROJECT 0.211 IN MILES
LENGTH OF RIGHT-OF-WAY 0.176 IN MILES

F.H.W.A. REGION NO. 6
NEW MEXICO PROJECT NO. TPS-4040(2)
SHEET NO. 1-2



TYPE OF CONSTRUCTION :
COLDMILLING, OVERLAY, PMBP,
CURB AND GUTTER, SIGNING, UTILITIES,
DETOURS, TRAFFIC SIGNALS, LIGHTING
AND OTHER MISCELLANEOUS CONSTRUCTION.



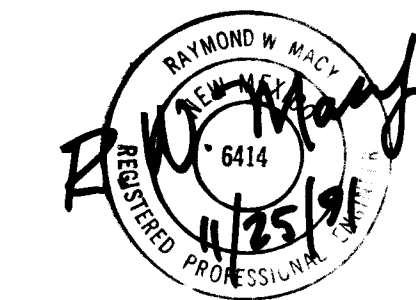
NOT TO SCALE

Note: This Project designation has been changed to CAQ-4040(2) and henceforth all drawings and construction documents designated TPS-4040(2) or HES-4040(2) shall apply to this project.

BORROW SOURCE TO BE COMMERCIAL

26 36720294

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Rogers</i>	3/13/92
TRANSPORTATION	<i>R. Davis</i>	8-26-91
HYDROLOGY	<i>Steve Bohrer</i>	8/23/91
WATER	<i>HLK</i>	8-30-91
WASTE WATER	<i>HLK</i>	"



3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
VICINITY MAP			
THE PLANS WERE DESIGNED AND/OR ASSEMBLED BY: DESIGNER ADIL RIZVI PHONE NO. 823-4494			

INDEX OF SHEETS


F.H.W.A. REGION NO. 6	SHEET NO.
NEW MEXICO PROJECT NO.	
TPS-4040(2)	1-3

[illegible][illegible][illegible]

FILENAME: INDEXES DRAWN BY: BJG
PROJECT NAME: LOMAS/BROADWAY DESIGNED BY:
PROJECT NO. 89001.00
DATE: 11/13/91



26 36720394

3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR NOTICES)			
<p style="text-align: center;">NEW MEXICO STATE HIGHWAY DEPARTMENT INDEX OF SHEETS</p>			
 <p>GARDNER, MASON & ASSOCIATES, INC. ENGINEERS & PLANNERS ALBUQUERQUE, NM</p>			

FILENAME: SQHSES
DRAWN BY: BJG
PROJECT NAME: LOMAS/BROADWAY DESIGNED BY: AR
PROJECT NO. 89001.00
DATE: 11/13/91

3
2
1
NO. DESCRIPTION DATE BY

REVISIONS (OR NOTICES)

SUMMARY OF QUANTITIES

F.H.W.A. REGION NO. 6	SHEET NO.
NEW MEXICO PROJECT NO.	1-4
TPS-4040(2)	

SHEET NO.	ITEM NO.	ITEM	UNIT	ROADWAY		CONSTRUCTION SIGNING		PERMANENT SIGNING		CONSTRUCTION ENGINEERING		LIGHTING		SIGNALIZATION		UTILITIES		NON-PARTICIPATING CITY OF ALBUQUERQUE		PROJECT TOTAL	
				ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL
	202001	REMOVAL OF STRUCTURES & OBSTRUCTIONS	L.S.	L.S.	L.S.															L.S.	L.S.
	202010	REMOVAL OF SURFACING	S.Y.	510	429															510	429
	202025	FULL DEPTH CONCRETE REMOVAL	S.Y.	124	65															124	65
	203001	UNCLASSIFIED EXCAVATION	C.Y.	280	0															280	0
	207001	SUBGRADE PREPARATION	S.Y.	1450	2088															1450	2088
	304014	BASE COURSE 4"	S.Y.	500	98															500	98
	304022	BASE COURSE 8"	S.Y.	665	843															665	843
	401215	PLANT MIX BITUMINOUS PAVEMENT, TYPE 1, GRADE B, 1½"	S.Y.	1568	283															1568	283
	401216	PLANT MIX BITUMINOUS MATERIAL, TYPE 1, GRADE B, 2"	S.Y.	1740	6090															1740	6090
	404002	OPEN GRADED FRICTION COURSE	S.Y.	6615	4470															6615	4470
	407001	ASPHALT FOR TACK COAT	S.Y.	7500	0															7500	0
	408001	ASPHALT FOR PRIME COAT	S.Y.	1200	843															1200	843
	414080	COLD MILLING (BITUMINOUS)	SY-IN	4450	4783															4450	4783
	414085	COLD MILLING (CONCRETE)	SY-IN	470	0															470	0
	451012	CONCRETE PAVEMENT - 8"	S.Y.	480	98															480	98
	452020	SEALING CONCRETE PAVEMENT JOINTS	L.F.	1500	2424															1500	2424
	452025	RESEALING CONCRETE PAVEMENT JOINTS	L.F.	2300	0															2300	0
	501312	18" REINFORCED CONCRETE PIPE CLASS IV	L.F.	215	144															215	144
	504010	REINFORCING BARS GRADE 40	LB.	0	143							220	358	366	354					586	855
	509050	STRUCTURAL CONCRETE CLASS A	C.Y.	0	11			1.5	0			4.5	5	11	12					17	28
	607036	CHAIN LINK FENCE - 6'	L.F.	260	229															260	229
	608004	CONCRETE SIDEWALK - 4"	S.Y.	699	827															699	827
	608028	DRIVE PAD - 8"	S.Y.	60	228															60	228
	609018	STANDARD CURB AND GUTTER	L.F.	1047	1061															1047	1061
	609200	BITUMINOUS CURB	L.F.	98	47															98	47
	621001	MOBILIZATION	L.S.	L.S.	L.S.															L.S.	L.S.
	623270	DROP INLET TYPE "A"	EA.	1	1															1	1
	623272	DROP INLET SINGLE "C"	EA.	2	3															2	3
	623273	DROP INLET DOUBLE "C"	EA.	5	6															5	6
	663102	REMOVE AND RESET EXISTING FIRE HYDRANT	EA.															3	3	3	3
	664180	ADJUST MANHOLE TO GRADE	EA.															15	13	15	13
	664190	RELOCATE EXISTING WATER METER AND BOX	EA.													5	5			5	5
	701010	PLYWOOD OR ALUMINUM PANEL	S.F.	✓				27	25											27	25
	701101	STEEL POST AND BASE FOR PLYWOOD OR ALUMINUM PANEL SIGNS	L.F.	✓				111	99											111	99
	702000	CONSTRUCTION SIGNING	S.F.			792	1398													792	1398
			C.Y.																	0	290
			S.Y.																	0	1830
			S.Y.																	0	1830
			C.Y.																	0	203
			S.Y.																	0	1833
			S.Y.																	0	1833
		Subgrade preparation & replacement	L.F.																	0	684
		Remove & dispose P.C.C.P.	S.Y.																	0	1830
		Remove & dispose ATB/CTB	S.Y.																	0	1830
		Remove & dispose unclassified excavation (4")	C.Y.																	0	203
		6" Subgrade preparation for P.C.C.P.	S.Y.																	0	1833
		Separator Fabric	S.Y.																	0	1833
		4" PVC Perforated Pipe w/gravel	L.F.																	0	1833
		8" ATO GBC	S.Y.																	0	1833
		PCCP, including Dowel & joint material	S.Y.																	0	1833
		Sawcut joints	L.F.																	0	1833
		water valve adjustment	ea.																	0	1833
		Pipe & catch basin adjustment (connection)	ea.																	0	1833
		Extruded PCC Med. Curb	L.F.																	0	1833

26 36720494

Project Total cont.
0 684

0 1833
0 1833
0 2424
0 4
0 4
0 287



NEW MEXICO
STATE HIGHWAY DEPARTMENT

SUMMARY OF QUANTITIES

GMA, INC.
5700 HARPER DR. NE., STE. 240
ALBUQUERQUE, NM 87109

FILENAME: SDQHE5
PROJECT NAME: LDMAS/ BROADWAY
PROJECT NO.: 89001.00
DATE: 8/15/91
DRAWN BY: BJG
DESIGNED BY: AR

3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR NOTICES)			

SUMMARY OF QUANTITIES

F.H.W.A. REGION NO. 6	SHEET NO.
NEW MEXICO PROJECT NO.	
TPS-4040(2)	1-5

SHEET NO.	ITEM NO.	ITEM	UNIT	ROADWAY		CONSTRUCTION SIGNING		PERMANENT SIGNING		CONSTRUCTION ENGINEERING		LIGHTING		SIGNALIZATION		UTILITIES		NON-PARTICIPATING CITY OF ALBUQUERQUE		PROJECT TOTAL	
				ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL
	702145	PORTABLE SIGN SUPPORT	EA.			46	57													46	57
	702215	BARRICADE TYPE III-8'	EA.			33	44													33	44
	702330	VERTICAL PANEL, SINGLE TYPE	EA.			5	39													5	39
	702335	VERTICAL PANEL BACK TO BACK TYPE	EA.			0	0													0	0
	702350	CHANNELIZATION DEVICES (BARRELS) TYPE B	EA.			466	285													466	285
	702400	SEQUENTIAL ARROW DISPLAY	EA.			0	0													0	0
	703120	TUBULAR TRAFFIC MARKER	EA.			0	0													0	0
	704010	REFLECTORIZED PAINTED MARKING	L.F.			7000	5963	5100	3842											12100	9805
	704015	ADHESIVE MARKING TAPE FOR CONSTRUCTION ZONES	L.F.			0	0													0	0
	704101	RETROFLECTIVE PREFORMED PAVEMENT MARKINGS	L.F.					1800	774											1800	774
	706010	SERVICE POLE (SIGNAL-UNDERGROUND)	L.F./EA											1						1	1
	707015	TYPE I STANDARD 15'	EA.											2	2					2	2
	707041	TYPE II STANDARD - 30' ARM (ALB.)	EA.											2	2					2	2
	707046	TYPE II STANDARD - 35' ARM (ALB.)	EA.											2	2					2	2
	709015	RIGID ELECTRICAL CONDUIT - 1'	L.F.											90	60					90	60
	709030	RIGID ELECTRICAL CONDUIT - 2"	L.F.									971	1541	748	902					1719	2443
	709040	RIGID ELECTRICAL CONDUIT - 3"	L.F.											752	705					752	705
	710010	ELECTRICAL PULL BOX (LARGE)	EA.									4	5	24	24					28	29
	710012	SPLICE CABINET	EA.											1	1					1	1
	711025	COMMUNICATION CABLE 25 PAIR	L.F.											656	672					656	672
	711110	MULTI CONDUCTOR CABLE 5	L.F.											939	772					939	772
	711112	MULTI CONDUCTOR CABLE 7	L.F.											534	489					534	489
	711125	MULTI CONDUCTOR CABLE 20	L.F.											1550	1350					1550	1350
	711224	SINGLE CONDUCTOR 10	L.F.											775	675					775	675
	711230	SINGLE CONDUCTOR 4	L.F.											452	470					452	470
	712020	3 SECTION TRAFFIC SIGNAL ASSEMBLY	EA.											4	4					4	4
	712030	5 SECTION TRAFFIC SIGNAL ASSEMBLY	EA.											8	8					8	8
	712070	PEDESTRIAN SIGNAL ASSEMBLY (NEON)	EA.											8	8					8	8
	712103	3 SECTION BACKPLATE	EA.											4	4					4	4
	712105	5 SECTION BACKPLATE	EA.											2	2					2	2
	713010	LOOP VEHICLE DETECTOR	EA.											5	5					5	5
	713030	PUSH BUTTON STATION	EA.											8	8					8	8
	713040	LOOP DETECTOR WIRE	L.F.											4078	3146					4078	3146
	713050	LOOP LEAD-IN CABLE	L.F.											2544	2746					2544	2746
	713060	DETECTOR SAW CUT	L.F.											1705	1508					1705	1508
	714072	MULTIPHASE ACTUATED CONTROLLER DUAL RING	EA.											1	1					1	1
	718020	REFLECTORIZED LEFT ARROW	EA.					4	6											4	6
	721001	REMOVAL OF PAVEMENT STRIPE	L.F.			7000	1249													7000	1249
	*	CLEANING OF REFLECTIVE SURFACES ON TRAFFIC CONTROL DEVICES (INCIDENTAL TO ITEMS 702000)	S.F.			792	1398													792	1398
	618001	TRAFFIC CONTROL MANAGEMENT	CAL/DAY							90	220									90	220

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	N/A	
TRANSPORTATION	R. Dwyer	8-26-91
HYDROLOGY	Stan Bohrer	8-23-91
WATER	AL Lira	8-30-91
WASTE WATER	ALD	..



26 36720594

NEW MEXICO
STATE HIGHWAY DEPARTMENT
SUMMARY OF QUANTITIES

GMA, INC.
5700 HARPER DR. NE., STE. 240
ALBUQUERQUE, NM 87109

FILENAME: HESGEN
PROJECT NAME: LDMAS/BROADWAY
PROJECT NO. 89001.00
DATE: 8/13/91
DRAWN BY: B.JG
DESIGNED BY:

GENERAL NOTES

1. THE CONSTRUCTION OF THE PROJECT WILL BE IN ACCORDANCE WITH THE NEW MEXICO STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, EDITION OF 1984 AND THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION. IN CASE OF CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL CONTROL.
2. THE CONTRACTOR SHALL INFORM THE PUBLIC THROUGH THE NEWS MEDIA OF LANE CLOSURES, DETOURS AND OTHER CONSTRUCTION ACTIVITIES WHICH AFFECT NORMAL TRAFFIC FLOW. NO DIRECT PAYMENT SHALL BE MADE BUT SHALL BE INCLUDED IN THE COST OF THE PROJECT.
3. THE FIRE DEPARTMENT SHALL BE NOTIFIED 48 HOURS IN ADVANCE BY THE CONTRACTOR WHENEVER A FIRE HYDRANT IS TO BE REMOVED OR IS TO BE OUT OF SERVICE.
4. THE AIR POLLUTION CONTROL REGULATIONS OF THE ALBUQUERQUE-BERNALILLO COUNTY AIR QUALITY CONTROL BOARD LIMIT EMISSION OF PARTICULATE MATTER AND THE USE OF CUT-BACK ASPHALT.
5. ALL EXCAVATION SHALL BE GOVERNED BY FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
6. 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.
7. THE CONTRACTOR IS TO EXERCISE CARE WHEN REMOVING EXISTING PAVEMENT 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. ANY BROKEN UTILITY RESULTING FROM CONTRACTOR'S CONSTRUCTION EFFORTS WILL BE REPAIRED BY THE CONTRACTOR AND NO SEPARATE MEASUREMENT NOR PAYMENT WILL BE MADE, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF THE PROJECT.
8. CURB AND GUTTER, SIDEWALKS AND DRIVEPADS SHOWN AS EXISTING AND NOT TO BE REMOVED UNDER THIS CONTRACT, WHICH ARE DAMAGED OR DISPLACED BY THE CONTRACTOR, SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
9. WHEN ABUTTING NEW PAVEMENT TO EXISTING INTERSECTING STREETS, SAW CUT EXISTING PAVEMENT TO A STRAIGHT LINE AND AT RIGHT ANGLES TO REMOVE ANY BROKEN OR CRACKED PAVEMENT. NO DIRECT PAYMENT WILL BE MADE FOR SAW CUTTING.
10. ALL GAS VALVE BOXES, GAS MANHOLES, ELECTRICAL MANHOLES, TELEPHONE MANHOLES AND UTILITY POLES WILL BE ADJUSTED TO GRADE OR RELOCATED BY OTHERS.
11. WHEN REMOVAL OF EXISTING CURB AND GUTTER OR SIDEWALK IS REQUIRED, REMOVE BACK TO NEAREST SUITABLE JOINT UNLESS OTHERWISE NOTED.
12. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED BY HIM TO EXISTING VALVE BOXES, SIDEWALKS, TRAFFIC CONDUIT, MANHOLES AND CURB AND GUTTER DURING CONSTRUCTION AND SHALL REPAIR OR REPLACE SAME AT HIS OWN EXPENSE. THE CONTRACTOR SHALL PROTECT THE CURB AND GUTTER FROM INCIDENTAL SPLASHING DURING TACK COAT APPLICATION AND CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING THE SAME AT THIS OWN EXPENSE IN THE EVENT OF SPLASHING.
13. CONTRACTOR SHALL MAKE ACCESSIBLE ALL WATER VALVES AND MANHOLES TO THE CITY UPON REQUEST, DURING CONSTRUCTION.
14. THE USE OF ADJUSTING RINGS WITHIN THE MANHOLE FRAMES TO ADJUST MANHOLE COVERS WILL NOT BE PERMITTED.
15. CAUTION - ALL EXISTING UTILITIES SHOWN REFLECT THE BEST INFORMATION AVAILABLE AND ARE APPROXIMATE ONLY. EXACT DEPTH OF UTILITIES IS UNKNOWN.
16. ALL MANHOLE FRAMES AND COVERS AND WATER VALVE FRAMES AND LIDS SHALL BE ADJUSTED WITH CONCRETE COLLARS IN ACCORDANCE WITH THE STANDARD DETAILS AND ALL MANHOLE FRAMES AND COVERS AND WATER VALVE FRAMES AND LIDS ON BROADWAY BLVD. WITHIN PROJECT LIMITS SHALL NOT BE ADJUSTED UNTIL AFTER THE FIVE-EIGHTHS (5/8") OGFC HAS BEEN PLACED AND COMPACTED TO INSURE PROPER FINISHED GRADE.
17. SUBGRADE PREPARATION UNDER SIDEWALKS AND DRIVEPADS, AND SUBGRADE PREPARATION AND BASE COURSE INSTALLATION UNDER "STANDARD CURB AND GUTTER" SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF SUCH AND NO DIRECT PAYMENT SHALL BE MADE FOR THOSE ITEMS OF WORK.
18. QUANTITIES SHOWN HEREIN, FOR THE VARIOUS BID ITEMS, ARE FOR THE CONTRACTOR'S INFORMATION ONLY. PAYMENT SHALL BE BASED ON ACTUAL QUANTITIES AS CONSTRUCTED.
19. IT IS THE INTENT OF THE OWNER TO REQUIRE THE CONTRACTOR TO REMOVE THE BITUMINOUS PAVEMENT AND PORTLAND CEMENT CONCRETE PAVEMENT SURFACES FROM LIP TO LIP OF GUTTERS, ALONG A STRAIGHT LINE ACROSS INTERSECTIONS AS SHOWN ON THE PLAN, TO DEPTH AND PARAMETERS ESTABLISHED IN TO PLANS AND SPECIFICATIONS. THE OWNER MAKES NO REPRESENTATION IN REGARD TO THE RELATIVE EASE OR DIFFICULTY THAT THE CONTRACTOR MAY ENCOUNTER IN PERFORMING THIS WORK. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO THOROUGHLY INVESTIGATE SITE CONDITIONS AND SUBMIT A BID IN ACCORDANCE WITH WHAT HE HAS DISCOVERED. ANY AND ALL RECORDS PERTINENT TO THIS ITEM AND OTHER ITEMS ON THIS PROJECT ARE AVAILABLE FOR INSPECTION AT THE CITY ENGINEER'S OFFICE.

GENERAL NOTES

20. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANY WHEN WORKING NEAR THEIR SYSTEMS. UTILITY COMPANIES SHALL BE GIVEN 48 HOURS (WEEKENDS EXCLUDED) ADVANCE NOTICE FOR LINE LOCATION. CALL NEW MEXICO ONE CALL SYSTEM INC. AT 260-1990 REGARDING RELOCATION OF UTILITY LINES.
21. DELAYS DUE TO UTILITY RELOCATIONS: THE CONTRACTOR SHALL RECEIVE NO ADDITIONAL COMPENSATION FOR DELAYS, INCONVENIENCES OR DAMAGE SUSTAINED DUE TO ANY INTERFERENCES FROM SAID UTILITY APPURTENANCES OR THE OPERATION OF MOVING THEM, RESULTING FROM HIS NEGLIGENCE, AS DETERMINED BY THE PROJECT ENGINEER.
22. TEMPORARY STRIPING SHALL BE PLACED WHERE THE CONTRACTOR'S OPERATION HAS OBLITERATED THE EXISTING OR PREVIOUS TEMPORARY STRIPING AT THE END OF EACH WORKDAY. THE TEMPORARY STRIPING MAY BE FOUR (4) INCH WIDE PAINT OR TAPE AS APPROVED BY THE ENGINEER. THE TEMPORARY STRIPE SEGMENTS SHALL BE AT LEAST FOUR FOOT LONG ON NO GREATER THAN 40 FOOT CENTERS. TEMPORARY STRIPING SHALL BE INCIDENTAL TO CONSTRUCTION AND NO SEPARATE PAYMENT SHALL BE MADE THEREFORE.
23. THE FINAL SURFACE OF THE REPLACED PAVEMENT AND GUTTER SHALL CONFORM TO A GRADE LINE SET BY THE CONTRACTOR SUCH THAT THE PAVEMENT AND GUTTER WILL READILY DRAIN.
24. THE CONTRACTOR SHALL RESTRICT THE USE OF ROLLING EQUIPMENT TO A MAXIMUM OF 35 TONS ON URBAN SECTIONS (4-LANE SECTION). THE USE OF A VIBRATORY ROLLER WILL NOT BE ALLOWED ON THIS PROJECT.
25. AN ENVIRONMENTALLY SUITABLE DISPOSAL SITE ACCEPTABLE TO THE PROJECT MANAGER AND APPROVED FOR ALL EXCESS EXCAVATED MATERIAL, ASPHALTIC MATERIAL, CONCRETE CURB AND GUTTER, SIDEWALK, FOUNDATIONS AND WALLS SHALL BE OBTAINED BY THE CONTRACTOR. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND HAUL THERETO SHALL BE INCLUDED IN THE UNIT BID PRICE FOR: 202001 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS. 202010 - REMOVAL OF SURFACING, 202025 - FULL DEPTH CONCRETE REMOVAL, AND 202800 - DEMOLITION.
26. THE OPEN-GRADED FRICTION COURSE OPERATION SHALL BE THE CONTRACTOR'S LAST SURFACING OPERATION. THE OPEN-GRADED FRICTION COURSE SURFACING SHALL BE PLACED FULL ROADWAY WIDTH AS SHOWN ON THE TYPICAL ROADWAY SECTION. ALL PMBP WILL BE COMPLETE PRIOR TO OGFC PLACEMENT.
27. ACCESS TO LOCAL BUSINESSES AND RESIDENCES SHALL BE PROVIDED AT ALL TIMES. ANY ACCESS CLOSURE MUST BE SCHEDULED AT LEAST 24 HOURS IN ADVANCE WITH PROPERTY OWNERS AND APPROVED BY THE PROJECT ENGINEER.
28. THE CONTRACTOR SHALL BE REQUIRED TO CONFINE HIS WORK WITHIN THE CONSTRUCTION LIMITS AND/OR RIGHT-OF-WAY LIMITS. PARKING OF PRIVATE VEHICLES SHALL NOT BE ALLOWED ALONG CONSTRUCTION AREA THROUGHOUT CONSTRUCTION LIMITS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROHIBIT ASPHALT VEHICLES AND EQUIPMENT FROM DRIVING UPON, ACCESSING OR TURNING ON PRIVATE PROPERTY ADJACENT TO PROJECT WORK AREAS.
29. EXACT LOCATION OF NEW SIGNAL MASTARMS, PEDESTAL POLES, SERVICE POLES AND CONTROLLER FOUNDATIONS ARE TO BE DETERMINED IN THE FIELD TO AVOID CONFLICTS WITH EXISTING UTILITIES. COORDINATE WITH CITY TRAFFIC ENGINEERS.
30. CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE PROJECT ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE PROJECT ENGINEER AND SHALL NOTIFY THE PROJECT ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE PROJECT 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.
31. NO MATERIALS PIT HAS BEEN DESIGNATED FOR THIS PROJECT. THE CONTRACTOR MAY OBTAIN SPECIFICATION SURFACING MATERIAL FROM ANY ACCEPTABLE SOURCE. ALL MATERIALS PIT ACTION SHALL BE GOVERNED BY SECTION 106 OF THE STANDARD SPECIFICATIONS.
32. EARTHWORK REQUIRED TO FILL THE WIDENED AREA TO THE PROPOSED GRADE INCLUDING IMPORTATION OF BORROW MATERIAL AND HAUL WILL BE CONSIDERED INCIDENTAL TO SURFACING ITEMS.
33. CONTRACTOR IS REQUIRED TO BUILD LIGHT POLE FOUNDATIONS, CONDUIT AND NEW TRAFFIC SIGNALS AND HAVE SIGNALS AND LIGHTING OPERATIONAL PRIOR TO WIDENING BROADWAY.
34. SUBSTANDARD MATERIAL SHALL NOT BE PLACED OR ALLOWED TO REMAIN WITH TWO FEET OF FINISHED SUBGRADE.
35. THE CONTRACTOR SHALL BE RESTRICTED TO THE USE OF A 30 TON NON-VIBRATING ROLLER MAXIMUM TO OBTAIN THE REQUIRED COMPACTION IN EMBANKMENT AND SUBGRADES.
36. THE CONTRACTOR WILL REPORT AND RESPOND TO ANY SPILLS OF HAZARDOUS MATERIALS SUCH AS GASOLINE, DIESEL, MOTOR OILS, SOLVENTS, CHEMICALS, TOXIC OR CORROSIVE SUBSTANCES, ETC. A SPILL IS DEFINED AS ANY RELEASE OF A CORROSIVE, HAZARDOUS, TOXIC OR RADIOACTIVE SUBSTANCE THAT MAY BE A THREAT TO PUBLIC HEALTH OR THE ENVIRONMENT.

REPORTS OF SPILLS WILL BE MADE IMMEDIATELY TO THE NEW MEXICO STATE POLICE, LOCAL FIRE MARSHAL, AND APPROPRIATE REGULATORY BUREAU OF THE ENVIRONMENT DEPARTMENT.

THE CONTRACTOR WILL BE RESPONSIBLE FOR REPORTING AND CLEANUP OF ANY SPILL ASSOCIATED WITH PROJECT CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPORTING ANY DISCOVERIES OF PAST SPILLS OR CURRENT SPILLS NOT ASSOCIATED WITH CONSTRUCTION.
37. THE CONTRACTOR IS ADVISED THAT UTILITY RELOCATION BY THE UTILITY COMPANIES WILL BE DONE CONCURRENTLY WITH THE CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE FOR UTILITY WORK IN CONJUNCTION WITH HIS OWN WORK AND SHALL BE REQUIRED TO COORDINATE THE SCHEDULING OF WORK WITH THE RESPECTIVE UTILITY COMPANIES. THIS WORK SHALL BE INCIDENTAL TO CONSTRUCTION AND NO SEPARATE PAYMENT MADE THEREOF.

SPECIAL PROVISIONS

FOR MINIMUM WAGE RATES
FOR TAXES IMPOSED BY THE STATE OF NEW MEXICO, SECTION 107 (11/01/88)
FOR SUBMISSION OF WEEKLY PAYROLLS (06/17/88)
FOR APPRENTICES (04/26/82)
~~MODIFYING SECTION 101 - ABBREVIATIONS AND DEFINITIONS (08/12/87)~~
~~MODIFYING SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS (09/29/87)~~
~~MODIFYING SECTION 103 - AWARD AND EXECUTION OF CONTRACT (03/10/88)~~
~~MODIFYING SECTION 105 - CONTROL OF WORK (05/08/90)~~
~~MODIFYING SECTION 106 - CONTROL OF MATERIALS (06/24/88)~~
~~MODIFYING SECTION 108 - PROSECUTION & PROGRESS (06/23/88)~~
MODIFYING SECTION 304 - BASE COURSE AND SUBBASE (06/28/89)
MODIFYING SECTION 401 - PLANT MIX BITUMINOUS PAVEMENT (PMBP) (03/29/90)
MODIFYING SECTION 404 - OPEN-GRADED FRICTION COURSE (03/29/90)
FOR PLANT MIX BITUMINOUS PAVEMENT TESTING BY THE CONTRACTOR (3/29/90)
MODIFYING SECTION 501 - PIPE CULVERTS & UNDERDRAINS (10/20/90)
MODIFYING SECTION 503 - PORTLAND CEMENT CONCRETE (05/28/91)
MODIFYING SECTION 608 - SIDEWALKS, DRIVE PADS AND CONCRETE MEDIAN PAVEMENT (12/13/88)

MODIFYING SECTION 618 - TRAFFIC CONTROL MANAGEMENT (8/29/91)
MODIFYING SECTION 663 - UTILITY ITEMS (09/06/89)
MODIFYING SECTION 701 - TRAFFIC SIGNS & SIGN STRUCTURES (1/24/92)
MODIFYING SECTION 702 - TRAFFIC CONTROL DEVICES FOR DETOURS (09/20/89)
~~FOR DEMOLITION ITEM NO. 202800~~

INCIDENTAL TO CONSTRUCTION

1. PROVIDE NEWS MEDIA INFORMATION REGARDING CONSTRUCTION ACTIVITY. SEE GENERAL NOTE NO. 2 ON SHEET 1-6.
2. COORDINATING CONTRACTORS WORK WITH UTILITY COMPANY WORK. SEE GENERAL NOTE NO. 20 ON SHEET 1-6.
3. WATERING FOR DUST CONTROL SEE GENERAL NOTE NO. 4.
4. EXISTING IMPROVEMENTS DAMAGED OR INADVERTENTLY DISTURBED BY THE CONTRACTOR INCLUDING SIGNALS, UTILITIES, PAVEMENT, CURBS, SIDEWALKS, MANHOLES, VALVES, FENCES AND LANDSCAPING SEE GENERAL NOTES NO'S 7, 8 AND 12 ON SHEET 1-6.
5. SAW CUTTING EXISTING ASPHALT AND CONCRETE PAVEMENT. SEE GENERAL NOTE NO. 9 ON SHEET 1-6.
6. EXPLORATORY EXCAVATION OF EXISTING UNDERGROUND LINES TO DETERMINE EXACT HORIZONTAL AND VERTICAL LOCATION. SEE GENERAL NOTE NO. 15 ON SHEET 1-6.
7. SUBGRADE PREPARATION UNDER NEW CURB AND GUTTER, SIDEWALK AND DRIVEPADS. SEE GENERAL NOTE NO. 17 ON SHEET 1-6.
8. DISPOSAL OF MATERIALS REMOVED IN CONJUNCTION WITH CONSTRUCTION AND EXCESS MATERIAL FROM WITHIN CONSTRUCTION AREA. SEE GENERAL NOTE NO. 25 ON SHEET 1-6.
9. JOINTS REQUIRED FOR CONCRETE PAVEMENT, CURB & GUTTER AND SIDEWALK INCLUDING SAWING, CLEANING, BITUMINOUS MATERIALS, STEEL AND JOINT FILLERS.
10. PAINTING MEDIAN CURB REFLECTORIZED YELLOW.
11. CLEANING OF EXISTING OR NEWLY INSTALLED REFLECTORIZED MATERIALS.
12. PROVIDING OF TEMPORARY STRIPING. SEE GENERAL NOTE NO. 22 ON SHEET 1-6.
13. REPLACEMENT AND ADJUSTMENT OF SURVEY MONUMENTS. SEE GENERAL NOTE NO. 30 ON SHEET 1-6.
14. EARTHWORK FOR FILL WITHIN THE WIDENED AREA OF THE ROADWAY. SEE GENERAL NOTE NO. 32, ON SHEET 1-6.
15. PIPE PLUGS AS SHOWN ON PLANS.
16. CONCRETE COLLAR FOR 18" PIPE AS SHOWN ON SHEET 9-1 AND 9-3.
17. CHAIN LINK GATES 6' AND 30' WIDE AS SHOWN ON SHEET 3-2.

SUPPLEMENTAL SPECIFICATIONS

~~MODIFYING SECTION 101 - ABBREVIATIONS & DEFINITIONS (06/01/89)~~
~~MODIFYING SECTION 102 - BIDDING REQUIREMENTS & CONDITIONS (01/14/87)~~
~~MODIFYING SECTION 103 - AWARD AND EXECUTION OF CONTRACT (01/14/87)~~
~~MODIFYING SECTION 104 - SCOPE OF WORK (04/26/89)~~
~~MODIFYING SECTION 105 - CONTROL OF WORK (02/01/89)~~
~~MODIFYING SECTION 106 - CONTROL OF MATERIALS (01/14/87)~~
~~MODIFYING SECTION 107 - LEGAL RELATIONS & RESPONSIBILITY TO PUBLIC (09/12/89)~~
~~MODIFYING SECTION 108 - PROSECUTION AND PROGRESS (01/14/87)~~
~~MODIFYING SECTION 109 - MEASUREMENT & PAYMENT (12/28/88)~~
MODIFYING SECTION 110 - CONTROL OF ENVIRONMENT (12/15/91)
MODIFYING SECTION 203 - EXCAVATION, BORROW, EMBANKMENT (06/30/86)
MODIFYING SECTION 304 - BASE COURSE AND SUBBASE (06/21/90)
MODIFYING SECTION 401 - PLANT MIX BITUMINOUS PAVEMENT (1/8/91)
MODIFYING SECTION 402 - BITUMINOUS MATERIALS (4/19/91)
MODIFYING SECTION 404 - OPEN-GRADED FRICTION COURSE (1/8/91)
MODIFYING SECTION 408 - PRIME COAT (02/02/87)
MODIFYING SECTION 501 - PIPE CULVERTS AND UNDERDRAINS (06/30/86)
MODIFYING SECTION 503 - PORTLAND CEMENT CONCRETE (09/26/88)
MODIFYING SECTION 504 - STEEL REINFORCEMENT (10/29/84)
MODIFYING SECTION 509 - CONCRETE STRUCTURES (02/19/87)
MODIFYING SECTION 608 - SIDEWALKS, DRIVE PADS AND CONCRETE MEDIAN PAVEMENT (09/12/90)

MODIFYING SECTION 609 - CURB & GUTTER (09/12/90)
MODIFYING SECTION 621 - MOBILIZATION (09/19/84)
MODIFYING SECTION 623 - DROP INLETS (5/24/91)
MODIFYING SECTION 701 - TRAFFIC SIGNS AND STRUCTURES (9/3/87)
MODIFYING SECTION 702 - TRAFFIC CONTROL DEVICES FOR DETOURS (06/01/87)
MODIFYING SECTION 704 - PAVEMENT MARKINGS (02/06/90)
MODIFYING SECTION 711 - WIRING (06/30/89)
MODIFYING SECTION 718 - REFLECTORIZED PLASTIC PAVEMENT SYMBOLS, LEGENDS STRIPES, MARKINGS (07/14/86)
MODIFYING SECTION 870 - CONSTRUCTION STAKING BY THE CONTRACTOR (01/03/89)


APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Ronald Brown</i>	3-13-92
TRANSPORTATION	<i>R. J. Drake</i>	8-26-91
HYDROLOGY	<i>Steve Bobing</i>	8/23/91
WATER	<i>W. L. ...</i>	8/30/91
WASTE WATER	<i>...</i>	...

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NO.	DESCRIPTION	DATE	BY

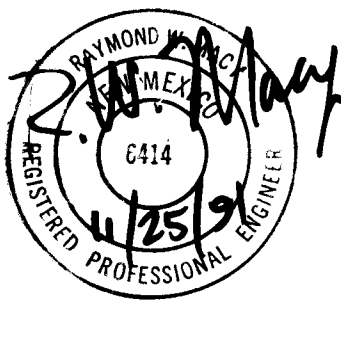
REVISIONS (OR NOTICES)

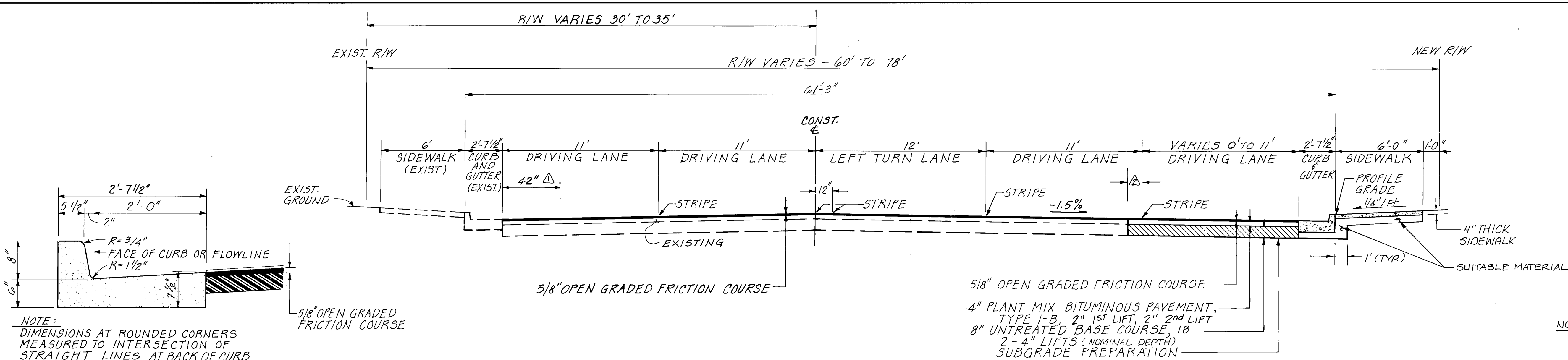
NEW MEXICO
STATE HIGHWAY DEPARTMENT

GENERAL NOTES,
SUPPLEMENTAL SPECIFICATIONS
AND SPECIAL PROVISIONS

GMA, INC.
5700 HARPER DR. NE., STE. 240
ALBUQUERQUE, NM 87109

26 36720694



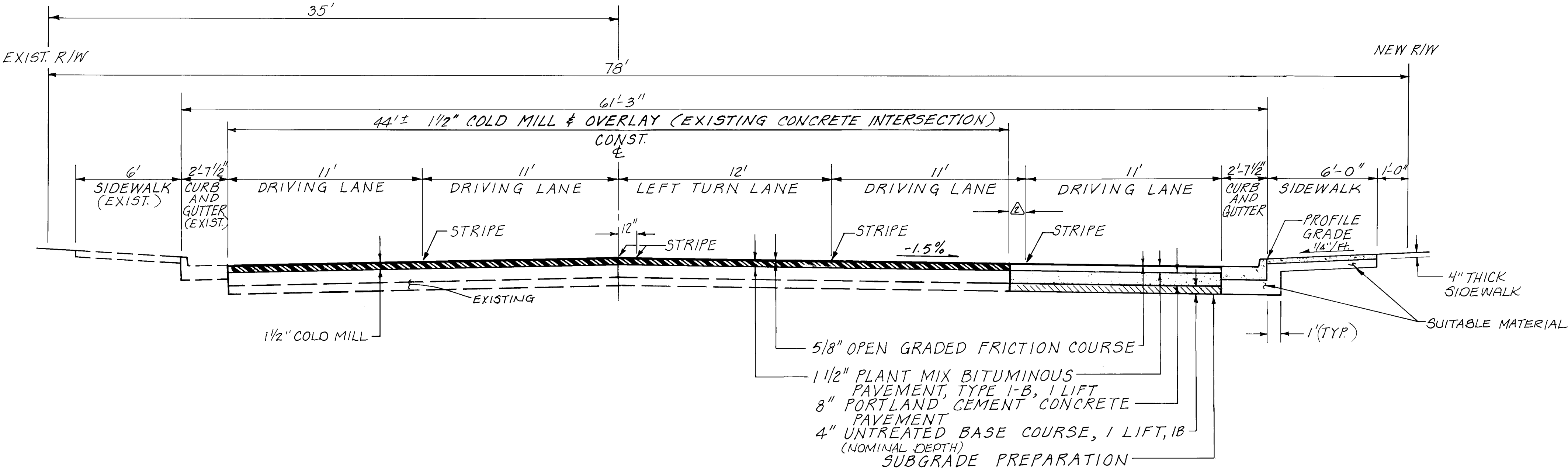


- NOTES:
- ▲ COLO MILL 12" WIDE TO LIP OF GUTTER.
 - ▲ VERTICAL SAWCUT 1' FROM LIP OF EXISTING GUTTER.
 - ▲ PROVIDE NEW SIDEWALK BEHIND DOUBLE "C" INLET, APPROX. STA. 1+41.6 TO STA. 1+5+38

STANDARD CURB AND GUTTER

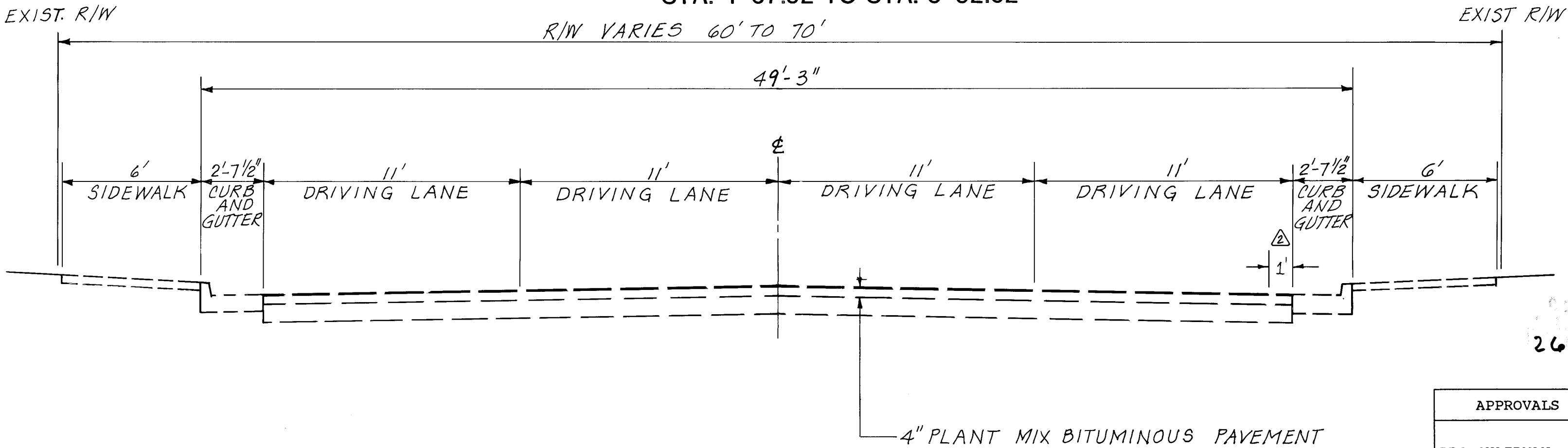
TYPICAL SECTION (ASPHALT) ON BROADWAY

STA. 0+06.62 TO STA. 4+07.92
STA. 5+92.62 TO STA. 9+37.12



TYPICAL SECTION (CONCRETE) ON BROADWAY

STA. 4+07.92 TO STA. 5+92.62



TYPICAL SECTION (EXISTING) ON BROADWAY

STA. 0+06.62 TO STA. 4+07.92
STA. 5+92.62 TO STA. 9+37.12

DESIGN SPEED 40 MPH

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NO.	DESCRIPTION	DATE	BY

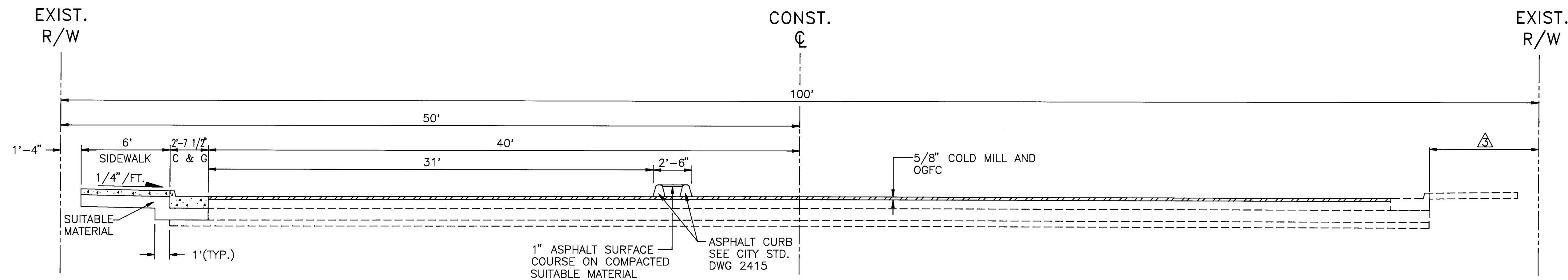
REVISIONS (OR NOTICES)

NEW MEXICO
STATE HIGHWAY DEPARTMENT

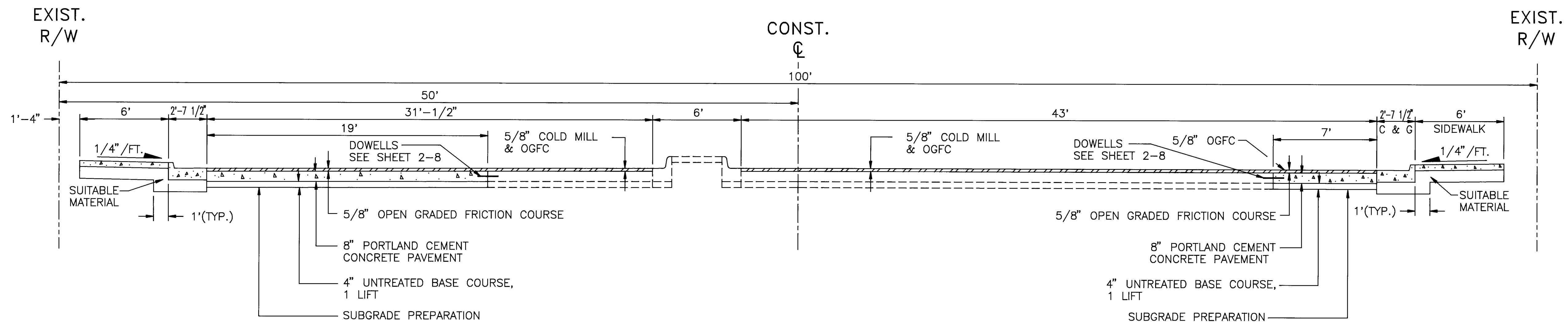
TYPICAL SECTIONS

GARDNER, MASON & ASSOCIATES, INC.
ENGINEERS & PLANNERS
ALBUQUERQUE, NM

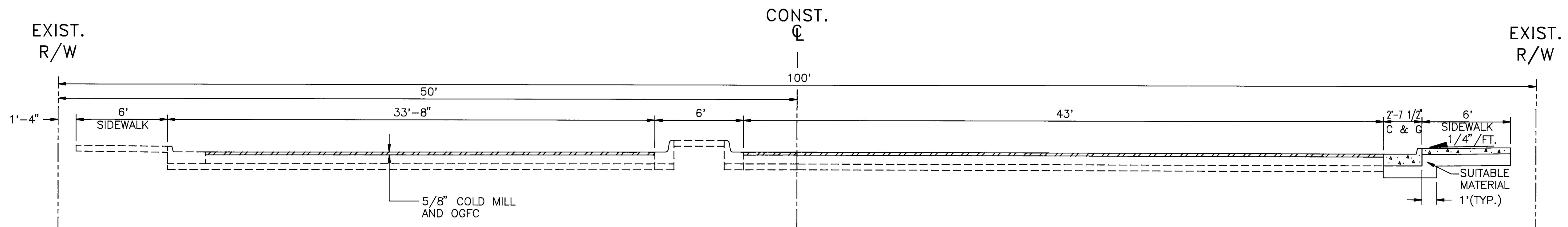
APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Rogers</i>	3/13/92
TRANSPORTATION	<i>R. Boudie</i>	8-26-91
HYDROLOGY	<i>Steve Boboy</i>	8/23/91
WATER	<i>Kai Lee</i>	8-30-91
WASTE WATER	<i>ALO</i>	"



TYPICAL SECTION (ASPHALT) ON LOMAS BLVD.
STA. 1+10.00 TO STA. 1+45.38



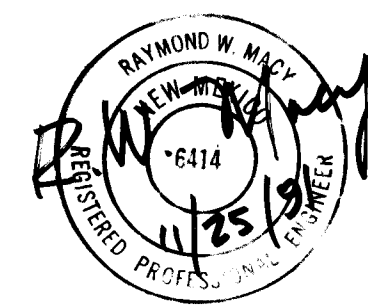
TYPICAL SECTION (CONCRETE) ON LOMAS BLVD.
STA. 2+66.63 TO STA. 2+79.20



TYPICAL SECTION (CONCRETE) ON LOMAS BLVD.
STA. 2+79.20 TO STA. 2+95.00

FILENAME: TYP1B2-2
PROJECT NAME: LOMAS/BROADWAY
PROJECT NO. 89001.00
DATE: 8/15/91
DRAWN BY: BJG
DESIGNED BY: RWM

26 36 720894



APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Roger Green</i>	3/13/92
TRANSPORTATION	<i>R. D. Smith</i>	8-26-91
HYDROLOGY	<i>Steve Bohrer</i>	8-23-91
WATER	<i>W. C. Lee</i>	8-30-91
WASTE WATER	<i>AHC</i>	"

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NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
TYPICAL SECTIONS			
GMA, INC. 5700 HARPER DR. NE, STE. 240 ALBUQUERQUE, NM 87109			

F.H.W.A. REGION NO. 6	SHEET NO.
NEW MEXICO PROJECT NO.	
TPS-4040(2)	2-3

NOTE: * FOR CONTRACTOR'S INFORMATION ONLY.

SURFACING FACTORS

* BY WEIGHT OF TOTAL MIX



RAYMOND W. MAC
NEW MEXICO
6814
REGISTERED PROFESSIONAL ENGINEER
11/25/97

NEW MEXICO PROJECT NO. TPS-4040(2) SHEET 2-3

FILENAME: SSSES DRAWN BY: PLG
PROJECT NAME: LOMAS/BROADWAY DESIGNED BY: RM
PROJECT NO. 89001.00
DATE: 11/13/91

ESTIMATED STRUCTURE QUANTITIES						203001		*	501312						623270	623272	623273	662055												
						UNCLASSIFIED EXCAVATION																								
						INLET	OUTLET	TOTAL																						
STATION	STRUCTURE	SKEW	SIZE	SIZE	CU. YD.	CU. YD.		LIN. FT.				EA.		EA.		EA.		EA.												
	BROADWAY BLVD. N.E.																													
0+84.00	BUILD 1-DROP INLET TYPE "A" - RT. TIE TO DROP INLET AT STA. 1+04.00 W/1-18"x12' RCP CLASS IV							12				1																		
1+04.00	BUILD 1-DROP INLET DOUBLE "C" - RT. TIE TO EXIST. 18" RCP W/1-18"x5 LF RCP CLASS IV							5								1														
4+15.13	BUILD 1-DROP INLET SINGLE "C" - RT. TIE TO EXIST. MANHOLE #2 W/1-18"x40 LF RCP CLASS IV							40						1																
5+39.00 BROADWAY	BUILD 1-TYPE "E" MANHOLE 8' DIA. 6' TO 10' DEPTH, CONNECT TO EXIST. 54" STORM DRAIN.							55								1														
5+85.36	BUILD 1-DROP INLET DOUBLE "C" - RT. TIE TO EXIST. MANHOLE #5 W/1-18"x55 LF RCP CLASS IV																1													
7+53.11	BUILD 1-DROP INLET SINGLE "C" - RT. TIE TO EXIST. 18" RCP W/1-18"x12 LF RCP CLASS IV							12						1																
1+45.31	LOMAS BLVD. N.E. BUILD 1-DROP INLET DOUBLE "C"- RT. TIE TO EXIST. MANHOLE #6 W/1-18"x36 LF RCP CLASS IV							36								1														
2+65.98	BUILD 1-DROP INLET DOUBLE "C"- LT. TIE TO EXIST. MANHOLE #5 W/1-18"x27 LF RCP CLASS IV							27								1														
2+66.59	BUILD 1-DROP INLET DOUBLE "C"- RT. BUILD 1-18"x28 LF RCP CLASS IV, TIE TO EXIST. 18" RCP							28								1														
	TOTAL							215				1		2		5		1												

26 36721094



APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	MA	
TRANSPORTATION	Edmund	8-26-91
HYDROLOGY	Steve Bohling	8-23-91
WATER	Alan	8-30-91
WASTE WATER	Geo	"

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NO.	DESCRIPTION	DATE	BY
REVISIONS (OR NOTICES)			
<p style="text-align: center;">NEW MEXICO STATE HIGHWAY DEPARTMENT</p> <p style="text-align: center;">ESTIMATED STRUCTURE QUANTITIES</p>			

FILENAME: MQLBWS
PROJECT NAME: LOMAS/BROADWAY DESIGNED BY: RM
PROJECT NO.: 89001.00
DATE: 8/15/91

DRAWN BY: B.JG

DROP INLET SINGLE "C" (NO. 623272)		
STATION	LOCATION	QTY. (EA.)
4+15.13	BWAY. RT.	1
7+53.11	BWAY. RT.	1
TOTAL		2

DROP INLET TYPE "A" (NO. 62370)		
STATION	LOCATION	QTY. (EA.)
0+84.00	BWAY. RT.	1
TOTAL		1

RELOCATE WATER METER AND BOX (NO. 664190)		
STATION	LOCATION	QTY. (EA.)
1+48.88 BROADWAY	RT.	1
3+69.18 BROADWAY	RT.	1
5+54.00 BROADWAY	RT.	1
6+22.54 BROADWAY	RT.	1
7+09.71 BROADWAY	RT.	1
TOTAL		5

REMOVE AND RESET EXISTING FIRE HYDRANT (NO. 663102)		
STATION	LOCATION	QTY (EA.)
1+34.59 BROADWAY	RT.	1
4+45.03 BROADWAY	LT.	1
5+78.54 BROADWAY	RT.	1
TOTAL		3

DROP INLET DOUBLE "C" (NO. 623273)		
STATION	LOCATION	QTY. (EA.)
1+04.00	BWAY. RT.	1
5+85.36	BWAY. RT.	1
1+45.31	LOMAS RT.	1
2+65.98	LOMAS LT.	1
2+66.59	LOMAS RT.	1
TOTAL		5

ADJUST MANHOLE TO GRADE (NO. 664180)		
STATION	OFFSET	QTY. (EA.)
1+11.13 BROADWAY	18' RT.	1
1+16.17 BROADWAY	1' RT.	1
1+21.23 BROADWAY	3' LT.	1
4+17.42 BROADWAY	7' LT.	1
4+77.70 BROADWAY	2' LT.	1
4+93.85 BROADWAY	6' LT.	1
5+37.84 BROADWAY	4' LT.	1
5+40.22 BROADWAY	8' RT.	1
5+81.64 BROADWAY	5' LT.	1
7+61.53 BROADWAY	4' LT.	1
7+89.80 BROADWAY	1' RT.	1
1+57.98 LOMAS	5' RT.	1
1+66.05 LOMAS	6' LT.	1
2+41.95 LOMAS	4' RT.	1
2+42.00 LOMAS	30' LT.	1
TOTAL		15

ADJUST VALVE BOX TO GRADE (NO. 664175)		
STATION	LOCATION	QTY (EA.)
4+16.00 BROADWAY	LT.	1
4+41.47 BROADWAY	LT.	1
5+56.08 BROADWAY	RT.	1
TOTAL		3

PIPE PLUG ITEM(S) INCIDENTAL TO STORM DRAINAGE ITEMS		
STATION	SIZE (INCHES)	QTY. (EA.)
1+11.13 BWAY.	18"	1
4+93.85 BWAY.	18"	1
5+85.00 BWAY.	18"	1
TOTAL		3

DEMOLITION (NO. 202800)			
LOCATION	QUANTITY	UNIT	DESCRIPTION
GUARANTEED APPLIANCE 800 BROADWAY BLVD. N.E.	1	EA.	REMOVE BUILDING FOUNDATION 20' x 80'

NO ITEMS ARE TO BE SALVAGED.

TELEPHONE MANHOLES (TO BE ADJUSTED BY OTHERS)		
STATION	LOCATION	QTY.
4+54.00 BWAY.	RT.	1
6+96.14 BWAY.	RT.	1
TOTAL		2

FULL DEPTH CONCRETE REMOVAL (NO. 202025)			
STATION TO STATION	LENGTH FT.	WIDTH FT.	QTY. SY.
INTERSECTION BROADWAY/LOMAS	VARIES	VARIES	192
TOTAL			192

26 36721294

APPROVALS

ENGINEER

DATE

DRC CHAIRMAN

TRANSPORTATION

HYDROLOGY

WATER

WASTE WATER

N/A

R. Davis 8-26-91

Steve Bohling 8-23-91

AKC 8-30-91

AKC ..

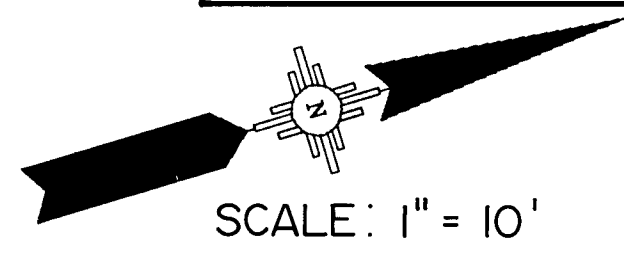


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NO.	DESCRIPTION	DATE	BY
	REVISIONS (OR NOTICES)		

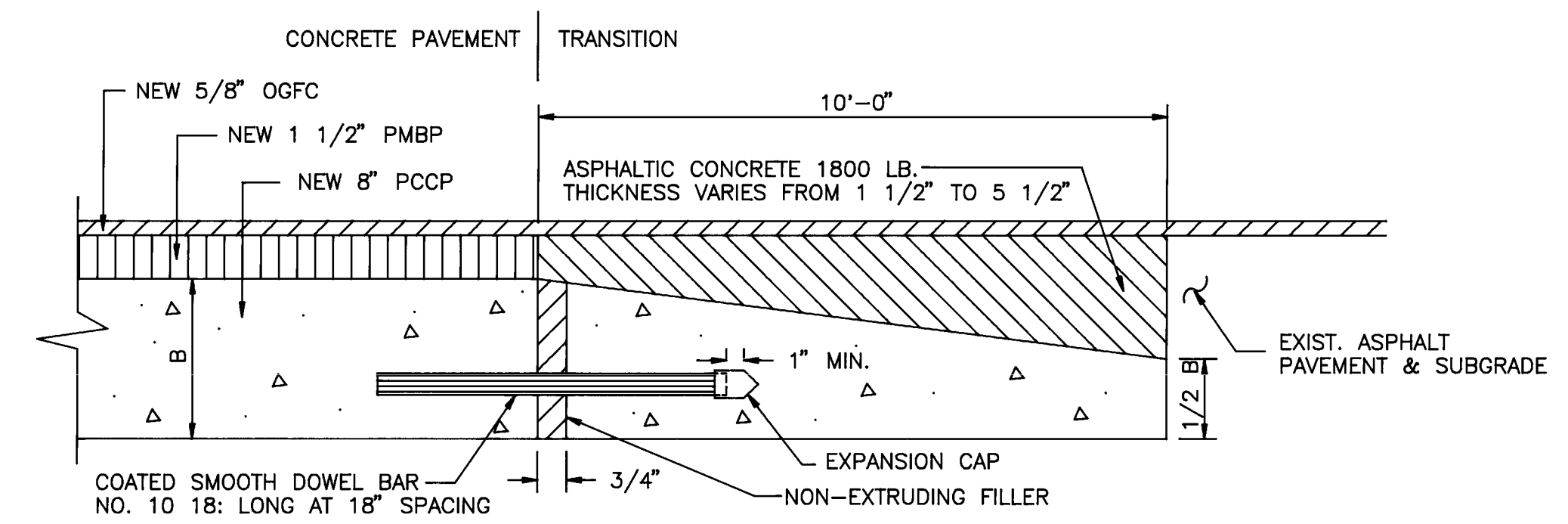
NEW MEXICO
STATE HIGHWAY DEPARTMENT

MISCELLANEOUS
QUANTITIES

GARDNER, MASON & ASSOCIATES, INC.
ENGINEERS & PLANNERS

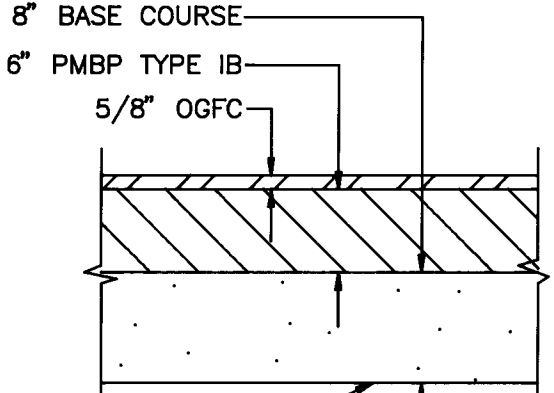


- GENERAL NOTES**
- ONE-HALF THE LENGTH OF ALL NO. 8 SMOOTH DOWEL BARS SHALL BE COATED WITH ONE COAT OF LEAD OR TAR PAINT. THE COATED HALF SHALL BE GREASED BEFORE PLACEMENT OF CONCRETE.
 - IN ALL CASES, DOWELS IN TRANSVERSE JOINTS ARE TO BE PARALLEL TO CENTER-LINE OF LANE.
 - EXPANSION JOINTS SHALL BE CONSTRUCTED AT THE DIRECTION OF THE ENGINEER. NUMBER AND LOCATION OF EXPANSION JOINTS WILL BE DEPENDENT UPON EXPANSIVE QUALITY OF CONCRETE AGGREGATES AND THE AMBIENT TEMPERATURE, AS PER PORTLAND CEMENT CONCRETE ASSOCIATION DESIGN AND CONTROL OF CONCRETE MIXTURES MANUAL, (LATEST EDITION).
 - SEALANT RESERVOIR, JOINT SHAPE FACTOR, AND BACKER ROD, IF REQUIRED, SHALL BE RECOMMENDED BY THE MANUFACTURER OF THE JOINT FILLER USED.
 - WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, AND SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.
 - WHEN NEW CONCRETE PAVEMENT ABUTS AN EXISTING CONCRETE PAVEMENT THE TRANSVERSE JOINT SHALL BE DOWELED WITH COATED SMOOTH, GRADE 60, NO. 8, DOWEL BARS, 18 IN. LONG, SPACED AT 12 IN. CENTER TO CENTER. THE TRANSVERSE FACE OF THE EXISTING PCP SHALL BE DRILLED TO ACCEPT ONE-HALF OF THE DOWEL LENGTH. THE DRILL HOLES SHALL BE LOCATED SUCH THAT THE DOWEL BARS WILL BE AT MID DEPTH OF THE THINNER OF THE TWO ABUTTING SLABS. THE DRILL HOLES SHALL BE A DIAMETER THAT WILL PROVIDE A CLOSE FIT FOR THE DOWELS. THE DOWELS SHALL BE EPOXYED INTO THE DRILLED HOLES. THE FREE HALF OF THE DOWEL BARS SHALL BE COATED WITH ONE COAT OF LEAD OR TAR PAINT. THE COATED HALF SHALL BE GREASED BEFORE PLACEMENT OF CONCRETE.
 - WHEN A NEW LANE OF CONCRETE PAVEMENT IS BUILT ADJACENT TO AN EXISTING LANE OF CONCRETE PAVEMENT THE LONGITUDINAL JOINT SHALL BE TIED WITH GRADE 40, NO. 5, DEFORMED STEEL BARS 30 IN. LONG, SPACED AT 30 INCHES CENTER TO CENTER. THE LONGITUDINAL FACE OF THE EXISTING PCP SHALL BE DRILLED TO ACCEPT ONE HALF OF THE TIE BAR LENGTH. THE DRILL HOLES SHALL BE LOCATED SUCH THAT THE TIE BARS WILL BE AT MID DEPTH OF THE THINNER OF THE TWO ADJOINING SLABS. THE DRILL HOLES SHALL BE A DIAMETER THAT WILL PROVIDE A CLOSE FIT FOR THE TIE BARS. THE TIE BARS SHALL BE EPOXYED INTO THE DRILLED HOLES.
 - INITIAL SAWCUT FOR CRACK CONTROL PURPOSES SHALL BE 1/8" TO 1/4" IN WIDTH.
 - NO ADJUSTMENT OF THE JOINT LAYOUT PLAN SHALL BE DONE WITHOUT APPROVAL OF THE PROJECT ENGINEER.
 - THE ANTICIPATED LOCATION OF EXISTING CONCRETE PAVEMENT JOINTS ADJACENT TO NEW PCP IS SHOWN ON THIS DRAWING WITH A HEAVY DOUBLE LINE. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS PRIOR TO CONCRETE PAVEMENT REMOVAL.



ASPHALT TO CONCRETE TRANSITION

NOT TO SCALE



ASPHALT PAVEMENT REPLACEMENT SECTION - LOMAS BLVD.

NOTES

- ALL CURBS TO BE EXTRUDED PINNED CURBS PER STD. DWG. 2415.
- DRILL AND SET TIE BARS WHERE CURB HAS BEEN PLACED.
- THICKEN CURB EDGE OF SLAB 2"
- ALL JOINT LINES AT DIAGONALS
- CITY STD. DWGS. 2450 & 2451 APPLY

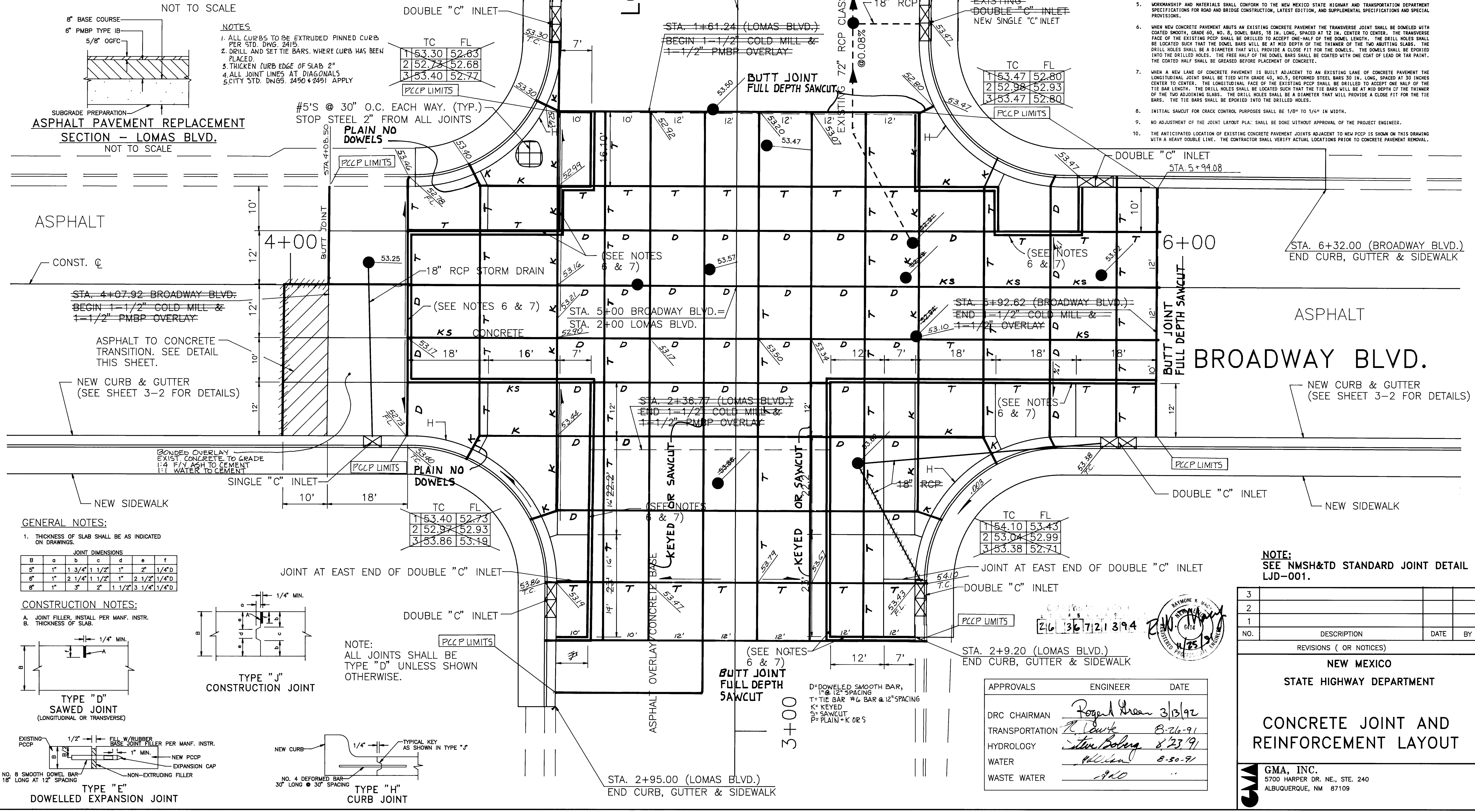
#5'S @ 30" O.C. EACH WAY. (TYP.)
STOP STEEL 2" FROM ALL JOINTS

PLAIN NO DOWELS

PCCP LIMITS

TC	FL
1 53.30	52.83
2 52.73	52.68
3 53.40	52.77

PCCP LIMITS



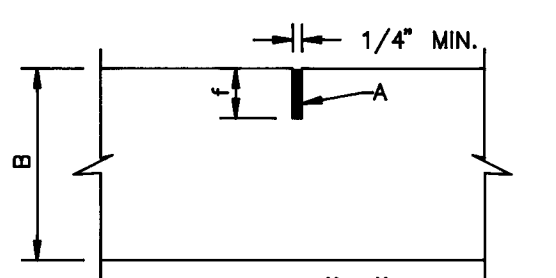
GENERAL NOTES:

- THICKNESS OF SLAB SHALL BE AS INDICATED ON DRAWINGS.

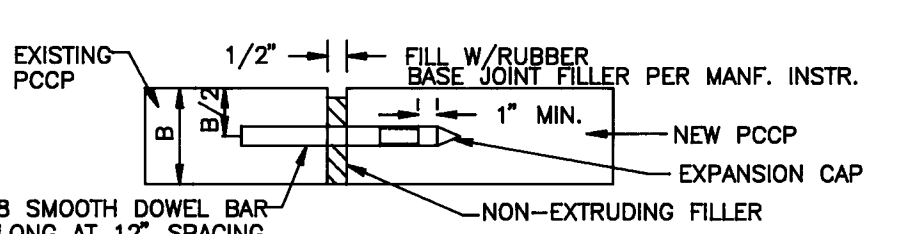
JOINT DIMENSIONS					
B	a	b	c	d	e
5"	1"	1 3/4"	1 1/2"	1"	2"
6"	1"	2 1/4"	1 1/2"	1"	2 1/2"
8"	1"	3"	2"	1 1/2"	3 1/4"

CONSTRUCTION NOTES:

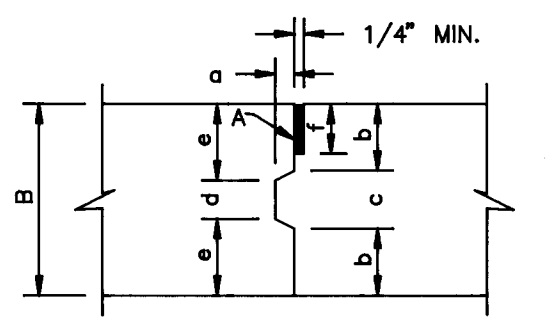
- JOINT FILLER, INSTALL PER MANF. INSTR.
- THICKNESS OF SLAB.



TYPE "D" SAWED JOINT (LONGITUDINAL OR TRANSVERSE)



TYPE "E" DOWELED EXPANSION JOINT



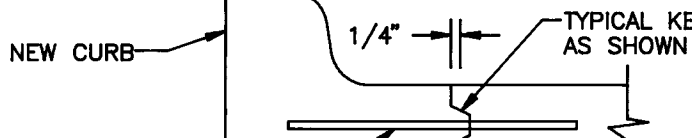
TYPE "J" CONSTRUCTION JOINT

NOTE: ALL JOINTS SHALL BE TYPE "D" UNLESS SHOWN OTHERWISE.

JOINT AT EAST END OF DOUBLE "C" INLET

DOUBLE "C" INLET

PCCP LIMITS



TYPE "H" CURB JOINT

FILENAME: LBJOINT
PROJECT NAME: LOMAS/BROADWAY
PROJECT NO. 89001.00
DATE: 8/15/91
DRAWN BY: BJG
DESIGNED BY: RVM

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	Roger Green	3/13/92
TRANSPORTATION	R. Durk	8-26-91
HYDROLOGY	Steve Boling	8-23-91
WATER	Mike	8-30-91
WASTE WATER	920	

NOTE: SEE NMSH&TD STANDARD JOINT DETAIL LJD-001.

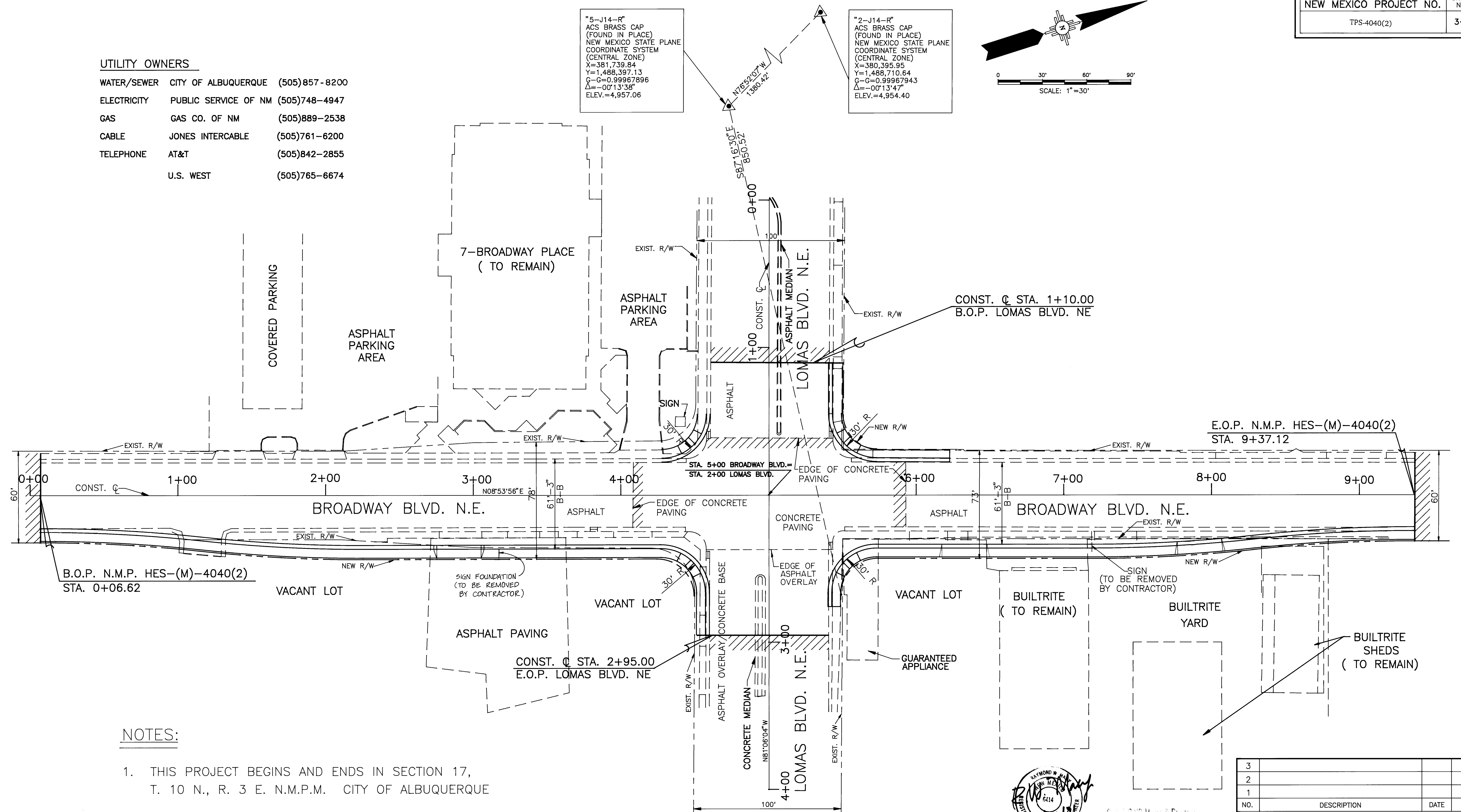
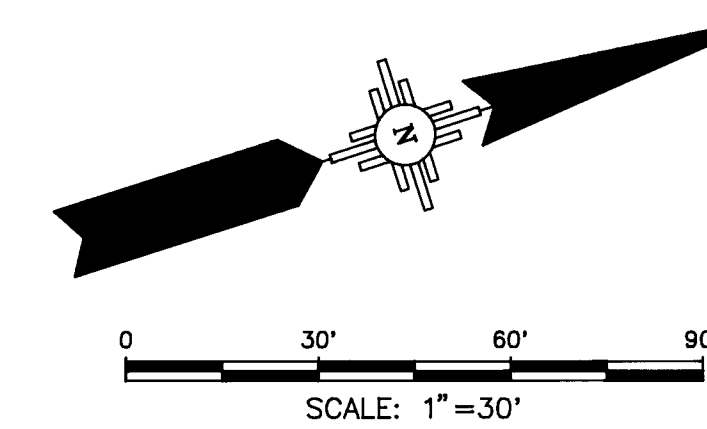
NO.	DESCRIPTION	DATE	BY
3			
2			
1			
REVISIONS (OR NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
CONCRETE JOINT AND REINFORCEMENT LAYOUT			
GMA, INC. 5700 HARPER DR. NE., STE. 240 ALBUQUERQUE, NM 87109			

UTILITY OWNERS

WATER/SEWER	CITY OF ALBUQUERQUE	(505)857-8200
ELECTRICITY	PUBLIC SERVICE OF NM	(505)748-4947
GAS	GAS CO. OF NM	(505)889-2538
CABLE	JONES INTERCABLE	(505)761-6200
TELEPHONE	AT&T	(505)842-2855
	U.S. WEST	(505)765-6674

"5-J14-R"
ACS BRASS CAP
(FOUND IN PLACE)
NEW MEXICO STATE PLANE
COORDINATE SYSTEM
(CENTRAL ZONE)
X=381,739.84
Y=1,488,397.13
G-C=0.99967896
Δ=-00°13'38"
ELEV.=4,957.06

"2-J14-R"
ACS BRASS CAP
(FOUND IN PLACE)
NEW MEXICO STATE PLANE
COORDINATE SYSTEM
(CENTRAL ZONE)
X=380,395.95
Y=1,488,710.64
G-C=0.99967943
Δ=-00°13'47"
ELEV.=4,954.40



NOTES:

1. THIS PROJECT BEGINS AND ENDS IN SECTION 17, T. 10 N., R. 3 E. N.M.P.M. CITY OF ALBUQUERQUE
2. ARC DEFINITION USED HORIZONTAL CURVES. (RADIUS OF A 1° CURVE=5729.58')
3. THIS SHEET IS FOR INFORMATION OF CONTRACTOR ONLY. SEE SHEET 3-2 FOR CONSTRUCTION DETAILS.
4. FOR UTILITY RELOCATION SEE SHEET 10-2.



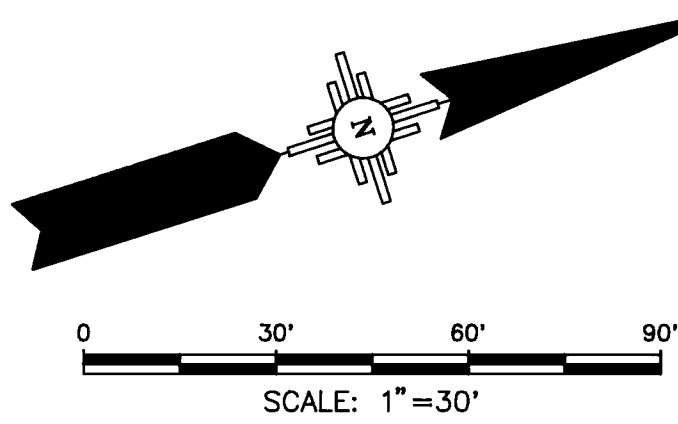
26 36721494

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Dorcas A. Hays</i>	3-13-92
TRANSPORTATION	<i>R. Hays</i>	8-26-91
HYDROLOGY	<i>Steve Bobing</i>	8-23-91
WATER	<i>W. Hays</i>	8-30-91
WASTE WATER	<i>W. Hays</i>	

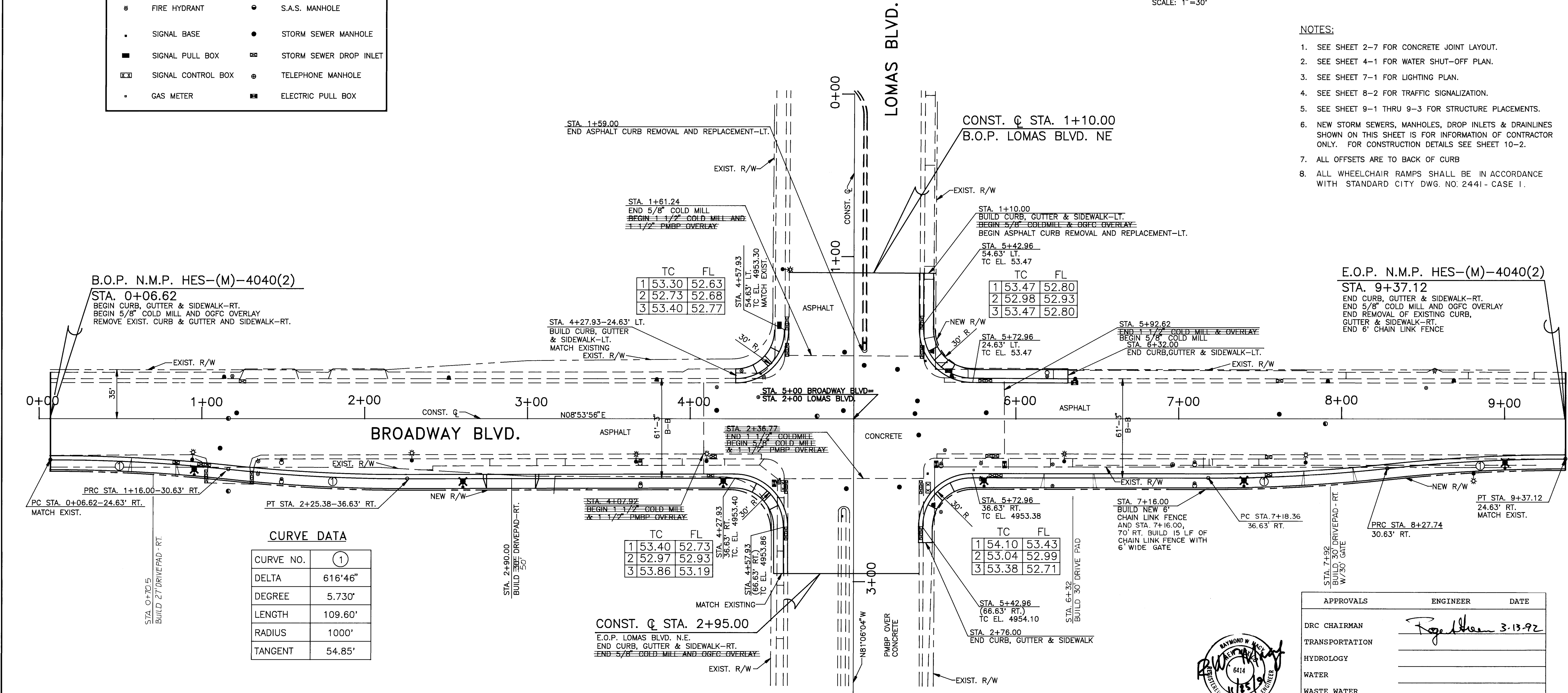
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2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
LAYOUT PLAN			
GMA, INC. 5700 HARPER DR. NE., STE. 240 ALBUQUERQUE, NM 87109			

FILENAME: LBLAYOUT
PROJECT NAME: LOMAS/BROADWAY DESIGNED BY: RM
PROJECT NO. 89001.00
DATE: 8/13/91

LEGEND			
	LIGHT POLE		WATER METER
	POWER POLE		WATER VALVE
	FIRE HYDRANT		S.A.S. MANHOLE
	SIGNAL BASE		STORM SEWER MANHOLE
	SIGNAL PULL BOX		STORM SEWER DROP INLET
	SIGNAL CONTROL BOX		TELEPHONE MANHOLE
	GAS METER		ELECTRIC PULL BOX



- NOTES:
- SEE SHEET 2-7 FOR CONCRETE JOINT LAYOUT.
 - SEE SHEET 4-1 FOR WATER SHUT-OFF PLAN.
 - SEE SHEET 7-1 FOR LIGHTING PLAN.
 - SEE SHEET 8-2 FOR TRAFFIC SIGNALIZATION.
 - SEE SHEET 9-1 THRU 9-3 FOR STRUCTURE PLACEMENTS.
 - NEW STORM SEWERS, MANHOLES, DROP INLETS & DRAINLINES SHOWN ON THIS SHEET IS FOR INFORMATION OF CONTRACTOR ONLY. FOR CONSTRUCTION DETAILS SEE SHEET 10-2.
 - ALL OFFSETS ARE TO BACK OF CURB
 - ALL WHEELCHAIR RAMPS SHALL BE IN ACCORDANCE WITH STANDARD CITY DWG. NO. 2441 - CASE 1.

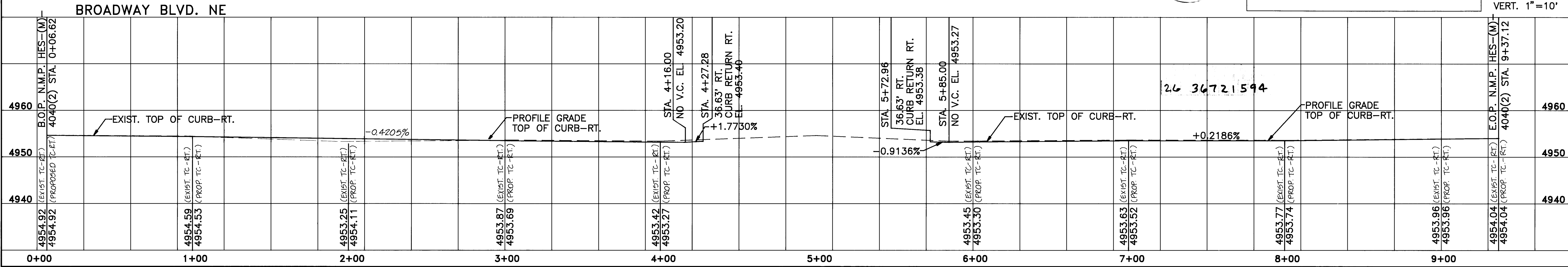


CURVE DATA	
CURVE NO.	1
DELTA	61°46"
DEGREE	5.730'
LENGTH	109.60'
RADIUS	1000'
TANGENT	54.85'

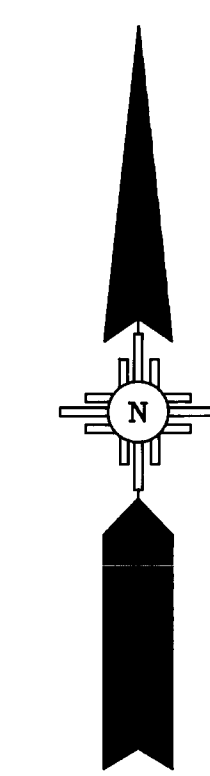
APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		3-13-92
TRANSPORTATION		
HYDROLOGY		
WATER		
WASTE WATER		



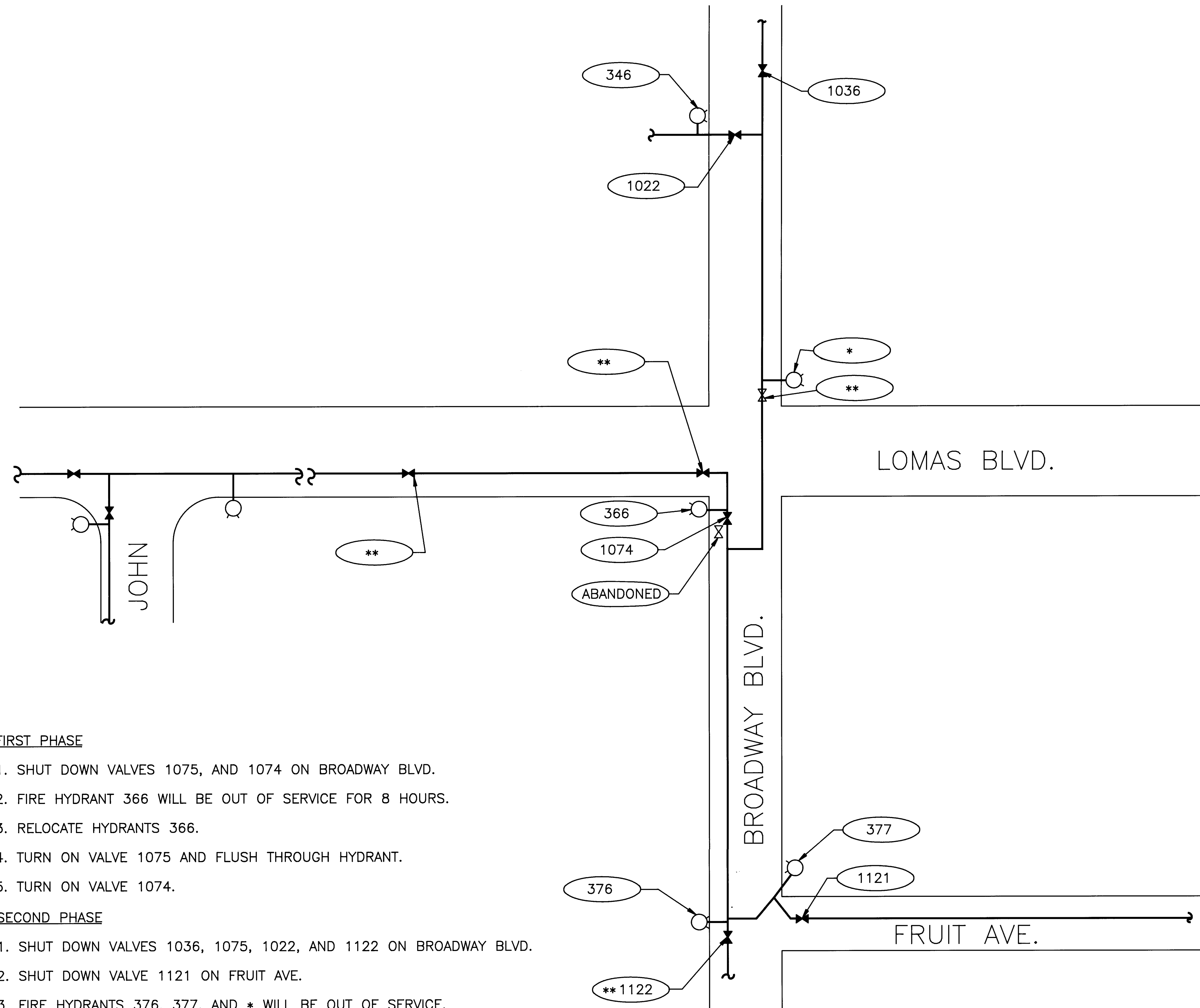
HORIZ. 1"=30'
VERT. 1"=10'



FILENAME: LBNP
PROJECT NAME: LOMAS/BROADWAY DESIGNED BY: RM
PROJECT NO. 8900100
DATE: 8/13/91



NO SCALE



FIRST PHASE

1. SHUT DOWN VALVES 1075, AND 1074 ON BROADWAY BLVD.
2. FIRE HYDRANT 366 WILL BE OUT OF SERVICE FOR 8 HOURS.
3. RELOCATE HYDRANTS 366.
4. TURN ON VALVE 1075 AND FLUSH THROUGH HYDRANT.
5. TURN ON VALVE 1074.

SECOND PHASE

1. SHUT DOWN VALVES 1036, 1075, 1022, AND 1122 ON BROADWAY BLVD.
2. SHUT DOWN VALVE 1121 ON FRUIT AVE.
3. FIRE HYDRANTS 376, 377, AND * WILL BE OUT OF SERVICE.
4. RELOCATE HYDRANTS 377, *, AND SERVICE LINES AND ASSOCIATED METER BOXES ON BROADWAY NORTH AND SOUTH OF LOMAS BLVD.
5. WATER LINES WILL BE OUT OF SERVICE FOR 8 HOURS.
6. TURN ON VALVE 1122, AND FLUSH THROUGH HYDRANTS 376, 377, AND *.
7. TURN ON VALVES 1121, 1022, AND 1036.

"VALVE NO. 1122 COULD NOT BE LOCATED IN FIELD.
IF NOT FOUND DURING CONSTRUCTION, SHUT-OFFS
WILL HAVE TO EXTEND SOUTH TO VALVE NO. 1172
AT THE NW CORNER OF ROMA/BROADWAY.

NOTE:

THE CONTRACTOR IS RESPONSIBLE FOR
COORDINATING THE WATER VALVE SHUT-OFF
PLAN WITH THE CITY WATER SYSTEMS DIVISION
THREE (3) DAYS IN ADVANCE OF ANY WORK
WHICH MAY AFFECT THE WATER SYSTEM. THE
CITY WSD WILL PERFORM THE ACTUAL SHUT-OFF.
PHONE NO. 823-4200.

- * NO NUMBER ASSIGNED
- ** NOT FOUND IN FIELD



26 367.21694

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Raymond W. Mason</i>	3-13-92
TRANSPORTATION		
HYDROLOGY		
WATER		
WASTE WATER		

3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
WATER SHUT-OFF PLAN			
GARDNER, MASON & ASSOCIATES, INC. ENGINEERS & PLANNERS ALBUQUERQUE, NM			

FILENAME: VSHUT
PROJECT NAME: LOMAS/BROADWAY
PROJECT NO. 8900100
DATE: 10/29/91
DRAWN BY: PLG
DESIGNED BY: RWM

*- NOT ALL SIGNS UTILIZED IN
THESE PLANS



FILENAME: TRSECONIT
PROJECT NAME: LOMAS/BROADWAY
PROJECT NO. 89001.00
DATE: 8/13/91
DRAWN BY: BJS
DESIGNED BY:

TRAFFIC CONTROL NOTES

SEQUENCE OF CONSTRUCTION

F.H.W.A. REGION NO. 6	SHEET NO.
NEW MEXICO PROJECT NO.	5-2
TPS-4040(2)	

- ALL TRAFFIC CONTROL DEVICES SHALL COMPLY WITH CHAPTER VI OF THE 1988 EDITION OF THE "MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES".
- THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING 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.
- UNLESS OTHERWISE PROVIDED AS PART OF THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE PROJECT MANAGER DETAILED TRAFFIC CONTROL PLANS, WHICH ARE SUBJECT TO THE APPROVAL OF THE ASSISTANT CITY ENGINEER FOR CONSTRUCTION COORDINATION 3 WORKING DAYS IN ADVANCE OF ANY REQUIRED CLOSURES.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING SERVICES 24 HOURS IN ADVANCE OF ANY COMPLETE CLOSURES: POLICE DEPARTMENT, FIRE DEPARTMENT, AMBULANCE SERVICES, AND THE TRANSIT DEPARTMENT.
- PERMITS TO BARRICADE OR DETOUR TRAFFIC MUST BE OBTAINED FOR EACH PHASE OF CONSTRUCTION THROUGH THE CONSTRUCTION COORDINATION DIVISION AT LEAST 24 HOURS IN ADVANCE OF CONSTRUCTION ACTIVITIES.
- ALL ADVANCE WARNING SIGNS AND BARRICADES MUST BE INSTALLED BEFORE CONSTRUCTION BEGINS AS DIRECTED BY THE ENGINEER.
- ALL SIGN LOCATIONS WILL BE SELECTED IN THE FIELD AND APPROVED BY THE PROJECT ENGINEER.
- ALL ADVANCE WARNING SIGNS SHALL BE 48" X 48" MINIMUM.
- ALL ADVANCE WARNING SIGNS NOT DIRECTLY APPLICABLE SHALL BE REMOVED, COMPLETELY COVERED OR TURNED AWAY FROM ONCOMING TRAFFIC.
- ALL CONSTRUCTION SIGNING SHALL BE BLACK ON REFLECTORIZED ORANGE FIELD UNLESS OTHERWISE SPECIFIED. ALL CONSTRUCTION BARRICADES AND CHANNELIZATION DEVICES SHALL BE ORANGE ON WHITE, REFLECTORIZED, UNLESS OTHERWISE SPECIFIED.
- ALL SIGNS WILL BE GROUND MOUNTED ON SINGLE OR DOUBLE POSTS WITH THE BOTTOM OF THE SIGN 7 FEET ABOVE SIDEWALK LEVEL. EXISTING POSTS MAY BE USED AT SOME LOCATIONS, WITH THE APPROVAL OF THE PROJECT ENGINEER. PORTABLE SIGN SUPPORTS WILL BE ACCEPTABLE AS AN ALTERNATIVE WITH THE APPROVAL OF THE PROJECT ENGINEER.
- ALL EXISTING REGULATORY SIGNS THAT NEED TO BE REMOVED, RELOCATED OR REINSTALLED SHALL BE DONE BY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING DIVISION. THE CONTRACTOR SHALL NOTIFY THE TRAFFIC ENGINEERING DIVISION 3 WORKING DAYS IN ADVANCE OF ANY REQUIRED WORK.
- TRAFFIC CONTROL DEVICES REQUIRED AFTER DARK ARE TO BE EQUIPPED WITH WARNING LIGHTS. TYPE (A) FLASHING WARNING LIGHTS SHALL BE USED ON ALL ADVANCE WARNING SIGNS AND ON ALL DEVICES WHICH ARE INTENDED TO WARN MOTORISTS OR PEDESTRIANS OF HAZARDS OR OBSTRUCTIONS IN OR NEAR THE TRAVEL PATH. TYPE (C) STEADY BURN LIGHTS SHALL BE USED ON ALL DEVICES WHICH ARE INTENDED TO DEFINE THE TRAVEL PATH.
- ALL SIGNS, BARRICADES AND/OR BARRELS WILL BE REFLECTORIZED. ALL BARRELS MAY HAVE SAND OR WATER BALLAST LIMITED TO 100 LBS.
- ALL SIGNS, BARRICADES AND/OR BARRELS WILL BE MOVED FORWARD AS THE CONSTRUCTION PROGRESSES (WHERE APPLICABLE).
- CONTRACTOR SHALL INSPECT AND MAINTAIN ALL BARRICADES AT LEAST TWICE EACH WORK DAY AND ONCE DURING THE HOURS OF DARKNESS. ANY UNACCEPTABLE SITUATIONS ENCOUNTERED WILL BE CORRECTED IMMEDIATELY.
- BARRELS AND BARRICADES ARE NOT TO BE INTERMIXED IN THE SAME SERIES OF CHANNELIZATION.
- TEMPORARY EXCAVATIONS MUST BE PLATED OR PATCHED PRIOR TO OPENING TO TRAFFIC.
- A MINIMUM WIDTH OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN BOTH DIRECTIONS DURING THE CONSTRUCTION PHASING AT INTERSECTIONS.
- EQUIPMENT AND MATERIALS ARE NOT TO BE STORED WITHIN THE STREET RIGHT-OF-WAY DURING NON-WORKING HOURS.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO BUSINESSES AND RESIDENCES ADJACENT TO THE CONSTRUCTION AREA AS DIRECTED BY THE PROJECT ENGINEER.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND ALL WORK AREAS THROUGHOUT THE PERIOD OF CONSTRUCTION. ALL SUCH CHANNELIZATION SHALL BE ARRANGED TO PREVENT PEDESTRIANS FROM HAVING TO ENTER THE ROADWAY IN ORDER TO PASS AROUND THE WORK AREAS.
- BARRELS AROUND OPEN EXCAVATIONS AND VALVE REPAIRS ARE TO BE SPACED AT 10 FEET.

- CONTRACTOR SHALL PROVIDE ACCESS SIGNS AS DIRECTED BY THE TRAFFIC ENGINEER. ACCESS SIGNS SHALL HAVE BLUE REFLECTORIZED BACKGROUND WITH 5" WHITE LETTERING.
- CONTRACTOR IS TO OPEN AND CLOSE TRENCHES ON THE SAME DAY.
- CONTRACTOR SHALL NOTIFY EACH FACILITY, BUSINESS AND RESIDENT, BY WRITTEN LETTER, ON BROADWAY BLVD. BETWEEN ROMA AND MARBLE INFORMING OCCUPANT OF SCOPE OF WORK, TENTATIVE START-UP DATE AND TENTATIVE COMPLETION DATE.
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL PROVIDE CONSTRUCTION ADVISORY SIGNS, WEST AND EAST OF THE LOMAS/BROADWAY INTERSECTION, AND ALONG BROADWAY NORTH OF MOUNTAIN ROAD AND SOUTH OF GRAND AVENUE. SIGNS SHALL READ "ROAD CONSTRUCTION AHEAD, TRAFFIC DELAYS ANTICIPATED, SEEK ALTERNATE ROUTE."
- ALL SIGNS TO BE FACING DIRECTION OF TRAFFIC.
- LANE CLOSURES AND OTHER INDIVIDUAL SITUATIONS WILL BE ADDRESSED AS THEY ARISE. THE TRAFFIC CONTROL INSTALLATIONS SHOWN HERE ARE TYPICAL. NOT ALL BARRICADING WILL NECESSARILY BE REQUIRED AT ALL TIMES AND IS SUBJECT TO REVISION UPON APPROVAL OF THE ASSISTANT CITY ENGINEER FOR CONSTRUCTION COORDINATION.
- DRAINAGE AND UTILITY FACILITIES WILL BE CONSTRUCTED CONCURRENTLY WITH PAVEMENT IMPROVEMENTS.
- MINOR CROSS STREETS MAY BE BLOCKED ONLY IF SUFFICIENT ALTERNATE ACCESS IS AVAILABLE TO AFFECTED PROPERTIES OR AS DETERMINED BY THE PROJECT ENGINEER.
- THE CITY WILL PLACE A NOTICE OF CONSTRUCTION ACTIVITY IN LOCAL NEWSPAPER(S) AT LEAST TWO WEEKENDS PRECEDING THE BEGINNING OF EACH MAJOR PHASE OF CONSTRUCTION. THE CONTRACTOR WILL PROVIDE THE PROJECT ENGINEER WITH TIMELY SCHEDULE AND DETOUR INFORMATION AND UPDATES FOR PREPARATION OF THESE NOTICES.
- CONTRACTOR IS REQUIRED TO BUILD LIGHT POLE FOUNDATIONS, CONDUIT AND NEW TRAFFIC SIGNALS AND HAVE SIGNALS OPERATIONAL PRIOR TO WIDENING BROADWAY.

PHASE I - BUILD EAST SIDE OF BROADWAY, NORTH AND SOUTH OF LOMAS.

- CONTRACTOR IS REQUIRED TO BUILD LIGHT POLE FOUNDATIONS, CONDUIT AND NEW TRAFFIC SIGNALS AND HAVE SIGNALS OPERATIONAL PRIOR TO WIDENING BROADWAY. SEE SHEET 5-7 FOR TCP FOR CONDUIT INSTALLATION.
- PLACE ADVANCE WARNING SIGNS AT MOUNTAIN ROAD, GRAND AVENUE, AND ON LOMAS BLVD.
- CLOSE EAST SIDE OF BROADWAY. MAINTAIN 2 LANES OF TRAFFIC, ONE EACH DIRECTION. CLOSE OUTSIDE LANES ON EAST AND WEST BOUND LOMAS. SEE SHEET 5-3 FOR DETAILS.
- BUILD WIDENED AREAS ON BROADWAY NORTH AND SOUTH OF LOMAS BLVD.
- STRIPE LANES FOR PHASE II TRAFFIC CONTROL. SEE SHEET 5-4 FOR DETAILS.

PHASE II - BUILD WEST SIDE OF BROADWAY, NORTH AND SOUTH SIDE OF LOMAS.

- TRAFFIC WILL REMAIN ON THE EAST SIDE OF BROADWAY.
- BUILD NEW CURB RETURNS. SEE SHEET 5-5 FOR DETAILS.

PHASE III - BUILD MIDDLE OF INTERSECTION

- COLD MILL AND OVERLAY ENTIRE PROJECT. PERFORM THIS WORK PROCESS ON A SATURDAY AND/OR SUNDAY ONLY. USE TCP DETOUR AT LOMAS AND BROADWAY INTERSECTION CLOSURE PLAN. SEE SHEETS 5-9 AND 5-10 FOR DETAILS.

PHASE IV - OGFC

- TRAFFIC WILL BE DIRECTED TO THE UN-USED LANES. SEE TCP FOR OGFC INSTALLATION SHEETS 5-9 AND 5-10 FOR DETAILS.



APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Roger Adams</i>	3-13-92
TRANSPORTATION	<i>A. Davis</i>	8-26-91
HYDROLOGY	<i>Steve Boburg</i>	8/23/91
WATER	<i>AKD</i>	8-30-91
WASTE WATER	<i>AKD</i>	
cc TROPC:	<i>Ronald B. Engel</i>	12/6/91

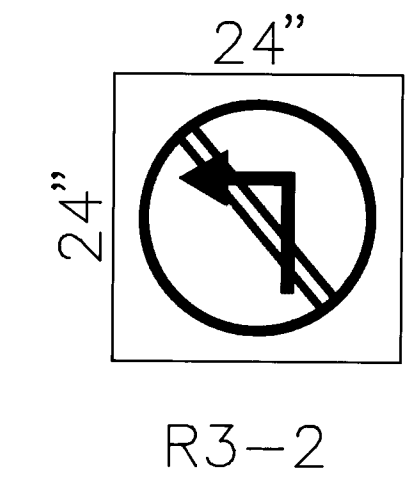
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NO.	DESCRIPTION	DATE	BY

REVISIONS (OR NOTICES)

NEW MEXICO
STATE HIGHWAY DEPARTMENT

TRAFFIC CONTROL NOTES

GMA, INC.
5700 HARPER DR. NE., STE. 240
ALBUQUERQUE, NM 87109




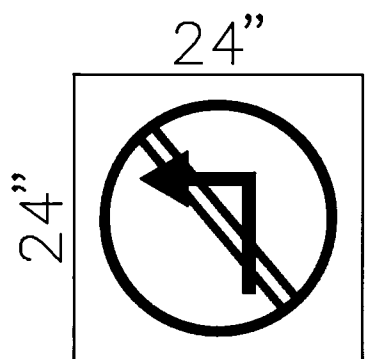
- | APPROVALS | ENGINEER | DATE |
|----------------|------------------------|----------|
| DRC CHAIRMAN | <i>Roger L. Dineen</i> | 3-13-92 |
| TRANSPORTATION | <i>R. Smith</i> | 8-26-91 |
| HYDROLOGY | <i>Steve Bohling</i> | 11/23/91 |
| WATER | <i>WLO</i> | 8-30-91 |
| WASTE WATER | <i>WLO</i> | |
| CC Traffic | <i>R. Smith</i> | 11/6/91 |

REVISIONS (OR NOTICES)

NEW MEXICO
STATE HIGHWAY DEPARTMENT

TRAFFIC CONTROL PLAN
PHASE I

 GMA, INC.
5700 HARPER DR. NE, STE. 240
ALBUQUERQUE, NM 87109



3			
2			
1			
NO.	DESCRIPTION	DATE	BY

GMA, INC.
5700 HARPER DR. NE, STE. 240
ALBUQUERQUE, NM 87109

FILENAME: SD01B58
PROJECT NAME: LOMAS/BRADWAY
PROJECT NO. 870010
DATE: 8/14/91

DRAWN BY: BJG
DESIGNED BY: RH

SIGN CODE	NO. OF SIGNS	TOTAL SIGN AREA SQ.FT.	POST LENGTHS				MOUNTING REQUIREMENTS						BASE POSTS	
			LEFT	CTR.	RIGHT	TOTAL	FLANGED CHANNEL	DRIVEDOWN POSTS		PORTABLE SIGN SUPPORT	NO.	TOTAL LENGTH		
								3'-0" x 3'-0" x 3'-0"	3'-0" x 3'-0" x 3'-0"					
PHASE I (BROADWAY BLVD. SIGNING)														
W20-1 (AHEAD)	1	16											1	
* W13-1 (25)	1	4											-	
W20-5R(AHEAD)	1	16											1	
* W13-1 (25)	1	4											-	
W4-2R	1	16											1	
* W13-1 (25)	1	4											-	
G20-2	1	10											1	
W1-4L	1	16											1	
* W13-1 (25)	1	4											-	
W1-4L	1	16											1	
* W13-1 (25)	1	4											-	
W1-4L	1	16											1	
* W13-1 (25)	1	4											-	
R4-7A	2	10											1	
R3-2	1	4	VERTICAL	PANEL									-	
W6-3	1	10											1	
W6-3	1	10											1	
R4-7A	1	10	VERTICAL	PANEL									-	
R3-2	1	4											-	
R4-7A	1	10	VERTICAL	PANEL									-	
R3-2	1	4											-	
W6-3	1	10											1	
W1-4R	1	16											-	
* W13-1 (25)	1	4											1	
R4-7A	1	10	VERTICAL	PANEL									-	
W4-2L	1	16											-	
* W13-1 (25)	1	4											1	
G20-2	1	10											-	
W20-5L (AHEAD)	1	16											1	
W13-1 (25)	1	4											1	
W20-1 (AHEAD)	1	16											-	
W13-1 (25)	1	4											1	
		-286-											-15-	
PHASE I (LOMAS BLVD. SIGNING)														
W20-1 (AHEAD)	1	16											1	
W13-1 (25)	1	4											-	
W20-1 (AHEAD)	1	16											1	
W13-1 (25)	1	4											-	
W20-5R (AHEAD)	1	16											1	
W13-1(25)	1	4											-	
W20-5R (AHEAD)	1	16											1	
W13-1 (25)	1	4											-	
G20-2	1	10											1	
W4-2R	1	16											1	
W13-1 (25)	1	4											-	
W4-2R	1	16											1	
W13-1 (25)	1	4											-	
R3-2	1	4											1	
R3-2	1	4											1	
R3-2	1	4											1	
R3-2	1	4											1	
W4-2R	1	16											1	
W13-1 (25)	1	4											-	
W4-2R	1	16											1	
W13-1 (25)	1	4											-	
G20-2	1	10											1	
W20-5R (AHEAD)	1	16											1	
W13-1 (25)	1	4											-	
W2-5R (AHEAD)	1	16											1	
W13-1 (25)	1	4											-	
W20-1 (AHEAD)	1	16											1	
W13-1 (25)	1	4											-	
W20-1 (AHEAD)	1	16											1	
W13-1 (25)	1	4											-	
		-276-											-18-	

() SIGN(S) AND/OR SUPPORT(S) USED IN OTHER CONSTRUCTION PHASE(S).
NO ADDITIONAL PAYMENT THEREFORE.

* NO ADDITIONAL POST NEEDED. SIGN TO BE MOUNTED ON COMMON POST WITH ANOTHER SIGN.

NOTE:

1. TRAFFIC CONTROL PLANS AND QUANTITIES MAY VARY AS FIELD CONDITIONS DICTATE. THE CONTRACTOR WILL BE PAID FOR ACTUAL QUANTITIES USED. PLACING, RELOCATING AND MAINTENANCE OF TRAFFIC CONTROL DEVICES AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE PROJECT MANAGER ARE TO BE INCIDENTAL TO THE UNIT BID PRICE.

2. ALL TRAFFIC CONTROL DEVICES FOR DETOURS SHALL COMPLY WITH STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION-SECTION 702 (1984 EDITION) AND CHAPTER VI OF THE 1988 EDITION MUTCD AND CURRENT REVISIONS.

3. ALL CONSTRUCTION SIGNING SHALL BE BLACK ON REFLECTIVE ORANGE UNLESS OTHERWISE SPECIFIED. ALL CONSTRUCTION BARRICADES AND CHANNELIZATION DEVICES SHALL BE ORANGE ON WHITE REFLECTORIZED UNLESS OTHERWISE SPECIFIED.

4. BID ITEM-(STEEL POSTS AND BASE POSTS FOR DETOUR SIGNS). THE CONTRACTOR SHALL HAVE THE OPTION OF SUPPLYING EITHER THE FLANGED CHANNEL OR THE DRIVEDOWN POST AS PER NEW MEXICO STANDARD SERIALS-SN 75-1, TBAC-001-10 & TBAC-002-11.

5. BID ITEM-(TYPE III BARRICADE-6' OR 8'). TYPE III BARRICADES SHALL BE ORANGE ON WHITE REFLECTORIZED. ATTACHED TYPE "A" FLASHING BEACONS, PLYWOOD ARROW AND ROAD CLOSED SIGNS ARE TO BE INCIDENTAL TO BID PRICE.

6. BID ITEM-(TYPE I BARRICADE-2'). TYPE I BARRICADE SHALL BE ORANGE ON WHITE REFLECTORIZED. ATTACHED HIGH INTENSITY FLASHING BEACON ARE TO BE INCIDENTAL TO BID PRICE. BID UNIT-PER EACH.

7. BID ITEM-(VERICAL PANELS, SINGLE OR BACK TO BACK 8"x24"). VERTICAL PANELS SHALL BE ORANGE ON WHITE REFLECTORIZED SHEETING, .060 MIN 6061 T-6. PANELS TO BE MOUNTED ON DRIVEDOWN POST EITHER 3' DRIVE OR ON STANCHION. BID UNIT-PER EACH.

8. FLAGGING SHALL BE PROVIDED FOR SAFETY AND/OR AS DIRECTED BY THE PROJECT MANAGER. FLAGGERS SHALL USE STOP/SLOW PADDLES (18"x18" MIN) IN ACCORDANCE WITH THE MUTCD. THE FLAGGER, APPLICABLE SIGNS AND OTHER RELATED ITEMS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, NO PAYMENT OR MEASUREMENT WILL BE MADE THEREFORE.

9. BID ITEM-(CHANNELIZATION DEVICE BARREL TYPE "A" OR "B"). CHANNELIZATION DEVICE BARRELS SHALL BE ORANGE ON WHITE REFLECTORIZED. TYPE "A" REQUIRES NO BEACON. TYPE "B" SHALL BE EQUIPPED WITH BEACON AS SPECIFIED IN THE STANDARD AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 702-021 (G), 1984 EDITION.

10. THE PROVISIONS AS INCLUDED IN THE PLANS AND SPECIFICATIONS FOR HANDLING AND CONTROLLING TRAFFIC DURING CONSTRUCTION OF THE PROJECT MAY BE CHANGED BY THE DISTRICT TRAFFIC ENGINEER. IF, BECAUSE OF FIELD CONDITION AS ACTUALLY ENCOUNTERED, SUCH CHANGES WILL BE MADE BY WRITTEN INSTRUCTION TO THE CONTRACTOR, AND SHALL BE CONSIDERED AN AMMENDMENT TO THE PLANS AND SPECIFICATION AS OF THE DATE OF THE CHANGE.

11. THE CONTRACTOR SHALL SUBMIT ANY PROPOSED CHANGES IN THE TRAFFIC CONTROL PLAN TO THE DISTRICT TRAFFIC ENGINEER FOR APPROVAL.

12. NO PAYMENT WILL BE MADE FOR ANY ADDITIONAL COST RESULTING FROM APPROVED TRAFFIC CONTROL PLAN CHANGES REQUESTED BY THE CONTRACTOR.

13. ITEM 704010 IS INCLUDED FOR PAVEMENT STRIPING BETWEEN SURFACING LIFTS AS DIRECTED BY THE PROJECT MANAGER.

14. BID ITEM-(SAND BARREL VEHICULAR IMPACT ATTENUATOR UNIT). SAND BARREL VEHICULAR IMPACT ATTENUATOR UNLESS OTHERWISE SPECIFIED, SHALL BECOME THE PROPERTY OF STATE OF NEW MEXICO AT COMPLETION OF CONSTRUCTION AND SHALL NOT REVERT TO THE CONTRACTOR. THIS ITEM SHALL BE DELIVERED AND STOCKPILED AT LOCATIONS DIRECTED BY THE PROJECT MANAGER..

15. THE CONTRACTOR SHALL HAVE A RESPONSIBLE PERSON ON SITE DURING WORKING HOURS AND ON CALL DURING NON-WORKING HOURS TO INSPECT AND MAINTAIN PROJECT TRAFFIC CONTROL, OR AS DIRECTED BY THE PROJECT MANAGER.

16. ALL NON-APPLICABLE SIGNING SHALL BE REMOVED OR COVERED COMPLETELY WITH AN OPAQUE NON-LIGHT TRANSMITTING MATERIAL. ALL REMAINING, NON-APPLICABLE TRAFFIC CONTROL DEVICES ARE TO BE REMOVED AND STORED AT LOCATIONS DESIGNATED BY THE PROJECT MANAGER.

17. BID ITEM-(PRECAST CONCRETE WALL BARRIER). PRECAST CONC. WALL BARRIER WHEN USED FOR TRAFFIC CONTROL PURPOSES, SHALL BECOME THE PROPERTY OF THE STATE OF NEW MEXICO AT COMPLETION OF THE PROJECT. PRECAST CONC. WALL BARRIER SHALL NOT REVERT TO THE CONTRACTOR OR UNLESS OTHERWISE SPECIFIED.

PRECAST CWB SHALL BE FABRICATED IN EITHER 10' UNITS OR 12.5' UNITS TO THE DIMENSIONS SHOWN ON PLANS. ALL PRECAST CWB UTILIZED IN THE WORK SHALL BE OF SAME LENGTH AND DESIGN, INTERMIXING WILL NOT BE ALLOWED. WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF SECTION 503-PORTLAND CEMENT CONCRETE, SECTION 504.022 (C) -STEEL REINFORCEMENT.

WHEN NEW PRECAST CWB IS CALLED FOR ON PLAN, THE CWB SHALL BE DELIVERED TO THE DESIGNATED AREA AND SITE AT COMPLETION OF WORK. CONTRACTOR IS TO UNLOAD AND STOCKPILE PRECAST CWB AS DIRECTED BY THE PROJECT MANAGER. HAULING AND STOCKPIILING OF NEW PRECAST CWB TO DESIGNATED AREA AND SITE SHALL BE INCIDENTAL TO THE ITEM FOR PRECAST CWB.

18. THE FOLLOWING PROCEDURES SHALL GOVERN ALL TRAFFIC CONTROL PLANS INVOLVING SINGLE LANE TRAFFIC. THE REGULATORY AND ADVISORY SPEED LIMIT POSTINGS, AS PART OF THESE TRAFFIC CONTROL PLANS ARE SHOWN ON THE SIGN FACE DETAIL SHEET. FOR VARIATION IN THE TRAFFIC CONTROL PLAN, AN ENGINEERING STUDY SHALL BE DONE AT THE PROJECT SITE. THE ENGINEERING STUDY SHALL BE PERFORMED BY THE DISTRICT TRAFFIC ENGINEER, IN ACCORDANCE WITH SECTION 2B-10 OF THE 1988 EDITION OF THE MUTCD AND CURRENT REVISIONS.

19. EACH SIGN FACE SHOWN ON PLANS SHALL MEET THE SPECIFICATIONS IN THE STANDARD HIGHWAY SIGNS MANUAL (1988 EDITION) FOR PROPER ARRANGEMENT, SPACING OF LETTERS, LETTER HEIGHT, LETTER SERIES, SYMBOLS, AND BORDERS FOR THE SPECIFIED SIZE AND MESSAGE AS SHOWN ON PLANS.

SUMMARY OF QUANTITIES

ITEM NO.	BID ITEM	UNITS		TOTAL
606403	PRECAST CONCRETE WALL BARRIER TYPE II	LIN. FT.		0
606012	W-BEAM / BARREL WALL BARRIER	LIN. FT.		0
606405	HAULING OF PRECAST WALL BARRIER	LIN. FT.		0
606410	RESETTING OF PRECAST WALL BARRIER	LIN. FT.		0
702000	CONSTRUCTION SIGNING	SQ. FT.		562
702103	STEEL POSTS AND BASE POSTS FOR CONSTRUCTION SIGNING	LIN. FT.		0
702145	PORTABLE SIGN SUPPORT	EACH		33
702205	BARRICADE, TYPE I	EACH		0
702210	BARRICADE, TYPE II	EACH		0
702214	BARRICADE, TYPE III (6 FT.)	EACH		0
702215	BARRICADE, TYPE III (8 FT.)	EACH		18
702330	VERTICAL PANEL, SINGLE TYPE	EACH		5
702335	VERTICAL PANEL, BACK TO BACK	EACH		0
702349	CHANNELIZATION DEVICE BARREL TYPE "A"	EACH		0
702350	CHANNELIZATION DEVICE BARREL TYPE "B"	EACH		153
702360	CONSTRUCTION TRAFFIC MARKERS	EACH		0
702400	SEQUENTIAL ARROW DISPLAY	EACH		0
703120	TUBULAR TRAFFIC MARKER	EACH		0
703210	REFLECTIVE BARRIER DELINEATOR	EACH		0
704010	REFLECTORIZED PAINTED MARKINGS	LIN. FT.		2500
704015	ADHESIVE MARKING TAPE FOR CONSTRUCTION ZONES	LIN. FT.		0
704016	ADHESIVE NON-METALLIC MARKING TAPE	LIN. FT.		0
717140	TEMPORARY REFLECTIVE PAVEMENT MARKER TYPE "TD"	LIN. FT.		0
720015	SAND-BARREL VEHICULAR IMPACT ATTENUATOR UNIT	LIN. FT.		0
721001	REMOVAL OF PAVEMENT STRIPE	LIN. FT.		2500
*	CLEANING OF REFLECTIVE SURFACES ON TRAFFIC CONTROL DEVICES	SQ. FT.		562

* - INCIDENTAL TO ITEM 702000



DATE	8-17-92
ENGINEER	Raymond W. Nolasco
APPROVALS	
DRC CHAIRMAN	8-26-92
TRANSPORTATION	8-23-92
HYDROLOGY	8-20-92
WATER	8-20-92
WASTE WATER	8-20-92

3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
TRAFFIC CONTROL DEVICES FOR CONSTRUCTION			
SUMMARY OF QUANTITIES			
GMA, INC. 5700 HARPER DR. NE, STE. 240 ALBUQUERQUE, NM 87109			

FILENAME: SD0LBIII
PROJECT NAME: LOMAS/BROADWAY
PROJECT NO. 89001.00
DATE: 10/28/91

DRAWN BY: BJG
DESIGNED BY: RH

SIGN CODE	NO. OF SIGNS	TOTAL SIGN AREA SQ.FT.	POST LENGTHS				MOUNTING REQUIREMENTS					BASE POSTS		
			LEFT	CTR.	RIGHT	TOTAL	FLANGED CHANNEL		DRIVEDOWN POSTS		PORTABLE SIGN SUPPORT	NO.	TOTAL LENGTH	
							2-20 1/8" x 1/2"	3-30 1/8" x 1/2"	4-40 1/8" x 1/2"	5-50 1/8" x 1/2"				6-60 1/8" x 1/2"
PHASE II (BROADWAY BLVD. SIGNING)														
W20-1 (AHEAD)	1	(16)										(1)		
W13-1 (25)	1	(4)										-		
W20-5L(AHEAD)	1	(16)										(1)		
W13-1 (25)	1	(4)										-		
W4-2L	1	(16)										(1)		
W13-1 (25)	1	(4)										-		
G20-2	1	(10)										(1)		
R4-7A	1	(10)	ON VERTICAL PANEL									-		
W1-4R	1	16										1		
W13-1(25)	1	(4)										-		
R3-2	1	(4)	ON VERTICAL PANEL									-		
R4-7A	2	(10)	ON VERTICAL PANEL									-		
R3-2	1	(4)										-		
R3-2	1	4	ON VERTICAL PANEL									-		
R4-7A	1	(10)										-		
R3-2	1	4	ON VERTICAL PANEL									-		
W6-3	1	(10)										(1)		
R4-7A	2	10										1		
W1-3L	1	16										1		
W13-1(25)	1	(4)										-		
W1-3L	1	16										1		
W13-1(25)	1	(4)										-		
G20-2	1	(10)										(1)		
W4-2R	1	(16)										(1)		
W13-1(25)	1	(4)										-		
W20-5R(AHEAD)	1	(16)										(1)		
W13-1(25)	1	(4)										-		
W20-1(AHEAD)	1	(16)										(1)		
W13-1 (25)	1	(4)										-		
		-66-										-4-		
PHASE II (LOMAS BLVD. SIGNING)														
W20-1 (AHEAD)	1	(16)										(1)		
W13-1 (25)	1	(4)										-		
W20-1 (AHEAD)	1	(16)										(1)		
W13-1 (25)	1	(4)										-		
W20-5L(AHEAD)	1	16										1		
W13-1(25)	1	(4)										-		
W20-5L(AHEAD)	1	16										1		
W13-1 (25)	1	(4)										-		
W4-2L	1	16										1		
W13-1(25)	1	(4)										-		
W4-2L	1	16										1		
W13-1 (25)	1	(4)										-		
G20-2	1	(10)										(1)		
R3-2	1	(4)										(1)		
R3-2	1	(4)										(1)		
R3-2	1	(4)										(1)		
R4-7A	1	10										-		
R3-2	1	(4)										(1)		
R3-2	1	4										1		
W20-1(AHEAD)	1	(16)										(1)		
W13-1 (25)	1	(4)										-		
R3-2	1	4										1		
W20-5L(AHEAD)		16										1		
W13-1 (25)	1	(4)										-		
W13-1 (25)	1	(4)										-		
W4-2L	1	16										1		
		-114-										-8-		

() SIGN(S) AND/OR SUPPORT(S) USED IN OTHER CONSTRUCTION PHASE(S).
NO ADDITIONAL PAYMENT THEREFORE.
* NO ADDITIONAL POST NEEDED. SIGN TO BE MOUNTED ON COMMON POST WITH ANOTHER SIGN.
NOTE:

1. TRAFFIC CONTROL PLANS AND QUANTITIES MAY VARY AS FIELD CONDITIONS DICTATE. THE CONTRACTOR WILL BE PAID FOR ACTUAL QUANTITIES USED. PLACING, RELOCATING AND MAINTENANCE OF TRAFFIC CONTROL DEVICES AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE PROJQT MANAGER ARE TO BE INCIDENTAL TO THE UNIT BID PRICE.

2. ALL TRAFFIC CONTROL DEVICES FOR DETOURS SHALL COMPLY WITH STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION-SECTION 702 (1984 EDITION) AND CHAPTER VI OF THE 1988 EDITION MUTCD AND CURRENT REVISIONS.
3. ALL CONSTRUCTION SIGNING SHALL BE BLACK ON REFLECTIVE ORANGE UNLESS OTHERWISE SPECIFIED. ALL CONSTRUCTION BARRICADES AND CHANNELIZATION DEVICES SHALL BE ORANGE ON WHITE REFLECTORIZED UNLESS OTHERWISE SPECIFIED.
4. BID ITEM-(STEEL POSTS AND BASE POSTS FOR DETOUR SIGNS). THE CONTRACTOR SHALL HAVE THE OPTION OF SUPPLYING EITHER THE FLANGED CHANNEL OR THE DRIVEDOWN POST AS PER NEW MEXICO STANDARD SERIALS-SN 75-1, TBAC-001-10 & TBAC-002-11.
5. BID ITEM-(TYPE III BARRICADE-6' OR 8'). TYPE III BARRICADES SHALL BE ORANGE ON WHITE REFLECTORIZED. ATTACHED TYPE "A" FLASHING BEACONS, PLYWOOD ARROW AND ROAD CLOSED SIGNS ARE TO BE INCIDENTAL TO BID PRICE.
6. BID ITEM-(TYPE I BARRICADE-2'). TYPE I BARRICADE SHALL BE ORANGE ON WHITE REFLECTORIZED. ATTACHED HIGH INTENSITY FLASHING BEACON ARE TO BE INCIDENTAL TO BID PRICE. BID UNIT-PER EACH.
7. BID ITEM-(VERICAL PANELS, SINGLE OR BACK TO BACK 8"x24"). VERTICAL PANELS SHALL BE ORANGE ON WHITE REFLECTORIZED SHEETING. .060 MIN 6061 T-6. PANELS TO BE MOUNTED ON DRIVEDOWN POST EITHER 3' DRIVE OR ON STANCHION. BID UNIT-PER EACH.
8. FLAGGING SHALL BE PROVIDED FOR SAFETY AND/OR AS DIRECTED BY THE PROJECT MANAGER. FLAGGERS SHALL USE STOP/SLOW PADDLES (18"x18" MIN) IN ACCORDANCE WITH THE MUTCD. THE FLAGGER, APPLICABLE SIGNS AND OTHER RELATED ITEMS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, NO PAYMENT OR MEASUREMENT WILL BE MADE THEREFORE.
9. BID ITEM-(CHANNELIZATION DEVICE BARREL TYPE "A" OR "B"). CHANNELIZATION DEVICE BARRELS SHALL BE ORANGE ON WHITE REFLECTORIZED. TYPE "A" REQUIRES NO BEACON. TYPE "B" SHALL BE EQUIPPED WITH BEACON AS SPECIFIED IN THE STANDARD AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 702-021 (G), 1984 EDITION.
10. THE PROVISIONS AS INCLUDED IN THE PLANS AND SPECIFICATIONS FOR HANDLING AND CONTROLLING TRAFFIC DURING CONSTRUCTION OF THE PROJECT MAY BE CHANGED BY THE DISTRICT TRAFFIC ENGINEER. IF, BECAUSE OF FIELD CONDITION AS ACTUALLY ENCOUNTERED, SUCH CHANGES WILL BE MADE BY WRITTEN INSTRUCTION TO THE CONTRACTOR, AND SHALL BE CONSIDERED AN AMMENDMENT TO THE PLANS AND SPECIFICATION AS OF THE DATE OF THE CHANGE.
11. THE CONTRACTOR SHALL SUBMIT ANY PROPOSED CHANGES IN THE TRAFFIC CONTROL PLAN TO THE DISTRICT TRAFFIC ENGINEER FOR APPROVAL.
12. NO PAYMENT WILL BE MADE FOR ANY ADDITIONAL COST RESULTING FROM APPROVED TRAFFIC CONTROL PLAN CHANGES REQUESTED BY THE CONTRACTOR.
13. ITEM 704010 IS INCLUDED FOR PAVEMENT STRIPING BETWEEN SURFACING LIFTS AS DIRECTED BY THE PROJECT MANAGER.
14. BID ITEM-(SAND BARREL VEHICULAR IMPACT ATTENUATOR UNIT). SAND BARREL VEHICULAR IMPACT ATTENUATOR UNLESS OTHERWISE SPECIFIED, SHALL BECOME THE PROPERTY OF STATE OF NEW MEXICO AT COMPLETION OF CONSTRUCTION AND SHALL NOT REVERT TO THE CONTRACTOR. THIS ITEM SHALL BE DELIVERED AND STOCKPILED AT LOCATIONS DIRECTED BY THE PROJECT MANAGER..
15. THE CONTRACTOR SHALL HAVE A RESPONSIBLE PERSON ON SITE DURING WORKING HOURS AND ON CALL DURING NON-WORKING HOURS TO INSPECT AND MAINTAIN PROJECT TRAFFIC CONTROL, OR AS DIRECTED BY THE PROJECT MANAGER.
16. ALL NON-APPLICABLE SIGNING SHALL BE REMOVED OR COVERED COMPLETELY WITH AN OPAQUE NON-LIGHT TRANSMITTING MATERIAL. ALL REMAINING, NON-APPLICABLE TRAFFIC CONTROL DEVICES ARE TO BE REMOVED AND STORED AT LOCATIONS DESIGNATED BY THE PROJECT MANAGER.
17. BID ITEM-(PRECAST CONCRETE WALL BARRIER). PRECAST CONC. WALL BARRIER WHEN USED FOR TRAFFIC CONTROL PURPOSES, SHALL BECOME THE PROPERTY OF THE STATE OF NEW MEXICO AT COMPLETION OF THE PROJECT. PRECAST CONC. WALL BARRIER SHALL NOT REVERT TO THE CONTRACTOR OR UNLESS OTHERWISE SPECIFIED.
- PRECAST CWB SHALL BE FABRICATED IN EITHER 10' UNITS OR 12.5' UNITS TO THE DIMENSIONS SHOWN ON PLANS. ALL PRECAST CWB UTILIZED IN THE WORK SHALL BE OF SAME LENGTH AND DESIGN, INTERMIXING WILL NOT BE ALLOWED. WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF SECTION 503-PORTLAND CEMENT CONCRETE, SECTION 504.022 (C) -STEEL REINFORCEMENT.
- WHEN NEW PRECAST CWB IS CALLED FOR ON PLAN, THE CWB SHALL BE DELIVERED TO THE DESIGNATED AREA AND SITE AT COMPLETION OF WORK. CONTRACTOR IS TO UNLOAD AND STOCKPILE PRECAST CWB AS DIRECTED BY THE PROJECT MANAGER. HAULING AND STOCKPIILING OF NEW PRECAST CWB TO DESIGNATED AREA AND SITE SHALL BE INCIDENTAL TO THE ITEM FOR PRECAST CWB.
18. THE FOLLOWING PROCEDURES SHALL GOVERN ALL TRAFFIC CONTROL PLANS INVOLVING SINGLE LANE TRAFFIC. THE REGULATORY AND ADVISORY SPEED LIMIT POSTINGS, AS PART OF THESE TRAFFIC CONTROL PLANS ARE SHOWN ON THE SIGN FACE DETAIL SHEET. FOR VARIATION IN THE TRAFFIC CONTROL PLAN, AN ENGINEERING STUDY SHALL BE DONE AT THE PROJECT SITE. THE ENGINEERING STUDY SHALL BE PERFORMED BY THE DISTRICT TRAFFIC ENGINEER, IN ACCORDANCE WITH SECTION 2B-10 OF THE 1988 EDITION OF THE MUTCD AND CURRENT REVISIONS.
19. EACH SIGN FACE SHOWN ON PLANS SHALL MEET THE SPECIFICATIONS IN THE STANDARD HIGHWAY SIGNS MANUAL (1988 EDITION) FOR PROPER ARRANGEMENT, SPACING OF LETTERS, LETTER HEIGHT, LETTER SERIES, SYMBOLS, AND BORDERS FOR THE SPECIFIED SIZE AND MESSAGE AS SHOWN ON PLANS.

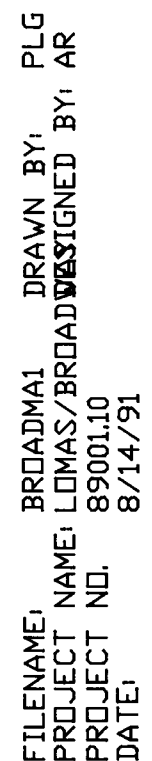


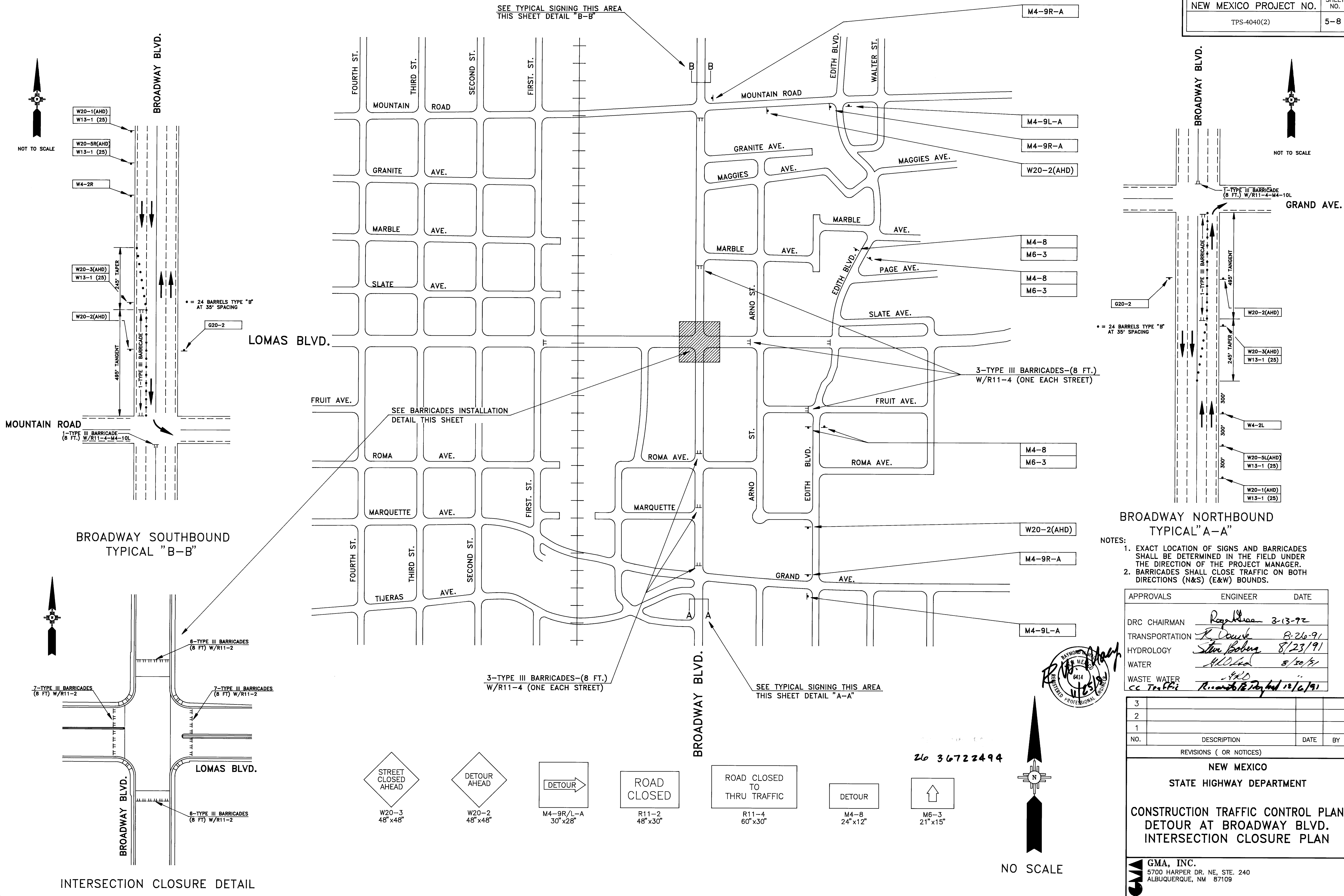
SUMMARY OF QUANTITIES

ITEM NO.	BID ITEM	UNITS		TOTAL
606403	PRECAST CONCRETE WALL BARRIER TYPE II	LIN. FT.		0
606012	W-BEAM / BARREL WALL BARRIER	LIN. FT.		0
606405	HAULING OF PRECAST WALL BARRIER	LIN. FT.		0
606410	RESETTING OF PRECAST WALL BARRIER	LIN. FT.		0
702000	CONSTRUCTION SIGNING	SQ. FT.		180
702103	STEEL POSTS AND BASE POSTS FOR CONSTRUCTION SIGNING	LIN. FT.		0
702145	PORTABLE SIGN SUPPORT	EACH		12
702205	BARRICADE, TYPE I	EACH		0
702210	BARRICADE, TYPE II	EACH		0
702214	BARRICADE, TYPE III (6 FT.)	EACH		0
702215	BARRICADE, TYPE III (8 FT.)	EACH		17
702330	VERTICAL PANEL, SINGLE TYPE	EACH		0
702335	VERTICAL PANEL, BACK TO BACK	EACH		0
702349	CHANNELIZATION DEVICE BARREL TYPE "A"	EACH		0
702350	CHANNELIZATION DEVICE BARREL TYPE "B"	EACH		154
702360	CONSTRUCTION TRAFFIC MARKERS	EACH		0
702400	SEQUENTIAL ARROW DISPLAY	EACH		0
703120	TUBULAR TRAFFIC MARKER	EACH		0
703210	REFLECTIVE BARRIER DELINEATOR	EACH		0
704010	REFLECTORIZED PAINTED MARKINGS	LIN. FT.		2500
704015	ADHESIVE MARKING TAPE FOR CONSTRUCTION ZONES	LIN. FT.		0
704016	ADHESIVE NON-METALLIC MARKING TAPE	LIN. FT.		0
717140	TEMPORARY REFLECTIVE PAVEMENT MARKER TYPE "TD"	LIN. FT.		0
720015	SAND-BARREL VEHICULAR IMPACT ATTENUATOR UNIT	LIN. FT.		0
721001	REMOVAL OF PAVEMENT STRIPE	LIN. FT.		2500
*	CLEANING OF REFLECTIVE SURFACES ON TRAFFIC CONTROL DEVICES	SQ. FT.		126

* INCIDENTAL TO ITEM 702000

3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
TRAFFIC CONTROL DEVICES FOR CONSTRUCTION SUMMARY OF QUANTITIES			
GMA, INC. 5700 HARPER DR. NE, STE. 240 ALBUQUERQUE, NM 87109			





BROADWAY SOUTHBOUND
TYPICAL "B-B"

BROADWAY NORTHBOUND
TYPICAL "A-A"

- NOTES:
- 1. EXACT LOCATION OF SIGNS AND BARRICADES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE PROJECT MANAGER.
 - 2. BARRICADES SHALL CLOSE TRAFFIC ON BOTH DIRECTIONS (N&S) (E&W) BOUNDS.

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>R. Deane</i>	3-13-92
TRANSPORTATION	<i>R. Deane</i>	8-26-91
HYDROLOGY	<i>Steve Bohrer</i>	8/23/91
WATER	<i>W. O'Brien</i>	8/30/91
WASTE WATER	<i>CC Trethke</i>	12/6/91

NO.	DESCRIPTION	DATE	BY
3			
2			
1			

REVISIONS (OR NOTICES)

NEW MEXICO
STATE HIGHWAY DEPARTMENT

CONSTRUCTION TRAFFIC CONTROL PLAN
DETOUR AT BROADWAY BLVD.
INTERSECTION CLOSURE PLAN

GMA, INC.
5700 HARPER DR. NE, STE. 240
ALBUQUERQUE, NM 87109

FILENAME: BROADWAY
PROJECT NAME: LOMAS/BROADWAY
PROJECT NO.: 8900130
DATE: 8/14/91

INTERSECTION CLOSURE DETAIL

F.H.A.A. Project No.	STATE	N. M. P.	SHEET TOTAL NO. SHEETS
6	NEW MEXICO	TPS-4040(2)	5-9

SUMMARY OF QUANTITIES.

ITEM N°	BID ITEM	UNITS	TOTAL
702000	CONSTRUCTION SIGNING	SQ. FT.	
702103	STEEL POSTS AND BASE POSTS FOR CONSTRUCTION SIGNING	LIN. FT.	
702205	BARRICADE, TYPE I	EACH	
702210	BARRICADE, TYPE II	EACH	
702215	BARRICADE, TYPE III 8 FT.	EACH	
702214	BARRICADE TYPE III 6 FT.	EACH	
702330	VERTICAL PANEL, SINGLE TYPE	EACH	
702335	VERTICAL PANEL, BACK TO BACK TYPE	EACH	
702360	CONSTRUCTION TRAFFIC MARKER	EACH	
702145	PORTABLE SIGN SUPPORT	EACH	
702349	CHANNELIZATION DEVICE - (BARREL) - TYPE "A"	EACH	
702350	CHANNELIZATION DEVICE (BARREL) - TYPE "B"	EACH	
702400	SEQUENTIAL ARROW DISPLAY	EACH	
703210	REFLECTIVE BARRIER DELINEATOR	EACH	
703120	TUBULAR TRAFFIC MARKER	EACH	
702365	TRAFFIC CONES	EACH	
704010	REFLECTORIZED PAINTED MARKINGS	LIN. FT.	
704015	ADHESIVE MARKING TAPE FOR CONSTRUCTION ZONES	LIN. FT.	
704016	ADHESIVE NON-METALLIC MARKING TAPE	LIN. FT.	
720015	SAND-BARREL VEHICULAR IMPACT ATTENUATOR UNIT	EACH	
721001	REMOVAL OF PAVEMENT STRIPE	LIN. FT.	
606402	PRECAST CONCRETE WALL BARRIER	LIN. FT.	
606012	W-BEAM / BARREL BARRIER	LIN. FT.	
606405	HAULING PRECAST CONCRETE WALL BARRIER	LIN. FT.	
606410	RESETTING OF PRECAST WALL BARRIER	LIN. FT.	
717140	TEMPORARY REFLECTIVE PAVEMENT MARKER TYPE "TD"	EACH	
INCIDENTAL TO ITEM 702000	CLEANING OF REFLECTIVE SURFACES ON TRAFFIC CONTROL DEVICES	SQ. FT.	

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No.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT TRAFFIC DESIGN SECTION TRAFFIC CONTROL DEVICES FOR CONSTRUCTION SUMMARY OF QUANTITIES			

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	MA	
TRANSPORTATION	A. D. D. 8-26-91	
HYDROLOGY	Steve Bohrer 8/23/91	
WATER	A/A	
WASTE WATER	MA	



NOTES.

- 1.) TRAFFIC CONTROL PLAN AND QUANTITIES MAY VARY AS FIELD CONDITIONS DICTATE. THE CONTRACTOR WILL BE PAID FOR ACTUAL QUANTITIES USED. PLACING, RELOCATION, AND MAINTENANCE OF TRAFFIC CONTROL DEVICES AS SHOWN ON THE PLAN, OR AS DIRECTED BY THE PROJECT MANAGER ARE TO BE INCIDENTAL TO THE UNIT BID PRICE.
- 2.) ALL TRAFFIC CONTROL DEVICES FOR DETOURS SHALL COMPLY WITH STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION - SECTION 702 (1984 EDITION) AND CHAPTER VI OF THE 1978 EDITION MUTCD.
- 3.) ALL CONSTRUCTION SIGNING SHALL BE BLACK ON REFLECTIVE ORANGE UNLESS OTHERWISE SPECIFIED. ALL CONSTRUCTION BARRICADES AND CHANNELIZATION DEVICES SHALL BE ORANGE ON WHITE REFLECTORIZED UNLESS OTHERWISE SPECIFIED.
- 4.) BID ITEM - (STEEL POSTS AND BASE POSTS FOR DETOUR SIGNS). THE CONTRACTOR SHALL HAVE THE OPTION OF SUPPLYING EITHER THE FLANGED CHANNEL OR THE DRIVEDOWN POST AS PER NEW MEXICO STANDARD SERIALS. REFER TO SERIALS SN 75-1, TBAC-001-10 AND TBAC-002-11.
- 5.) BID ITEM - (TYPE III BARRICADE-6' OR 8'). TYPE III BARRICADES SHALL BE ORANGE ON WHITE REFLECTORIZED. ATTACHED TYPE "A" FLASHING BEACONS, PLYWOOD ARROW AND ROAD CLOSED SIGNS ARE TO BE INCIDENTAL TO BID PRICE. BID UNIT - PER EACH.
- 6.) BID ITEM - (TYPE I BARRICADE-8'). TYPE I BARRICADE SHALL BE ORANGE ON WHITE REFLECTORIZED. ATTACHED HIGH INTENSITY FLASHING BEACON ARE TO BE INCIDENTAL TO BID PRICE. BID UNIT - PER EACH.
- 7.) BID ITEM - (VERTICAL PANELS, SINGLE TYPE OR BACK TO BACK 8"x24"). VERTICAL PANELS SHALL BE ORANGE ON WHITE REFLECTORIZED SHEETING .060 MIN 6061 T-6. PANELS TO BE MOUNTED ON DRIVE-DOWN POST EITHER 3' DRIVE OR ON STANCHION. BID UNIT - PER EACH.
- 8.) FLAGGING SHALL BE PROVIDED FOR SAFETY AND/OR AS DIRECTED BY THE PROJECT MANAGER. FLAGGERS SHALL USE STOP/SLOW PADDLES (18"x18" MIN.) IN ACCORDANCE WITH THE MUTCD. THE FLAGGER, APPLICABLE SIGNS AND OTHER RELATED ITEMS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, NO PAYMENT OR MEASUREMENT WILL BE MADE THEREFORE.
- 9.) BID ITEM - (CHANNELIZATION DEVICE BARREL TYPE "A" OR TYPE "B"). CHANNELIZATION DEVICE BARRELS SHALL BE ORANGE ON WHITE REFLECTORIZED. TYPE "A" REQUIRES NO BEACON. TYPE "B" SHALL BE EQUIPPED WITH BEACON AS SPECIFIED IN THE STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 702.021 (g), 1984 EDITION.
- 10.) THE PROVISIONS AS INCLUDED IN THE PLANS AND SPECIFICATIONS FOR HANDLING AND CONTROLLING TRAFFIC DURING CONSTRUCTION OF THE PROJECT MAY BE CHANGED BY THE DISTRICT HIGHWAY ENGINEER IF, BECAUSE OF FIELD CONDITION AS ACTUALLY ENCOUNTERED, SUCH CHANGES ARE DESIRABLE AT THE DISCRETION OF THE PROJECT MANAGER. THESE CHANGES WILL BE MADE BY WRITTEN INSTRUCTION TO THE CONTRACTOR, AND SHALL BE CONSIDERED AN AMENDMENT TO THE PLANS AND SPECIFICATION AS OF THE DATE OF THE CHANGE.
- 11.) THE CONTRACTOR SHALL SUBMIT ANY PROPOSED CHANGES IN THE TRAFFIC CONTROL PLAN TO THE DISTRICT HIGHWAY ENGINEER FOR APPROVAL.
- 12.) NO PAYMENT WILL BE MADE FOR ANY ADDITIONAL COST RESULTING FROM APPROVED TRAFFIC CONTROL PLAN CHANGES REQUESTED BY THE CONTRACTOR.
- 13.) ITEM 704010 IS INCLUDED FOR PAVEMENT STRIPING BETWEEN SURFACING LIFTS AS DIRECTED BY THE PROJECT MANAGER.
- 14.) BID ITEM - (SAND BARREL VEHICULAR IMPACT ATTENUATOR UNIT). SAND BARREL VEHICULAR ATTENUATOR UNLESS OTHERWISE SPECIFIED, SHALL BECOME THE PROPERTY OF STATE OF NEW MEXICO AT COMPLETION OF CONSTRUCTION AND SHALL NOT REVERT TO THE CONTRACTOR. THIS ITEM SHALL BE DELIVERED AND STOCK-PILED AT LOCATIONS DIRECTED BY THE PROJECT MANAGER.
- 15.) THE CONTRACTOR SHALL HAVE A RESPONSIBLE PERSON ON SITE DURING WORKING HOURS AND ON CALL DURING NON WORKING HOURS TO INSPECT AND MAINTAIN PROJECT TRAFFIC CONTROL, OR AS DIRECTED BY PROJECT MANAGER.
- 16.) ALL NON-APPLICABLE SIGNING SHALL BE REMOVED OR COVERED COMPLETELY WITH AN OPAQUE NON-LIGHT TRANSMITTING MATERIAL. ALL REMAINING, NON-APPLICABLE TRAFFIC CONTROL DEVICES ARE TO BE REMOVED AND STORED AT LOCATIONS DESIGNATED BY THE PROJECT MANAGER.
- 17.) BID ITEM - (PRECAST CONCRETE WALL BARRIER). PRECAST CONCRETE WALL BARRIER WHEN USED FOR TRAFFIC CONTROL PURPOSES, SHALL BECOME THE PROPERTY OF THE STATE OF NEW MEXICO AT COMPLETION OF THE PROJECT. PRECAST CONCRETE WALL BARRIER SHALL NOT REVERT TO THE CONTRACTOR OR UNLESS OTHERWISE SPECIFIED. PRECAST CONCRETE WALL BARRIER SHALL BE FABRICATED IN EITHER 10' UNITS OR 12.5' UNITS TO THE DEMENSIONS SHOWN ON PLANS. ALL PRECAST CONCRETE WALL BARRIER UTILIZED IN THE WORK SHALL BE OF THE SAME LENGTH AND DESIGN. INTERMIXING WILL NOT BE ALLOWED. WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF SECTION 503 - PORTLAND CEMENT CONCRETE, SECTION 504.022(C) - STEEL REINFORCEMENT. WHEN NEW PRECAST CONCRETE WALL BARRIER IS CALLED FOR ON PLAN, THE WALL BARRIER SHALL BE DELIVERED TO THE DESIGNATED AREA AND SITE AT COMPLETION OF WORK. CONTRACTOR IS TO UNLOAD AND STOCKPILE PRECAST CONCRETE WALL BARRIER AS DIRECTED BY THE PROJECT MANAGER. HAULING AND STOCKPILING OF NEW PRECAST CONCRETE WALL BARRIER TO DESIGNATED AREA AND SITE SHALL BE INCIDENTAL TO THE ITEM FOR PRECAST CONCRETE WALL BARRIER. THE DESIGNATED AREA IS

SIGN CODE	N° OF SIGNS	TOTAL SIGN AREA SQ. FT.	POST LENGTHS				MOUNTING REQUIREMENTS						BASE-POSTS	
							FLANGED CHANNEL			DRIVEDOWN POSTS 0.1345 THICK		PORTABLE SIGN SUPPORT		
			2.25 Lb/Ft.	3.00 Lb/Ft.	4.00 Lb/Ft.	2 3/16 X 2 3/16	2 1/2 X 2 1/2	N°	TOTAL LENGTH					
DETOUR AT LOMAS BLVD. & BROADWAY BLVD. INTERSECTION CLOSURE OPERATION														
W20-3(AHEAD)	1	16										(1)		
W20-2(AHEAD)	1	16										(1)		
M4-9L (A)	1	5.85										(1)		
G20-2	1	(10)										(1)		
M4-9L	1	5.85										(1)		
W20-2(AHEAD)	1	16										(1)		
M4-9L	1	5										(1)		
W20-3(AHEAD)	1	16										(1)		
W20-2(AHEAD)	1	16										(1)		
M4-9L (A)	1	5.85										(1)		
W20-3(AHEAD)	1	16										(1)		
G20-2	1	(10)										(1)		
W20-3(AHEAD)	1	16										(1)		
W20-2(AHEAD)	1	16										(1)		
M4-9R (A)	1	5.85										(1)		
M4-9L	1	5										(1)		
W20-2(AHEAD)	1	16										(1)		
M4-8	1	2										-		
M6-6R/L	1	2.5										-		
G20-2	1	(10)										-		
M4-8	1	2										-		
M6-6R/L	1	2.5										-		
M4-9R	1	5										-		
W20-2(AHEAD)	1	16										-		
W20-3(AHEAD)	1	16										-		
M4-10L	1	6										-		
M4-9R	1	5										-		
M4-9R	1	5										-		
W20-2(AHEAD)	1	16										-		
G20-2	1	(10)										-		
M4-9L	1	5										-12-		
-201-														
BROADWAY BLVD. O.G.F.C. AND SIGNAL CONDUIT INSTALLATION - RIGHT LANE CLOSURE														
G20-2	1	10										(1)		
W4-2R	1	(16)										(1)		
W20-5R(AHEAD)	1	(16)										(1)		
W20-1(AHEAD)	1	(16)										(1)		
-10-														
BROADWAY BLVD. LEFT LANE CLOSURE														
G20-2	1	10										(1)		
W4-2L	1	(16)										(1)		
W20-5R(AHEAD)	1	(16)										(1)		
W20-1(AHEAD)	1	(16)										(1)		
-10-														
LOMAS BLVD. - LEFT LANE CLOSURE														
G20-2	1	10										(1)		
W20-5L(AHEAD)	1	(16)										(1)		
W20-5L(AHEAD)	1	(16)										(1)		
W4-2L	1	(16)										(1)		
W20-5L(AHEAD)"A"	1	16										(1)		
W20-1(AHEAD)	1	(16)										(1)		
-20-														

() SIGN (S) AND/OR SUPPORT(S) USED IN OTHER CONSTRUCTION PHASE (S). NO ADDITIONAL PAYMENT THEREFORE.
* NO ADDITIONAL POST NEEDED. SIGN TO BE MOUNTED ON COMMON POST WITH ANOTHER SIGN.

SIGN CODE	N° OF SIGNS	TOTAL SIGN AREA SQ. FT.	POST LENGTHS				MOUNTING REQUIREMENTS						BASE-POSTS	
			LEFT	CTR.	RIGHT	TOTAL	FLANGED CHANNEL	DRIVEDOWN POSTS 0.1345 THICK	PORTABLE SIGN SUPPORT				N°	TOTAL LENGTH
				LOMAS	BLVD.	CONTINUED								
				RIGHT	LANE	CLOSURE								
G20-2	1	10												
W20-5R(AHEAD)	1	(16)								(1)				
W20-5R(AHEAD)	1	(16)								(1)				
W4-2R	1	(16)								(1)				
W20-5R(AHEAD) 1/2"	1	16								(1)				
W20-1(AHEAD)	1	(16)								(1)				
		-26-								-2-				

NOTES:

- 1) TRAFFIC CONTROL PLAN AND QUANTITIES MAY VARY AS FIELD CONDITIONS DICTATE. THE CONTRACTOR WILL BE PAID FOR ACTUAL QUANTITIES USED. PLACING, RELOCATION, AND MAINTENANCE OF TRAFFIC CONTROL DEVICES AS SHOWN ON THE PLAN, OR AS DIRECTED BY THE PROJECT MANAGER ARE TO BE INCIDENTAL TO THE UNIT BID PRICE.
- 2) ALL TRAFFIC CONTROL DEVICES FOR DETOURS SHALL COMPLY WITH STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION - SECTION 702 (1984 EDITION) AND CHAPTER VI OF THE 1978 EDITION MUTCD.
- 3) ALL CONSTRUCTION SIGNING SHALL BE BLACK ON REFLECTIVE ORANGE UNLESS OTHERWISE SPECIFIED. ALL CONSTRUCTION BARRICADES AND CHANNELIZATION DEVICES SHALL BE ORANGE ON WHITE REFLECTORIZED UNLESS OTHERWISE SPECIFIED.
- 4) BID ITEM - (STEEL POSTS AND BASE POSTS FOR DETOUR SIGNS). THE CONTRACTOR SHALL HAVE THE OPTION OF SUPPLYING EITHER THE FLANGED CHANNEL OR THE DRIVEDOWN POST AS PER NEW MEXICO STANDARD SERIALS. REFER TO SERIALS SH 75-4, TBAC-001-10 AND TBAC-002-11.
- 5) BID ITEM - (TYPE III BARRICADE-6' OR 8'). TYPE III BARRICADES SHALL BE ORANGE ON WHITE REFLECTORIZED. ATTACHED TYPE "A" FLASHING BEACONS, PLYWOOD ARROW AND ROAD CLOSED SIGNS ARE TO BE INCIDENTAL TO BID PRICE. BID UNIT - PER EACH.
- 6) BID ITEM - (TYPE I BARRICADE-8'). TYPE I BARRICADE SHALL BE ORANGE ON WHITE REFLECTORIZED. ATTACHED HIGH INTENSITY FLASHING BEACON ARE TO BE INCIDENTAL TO BID PRICE. BID UNIT - PER EACH.
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- 8) FLAGGING SHALL BE PROVIDED FOR SAFETY AND/OR AS DIRECTED BY THE PROJECT MANAGER. FLAGGERS SHALL USE STOP/SLOW PADDOLES (18"x18" MIN.) IN ACCORDANCE WITH THE MUTCD. THE FLAGGER, APPLICABLE SIGNS AND OTHER RELATED ITEMS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, NO PAYMENT OR MEASUREMENT WILL BE MADE THEREFORE.
- 9) BID ITEM - (CHANNELIZATION DEVICE BARREL TYPE "A" OR TYPE "B"). CHANNELIZATION DEVICE BARRELS SHALL BE ORANGE ON WHITE REFLECTORIZED. TYPE "A" REQUIRES NO BEACON. TYPE "B" SHALL BE EQUIPPED WITH BEACON AS SPECIFIED IN THE STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 702.021 (g), 1984 EDITION.
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- 12) NO PAYMENT WILL BE MADE FOR ANY ADDITIONAL COST RESULTING FROM APPROVED TRAFFIC CONTROL PLAN CHANGES REQUESTED BY THE CONTRACTOR.
- 13) ITEM 704010 IS INCLUDED FOR PAVEMENT STRIPING BETWEEN SURFACING LIFTS AS DIRECTED BY THE PROJECT MANAGER.
- 14) BID ITEM - (SAND BARREL VEHICULAR IMPACT ATTENUATOR UNIT). SAND BARREL VEHICULAR ATTENUATOR UNLESS OTHERWISE SPECIFIED, SHALL BECOME THE PROPERTY OF STATE OF NEW MEXICO AT COMPLETION OF CONSTRUCTION AND SHALL NOT REVERT TO THE CONTRACTOR. THIS ITEM SHALL BE DELIVERED AND STOCK-PILED AT LOCATIONS DIRECTED BY THE PROJECT MANAGER.
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SUMMARY OF QUANTITIES.

ITEM N°	BID ITEM	UNITS	DETOURING	TOTAL
702000	CONSTRUCTION SIGNING	SQ. FT.	333	
702103	STEEL POSTS AND BASE POSTS FOR CONSTRUCTION SIGNING	LIN. FT.		0
702205	BARRICADE, TYPE I	EACH		0
702210	BARRICADE, TYPE II	EACH		0
702215	BARRICADE, TYPE III 8 FT.	EACH		24
702214	BARRICADE TYPE III 6 FT.	EACH		0
702330	VERTICAL PANEL, SINGLE TYPE	EACH		0
702335	VERTICAL PANEL, BACK TO BACK TYPE	EACH		8
702360	CONSTRUCTION TRAFFIC MARKER	EACH		0
702145	PORTABLE SIGN SUPPORT	EACH	17	
702349	CHANNELIZATION DEVICE - (BARREL) - TYPE "A"	EACH		0
702350	CHANNELIZATION DEVICE (BARREL) - TYPE "B"	EACH		84
702400	SEQUENTIAL ARROW DISPLAY	EACH		0
703210	REFLECTIVE BARRIER DELINEATOR	EACH		0
703120	TUBULAR TRAFFIC MARKER	EACH		0
702365	TRAFFIC CONES	EACH		0
704010	REFLECTORIZED PAINTED MARKINGS	LIN. FT.		7500
704015	ADHESIVE MARKING TAPE FOR CONSTRUCTION ZONES	LIN. FT.		0
704016	ADHESIVE NON-METALLIC MARKING TAPE	LIN. FT.		0
720015	SAND-BARREL VEHICULAR IMPACT ATTENUATOR UNIT	EACH		0
721001	REMOVAL OF PAVEMENT STRIPE	LIN. FT.		2000
606402	PRECAST CONCRETE WALL BARRIER	LIN. FT.		0
606012	W-BEAM / BARREL BARRIER	LIN. FT.		0
606405	HAULING PRECAST CONCRETE WALL BARRIER	LIN. FT.		0
606410	RESETTING OF PRECAST WALL BARRIER	LIN. FT.		0
717140	TEMPORARY REFLECTIVE PAVEMENT MARKER TYPE "TD"	EACH		0
ITEM 702000	INCIDENTAL TO CLEANING OF REFLECTIVE SURFACES ON TRAFFIC CONTROL DEVICES	SQ. FT.		3000

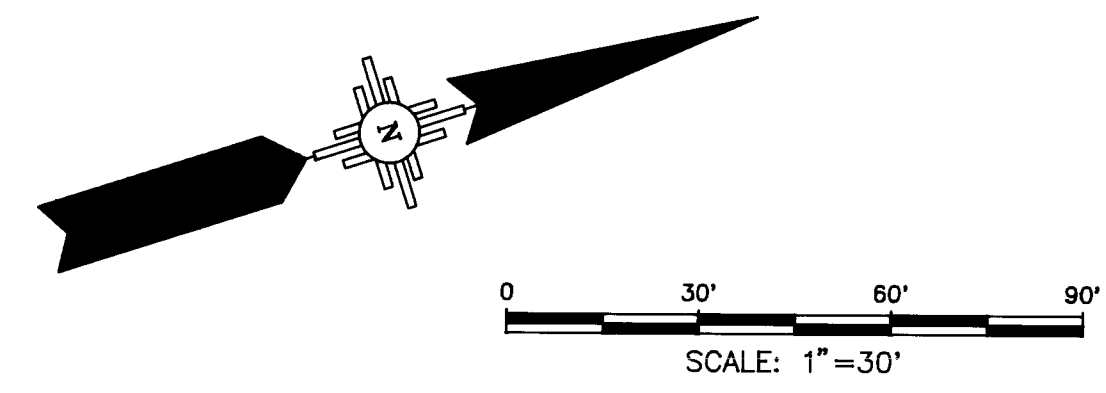
() SIGN (S) AND/OR SUPPORT(S) USED IN OTHER CONSTRUCTION PHASE (S). NO ADDITIONAL PAYMENT THEREFORE.
 * NO ADDITIONAL POST NEEDED. SIGN TO BE MOUNTED ON COMMON POST WITH ANOTHER SIGN.



APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	N/A	
TRANSPORTATION	R. D. Mares	8-26-91
HYDROLOGY	Steve Bohag	8/23/91
WATER	N/A	
WASTE WATER	N/A	

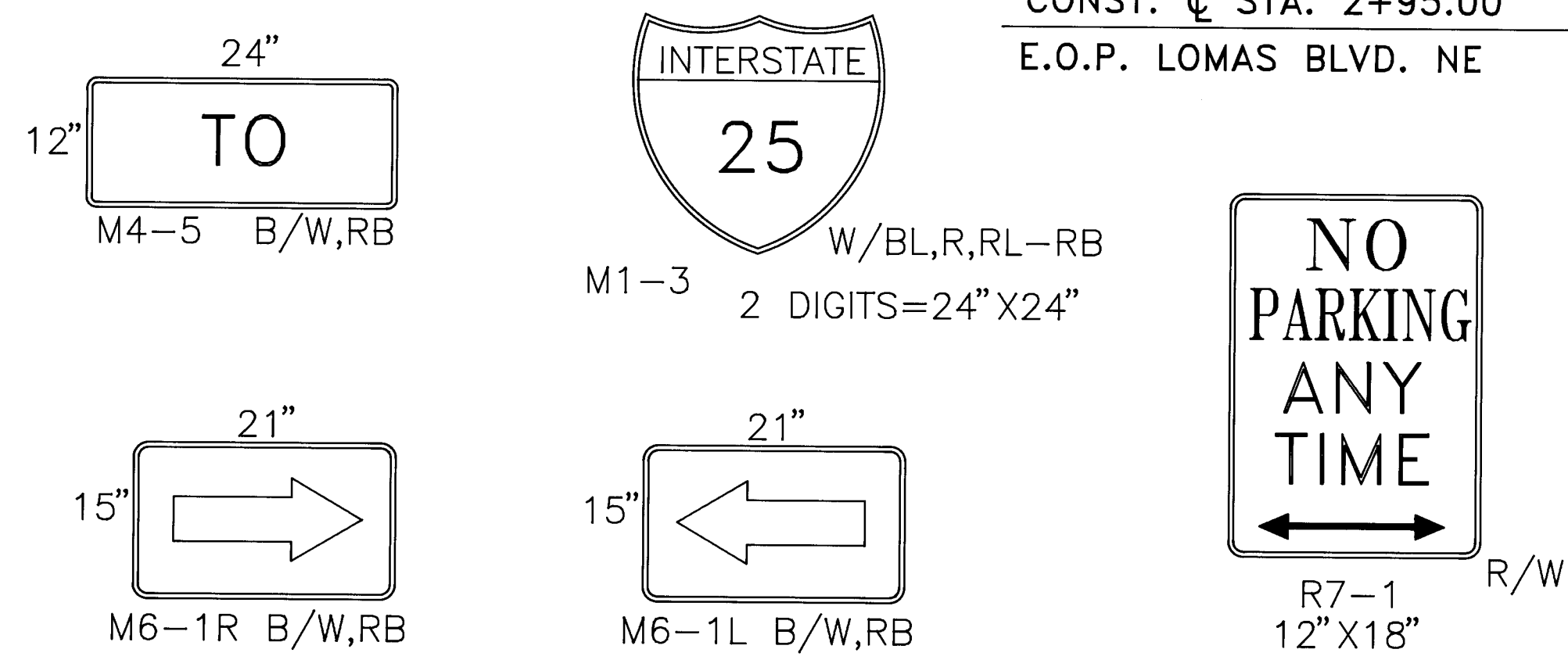
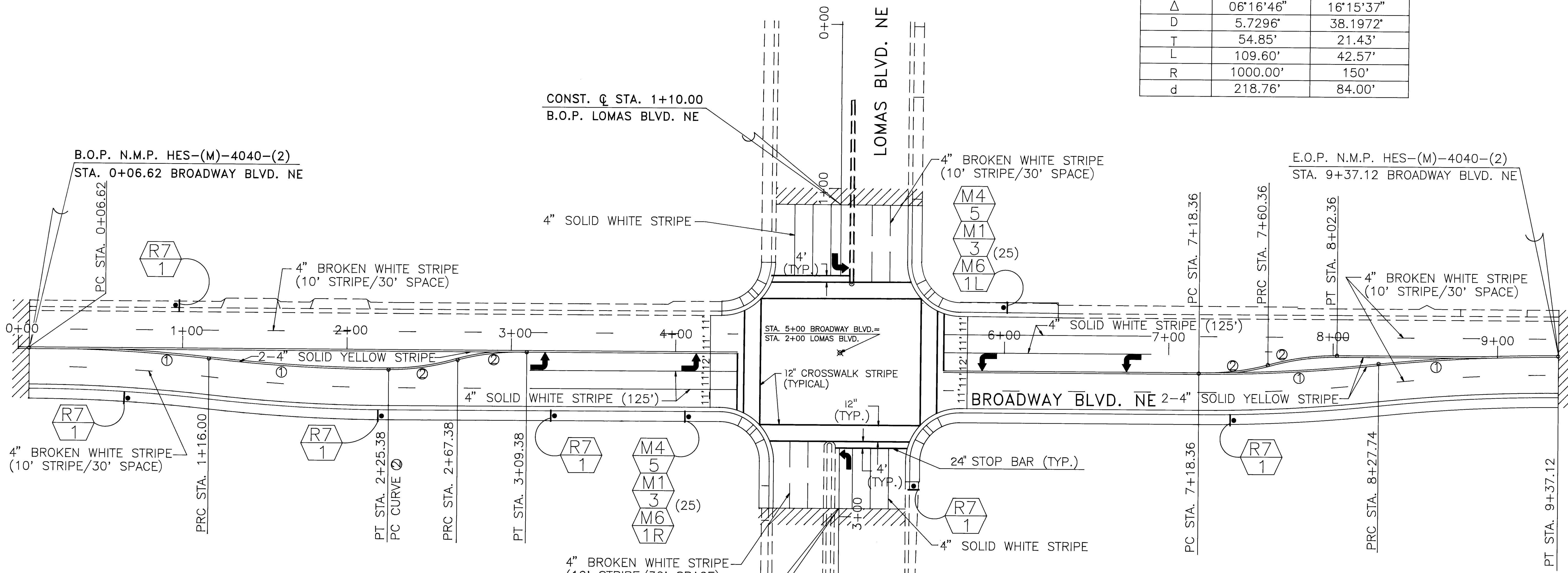
CHIEF PWD Mares & Pore
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NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
<p align="center">NEW MEXICO STATE HIGHWAY DEPARTMENT TRAFFIC DESIGN SECTION TRAFFIC CONTROL DEVICES FOR CONSTRUCTION SUMMARY OF QUANTITIES</p>			



CURVE DATA FOR STRIPING

CURVE NO.	①	②
Δ	06°16'46"	16°15'37"
D	5.7296°	38.1972°
T	54.85'	21.43'
L	109.60'	42.57'
R	1000.00'	150'
d	218.76'	84.00'



APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Reggie H. Hagan</i>	
TRANSPORTATION	<i>Steve Bobey</i>	8-26-91
HYDROLOGY	<i>Steve Bobey</i>	8/23/91
WATER	<i>N/A</i>	<i>ALD</i>
WASTE WATER		
Traffic Operations:		

- NOTES:
1. THIS SIGNING PLAN REPLACES EXISTING SIGNS.
 2. EXISTING SIGNS ARE TO BE REMOVED UNDER ITEM NO. 202001, REMOVAL OF STRUCTURES AND OBSTRUCTIONS.
 3. THE REMOVED SIGNS ARE TO BE STOCKPILED AS DIRECTED BY THE PROJECT MANAGER.
 4. FINAL LOCATION OF ALL SIGNS SHOWN ON PLAN ARE TO BE DETERMINED IN THE FIELD AT THE DIRECTION OF THE PROJECT MANAGER.
 5. FOR FURTHER INFORMATION AND DETAILS SEE THE STANDARD HIGHWAY SIGN MANUAL AND THE CURRENT EDITION OF THE M.U.T.C.D.

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NO.	DESCRIPTION	DATE	BY

REVISIONS (OR NOTICES)

NEW MEXICO
STATE HIGHWAY DEPARTMENT

PERMANENT SIGNING AND MARKING PLAN

GARDNER, MASON & ASSOCIATES, INC.
ENGINEERS & PLANNERS
ALBUQUERQUE, NM

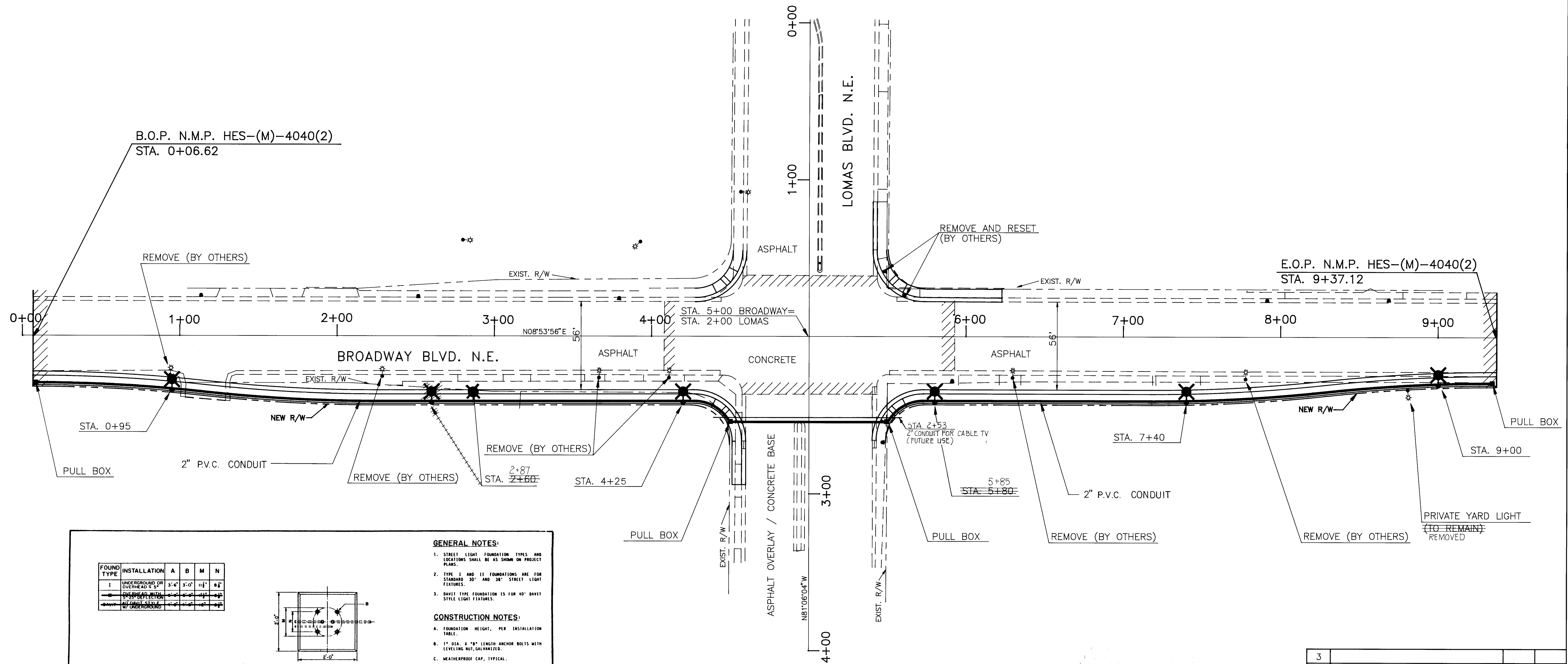
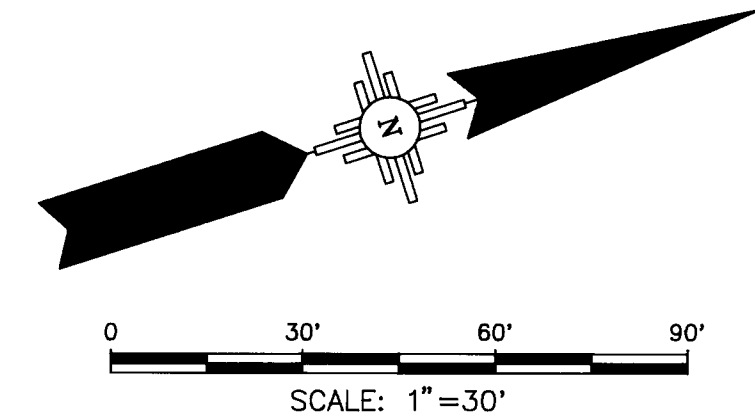
DESIGNED BY
DRAWN BY *es. eeseeebueq*
CHECKED BY

NOTES:

1. QUANTITIES MAY VARY AS FIELD CONDITIONS DICTATE. THE CONTRACTOR WILL BE PAID FOR ACTUAL QUANTITIES USED.
2. ALL TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE N.M. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION). ANY APPLICABLE SPECIAL PROVISION AND/OR SUPPLEMENTAL SPECIFICATION AND THE CURRENT EDITION OF THE M.U.T.C.D.
3. EACH REGULATORY AND WARNING SIGN FACE SHOWN ON PLANS SHALL MEET THE SPECIFICATIONS IN THE STANDARD HIGHWAY SIGNS MANUAL (1979 EDITION) FOR PROPER ARRANGEMENT, SPACING OF LETTERS, LETTER HEIGHT, LETTER SERIES, SYMBOLS, AND BORDERS FOR THE SPECIFIED SIZE AND MESSAGE AS SHOWN ON PLANS.
4. BID ITEM - STEEL POSTS AND BASE POSTS FOR PLYWOOD OR ALUMINUM PANEL SIGN. THE CONTRACTOR SHALL HAVE THE OPTION OF SUPPLYING EITHER THE FLANGED CHANNEL OR THE DRIVEDOWN POST CROSS-SECTION INDICATED. REFER TO NEW MEXICO STANDARDS: SN-75-1, SN-75-2, TB&C-001, AND TB&C-002.
5. WHERE EXISTING SIGNS ARE REPLACED WITH NEW BREAKAWAY EXTRUDED SIGNS, THE VOIDS LEFT FROM FOOTING REMOVAL ARE TO BE BACKFILLED AND THE PAD CONTOURED TO THE EXISTING TERRAIN. RESEEDING WILL NOT BE REQUIRED. THIS WORK IS CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT.
6. PLYWOOD PANEL SIGNS SHALL BE MADE FROM ONE CONTINUOUS SHEET. NO VERTICAL OR HORIZONTAL SPLICING WILL BE PERMITTED.
7. SIGN POST LENGTHS UP TO 14 FT. SHALL BE CONTINUOUS. SPLICING WILL ONLY BE PERMITTED IF THE TOTAL LENGTH EXCEEDS 14 FT. A 12 FT LENGTH MAY BE USED TO OBTAIN LENGTHS OF 15 FT. AND ABOVE. ALL SPLICING MUST BE DONE WITHIN THE SIGN BLANK AREA AND NO SPLICING SHOULD EXTEND BELOW. SPLICING MUST CONFORM TO THE MANUFACTURERS RECOMMENDATIONS AND PROCEDURES.
8. THE CONTRACTOR SHALL SUBMIT TO THE PROJECT MANAGER FOR APPROVAL, DRAWING OF SPECIAL SIGNS FACE DETAILS (THOSE OTHER THAN STANDARD M.U.T.C.D. SIGNS) SHOWING ARRANGEMENT AND SPACING OF LETTERS, LETTER HEIGHT, LETTER SERIES, SYMBOLS, AND BORDERS FOR THE MESSAGE INDICATED ON PLANS.
9. POST LENGTHS AND SECTIONS ARE BASED ON A 7'-0" CLEARANCE HEIGHT FROM THE TOP OF DRIVING LANE TO THE BOTTOM OF THE LOWEST SIGN. (EXCEPT WHERE INDICATED ON PLANS.) FINAL POST LENGTHS AND SECTIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND APPROVED BY THE PROJECT MANAGER PRIOR TO THE FABRICATION OF SIGN POSTS.

26 3672.2894

- NO ADDITIONAL POST NEEDED. SIGN TO BE MOUNTED ON COMMON POST WITH ANOTHER SIGN



FOUND. TYPE	INSTALLATION	A	B	M	N
I	UNDERGROUND OR OVERHEAD 5\"/>	3'-6\"/>	3'-0\"/>	11'-4\"/>	0'-0\"/>
II	OVERHEAD WITH 5\"/>	3'-6\"/>	3'-0\"/>	11'-4\"/>	0'-0\"/>
III	UNDERGROUND	3'-6\"/>	3'-0\"/>	11'-4\"/>	0'-0\"/>

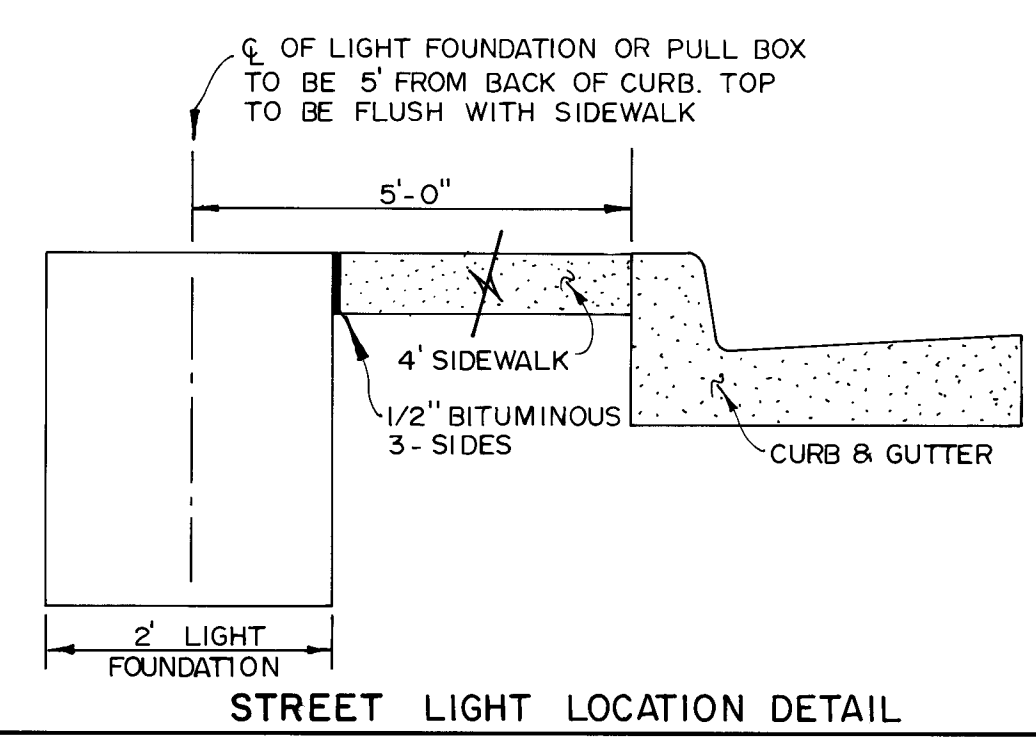
GENERAL NOTES:

- STREET LIGHT FOUNDATION TYPES AND LOCATIONS SHALL BE AS SHOWN ON PROJECT PLANS.
- TYPE I AND II FOUNDATIONS ARE FOR STANDARD 30\"/>
- DAVIS TYPE FOUNDATION IS FOR 40\"/>

CONSTRUCTION NOTES:

- FOUNDATION HEIGHT, PER INSTALLATION TABLE.
- 1\"/>
- WEATHERPROOF CAP, TYPICAL.
- 18\"/>
- CONDUIT, SIZE PER PLANS.
- 1/2\"/>
- 3,000 PSI P.C. CONCRETE.
- NO REBAR AT EACH CORNER.
- 24 TIES AT 12\"/>
- 3/4\"/>
- 5/8\"/>
- BOLT CIRCLE DIAMETER.
- BOLT SPACING.
- TOP OF FOUNDATION SHALL BE LEVEL AND FLUSH WITH HIGHEST ADJACENT SIDEWALK GRADE.

CITY OF ALBUQUERQUE
TRAFFIC LIGHT FOUNDATION
DWG. 2530
AUG 86



NOTE: 26 36722994

1. ALL LIGHT POLE FOUNDATIONS SHALL BE PLACED AT THE RIGHT-OF-WAY LINE.

2. PLACE PULL BOXES AT THE RIGHT-OF-WAY LINES.

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	Rogel Brice	3-13-90
TRANSPORTATION	R. J. Davis	8-26-91
HYDROLOGY	Steve Bobing	8/23/91
WATER	N/A	1/20
WASTE WATER		
TRAFFIC OPR.	R. J. Davis	3/4/91

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NO.	DESCRIPTION	DATE	BY

REVISIONS (OR NOTICES)

NEW MEXICO
STATE HIGHWAY DEPARTMENT

LIGHTING PLAN
AND DETAILS

GARDNER, MASON & ASSOCIATES, INC.
ENGINEERS & PLANNERS
ALBUQUERQUE, NM

TRAFFIC SIGNAL QUANTITIES (Estimated)					
NUMBER	ITEM	UNIT			TOTAL
504010	REINFORCING BARS - GRADE 40	POUND			366
509050	STRUCTURAL CONCRETE - CLASS A	CU.YD.			11
706010	SERVICE POLE (SIGNAL UNDERGROUND)	EACH			1
707015	TYPE I ALBUQUERQUE STANDARD - 15' ARM	EACH			2
707041	TYPE II ALBUQUERQUE STANDARD - 30' ARM	EACH			2
707046	TYPE II ALBUQUERQUE STANDARD - 35' ARM	EACH			2
709015	RIGID ELECTRICAL CONDUIT - 1"	LIN.FT.			90
709030	RIGID ELECTRICAL CONDUIT - 2"	LIN.FT.			748
709040	RIGID ELECTRICAL CONDUIT - 3"	LIN.FT.			752
710010	ELECTRICAL PULL BOX (LARGE)	EACH			24
710012	SPLICE CABNET	EACH			1
711025	COMMUNICATION CABLE 25 PAIRS	LIN. FT.			656
711110	MULTI CONDUCTOR CABLE 5	LIN.FT.			939
711112	MULTI CONDUCTOR CABLE 7	LIN.FT.			534
711125	MULTI CONDUCTOR CABLE 20	LIN.FT.			1550
711224	SINGLE CONDUCTOR 10	LIN.FT.			775
711230	SINGLE CONDUCTOR 4	LIN.FT.			452
712020	3 SECTION TRAFFIC SIGNAL ASSEMBLY	EACH			4
712030	5 SECTION TRAFFIC SIGNAL ASSEMBLY	EACH			8
712080	PEDESTRIAN SIGNAL (NEON)	EACH			8
712103	3 SECTION BACKPLATE	EACH			4
712105	5 SECTION BACKPLATE	EACH			2
713010	LOOP VEHICLE DETECTOR	EACH			5
713030	PUSH BUTTON STATION	EACH			8
713040	LOOP DETECTOR WIRE	LIN.FT.			4078
713050	LOOP LEAD - IN CABLE	LIN.FT.			2544
713060	DETECTOR SAW CUT	LIN.FT.			1705
714072	MULTIPHASE ACTUATED CONTROLLER- DUAL RING	EACH			1

GENERAL NOTES

- MASTARMS SHALL BE PLACED 90° TO THE CENTERLINE UNLESS OTHERWISE NOTED.
- MOUNT ALL CONTROLLERS SO DOORS FACE AWAY FROM TRAFFIC, UNLESS OTHERWISE SHOWN ON PLANS OR DIRECTED BY PROJECT MANAGER.
- SHOWN DISTANCES TO TRAFFIC SIGNAL POLES TO BE MEASURED FROM FACE OF CURB UNLESS OTHERWISE NOTED.
- CONTROLLERS SHALL BE OF A MICROPROCESSOR TYPE. CONTROLLER SHALL BE A MULTISONICS 820, COMPLETE FOR VMS SYSTEM OPERATOR IN A "P" TYPE CABINET.
- ALL ITEMS UNDER SECTION 707-SIGNAL AND LIGHTING STANDARDS SHALL COMPLY TO THE "BUY AMERICA PROVISION" AS COVERED UNDER SPECIAL PROVISION MODIFYING SECTION 106-CONTROL OF MATERIALS AUGUST 29, 1989.
- ALL SPLICES FOR TRAFFIC SIGNAL MULTI-CONDUCTOR CABLE SHALL BE MADE ABOVE GROUND (IN CABINET) SPLICING OF MCC WILL BE PERMITTED IN PULL BOXES. CONNECTIONS TO MAST ARM SIGNALS, PEDESTRIANS PUSH BUTTONS NO SPLICES OF COMMUNICATION CABLE WILL BE PERMITTED EXCEPT IN SPLICED CABNETS.
- COVER ENTIRE SIGNAL HEADS WHEN NECESSARY WITH BURLAP CLOTH OR BAGS AS REQUIRED BY SECTION 712.031 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (EDITION OF 1984).
- ALL WIRE ON THIS PROJECT TO BE COPPER, AS PER SUBSECTION 711.02.
- BEFORE CONDUITS CAN BE BORED, DRILLED, OR PUSHED UNDER THE ROADWAY, THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES.
- SIGNALIZATION SHALL REMAIN IN OPERATION DURING THE DURATION OF CONSTRUCTION.
- ALL EXISTING TRAFFIC SIGNAL EQUIPMENT INCLUDING CONTROLLER, MAST ARMS, PEDESTAL POLES, PULL BOXES, MANHOLES, SPLICE CABNETS, SERVICE CONNECTIONS SHALL BE REMOVED BY CONTRACTOR AND DELIVERED TO TRAFFIC ENGINEERING CITY YARD PINOS ROAD NORTHEAST.
- ALL SPLICES SHALL BE WATERPROOFED AS PER SECTION 711.034.
- SINGLE PHASE PEDESTAL METERING CONNECTION INCLUDED IN ITEM 706010 SERVICE POLE SIGNAL (UNDERGROUND) SEE SHEET 8-11 FOR DETAILS. ITEM INCLUDES CONDUIT AND WIRE FROM WEATHERHEAD TO METER.
- ALL INTERCONNECT CABLE WORK SHALL BE COORDINATED WITH COMPUTERIZED SIGNAL SYSTEM STAFF. PHONE NO. 291-6220. INTERCONNECT CABLE SHALL NOT BE DISCONNECTED FOR MORE THAN 24 HOURS.
- CITY TO SUPPLY 6 CONDUCTOR COMMUNICATION CABLE.
- PRIOR TO COMMENCING ANY BORING UNDER GAS LINES, THE AREA SHALL BE EXCAVATED TO EXPOSE THE GAS LINES TO AVOID CONFLICTS.
- CONTROLLERS SHALL ADHERE TO NMS&TD STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION EXCEPT SUBSECTION 714.024 (b) 8K SHALL BE DELETED (FIELD FUSED OUTPUT SHALL NOT BE INCLUDED) AND UNDER SUBSECTION 713.021 (f) THE NEON BULBS WILL NOT BE REQUIRED.
- THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY AND PERMANENT TRAFFIC SIGNAL MATERIAL (POLES, CONTROLLER, HARDWARE, ETC.) PRIOR TO THEIR INSTALLATION. THE CITY OF ALBUQUERQUE WILL NOT PROVIDE, LOAN OR ACCEPT IN KIND TRADE OF SIGNAL MATERIAL FOR THE CONSTRUCTION OF THIS PROJECT.

LEGEND

PROPOSED	EXISTING	ITEM
		PULL BOX
		SIGNAL POLE
		SERVICE POLE
		CONTROLLER CABINET
		SPLICE CABINET
		CONDUIT RUN
		LOOP DETECTOR
		TRAFFIC SIGNAL PEDESTAL POLE
		CONDUIT RUN NUMBER
		POLE WITH MASTARM. TRAFFIC SIGNAL AND BACKPLATE
		COMBINATION POLE WITH LUMINAIRE AS INDICATED
		PEDESTRIAN PUSH BUTTON (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		PEDESTRIAN SIGNALS (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		TRAFFIC MANHOLE

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Rogel Huan</i>	3-13-92
TRANSPORTATION	<i>R. Dwyer</i>	8-26-91
HYDROLOGY	<i>Steve Goring</i>	8/23/91
WATER	<i>N/A</i>	<i>AKD</i>
WASTE WATER		
TRAFFIC CPR.	<i>F. J. ...</i>	3/14/92

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NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT TRAFFIC SIGNAL GENERAL NOTES, LEGEND & ESTIMATED QUANTITIES			

REMOVE EXISTING SPLICE CABINET AND BASE. DELIVER TO CITY TRAFFIC ENGINEERING SHOP AT CITY YARDS. INSTALL CABINET AND BASE FROM EAST SIDE OF INTERSECTION.

JOHN STREET

EXISTING SPLICE CABINET REMOVE CABINET, BASE, & FOUNDATION. INSTALL PULL BOX.

LOMAS

MATCH LINE A

MATCH LINE A

COMMUNICATIONS CABLE WILL BE CONTINUOUS RUN FROM SPLICE CABINET ON WEST SIDE JOHN STREET TO SPLICE CABINET ADJACENT TO CONTROLLER. APPROXIMATE LENGTH 668 FEET.

EXISTING T.S. MANHOLE COIL 50 CABLE

INTERCEPT EXISTING CONDUIT INSTALL PULL BOX 23

MASTARM #2 35' ARM LENGTH

POWER FROM EXISTING POLE (PNM)

NEW SERVICE RISER

MASTARM #1 30' ARM LENGTH

(NOTE: THIS CONDUIT RUN WAS RELOCATED TO S.W. AREA ON SOUTH SIDE OF LOMAS.)

SCALE: 1"=20'

EXISTING PULL BOX

NEW CONDUIT 18" FROM BACK OF CURB

2+00

3+00

4+00

5+00

7+00

8+00

TYPICAL MAST ARM INSTALLATION

INTERCEPT EXISTING CONDUIT INSTALL PULL BOX 19 DISCONNECT 50 PAIR COMMUNICATION CABLE AT EXISTING SPLICE CABINET PULL ALL SLACK INTO EXISTING MANHOLE STA. 4+26 AFTER CONNECTING TO NEW SPLICE CABINET

INTERCEPT EXISTING CONDUIT IN MEDIAN AND INSTALL PB 15

INTERCEPT EXISTING CONDUIT INSTALL PULL BOX 19

STA. 4+26 EXIST. MANHOLE COIL SLACK 50 PAIR COM CABLE

EXISTING PULL BOX FOR FUTURE SYSTEM DETECTORS

26 36723194

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	Reginald Khan	3-13-92
TRANSPORTATION	R. L. Lank	8-26-91
HYDROLOGY	Steve Boling	8-23-91
WATER	N/A	N/A
WASTE WATER	N/A	N/A
TRAFFIC OPR.	2 Jim	3/1/92



NO.	DESCRIPTION	DATE	BY
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NEW MEXICO
STATE HIGHWAY DEPARTMENT

TRAFFIC SIGNAL PLAN

GARDNER, MASON & ASSOCIATES, INC.
ENGINEERS & PLANNERS
ALBUQUERQUE, NM

CABLE RUNS

CONDUIT RUNS

FUNCTION CHART

CABLE LENGTH CONDUCTOR AWG TYPE REMARKS

CONDUIT LENGTH SIZE TYPE REMARKS

CON- BASE (RING 1) (RING 2)
DUCTOR COLOR TRACER FUNCTION FIELD CONNECTION FUNCTION FIELD CONNECTION

1 SEE SHEET 8-4.

0	9'	3"	REC.	
1	20'	2"	REC	FOR SERVICE
2	5'	2"	"	
3	9'	3"	"	
4	30'	3"	"	
5	55'	3"	"	
6	66'	3"	"	
7	49'	3"	"	
8	44'	3"	"	
9	53'	3"	"	
10	40'	3"	"	
11	24'	3"	"	
12	58'	3"	"	
13	67'	3"	"	
14	37'	3"	"	
15	52'	3"	"	
16	53'	3"	"	
17	40'	3"	"	
18	8'	3"	"	
19	134'	2"	"	
20	8'	3"	"	
21	11'	2"	"	
22	126'	2"	"	
23	8'	3"	"	
24	142'	2"	"	
25	8'	3"	"	
26	15'	2"	"	
27	118'	EXISTING	"	
28	8'	2"	" INTERCONNECT	
29	8'	2"	" "	
30	9'	2"	" "	
31	102'	2"	" "	
32	68'	2"	" INTERCONNECT	
33	100'	2"	" "	
34	75'	EXISTING	" "	
35	160'	EXISTING	" "	
36	62'	EXISTING	" INTERCONNECT	

90' 1" CONDUIT FOR DETECTORS
25' 3" CONDUIT FOR CONTROLLER AND
MAST ARM STUB OUTS

1.	BLACK	-	SPARE	-	- SPARE	-
2.	WHITE	-	SPARE	-	- SPARE	-
3.	RED	-	Ø1 RED	-	Ø5 RED	-
4.	GREEN	-	Ø1 GREEN	G LT. GR. AR. 2 RT. GR. AR.	Ø5 GREEN	3 LT. GR. AR. 5 RT. GR. AR.
5.	ORANGE	-	Ø1 YELLOW	G LT. YL. AR. 2 RT. GR. AR.	Ø5 YELLOW	3 LT. YL. AR. 5 RT. YL. AR.
6.	BLUE	-	Ø1 WALK	-	-	-
7.	WHITE	BLACK	Ø1 Dont Walk	-	-	-
8.	RED	BLACK	Ø2 RED	3, 4, 4M	Ø6 RED	1, 1M, G
9.	GREEN	BLACK	Ø2 GREEN	3, 4, 4M	Ø6 GREEN	1, 1M, G
10.	ORANGE	BLACK	Ø2 YELLOW	3, 4, 4M	Ø6 YELLOW	1, 1M, G
11.	BLUE	BLACK	Ø2 WALK	P5, P7	Ø6 WALK	P1, P3
12.	BLACK	WHITE	Ø2 Dont Walk	P5, P7	Ø6 Dont Walk	P1, P3
13.	RED	WHITE	Ø3 RED	-	Ø7 RED	-
14.	GREEN	WHITE	Ø3 GREEN	5M LT. GR. AR. 1 RT. GR. AR.	Ø7 GREEN	2M, LT. GR. AR. 4 RT. GR. AR.
15.	BLUE	WHITE	Ø3 YELLOW	5M LT. YL. AR. 1 RT. GR. AR.	Ø7 YELLOW	2M, LT. YL. AR. 4 RT. YL. AR.
16.	BLACK	RED	Ø4 RED	2, 2M, 2MA	Ø8 RED	5, 5M, 5MA
17.	WHITE	RED	Ø4 GREEN	2, 2M, 2MA	Ø8 GREEN	5, 5M, 5MA
18.	ORANGE	RED	Ø4 YELLOW	2, 2M, 2MA	Ø8 YELLOW	5, 5M, 5MA
19.	BLUE	RED	Ø4 WALK	P4, P6	Ø8 WALK	P2, P8
20.	RED	GREEN	Ø4 Dont Walk	P4, P6	Ø8 Dont Walk	P2, P8
21.	ORANGE	GREEN	SPARE	-	- SPARE	-

NOTE: IDENTIFY CABLES ABOVE AS "115 VOLTS" AND CABLES BELOW AS "P.P.B.-LOW VOLTAGE" AT EACH SPLICE POINT. 5 CONDUCTOR CABLE 24 VOLTS (PUSH BUTTONS ONLY).

1.	BLACK	- Ø2 PPB	PPB 57
2.	WHITE	- COMMON	PPB1 THRU PPB8
3.	RED	- Ø4 PPB	PPB 4, 6
4.	GREEN	- Ø6 PPB	PPB 1, 3
5.	ORANGE	- Ø8 PPB	PPB P2, P8

NOTE: WRAP RING 2 CABLE AT EACH SPLICE POINT AND PULL BOX WITH COLORED ELECTRICAL TAPE. AT EACH END OF CABLE. 6" BACK FOR IDENTIFICATION.

26 36723294



APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	NA	
TRANSPORTATION	R. Davis	8/26/91
HYDROLOGY	Steve Boring	8/23/91
WATER	N/A	AKD
WASTE WATER		
TRAFFIC OPR.	R. Frazer	3/4/92

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NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT TRAFFIC DESIGN SECTION TRAFFIC SIGNAL CONDUITS, CABLES & FUNCTIONS			

CABLE RUNS

CABLE RUNS

CABLE RUNS

RUN	LENGTH	CONDUCTORS		AWG.	TYPE	REMARKS	RUN	LENGTH	CONDUCTORS		AWG.	TYPE	REMARKS	RUN	LENGTH	CONDUCTORS		AWG.	TYPE	REMARKS
0	21'	2	20C	14	MCC	PED BUTTONS	11	28'	2	20C	14	MCC		25	*	3	7C	14	MCC	
		1	5C	14	MCC	COMMON			1	5C	14	MCC	PED BUTTONS			1	5C	14	MCC	PED BUTTONS
		1	1C	10	THHN				1	1C	10	THHN	COMMON							
		3 LOOP LEAD IN WIRES												26	21'	1	7C	14	MCC	
		2	1C	4	THHN	SERVICE	12	62'	2	20C	14	MCC	PED BUTTONS							
1	27'	2	1C	4	THHN	FOR SERVICE			1	5C	14	MCC	COMMON	27	122'					
						TO METER ONLY			1	1C	10	THHN				1 LOOP LEAD IN WIRES				
1A	9'	2	1C	4	THHN	SERVICE	13	71'	2	20C	14	MCC		28	14'	1	50PR	COMM	CABLE	INTERCONNECT
2	15'	2	20C	14	MCC				1	5C	14	MCC	PED BUTTONS							EXISTING
		1	5C	14	MCC	PED BUTTONS			1	1C	10	THHN	COMMON							
		1	1C	16	THHN	COMMON			3 LOOP LEAD IN WIRES					29	14'	1	25PR	COMM	CABLE	INTERCONNECT
		5 LOOP LEAD IN WIRES THHN																		
		2	1C	4	THHN	SERVICE	14	41'	2	20C	14	MCC	PED BUTTONS	30	15'	1	6PR	COMM	CABLE	INTERCONNECT
3	15'	2	20C	14	MCC	PED BUTTONS			1	5C	14	MCC	COMMON							
		1	5C	14	MCC	COMMON			1	1C	10	THHN		31	106'	1	25PR	COMM	CABLE	INTERCONNECT
		1	1C	10	THHN				3 LOOP LEAD IN WIRES											
		5 LOOP LEAD IN WIRES												32	72'	1	25PR	COMM	CABLE	INTERCONNECT
							15	56'	2	20C	14	MCC								
4	34'	2	20C	14	MCC				1	5C	14	MCC	PED BUTTONS	33	104'	1	25PR	COMM	CABLE	INTERCONNECT
		1	5C	14	MCC	PED BUTTONS			1	1C	10	THHN	COMMON							
		1	1C	10	THHN	COMMON			3 LOOP LEAD IN WIRES					34	127'	1	25PR	COMM	CABLE	INTERCONNECT
		5 LOOP LEAD IN WIRES THHN																		
		2	1C	4	THHN	SERVICE	16	57'	2	20C	14	MCC	PED BUTTONS	35	161'	1	25PR	COMM	CABLE	INTERCONNECT
5	59'	2	20C	14	MCC	PED BUTTONS			1	5C	14	MCC	COMMON							
		1	5C	14	MCC	COMMON			1	1C	10	THHN		36	72'	1	25PR	COMM	CABLE	INTERCONNECT
		1	1C	10	THHN				3 LOOP LEAD IN WIRES											
		5 LOOP LEAD IN WIRES													CABLE RUN CONTINUATIONS					
		2	1C	4	THHN	SERVICE	17	44'	2	20C	14	MCC		MA-1	62'	1	7C	14	MCC	HEAD 1M
6	70'	2	20C	14	MCC				1	5C	14	MCC	PED BUTTONS		27'	1	7C	14	MCC	HEAD 1
		1	5C	14	MCC	PED BUTTONS			1	1C	10	THHN	COMMON		24'	1	5C	14	MCC	P1, P2
		1	1C	10	THHN	COMMON			5 LOOP LEAD IN WIRES						17'	1	5C	14	MCC	PPB1, PPB2
		2 LOOP LEAD IN WIRES THHN												MA-2	67'	1	7C	14	MCC	HEAD 2M
		2	1C	4	THHN	SERVICE	18	*	2	7C	14	MCC			53'	1	7C	14	MCC	HEAD 2MA
7	53'	2	20C	14	MCC	PED BUTTONS			1	5C	14	MCC	PED BUTTONS		27'	1	7C	14	MCC	HEAD 2
		1	5C	14	MCC	COMMON								24'	1	5C	14	MCC	P3, P4	
		1	1C	10	THHN		19	138'							17'	1	5C	14	MCC	PPB3, PPB4
		2 LOOP LEAD IN WIRES							1 LOOP LEAD IN WIRES					SP-3	12'	1	7C	14	MCC	HEAD 3
														MA-4	62'	1	7C	14	MCC	HEAD 4M
8	48'	2	20C	14	MCC		20	*	3	7C	14	MCC			27'	1	7C	14	MCC	HEAD 4
		1	5C	14	MCC	PED BUTTONS			1	5C	14	MCC	PED BUTTONS		24'	1	5C	14	MCC	P5, P6
		1	1C	10	THHN	COMMON									17'	1	5C	14	MCC	PPB5, PPB6
		2 LOOP LEAD IN WIRES					21	17'	1	7C	14	MCC		MA-5	67'	1	7C	14	MCC	HEAD 5M
									1 LOOP LEAD IN WIRES						53'	1	7C	14	MCC	HEAD 5MA
9	57'	2	20C	14	MCC	PED BUTTONS									27'	1	7C	14	MCC	HEAD 5
		1	5C	14	MCC	COMMON	22	130'							24'	1	5C	14	MCC	P3, P4
		1	1C	10	THHN				1 LOOP LEAD IN WIRES						17'	1	5C	14	MCC	PPB7, PPB8
		1 LOOP LEAD IN WIRES												SP-6	12'	1	7C	14	MCC	HEAD 6
							23	*	2	7C	14	MCC								
10	44'	2	20C	14	MCC	PED BUTTONS			1	5C	14	MCC	PED BUTTONS	*	LENGTH INCLUDED IN CABLE RUN CONTINUATIONS FROM MAST ARMS					
		1	5C	14	MCC	COMMON														
		1	1C	10	THHN		24	146'						**	CITY TRAFFIC ENGINEERING TO SUPPLY 6 CONDUCTOR COMMUNICATIONS CABLE					
									1 LOOP LEAD IN WIRES											

26 36723394



APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>NA</i>	
TRANSPORTATION	<i>R. Dawe</i>	8-26-91
HYDROLOGY	<i>Stan Boling</i>	8/23/91
WATER	<i>N/A</i>	
WASTE WATER	<i>N/A</i>	
TRAFFIC ENG.	<i>R. J. Smith</i>	3/4/92

3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
TRAFFIC SIGNAL CABLE RUNS			
GMA, INC. 5700 HARPER DR. NE, STE. 240 ALBUQUERQUE, NM 87109			

DRAWN BY: BJG
DESIGNED BY:

FILENAME: LBCABLE
PROJECT NAME: LOMAS/BROADWAY
PROJECT NO.: 870000
DATE: 8/14/91

FLASH CONDITION *

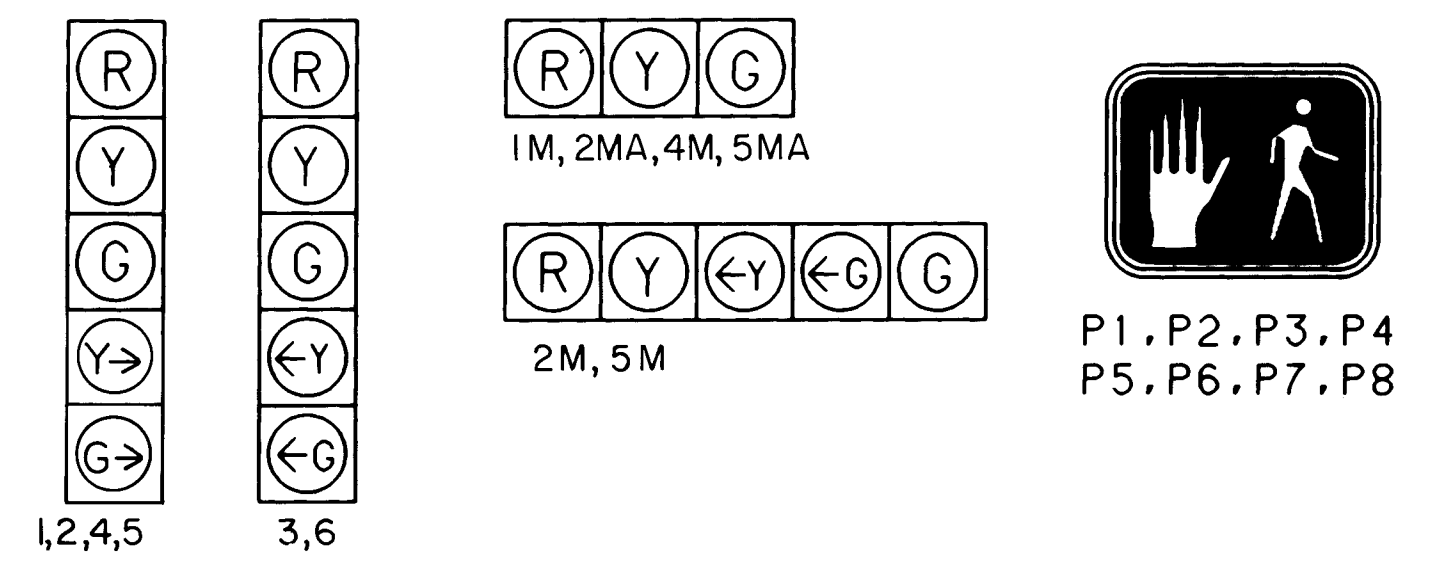
RED BALL ALL HEADS ~~2M, 2MA, 5, 5M, 5MA~~
YELLOW BALL HEADS ~~2, 2M, 4, 4M, 1, 1M, 3, 4, 4M, 5~~

INITIALIZATION

~~PHASE 2 AND 6 YELLOW~~
~~CLEARANCE INTERVAL~~

PHASE 2, 4, 6, 8 STEADY RED 6 SECONDS
THEN PHASE 2 AND 6 GREEN

SIGNAL HEAD DETAILS



BACK UP TIME SETTING

	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
MINIMUM INITIAL	3	16	3	3	3	16	3	3
VEHICLE EXTENSION	1.5	35	1.5	1.5	1.5	3.5	1.5	1.5
MAXIMUM 1	15	30	15	30	15	30	15	30
MAXIMUM 2	20	40	20	40	20	40	20	40
YELLOW CHANGE	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
RED CLEAR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
WALK	-	7	-	7	-	7	-	7
PEDESTRIAN CLEAR	-	20	-	14	-	20	-	14
OPERATION	MEM OFF	MIN RECALL	MEM OFF	MEM OFF	MEM OFF	MIN RECALL	MEM OFF	MEM OFF

PEDESTRIAN PUSH BUTTON DESIGNATION SIGNS

PPB 1, 4, 5, 8 R10 - 4b R
PPB 2, 3, 6, 7 R10 - 4b L

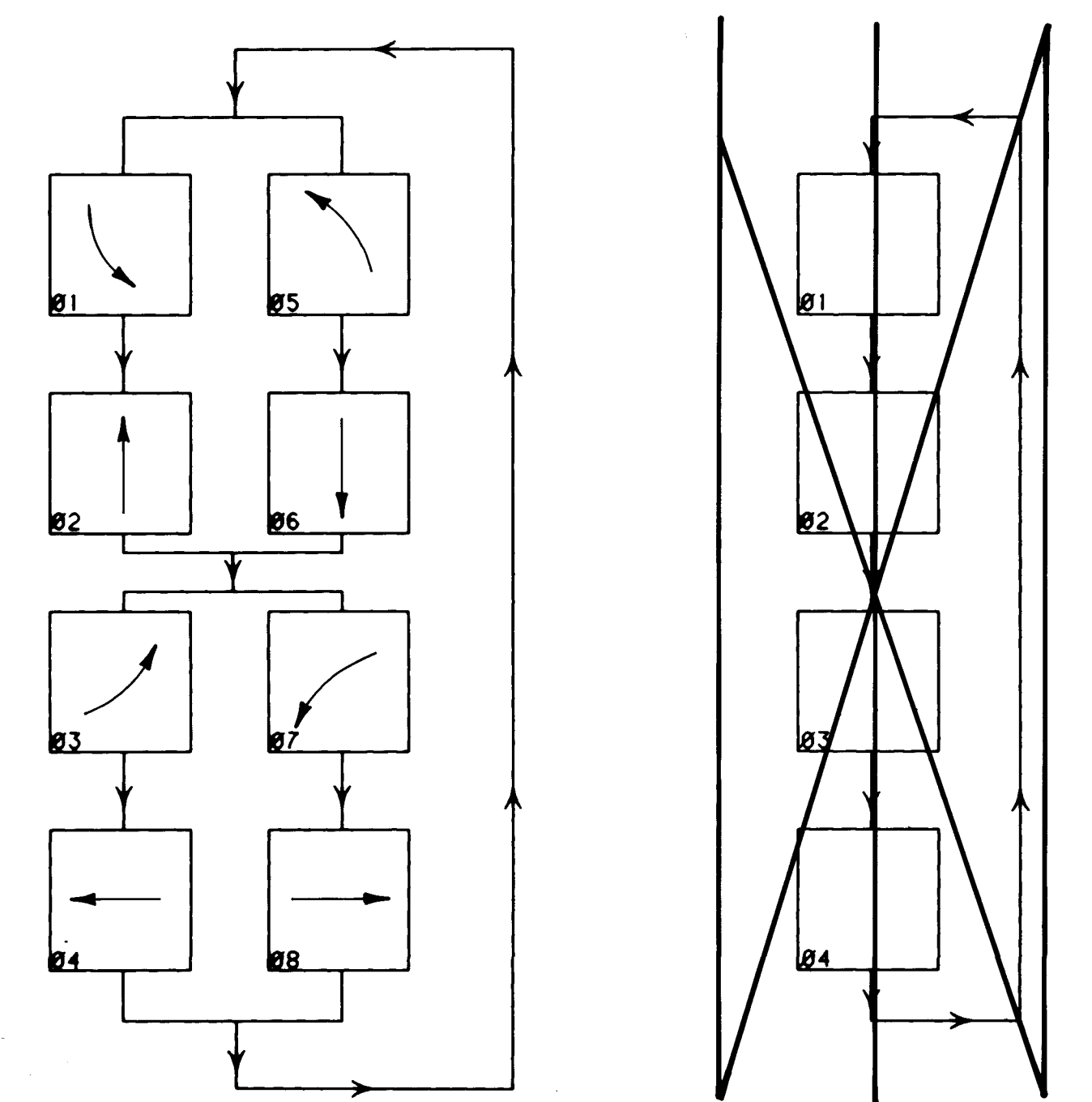
DETECTORS

UNIT	PHASE (#)	MODE
1 CHAN 1	1 (1)	PRESENCE / DELAY CALL 3 SEC
CHAN 2	5 (1)	PRESENCE / DELAY CALL 3 SEC
2 CHAN 1	3 (1)	PRESENCE / DELAY CALL 3 SEC
CHAN 2	7 (1)	PRESENCE / DELAY CALL 3 SEC
3 CHAN 1	6 (1)	PRESENCE / EXTEND CALL 3 SEC
CHAN 2	2 (1)	PRESENCE / EXTEND CALL 3 SEC
4 CHAN 1	4 (1), (2)	PRESENCE
CHAN 2	4 (3)	PRESENCE / EXTEND CALL 3 SEC
5 CHAN 1	8 (1), (2)	PRESENCE
CHAN 2	8 (3)	PRESENCE / EXTEND CALL 3 SEC

LOOP LEAD IN CABLE

FROM	TO	LENGTH
PB-3	CONTROLLER	216'
PB-8	CONTROLLER	357'
PB-11	CONTROLLER	568'
PB-15	CONTROLLER	59'
PB-16	CONTROLLER	246'
PB-17	CONTROLLER	487'
PB-18	CONTROLLER	430'
PB-19	CONTROLLER	181'
TOTAL		2544'

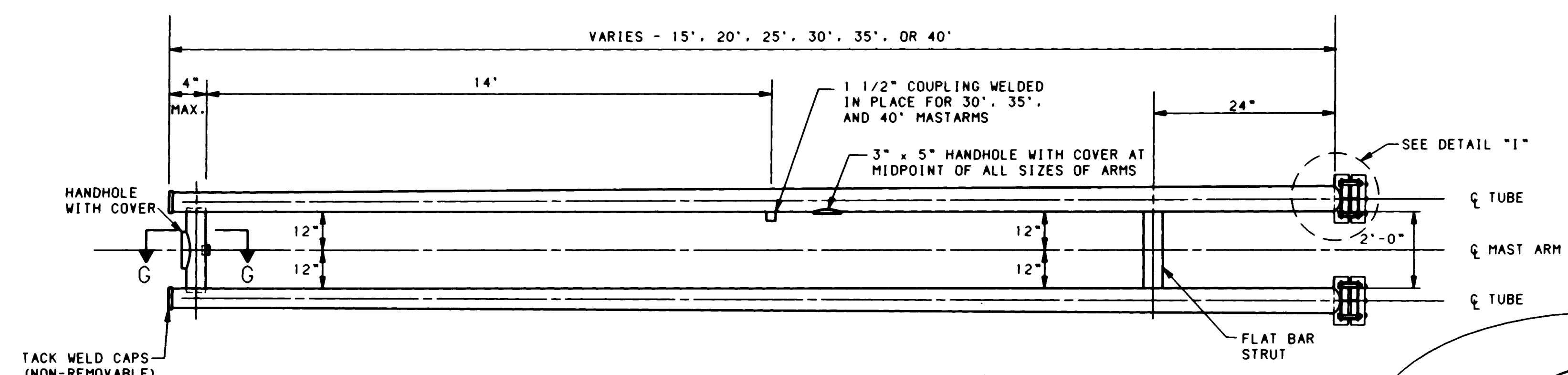
SIGNAL PHASING



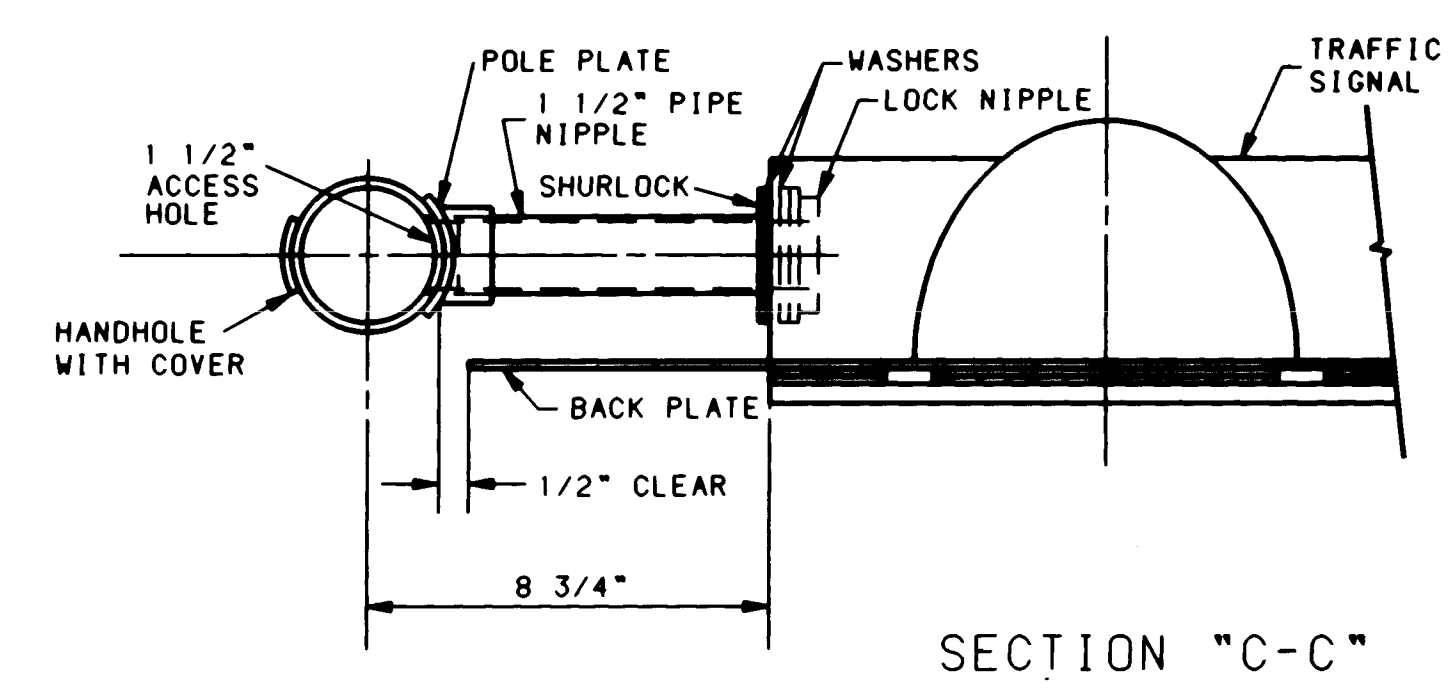
26 36723494

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	N/A	
TRANSPORTATION	R. D. ...	8-26-91
HYDROLOGY	Steve Bohrer	8/23/91
WATER	N/A	
WASTE WATER	N/A	

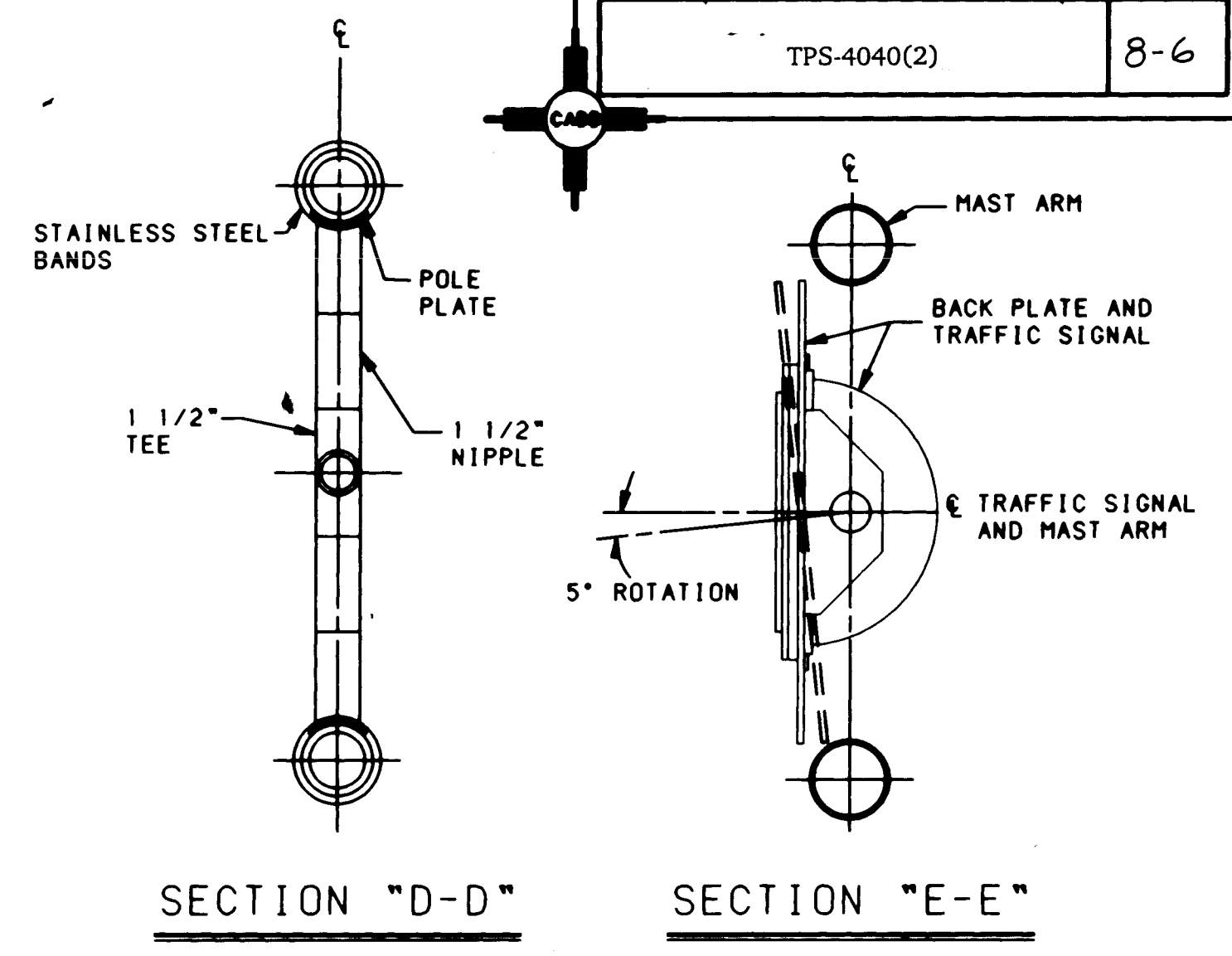
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1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT			
TRAFFIC SIGNAL MISCELLANEOUS ITEMS			



MAST ARM TYPICAL
SEE TABLE FOR DIMENSIONS

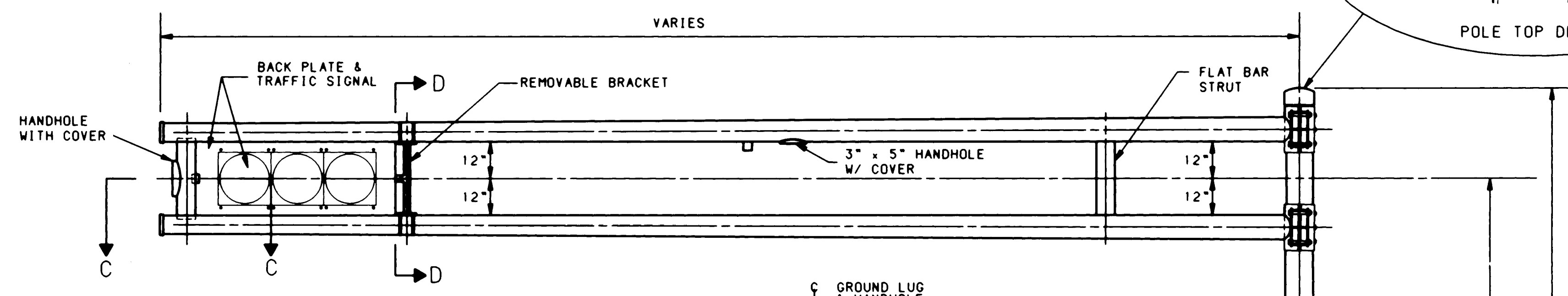


SECTION "C-C"

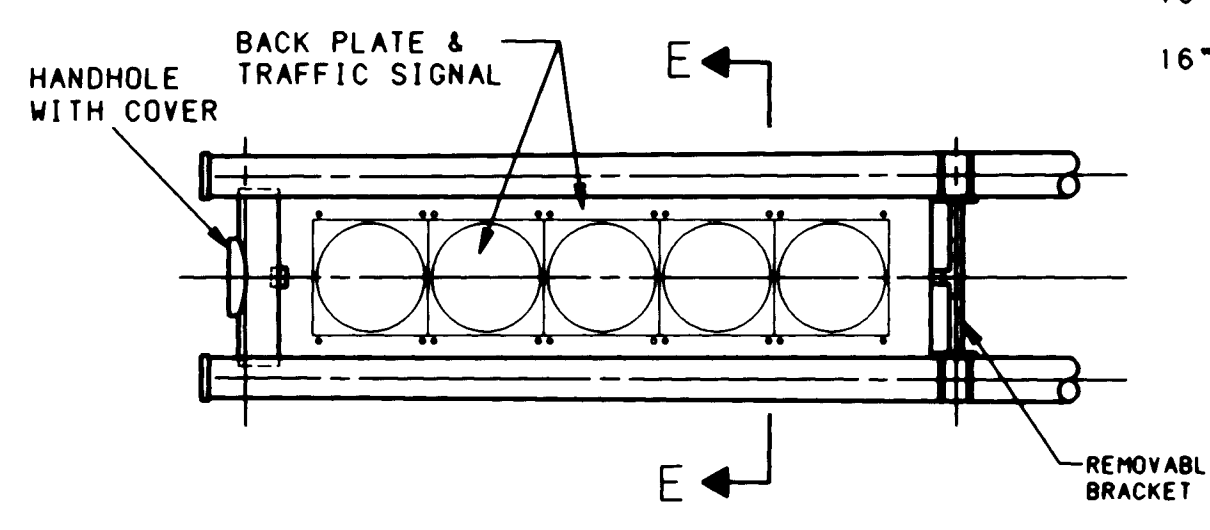


SECTION "D-D"

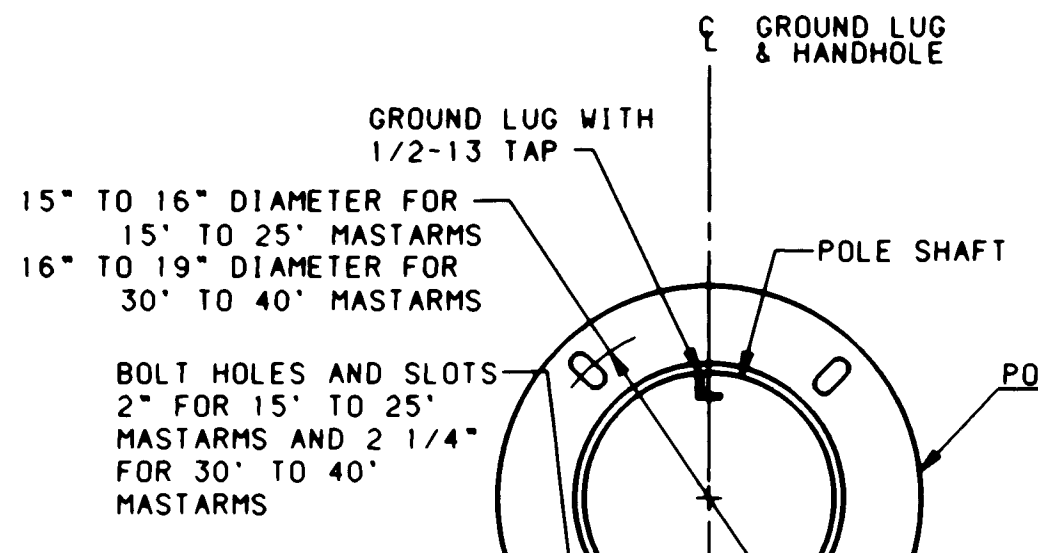
SECTION "E-E"



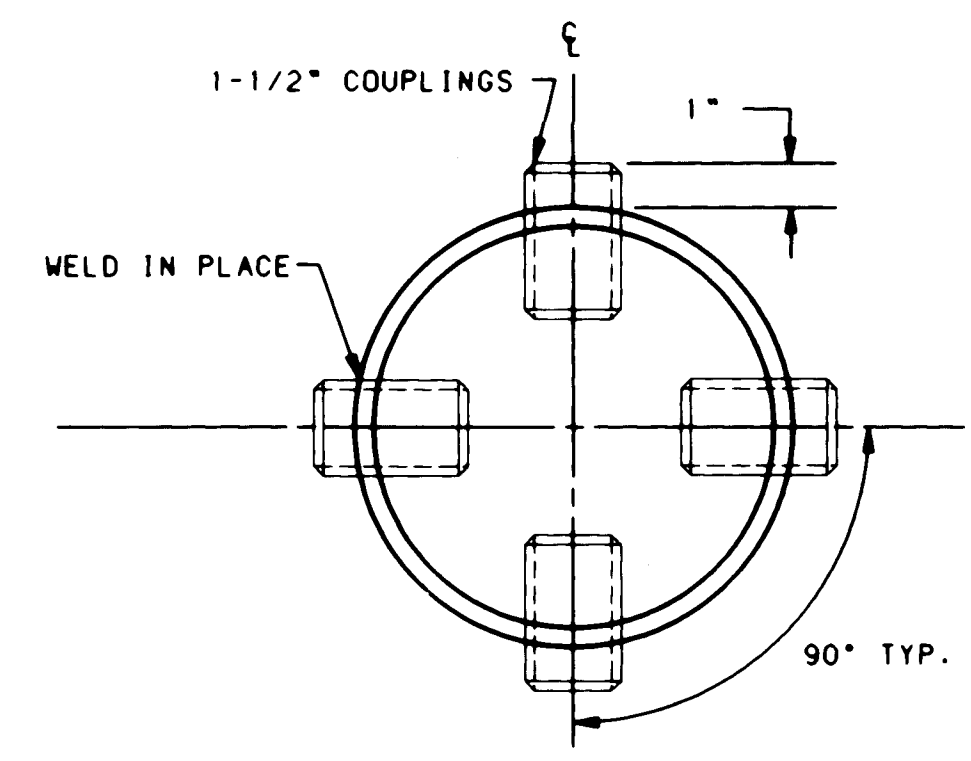
3-SECTION TRAFFIC SIGNAL



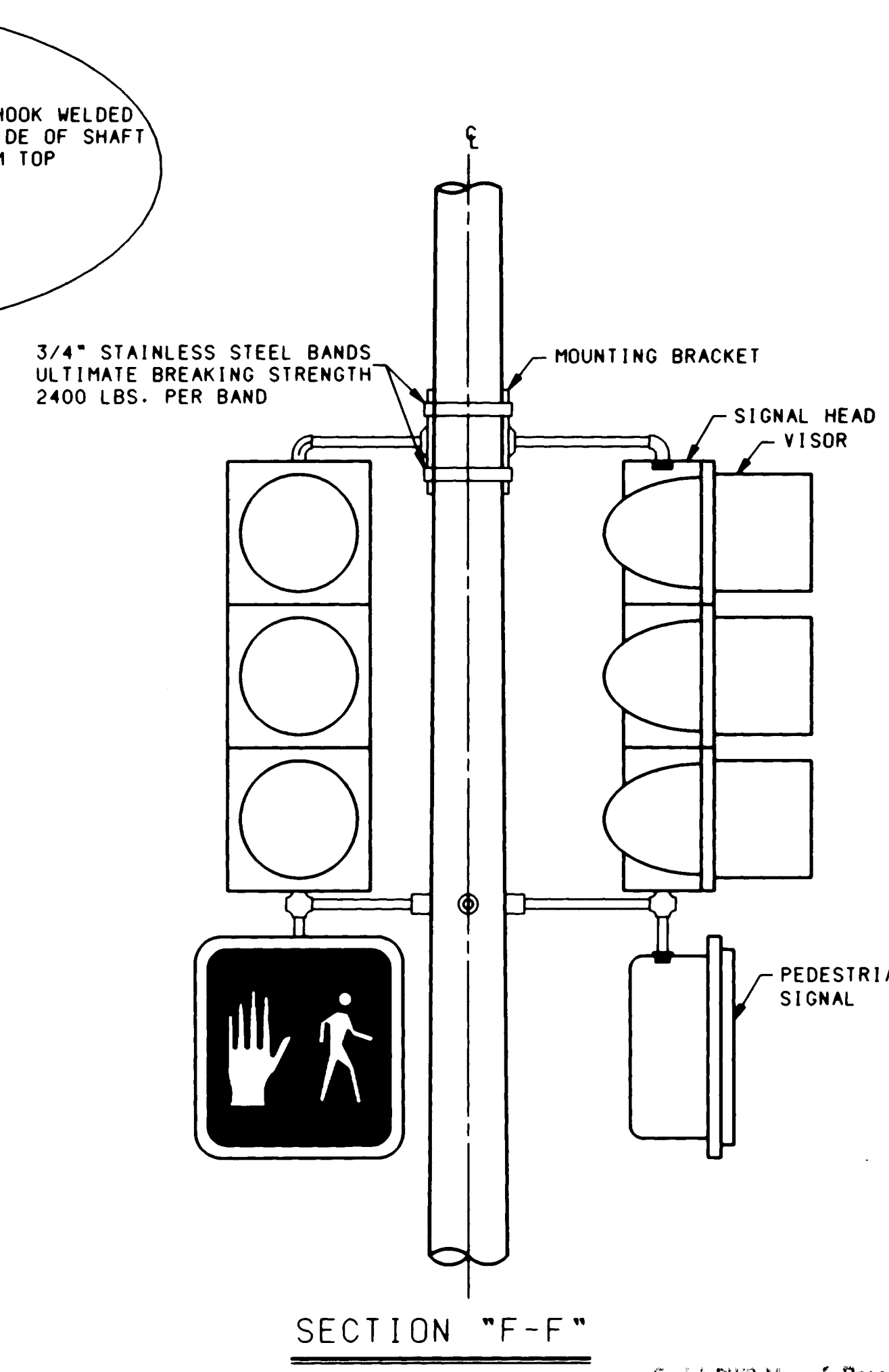
5-SECTION TRAFFIC SIGNAL



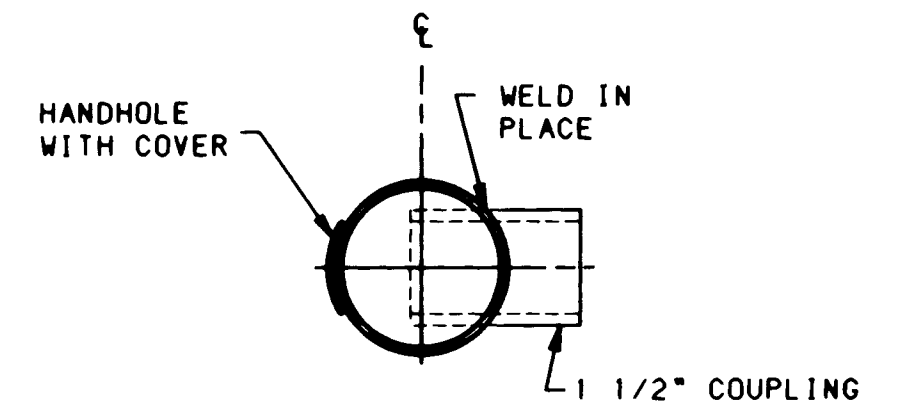
SECTION "A-A"



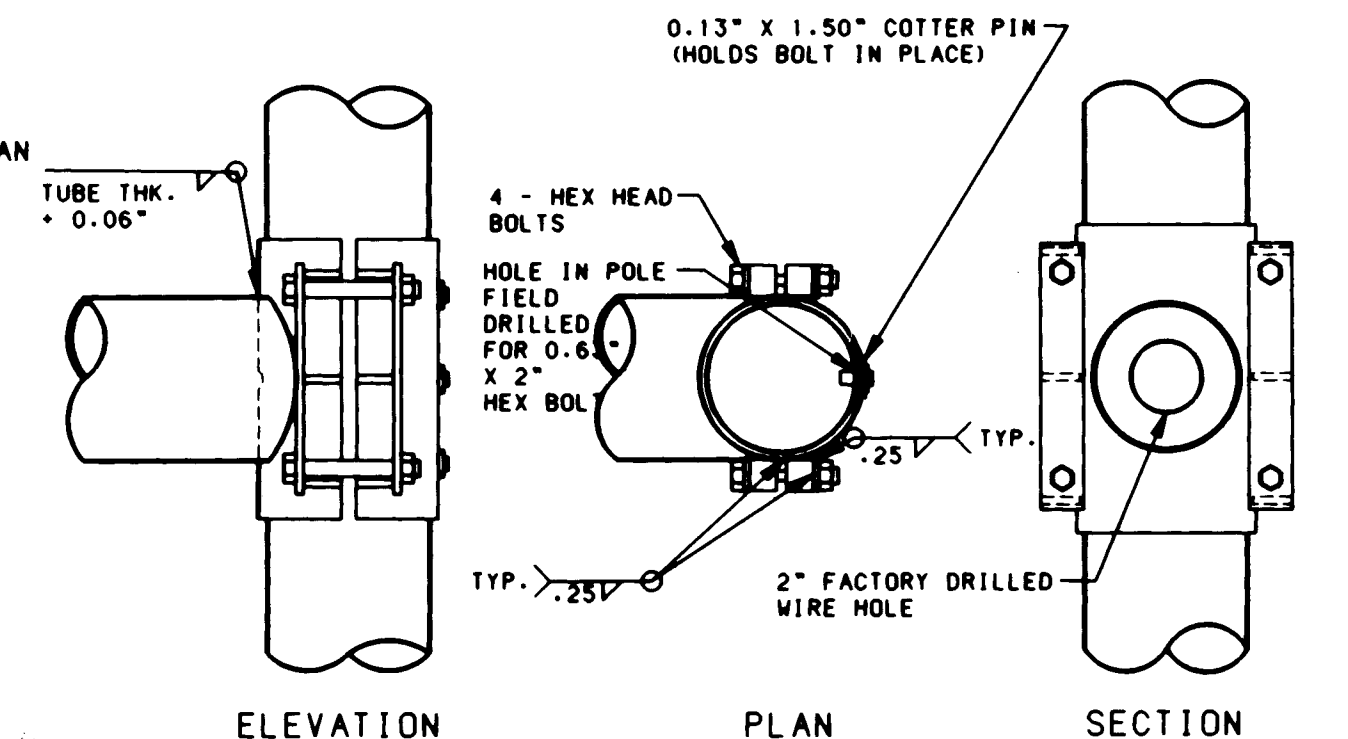
SECTION "B-B"



SECTION "F-F"



SECTION "G-G"



ELEVATION

PLAN

SECTION

NOTES

- DESIGN IN ACCORDANCE WITH 1985 AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS FOR AN 80 MPH WIND ZONE.
- POLES AND ARM SHAFTS SHALL CONFORM TO ASTM A-570 (45,000 PSI MAX + 1.25 SAFETY FACTOR YIELD).
- ALL POLES AND MASTARMS SHALL BE GALVANIZED TO ASTM A-123.
- BASE PLATE, POLES, AND ARM CONNECTING PLATES AND GUSSETS SHALL BE ASTM A-36.
- ANCHOR BOLTS SHALL BE ASTM A-36 MDD 55.
- ALL STRUCTURAL CONNECTING BOLTS SHALL BE ASTM A-325, GALVANIZED TO ASTM A-153 UNLESS OTHERWISE NOTED.
- WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY SPECIFICATION AWS D1.1, LATEST EDITION. ALL WELDS SHALL BE FREE FROM CRACKS, EXCESSIVE UNDERCUT, AND POROSITY. ANY WELDING DEFECTS SHALL BE REPAIRED BY REMOVING THE DEFECTIVE MATERIAL AND REPLACING IT WITH SOUND WELD MATERIAL.
- ALL HOLES SHALL BE DRILLED AND DEBURRED.

ONE SIZE ARM CLAMP FOR 15' TO 25' MASTARMS WILL BE ALLOWED AND ONE SIZE FOR 30' TO 40' MASTARMS

DETAIL "I"

MITERED ARM END (OPTIONAL)

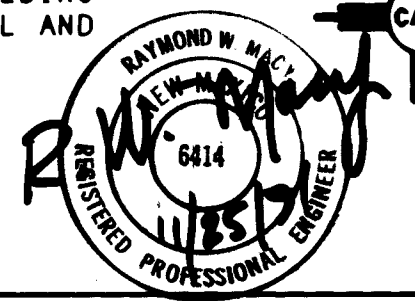
APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	N/A	
TRANSPORTATION	16. D. D. 8/26/91	
HYDROLOGY	Steve Bobing 8/23/91	
WATER	N/A	
WASTE WATER	AKD	

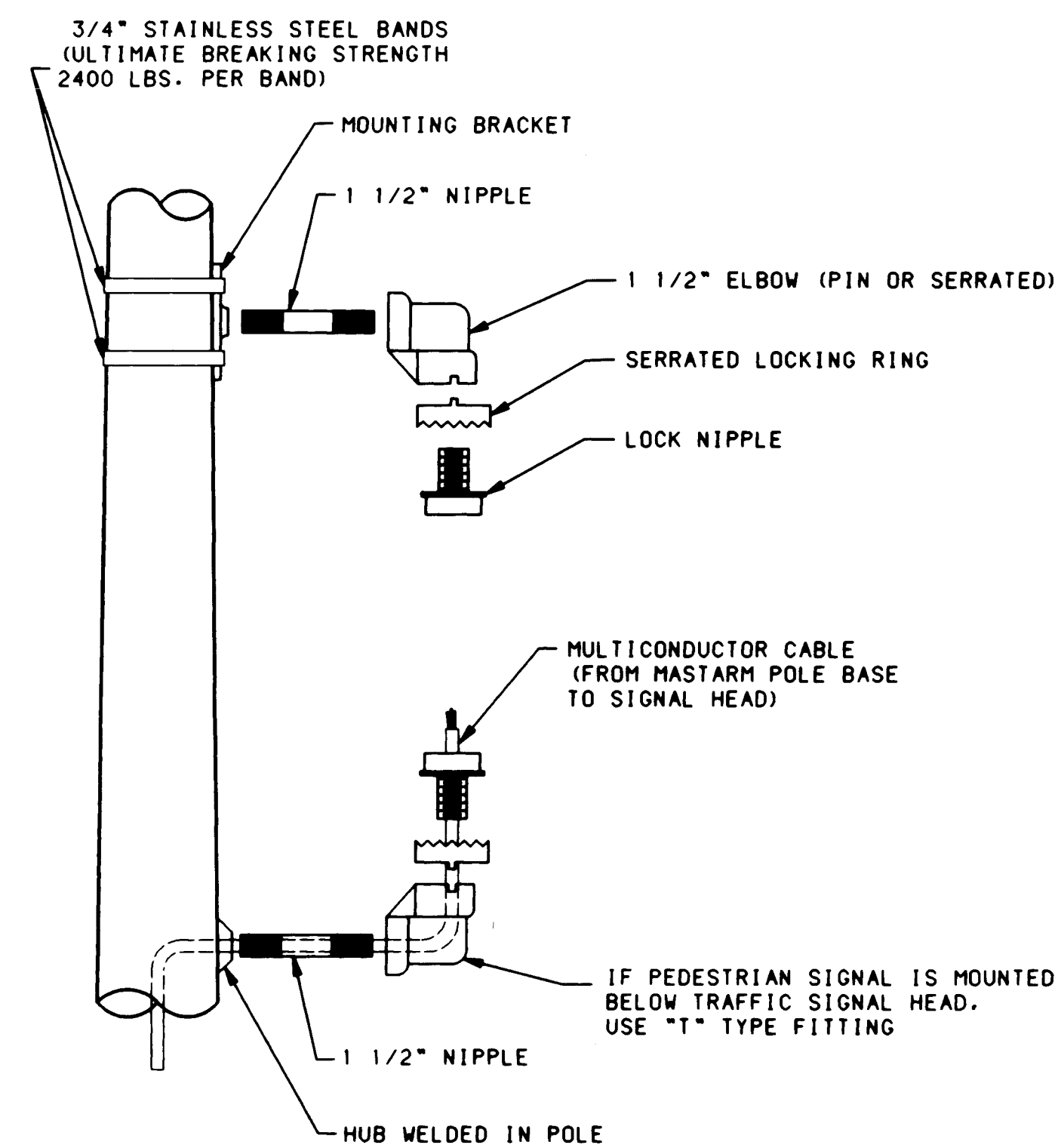
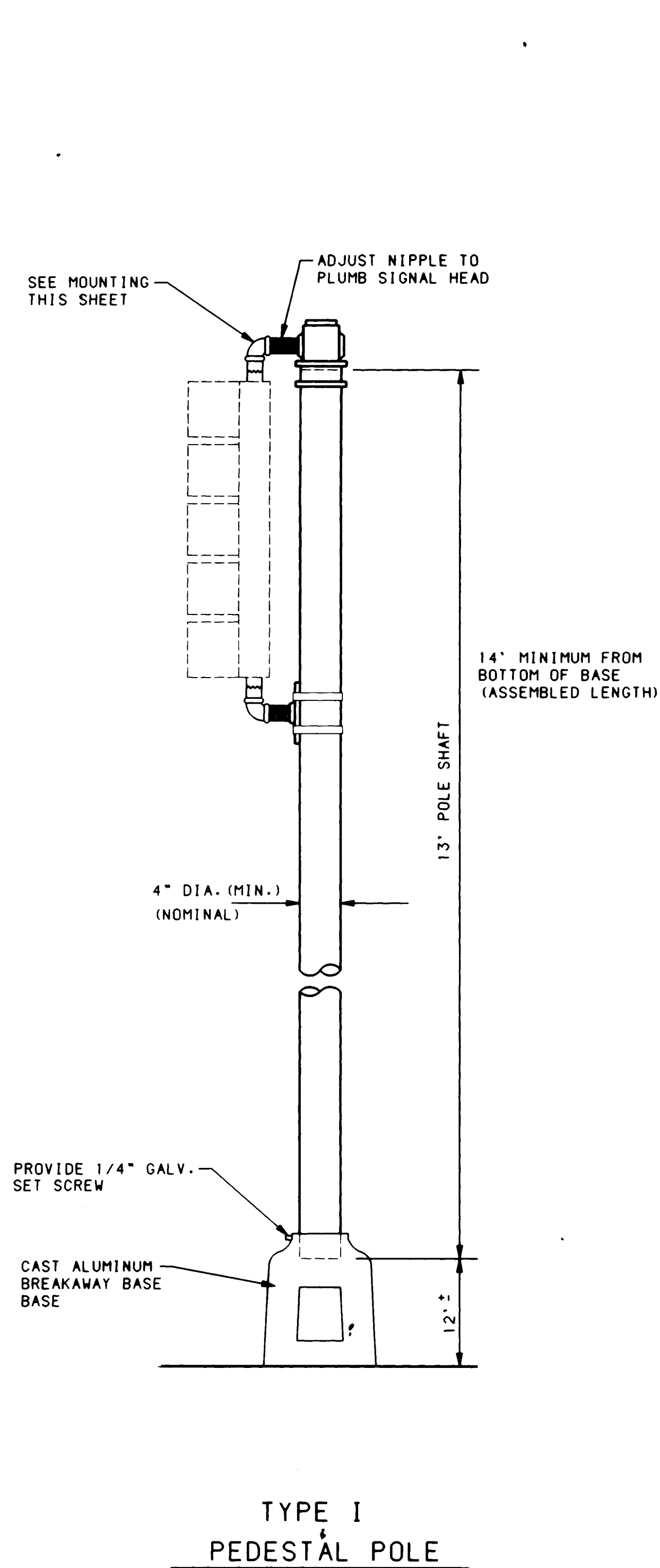
ANCHOR BOLTS
15', 20', 25' ARM: 1 1/2" X 60" X 6"
30', 35', 40' ARM: 1 3/4" X 60" X 6"

NO.	DESCRIPTION	DATE	BY
1	REVISIONS (OR CHANGE NOTICES)		

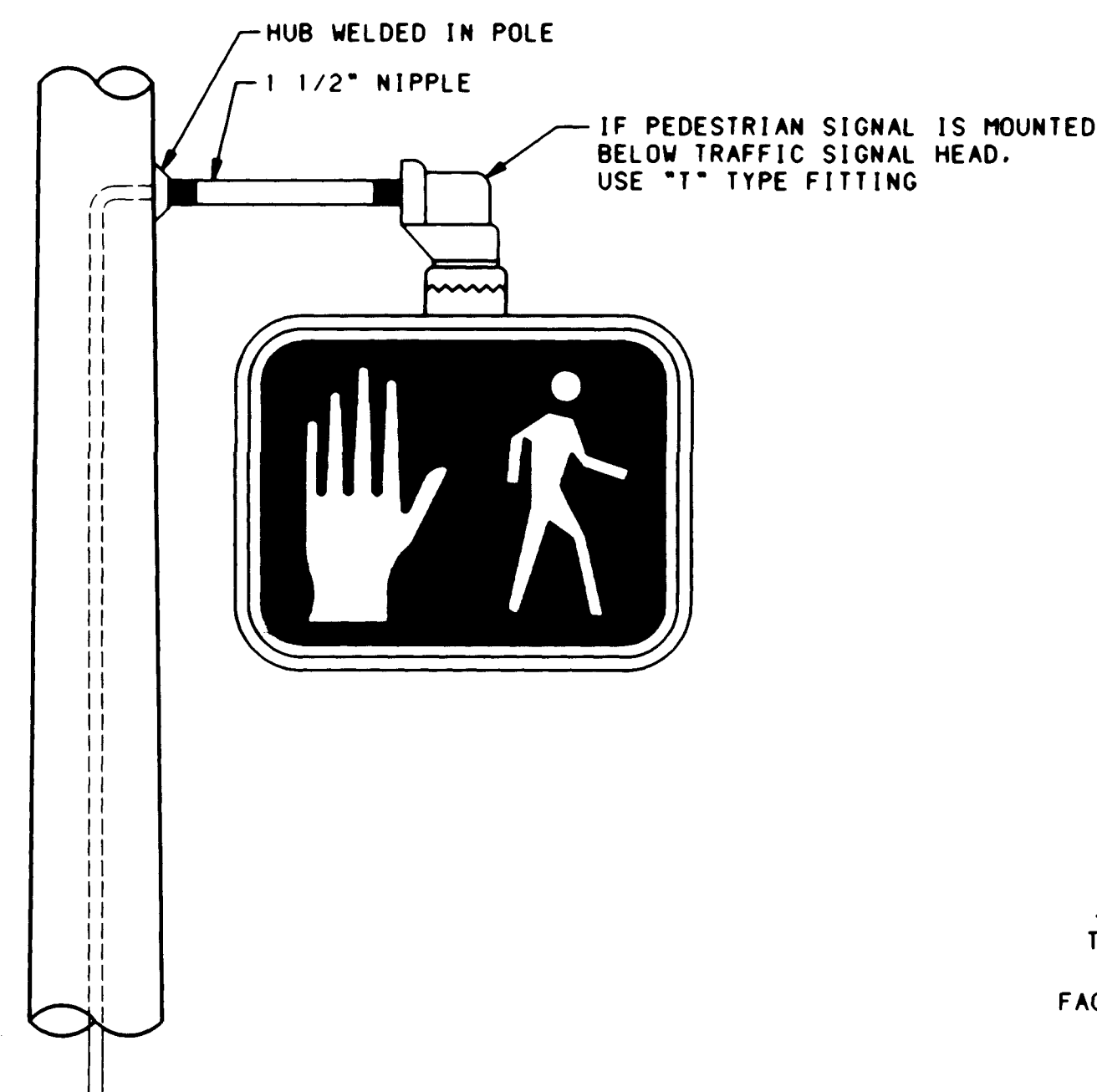
**NEW MEXICO STATE
HIGHWAY AND TRANSPORTATION
DEPARTMENT**

**TRAFFIC DESIGN SECTION
TYPE II STANDARDS
CITY OF ALBUQUERQUE**

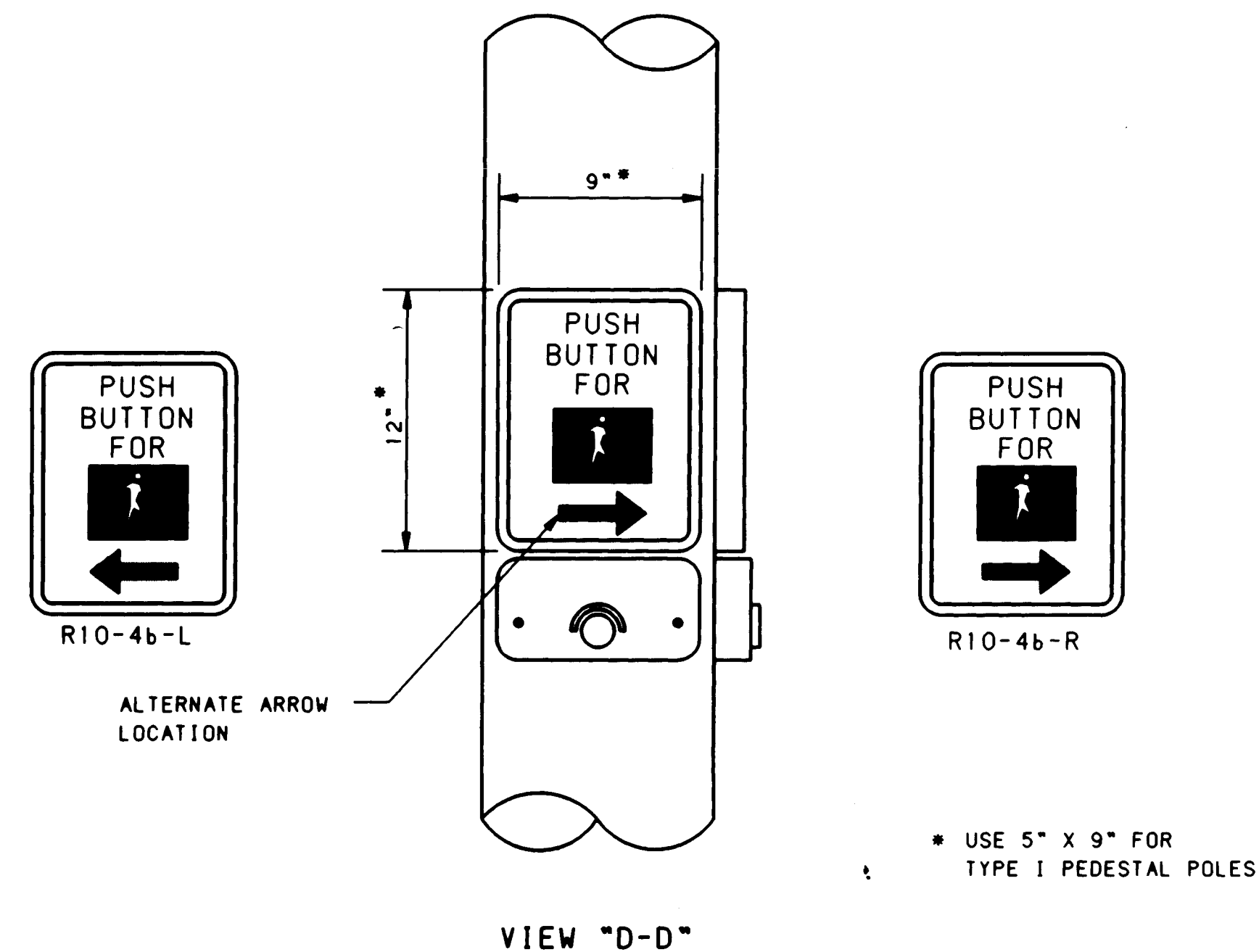




MOUNTING DETAIL
(SIDE OF SHAFT)

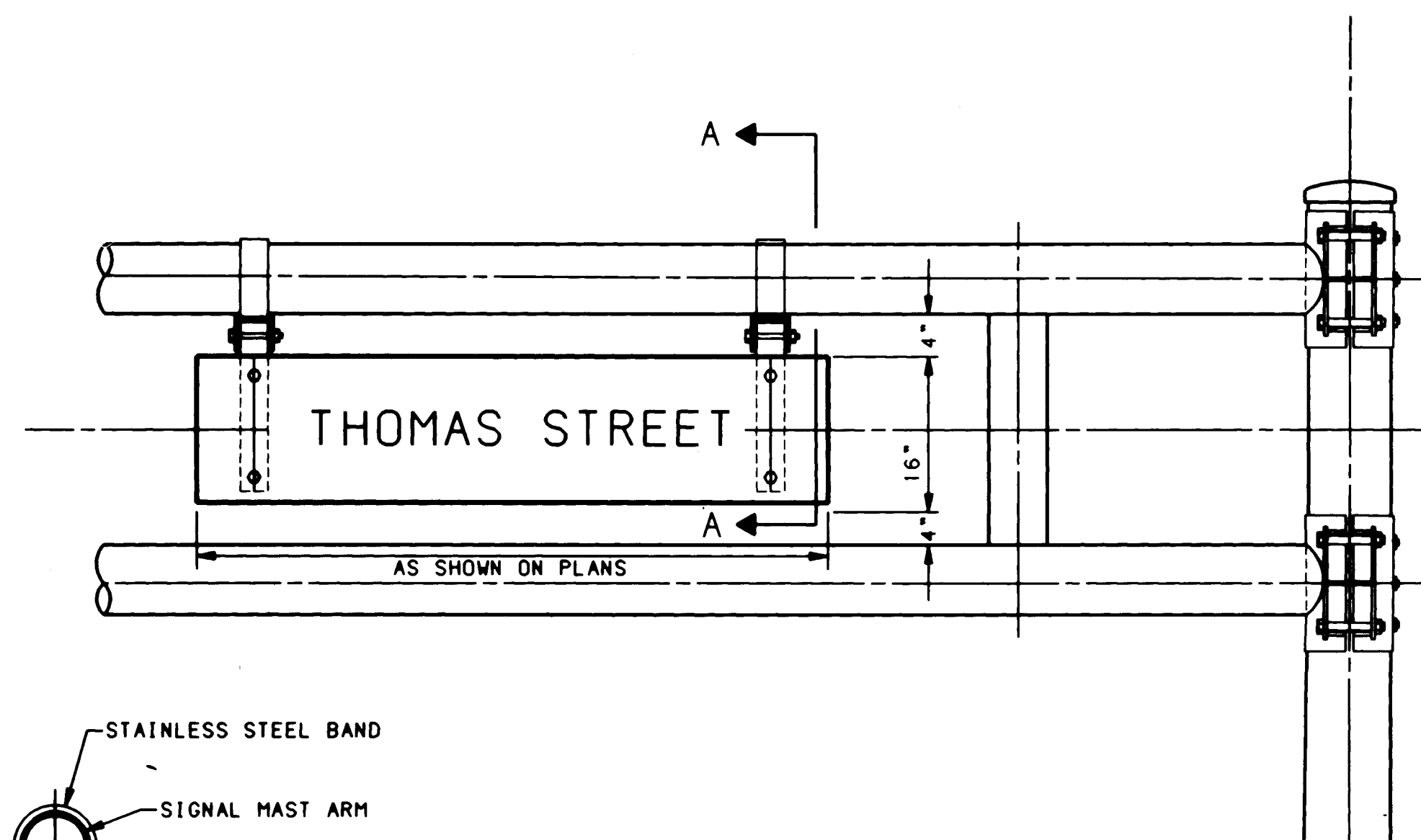


PEDESTRIAN SIGNAL

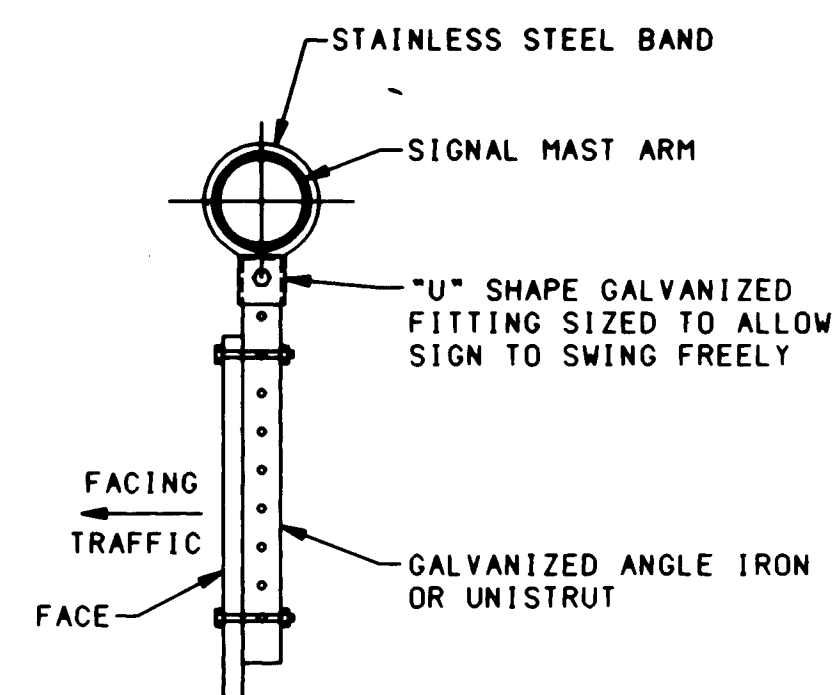


VIEW "D-D"

PUSH BUTTON DETAIL



STREET NAME SIGN DETAIL



SECTION "A-A"

ALUMINUM PANEL SIGN NOTES

1. SIGN SHALL BE 16" WIDE WITH 8" SERIES "C" LETTERS UP TO 12 SQUARE FEET TOTAL AREA AND SHALL HAVE HIGH INTENSITY REFLECTIVE LEGEND, BORDER AND BACKGROUND. COLORS: WHITE ON GREEN, SIGN PANELS SHALL BE SINGLE SHEET 6061-T6 ALUMINUM .120 MINIMUM THICKNESS.

C of A PWD Maps & Records

1	2	3	4	5	6	7	8	9		
2	4		3	6	7	2	3	6	9	4

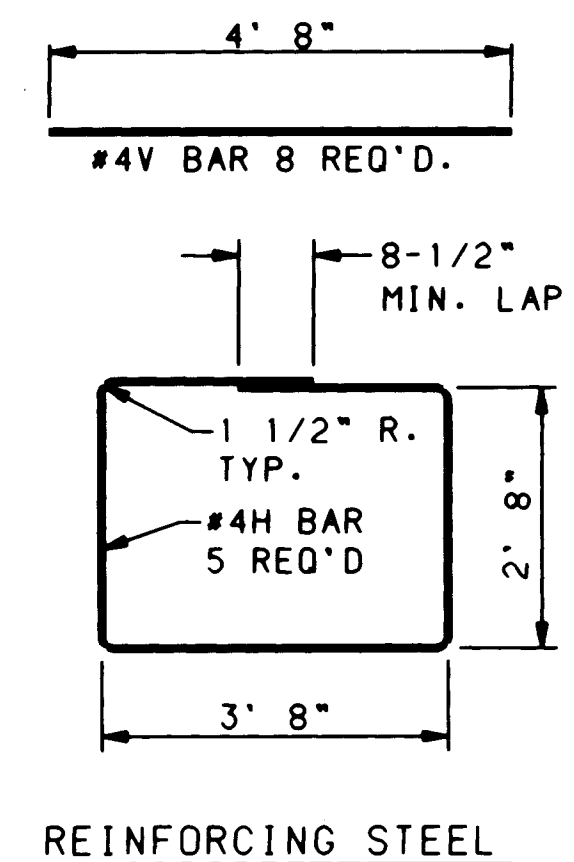
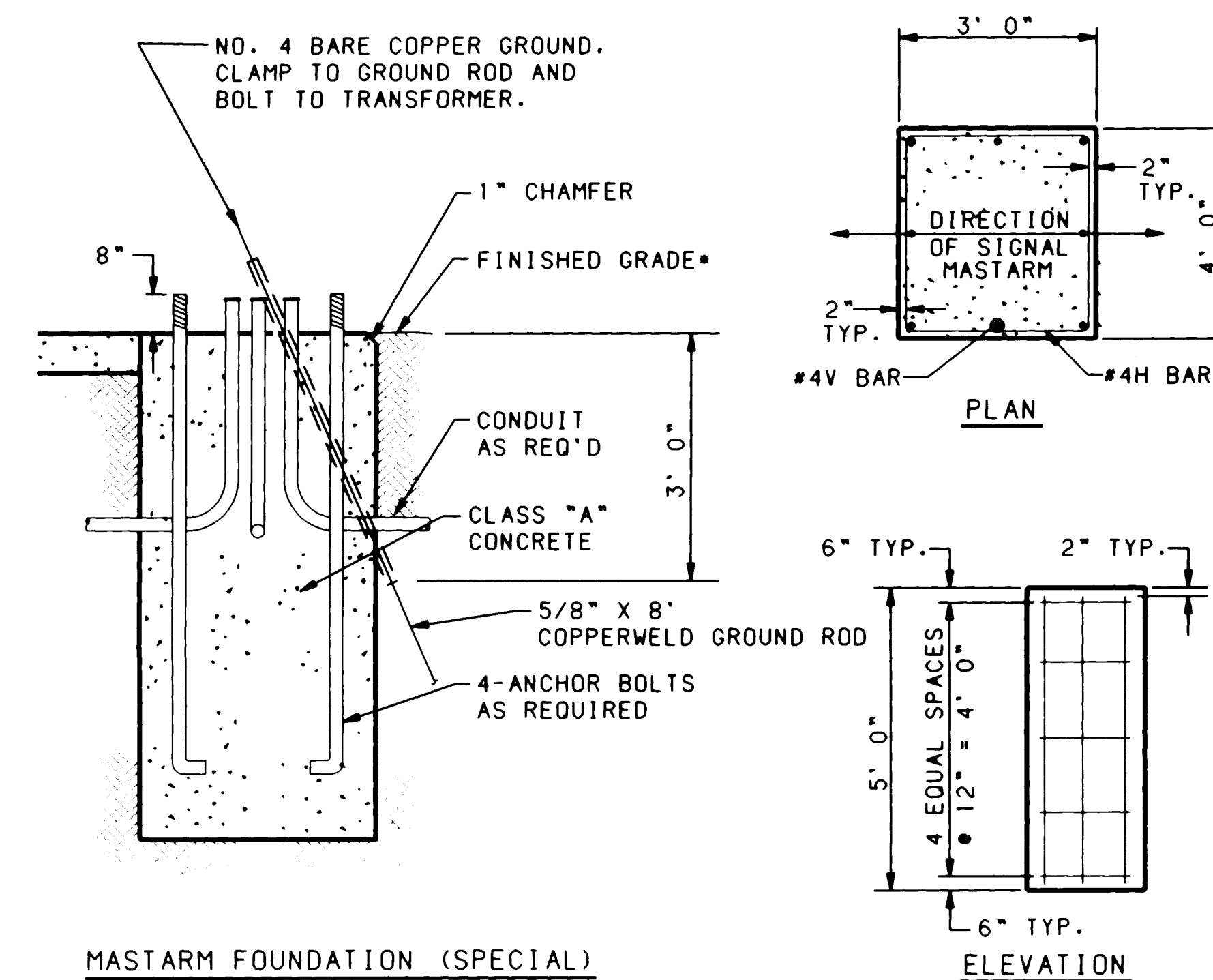
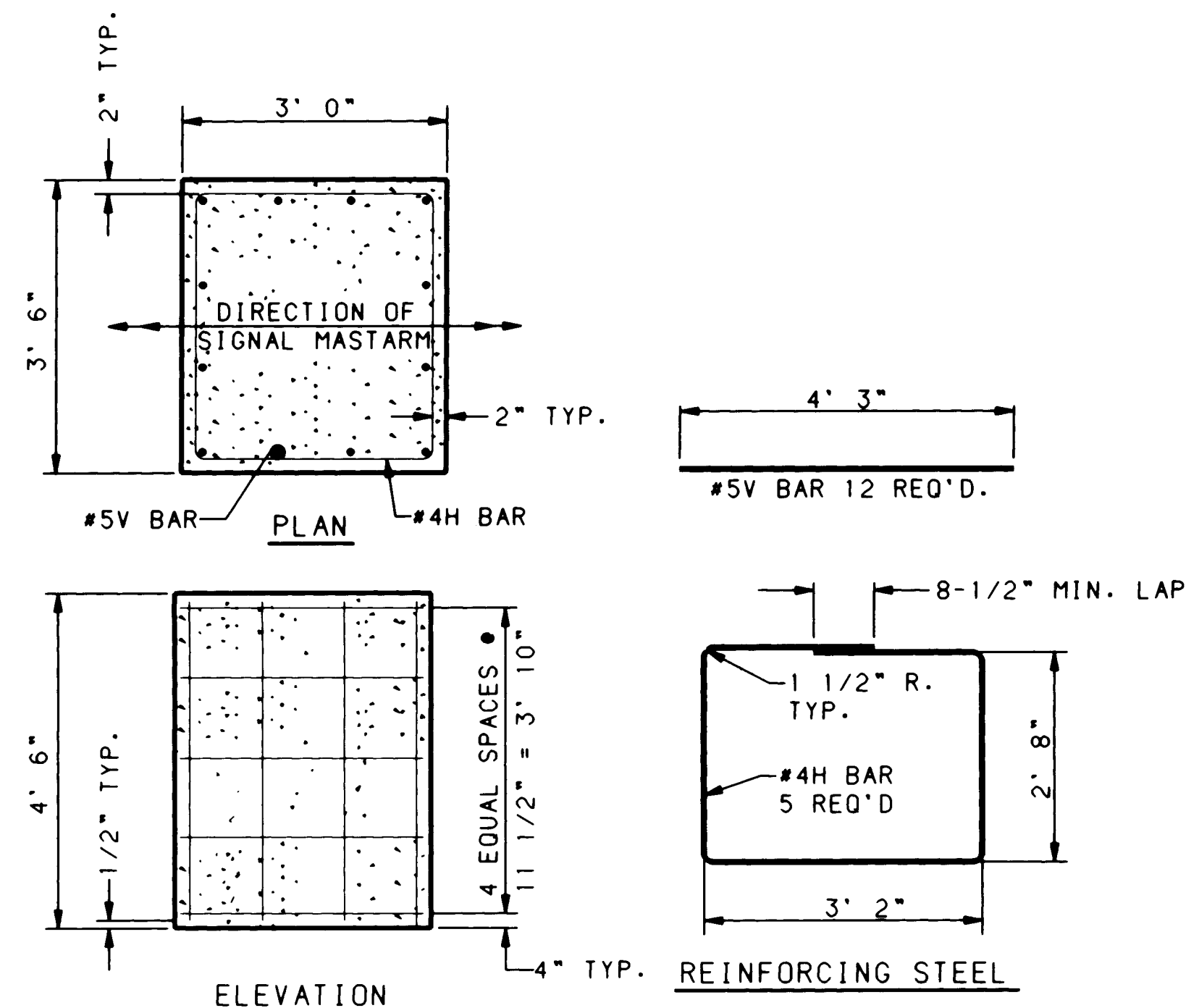
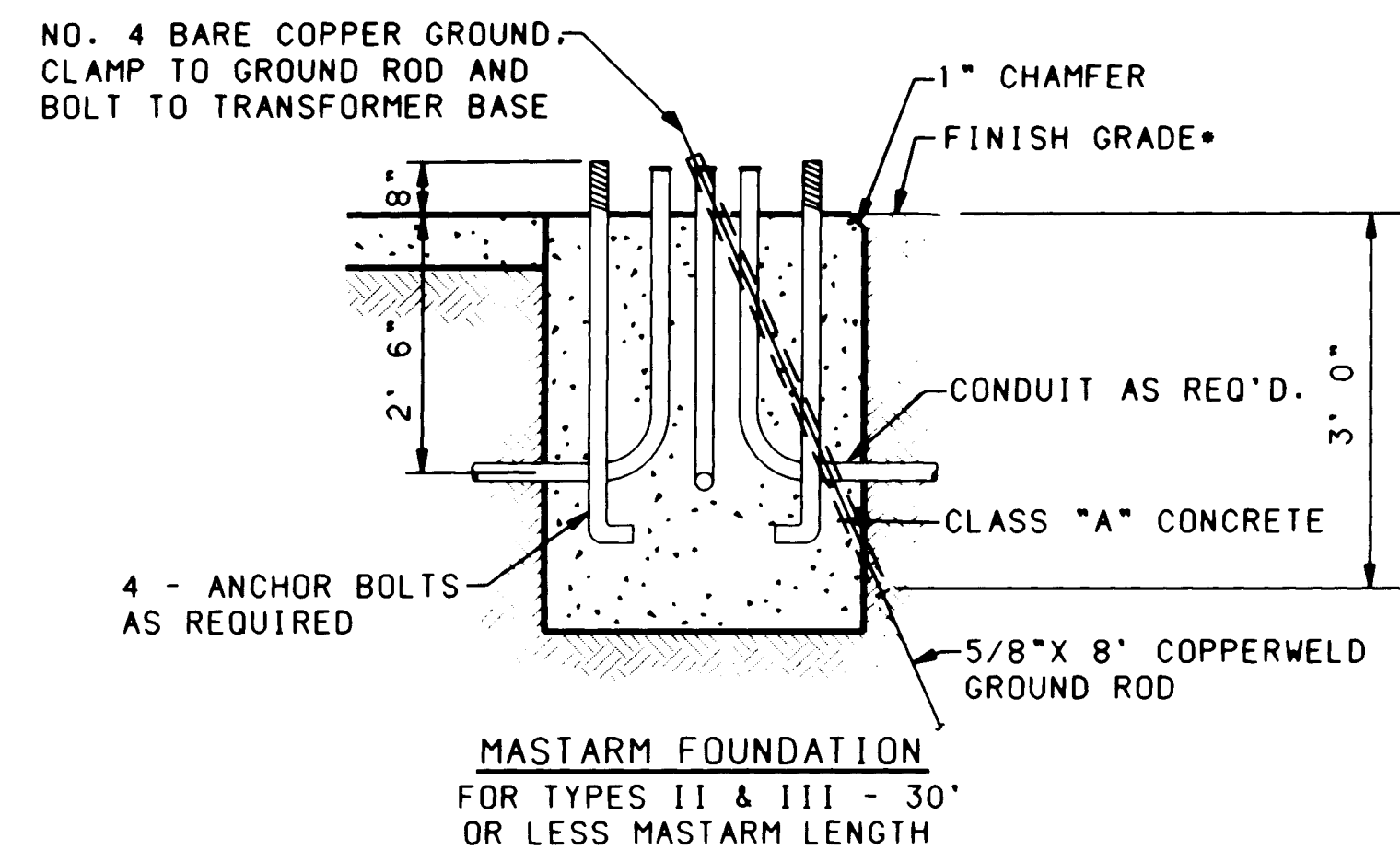
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE:	TRAFFIC SIGNAL MISCELLANEOUS DETAILS
--------	---

DRAWING	
NO.	TPS-4040(2)

MAP NO.	SHEET	OF
	8	7

[illegible]



MASTARM FOUNDATION DETAILS-TYPE II & TYPE III STANDARDS
TYPES II & III - 30' OR LESS MASTARM LENGTH

MASTARM FOUNDATION (SPECIAL) DETAILS-TYPE II & TYPE III STANDARDS
TYPES II & III - GREATER THAN 30' MASTARM LENGTH

NOTES

- ALL COPPERWELD GROUND RODS SHALL BE 5/8" ϕ X 8'-0" AND SHALL BE WRAPPED IN THREE (3) LAYERS OF PIPE INSULATION TAPE OR PLACED THROUGH A 1" ϕ PVC CONDUIT.

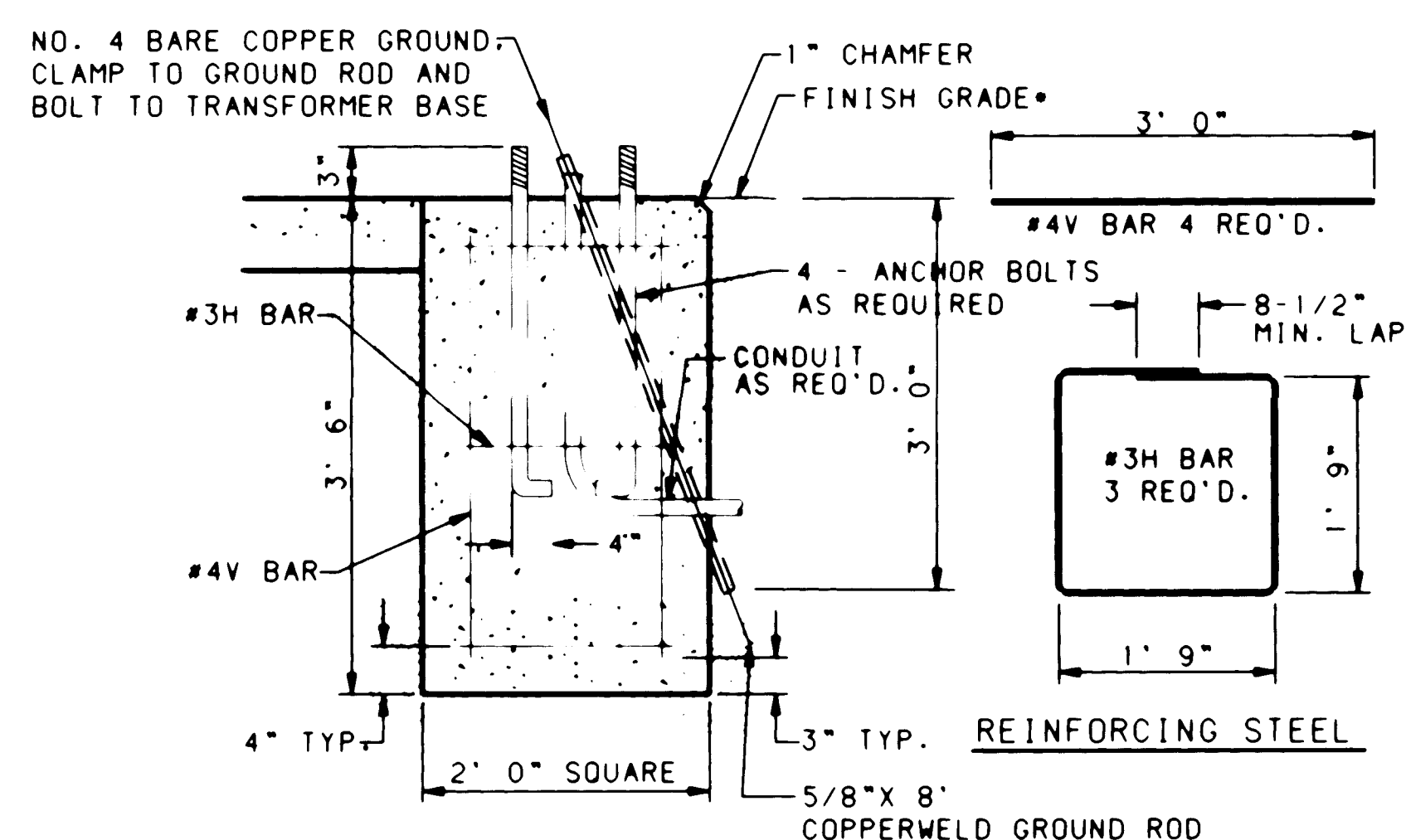
APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>N/A</i>	
TRANSPORTATION	<i>N/A</i>	8-26-91
HYDROLOGY	<i>Steve Boley</i>	8/23/91
WATER	<i>N/A</i>	
WASTE WATER	<i>N/A</i>	

ESTIMATED QUANTITIES (FOR CONTRACTORS INFORMATION ONLY)		
FOUNDATION	CLASS "A" CONC. CUBIC YARDS	REINFORCING BARS POUNDS
MASTARM - TYPES II & III (SPECIAL) (FOR 35 FOOT MASTARM)	2.22	72
MASTARM - TYPES II & III (FOR 30 FOOT OR LESS MASTARM)	1.75	94
PEDESTAL POLE TYPE I	0.52	17
CONTROLLER CABINET TYPE P&R	1.26	--
CONTROLLER CABINET TYPE G&M	0.78	--

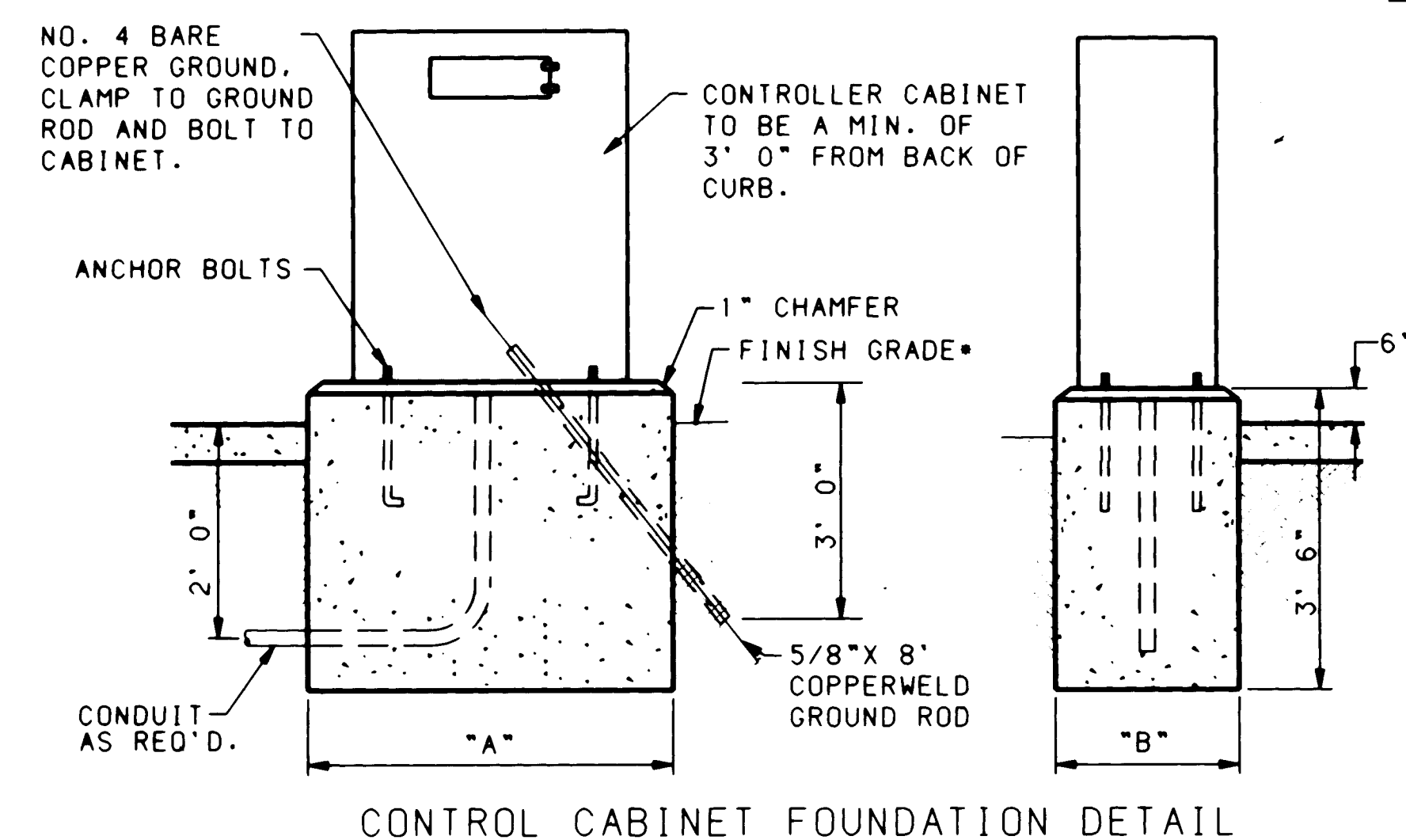
ALTERNATE DESIGNS FOR STANDARD FOUNDATIONS. TO BE SUBMITTED TO THE BRIDGE ENGINEER FOR APPROVAL.

NOTE: ALL SIGNAL FOUNDATIONS SHALL INCLUDE COPPERWELD GROUND RODS AS SHOWN WHICH SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF FOUNDATION. NO PRICE OR PAYMENT SHALL BE MADE THEREFOR.

* FINISHED GRADE FOR ALL FOUNDATIONS TO BE DETERMINED BY THE PROJECT ENGINEER. THE TOP OF STANDARD FOUNDATIONS SHALL BE FLUSH WITH ADJACENT SIDEWALK OR PAVED AREAS.



PEDESTAL FOUNDATION DETAILS-TYPE I STANDARD



CONTROL CABINET FOUNDATION DETAIL

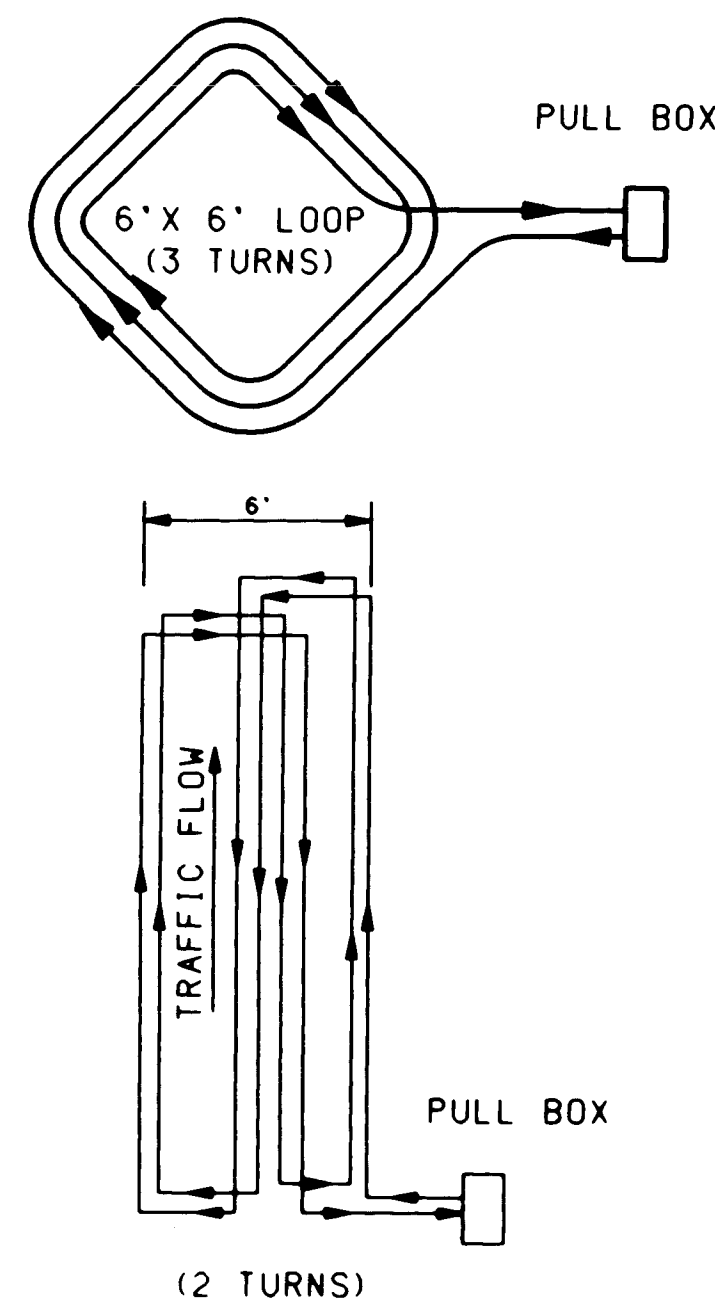
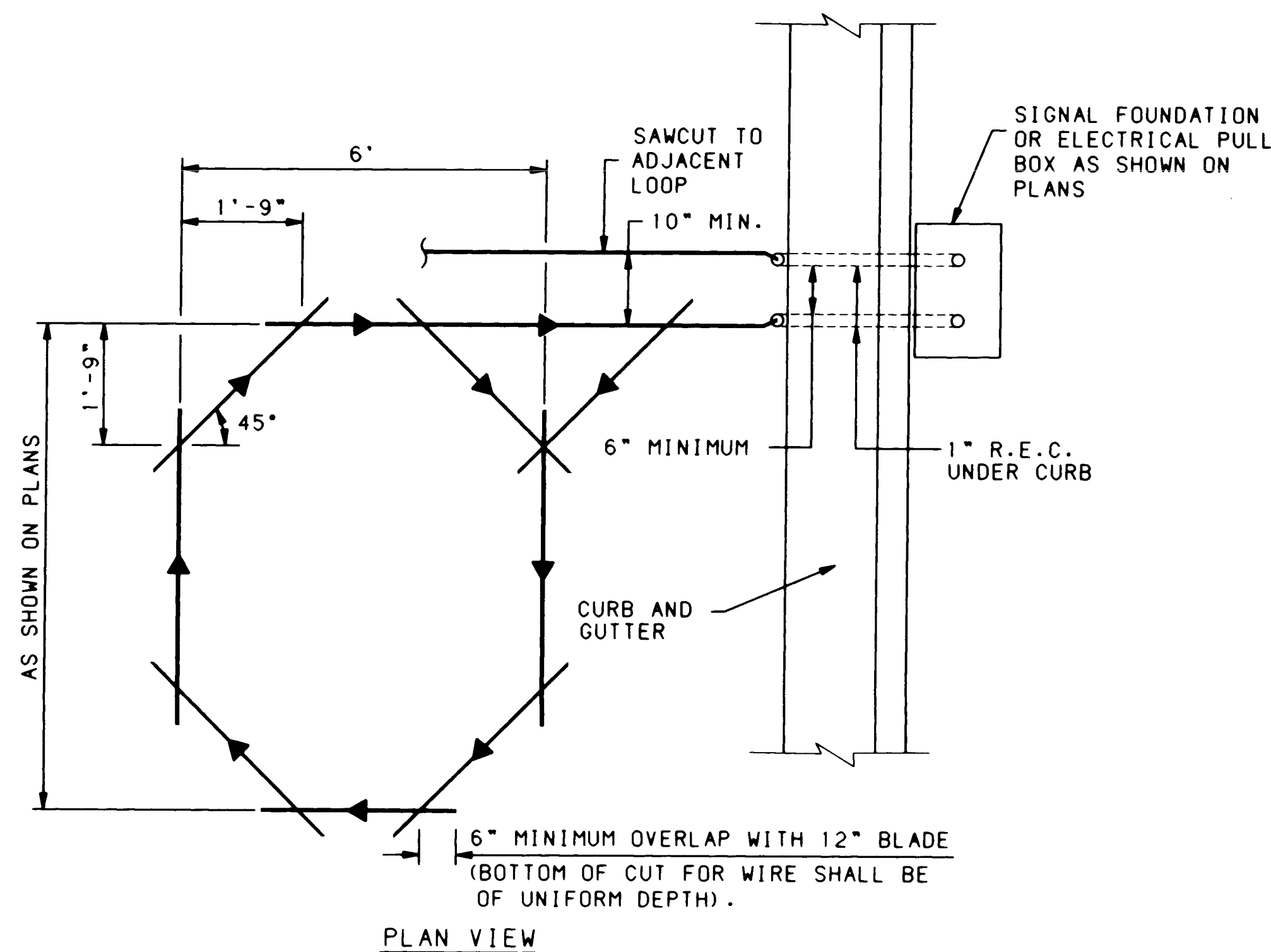
IN THE EVENT THE SUPPLIED CABINET WOULD OVERLAP THE SIDES OF ABOVE FOUNDATION, THE FOUNDATION SHALL BE INCREASED IN SIZE AS DIRECTED BY THE ENGINEER.

CABINET TYPE	"A"	"B"
P & R	4'-2"	2'-4"
G & M	3'-0"	2'-0"



NEW MEXICO STATE
HIGHWAY AND TRANSPORTATION
DEPARTMENT
TRAFFIC DESIGN SECTION
TRAFFIC SIGNAL
FOUNDATION DETAILS

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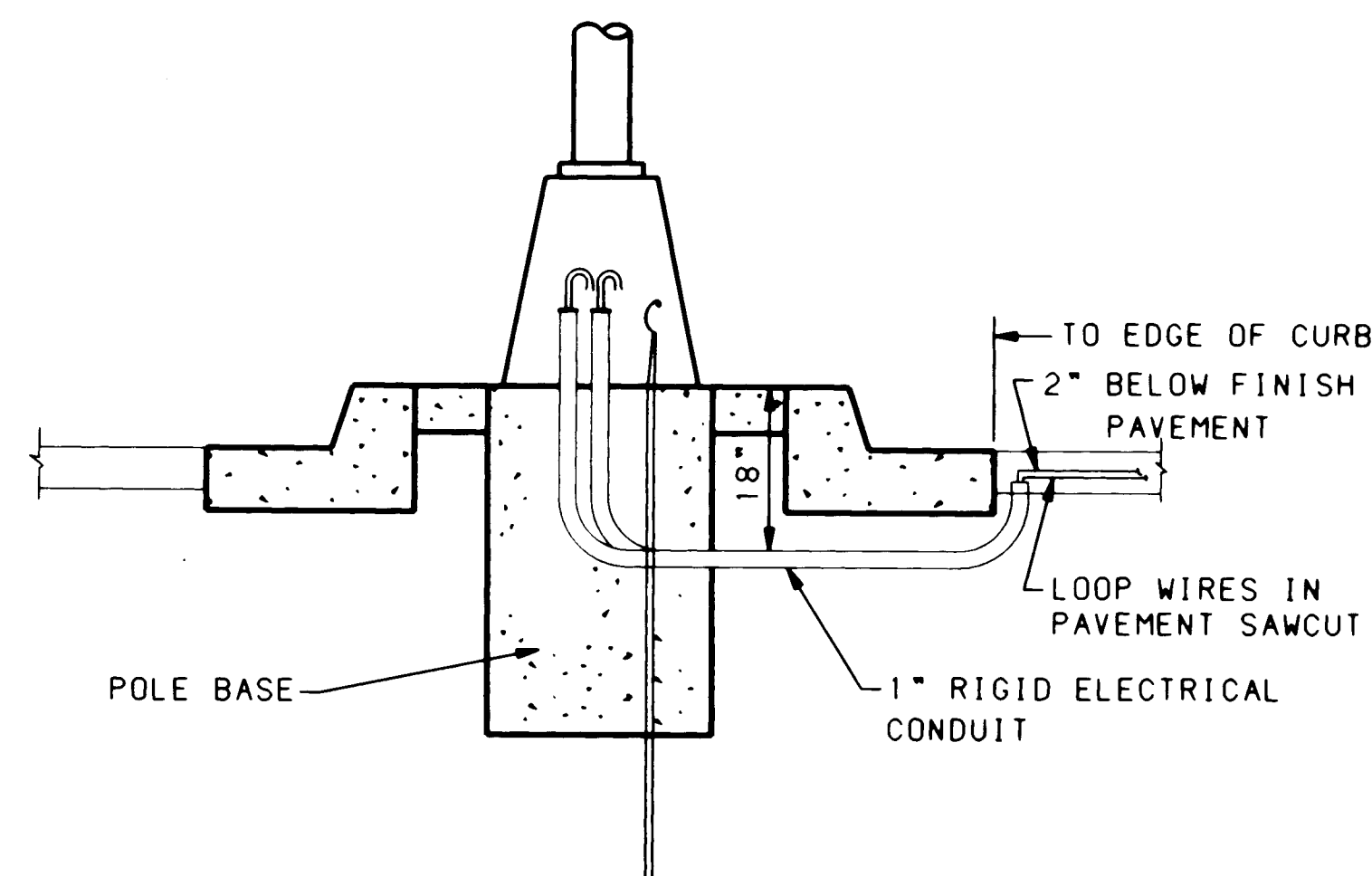


NOTES

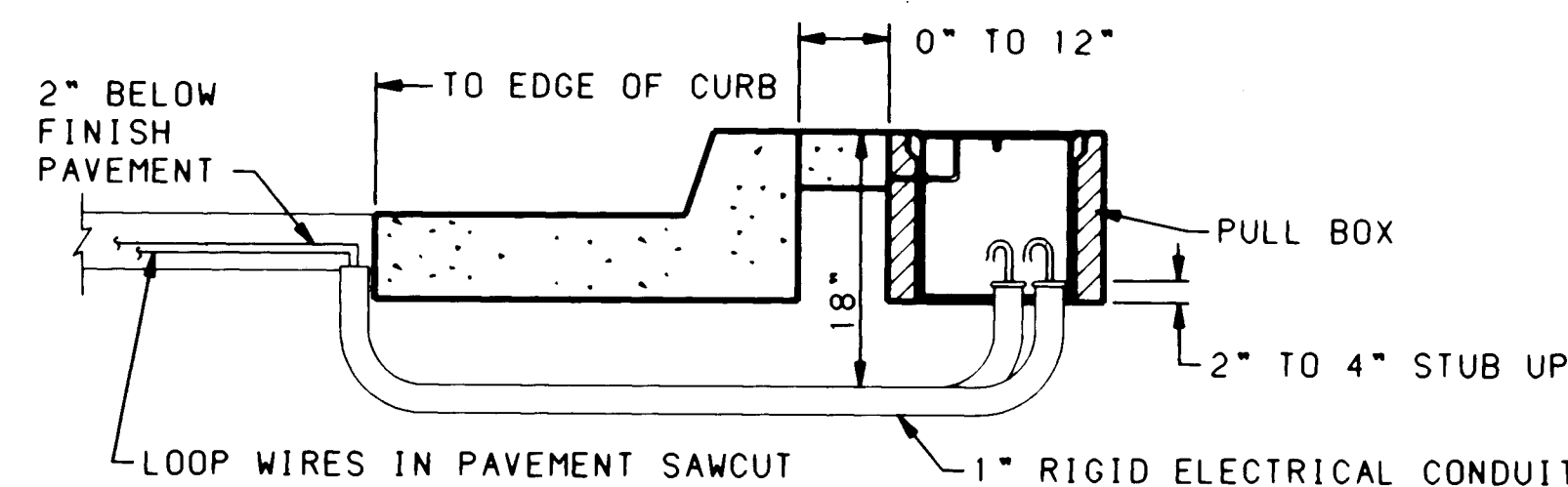
- ALL LOOP DETECTOR WIRE SHALL BE NO. 14 AWG STRANDED COPPER WIRE WITH CROSSLINKED POLYETHYLENE INSULATION (INDUSTRY TYPE XHHW) CONFORMING TO THE REQUIREMENTS OF I.M.S.A. SPECIFICATIONS NO. 51-3 1984. BACKER ROD SHALL NOT BE USED IN THE INSTALLATION OF LOOP (EXCEPT PIECES LESS THAN 12" WHICH MAY BE PLACED OVER THE WIRE AT THE SAW CUT CORNERS TO HOLD THE WIRE. A 1/4" LAYER OF SEALANT SHALL BE PLACED IN THE SAWCUT BEFORE PLACEMENT OF THE WIRE AND THEN THE WIRE SHALL BE ENCAPSULATED WITH SEALANT.
- ALL LOOP LEAD IN CABLES SHALL BE TAGGED AT CABINET TO IDENTIFY EACH CABLE BY LOOP AND PHASE NUMBER.
- SEALANT SHALL BE HOT MELT RUBBERIZED ASPHALT LOOP DETECTOR SEALANT MANUFACTURED BY CRAFTCO OR ALTERNATE APPROVED BY CITY TRAFFIC SIGNAL ENGINEER. NO TWO PART EPOXY SEALANT WILL BE ACCEPTABLE.

TYPICAL LOOP WIRE PLACEMENT DETAIL

- NOTES:
- WIRES MUST BE WOUND IN THE DIRECTION SHOWN.
 - ALL 6x30, 6x40, & 6x50 LOOPS HAVE 2 TURNS. ALL 6x6 LOOPS HAVE 3 TURNS.

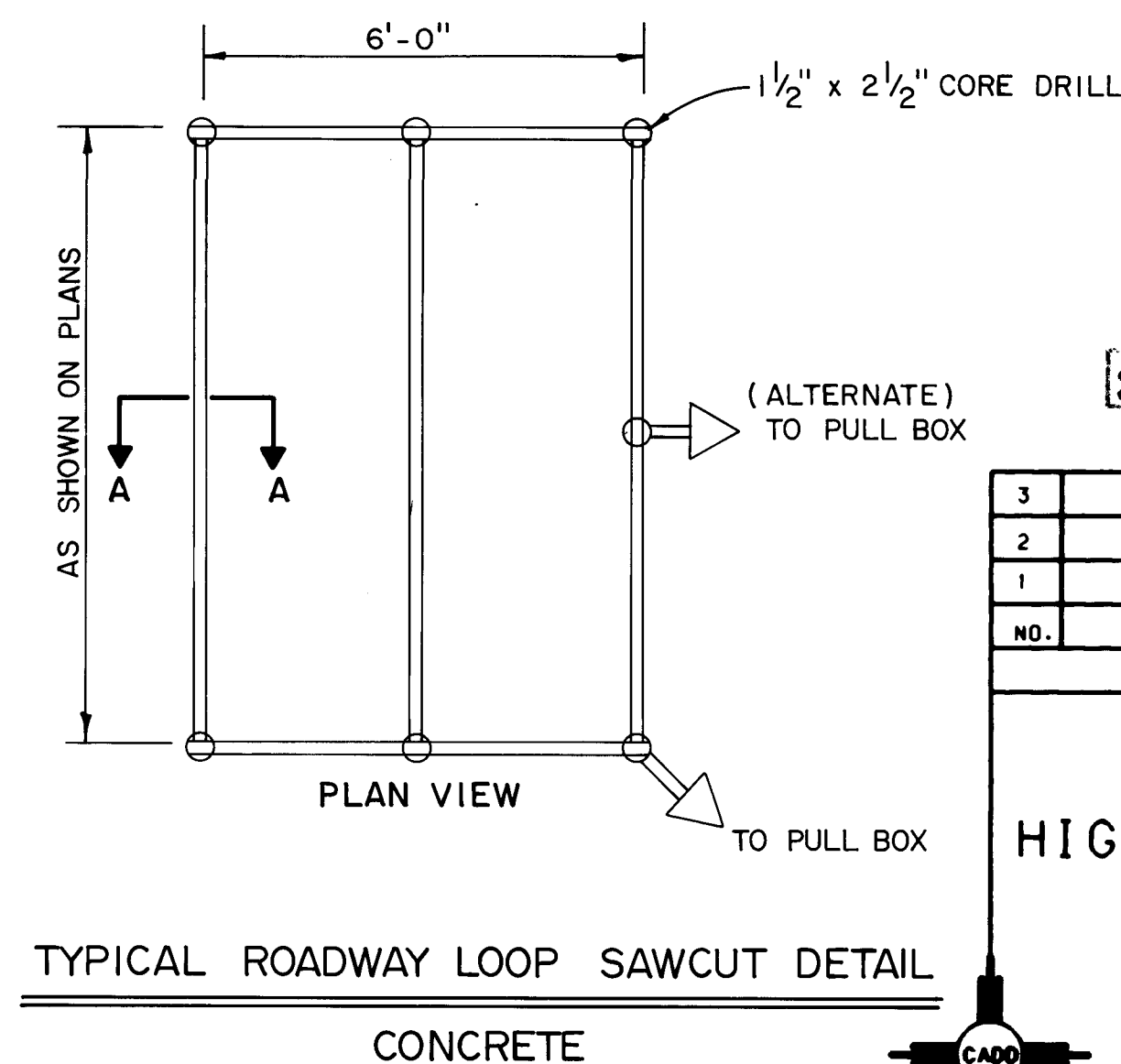
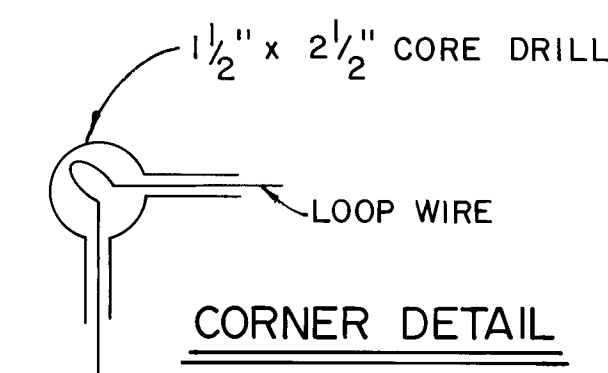
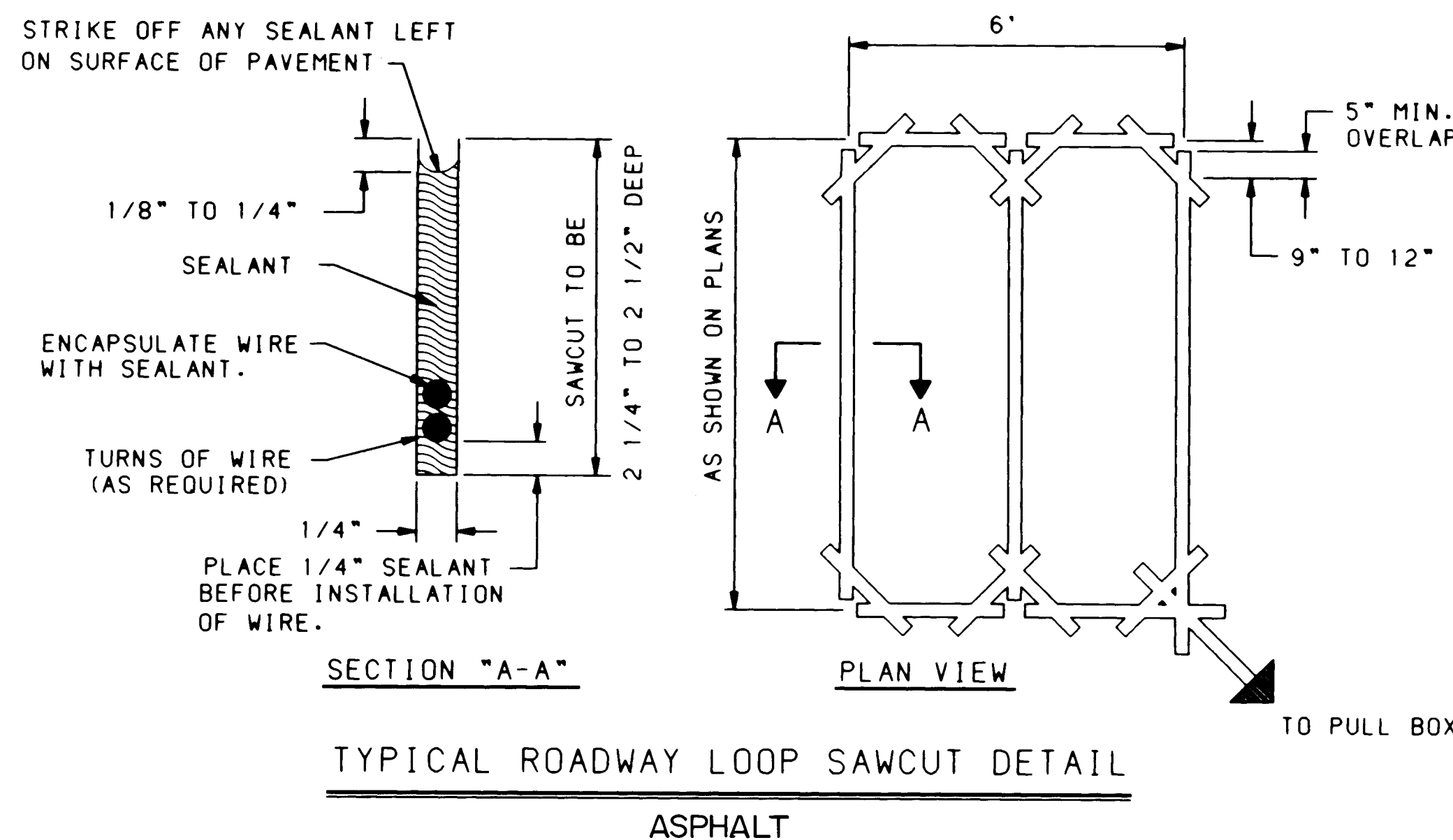


NOTE: PROVIDE A SEPARATE 1" CONDUIT FOR EACH LOOP (PAIR OF DETECTOR WIRES) TERMINATION.



LOOP WIRE TERMINATION DETAILS

NOTE: GROUND LOOP LEAD - IN SHIELD AT CONTROLLER ONLY.

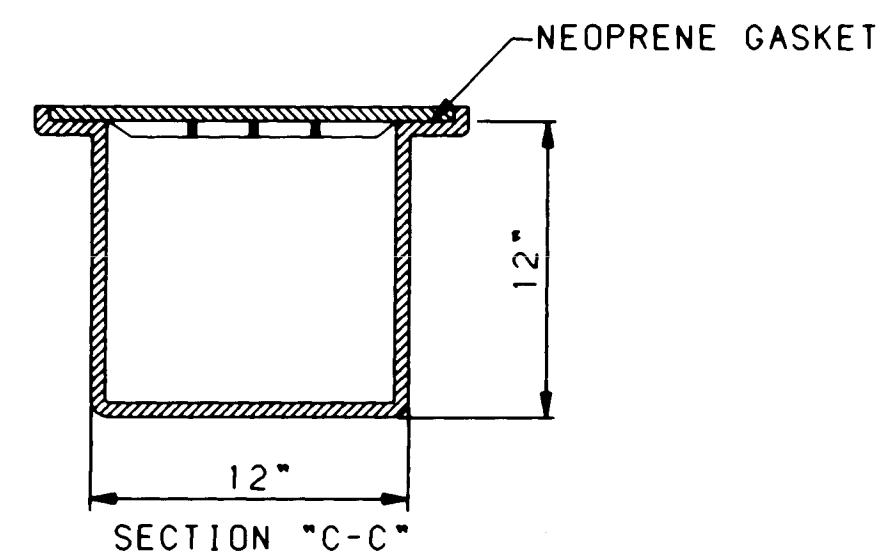
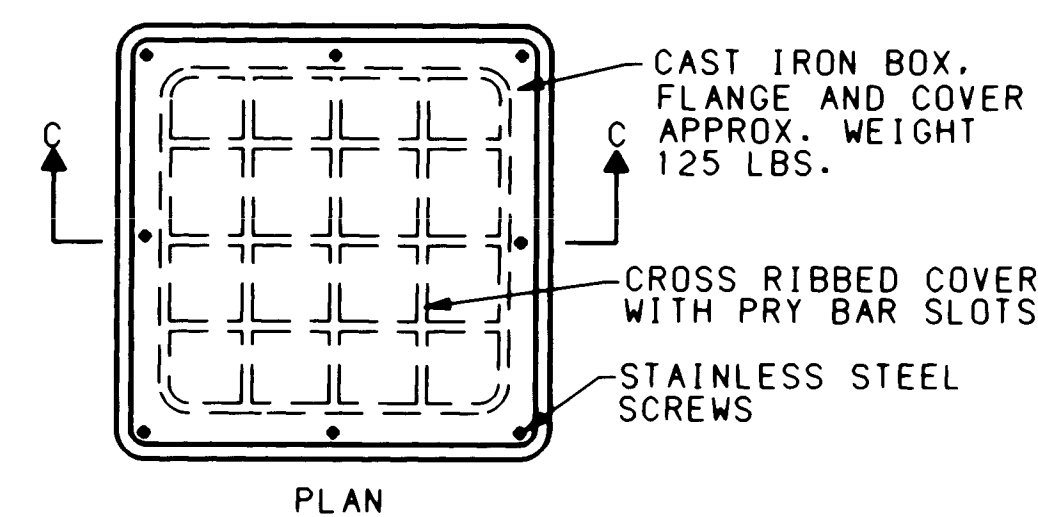


APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	N/A	
TRANSPORTATION	K. Danks	8-26-91
HYDROLOGY	Steve Bobing	8/23/91
WATER	N/A	NED
WASTE WATER		

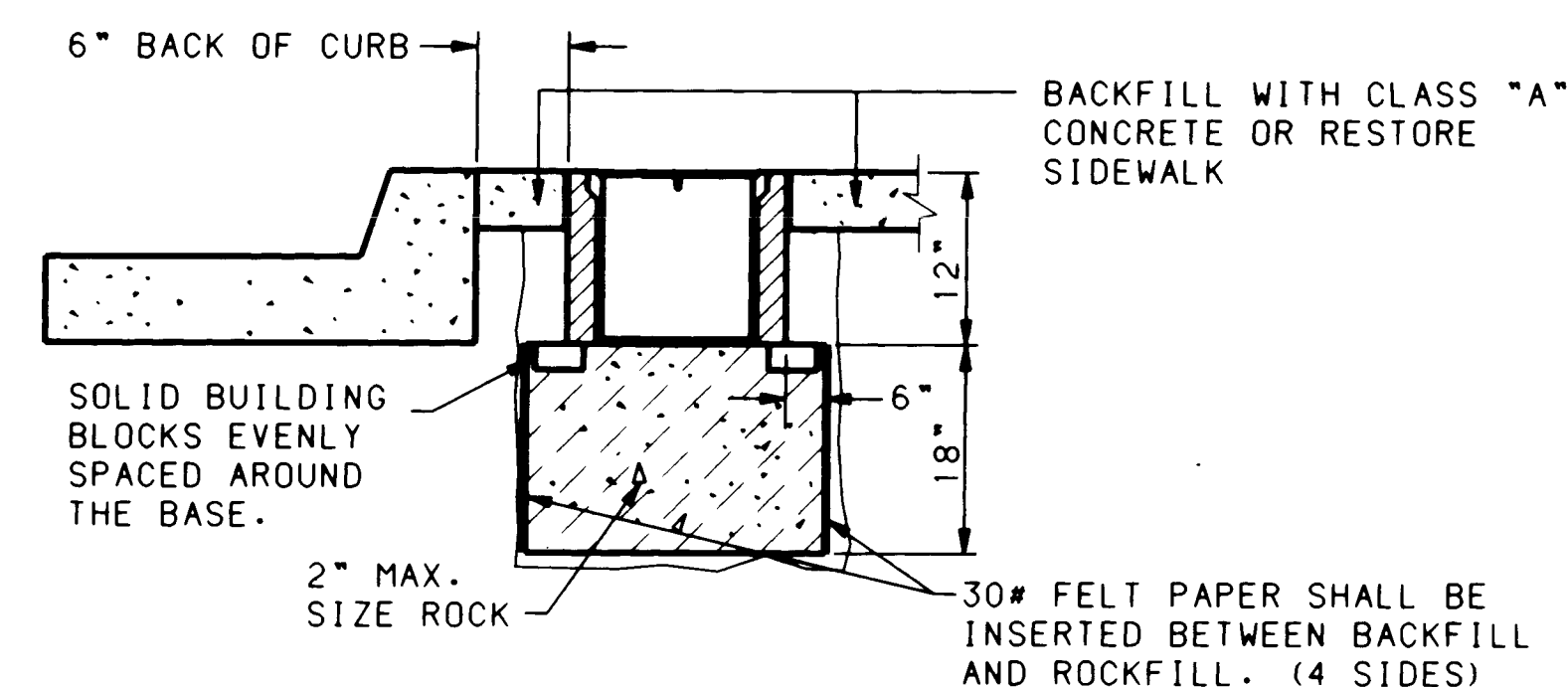


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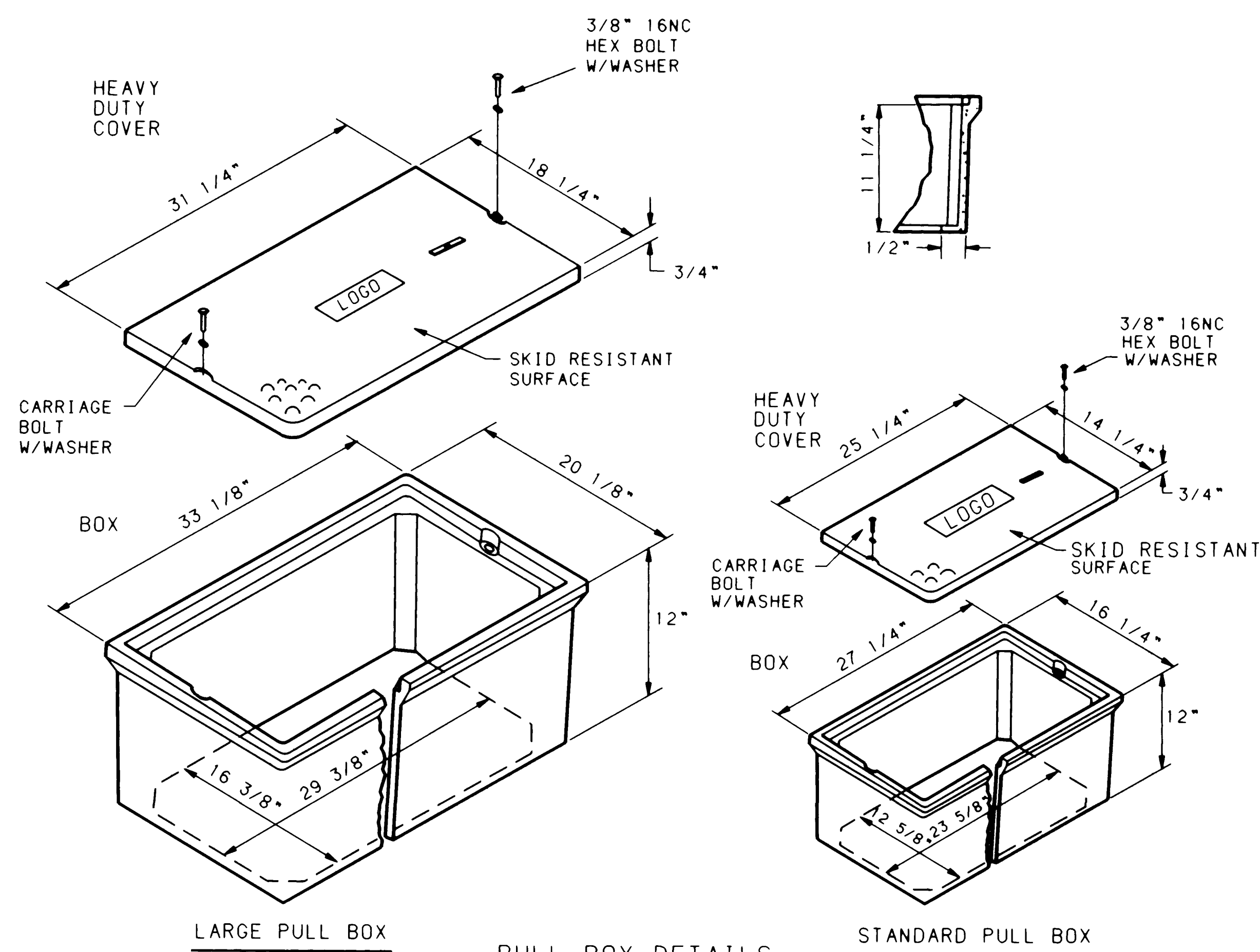
NO.	DESCRIPTION	DATE	BY
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REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT			
TRAFFIC DESIGN SECTION			
LOOP DETECTOR DETAILS			



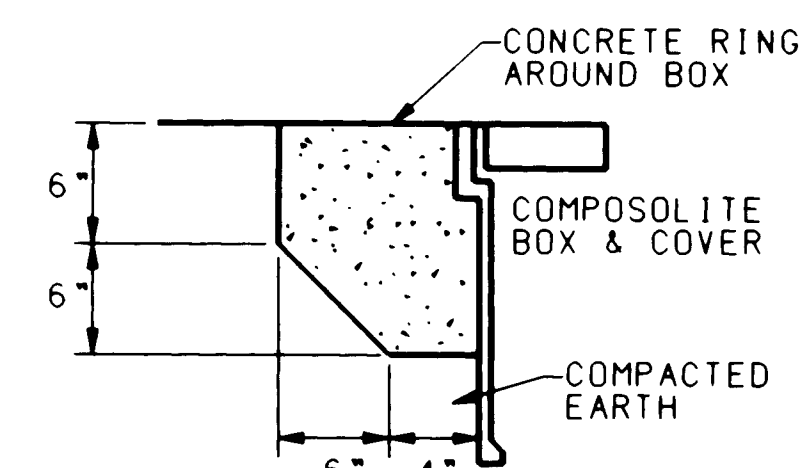
METAL PULL BOX



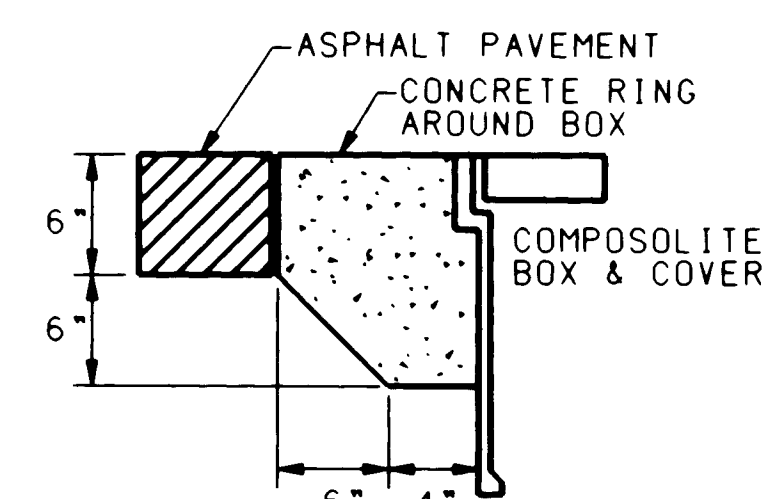
TYPICAL PULLBOX INSTALLATION
SEE DETAIL "A" BELOW



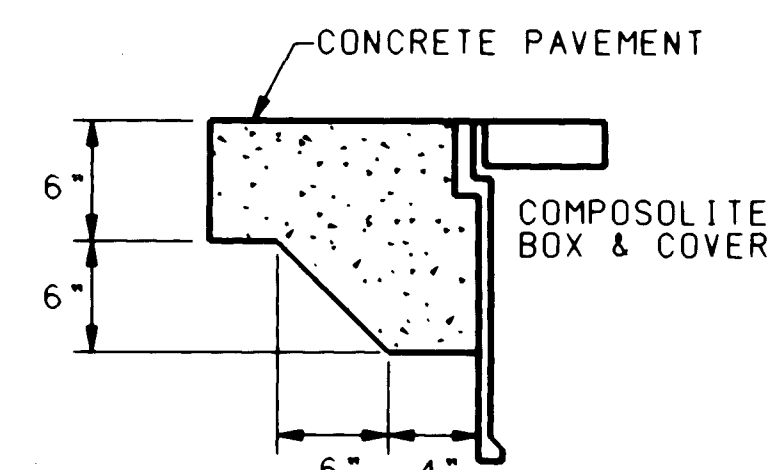
PULL BOX DETAILS



IN COMPACTED EARTH



IN ASPHALT PAVEMENTS



IN CONCRETE PAVEMENTS

CONCRETE COLLAR DETAIL FOR PULL BOXES

NOTE: THE CONCRETE FOR THE PULL BOXES WILL BE PAID FOR UNDER ITEM NO. 710010 AND NO OTHER MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR

DETAIL "A"

NOTES FOR REINFORCED POLYMER MORTAR PULL BOX

- SERVICE LOAD FOR (HEAVY DUTY COVERS) - 15,000 LBS. OVER A 10" SQUARE (150 PSI).
- MATERIAL TO BE AN AGGREGATE CONSISTING OF SAND AND GRAVEL BOUND TOGETHER WITH A POLYMER AND REINFORCED WITH CONTINUOUS WOVEN GLASS STRANDS. THE MATERIAL MUST HAVE THE FOLLOWING MECHANICAL PROPERTIES: COMPRESSIVE STRENGTH - 11,000 PSI, TENSILE STRENGTH - 1700 PSI, FLEXURAL STRENGTH - 7500 PSI.
- ALL PULL BOX COVERS SHALL BE STEEL OR REINFORCED POLYMER MORTAR. NO CONCRETE COVERS WILL BE ACCEPTABLE. PULL BOX TYPE SHALL BE APPROVED BY THE PROJECT MANAGER.
- THE DIMENSIONS OF THE PULL BOXES SHOWN ARE MINIMUM DIMENSIONS AND MAY VARY AS TO THE MANUFACTURER'S RECOMMENDATIONS. ALL DIMENSIONS SHALL BE VERIFIED BY THE PROJECT MANAGER

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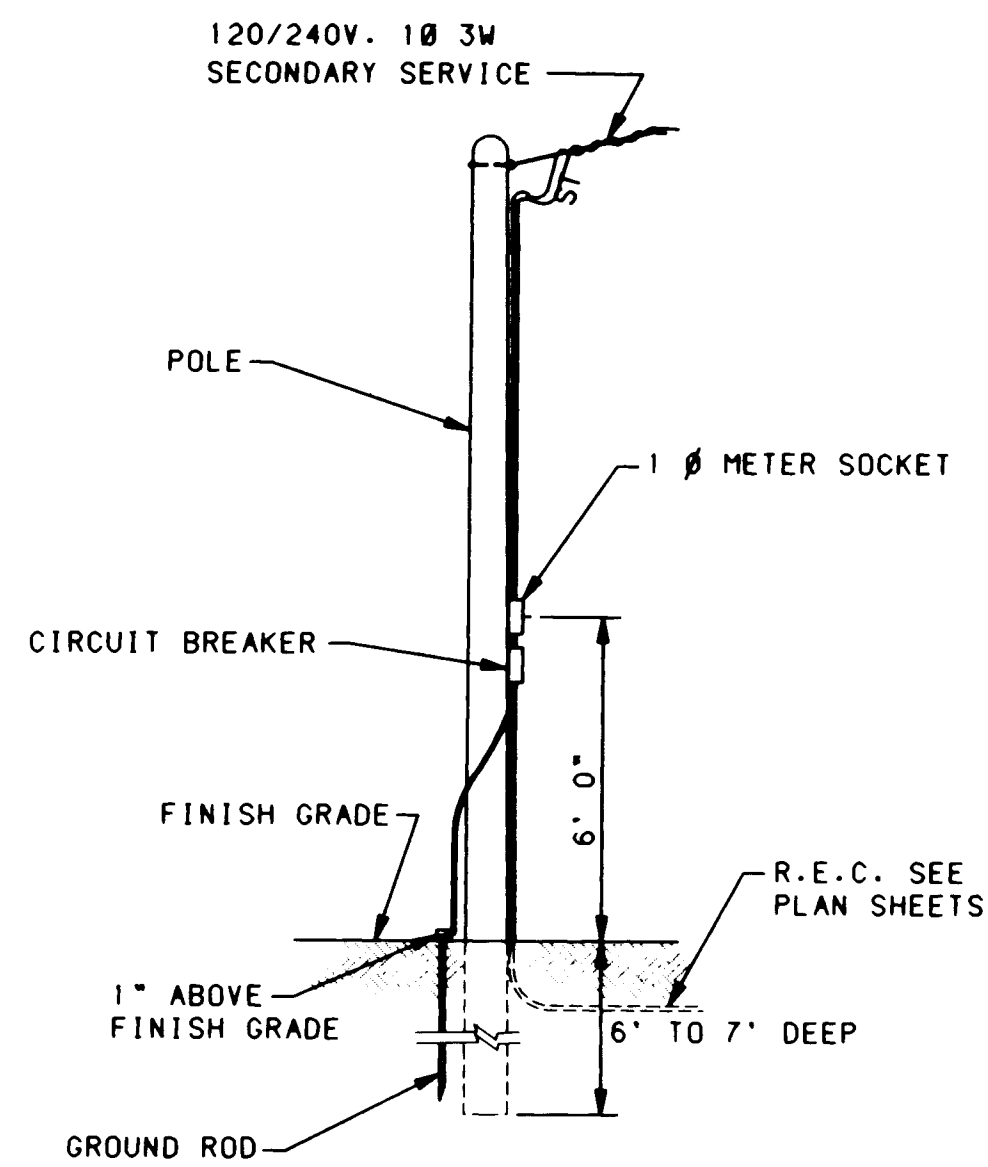


APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	N/A	
TRANSPORTATION	R. Doyle	8-26-91
HYDROLOGY	Steve Boley	8/23/91
WATER	N/A	
WASTE WATER	N/A	

3			
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NO.	DESCRIPTION	DATE	BY

NEW MEXICO STATE
HIGHWAY AND TRANSPORTATION
DEPARTMENT

TRAFFIC DESIGN SECTION
SIGNAL AND LIGHTING
PULL BOX DETAILS



NOTE:
PROVIDE ONE 50A. 1P 120V. CIRCUIT FOR CONTROLLER SIGNALS AND ONE 50A. 1P CIRCUIT FOR DUPLEX CONVENIENCE OUTLET IN CONTROLLER. (USE A 15A FUSE TO PROTECT THIS CIRCUIT.)

MATERIAL LIST

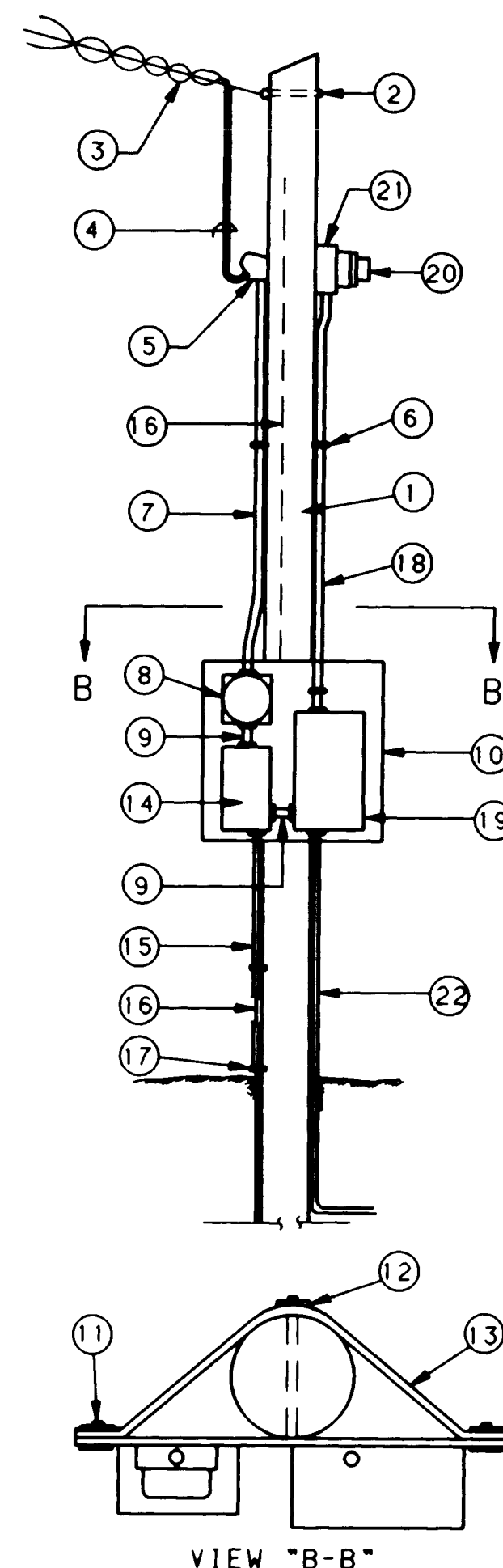
- 1 25' TREATED POLE (SEE NOTE 1. BELOW)
- 1 1" x 1" G.R.C. NIPPLE
- 1 SINGLE PHASE METER SOCKET
- 2 CIRCUIT BREAKERS 50A
- 1P IN RAIN TIGHT ENCLOSURE (N.E.M.A. 3R)
- 30' 1/2" NO. 6 THW BLACK
- 30' 1/2" NO. 6 THW WHITE
- 30' 1/2" NO. 6 THW RED
- 1 COPPERWELD 3/4" x 10'-0" GROUND ROD
- 1 GROUND ROD CLAMP
- 20' 1" GALV. RIGID CONDUIT (APPROX.)
- 1 5/8" EYEBOLT
- 1 1" WEATHERHEAD
- 10' NO. 6 BARE COPPER GROUND WIRE
- 5' 1/2" GALV. RIGID CONDUIT

SERVICE POLE (SIGNAL)

NO SCALE

GENERAL NOTES:

1. BID ITEM FOR SERVICE CONNECTION IS THE SAME DETAIL AS SERVICE POLE EXCEPT WITHOUT POLE.
2. SERVICE POLE (SIGNAL) FOR UNDERGROUND SERVICE INCLUDES UNIVERSAL SUPPORT BRACKETS AND SINGLE PHASE PEDESTAL METERING.

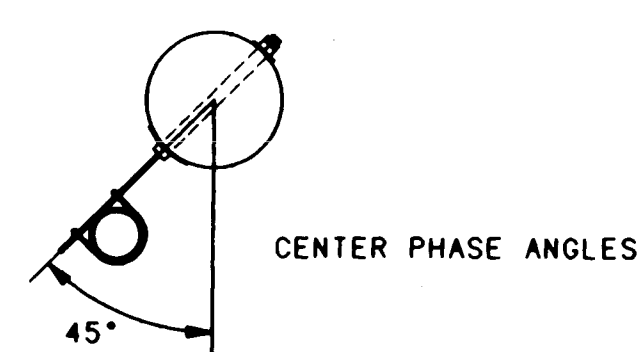


MATERIAL LIST

- 1 WOOD POLE FULLY TREATED - 30'-5" (SEE NOTE 1. BELOW)
- 1 EYE BOLT 5/8" Ø
- 3 WIRE - 120/240 VOLT 1Ø SECONDARY
- 60' NO. 6 WIRE THW IDENTIFY PHASES
- 1 1" SERVICE ENTRANCE WEATHERHEAD
- CONDUIT CLAMPS
- 15' 1" GALVANIZED RIGID STEEL CONDUIT
- 1 METER SOCKET 1Ø
- NIPPLES
- 1 TREATED PLYWOOD BACKBOARD 3/4" x 36" x 36"
- 4 1/4" GALVANIZED BOLT, NUT AND WASHER
- 2 5/8" BOLT THROUGH POLE, BOARD AND STRAP
- 2 1" x 1/8" GALVANIZED STEEL STRAP
- 1 ---AMP 2P. RAIN TIGHT MULTI-BREAKER
- 6' 1/2" GALVANIZED RIGID STEEL CONDUIT
- 10' NO. 6 AWG BARE SOLID WIRE
- 1 3/4" Ø x 10'-0" COPPERWELD GROUND ROD AND CLAMP
- 15' 3/4" GALVANIZED RIGID STEEL CONDUIT - 3 NO. 12 THW
- 1 ---AMP 2P. LIGHTING CONTACTOR R.T. 240 VOLT
- 1 PHOTO-ELECTRIC CONTROLLER, FACING NORTH 16' ABOVE GRADE - 240 VOLT 1Ø
- 1 WEATHERPROOF JUNCTION BOX
- 10' 1 1/2" GALVANIZED RIGID STEEL CONDUIT

SERVICE POLE (LIGHTING)

NO SCALE



MATERIAL LIST

- 1 U BOLT
- 2 5/8" x MACHINE BOLTS
- 3 #4 SOL CU WIRE
- 2 2-1/4" SQUARE WASHER
- 2 5/8" MF LOCKNUT
- 1 LINE TAP
- 1 SUPPORT BRACKET
- 1 GROUNDING LUG

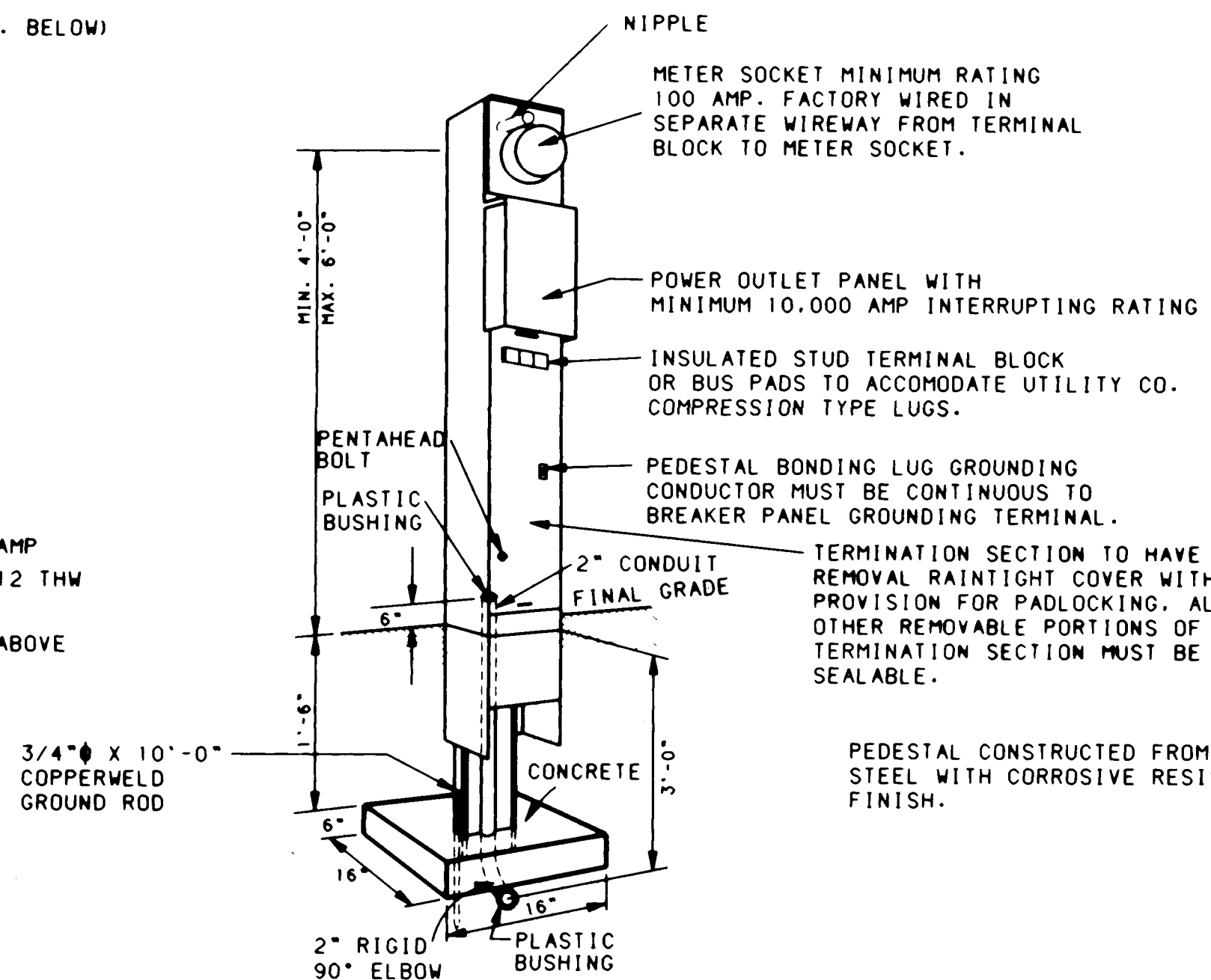
UNIVERSAL SUPPORT BRACKETS NOTES

1. BRACKET TO BE FASTENED TO POLE WITH 5/8" GALVANIZED MACHINE BOLTS.
2. BRACKET SUITABLE FOR TWO 2", OR ONE 4" CONDUIT.
3. TWO HOLE STRAPS ATTACHED AT 30° INTERVALS WITH 2" LAG SCREWS MAY BE USED INSTEAD OF THE SUPPORT BRACKET WHEN THE CONDUIT IS 1" OR LESS. A MAXIMUM OF TWO CONDUITS MAY BE STRAPPED DIRECTLY TO THE POLE.

SIZE CONDUIT	X	Y
2"	2-7/8"	3-5/8"
4"	5"	5-3/4"

UNIVERSAL SUPPORT BRACKETS

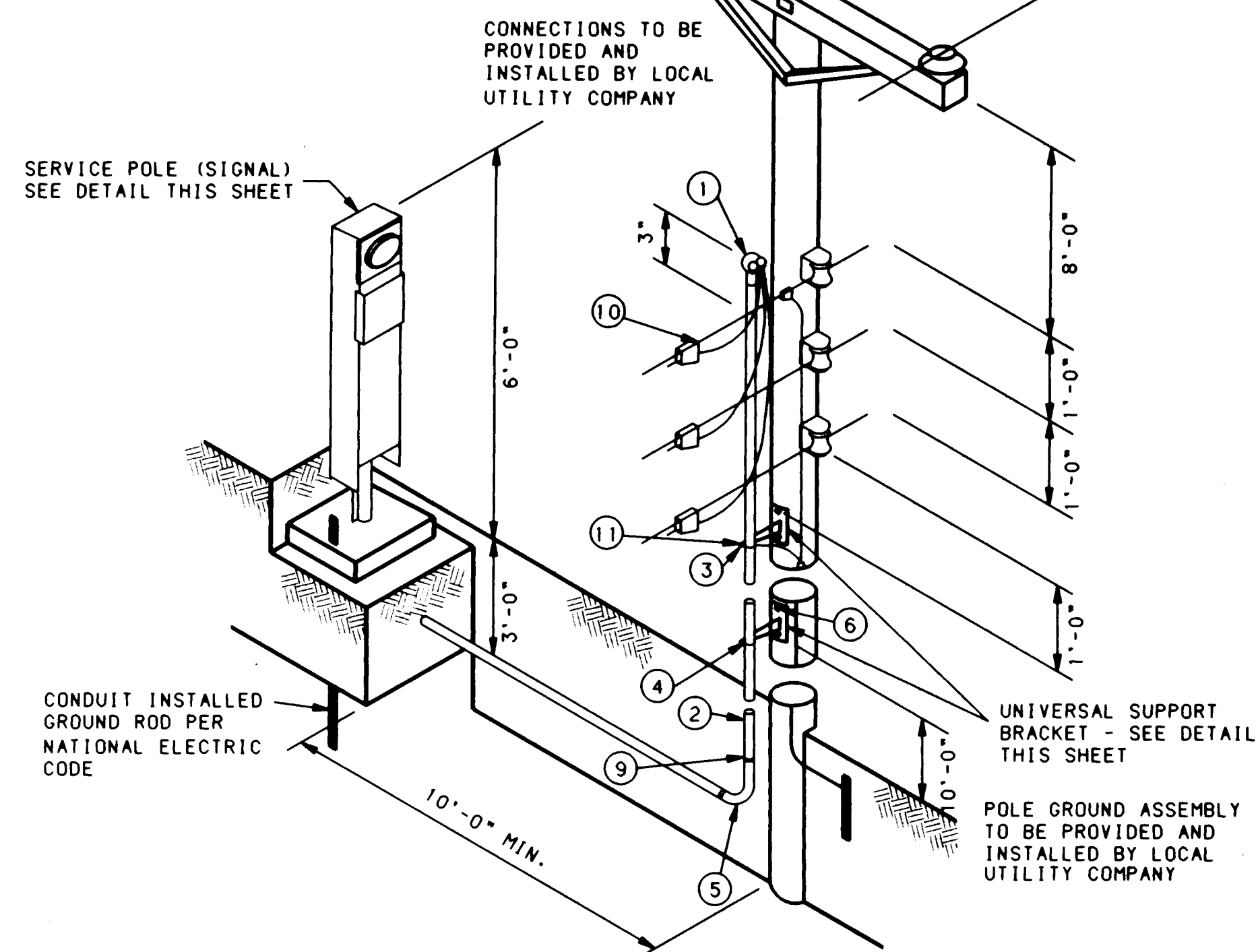
NO SCALE



SERVICE POLE (SIGNAL)
(FOR UNDERGROUND SERVICE)

NO SCALE

SERVICE POLE (SIGNAL)
SEE DETAIL THIS SHEET



SINGLE PHASE PEDESTAL METERING NOTES

1. WEATHERHEAD SHALL BE 3" ABOVE NEUTRAL.
2. NO STANDOFF BRACKET REQUIRED IF CONDUIT IS 1" OR LESS. UP TO 2 CONDUITS 1" OR LESS MAY BE STRAPPED TO THE POLE.
3. CONTACT LOCAL UTILITY COMPANY SERVICES FOR POLE QUADRANT.
4. ALL ABOVE-GRADE CONDUIT SHALL BE GALVANIZED.
5. CONTRACTOR SHALL PROVIDE & INSTALL CONDUIT BRACKETS, WEATHER HEAD, CONDUCTORS, METER BASE AND ALL MINOR FITTINGS.
6. RISER BRACKET ASSEMBLY MUST HAVE PROVISIONS FOR GROUNDING BY LOCAL UTILITY COMPANY.

MATERIAL LIST

- 1 2" CLAMP TYP WEATHER HD
- 30' 2" GALVANIZED CONDUIT
- 2 UNIVERSAL SUPPORT BRACKET
- 2 2" PIPE STRAP KIT
- 1 2" GALVANIZED ELBOW
- 4 5/8" x MACHINE BOLT
- 4 5/8" LOCKNUT
- 4 2-1/4" SQUARE WASHER
- 1 2" GALVANIZED COUPLING
- 3 LINE TAP
- 2 #10-#2 GROUND LUG
- 1 GROUND ASSEMBLY

SINGLE PHASE PEDESTAL METERING

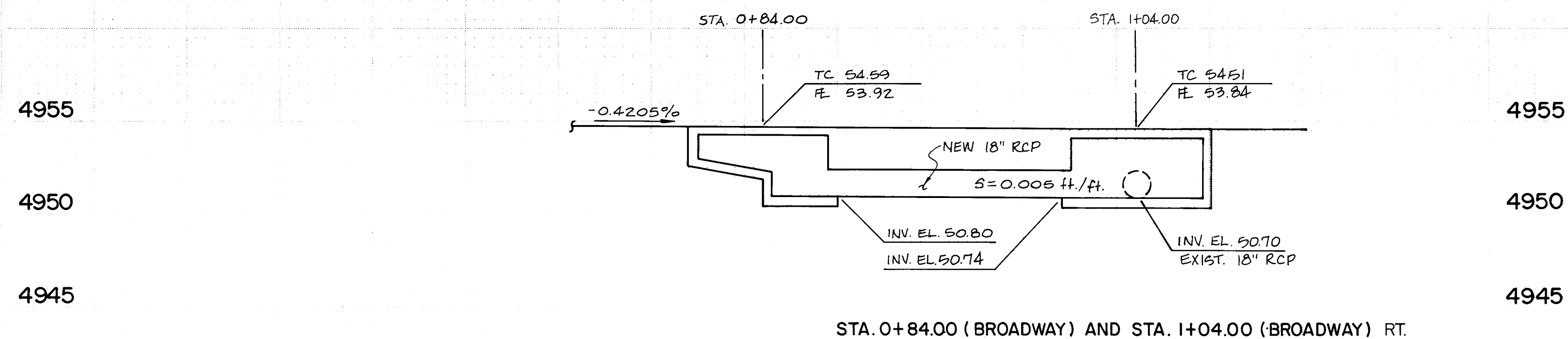
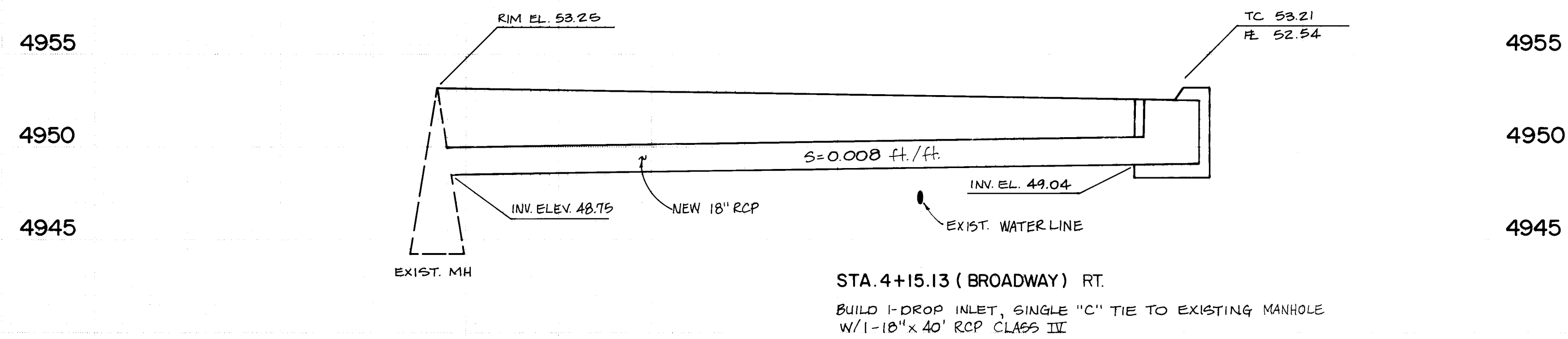
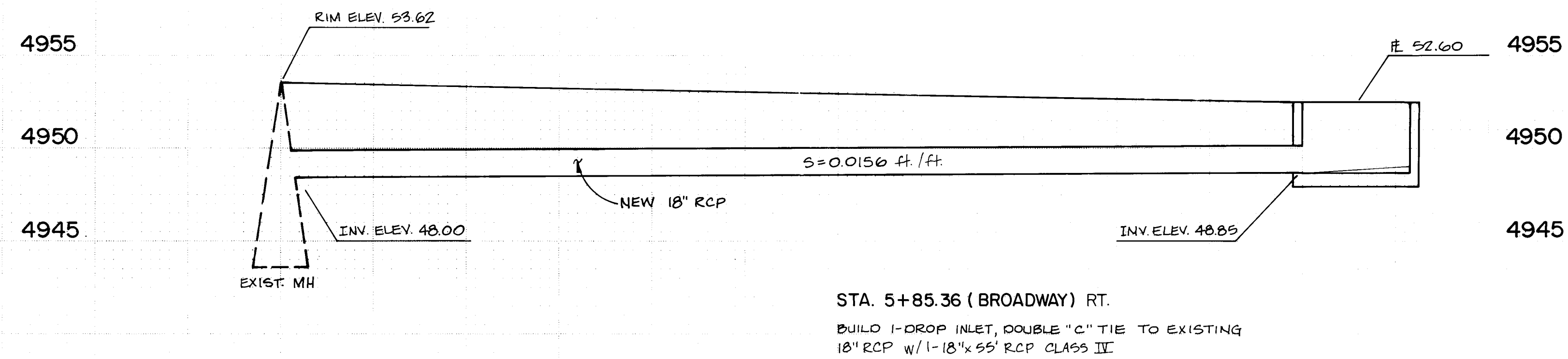
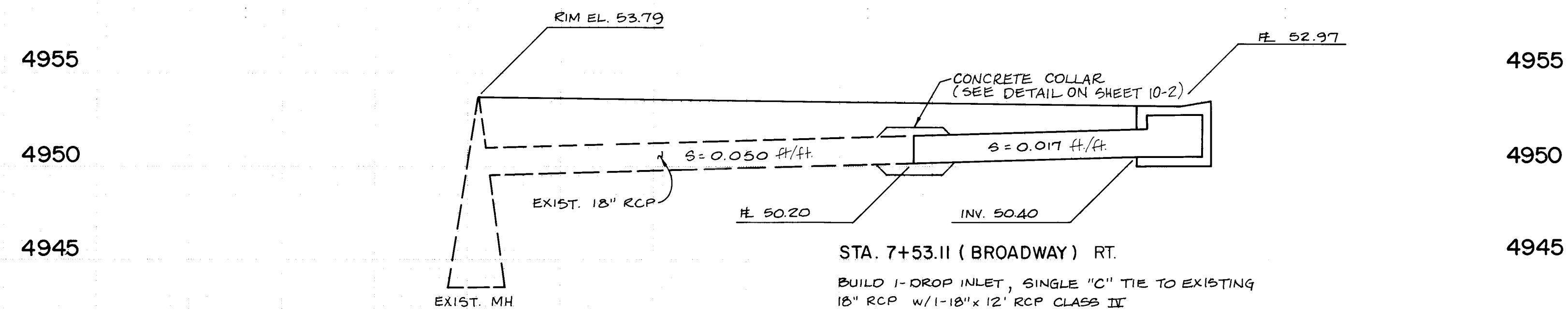
NO SCALE

26 36724094

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	N/A	
TRANSPORTATION	N. Ponce	8/26/91
HYDROLOGY	Steve Bobing	8/23/91
WATER	N/A	
WASTE WATER	N/A	

3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT			
TRAFFIC DESIGN SECTION SIGNAL AND LIGHTING SERVICE DETAILS			

F.H.W.A. REGION NO.	STATE	N.M.P.	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	TPS-4040(2)	9-1	



26 36724194

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Roger Green</i>	3-13-98
TRANSPORTATION	<i>K. Dwyer</i>	8-26-91
HYDROLOGY	<i>Steve Bolberg</i>	8/23/91
WATER	<i>ALC</i>	8-30-91
WASTE WATER	<i>ALC</i>	"

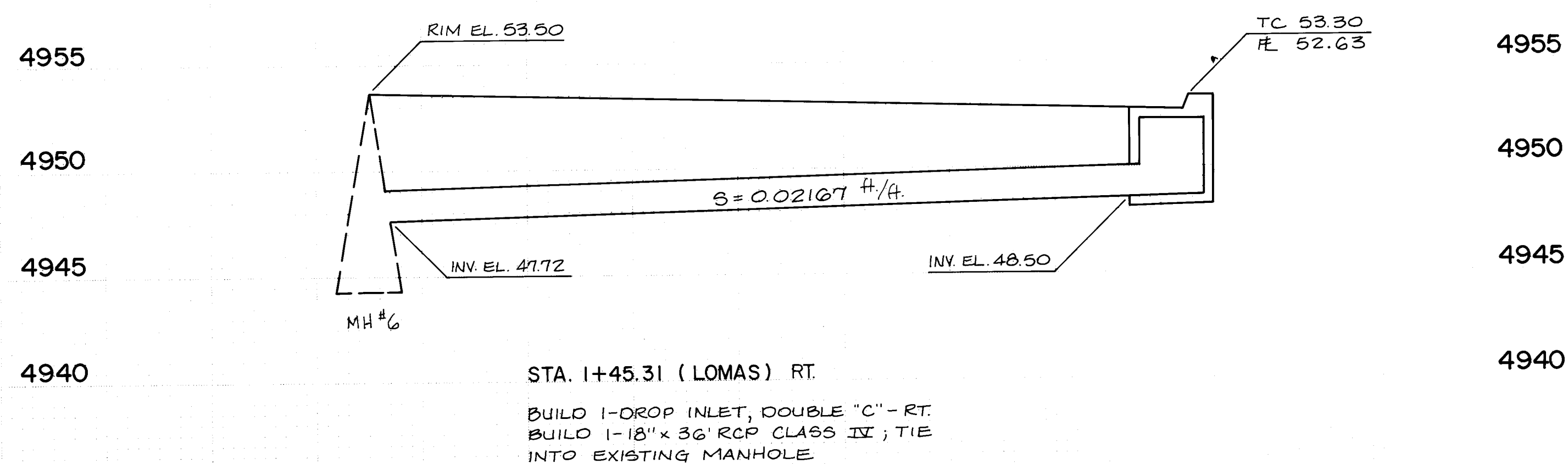


GARDNER, MASON & ASSOCIATES, INC.
ENGINEERS & PLANNERS
ALBUQUERQUE, NM

STRUCTURE PLACEMENT

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

F.H.W.A. REGION NO.	STATE	N.M.P.	SHEET NO.	TOTAL SHEET
6	NEW MEXICO	TPS-4040(2)	9-2	



FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO	TEMPLATE		
	ARTS		
	ARTS, CHECKED		

ORIGINAL	BY	DATE
SURVEY		
PLOTTED		
TEMPLATE		
AREAS		

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Rogert Llan</i>	3-13-9
TRANSPORTATION	<i>KL Hank</i>	8-24-91
HYDROLOGY	<i>Steve Bolberg</i>	8/23/91
WATER	<i>AKC Llan</i>	8-30-91
WASTE WATER	<i>AKO</i>	"

26 36724294



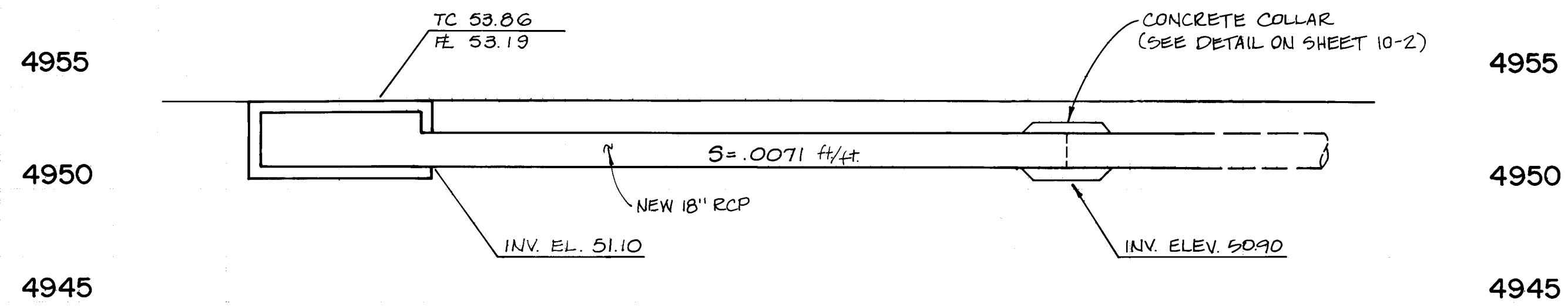
GARDNER, MASON & ASSOCIATES, INC.
ENGINEERS & PLANNERS
ALBUQUERQUE, NM

STRUCTURE PLACEMENT
SCALE: HORIZ. 1" = 5'
VERT. 1" = 5'

F.H.W.A. REGION NO.	STATE	N.M.P.	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	TPS-4040(2)	9-3	

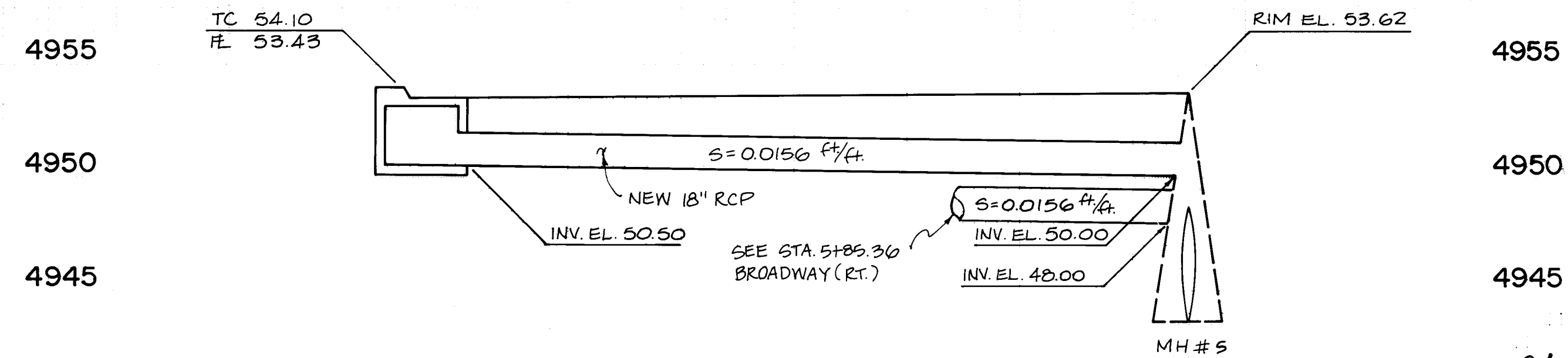
FINAL SURVEY	DATE	BY
SURVEYED		
PLOTTED		
NOTED BOOK		
AREAS CHECKED		
NO		

ORIGINAL SURVEY	DATE	BY
SURVEYED		
PLOTTED		
NOTED BOOK		
AREAS CHECKED		
NO		



STA. 2+66.59 (LOMAS) RT.

BUILD 1- DROP INLET, DOUBLE "C" - RT.
BUILD 1-18" x 28' RCP CLASS IV, CONNECT
TO EXISTING 18" DIA. PIPE



STA. 2+65.98 (LOMAS)

BUILD 1- DROP INLET, DOUBLE "C" - LT.
BUILD 1-18" x 27' RCP CLASS IV, TIE
INTO EXISTING MANHOLE.

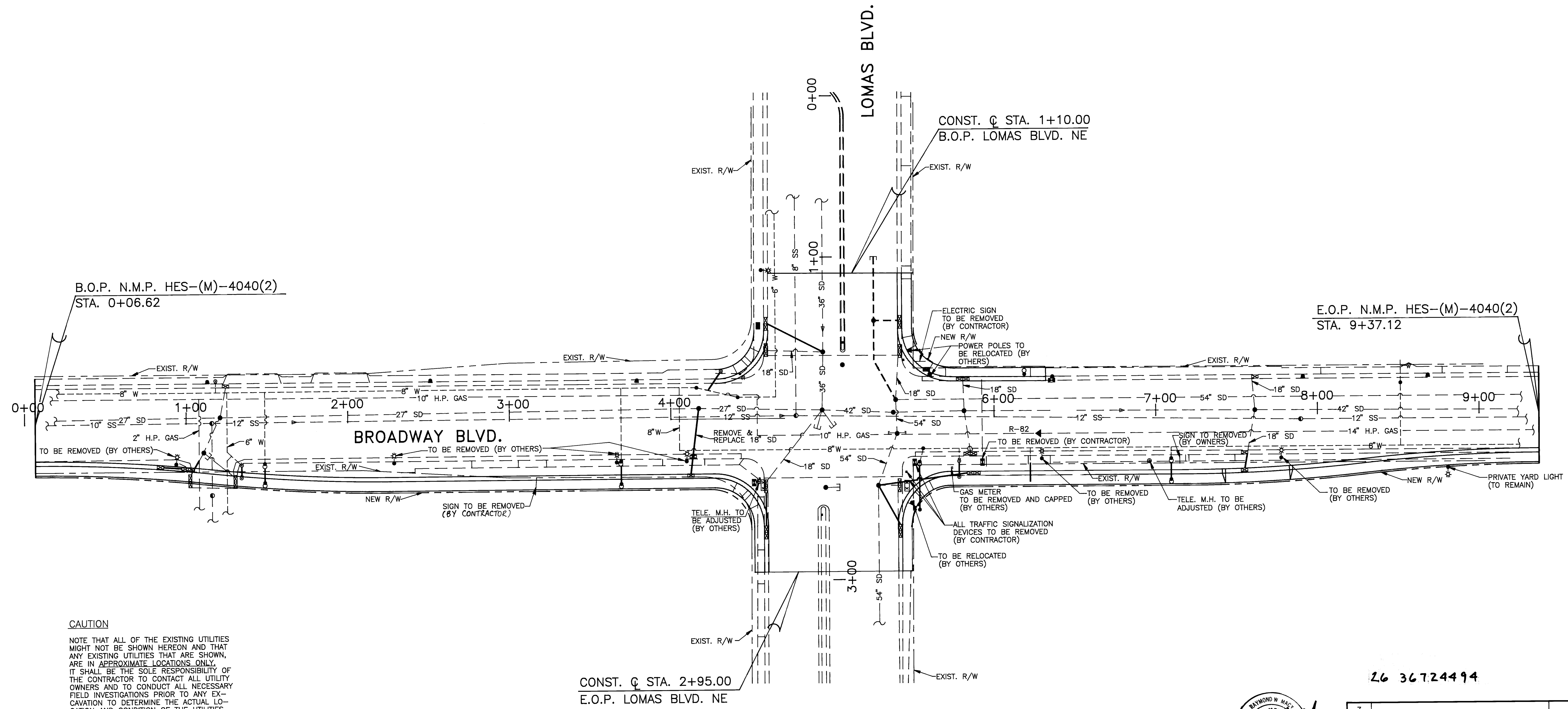
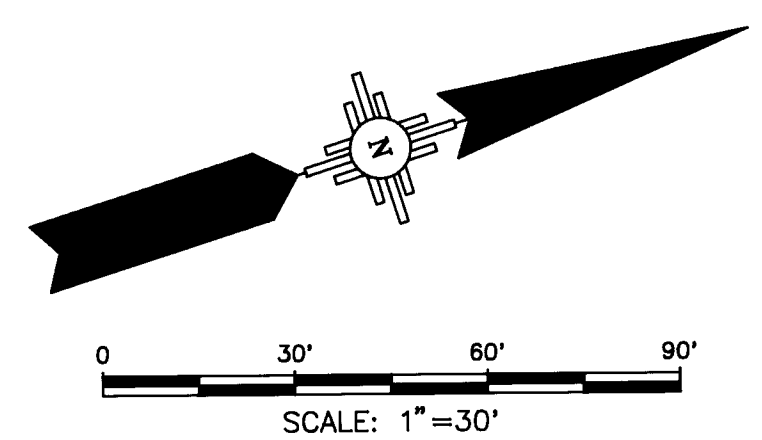
APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Rogel L. Lora</i>	3-13-92
TRANSPORTATION	<i>M. J. Lora</i>	8-26-91
HYDROLOGY	<i>Steve Bolger</i>	8-23-91
WATER	<i>AKC</i>	8-30-91
WASTE WATER	<i>AKC</i>	"

26 36724394
4940



GARDNER, MASON & ASSOCIATES, INC.
ENGINEERS & PLANNERS
ALBUQUERQUE, NM

STRUCTURE PLACEMENT
SCALE: HORIZ. 1" = 5'
VERT. 1" = 5'



CAUTION

NOTE THAT ALL OF THE EXISTING UTILITIES MIGHT NOT BE SHOWN HEREON AND THAT ANY EXISTING UTILITIES THAT ARE SHOWN, ARE IN APPROXIMATE LOCATIONS ONLY. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL UTILITY OWNERS AND TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION AND CONDITION OF THE UTILITIES AND OTHER IMPROVEMENTS.

<u>LEGEND</u>			
●	LIGHT POLE	○	WATER METER
★		●	WATER VALVE
⬮	POWER POLE		
⊗	FIRE HYDRANT	●	S.A.S. MANHOLE
■	SIGNAL BASE	●	STORM SEWER MANHOLE
■	SIGNAL PULL BOX	⊗	STORM SEWER DROP INLET
⊗	SIGNAL CONTROL BOX	⊕	TELEPHONE MANHOLE
■	GAS METER	⬮	ELECTRIC PULL BOX

UTILITY OWNERS			
WATER/SEWER	CITY OF ALBUQUERQUE	(505)857-8200	
ELECTRICITY	PUBLIC SERVICE OF NM	(505)748-4947	
GAS	GAS CO. OF NM	(505)889-2538	
CABLE	JONES INTERCABLE	(505)761-6200	
TELEPHONE	AT&T	(505)842-2855	
	U.S. WEST	(505)245-6736	

- NOTES:**
- SEE SHEET 4-1 FOR WATER SHUT-OFF PLAN.
 - SEE SHEET 7-1 FOR LIGHTING PLAN.
 - SEE SHEET 8-2 FOR TRAFFIC SIGNALIZATION.
 - SEE SHEET 9-1 THRU 9-3 FOR STRUCTURE PLACEMENTS.
 - A.T. & T. HAS NO COMMUNICATION CABLES IN THE INTERSECTION.
 - JONE'S INTERCABLE HAS NO CABLES IN THE INTERSECTION.

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>Raymond W. Mack</i>	2-13-91
TRANSPORTATION	<i>R. J. Jansky</i>	8-26-91
HYDROLOGY	<i>Steve Boley</i>	8-23-91
WATER	<i>AKO</i>	8-30-91
WASTE WATER	<i>AKO</i>	"



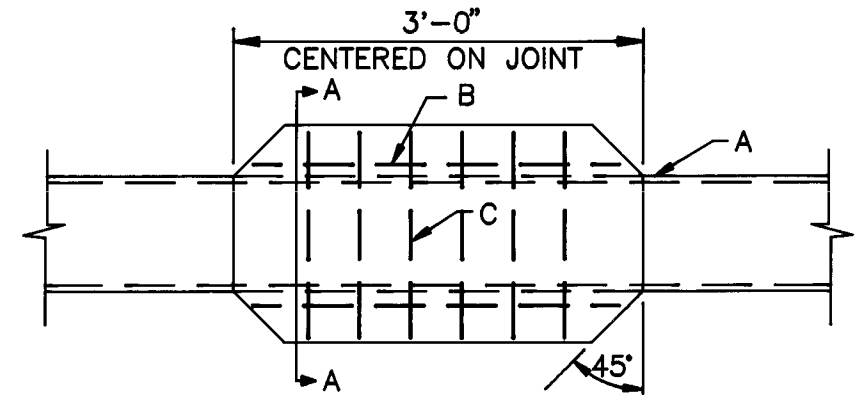
26 367.24494

3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
EXISTING UTILITIES			
GMA, INC. 5700 HARPER DR. NE., STE. 240 ALBUQUERQUE, NM 87109			

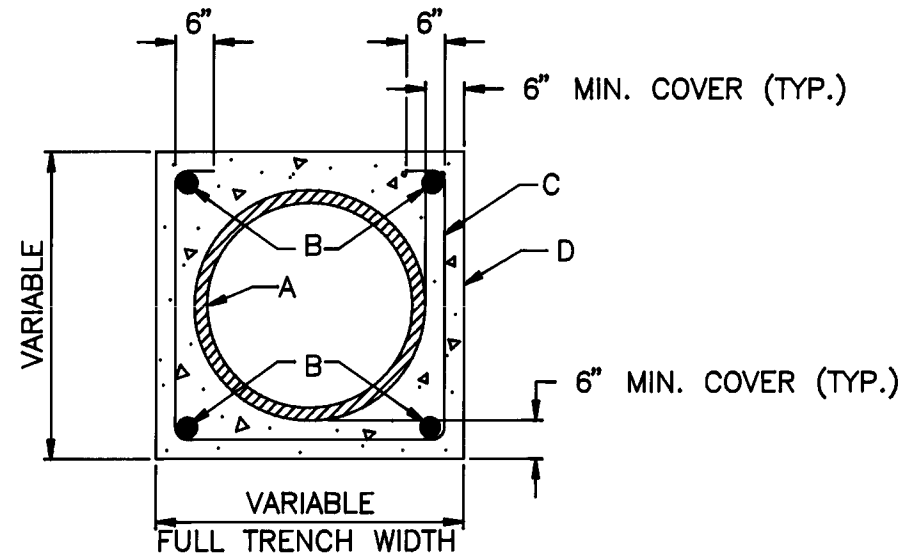
FILENAME: EXPELUT DRAWN BY: RJG
PROJECT NAME: LOMAS/BROADWAY DESIGNED BY: RM
PROJECT NO.: 89001.00
DATE: 8/14/91

CONSTRUCTION NOTES:

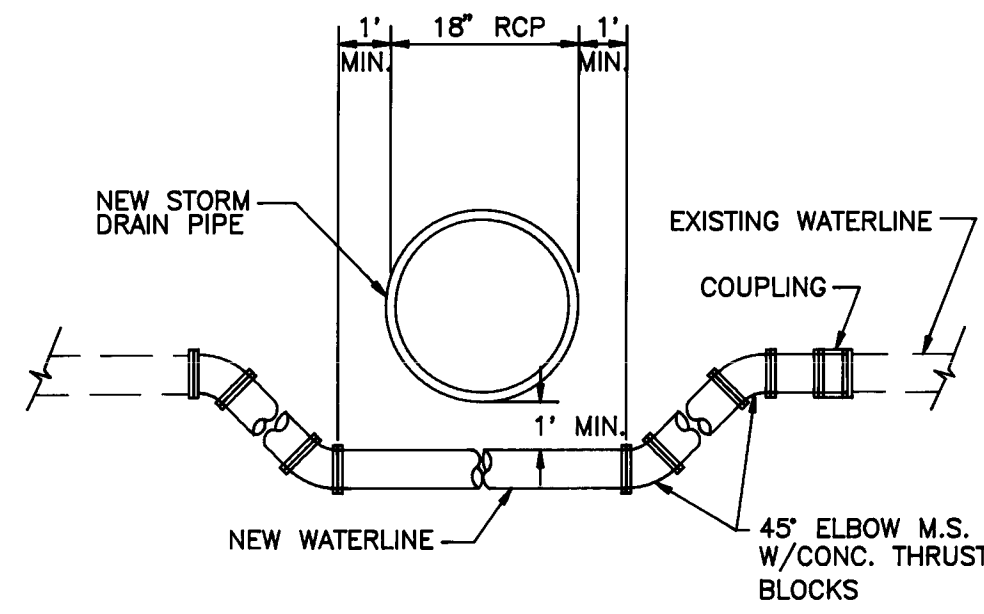
- A. STORM DRAIN LINE AS SHOWN ON PLANS.
B. 4-NO. 4 BARS, CONT. WITH 3" CLEARANCE.
C. NO. 4 BARS, AT 8" O.C.
D. 3000 PSI CONCRETE.



PLAN
CONCRETE COLLAR

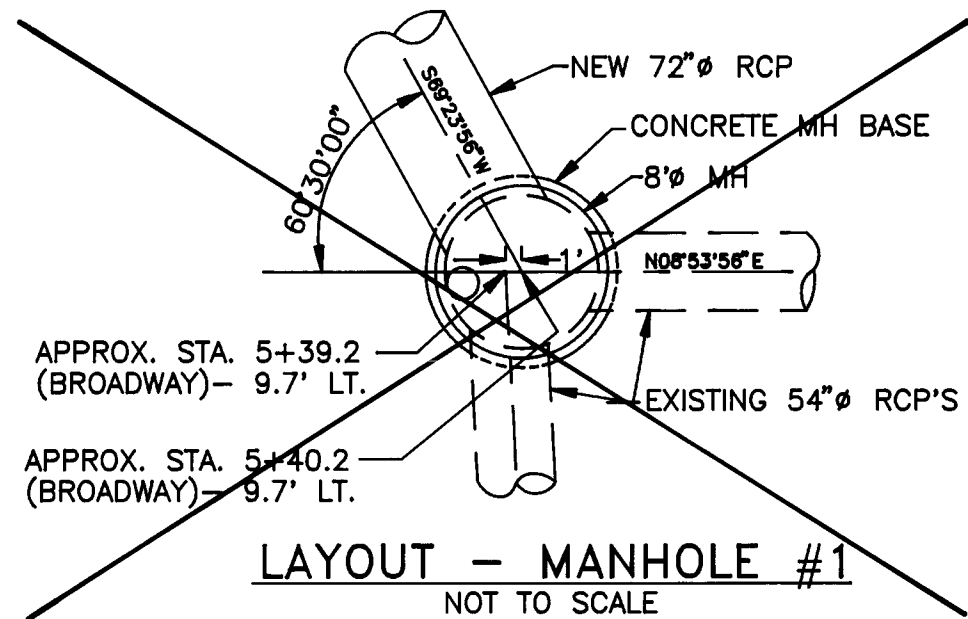


SECTION A-A

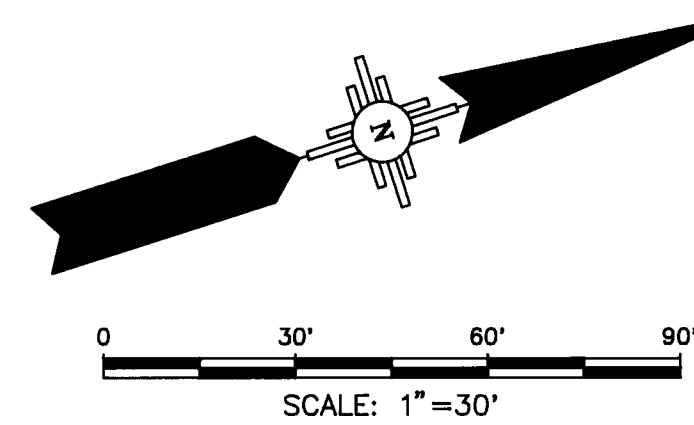


EXISTING WATERLINE LOWERING
NOT TO SCALE

STORM DRAIN
CONCRETE COLLAR DETAIL
NOT TO SCALE



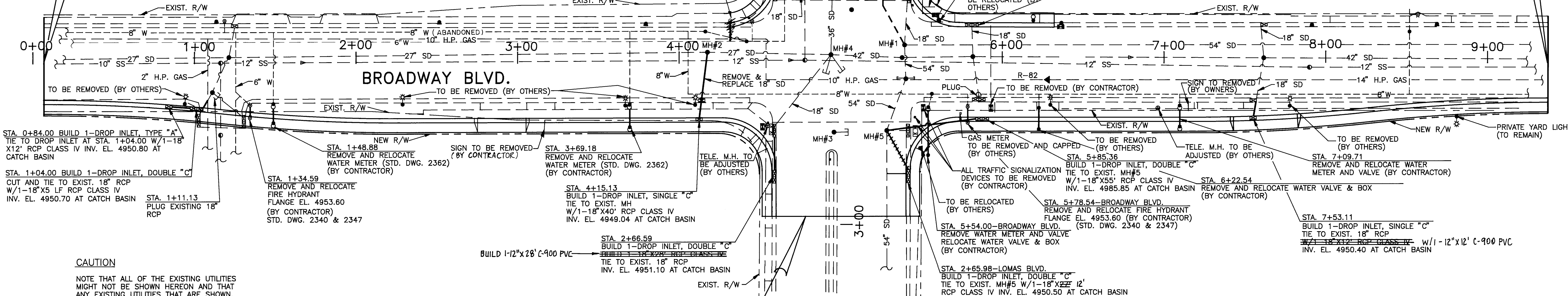
LAYOUT - MANHOLE #1
NOT TO SCALE



STORM DRAIN MANHOLES

NO.	STATION	OFFSET	INV. EL.
MH#1	5+39.00	9.7' LT.	72" 44.50 54" 43.86
MH#2	4+23.00	5' LT.	TIE TO DROP INLET W/18" RCP
MH#3	ABANDON IN PLACE.	PLUG LINES & FILL M.H. WITH SAND	
MH#4	PLUG 2-18" PIPES.		
MH#5	GROUT BOTTOM AND ALL EXPOSED JOINTS-TIE TO DROP INLETS W/18" RCP		
MH#6	TIE TO DROP INLET W/18" RCP		

B.O.P. N.M.P. HES-(M)-4040(2)
STA. 0+06.62



CAUTION

NOTE THAT ALL OF THE EXISTING UTILITIES
MIGHT NOT BE SHOWN HEREON AND THAT
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ARE IN APPROXIMATE LOCATIONS ONLY.
IT SHALL BE THE SOLE RESPONSIBILITY OF
THE CONTRACTOR TO CONTACT ALL UTILITY
OWNERS AND TO CONDUCT ALL NECESSARY
FIELD INVESTIGATIONS PRIOR TO ANY EX-
CAVATION TO DETERMINE THE ACTUAL LO-
CATION AND CONDITION OF THE UTILITIES
AND OTHER IMPROVEMENTS.

LEGEND

●	LIGHT POLE	○	WATER METER
▼	POWER POLE	●	WATER VALVE
⊗	FIRE HYDRANT	●	S.A.S. MANHOLE
•	SIGNAL BASE	●	STORM SEWER MANHOLE
■	SIGNAL PULL BOX	■	STORM SEWER DROP INLET
⊠	SIGNAL CONTROL BOX	⊠	TELEPHONE MANHOLE
•	GAS METER	■	ELECTRIC PULL BOX

UTILITY OWNERS

WATER/SEWER	CITY OF ALBUQUERQUE	(505)857-8200
ELECTRICITY	PUBLIC SERVICE OF NM	(505)748-4947
GAS	GAS CO. OF NM	(505)889-2538
CABLE	JONES INTERCABLE	(505)761-6200
TELEPHONE	AT&T	(505)842-2855
	U.S. WEST	(505)245-6736

NOTES:

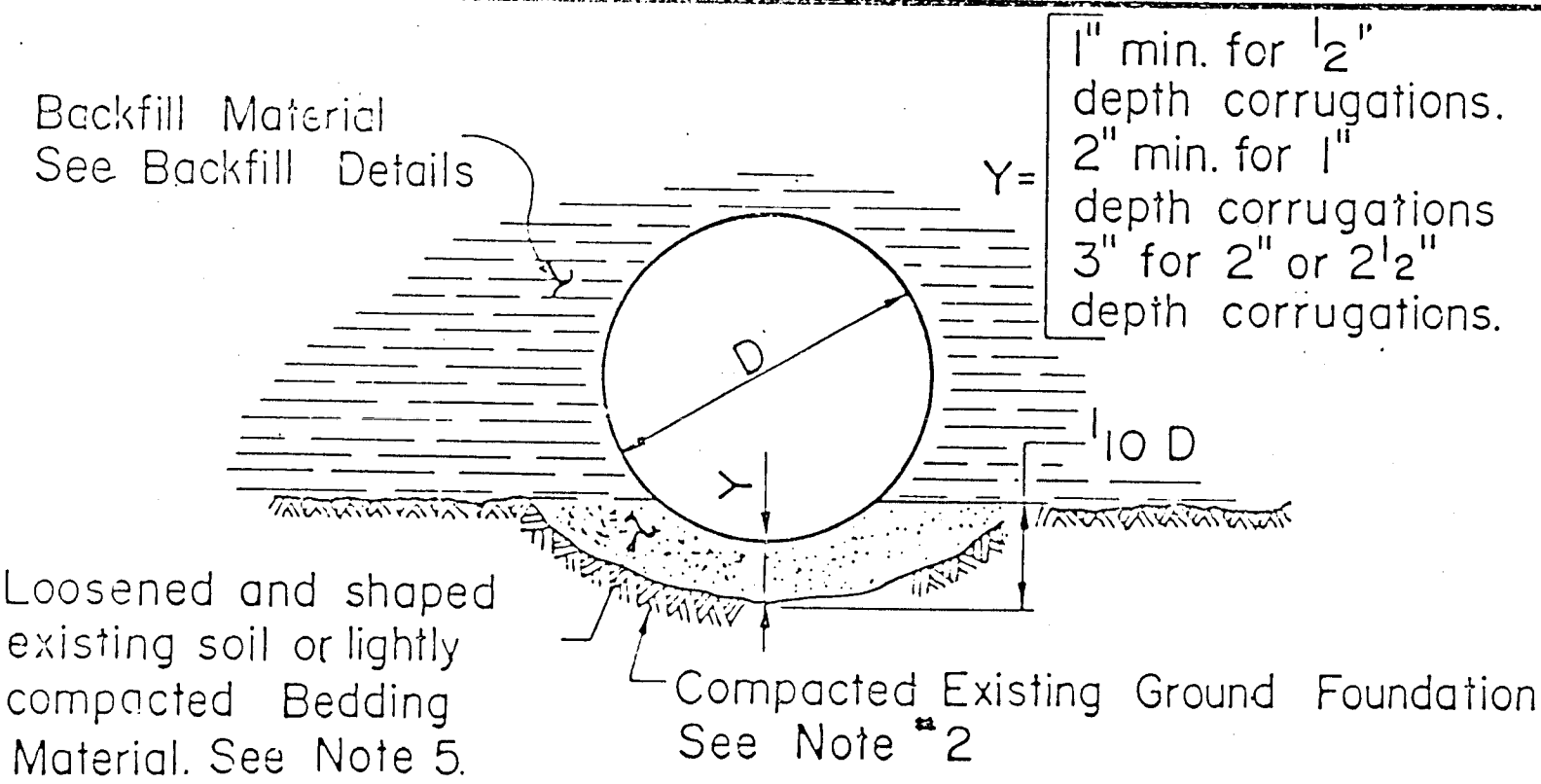
- SEE SHEET 4-1 FOR WATER SHUT-OFF PLAN.
- SEE SHEET 7-1 FOR LIGHTING PLAN.
- SEE SHEET 8-2 FOR TRAFFIC SIGNALIZATION.
- SEE SHEET 9-1 THRU 9-3 FOR STRUCTURE PLACEMENTS.
- A.T. & T. HAS NO COMMUNICATION CABLES IN THE INTERSECTION.
- JONE'S INTERCABLE HAS NO CABLES IN THE INTERSECTION.
- SEE SHT 2-5 FOR REMOVAL OF STRUCTURES.

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	Raymond W. Miller	3-13-92
TRANSPORTATION	Steve Bolger	8-26-91
HYDROLOGY	Steve Bolger	8/23/91
WATER	Steve Bolger	8-30-91
WASTE WATER	Steve Bolger	"

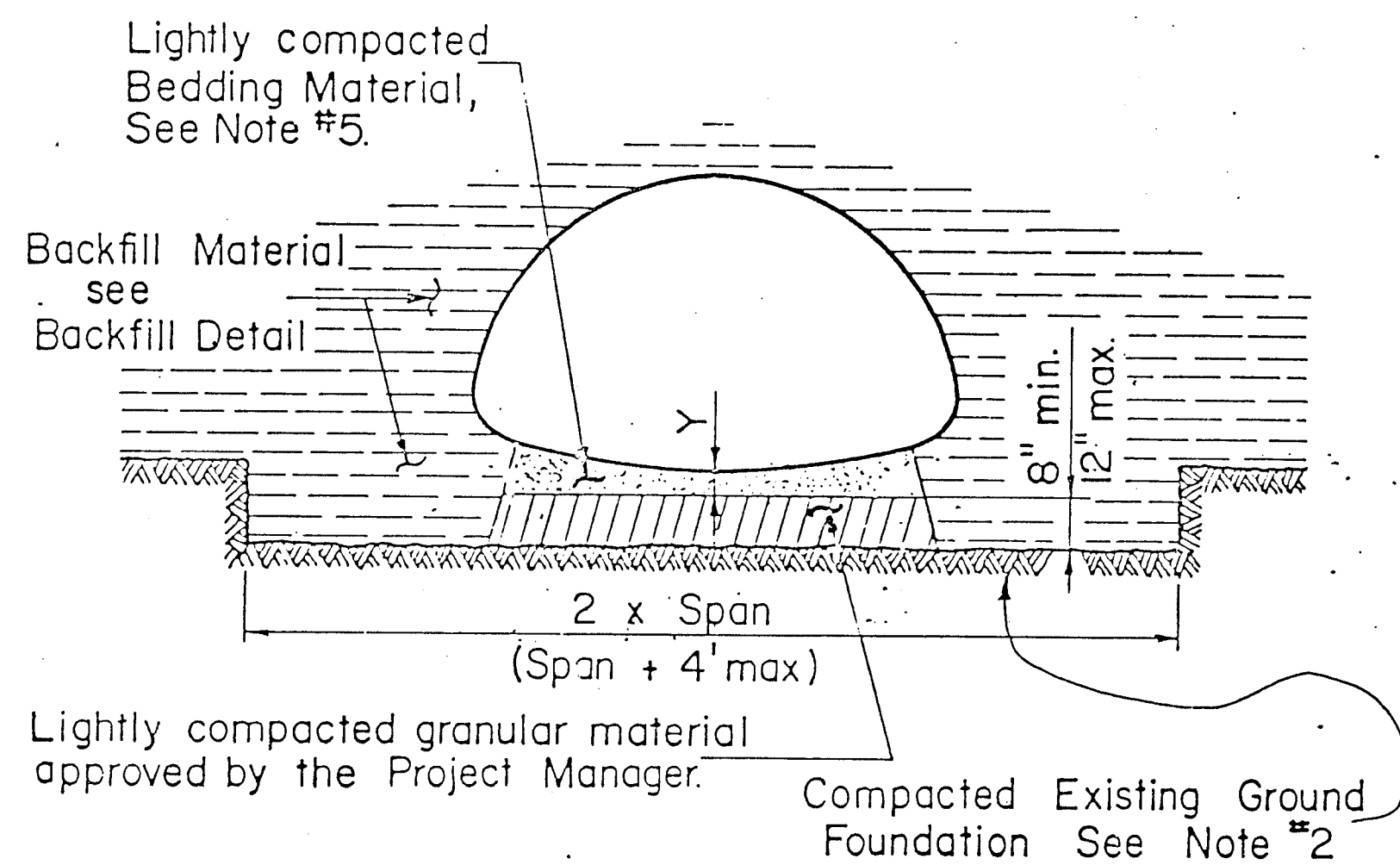
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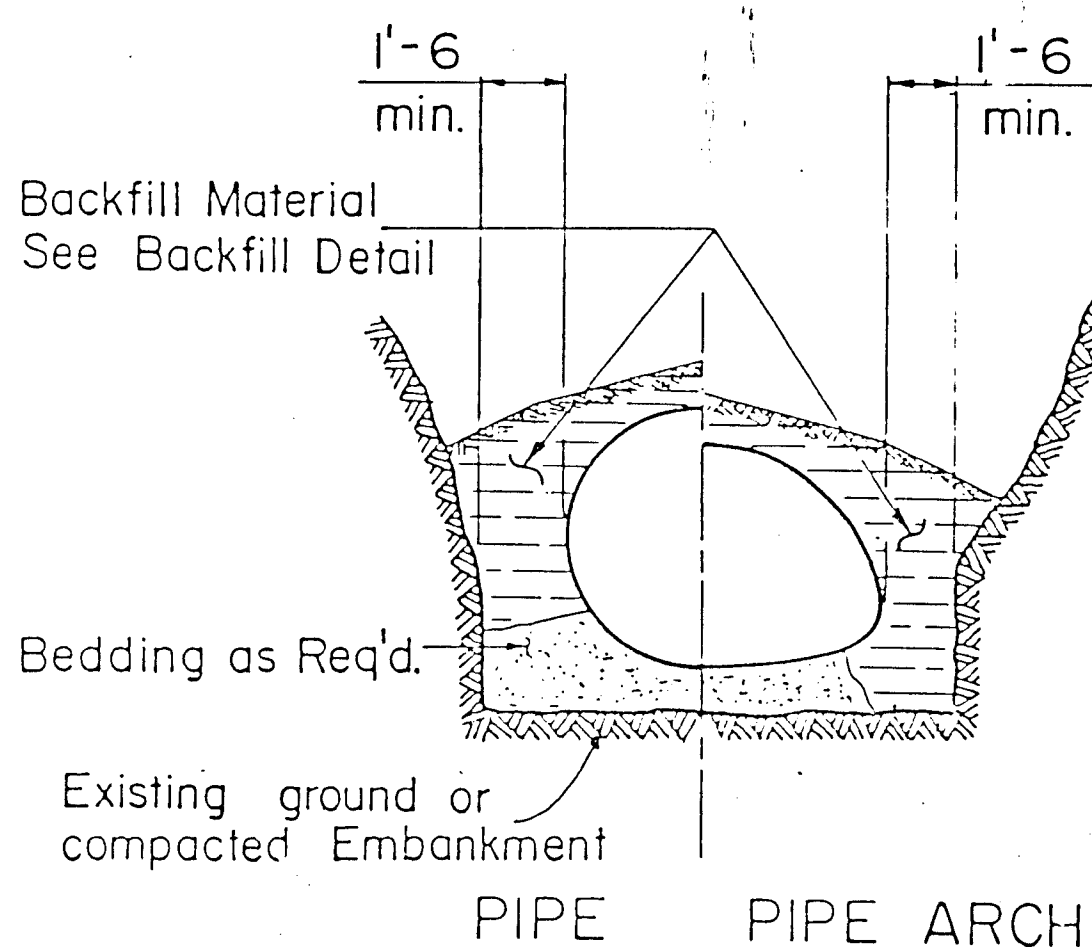
3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
UTILITY RELOCATIONS STORM DRAIN AND WATER			
GMA, INC. 5700 HARPER DR. NE., STE. 240 ALBUQUERQUE, NM 87109			



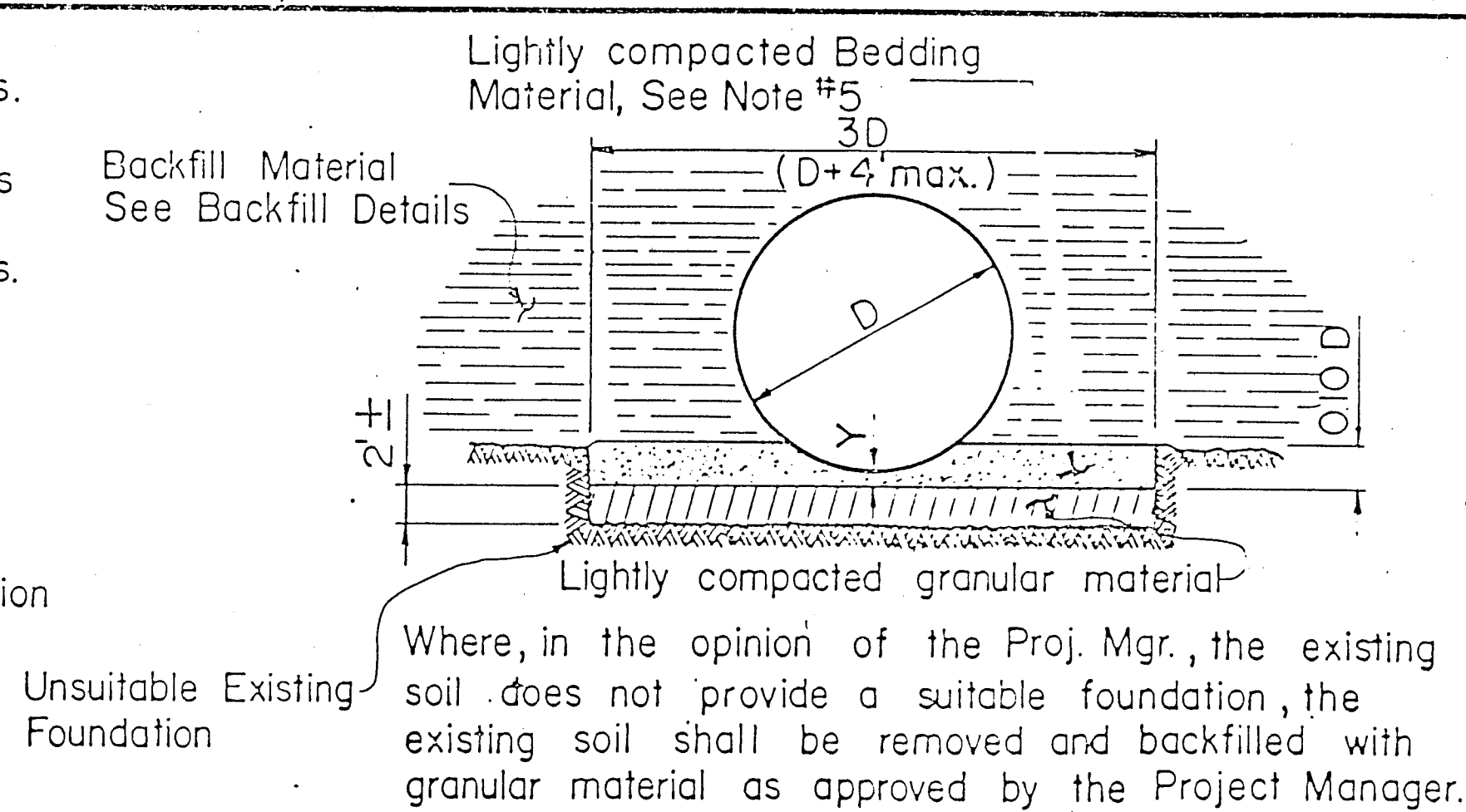
SUITABLE EXISTING GROUND FOUNDATION



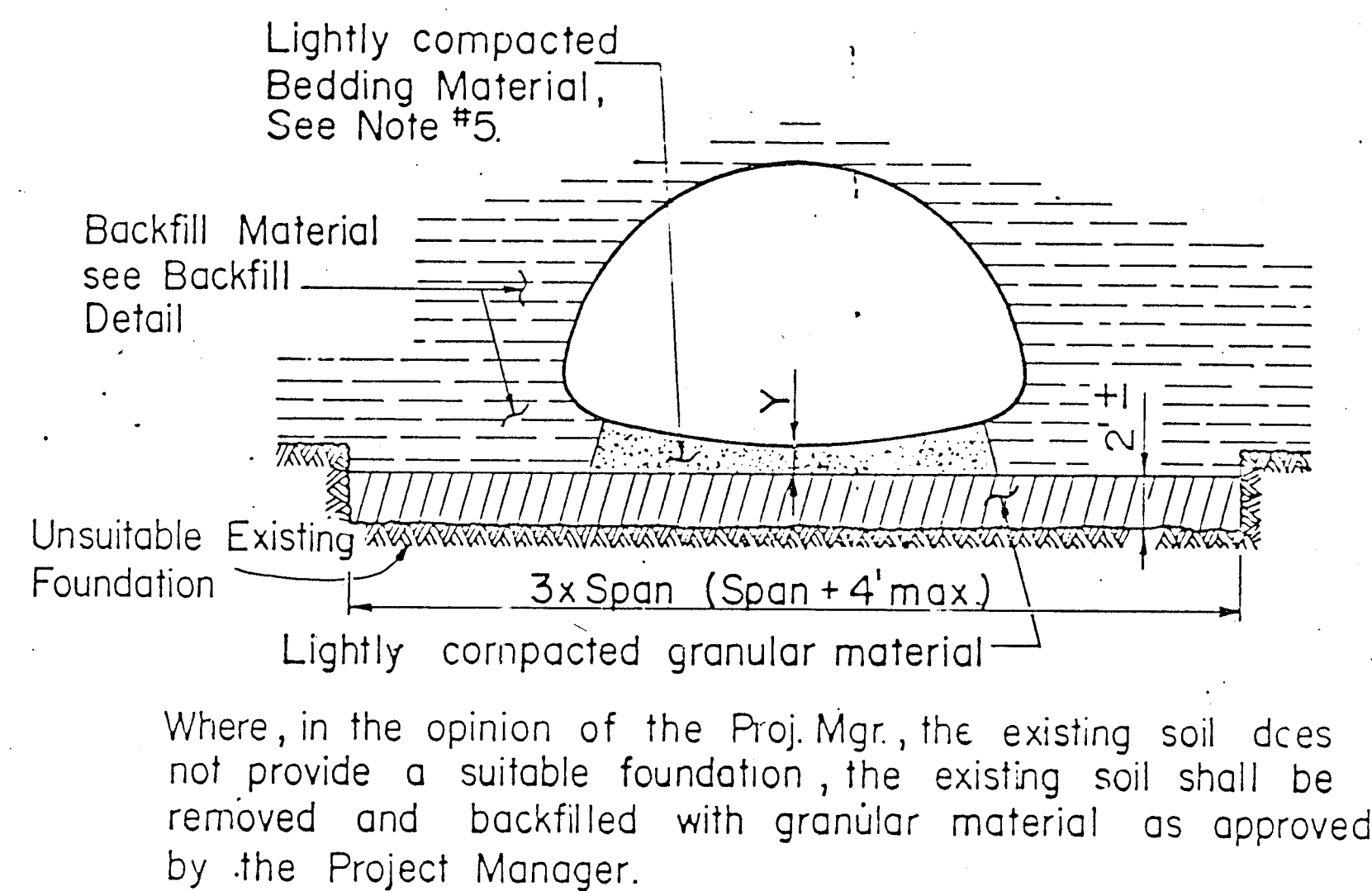
SUITABLE EXISTING GROUND FOUNDATION



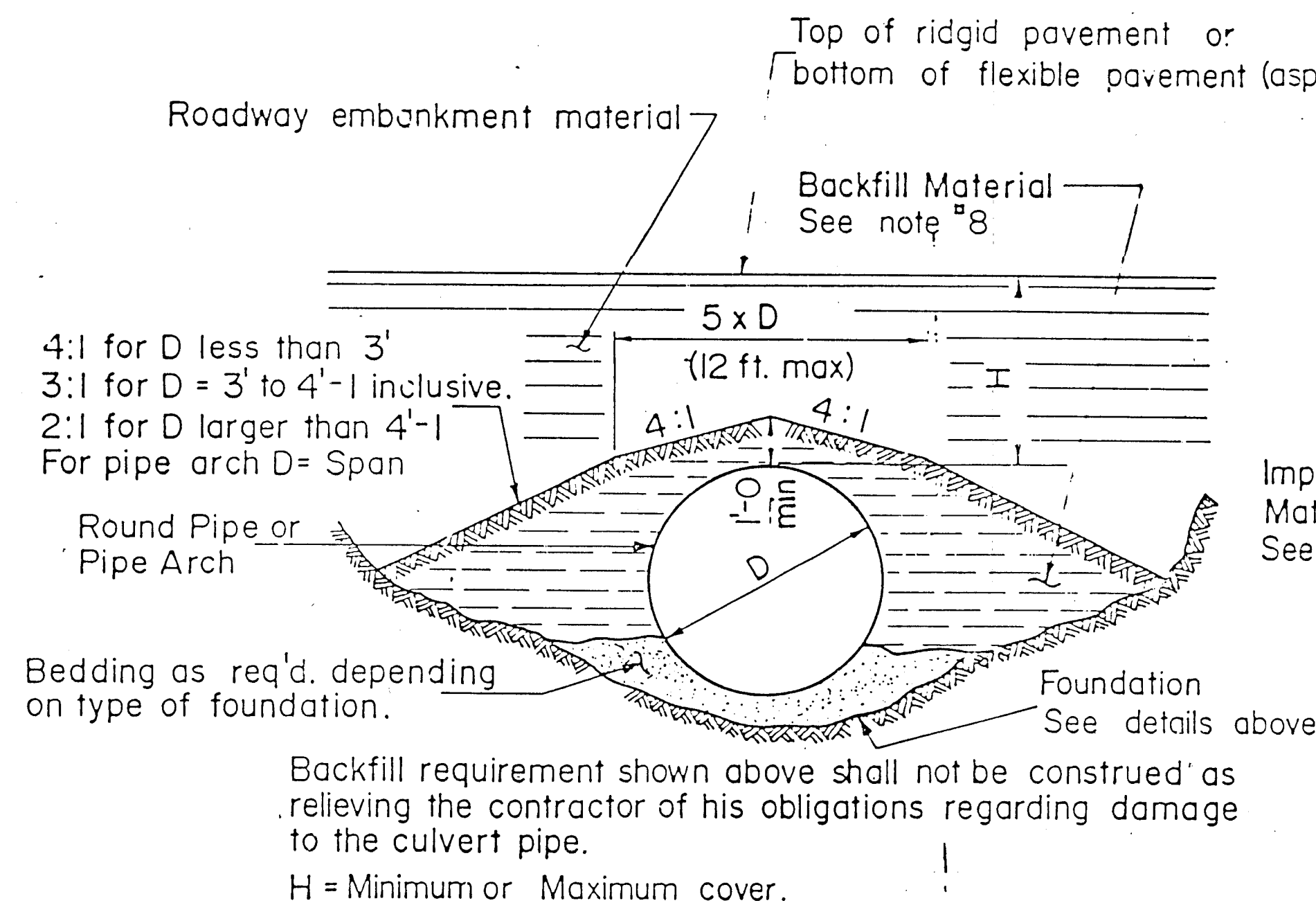
TRENCH CONDITION



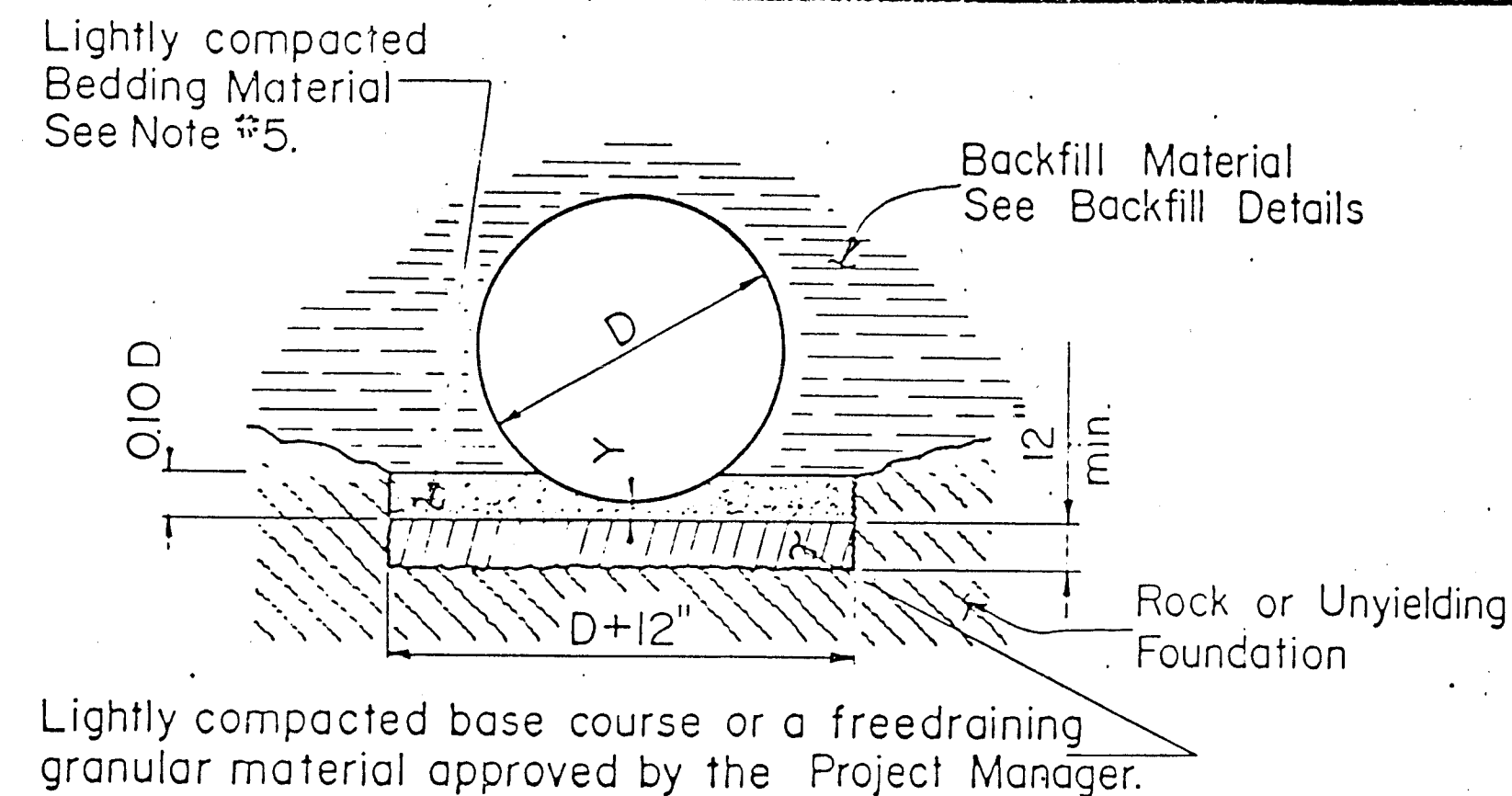
UNSUITABLE EXISTING FOUNDATION



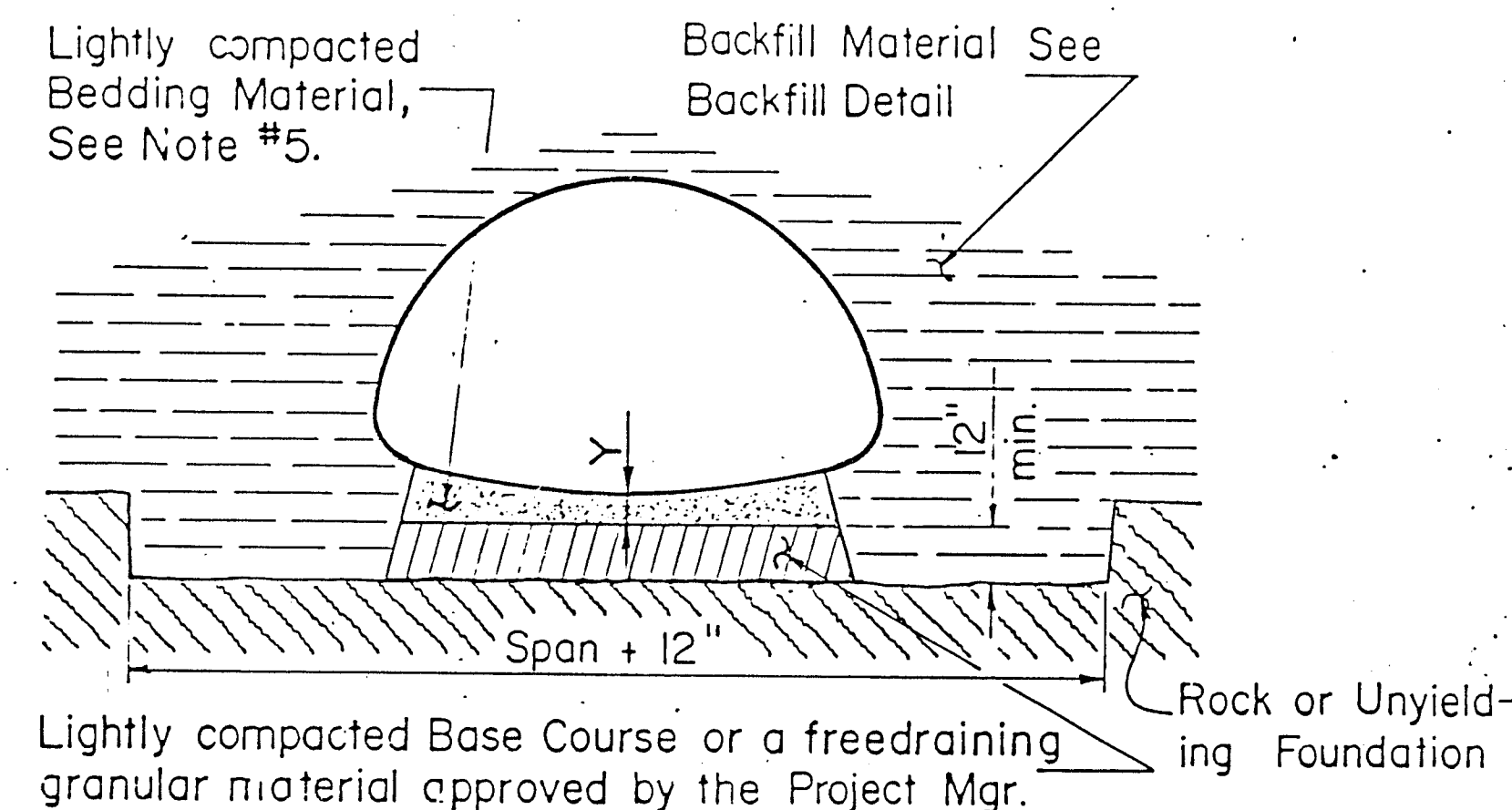
UNSUITABLE EXISTING FOUNDATION



BACKFILL DETAIL

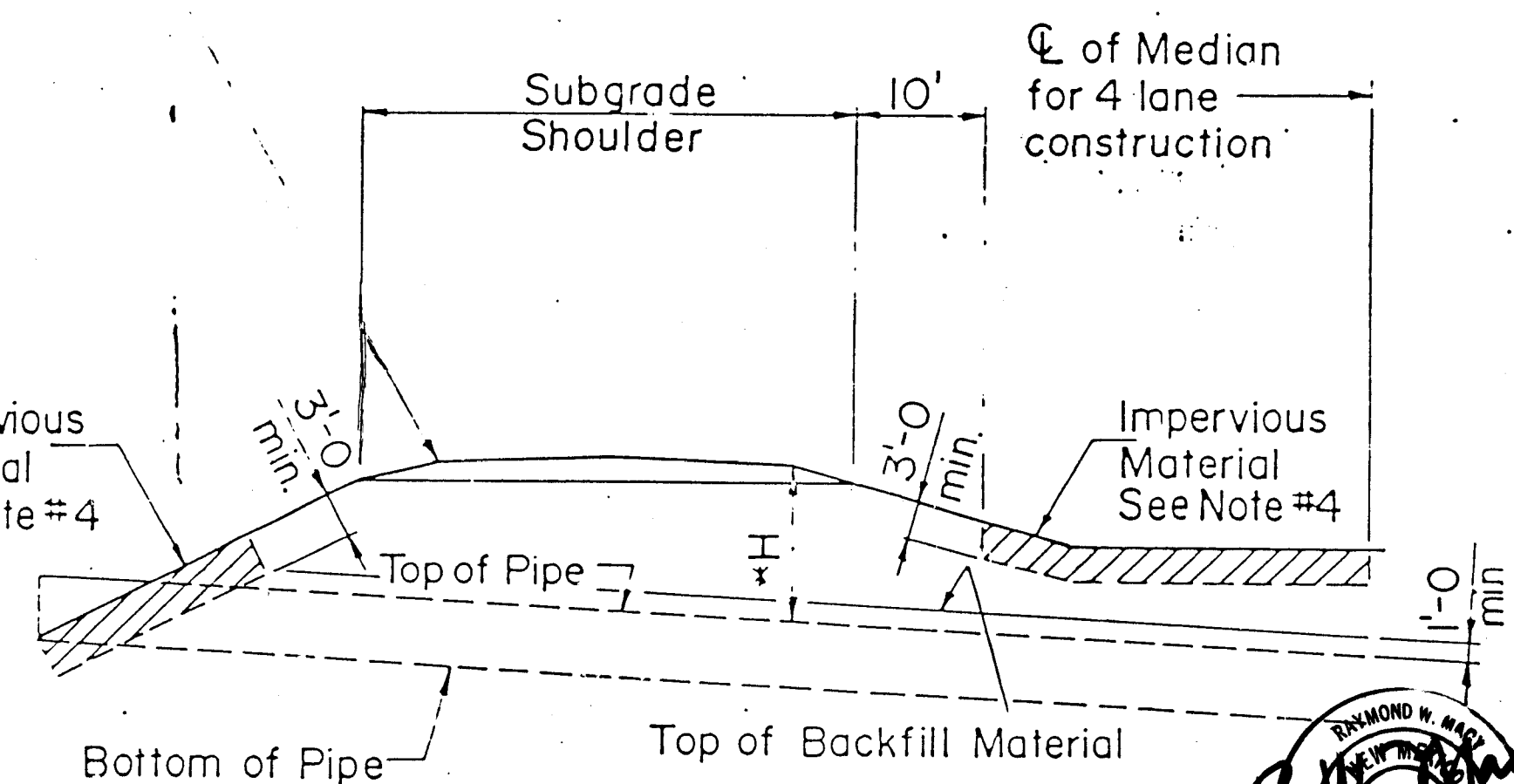


ROCK OR UNYIELDING FOUNDATION



ROCK OR UNYIELDING FOUNDATION

Note: See BMC-001, BMC-002, BMC-003, & BMC-004 for Table of Max. and Min. Cover & corresponding gage of material.



CROSS SECTION OF ROADWAY EMBANKMENT

F.H.W.A. Region No.	STATE	TPS-4040(2)	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		11-1	

GENERAL NOTES

- Riveted or welded Metal Pipe & Pipe Arches shall be placed with the inside circumferential laps pointing downstream & with longitudinal laps at side or quarter points, not top or bottom. Structural Plate Pipe & Pipe Arch culverts shall be erected as shown on erection diagrams furnished by the supplier.
- The Existing Ground Foundation material under pipes shall be broken up and compacted to a minimum depth of 6". Compaction shall be 95% of maximum density by A.A.S.H.T.O. T99.
- Where an unsuitable material (peat, muck, etc.) is encountered at or below the invert elevation, the necessary subsurface exploration and analysis shall be made and corrective treatment shall be as directed by the Project Manager.
- Impervious Material shall be placed longitudinally along the pipe to the elevations and limits shown on the Cross Section of Roadway Embankment, and transversely around the pipe to the density and slopes shown for Backfill Material on the Backfill Detail. Unless otherwise designated on the plans or directed by the Proj. Mgr. Impervious Material shall conform to A.A.S.H.T.O. A-6 or A-7 soils.
- Bedding Material shall be roughly shaped to fit bottom of pipes and then lightly compacted. Material shall conform to Article 206.032(c), N.M.S.H.D. Standard Specifications. For Pipe Arch the width of bedding shall not exceed the width of the bottom arc.
- Where multiple lines of pipes or pipe arches greater than 48 inches in diameter or span are used, they shall be spaced so that adjacent sides of the pipe shall be at least one-half diameter or 3 feet apart, whichever is less, to permit adequate compaction of backfill material. For diameters 48" and less the minimum spacing shall be not less than 24 inches. See Serial ES-1 for flared end sections.
- A continuous concrete cradle shall be used only when shown on the plans.
- Backfill Material shall conform to Article 206.031, N.M.S.H.D. Standard Specifications. Special care shall be taken when compacting backfill at haunches and side of pipes.

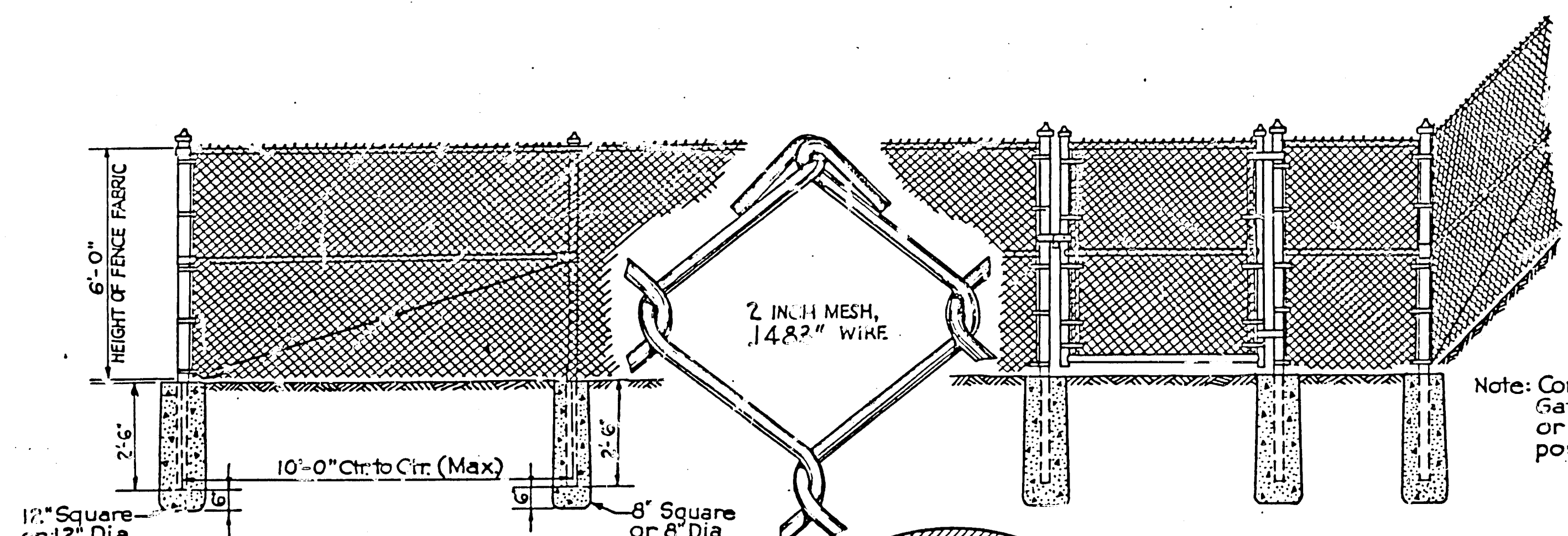
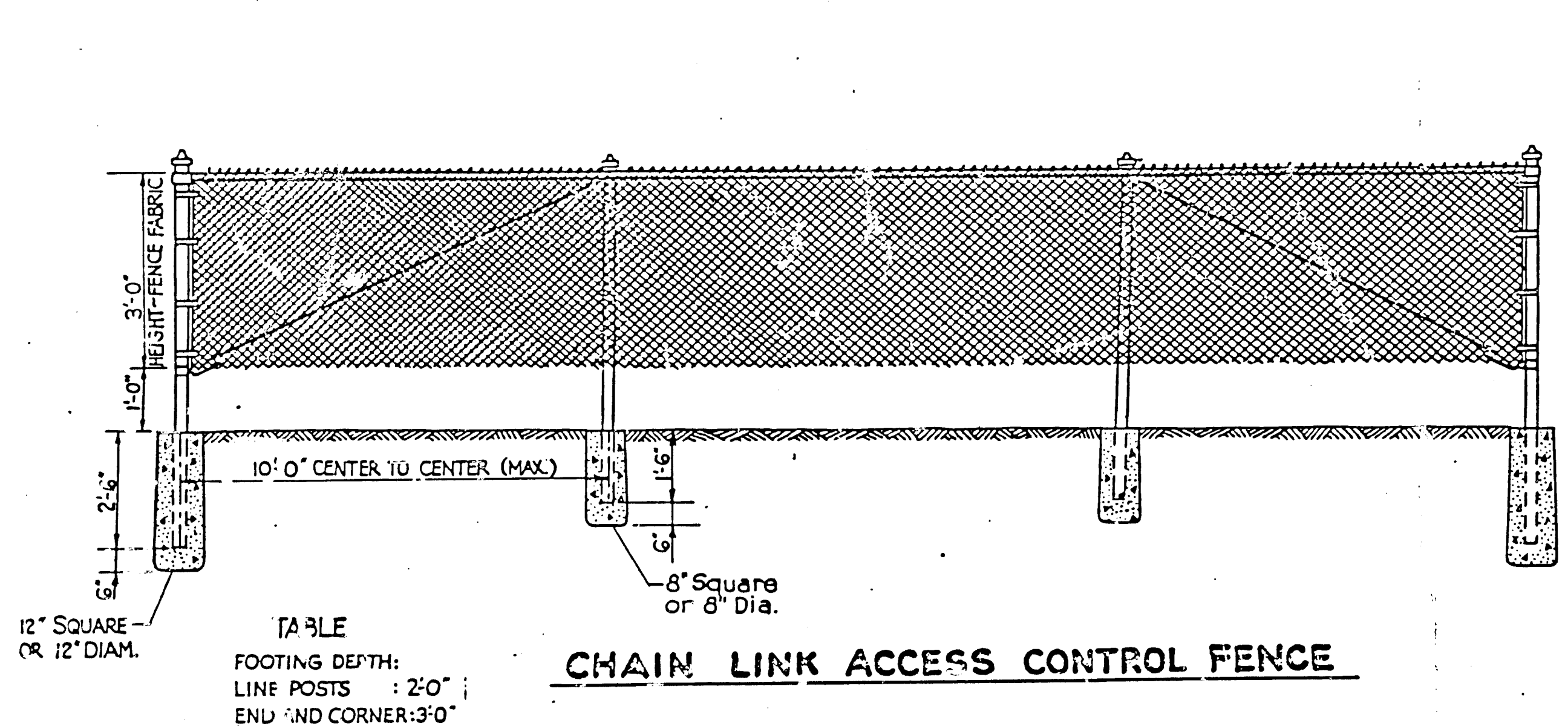
THIS SERIAL REVISED 1-28-85

REFORMATS AND UPDATES BMC-003		DATED 6-13-80		1-28-85 CS	
IDENT NO.	DESCRIPTION			DATE	BY
REVISIONS (OR CHANGE NOTICES)					
NEW MEXICO STATE HIGHWAY DEPARTMENT					
CORRUGATED METAL CULVERT & PIPE ARCHES					
BEDDING & BACKFILL DETAILS					
DESIGNED BY J.O.G.	APPROVAL	6-12-80			
DRAWN BY A.J.S.	RECOMMENDED	BRIDGE ENGINEER DATE			
CHECKED BY E.R.D.	APPROVED	DIRECTOR PROJ. DEVELOPMENT DIVISION DATE			
SERIAL BMC-005-01					

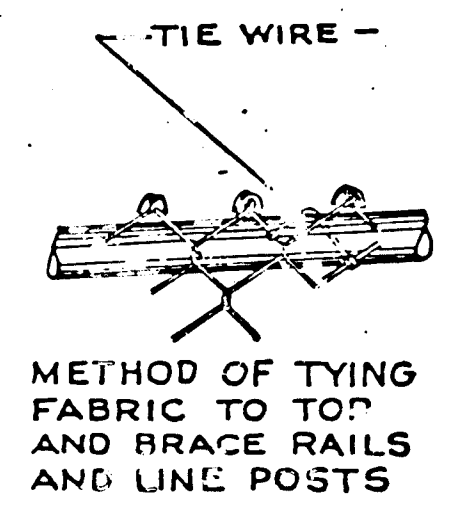
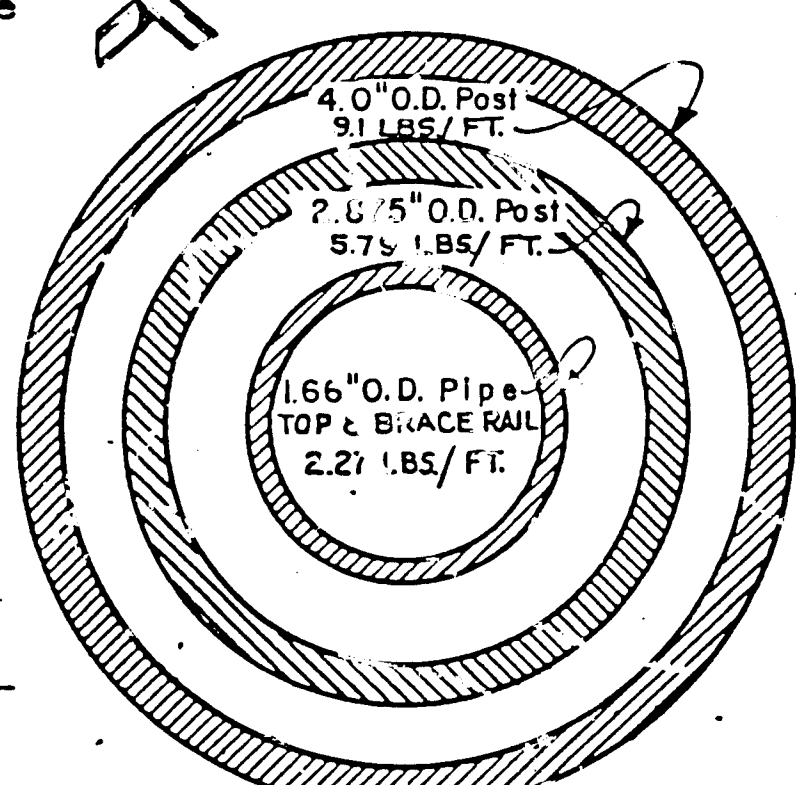
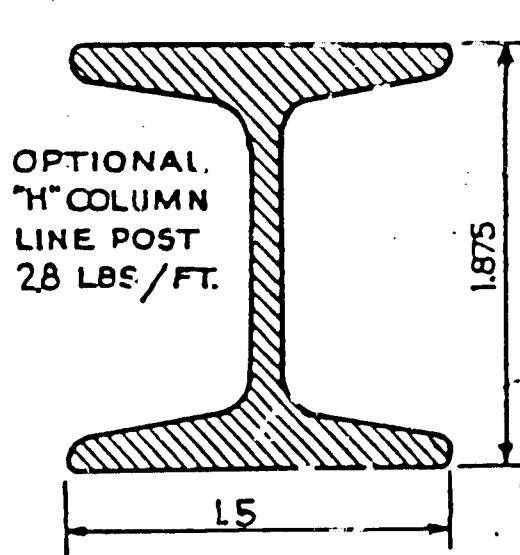
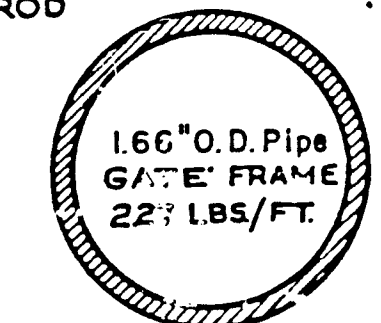
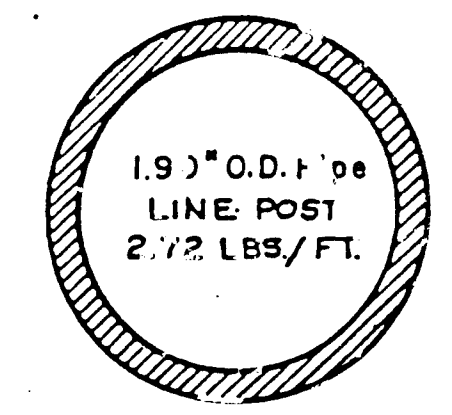
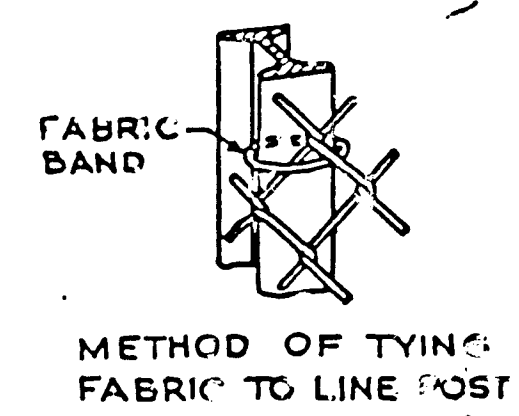
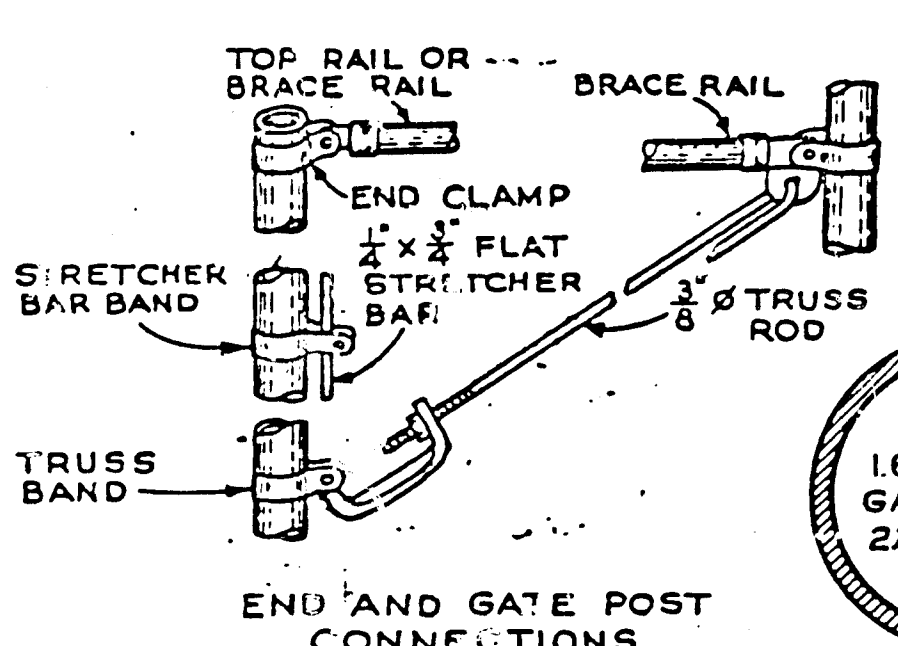
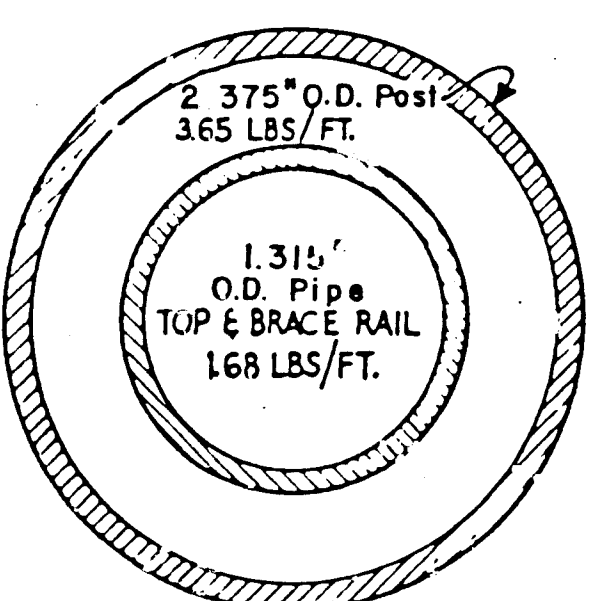
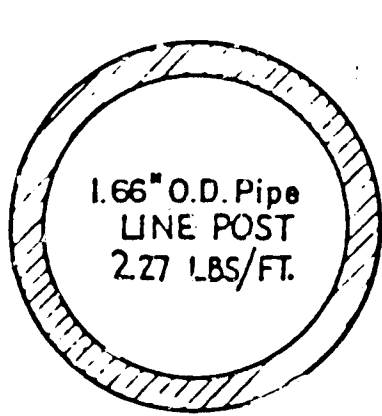
FED. ROAD DIV. NO.	STATE		SHEET NO.	TOTAL SHEETS
9	NEW MEXICO	TPS-4040(2)	11-2	

REVISED 11-10-58 "H" COLUMN LINE POST
REVISED 5-24-60; FENCING, ETC. CHANGED
REVISED 3-2-61; FENCING, ETC. CHANGED
REVISED 10-16-61; PIPE DIAM. POSTS; FENCING.
REVISED 3-10-64 Chain link, etc.
REVISED 5-15-64 Chain link Fence (Title) &
Added note # 5. To General Notes.
Revised 2/27/78 All Diameters Changed to
O.D. also Gen. Note # 5

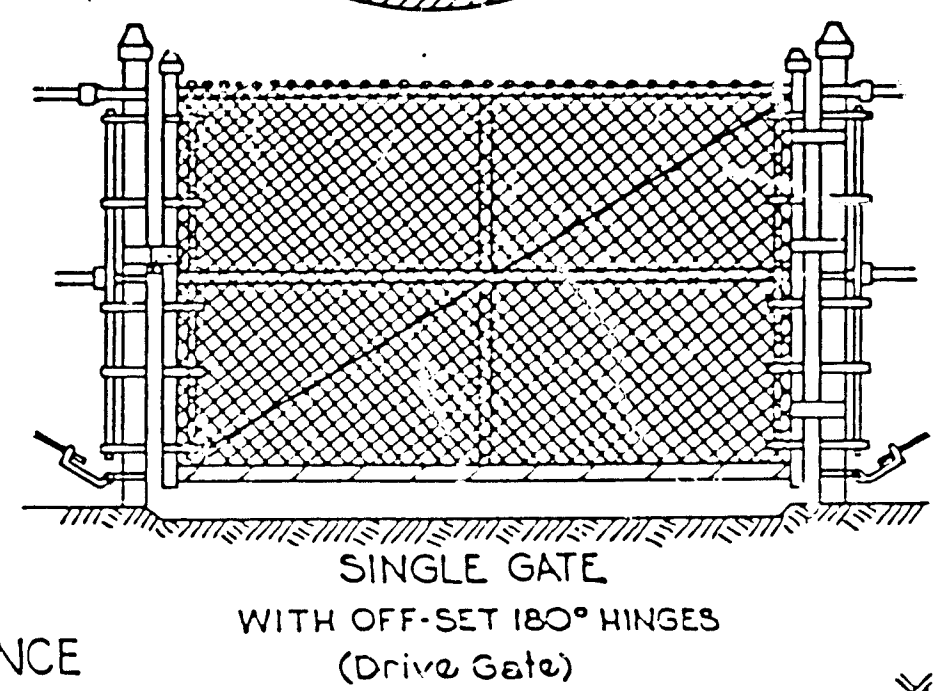
- GENERAL NOTES**
1. Tubular posts, braces and top rails shall conform to the requirements of ASTM Designation A 120.
 2. Chain link fabric shall conform to AASHTO Designation M-181.
 3. All concrete to be Class 'A'.
 4. Knuckled Salvage shall be used.
 5. Diameters (O.D.) shown hereon are nominal sizes as established by the American Standards Association.



Note: Concrete around corner and Gate posts shall be 12" Dia. or square min. and on line posts 8" Dia. or square min.

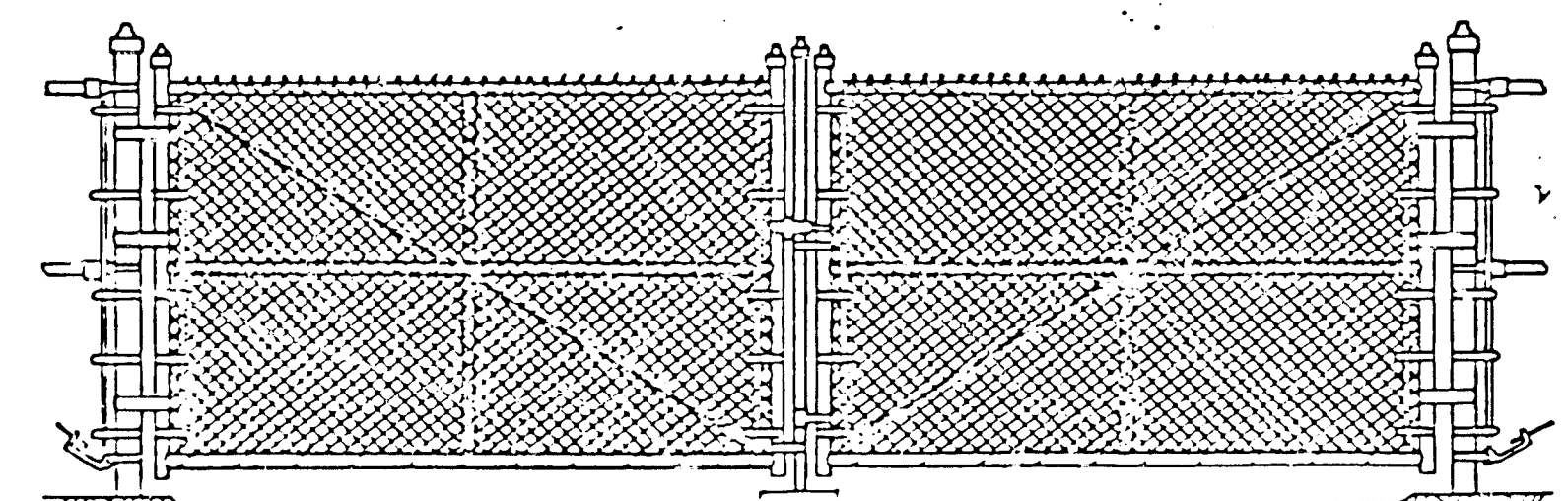
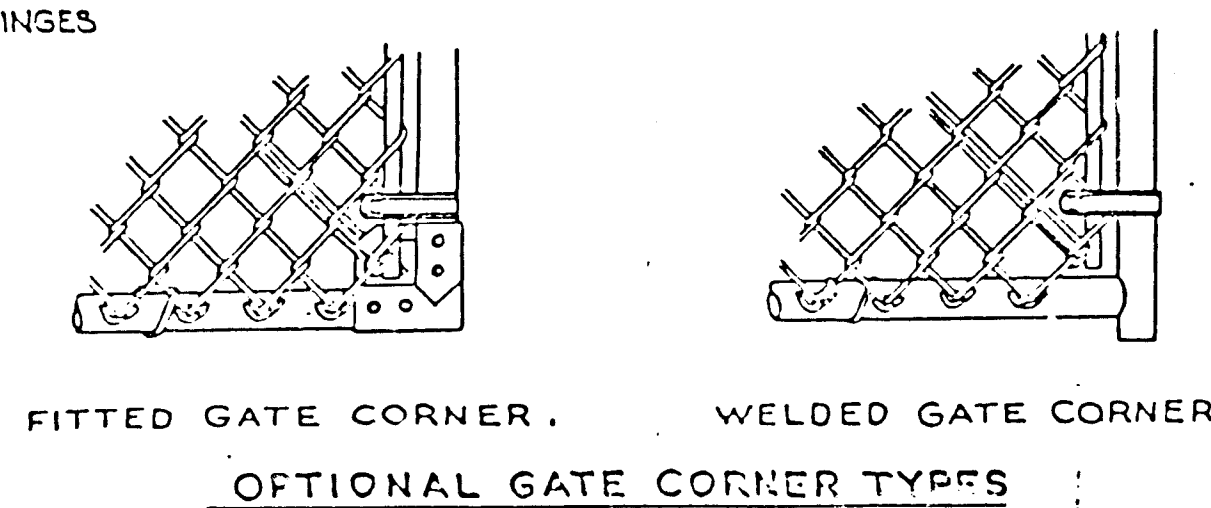


- Use 1.66" O.D. Top and Brace Rails and Gate Frames to 4' width.
- Use 1.93" O.D. for Line Posts and Gate Frames to 13' width.
- Use 2.875" O.D. for End Posts, Corner Posts and Gate Posts for single gate openings to 6' width.
- Use 4.00" O.D. for Gate Posts for single gate openings to 13' width and double gate openings.

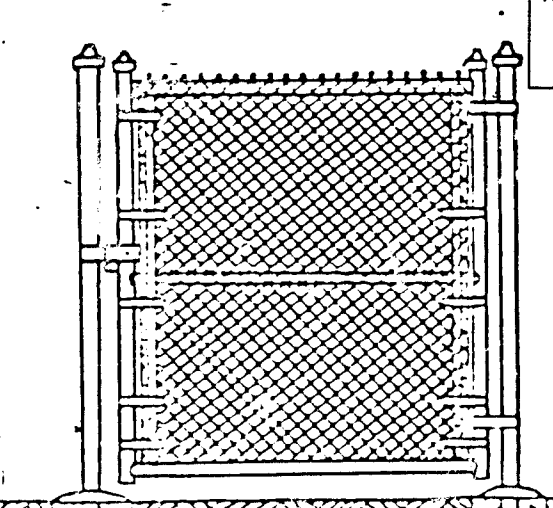


CHAIN LINK ACCESS CONTROL FENCE

TOP RAIL USE 1.315" O.D.
FOR LINE POSTS USE 1.66" O.D.
FOR END POSTS USE 2.375" O.D.



CHAIN LINK FENCE AND DETAILS
TO BE USED AT SCHOOLS, ETC.



APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		
TRANSPORTATION		
HYDROLOGY		
WATER		
WASTE WATER		

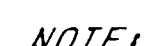
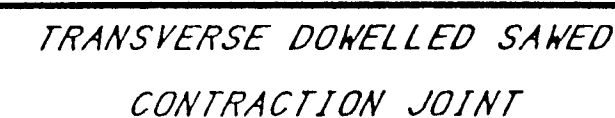
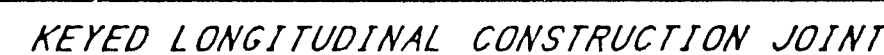
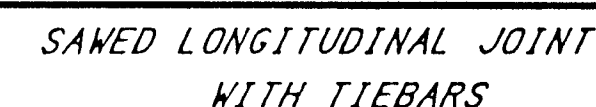
26 36724794

THIS SERIAL REVISED.

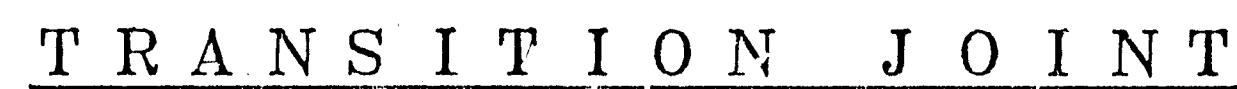
CL-1

NEW MEXICO
STATE HIGHWAY DEPARTMENT
STANDARD
CHAIN LINK FENCES & GATES

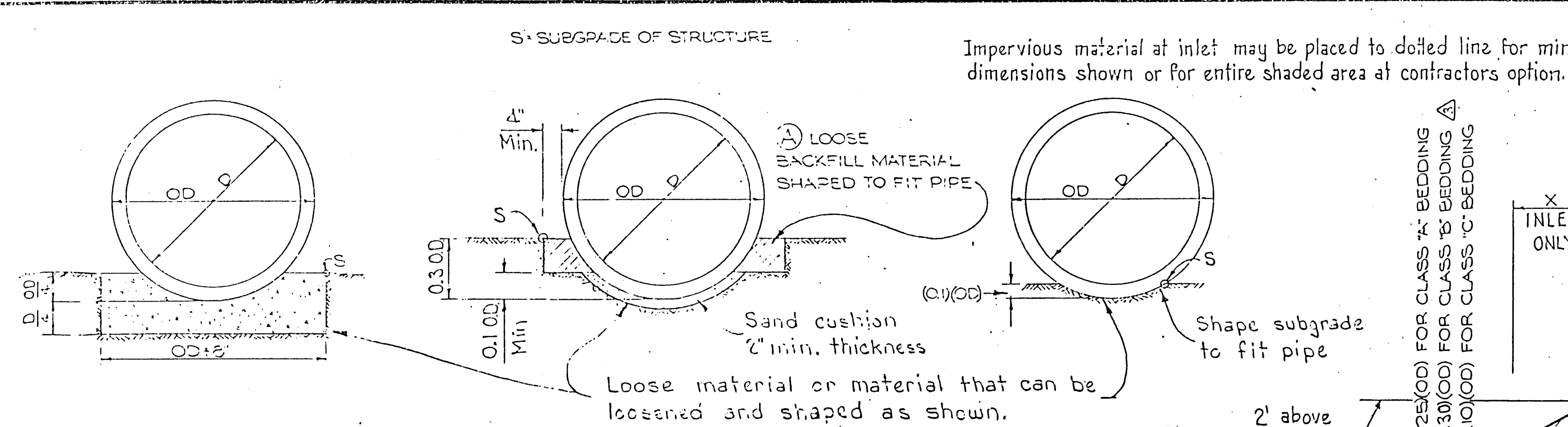
CL-1



* APPLIES FOR HIGH PERCENTAGE OF TRUCK TRAFFIC

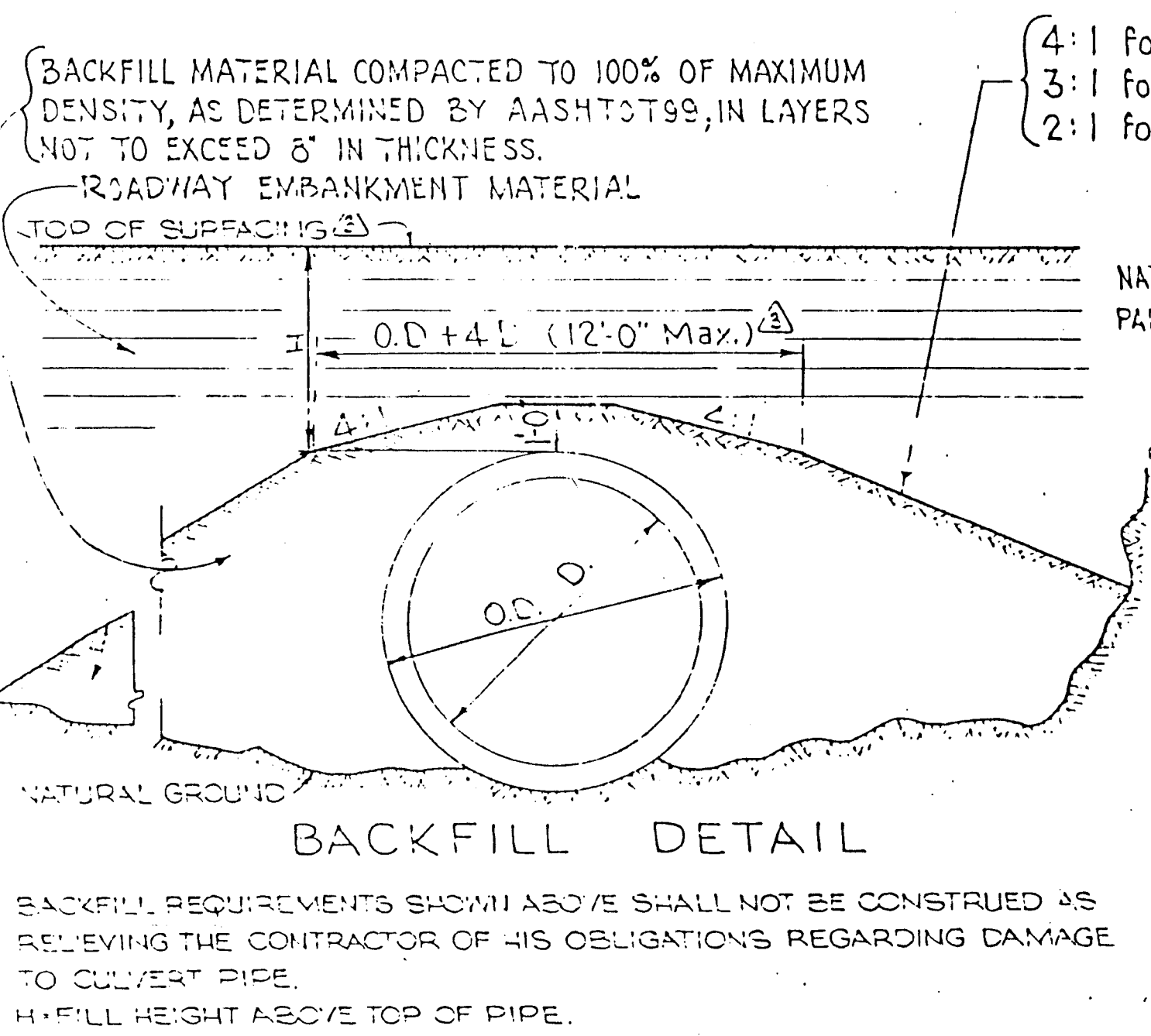


- 26 36724894



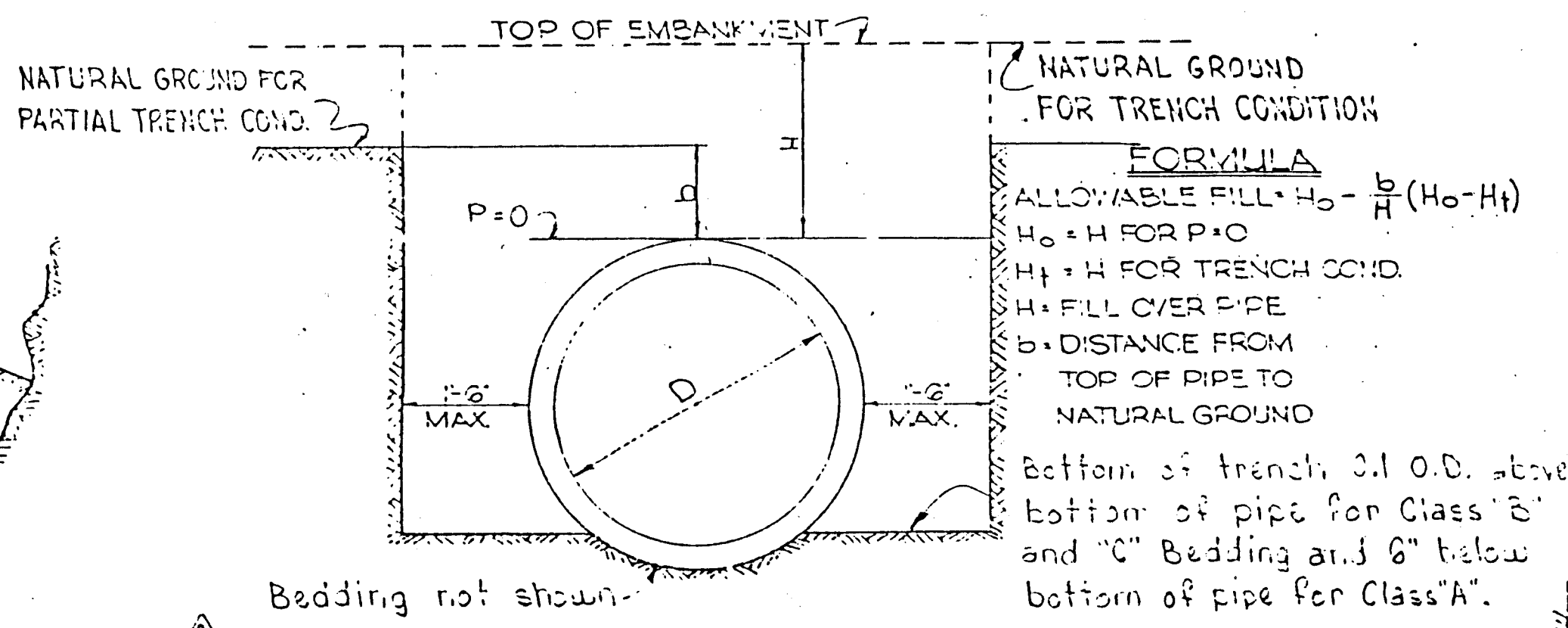
CLASS "A"
CLASS "A" BEDDING SHALL CONSIST OF A CONTINUOUS CONCRETE CRADLE AND SHALL BE USED ONLY WHEN SHOWN ON THE PLANS.
VOLUME OF CRADLE
 $0.0156 D^3 + 0.00123 D + 0.0011 = 0.0170 D^3$
D IS IN FEET.

CLASS "B"
See detail below for bedding in rock or other incompressible foundation.
CLASS "C"
See detail below for bedding in rock or other incompressible foundation.



4:1 for D less than 3'
3:1 for D = 3' to 4'-1" inclusive.
2:1 for D larger than 4'-1"

CLASS "A"
LOOSE BACKFILL MATERIAL ROUGHLY SHAPED TO FIT BOTTOM OF PIPE AND THEN COMPACTED AT HAUNCHES AND SIDES OF PIPE.



METHOD OF INTERPOLATION FOR ALLOWABLE FILL WHEN NATURAL GROUND LIES BETWEEN TOP OF PIPE AND TOP OF EMBANKMENT (PARTIAL TRENCH CONDITION)

MAXIMUM HEIGHT OF FILL

INSIDE DIAMETER INCHES	CLASS II PIPE									CLASS III PIPE									CLASS IV PIPE									CLASS V PIPE									INSIDE DIAMETER INCHES	
	CLASS "A" BEDDING			CLASS "B" BEDDING			CLASS "C" BEDDING			CLASS "A" BEDDING			CLASS "B" BEDDING			CLASS "C" BEDDING			CLASS "A" BEDDING			CLASS "B" BEDDING			CLASS "C" BEDDING													
	P=0	P=10	TRENCH	P=0	P=10	TRENCH	P=0	P=10	TRENCH	P=0	P=10	TRENCH	P=0	P=10	TRENCH	P=0	P=10	TRENCH	P=0	P=10	TRENCH	P=0	P=10	TRENCH	P=0	P=10	TRENCH	P=0	P=10	TRENCH								
18	24	19	24	16	13	16	13	11	13	32	25	32	22	18	22	19	15	18	47	38	56	32	25	32	27	21	27	55	45	110	37	30	37	32	26	32	18	
24																					87								56	45		35	30	39	32		32	24
30																					90								57	47		39	31	47	33		33	30
36																					90								58		40	31	54				36	
42												32									140								58			31	54				42	
48												33									110								58			31	54				48	
54												33									110								59			32	51				54	
60												32									78								59			32	51				60	
66												32									76			32					59			32	51				66	
72												33									76			34					59	47	110	40	32	50	33	26	33	72
78												34									74			35														
84												33									47	38	68	32	25	34	27	21	27									
90												33																										
96												34																										
102												33																										
108	24	19	24	16	13	16	13	11	13	32	25	34	22	18	22	19	15	18																				
<div><div>APPROVALS</div><div>ENGINEER</div><div>DATE</div></div> <div><div>DRC CHAIRMAN</div><div>TRANSPORTATION</div><div>HYDROLOGY</div></div> <div><div>NOTE:</div><div>FOR PROJECTION RATIOS WHEN P IS GREATER THAN ZERO AND LESS THAN ONE, ALLOWABLE FILL MAY BE DETERMINED BY INTERPOLATION. WHEN NATURAL GROUND IS ABOVE TOP OF PIPE AND BELOW TOP OF EXHAUSTION, ALLOWABLE FILL HEIGHTS ARE COMPILED FROM SLOPE AND FORMULA SHOWN ABOVE.</div></div>																																						

APPROVALS

ENGINEER _____ DATE _____

DRC CHAIRMAN _____

TRANSPORTATION _____

HYDROLOGY _____

WATER _____

WASTE WATER _____

NOTE: FOR PROJECTION RATIOS WHEN P IS GREATER THAN ZERO AND LESS THAN ONE, ALLOWABLE FILL MAY BE DETERMINED BY INTERPOLATION. WHEN NATURAL GROUND IS ABOVE TOP OF PIPE AND BELOW TOP OF EMBANKMENT, ALLOWABLE FILL HEIGHTS ARE COMPLETED FROM ENATCH AND FORMULA SHOWN ABOVE.

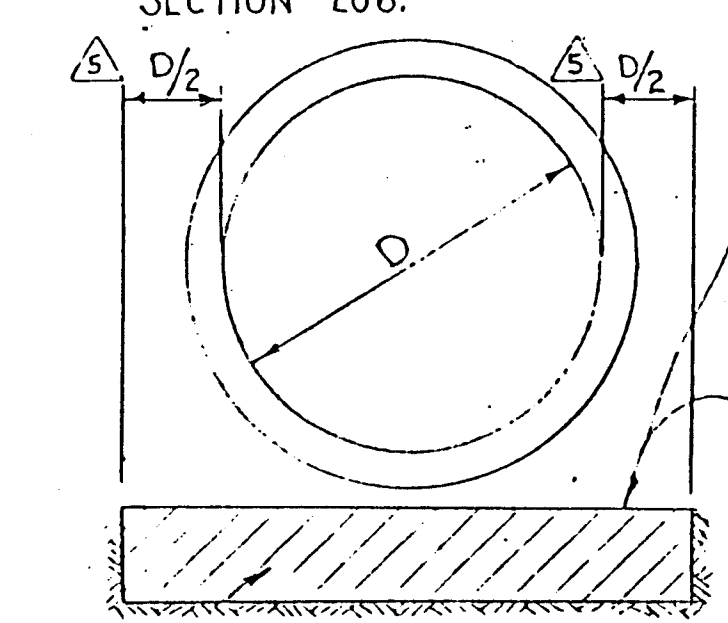
DESIGN DATA

Design according to U.S.B.P.R. Circular Memorandum dated April 4, 1957.
and A.A.S.H.T.O. Spec. M-170.
Weight of fill material = 120 lbs./ft.³
Factor of safety = 1.33 applied to ultimate 3 edge bearing load.
Settlement Ratio = 0.7

PRNA	STAT	TPS-4040(2)	SHEET	TOTAL
6	NEW MEXICO		11-4	

GENERAL NOTES

1. WORKMANSHIP AND MATERIALS SHALL CONFORM TO N.M.S.H. DEPT. SPECIFICATIONS.
2. CONCRETE PIPE SHALL CONFORM TO ALL REQUIREMENTS OF AASHTO SPECIFICATION M-170
3. THE MINIMUM HEIGHT OF FILL BETWEEN TOP OF PIPE AND FINISHED GRADE OF THE ROADWAY SHALL BE 1.75 FT. FOR UNPAVED AND BITUMINOUS PAVED ROADS AND 1.25 FT. FOR CONCRETE PAVED ROADS.
4. SAND CUSHION FOR CLASS "B" BEDDING TO BE INCLUDED IN THE UNIT PRICE BID FOR CONCRETE PIPE.
5. SUITABLE MATERIAL FOR STABILIZING THE CULVERT FOUNDATION SHALL CONSIST OF MATERIAL APPROVED BY THE ENGINEER. THE MATERIAL MAY BE OBTAINED FROM THE ROADWAY OR STRUCTURE EXCAVATION OR FROM BORROW, AS DIRECTED BY THE ENGINEER. THE DEPTH OF SUCH MATERIAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD AFTER EXAMINATION OF THE NATURAL FOUNDATION MATERIAL, CONSIDERING THE DIAMETER OF THE PIPE AND HEIGHT OF COVER.
6. FOR MULTIPLE INSTALLATIONS, PIPES SHALL BE SPACED TO PROVIDE TWO FEET CLEAR DISTANCE BETWEEN END SECTIONS, SEE SERIAL ES-1. WHERE SERIAL ES-1 DOES NOT LIST END SECTIONS FOR THE SIZE OF PIPE TO BE USED, THE CENTER TO CENTER SPACING OF PIPES SHALL BE THE OUTSIDE DIAMETER PLUS THREE FEET.
7. EXISTING GROUND UNDER PIPE BEDDING SHALL BE BROKEN UP & COMPACTED TO TO A MINIMUM DEPTH OF 6 INCHES REGARDLESS OF FILL HEIGHT. COMPACTION SHALL BE 95% OF MAXIMUM DENSITY BY AASHTO T99.
8. BACKFILL MATERIAL SHALL CONFORM TO SPECIAL PROVISION MODIFYING SECTION 208.



FOR DETAILS ABOVE THIS PLANE SEE SPECIFIED CLASS OF BEDDING.
BOTTOM OF CONCRETE CRADLE FOR CLASS "A" BEDDING. BOTTOM OF LOOSE BACKFILL MATERIAL FOR CLASS "B" BEDDING. SUBGRADE OF STRUCTURE FOR CLASS "C" BEDDING.

COMPACTED SUITABLE MATERIAL.

FOUNDATION STABILIZATION

UNSUITABLE FOUNDATION MATERIAL SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AND THE EXCAVATED AREA BACKFILLED AS SHOWN.

THIS SERIAL REVISED: 9-9-74

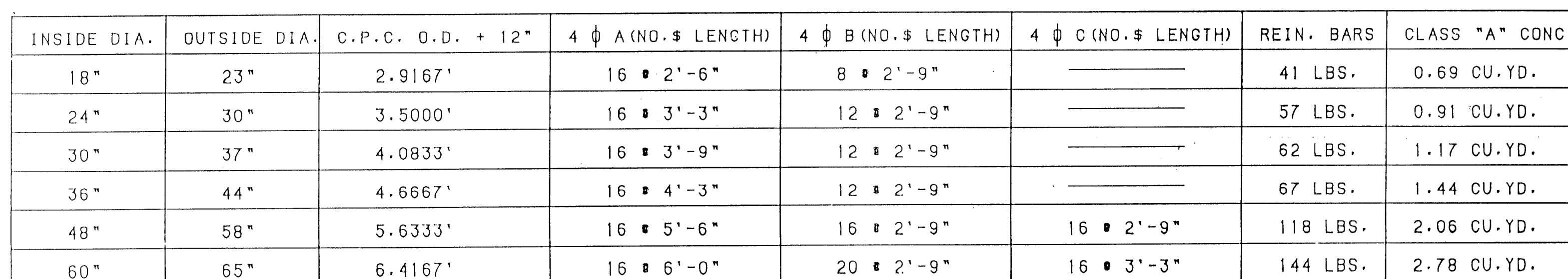
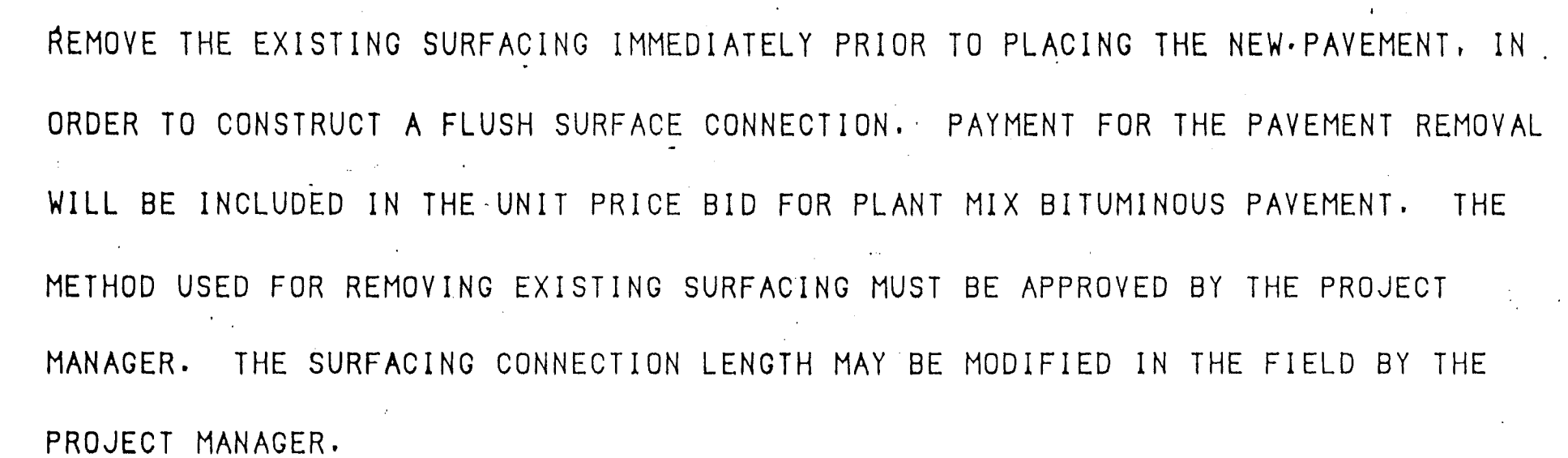
No.	DESCRIPTION	DATE	BY
9	Rev Note 7 & Backfill Note	9-9-74	RH
8	Minor corrections	4-28-74	RP
7	Miscellaneous revisions	4-28-74	RH
6	Minor revisions	11-6-73	RH
5	Revised Width of Subgrade Stabilization	11-22-71	WLD
4	ADDED NOTE #3	11-4-71	WLD
3	Changes marked	10-20-71	WLD
2	NOTE #6	2-4-71	HHY
1	REDRAWN	11-4-70	HHY

NEW MEXICO
STATE HIGHWAY DEPARTMENT
FILL HEIGHTS AND
BEDDING DETAILS
FOR
CONCRETE PIPE CULVERTS

SERIAL M-16-71

APPROVED: *J. J. ...* 2-2-71
BRIDGE ENGINEER

REGION NO.	STATE	TPS-4040(2)	SHEETS NO.	TOTAL SHEETS
6	NEW MEXICO		11-5	



COLLAR DETAILS FOR CONNECTING CONC. PIPE CULV. W/CORR. METAL CULV.



INCREASER. PLATE DETAILS

RMD-001-00

NEW MEXICO PROJECT NO. TPS-4040(2)

SHEET 11-5

PAINT STEEL PLATE
BOTH SIDES
SEE SECTION 615 - PAINT

PAINT STEEL PLATE
BOTH SIDES
SEE SECTION 615 - PAINT

26 36725094

△			
△			
△			
IDENT. NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO			
STATE HIGHWAY DEPARTMENT			
MISC. DETAILS			
DESIGNED BY	APPROVAL		
DRAWN BY	RECOMMENDED	ENGINEER	DATE
CHECKED BY	APPROVED	ENGINEER	

CHART TO DETERMINE POST SIZE

Post Size	H	H in feet										
		5	6	7	8	9	10	11	12	13	14	15
1 1/2" x 1 1/2"	4.9	4.1	3.5	3.0	2.7	2.4	2.2	2.0	1.9	1.7		
1 3/4" x 1 3/4"	7.5	6.2	5.3	4.7	4.1	3.7	3.4	3.1	2.9	2.7		
2" x 2"	10.5	8.8	7.5	6.6	5.8	5.3	4.8	4.4	4.0	3.8		
2 1/4" x 2 1/4"	14.0	11.7	10.0	8.8	7.7	7.1	6.4	5.9	5.3	5.1		
2 3/8" x 2 3/8"	16.7	13.9	11.9	10.4	9.3	8.3	7.6	7.0	6.4	6.0	5.6	5.2
2 1/2" x 2 1/2"	22.2	18.5	15.8	13.8	12.3	11.1	10.1	9.2	8.5	7.9	7.4	6.9

EXAMPLE:

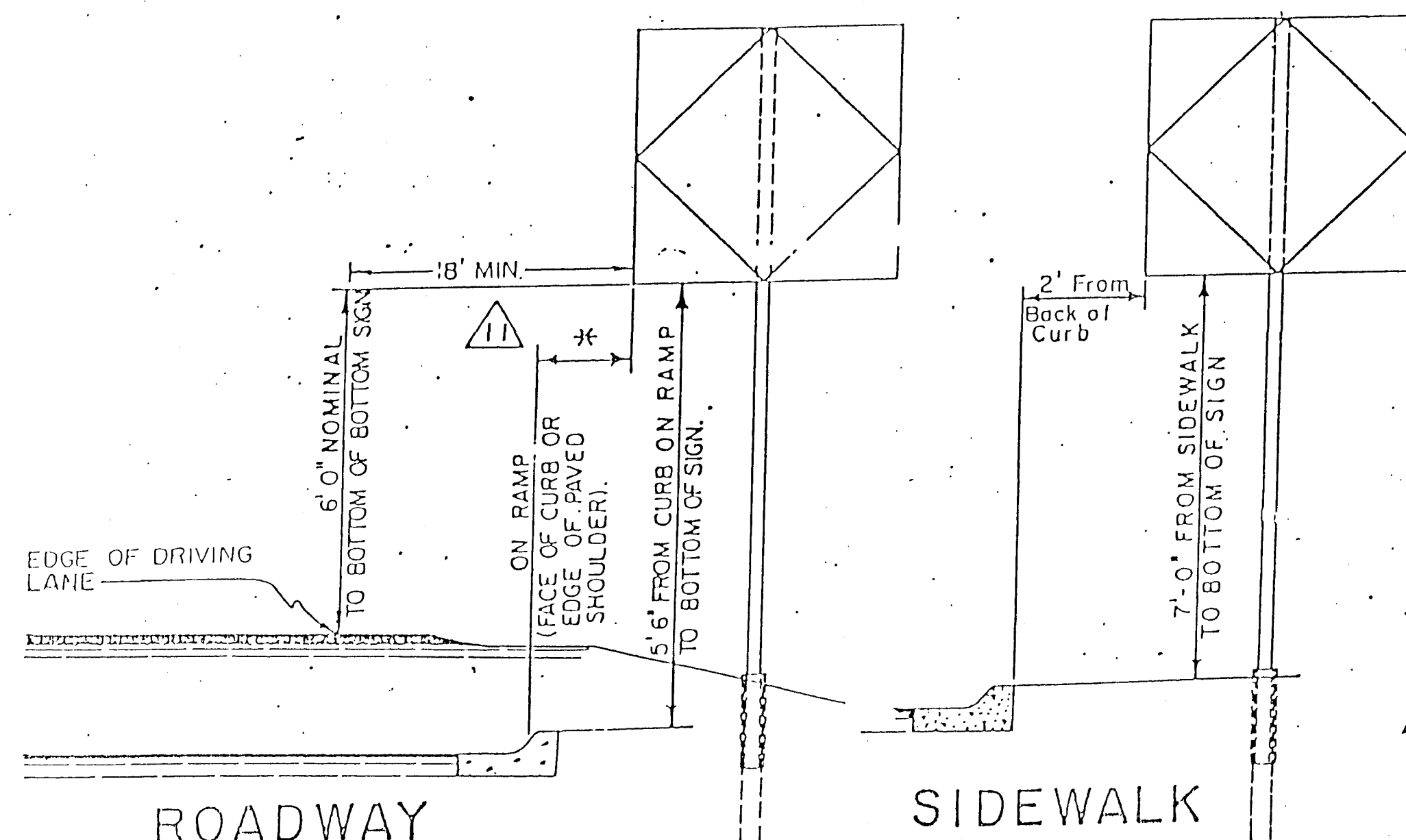
DETERMINE SIZE AND NUMBER OF POSTS TO USE WITH SIGN 4'x4' AREA = 16 sq. ft.
DETERMINE DESIGN HEIGHT FROM ROADWAY CROSS SECTION IN CONJUNCTION WITH SIGN SIZE
(DESIGN HEIGHT (H) IS FROM THE GROUND ELEVATION AT THE BASE OF THE LONGEST POST TO CENTER OF SIGN).

SOLUTION:

FROM ROADWAY CROSS SECTION, CLEARANCE TO BOTTOM OF SIGN = 9.5'
SIGN DEPTH IS 4'.
 $d/2 = 4/2 = 2$

DESIGN HEIGHT
NUMBER OF POSTS (n) NEEDED FOR A 16 sq. ft. WOULD BE $n = 2$ (NORMALLY NOT OVER 10 TO 12 SQ. FT. PER POST). SIGN AREA PER POST $A_n = 16/2 = 8$ sq. ft. PER POST.

ENTER CHART AT TOP WHERE H=12.0' PROCEED DOWNWARD TO AN AREA EQUAL TO OR GREATER THAN SIGN AREA PER POST. THEN PROCEED TO THE LEFT TO FIND THE REQUIRED POST SIZE. THIS COMES OUT TO BE A 2 1/2" x 2 1/2", 10 GA. POST.
THE LENGTH OF THE LONGER POST WILL THEN BE THE 9.5' FROM GROUND LINE TO BOTTOM OF SIGN PLUS THE SIGN HEIGHT (5.0' IN THIS CASE) PLUS THE 1.5' IN THE GROUND FOR A TOTAL OF 16.0'. THE OTHER POST LENGTH WILL BE 16.0' MINUS THE DIFFERENCE "d" (IN THIS CASE 16.0' - 0.4' OR 15.6')

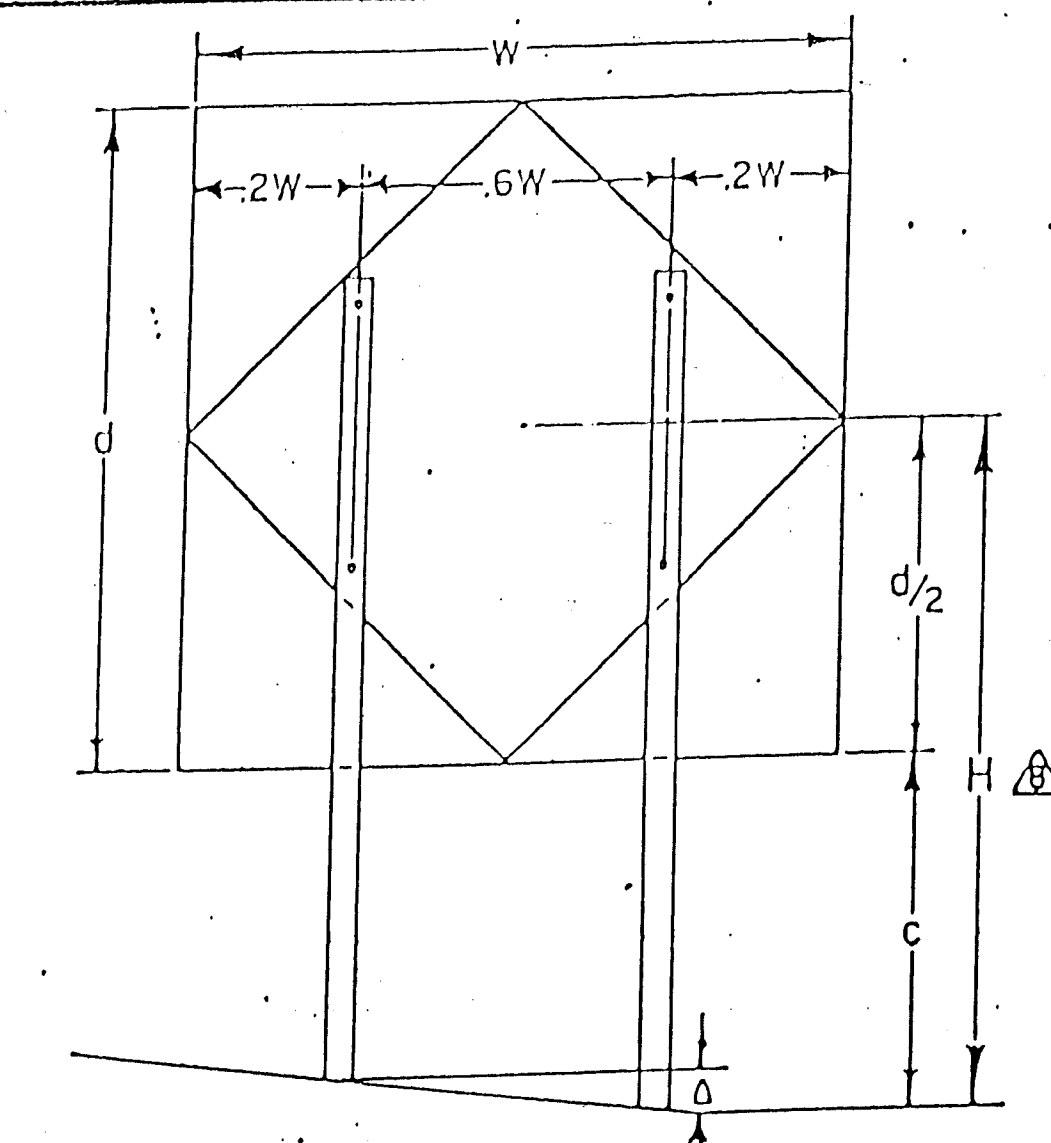


ROADWAY

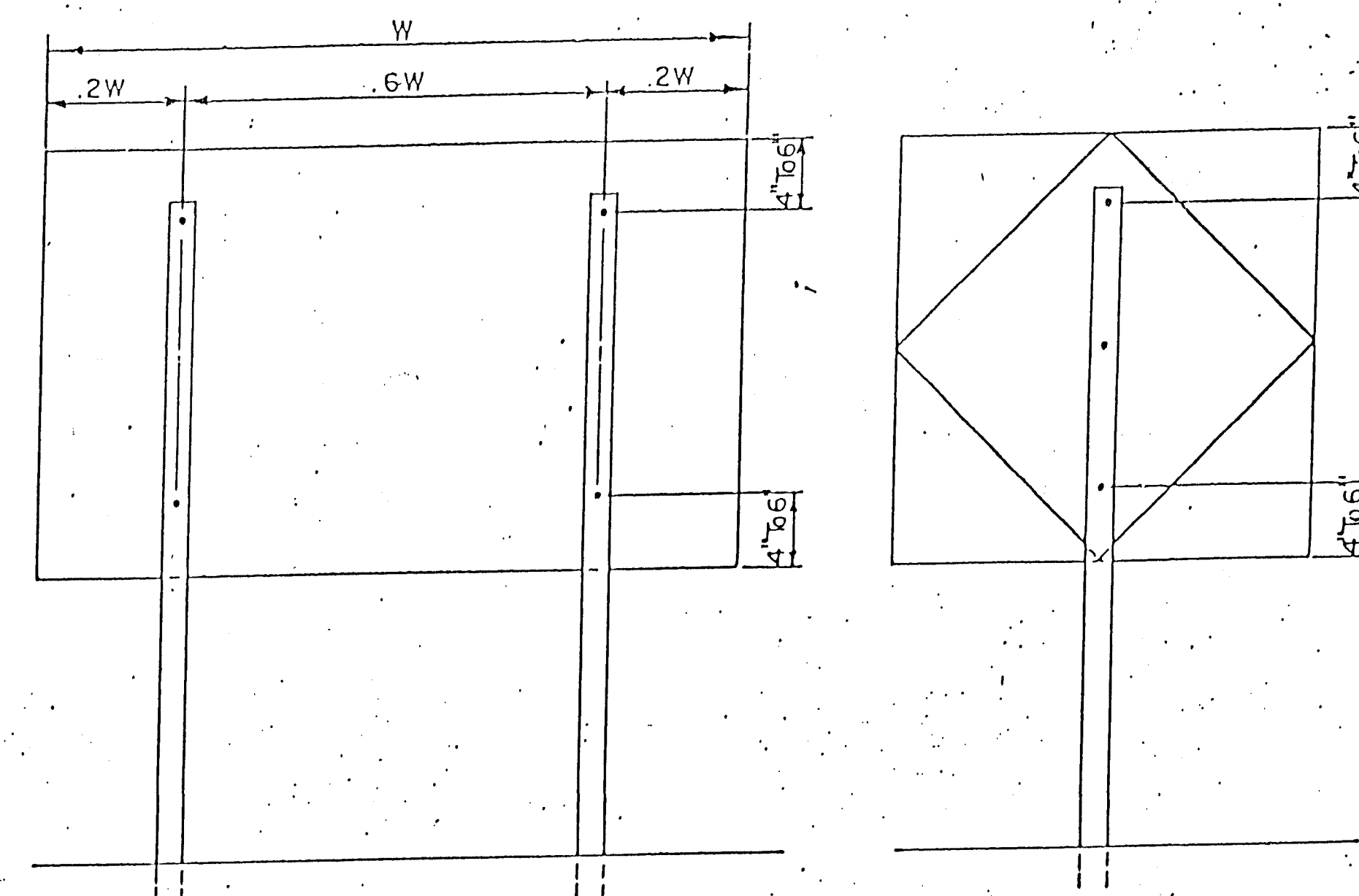
SIDEWALK

POST INSTALLATION

3' MIN. FROM FACE OF CURB OR
6' MIN. FROM EDGE OF PAVED SHOULDER



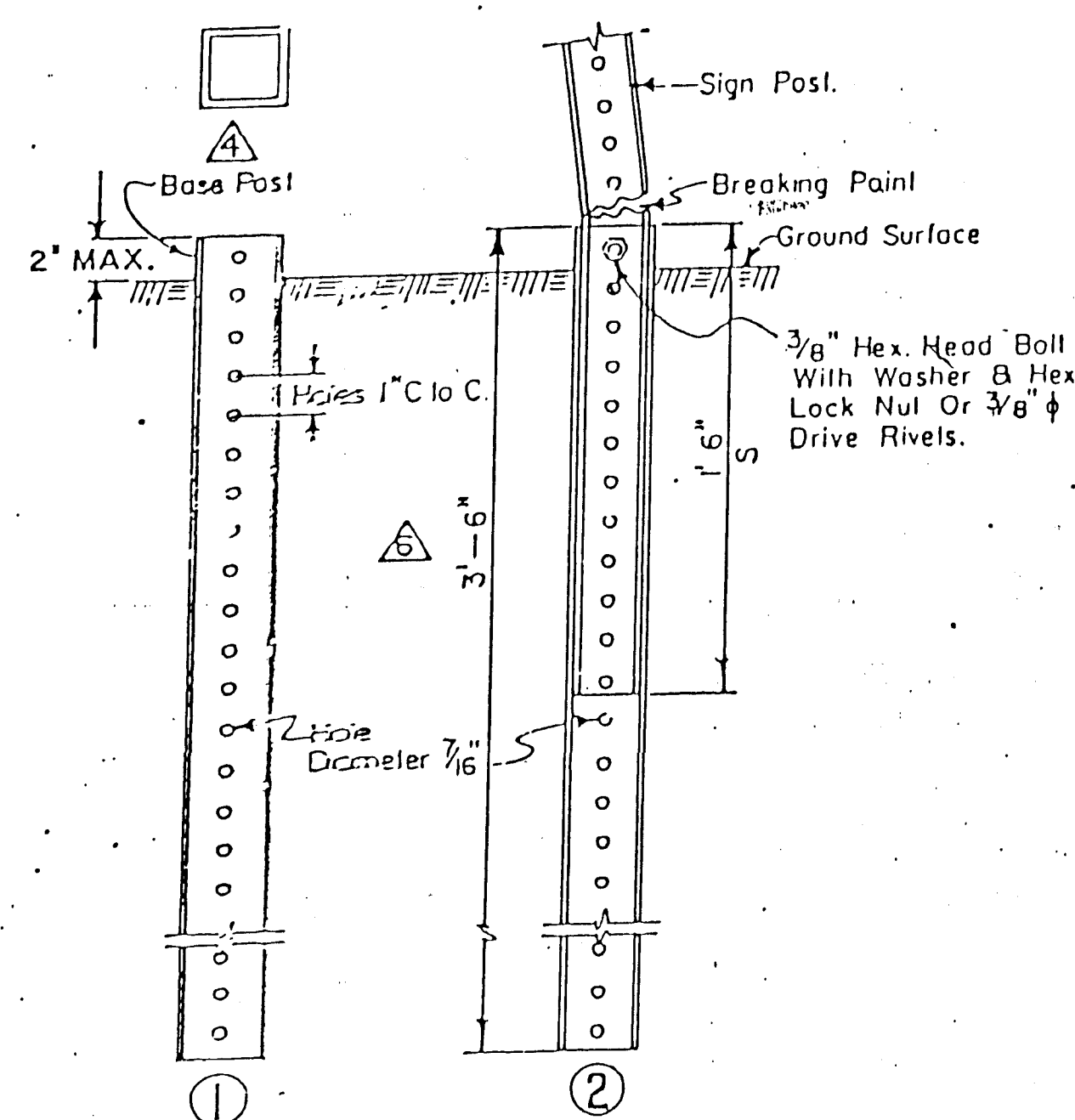
POST SIZE CALCULATION



POST SPACING & SIGN MOUNTING

NOTE: WHERE 3 POSTS ARE USED SPACING SHOULD BE
.15W - .35W - .35W - .15W

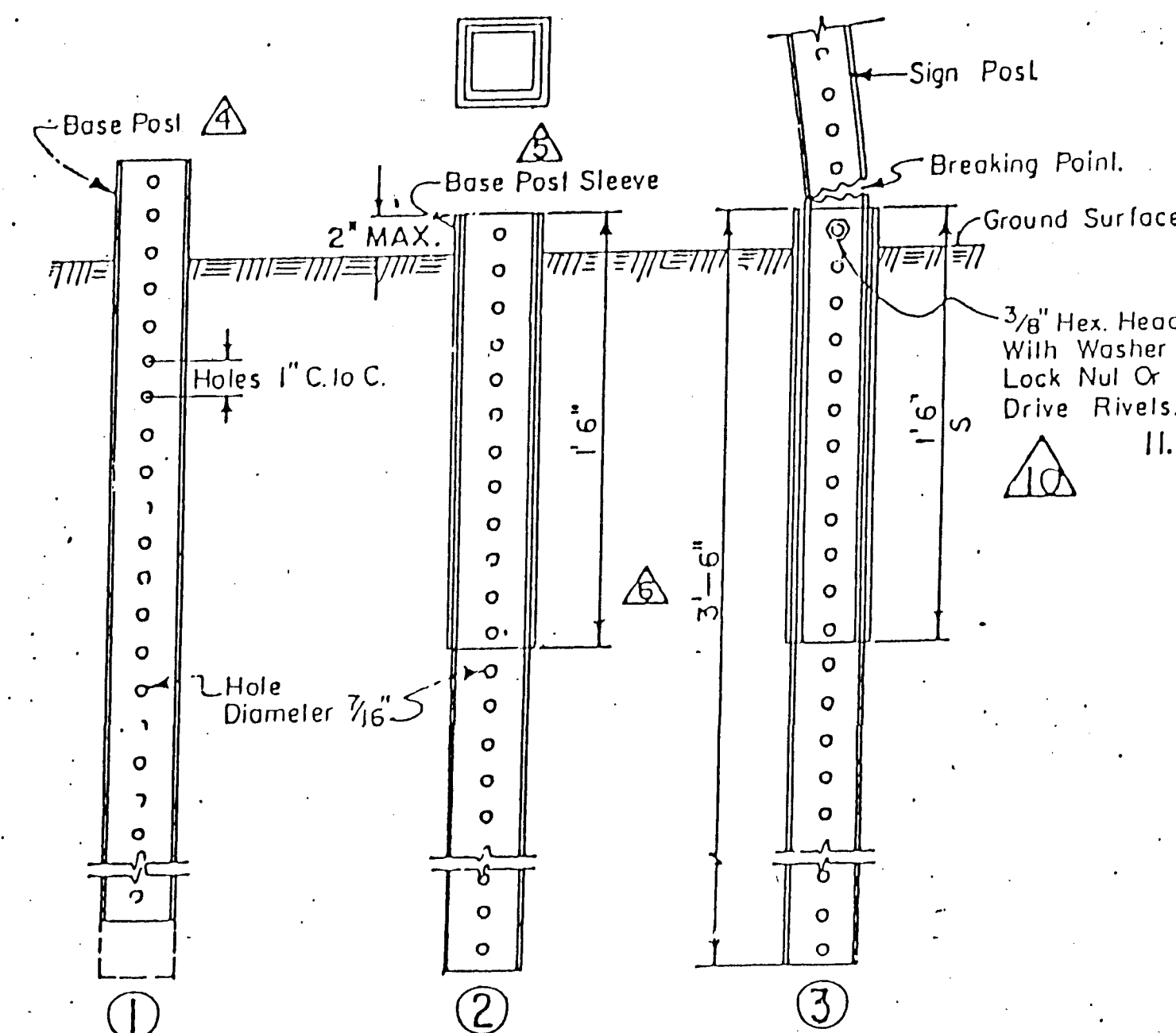
POSTS
0.1345" THICK (10 GA.)



GROUND INSTALLATION

1. DRIVE BASE POST UNTIL ONE HOLE IS EXPOSED ABOVE GROUND FOR RIVET OR BOLT INSTALLATION.
2. INSERT SIGN POST 1'-6" AND FASTEN WITH 2 EACH 3/8" ϕ DRIVE RIVET OR A 3/4" ϕ BOLT.
3. THE HOLE PATTERN SHOWN IS ONLY REQUIRED IN THE AREA OF THE BREAKAWAY INFLUENCE AND AT THE SIGN PANEL LOCATION (HOLES MAY BE FIELD DRILLED).

POSTS
0.1046" THICK (12 GA.)



GROUND INSTALLATION

1. DRIVE BASE POST TO WITHIN THREE OR FOUR INCHES OF SURFACE. BASE POST IS NEXT SIZE LARGER SECTION THAN SIGN POST.
2. PRE-CUT BASE POST SLEEVE (of next size larger tube) SO THAT THE HOLES WILL MATCH AND STILL BE FLUSH WITH TOP OF THE BASE POST. DRIVE BASE POST SLEEVE UNTIL HOLES MATCH AS NOTED ABOVE, THEN DRIVE BOTH THE BASE POST SLEEVE AND THE BASE POST UNTIL ONE HOLE IS EXPOSED ABOVE GROUND FOR BOLT CONNECTION.
3. INSERT SIGN POST 1'-6" FASTEN WITH 2 EACH 3/8" ϕ DRIVE RIVETS OR A 3/4" ϕ BOLT.
4. THE HOLE PATTERN SHOWN IS ONLY REQUIRED IN THE AREAS OF THE BREAKAWAY INFLUENCE AND AT THE SIGN PANEL LOCATION (HOLES MAY BE FIELD DRILLED).

F.H.W.A. Region No.	STATE	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	11-6	

NOTES:

1. MATERIALS AND WORKMANSHIP SHALL CONFORM TO NEW MEXICO STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. BREAKAWAY SIGN SUPPORTS SHALL BE FABRICATED FROM PERFORATED STEEL AND SHALL CONFORM TO THE BREAKAWAY DESIGN SHOWN ON THIS SHEET. ALL HOLES TO BE 7/16" ϕ .
3. THE STEEL POSTS SHALL CONFORM TO COMMERCIAL QUALITY ASTM DESIGNATION A 446 GRADE A ZINC COATED (G 90) ASTM A 525. THE CROSS SECTION OF THE POST SHALL BE SQUARE TUBE FORMED OF 0.1046" THICK OR 0.1345" THICK. ROLL FORMED CARBON STEEL WELDED DIRECTLY IN THE CORNER BY HIGH FREQUENCY RESISTANCE WELDING OR EQUAL AND EXTERNALLY SCARFED TO AGREE WITH CORNER RADIUS. STANDARD OUTSIDE CORNER RADIUS SHALL BE 5/32" PLUS OR MINUS 1/64".
4. BOLTS AND NUTS SHALL BE CARBON STEEL A-307 OR STAINLESS STEEL A-193.
5. DRIVING CAPS MUST BE USED TO DRIVE POSTS 1'-6".
6. BASE POST SLEEVE IS REQUIRED WITH 0.1046" THICK POST; BUT NOT WITH 0.1345" THICK.
7. 3" X 3" X 4'0" BASE POST OF 3/16" WALL THICKNESS TO BE USED WITH 2 1/2" X 2 1/2" 0.1345 POST.
8. POSTS SHALL HAVE A MINIMUM COLD FORMED YIELD STRESS OF 40,000 PSI.
9. DESIGN IS IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 1976.
WIND LOAD: 19 LBS./SQ. FT. (70 MPH)
SOIL BEARING CAPACITY: 3 K/SQ. FT.
10. CARBON STEEL NUTS, BOLTS AND WASHERS SHALL BE HOT DIP GALVANIZED A-153, CLASS D, ZINC COATED A-164, TYPE LS (0.0005 THICKNESS), OR CADMIUM COATED A-165, TYPE OS (0.0003 THICKNESS).
11. AS AN ALTERNATE TO GALVANIZING, STEEL POSTS AND BASE POSTS MAY BE PAINTED WITH A GREEN MODIFIED POLYESTER PAINT MEETING THE COLOR REQUIREMENTS OF FS 595-A (COLOR NO. 14109). METHOD OF APPLICATION SHALL BE BY ELECTRODEPOSITION TO A MINIMUM 1 MIL THICKNESS. FINISHED POSTS SHALL HAVE A SMOOTH, UNIFORM FINISH FREE FROM DEFECTS AFFECTING STRENGTH OR APPEARANCE.

REVISIONS (OR CHANGE NOTICES)	DATE
ADDED NOTE No. 11	8/6/43
REVISED NOTE No. 9	9/24/77 T.M.
CORRECTED LETTER REFERENCE	7-2470 T.M.
ADDED LARGER POST SIZE TO CHART	2-2872 T.M.
REV. BASE POST DIMENSION	12-5-77 T.M.
ANCHOR SLEEVE TO BASE POST SLEEVE	12-5-77 T.M.
SIGN POST ANCHOR TO BASE POST	12-5-77 T.M.
Rev. Note 4 & Add Note 10	6-6-77 J.G.
Rev. Note 4	3-31-77 T.M.
Rev. Offset Distance	5/14/43 T.M.
IDENT. NO.	DESCRIPTION

NEW MEXICO
STATE HIGHWAY DEPARTMENT

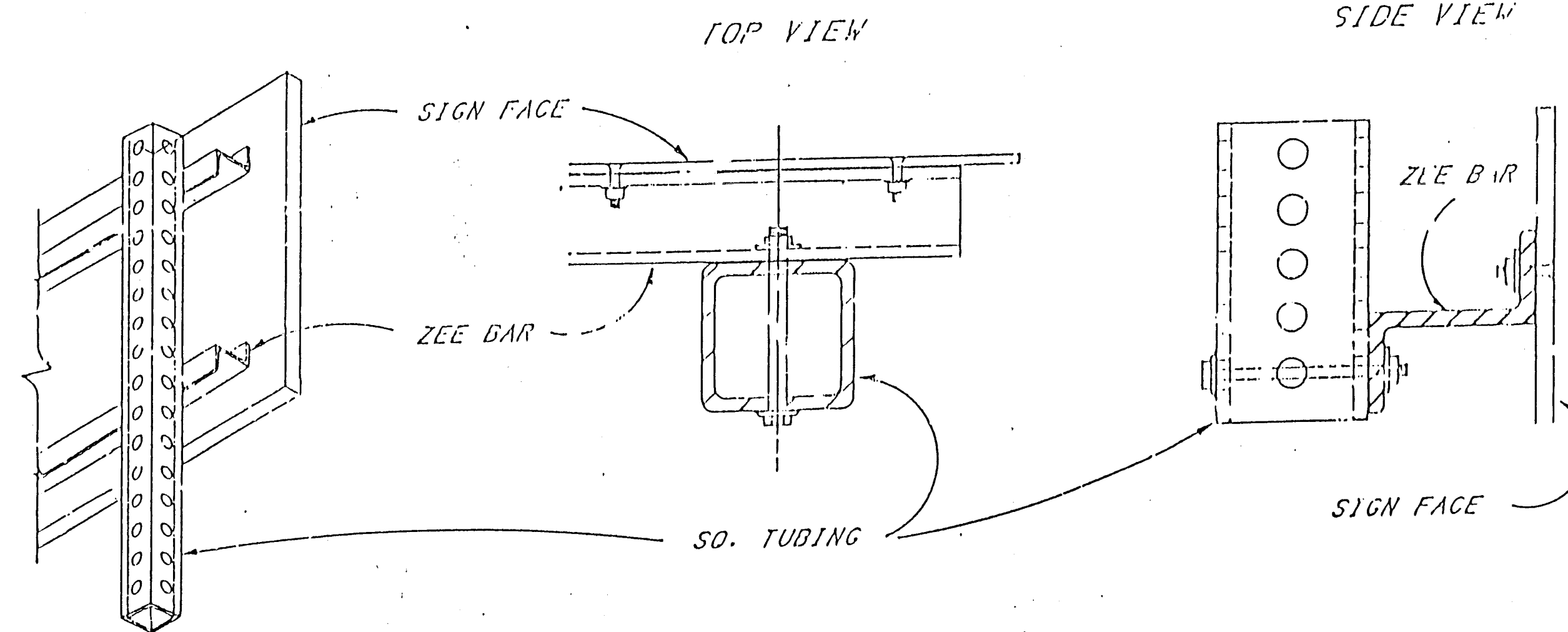
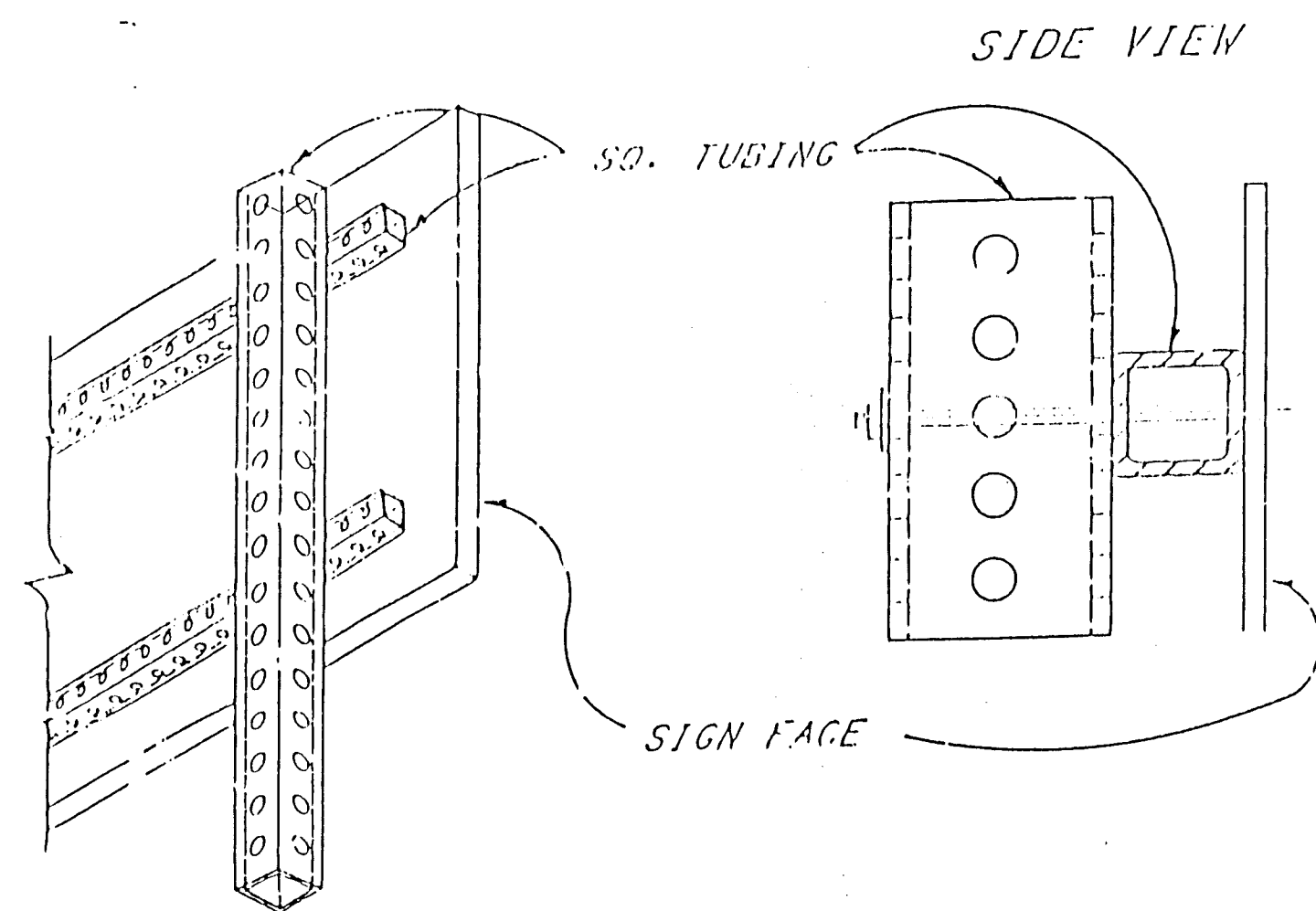
DESIGN LOADS FOR
SQUARE TUBING POSTS

DESIGNED BY JG
DRAWN BY JP
CHECKED BY JG
APPROVAL
RECOMMENDED - TRAFFIC ENGINEER DATE
APPROVED - ENGINEER OF DESIGN DATE

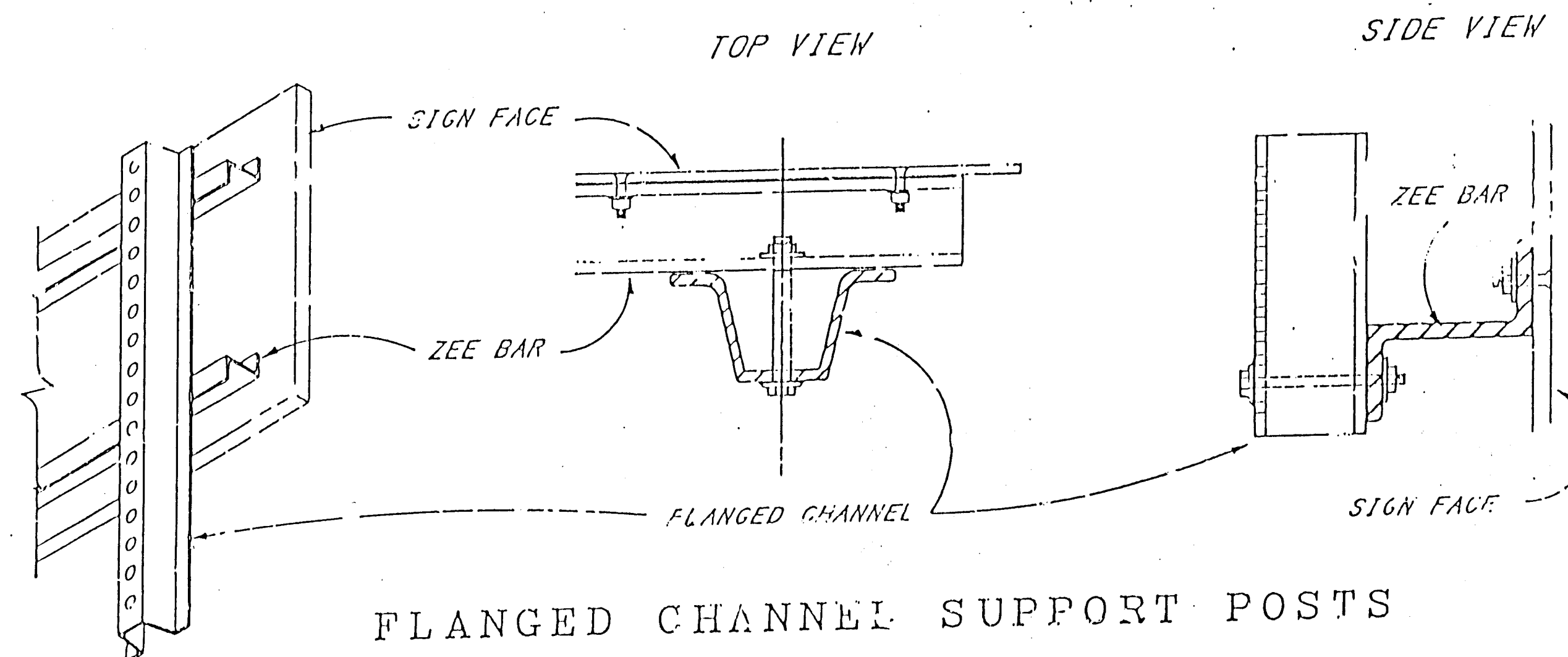
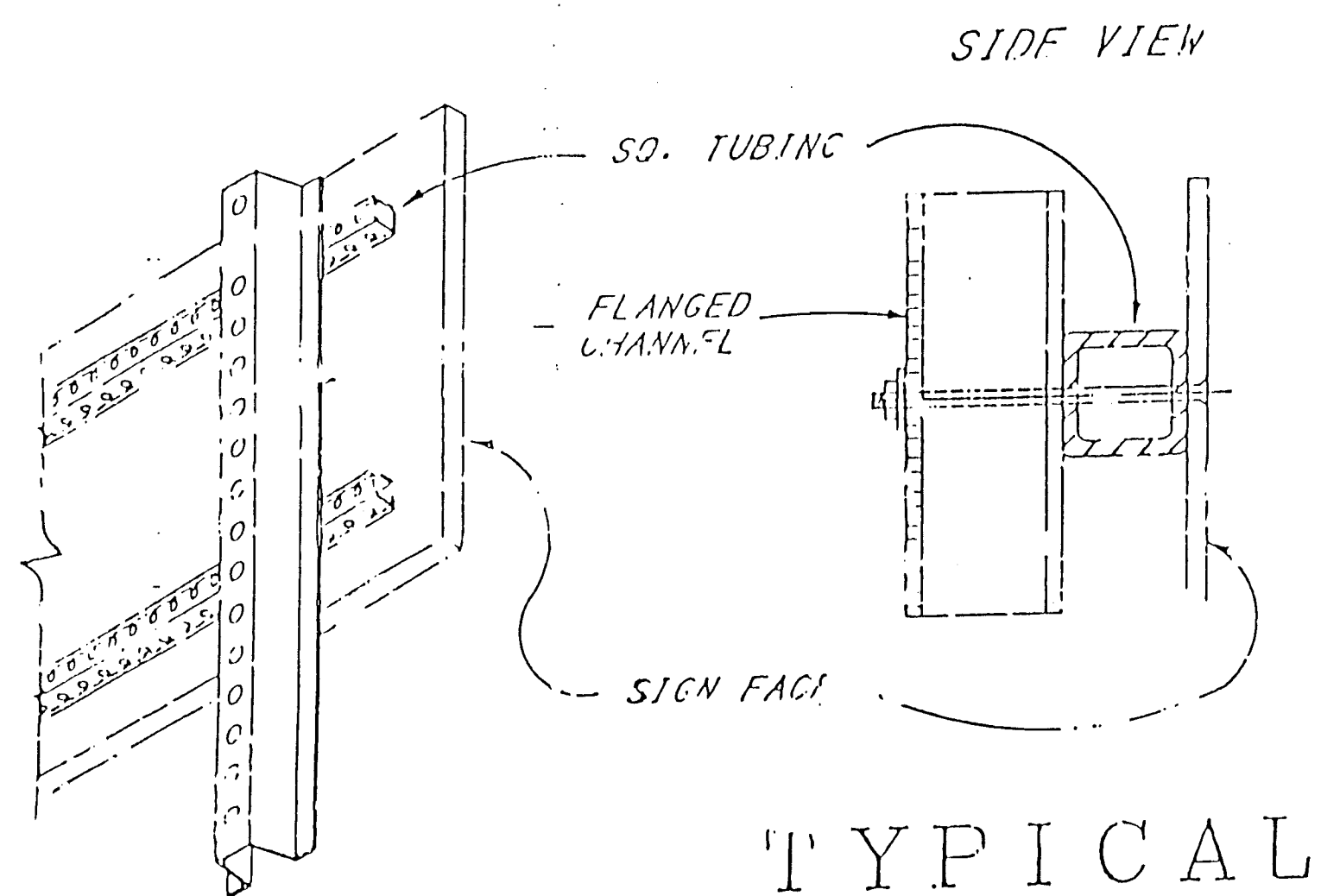
SERIAL Sn 75-1 SHEET 1 OF 9

NEW MEXICO PROJECT NO.

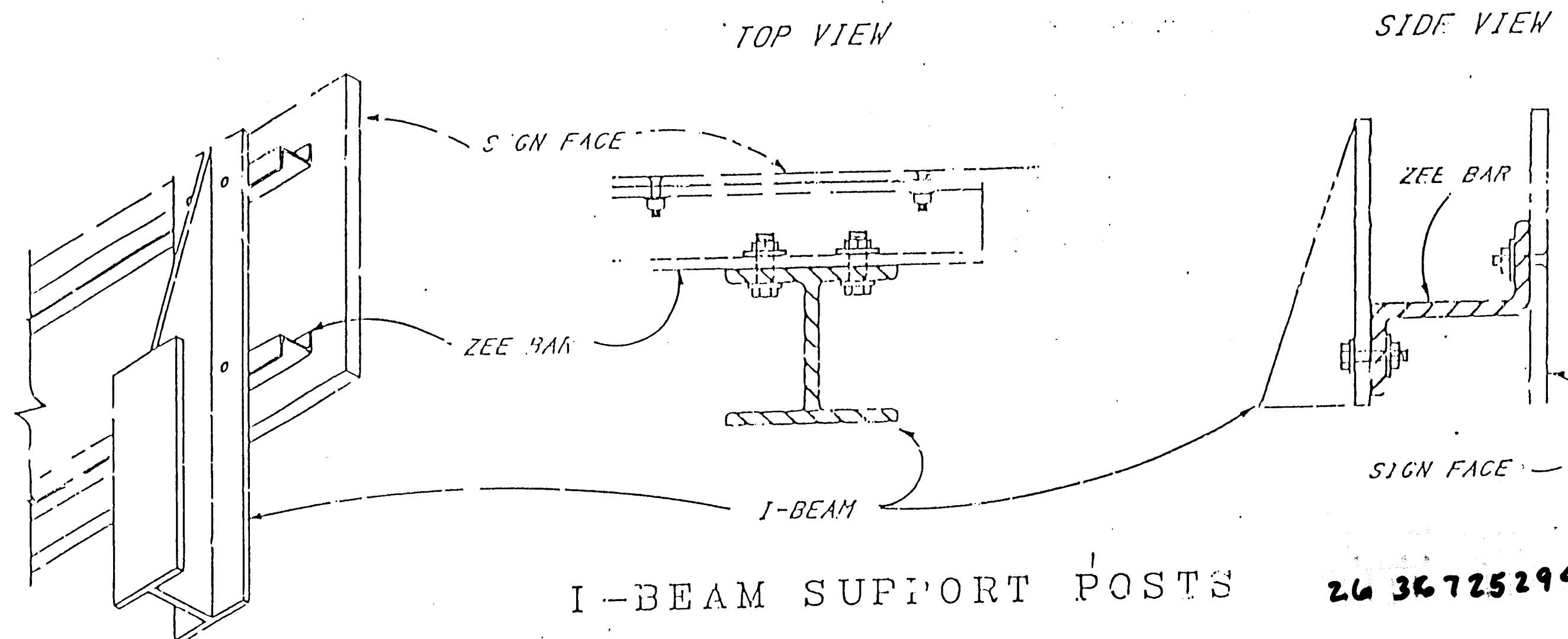
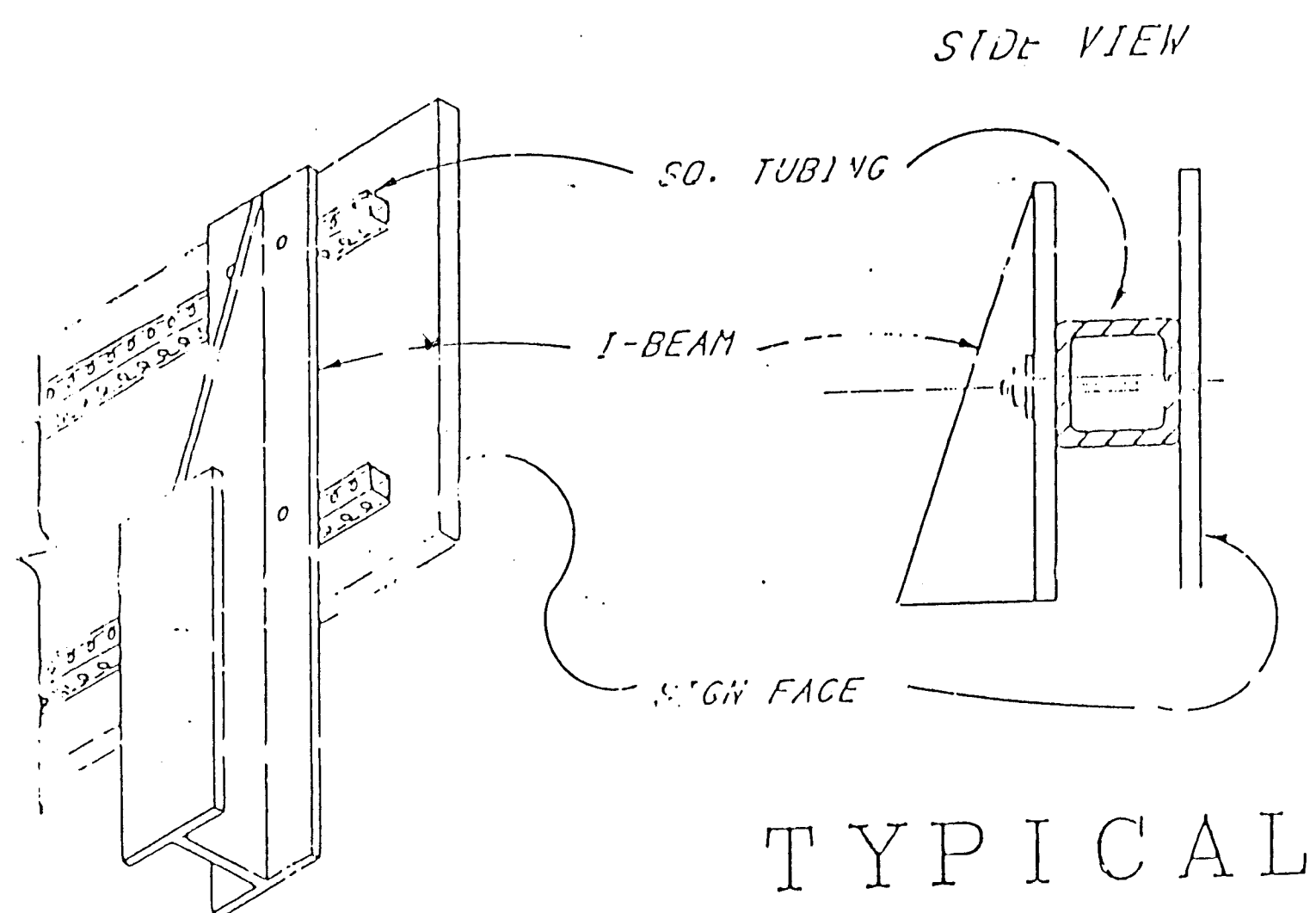
SHEET 11-6



PERFORATED SQUARE TUBING (DRIVEDOWN) POSTS



FLANGED CHANNEL SUPPORT POSTS



I-BEAM SUPPORT POSTS

26 36725294

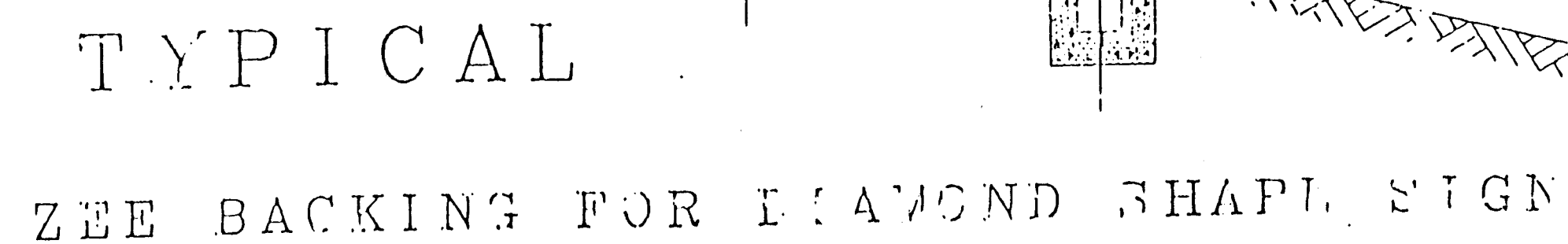
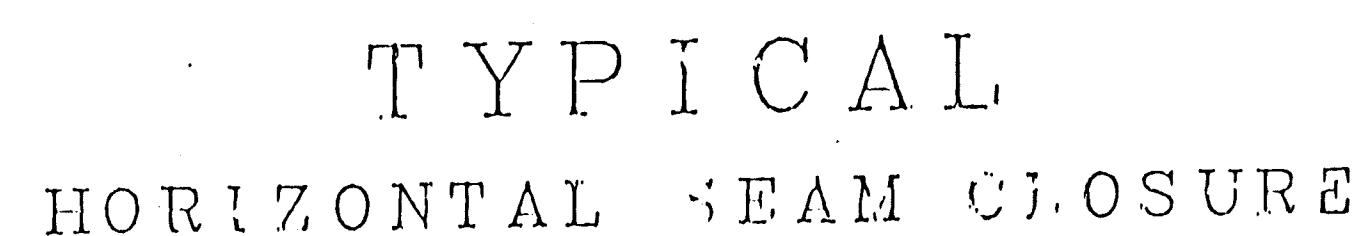
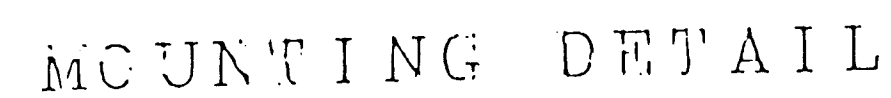
GENERAL NOTES

1. BACKING ZEE SHALL BE ALUMINUM ALLOY 6061-T6. EACH ZEE SHALL BE PROVIDED WITH A 9/16" x 2" HORIZONTAL SLOT FOR EACH POST MOUNTING BOLT.
2. BACKING ZEE SHALL BE FASTENED TO THE SIGN BLANK WITH 1/4" x 20 x 3/4" FLAT HEAD COUNTER SUNK MACHINE SCREWS WITH NUT AND LOCK WASHER (CADMIUM OR GALVANIZED OR 2024-T4 ALUMINUM ALLOY) FASTENERS AT 9" +/- 1/2" INTERVALS.
3. BACKING ZEE WITH SIGN FACES SHALL BE FASTENED TO THE SIGN SUPPORT POST WITH 3/8" HEX. HEAD BOLT, NUT & TWO WASHERS GALVANIZED OR CADMIUM PLATED.
4. BACKING ZEE IS NOT NEEDED WHERE SIGN IS TO BE MOUNTED ON ONE POST AND IS APPROXIMATELY TEN SQUARE FEET OR LESS.
5. ALTERNATE BACKING MAY BE 1-1/2" PERFORATED SQUARE TUBING AND ASSOCIATED HARDWARE, DESCRIBED IN SERIAL SN-75-1.
6. SIGN PANELS SHALL BE SINGLE SHEET 6061-T6 ALUMINUM .120 MINIMUM THICKNESS.
7. BACKING ZEES SHALL BE 3"x2-3/4"x1/4" AL 2.33 LBS. PER FT. FOR 6061-T6 ALUMINUM.
8. EXPOSED BOLT HEADS ON THE FACE OF THE SIGN SHALL BE PAINTED OR REFLECTORIZED TO MATCH THE SURROUNDING COLOR.

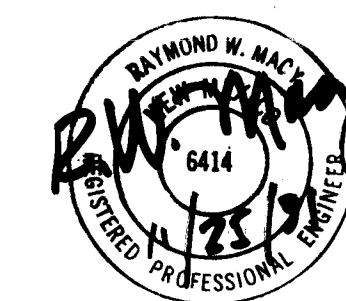


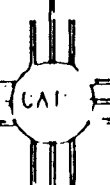
APPROVALS	DATE
ENGINEER	
DRC CHAIRMAN	
TRANSPORTATION	
HYDROLOGY	
WATER	
WASTE WATER	

3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO STATE HIGHWAY DEPARTMENT			
ALUMINUM PANEL SIGN DETAILS			
DESIGNED BY	APPROVED	DATE	
DRAWN BY	TRAFFIC DESIGN ENGINEER	DATE	
CHECKED BY	TRAFFIC BUREAU	DATE	
SERIAL SN-75-02			SHEET 1 OF 2



1. BACKING ZEE SHALL BE ALUMINUM ALLOY 6061-T6. EACH ZEE SHALL BE PROVIDED WITH A 9/16" x 2" HORIZONTAL SLOT FOR EACH POST MOUNTING BOLT.
2. BACKING ZEE SHALL BE FASTENED TO THE SIGN BLANK WITH 1/4" - 20 x 3/4" FLAT HEAD COUNTER SUNK MACHINE SCREWS WITH NUT AND LOCK WASHER (CADMIUM OR GALVANIZED OR 2024-T4 ALUMINUM ALLOY) FASTENERS AT 9" - 1/2" INTERVALS.
3. BACKING ZEE WITH SIGN FACES SHALL BE FASTENED TO THE SIGN SUPPORT POST WITH 3/8" HEX. HEAD BOLT, NUT & TWO WASHERS GALVANIZED OR CADMIUM PLATED.
4. BACKING ZEE IS NOT NEEDED WHERE SIGN IS TO BE MOUNTED ON ONE POST AND IS APPROXIMATELY TEN SQUARE FEET OR LESS.
5. ALTERNATE BACKING MAY BE 1-1/2" PERFORATED SQUARE TUBING AND ASSOCIATED HARDWARE, DESCRIBED IN SERIAL SN-7500.
6. SIGN PANELS SHALL BE SINGLE SHEET 6061-T6 ALUMINUM .120 MINIMUM THICKNESS.
7. BACKING ZEES SHALL BE 3"x2-3/4"x1/4" AT 2.33 LBS. PER FT. FOR 6061-T6 ALUMINUM.
8. EXPOSED BOLT HEADS ON THE FACE OF THE SIGN SHALL BE PAINTED OR REFLECTORIZED TO MATCH THE SURROUNDING COLOR.



3			
2			
1			
NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO			
STATE HIGHWAY DEPARTMENT			
ALUMINUM PANEL			
SIGN DETAILS			
	APPROVAL: <i>[Signature]</i> REGISTERED TRAFFIC ENGINEER APPROVED: <i>[Signature]</i> TRAFFIC SURVEY CHIEF		
DRAWN BY: <i>[Signature]</i> CHECKED BY:	DATE: <i>[Signature]</i> BY:		
SPECIAL SN-75-02		SHEET 2 OF	

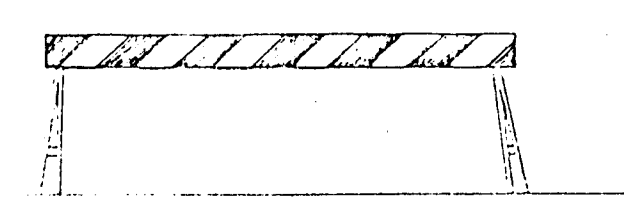
GENERAL NOTES

1. All signs, sign materials, beacons, and barricade warning lights shall conform to the standards set forth in the M.U.T.C.D. 1978 edition.
2. The entire area of orange and white stripes shall be reflectorized on all barricades, barrels, vertical panels or other channelization devices when used on construction, detours, or participating connections, by use of reflective sheeting or tape.
3. Red and white barricades may be used to mark the end of a road, street, or highway where there is no crossroad or outlet at locations considered permanent and semi-permanent closures or termination of roadways.
4. Flashing beacons or steady burn lights, when used on barricades, shall be positioned above the top rail of the barricade, facing traffic.
5. High intensity flashing beacons shall be used to mark obstructions or hazards. Type "C" steady burn light may be used for delineation at night.
6. All barricade framing and supports, other than galvanized metal, shall be painted white.

THIS SERIAL REVISED: 9-20-88

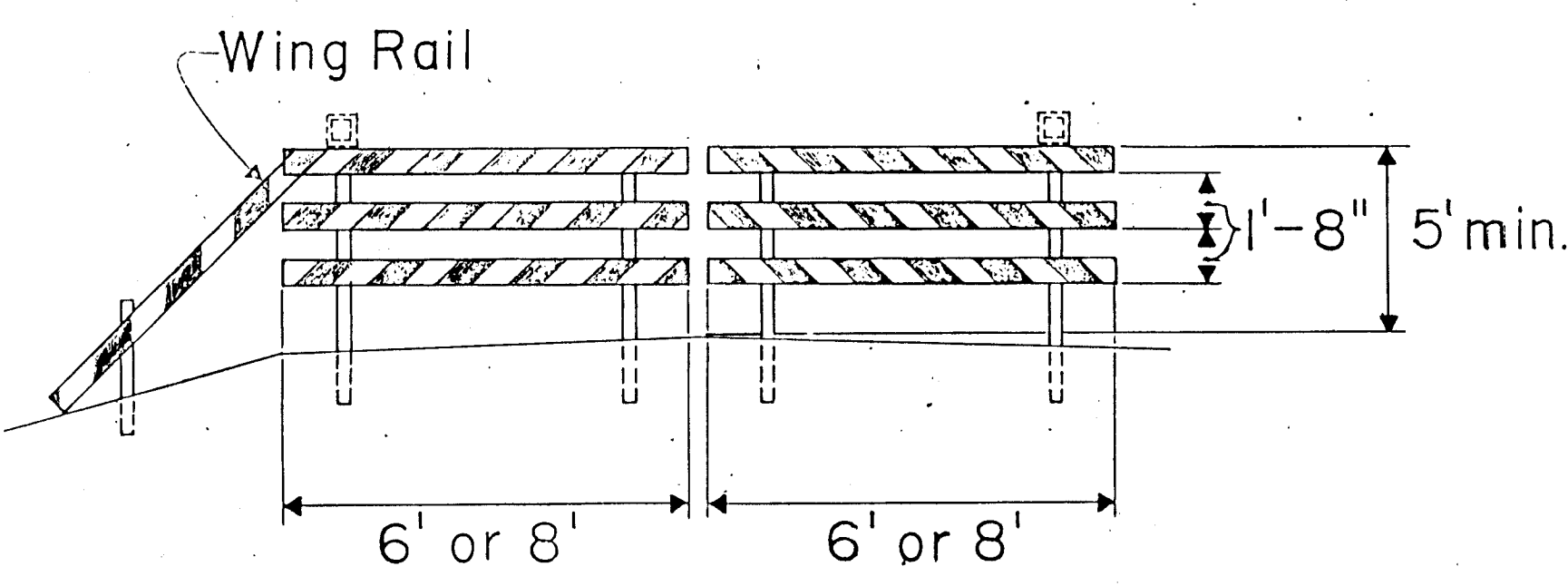
REVISOR	REVISION	DATE
1	REVISED PORT. SIGN SUPPORT DETAILS	3/15/80 T.G.M.
2	REVISED PORT. SIGN SUPPORT DETAILS	1/31/80 T.G.M.
3	REVISED NOTE No. 1	9/24/79 T.G.M.
4	ADDED 5052 - H38 ALUMINUM ALLOY	5-9-76 T.G.M.
5	ADDED FLANGED CHANNEL POST	5-4-78 T.G.M.
6	REVISED BARREL DIMENSIONS	9-20-88
7	CHANGED No. of STRIPES ON BARRELS	3-4-88 E.R.

NEW MEXICO STATE HIGHWAY DEPARTMENT	
BARRICADES AND CHANNELIZATION DEVICES	
DESIGNED BY J.G. DRAWN BY J.L.B. CHECKED BY J.G.	APPROVED RECOMMENDED APPROVED 10-7-77 DATE DATE DATE
SERIAL Sn 77-9 SHEET 9 OF 9	



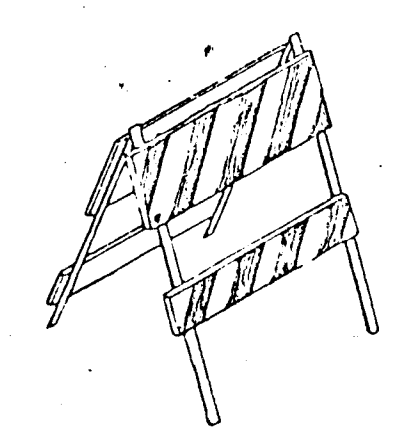
Stands may be detachable for portability. Type "I" Barricades have two (2) reflectorized rail faces (one in each direction). The stand materials may be metal, wood or other suitable light weight materials of structural soundness.

TYPICAL
TYPE "I" BARRICADE



Type "III" Barricades have 3 reflectorized rail faces when facing traffic in one direction; 6 if facing traffic in two directions. Wing Rail may be fitted to the back of the top rail attached by two 5/16" bolts, nuts, and washers.

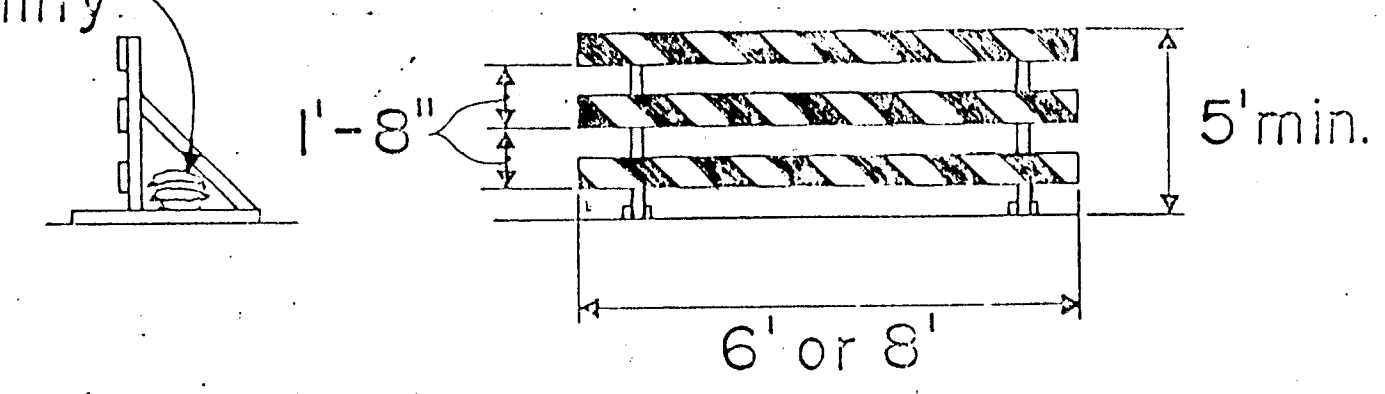
TYPICAL
FIXED TYPE "III" BARRICADE



Type "II" Barricades have four (4) reflectorized rail faces (two in each direction). Folding stands shall be of materials similar to Type "I" Barricade stands.

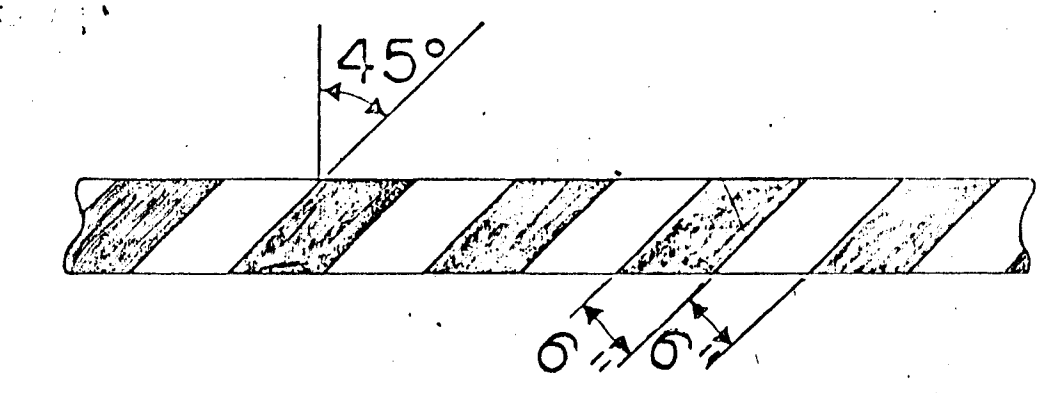
TYPICAL
TYPE "II" BARRICADE

Sand bags for added stability.



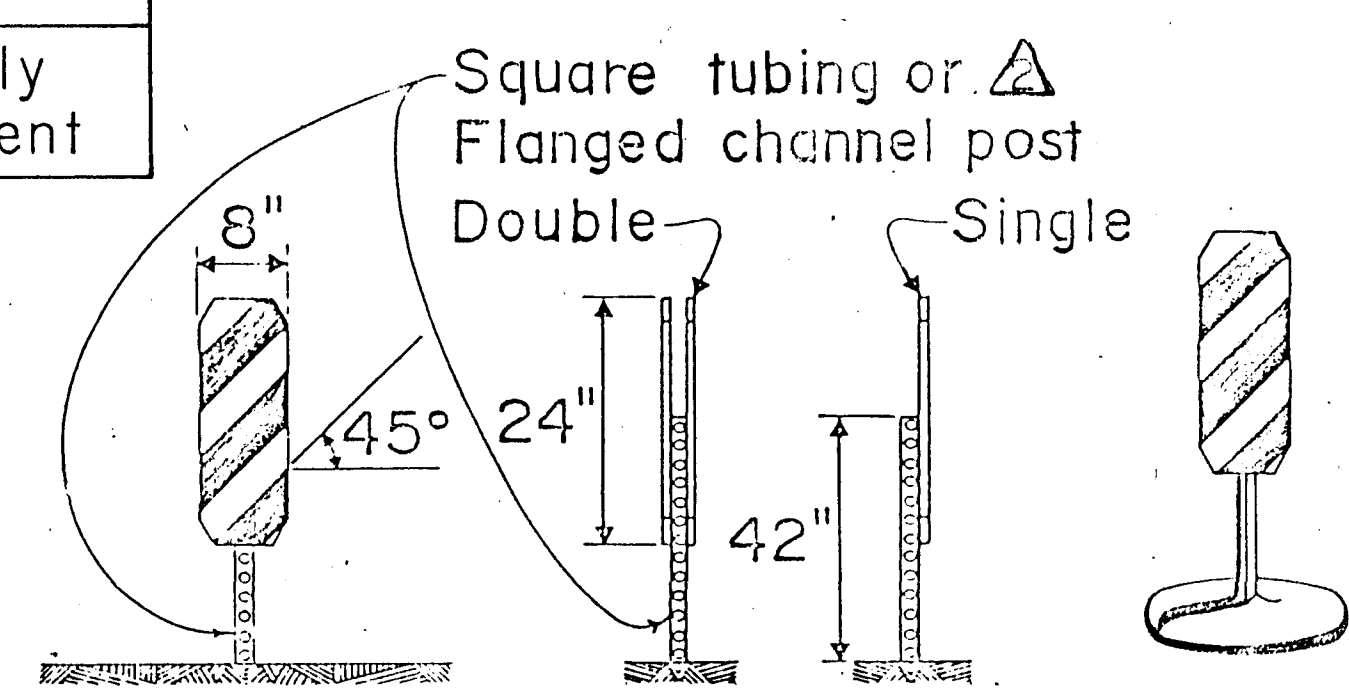
Type "III" Barricade framing and supports shall be 2"x2" min.-12Ga., square metal tubing or driven down posts.

TYPICAL
MOVABLE TYPE "III" BARRICADE



Rail shall be 1/2" min. 5 ply sign grade plywood or 2"x8" S4S quality wood. On Types "I" and "II", metal rails, if used, must be light weight material, commensurate with structural soundness. Stripes shall slant downward at 45° toward the side which traffic is to pass.

DETAIL OF BARRICADE
RAIL STRIPING

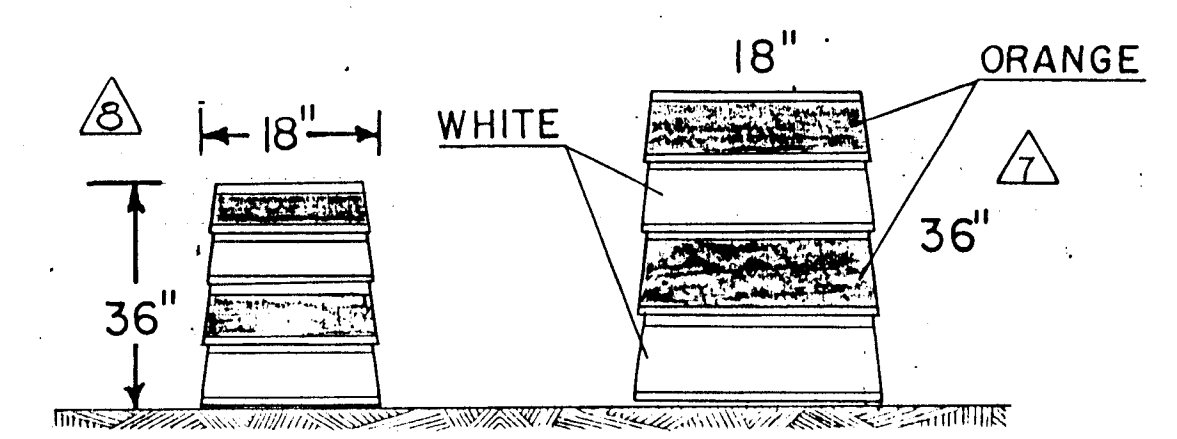


Panels to be 0.060 min., 6061-T6, or 5052-H38 aluminum alloy mounted on 1 1/2" min. square steel tubing post or 1.33 lb./ft. min. flanged channel post. Stripes shall slant downward at 45° toward the side which traffic is to pass. For temporary installation the post may be set to 3 ft. below ground or the panels may be mounted on stanchions.

CHANNELIZATION DEVICES
(VERTICAL PANELS)

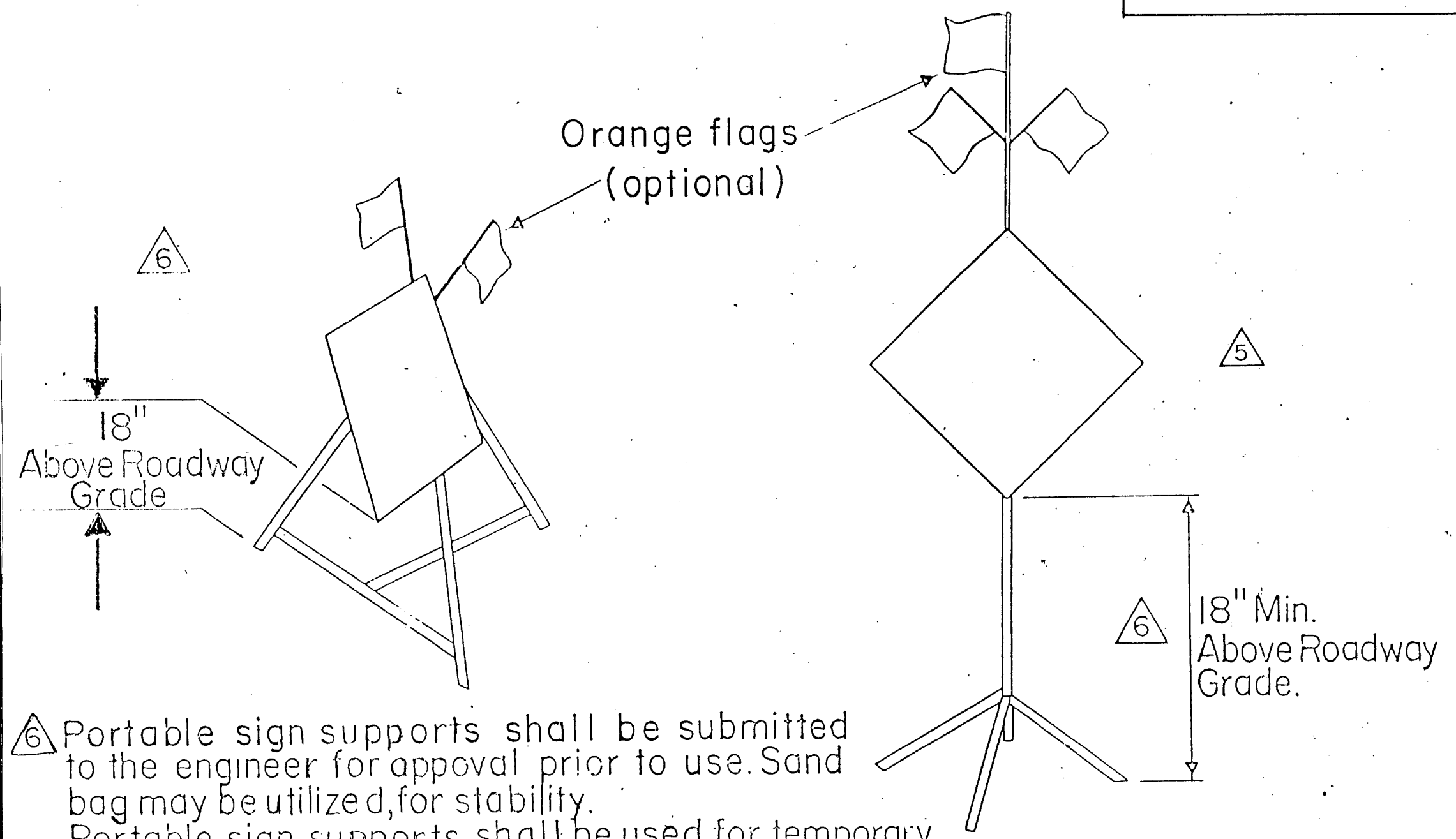
BARRICADES - CHARACTERISTICS

	I	II	III
WIDTH OF RAIL	8" min.-12" max.	8" min.-12" max.	8" min.-12" max.
LENGTH OF RAIL	6' to 8'	3' min.-4' max.	6' or 8'
WIDTH OF STRIPES	6 ins.	6 ins.	6 ins.
HEIGHT	3 ft. min.	3 ft. min.	5 ft. min.
TYPE OF FRAME	Demountable or heavy "A" frame	Light "A" frame	Posts or skids
FLEXIBILITY	Essentially movable	Portable	Essentially permanent



With two (2) orange stripes minimum and alternating white stripes, all reflective tape or sheeting.

CHANNELIZATION DEVICES
(BARRELS)



Portable sign supports shall be submitted to the engineer for approval prior to use. Sand bag may be utilized for stability. Portable sign supports shall be used for temporary or moving construction operation only.

PORTABLE SIGN SUPPORT (TYPICAL)

CHART TO DETERMINE SINGLE POST SIZE Δ

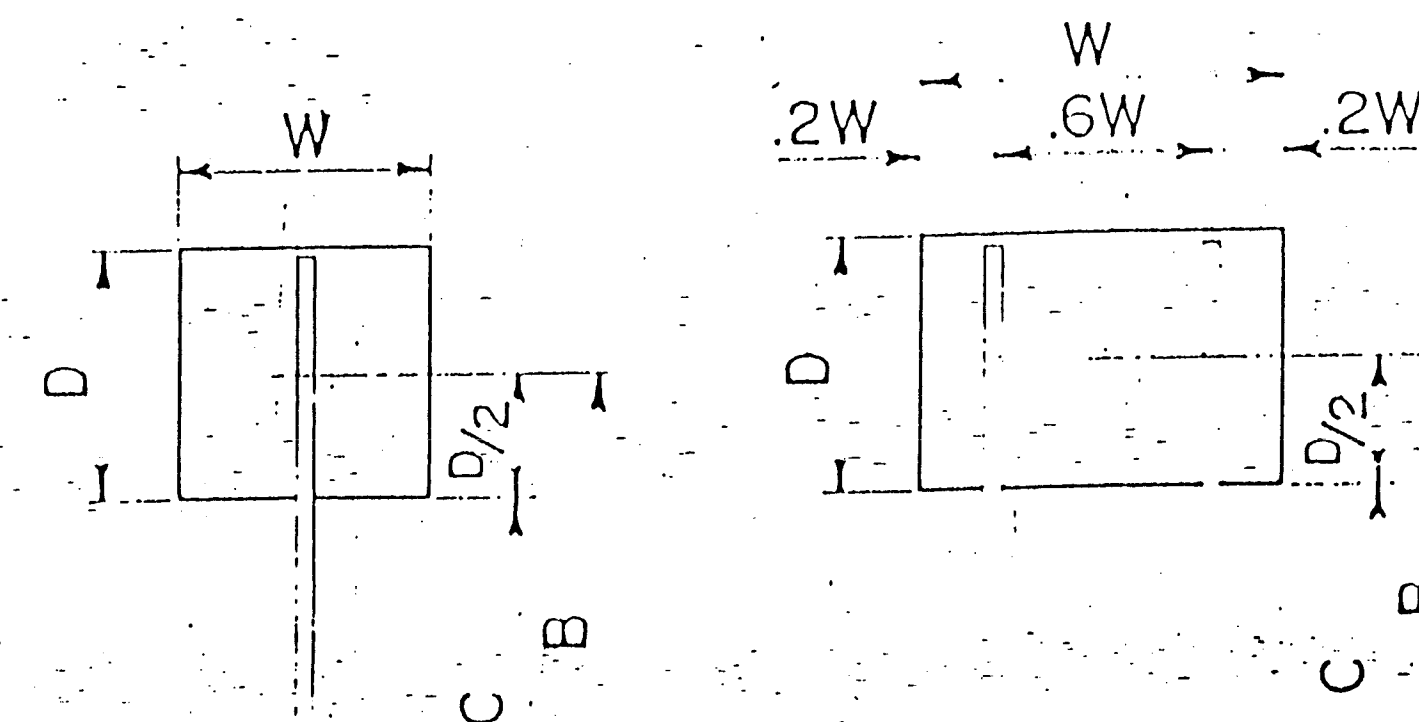
POST SIZE	K FACTOR (B x A)	B DIMENSION (FT.)												A(FT ²) SIGN AREA
		5	6	7	8	9	10	11	12	13	14	15	16	
2.00LB/FT	DOES NOT APPLY				3.9				3.7	3.4	3.2	2.9	2.8	
2.25 LB/FT					5.1			4.6	4.2	3.9	3.6	3.4	3.2	
2.75 LB/FT					6.7			6.0	5.5	5.1	4.7	4.4	4.1	
3.00LB/FT					7.3				6.7	6.2	5.6	5.1	5.0	
4.00LB/FT					9.4				8.6	8.0	7.5	7.0	7.0	

CHART TO DETERMINE DOUBLE POST SIZE Δ

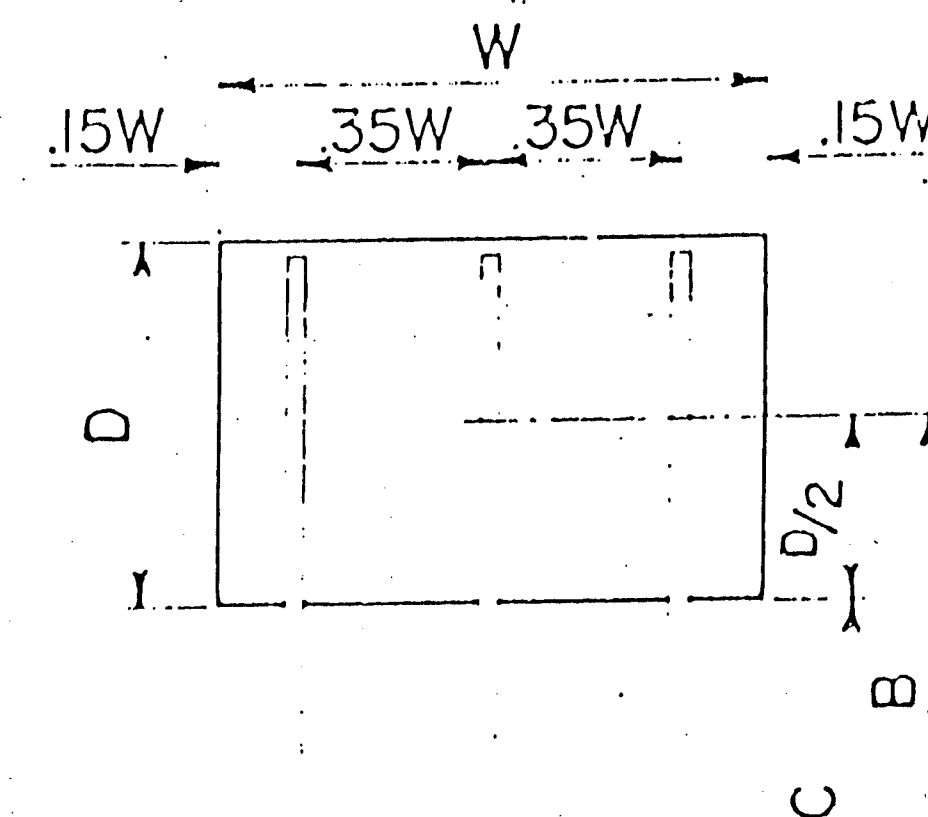
POST SIZE	K FACTOR (B x A)	B DIMENSION (FT.)												A(FT ²) SIGN AREA
		5	6	7	8	9	10	11	12	13	14	15	16	
2.00LB/FT	97.00	19.4	16.1	13.8	12.1	10.8	9.7	8.8	8.1	7.5	6.9	6.5	6.1	
2.25 LB/FT	109.00	21.9	18.2	15.6	13.7	12.2	10.9	9.9	9.1	8.4	7.8	7.3	6.8	
2.75 LB/FT	142.00	28.4	23.7	20.3	17.8	15.8	14.2	12.9	11.8	10.9	10.1	9.5	8.9	
3.00LB/FT	174.00	34.8	29.0	24.9	21.8	19.3	17.4	15.8	14.5	13.4	12.4	11.6	10.9	
4.00LB/FT	241.00	48.2	40.2	34.4	30.1	26.8	24.1	21.9	20.1	18.5	17.2	16.1	15.1	

CHART TO DETERMINE THREE POST SIZE Δ Δ

POST SIZE	K FACTOR (B x A)	B DIMENSION (FT.)												A(FT ²) SIGN AREA
		5	6	7	8	9	10	11	12	13	14	15	16	
2.00LB/FT	145.00	29.0	24.2	20.7	18.1	16.1	14.5	13.2	12.1	11.2	10.4	9.7	9.1	
2.25 LB/FT	164.00	32.8	27.3	23.4	20.5	18.2	16.4	14.9	13.7	12.6	11.7	10.9	10.3	
2.75 LB/FT	213.00	42.6	35.5	30.4	26.6	23.6	21.3	19.3	17.7	16.3	15.2	14.2	13.3	
3.00LB/FT	261.00	52.2	43.5	37.3	32.6	29.0	26.1	23.7	21.7	20.0	18.6	17.4	16.3	
4.00LB/FT	361.00	72.2	60.1	51.5	45.1	40.1	36.1	32.8	30.0	27.7	25.8	24.0	22.5	



SINGLE POST SIZE DOUBLE POST SIZE



THREE POST SIZE

FHWA Region No.	STATE	TPS-4040(2)	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		11-10	

EXAMPLE

Required: Determine post requirements for a 5' wide, 4' high sign. Located on a rural highway.

Given: W = 5'
D = 4'

Solution: 1. For a rural location.

C (min) = 5'

2. $D/2 = 4/2 = 2$

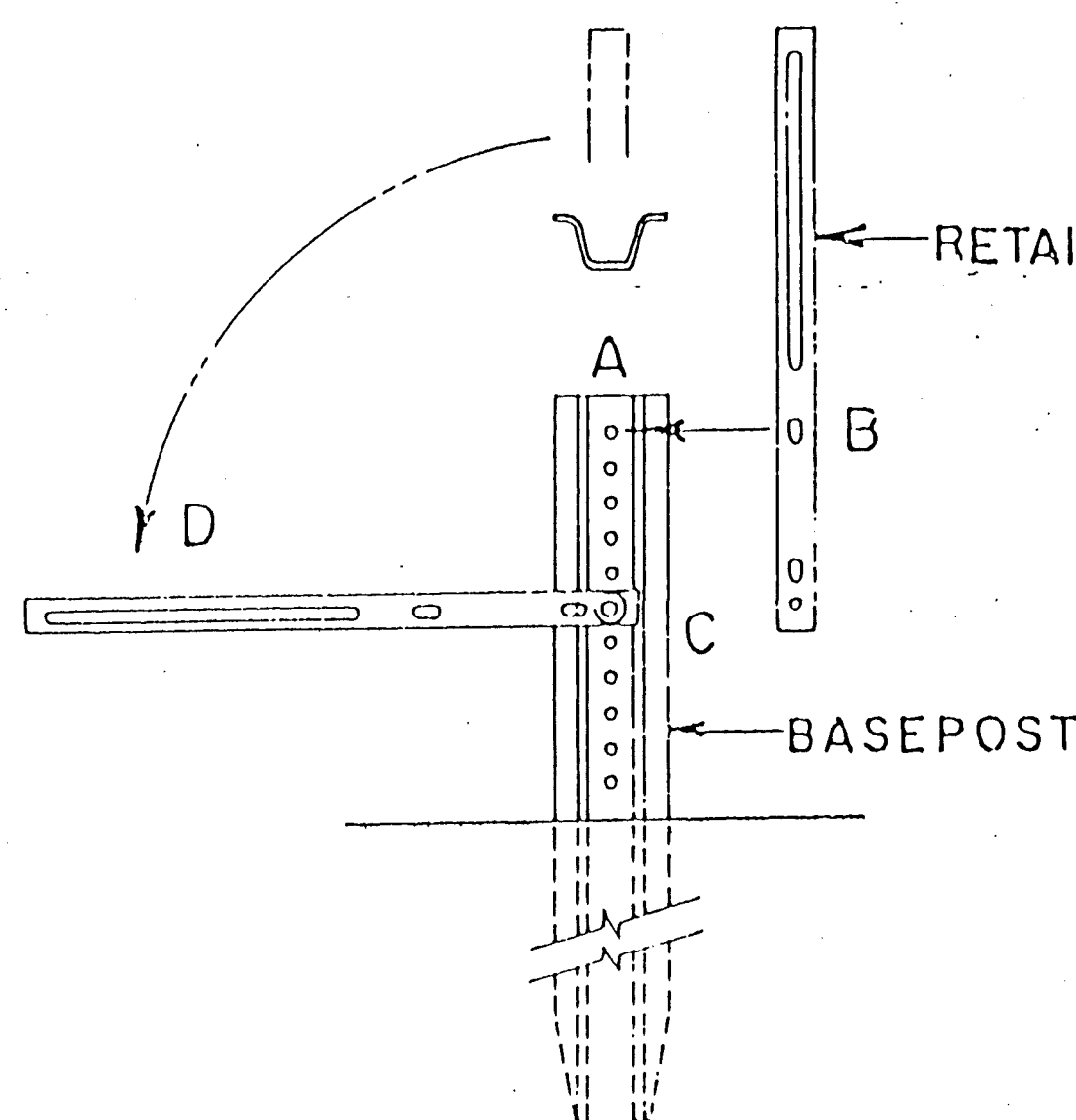
3. $B = C + D/2 = 5' + 2' = 7'$

4. $A = W \times D = 5' \times 4' = 20.00 \text{ sq. ft.}$

5. Enter the column for B=7' and continue down the "A" column until the "A" factor equals or exceeds 20 sq. ft. 2 posts of 2.75lb/ft yields a factor of 20.3 which is optimum.

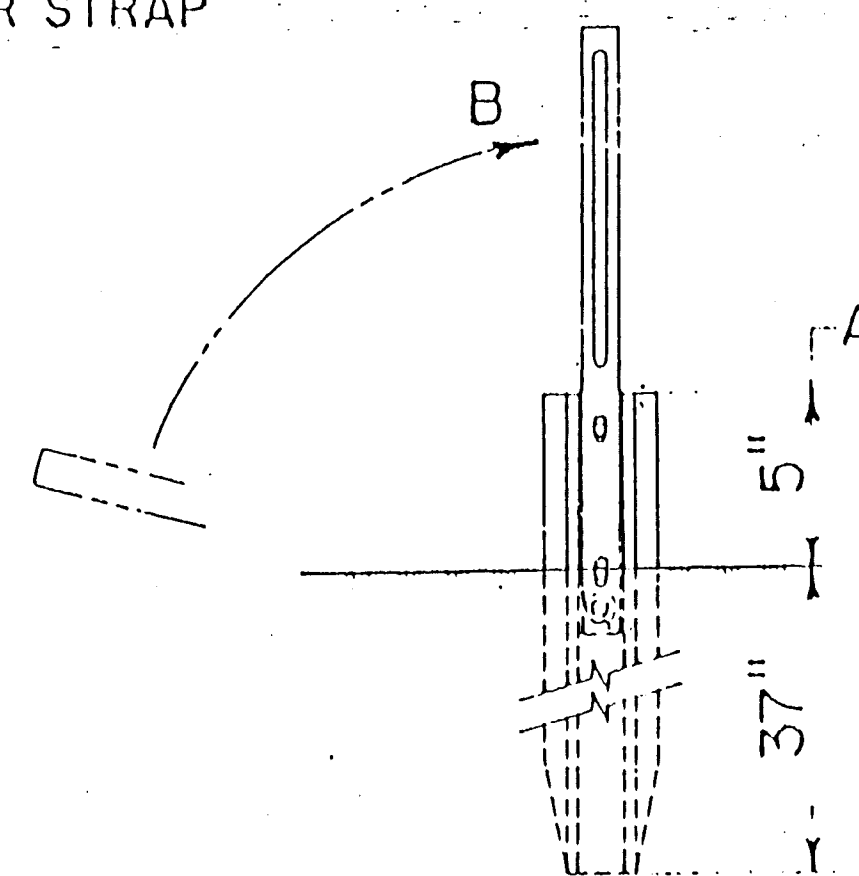
Example:	POST	B=7
	2.75 LB/FT	20.3
	3.00LB/FT	24.9
	4.00LB/FT	34.4

INSTALLATION PROCEDURE

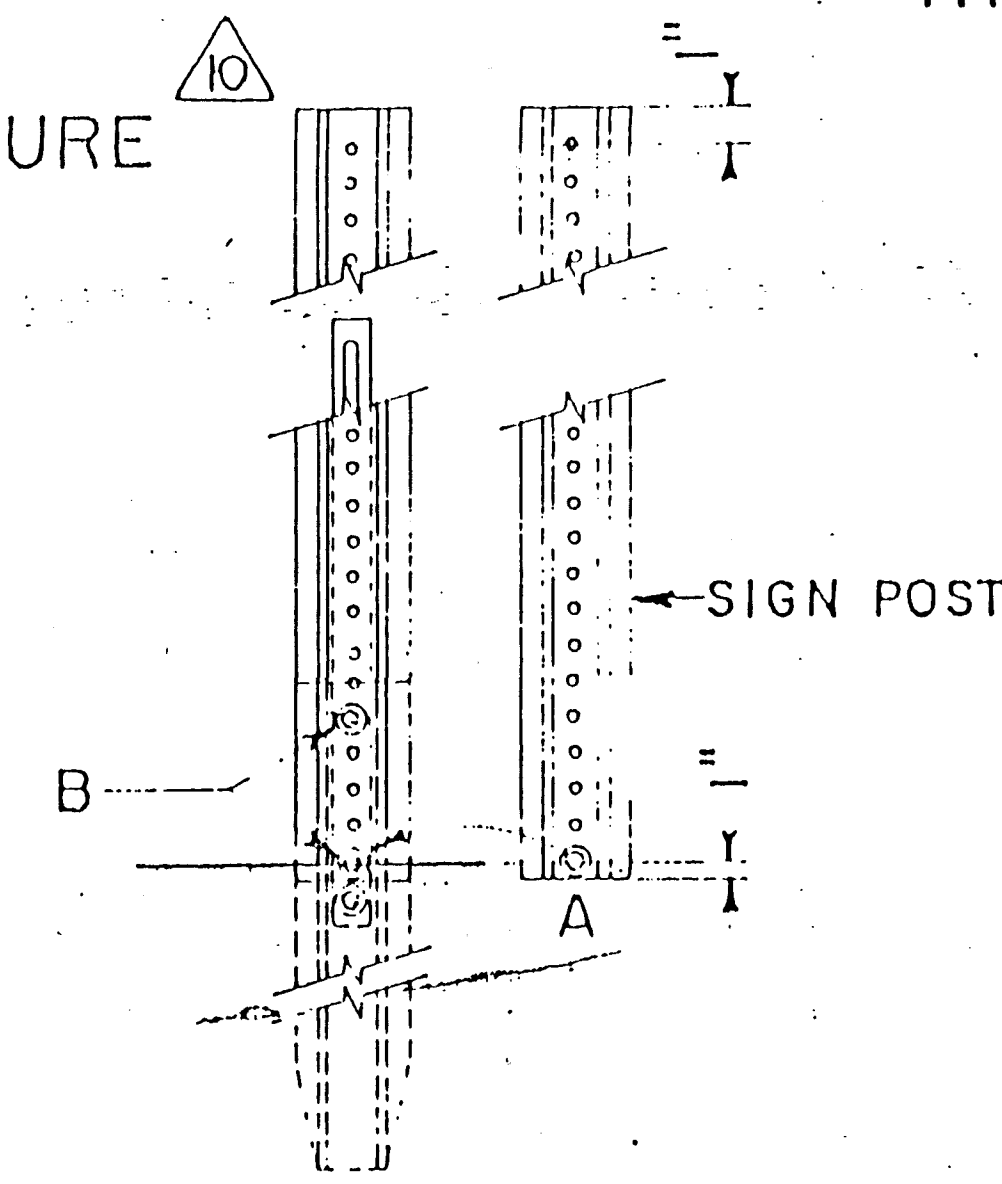


1. A-Drive basepost to within 12" of ground level.
B-Proper assembly established by lining up top 3/4" slot of retainer spacer strap with top hole of basepost.
C-Assemble strap to basepost.

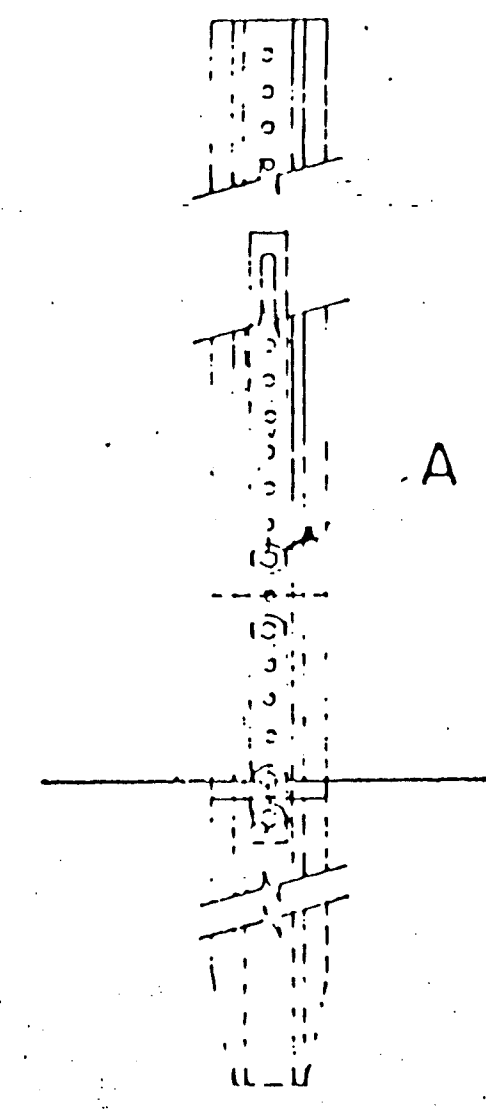
D-Rotate strap 90° to left.



2. A-Drive basepost to 5" dimension.
B-Rotate strap to vertical position.



3. A-Place 3/8-16 UNC x 2.0" bolt in bottom of sign post to facilitate alignment of sign post with proper hole in base post. (This coincides with bottom 3/4" slot in strap).
B-Alternately tighten two connector bolts.



4. A-Complete assembly by tightening retainer bolt. (This fastens sign post to retainer spacer strap).

26 367255 94

REVISION NO.	REVISION DESCRIPTION	DATE	BY
1	REVISED INSTALLATION PROCEDURE	5-30-82	T.G.M.
2	DELETED NOTE N° 1	5-30-82	T.G.M.
3	REVISED THREE POST CHART	12-1-80	T.G.M.
4	REVISED NOTE 1	5-17-79	T.G.M.
5	REVISED SINGLE POST CHART	2-13-78	T.G.M.
6	REVISED EXAMPLE	2-13-78	T.G.M.
7	REVISED DOUBLE AND THREE POST CHART	2-9-78	J.G.
8	REVISED NOTE 1, DELETED NOTE 2	2-9-78	T.G.M.
9	ADDED NOTES 1 AND 2	1/25/79	J.G.
10	REVISED CHARTS TO DETERMINE POST SIZE	1/19/78	J.G.

NEW MEXICO
STATE HIGHWAY DEPARTMENT

DESIGN LOADS FOR
BREAKAWAY FLANGED
CHANNEL POSTS

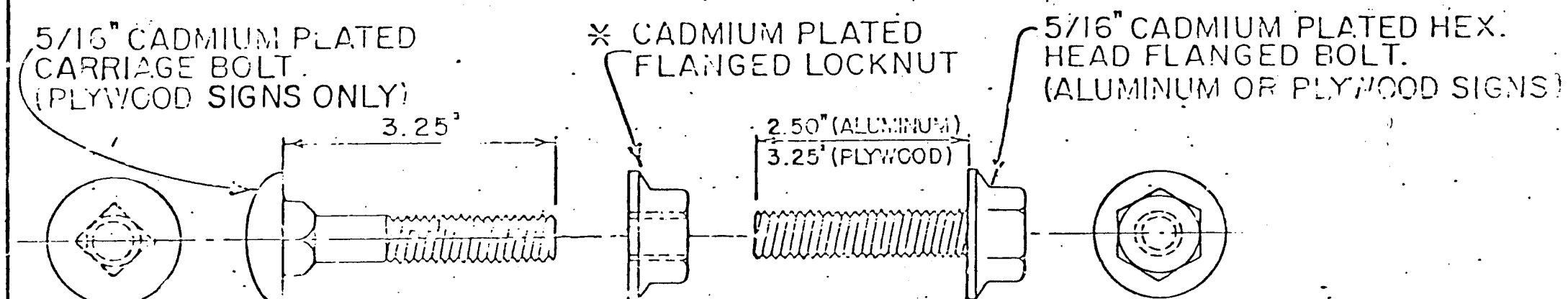
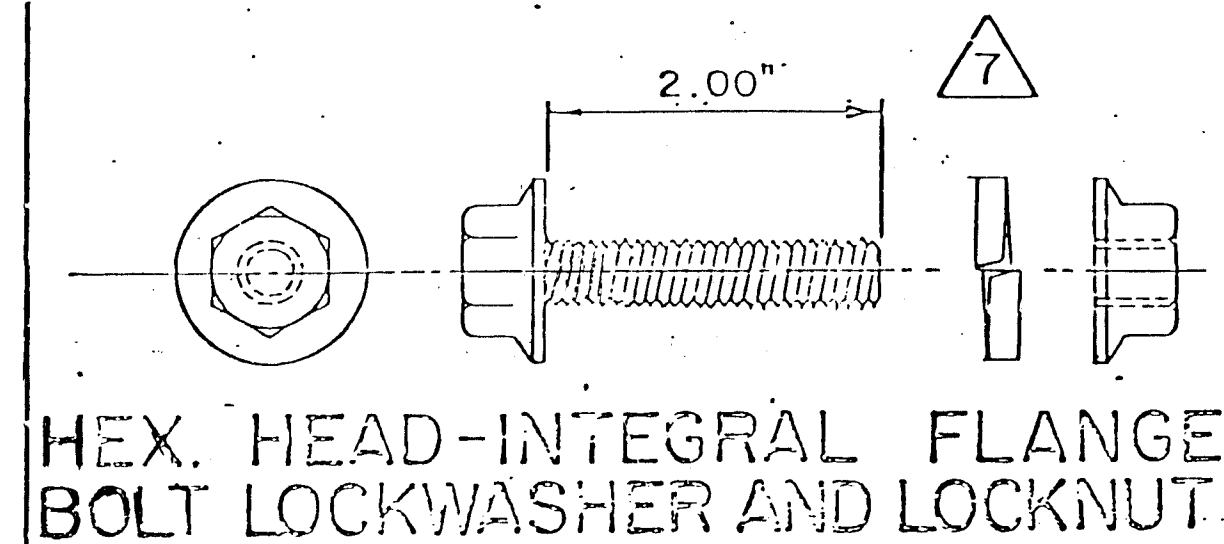
DESIGNED BY GPU	APPROVAL	DATE
DRAWN BY IPH	RECOMMENDED	DATE
CHECKED BY GPB	APPROVED	DATE

SERIAL TBAC-001-10

F.H.W.A. Region No.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	TPS-4040(2)	11-11	

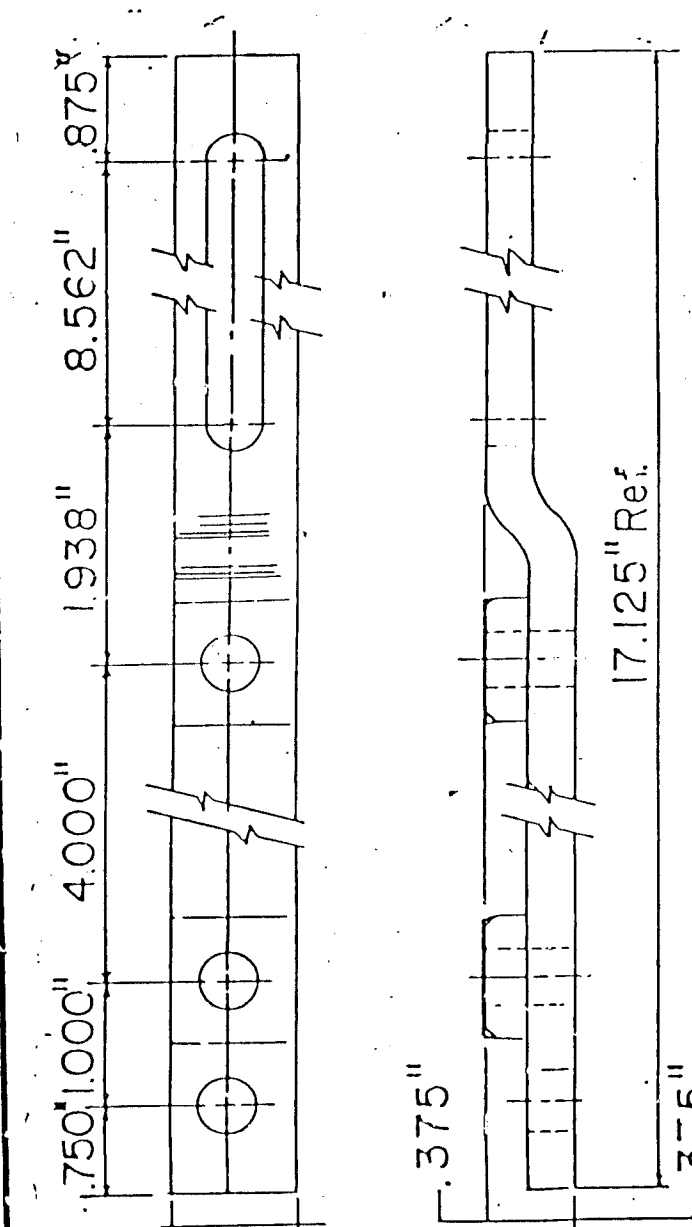
FLANGED CHANNEL PROPERTIES

WEIGHT PER FOOT	DIMENSIONS								AREA IN ²	X-X AXIS		Y-Y AXIS	
	A	B	C	D	E	F	G	Δ		I (in ⁴)	S (in ³)	I (in ⁴)	S (in ³)
2.00	1.516	3.125	1.250	.625	.116	.104	.113	12 1/2°	.590	.179	.225	.442	.233
2.25	1.532	3.125	1.250	.625	.124	.113	.132	12 1/2°	.648	.201	.254	.474	.303
2.50	1.562	3.125	1.250	.625	.132	.149	.164	12 1/2°	.748	.233	.289	.551	.353
2.75	1.578	3.125	1.250	.625	.140	.170	.185	12 1/2°	.819	.271	.329	.607	.389
3.00	1.750	3.500	1.625	.718	.150	.165	.160	11 1/2°	.918	.372	.403	.870	.497
4.00	1.750	3.500	1.671	.718	.175	.230	.250	11 1/2°	1.190	.500	.560	1.190	1.090

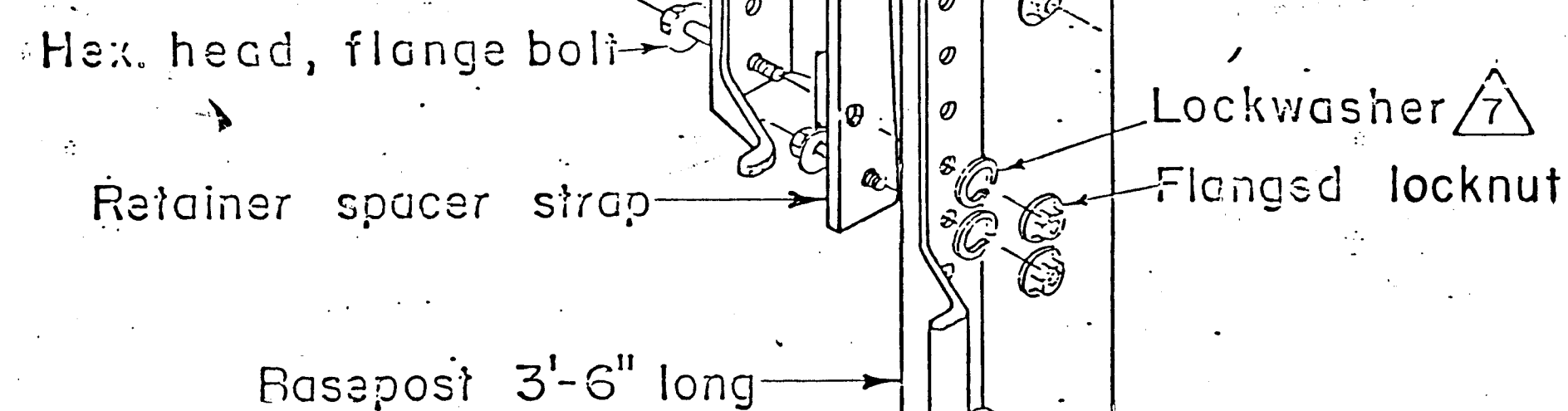
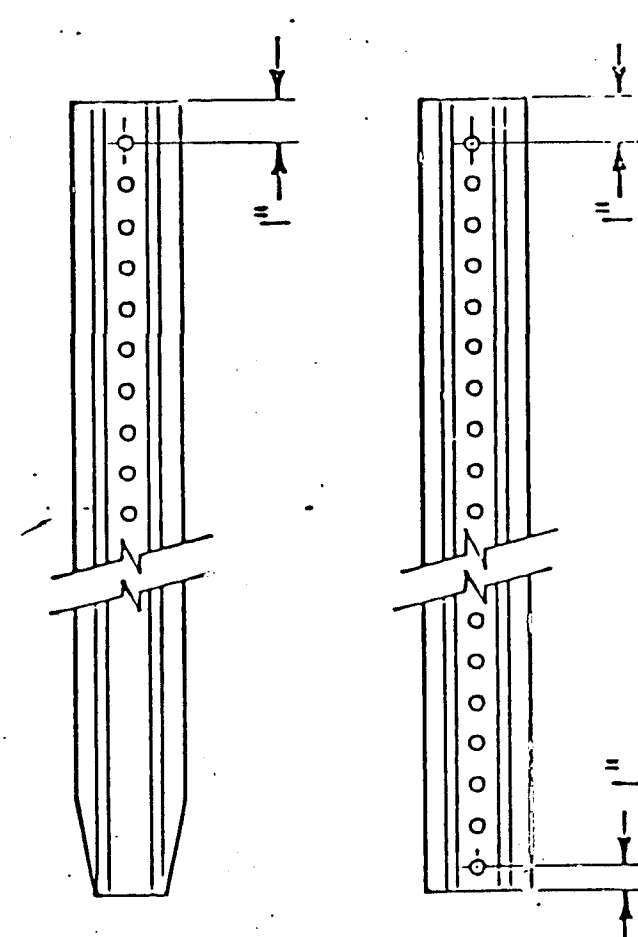


BOLTS AND LOCKNUT-SIGN ATTACHMENT

* FLANGED LOCKNUT REQUIRED FOR CARRIAGE AND
HEX. HEAD FLANGE BOLT.

RETAINER SPACER
STRAP

BASE POST SIGN POST



SIGN POST ASSEMBLY

GENERAL NOTES

- Base post and sign post shall be flanged channel section, hot rolled from high strength steel meeting requirements of ASTM A499 specification modified in that material shall meet minimum yield stress of 60,000 psi and minimum tensile of 90,000 psi or equal.
- The finish for base post and sign post shall be hot dip galvanizing meeting requirements of ASTM A-123 specifications or flow coated with a green enamel paint meeting the color requirements of F3-535A (color no. 14032) to a minimum 1 mil thickness.
- The weight of each base post, before punching, shall be 2.75, 3.0 and 4.0 lb/ft. Weight tolerance shall be plus or minus 3 1/2%. Punching shall be eighteen 438" dia. holes on 1 inch centers, except the first and fifth are 438"x.500" slots, beginning 1" from the top. The length of each base post shall be 3.5' plus or minus 1 inch.
- The weight of each sign post before punching shall be 2.0, 2.25, 2.5, 2.75, 3.0 and 4.0 lb/ft. Weight tolerance shall be plus or minus 3 1/2%. Punching shall be full length .375 dia. holes, 1 inch centers. First hole 1 inch from top and last hole .50 inch from bottom. Lengths shall be to increments of 6 inches length tolerance and shall be plus or minus 1.5 inches.
- The finished posts shall be machine straightened and have a smooth uniform finish free from injurious defects affecting strength or appearance. Bolt holes and slots shall be carefully spaced vertically and horizontally so that holes will align for easy assembly. All holes, slots and sheared ends shall be free from burrs.
- Retainer spacer strap material shall be steel AISI 1020. The strap for all posts shall be 1 inch wide x 17 inches long x .375 inch thick with a .375 inch offset. Straps shall be hot dip galvanized meeting requirements of ASTM A-123 specifications.
- Bolts shall be 3/8"x 16 UNC x 2.0" long hex. Integral flange conforming to ASTM A-354 grade BD. Nuts shall be 3/8"x 16 UNC hex head, integral flange conforming to ASTM A-563 grade DH. Lockwashers shall be 3/8" extra duty helical spring. Bolts, nuts and lockwashers shall mechanically galvanized to ASTM B454-76, class 25.
- For sidewalk and roadway post installation see standard Sn75-1.
- Assemblies are as follows: 2.0, 2.25, 2.50 and 2.75 lb/ft. sign post with 2.75 lb/ft. base post. 3.0 lb/ft. sign post with 3.0 lb/ft. base post. 4.0 lb/ft. sign post with 4.0 lb/ft. base post.
- Bolts and locknut hardware for sign attachment shall be carriage or hex head flange type, size shall be 5/16"- 18 UNC. Bolts and nuts shall be cadmium plated to ASTM A 165 specification.

REVISION NO.	DESCRIPTION	DATE	BY
2	REVISED RETAINER SPACER STRAP	3-10-86	QRR
1	REVISED SIGN POST DETAIL	6-29-82	T.G.M.
1	REVISED STRAP DETAIL	6-29-82	T.G.M.
1	REVISED SIGN POST ASSEMBLY DETAIL	6-29-82	T.G.M.
1	REVISED NOTES 3, 5, 6, 7	6-29-82	T.G.M.
1	REVISED BOLT LENGTH, ADDED LOCKWASHER	6-29-82	T.G.M.

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO
STATE HIGHWAY DEPARTMENT

DESIGN DETAILS FOR
BREAKAWAY FLANGED
CHANNEL POST & HARDWARE

DESIGNED BY GPC	APPROVAL	DATE
DRAWN BY IPH	RECOMMENDED - TRAFFIC ENGINEER	DATE
CHECKED BY GPC	APPROVED	DATE
	ENGINEER OF DESIGN	DATE

SERIAL TBAC-002-12

NEW MEXICO PROJECT NO. TPS-4040(2)

SHEET 11-11