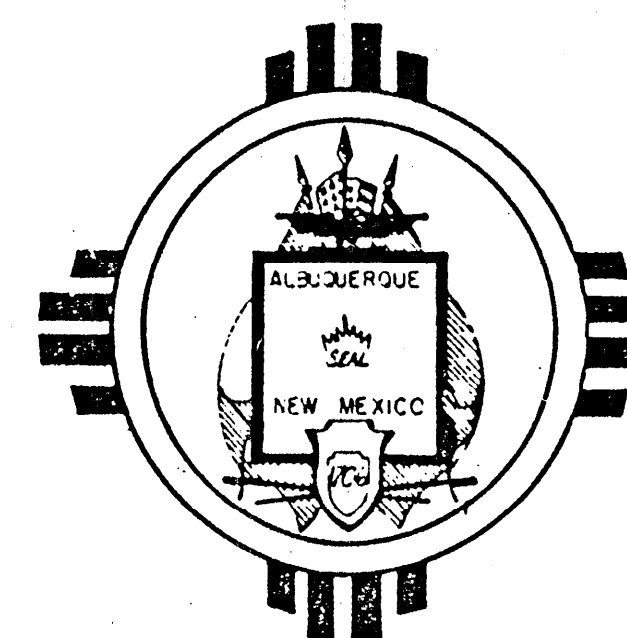
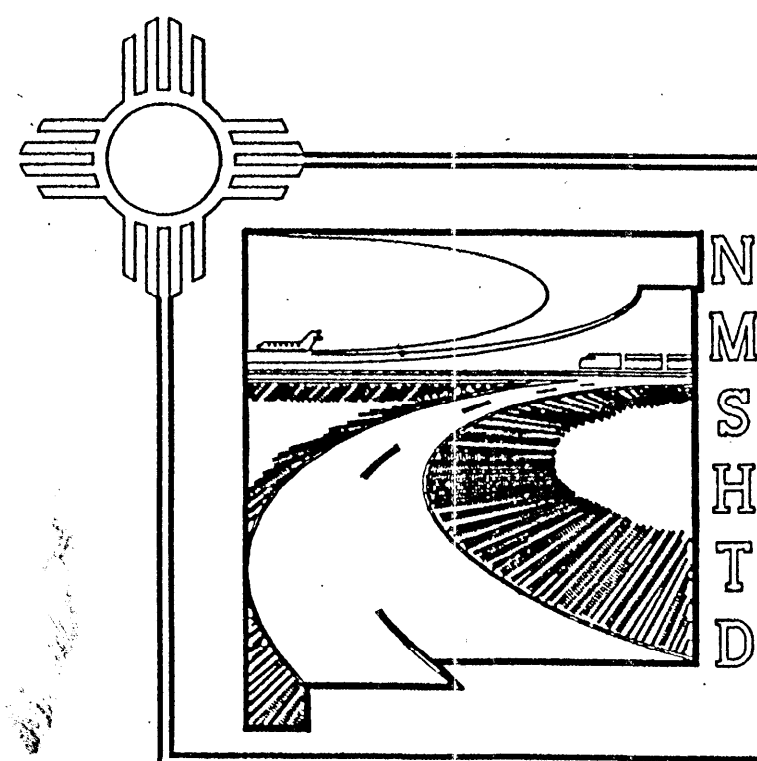


NEW MEXICO STATE HIGHWAY & TRANSPORTATION DEPARTMENT CONSTRUCTION PLANS

OSUNA ROAD

SP-(M)-4052(200)

BERNALILLO COUNTY



APPROVED *R. S. Ringer* DATE 3/7/88
 ROBERT G. RINGER
 NEW MEXICO STATE HIGHWAY & TRANSPORTATION DEPARTMENT
 DESIGN DIVISION DIRECTOR
 P.E. NO. 5680

APPROVED *Herb Hughes* DATE 3-3-88
 HERB HUGHES
 ACTING COUNTY MANAGER

APPROVED *George Euseva* DATE 3/3/88
 GEORGE EUSEVA
 DIRECTOR, PUBLIC WORKS DEPARTMENT
 CITY OF ALBUQUERQUE
 C.O.A. PROJECT NO. 3396

APPROVED *John Ramsey* DATE March 3, 1988
 JOHN RAMSEY JR., P.E.
 DIRECTOR, PUBLIC WORKS DEPARTMENT
 BERNALILLO COUNTY

AS-BUILT
 INCLUDING CHANGE ORDERS 1 THROUGH 6
JULY 1990
 NOTE: AS-BUILT INFORMATION WAS SUPPLIED
 BY CONTRACTOR. (MOUNTAIN STATES CONST.)

ESPEY, HUSTON & ASSOCIATES, INC.
 Engineering & Environmental Consultants
James L. Leymon Jr. DATE 3-2-88
 JAMES L. LEYMON JR.
 P.E. NO. 8105

CONVENTIONAL SIGNS

DESCRIPTION	ON PLAN		ON PROFILE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
NORTH ARROW				
RIGHT-OF-WAY LINE				
CENTERLINE				
STANDARD CURB & GUTTER				
MEDIAN CURB & GUTTER				
BENCH MARK				
CONTOUR				
SPOT ELEVATION				
BUILDING				
CONCRETE CHANNEL				
RAILROAD				
FENCE LINE				
TREES OR SHRUBS				
STREET SIGN				
CORRUGATED METAL PIPE				
FIRE HYDRANT				
WATER VALVE				
WATER METER				
GAS METER				
TELEPHONE PEDESTAL				
TELEPHONE MAN HOLE				
POWER POLE				
STORM DRAIN DROP INLETS				
STORM DRAIN MAN HOLE				
SANITARY SEWER LINE				
WATER LINE				
GAS LINE				
STORM DRAIN				
OVERHEAD ELECTRIC				
OVERHEAD TELEPHONE				
UNDERGROUND TELEPHONE				
PROFILE GRADE				
EXISTING GRADE				
VERTICAL CURVE				
PERCENTAGE OF GRADE				
DATUM LINE : GRADE ELEVATION				
DATUM LINE : GROUND ELEVATION				
SANITARY SEWER MAN HOLE				
DRIVEPAD				
LIGHT POLE CONCRETE BASE				

SCALES

PLAN : 1" = 50'
 PROFILE : 1" = 50' HORIZ.
 1" = 10' VERT.

SHIPPING POINTS

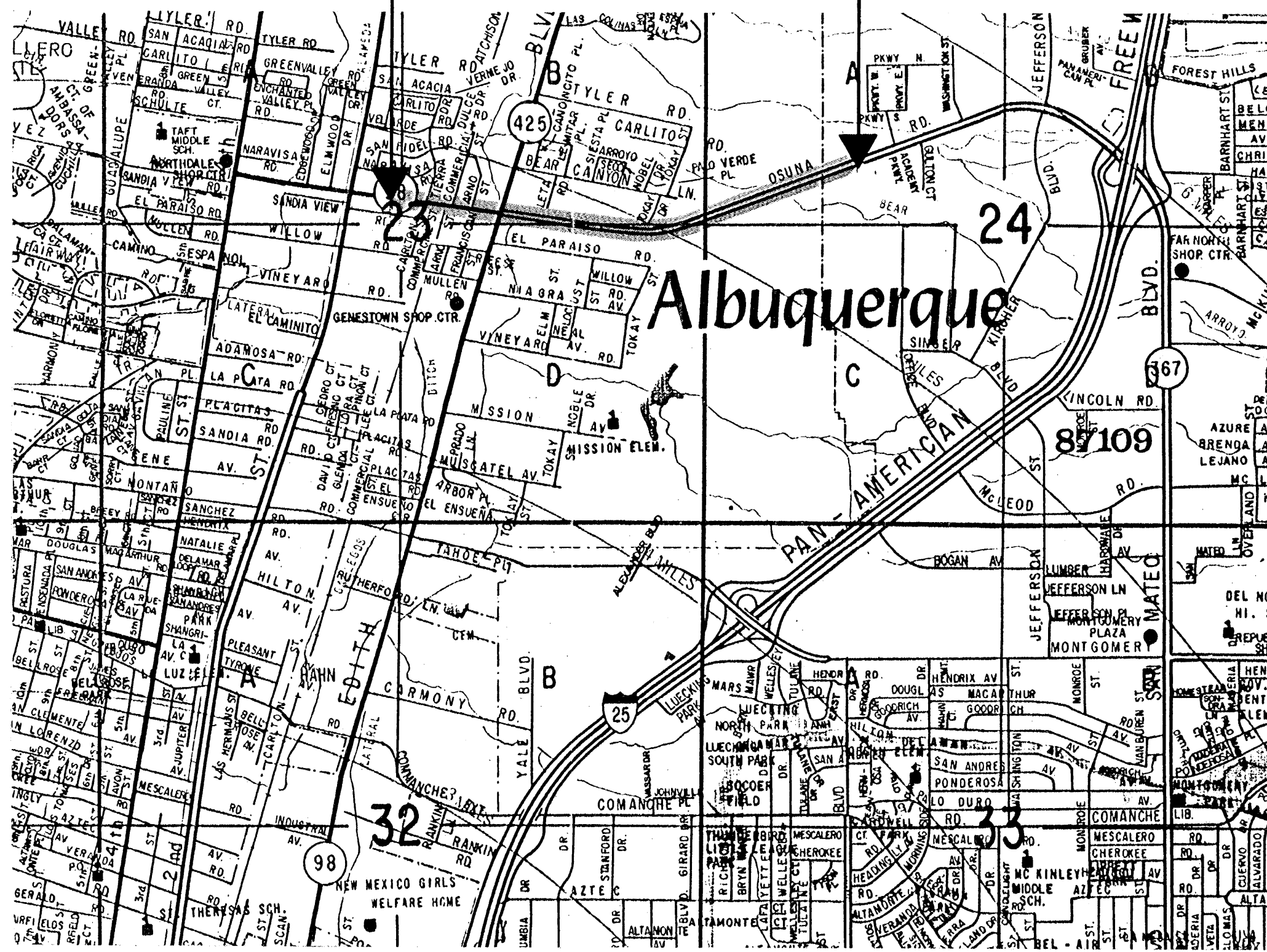
ALBUQUERQUE

TRAFFIC	DESIGN	DATA
OSUNA	ROAD	
A.D.T. (1985) ACTUAL		13,467
A.D.T. (2007)		22,033
D.H.V. (2007)		2,203
% HEAVY COMMERCIAL (1985)		6.5%
% HEAVY COMMERCIAL (2007)		7.5%
% HEAVY COMMERCIAL DURING D.H.V.		6.5%
A.D.L. (20) 231 FLEX.		
DESIGN SPEED		45 M.P.H.

LENGTH OF PROJECT

OSUNA ROAD
STA. 16+20.00 TO STA. 91+83.41-7563.41 FT.-1.433 MILES-ROADWAY
STA. 91+83.41 TO STA. 92+82.09- 98.68 FT.-0.019 MILES-BRIDGE
STA. 92+82.09 TO STA. 96+98.55- 416.46 FT.-0.079 MILES-ROADWAY
EDITH BOULEVARD
STA. 14+05.66 TO STA. 22+09.95- 804.29 FT.-0.152 MILES-ROADWAY
CHAPPELL ROAD
STA. 0+00.00 TO STA. 5+93.42- 593.42 FT.-0.112 MILES-ROADWAY
MAJOR STRUCTURES
STA. 36+17.25 M.R.G.C.D. CROSSING
66" SPAN x 51" RISE CORRUGATED STEEL CULVERT PIPE
LENGTH=290'
STA. 70+61.00 A.G.P. CROSSING
29'-5" SPAN x 16'-5" RISE STRUCTURAL PLATE HIGH PROFILE ARCH
LENGTH=242'

B.O.P. STA. 20+50.00 WEST BOUND LANE	LENGTH OF PROJECT : 1.53 MILES	E.O.P. STA. 96+98.55 EAST & WEST BOUND LANES
B.O.P. STA. 16+20.00 EAST BOUND LANE		



VICINITY MAP

OSUNA ROAD, PROJECT NO. SP-(M)-4052(200)

SPECIFIC IMPROVEMENTS PROPOSED AS PART OF THE OSUNA ROAD PROJECT INCLUDE:

- | | |
|--|--|
| 1.) CONSTRUCTION OF A 2-LANE, 40' WIDE, PRE-STRESSED CONCRETE GIRDER BRIDGE OVER THE NDC PARALLEL TO THE EXISTING 2-LANE BRIDGE; | LINE STUBOUTS TO THE SOUTH; |
| 2.) WIDENING OF THE EXISTING BRIDGE OVER THE NDC TO APPROXIMATELY 36' AND REHABILITATION OF DECK; | 6.) CONSTRUCTION OF A STORMWATER DRAINAGE SYSTEM BETWEEN SECOND STREET AND THE AGP UNDERPASS, APPROXIMATELY 4500 FEET. INCLUDES UNDERGROUND PIPING OF RUNOFF WEST UNDER THE ATCHISON TOPEKA & SANTA FE (AT&SF) RAILWAY. AN AT-GRADE CONCRETE AND EARTH-LINED CHANNEL LOCATED WITHIN THE PROPOSED MEDIAN IMMEDIATELY EAST AND WEST OF THE RAILROAD. THE CHANNEL WILL TERMINATE EAST OF SECOND STREET; |
| 3.) CONSTRUCTION OF A STEEL PLATE CULVERT STRUCTURE FOR THE NORTH AND SOUTH ACCESS/EGRESS UNDERCROSSING OF OSUNA FOR THE ALBUQUERQUE GRAVEL PRODUCTS' HAUL ROAD; | 7.) INSTALLATION OF RUBBER PLANKING WHERE THE FOUR (4) LANES CROSS THE AT&SF RAILROAD AS WELL AS SIGNAL ARMS TO CONTROL EAST AND WESTBOUND TRAFFIC. THIS CONSTRUCTION, WITHIN THE AT&SF RAILROAD RIGHT-OF-WAY, IS TO BE PERFORMED BY THE RAILROAD. |
| 4.) CONSTRUCTION OF A 4-LANE DIVIDED HIGHWAY, INCLUDING CURB AND GUTTER, WITH A RAISED MEDIAN FROM THE NDC TO 550 FEET EAST OF THE SECOND STREET INTERSECTION (APPROXIMATELY 1.5 MILES), LEFT TURN BAYS AT EDITH BOULEVARD, AND OTHER LOCATIONS; | |

INDEX OF SHEETS

[illegible]

INDEX OF SHEETS

NO.	DESCRIPTION	REV. DATE	SERIAL
1- 1	COVER SHEET		
1- 2	VICINITY MAP		
1- 3	INDEX OF SHEETS		
1- 4 THRU	SUMMARY OF QUANTITIES		
1- 7A			
1- 8 THRU	GENERAL NOTES, SPECIAL PROVISIONS AND		
1-10	SUPPLEMENTAL SPECIFICATIONS		
	SUB-TOTAL 11		
2- 1.	TYPICAL SECTIONS		
2- 2			
2- 3 THRU	SURFACING SCHEDULE		
2- 5			
2- 6.	STRUCTURE QUANTITIES		
2- 7			
2- 8.	MESCELLANEOUS QUANTITIES		
2- 9			
2-10	ROADWAY DETAILS		
2-11 THRU	SPECIAL STORM DRAIN DETAILS		
2-13			
2-14	SPECIAL DRAINAGE DETAILS		
2-15	SPECIAL WATER AND SANITARY SEWER DETAILS		
2-16	BICYCLE CROSSING DETAILS		
2-17	SURFACING REQUIREMENTS		
	SUB-TOTAL 17		
3- 1 THRU	PLAN AND PROFILE SHEETS (OSUNA ROAD)		
3- 6			
3- 7	PLAN AND PROFILE SHEETS (CHAPPELL ROAD)		
3- 8	PLAN AND PROFILE SHEETS (DETOUR, OSUNA		
	ROAD AT A.G.P. UNDERPASS)		
3- 9	PLAN AND PROFILE SHEETS (DETOUR, A.G.P.		
	HAUL ROAD OVER OSUNA ROAD)		
3-10	PLAN SHEETS (INTERSECTION LAYOUT AND		
	GRADING PLAN OSUNA ROAD AND EDITH		
	BOULEVARD, EDITH BOULEVARD ROADWAY)		
3-11 THRU	PLAN AND PROFILE SHEETS (STORM DRAIN,		
	OSUNA ROAD)		
3-17	PLAN AND PROFILE SHEETS (STORM DRAIN,		
	TIERRA DRIVE, BROADWAY PLACE, ARNO STREET		
	AND EDITH BOULEVARD)		
	△ SUB-TOTAL 17		
4- 1 THRU	DELETED		
4-4			
4- 5 THRU	TURNOUT PROFILES (OSUNA ROAD)		
4-14 △			
	△ SUB-TOTAL 10		
5- 1 THRU	BRIDGE (PROPOSED, OSUNA ROAD OVER N.D.C.,		
5-11	WESTBOUND)		
5-12 THRU	BRIDGE (EXISTING, OSUNA ROAD OVER N.D.C.,		
5-16	EASTBOUND)		
	SUB-TOTAL 16		
6- 1	DELETED		
7- 1	DELETED		
8- 1 THRU	CONSTRUCTION SIGNING		
8-31			
	SUB-TOTAL 31.		
9- 1 THRU	PERMANENT SIGNING		
9-11			
	SUB-TOTAL 11		
10- 1	LIGHTING		
	SUB-TOTAL 1		
11- 1 THRU	SIGNALIZATION		
11- 9			
	△ SUB-TOTAL 9		

C.O. # △ ADDED SHTS 3-16 & 3-17

C.O. # △ ADDED SHTS 11-8 & 11-9

NO.	DESCRIPTION	REV. DATE	SERIAL
12- 1 THRU	STRUCTURE PLACEMENT (LONG SPAN STRUCTURAL		
12- 3	PLATE HIGH PROFILE ARCH, A.G.P. UNDERPASS)		
12- 4, 5, 6	STRUCTURE PLACEMENT (CORRUGATED STEEL		
	CULVERT PIPE, ALAMEDA LATERAL)		
	△ SUB-TOTAL 6		
13- 1 THRU	CROSS SECTIONS (OSUNA ROAD)		
13-19			
13-20	CROSS SECTIONS (CHAPPELL ROAD)		
13-21 THRU	CROSS SECTIONS (DETOUR, OSUNA ROAD AT		
13-23	A.G.P. UNDERPASS)		
13-24.	CROSS SECTIONS (DETOUR, A.G.P. HAUL ROAD		
13-25	OVER OSUNA ROAD)		
	SUB-TOTAL 25		
14- 1	DELETED		
15- 1 THRU	UTILITIES (WATER AND SANITARY SEWER, OSUNA		
15- 6	ROAD)		
15- 7.	UTILITIES (GAS LINE, OSUNA ROAD) SHEETS		
15- 8	PROVIDED BY GAS COMPANY		
15- 9 THRU	UTILITIES (TELEPHONE LINE, OSUNA ROAD)		
15-14	SHEETS PROVIDED BY MOUNTAIN BELL		
	SUB-TOTAL 14		
16- 1	EXCAVATION AND BACKFILL FOR BRIDGES, WALLS	11- 7-80	BEB-001-04
	AND CBC'S		
16- 2	ELASTOMERIC EXPANSION JOINT SEALS FOR	10-31-81	BJE-001-12
	BRIDGES		
16- 3	ELASTOMERIC EXPANSION JOINT SEALS FOR	8-27-81	BJE-002-05
	BRIDGES		
16- 4	MAXIMUM & MINIMUM COVERS STEEL PIPE	1-28-85	BMC-002-07
	ARCHES CORR. METAL & STRUCT. PLATE		
16- 5	CORRUGATED METAL CULVERT & PIPE ARCHES	1-28-85	BMC-005-01
	BEDDING & BACKFILL DETAILS		
16- 6	METAL RAILING GENERAL NOTES & TYPICAL	2- 6-80	BMR-001-10
	DETAILS		
16- 7	METAL RAILING TYPE A	1- 4-80	BMR-002-11
16- 8	METAL RAILING TYPE B	3- 6-85	BMR-003-08
16- 9	METAL RAILING TYPE C	3- 6-85	BMR-004-08
16-10	SLOPE PAVEMENT DETAILS AT BRIDGES	12-19-79	BSP-001-01
16-11	METAL BARRIER MATERIALS AND PLACEMENT	2- 1-85	M-21-62
	PROCEDURES		
16-12	METAL BARRIER DETAIL TYPE A END ANCHORAGE	7- 8-86	M-21-65A
16-13	THREE BEAM METAL BARRIER OVER CBC &	3- 7-85	M-21-67A
	UNDERPASSES		
16-14	METAL BARRIER AT BRIDGE APPROACHES	2- 5-85	M-21-77
16-15	APPROACH SLOPE PREPARATION METAL BARRIER	2- 7-85	M-21-77
	INSTALLATION		
16-16	METAL BARRIER (BREAKAWAY) TYPE "C" END	10- 2-85	M-21-77C
	ANCHORAGE (WOOD POSTS)		
16-17	METAL BARRIER (BREAKAWAY) TYPE "C" END	9-30-87	M-21-77C
	ANCHORAGE (STEEL POSTS)		
16-18	METAL BARRIER (BREAKAWAY) TYPE "C" END	9-30-87	M-21-77C
	ANCHORAGE STEEL POSTS (SOIL PLATE)		
16-19	SUPERELEVATION FOR SIMPLE AND SPIRALED	11-30-67	SE-2
	CURVES		
16-20	MEDIAN & RIGHT OF WAY TRANSITION CURVES	11-30-67	SE-2
16-21	DESIGN LOADS FOR SQUARE TUBING POSTS	8- 6-80	SN-75-1
16-22	TRAFFIC MARKER-GUIDE DETAILS	9-24-79	SN-75-7
16-23	TRAFFIC MARKER-HAZARD DETAILS	2-27-78	SN-75-8
16-24	BARRICADES AND CHANNELIZATION DEVICES	3-15-80	SN-77-9
16-25	DESIGN LOADS FOR BREAKAWAY FLANGED CHANNEL	6-30-82	TBAC-001-10
	POSTS		
16-26	DESIGN DETAILS FOR BREAKAWAY FLANGED	8-10-82	TBAC-002-12
	CHANNEL POST & HARDWARE		
	SUB-TOTAL 26		
	△ TOTAL SHEETS 194		

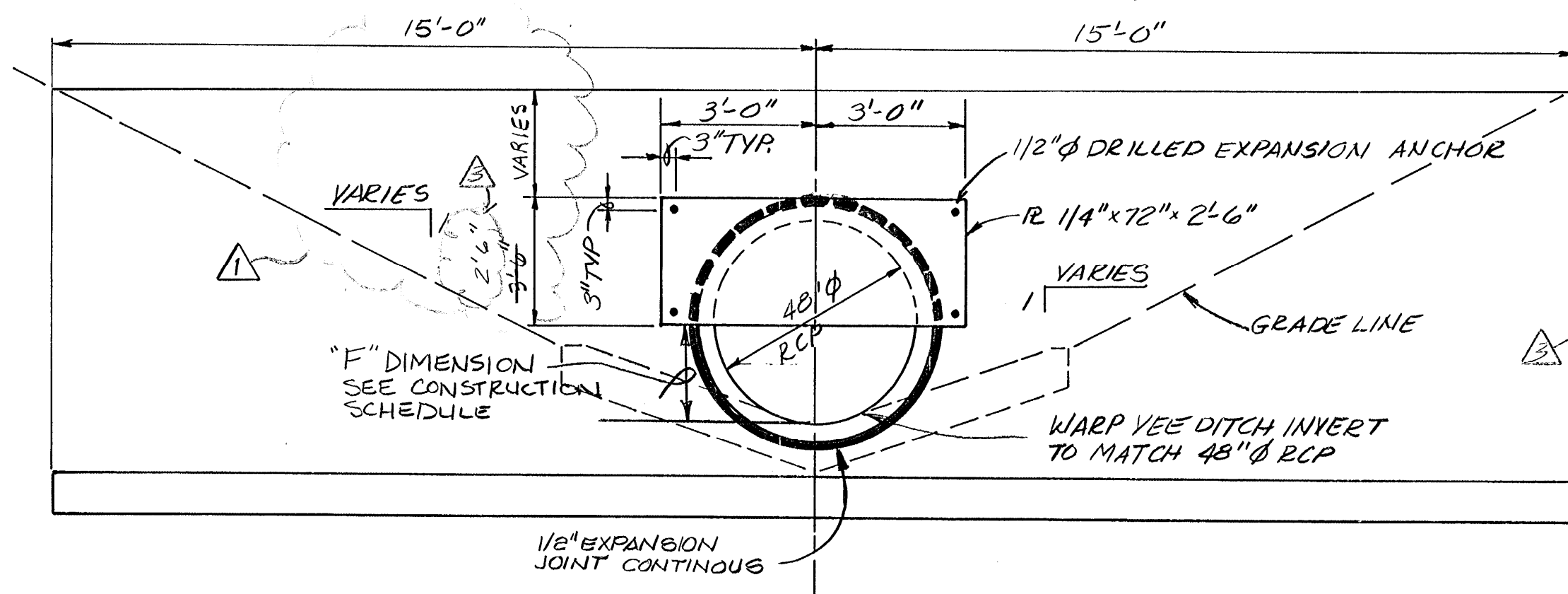
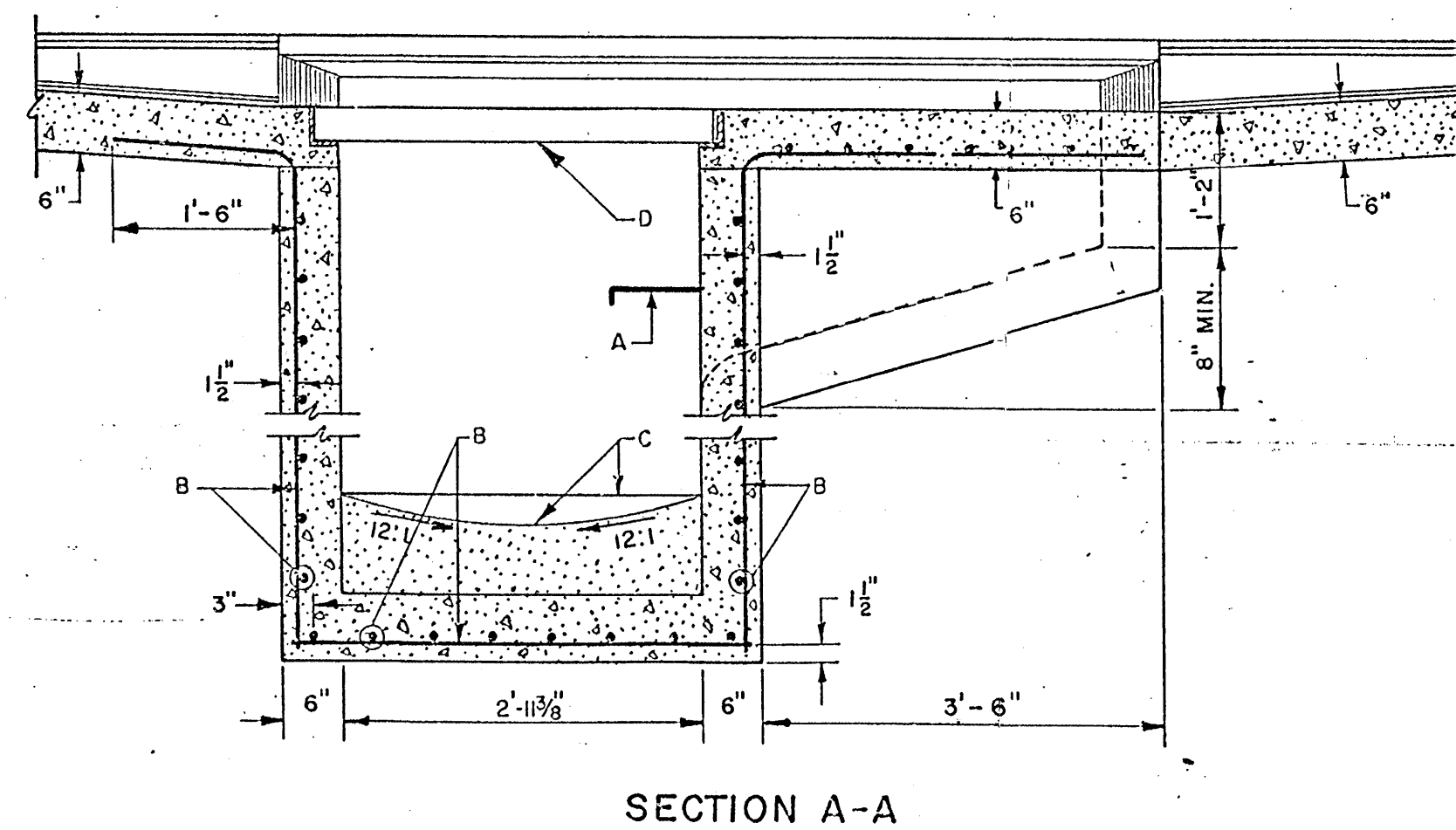
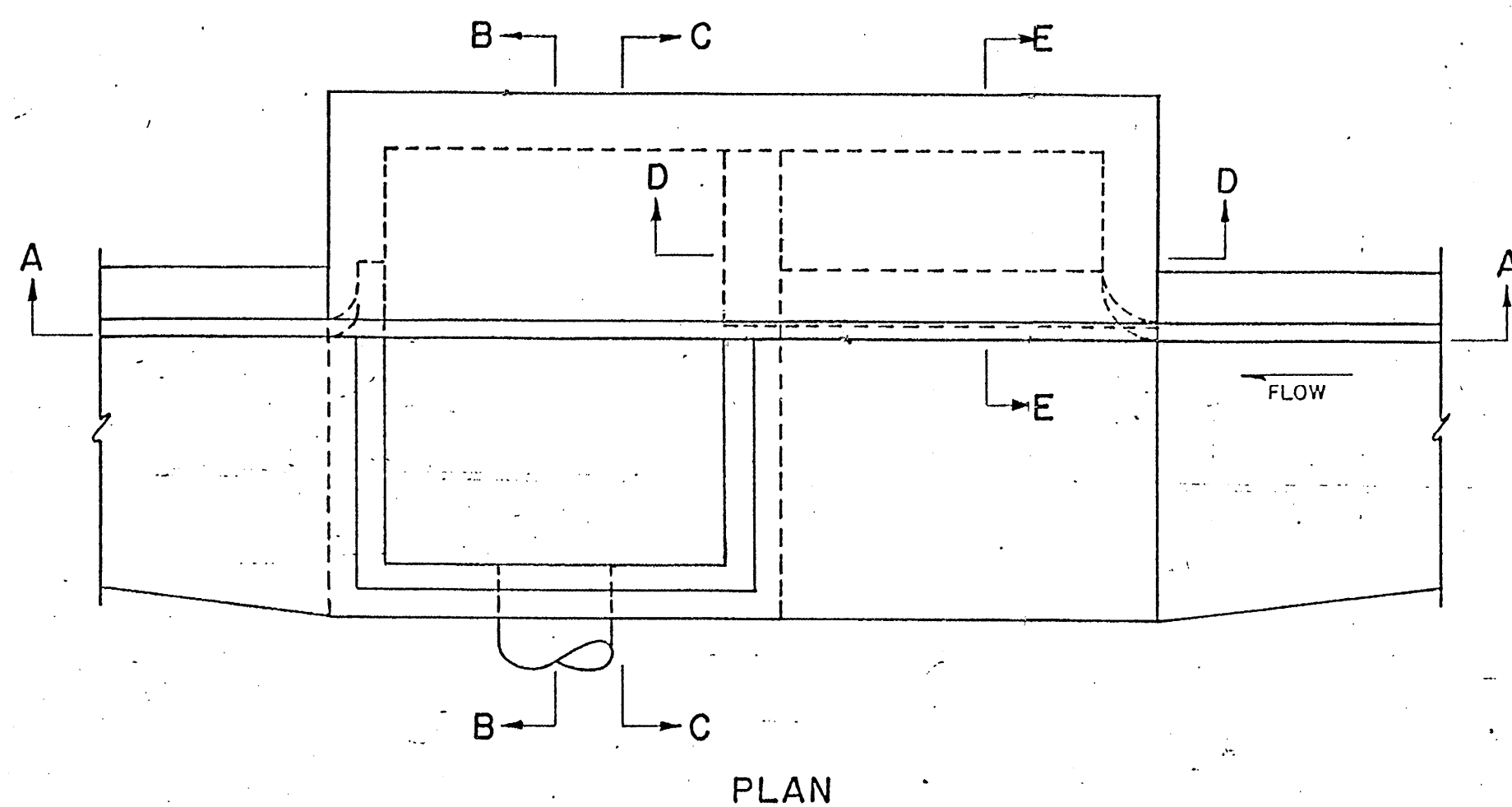
C.O. No. △ ADDED SHTS. 12-5 & 12-6

12-5 THRU RETAINING WALLS

12-6

△			
△			
△			
△			
△	AS-BUILT	7/90	TS
△	ADD.#3-ADD SHT. 4-14 AND ADJUST TOTALS		
IDENT NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			
COUNTY OF BERNALILLO NEW MEXICO			
OSUNA ROAD			
INDEX OF SHEETS			

F.H.W.A. Region No.	STATE	SP-(M)-4052(200)	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		2-11	



ITEM	QUANTITY
CLASS "A" CONCRETE, CU.YDS.	52.11 c.yds.
REINFORCING STEEL, LBS	4015.7 lbs.
STRUCTURAL STEEL, LBS	460 lbs.
FOR 1/4" R ON INLET HEADWALL, INCIDENTAL TO CLASS "A" CONCRETE	

CONCRETE HEADWALL DETAILS

* FOR CONTRACTOR INFORMATION ONLY.

NOTES:

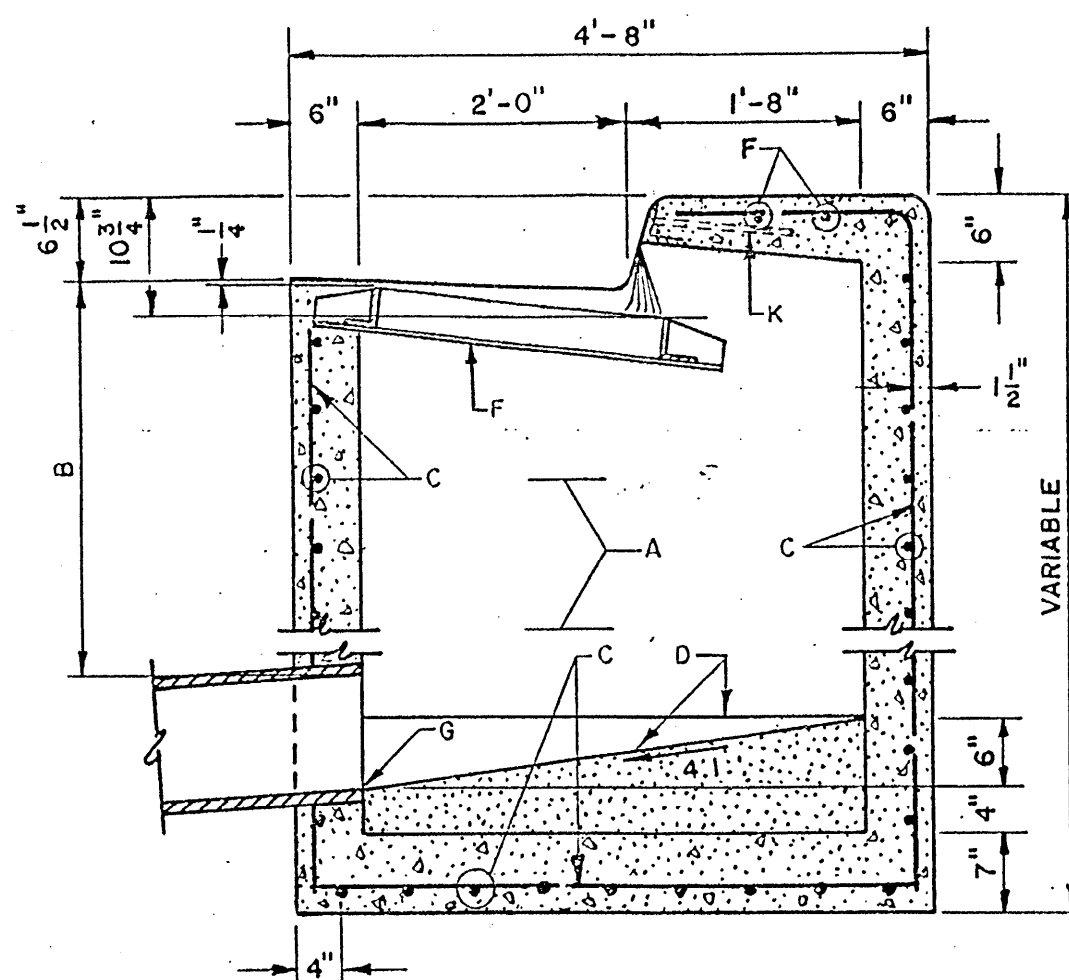
- ALL CONCRETE SHALL BE CLASS "A" - DESIGN BASED ON A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. CHAMFER EXPOSED EDGES.
- REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION AASHTO M161 GRADE 40.
- INSTALL STEEL PLATE ON INLET HEADWALLS ONLY PAINT WITH ONE SHOP COAT OF RED LEAD PAINT (AASHTO M72) AND TWO COATS OF ALUMINUM PAINT (AASHTO M-69).
- DRILLED EXPANSION ANCHORS SHALL BE TYPE 316 STAINLESS STEEL WEDGE ANCHORS AS MANUFACTURED BY PHILLIPS DRILL COMPANY OR EQUAL.

GENERAL NOTES:

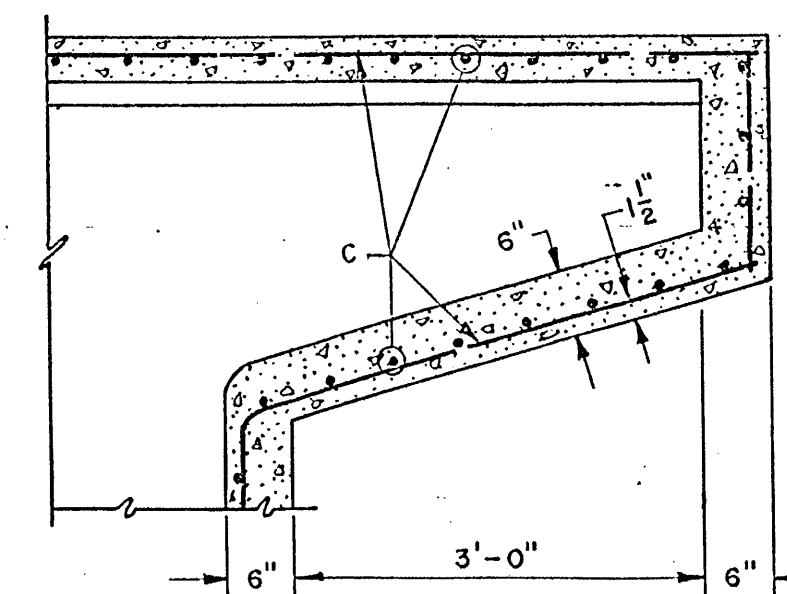
- SEE DWG 2202 FOR TYPE "A" INLET SECTIONS.
- FOR STORM INLET GUTTER TRANSITION, SEE DWG 2207.
- OUTLET PIPE SIZE, PER DESIGN REQUIREMENT.
- FOR FRAME & GRATING, SEE DWG 2216, 2220 & 2221.

CONSTRUCTION NOTES:

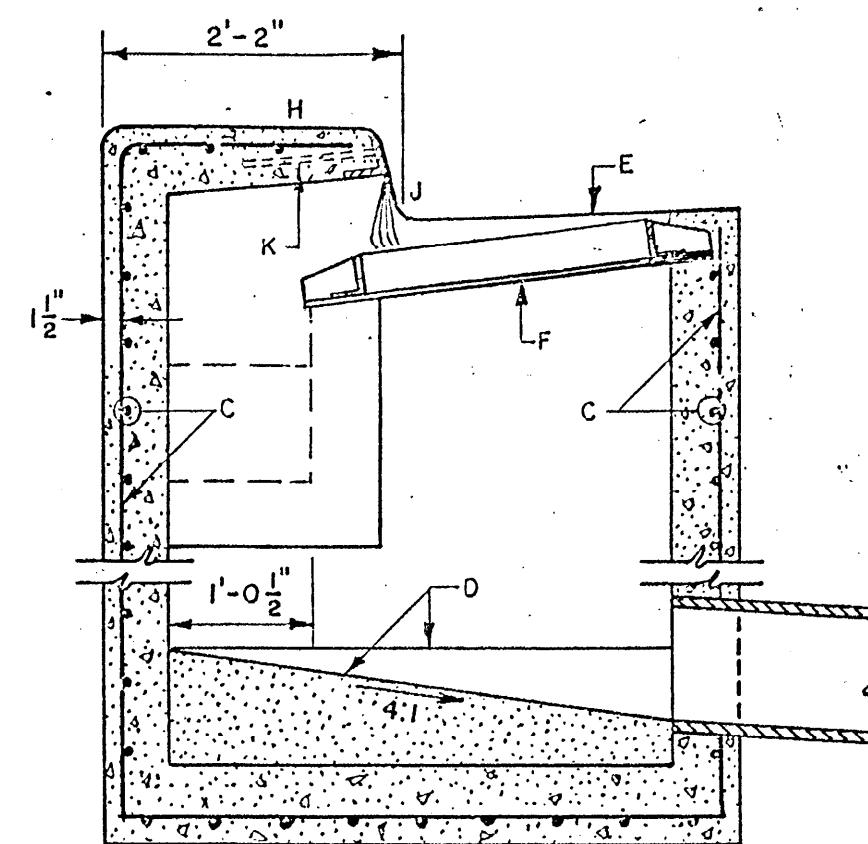
- FOR STORM INLET DEPTHS GREATER THAN 4', INSTALL STD STEPS, SEE DWG 2229.
- NO. 4 BARS AT 6" O. C. EACH WAY.
- CONCRETE FILL, MINIMUM SLOPE SHOWN IN SECTION A-A.
- GRATE



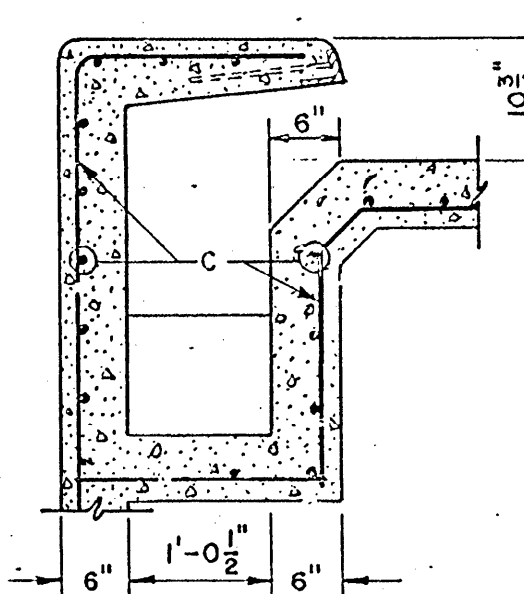
SECTION B-B



SECTION D-D



SECTION C-C



SECTION E-E

GENERAL NOTES:

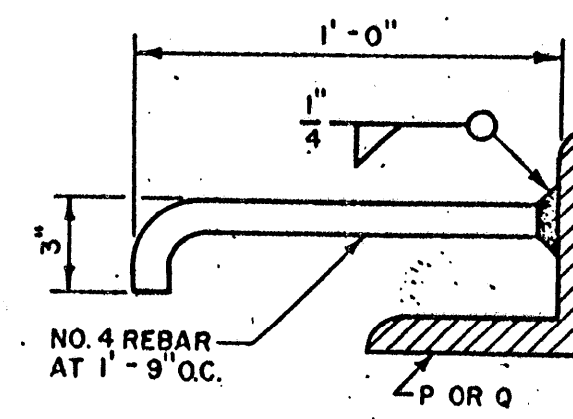
- SEE DWG 2201 FOR PLAN AND SECTION A-A.
- GENERAL NOTES 2, 3 & 4 ON DWG 2201 ALSO APPLY TO THIS DWG.
- FOR ANCHOR DETAIL, SEE DWG 2205.

CONSTRUCTION NOTES:

- STORM INLET STEPS, SEE DWG 2229 FOR SPACING.
- 1"-10" MIN UNLESS OTHERWISE DIRECTED.
- NO. 4 BARS AT 6" O.C. EACH WAY.
- CONCRETE FILL, MINIMUM SLOPES SHOWN IN SECTIONS.
- NORMAL GUTTER.
- GRATE FRAME.
- INVERT ELEVATION PER DESIGN.
- TOP OF CURB.
- FLOWLINE.
- ANGLE ANCHOR.

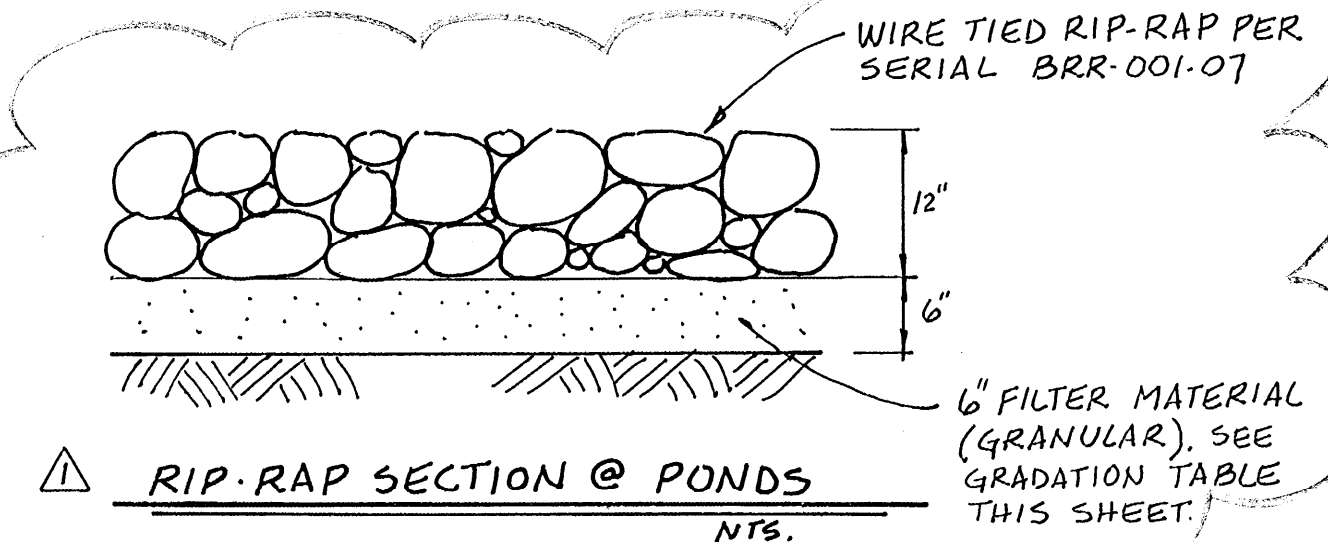
CONSTRUCTION SCHEDULE FOR CONCRETE HEADWALLS

STA.	PIPE INVERT	TOP OF WALL ELEV.
15+30.86	4974.46	N/A
20+50	4976.72	4983.39
26+35	4979.78	4991.60
28+60	4980.90	4990.60



ANCHOR DETAIL

- 3 1/2" X 3 1/2" X 1/2" X 4' - 0" FOR SINGLE GRATE TYPE "C" STORM INLET.
- 3 1/2" X 3 1/2" X 1/2" X 7' - 6" FOR DOUBLE GRATE TYPE "C" STORM INLET.



RIP-RAP SECTION @ PONDS

SIEVE SIZE	% SMALLER BY WEIGHT
2"	90-100
1 1/2"	-
3/4"	20-90
3/8"	-
#4	0-20
#16	-
#50	-
#100	-
#200	0-3

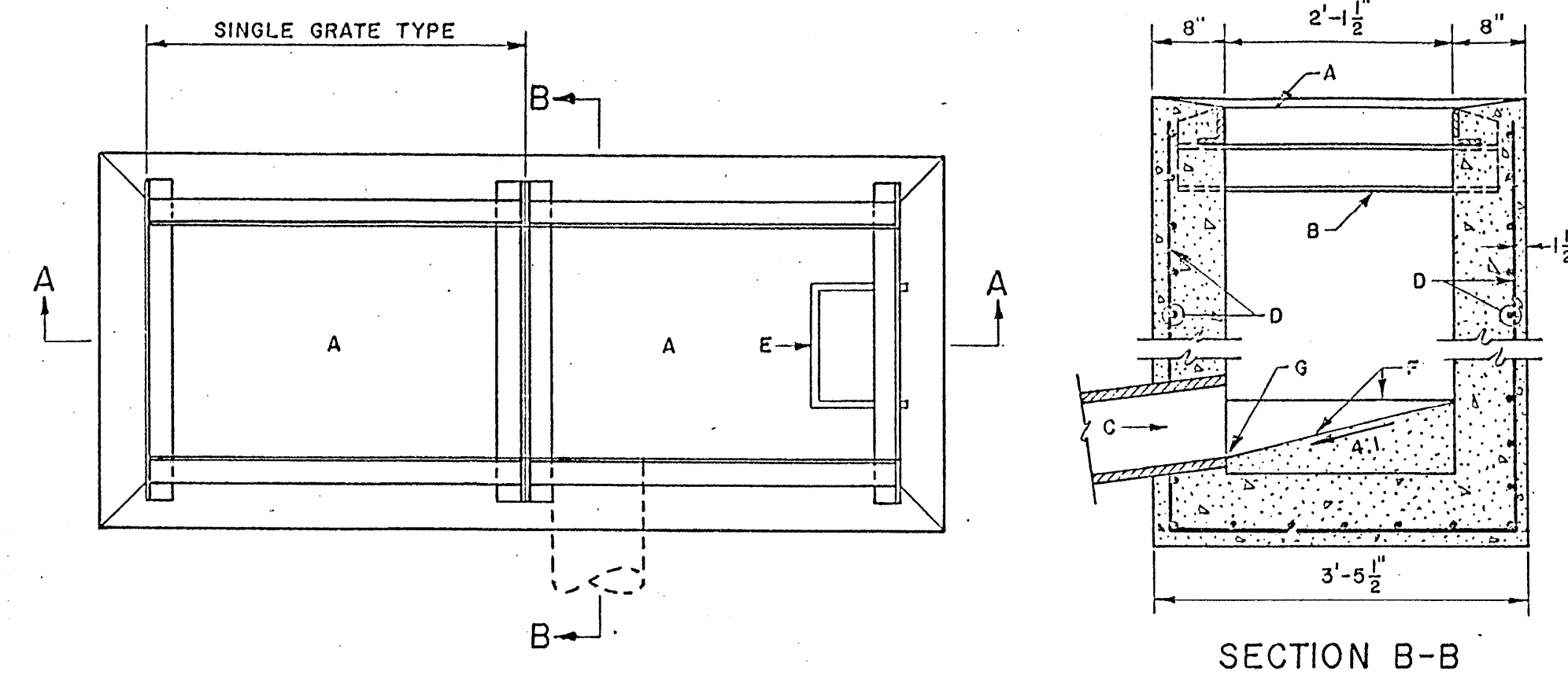
IDENT. NO.	DESCRIPTION	DATE	BY
6	AS-BUILT	7/90	DL
7	REVISION OF WIER ELEVATIONS	6/89	DL
8	C.O. #1- RAISED H.W., REV. STL. PL.	6-88	DL
REVISIONS (OR CHANGE NOTICES)			

COUNTY OF BERNALILLO
NEW MEXICO

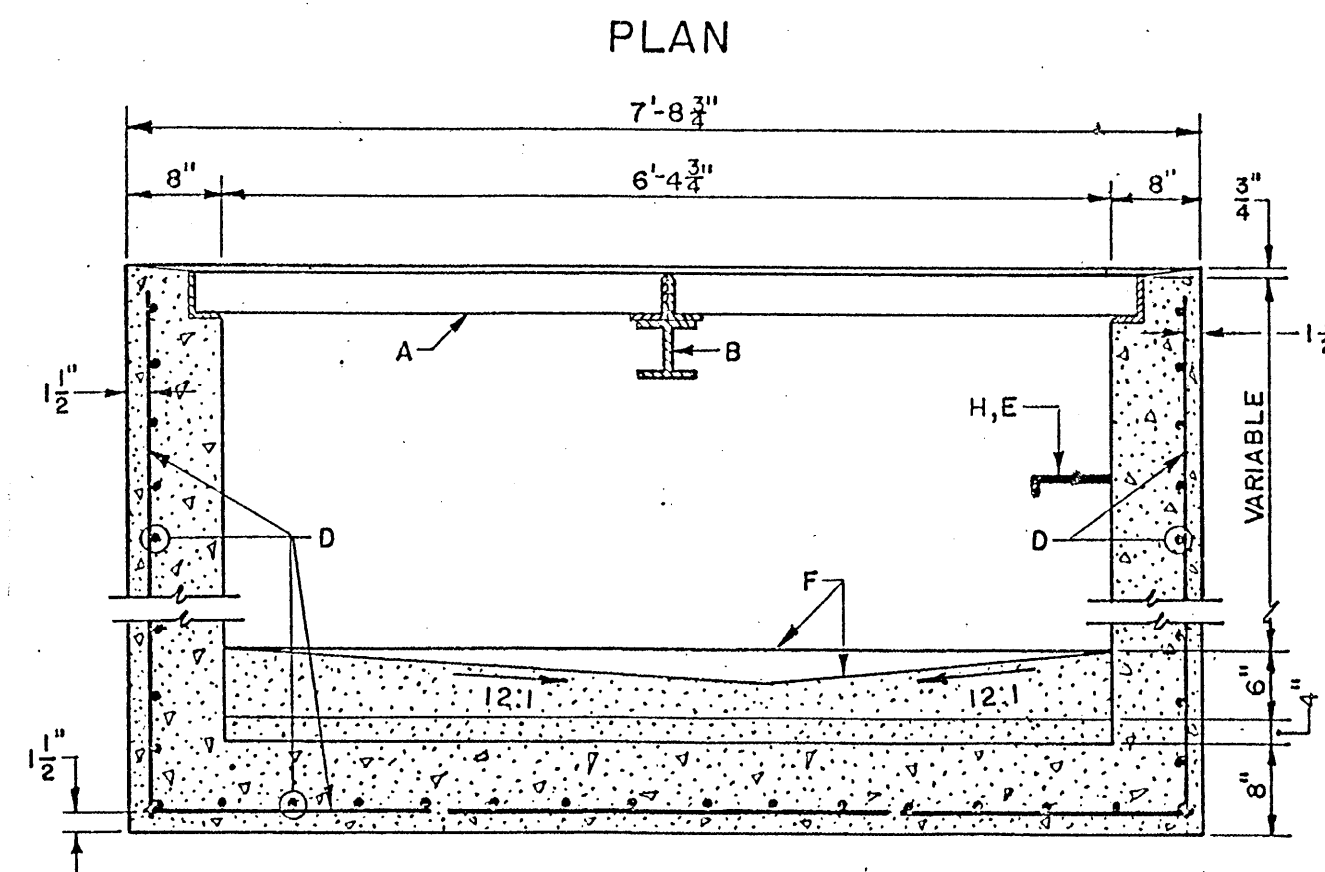
OSUNA ROAD

SPECIAL STORM DRAIN DETAILS

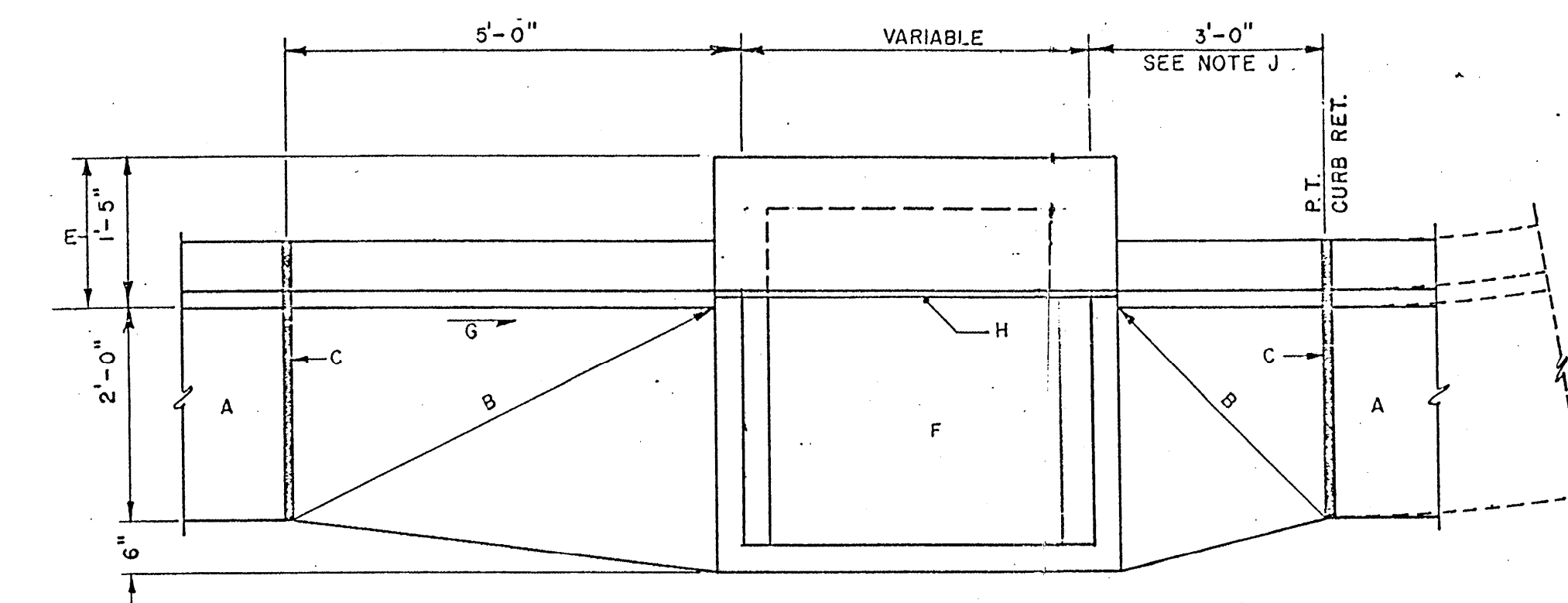
F.H.W.A. Region No.	STATE		SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	SP-(M)-4052(200)	2-12	



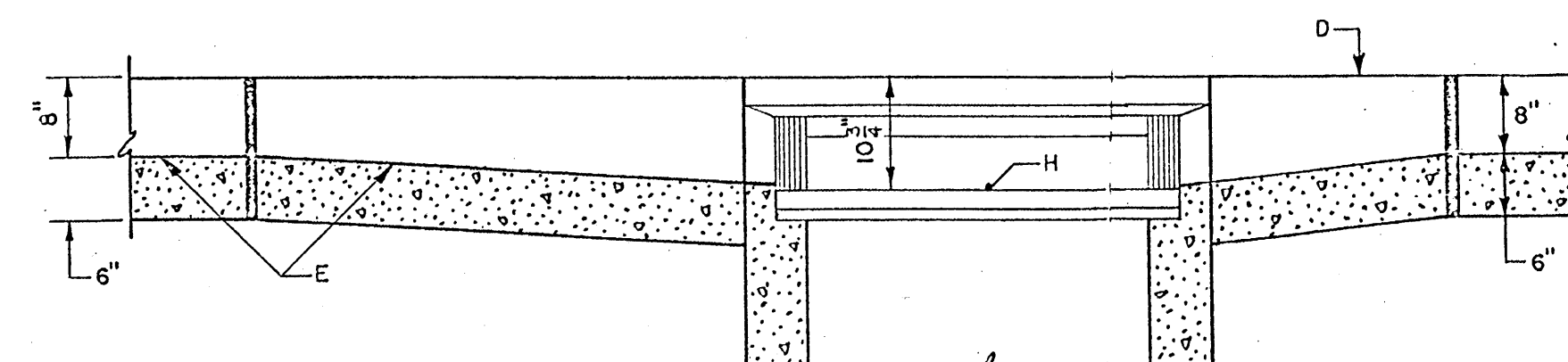
SECTION B-B



SECTION A-A



PLAN



LONGITUDINAL SECTION
ALONG FLOWLINE

GENERAL NOTES:

1. FOR SINGLE GRATE TYPE STORM INLET, DELETE CENTER SUPPORT AND MOVE ONE END WALL TO FORM NEW SINGLE GRATE INLET.
2. STORM INLET GUTTER TRANSITION WILL BE SHOWN ON THE CONSTRUCTION PLANS.
3. OUTLET PIPE SIZE, PER DESIGN REQUIREMENT.
4. FOR FRAME & GRATING, SEE DWG 2216, 2220 & 2221.
5. FOR CENTER SUPPORT ASSEMBLY, SEE DWG 2215.

CONSTRUCTION NOTES:

- A. FRAME & GRATE
- B. CENTER SUPPORT ASSEMBLY.
- C. CUT ONE HORIZONTAL AND ONE VERTICAL BAR MAX. AT PIPE OPENING.
- D. NO. 4 BARS A 6" O.C. EACH WAY.
- E. USE STANDARD STEPS, SEE DWG 2229.
- F. CONC. FILL, SEE NOTE; C DWG 2201.
- G. INVERT PER DESIGN.
- H. INSTALL STEPS ON UPSTREAM FACE.

	CITY OF ALBUQUERQUE
REVISIONS	DRAINAGE
	STORM INLET DOUBLE "D"
	DWG. 2206
	AUG. 1986

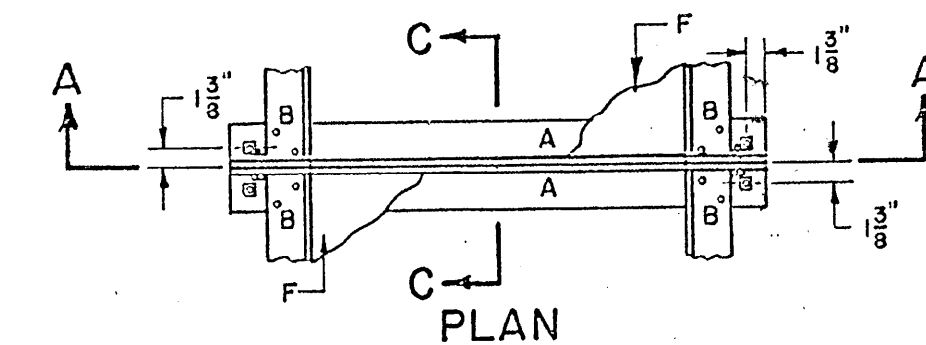
GENERAL NOTES:

1. DETAILS FOR PLACING CATCH BASINS.
STANDARD CURB AND GUTTER.

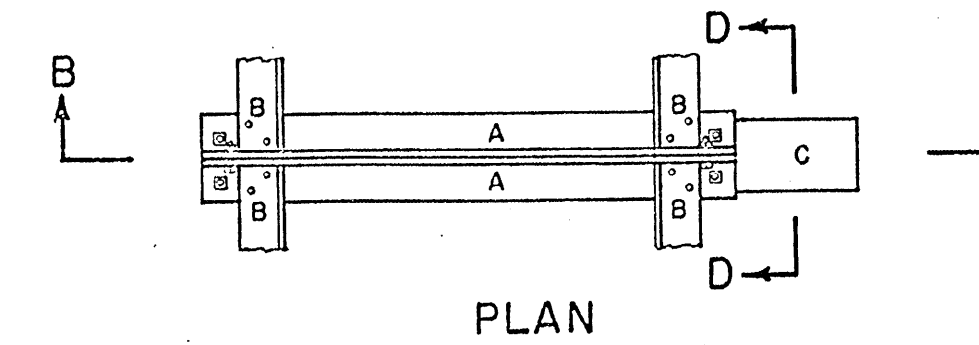
CONSTRUCTION NOTES:

- A. STANDARD CURB AND GUTTER.
- B. STRAIGHT GRADE.
- C. EXPANSION JOINT.
- D. TOP OF CURB.
- E. FLOWLINE.
- F. FOR FRAME & GRATE SEE DWG 2216, 2220 & 2221.
- G. DIRECTION OF FLOW.
- H. POINT OF MEASUREMENT FOR TOP OF GRATE ELEVATION.
- J. PROVIDE 5 FEET TRANSITION EACH SIDE OF CATCH BASIN, WHEN INSTALLING AT SAG POINT IN INSTALLATIONS OTHER THAN AT CURB RETURN.

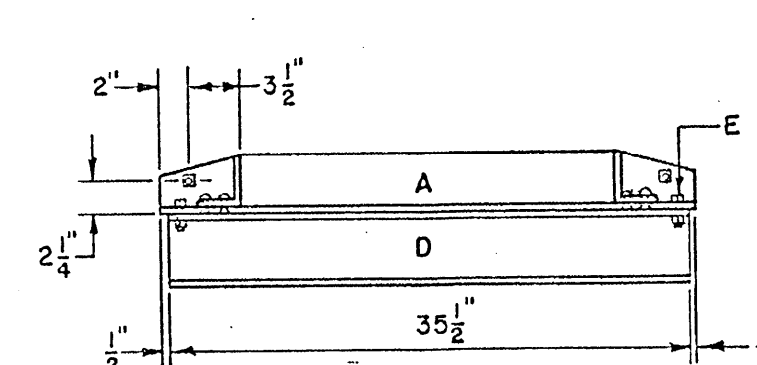
	CITY OF ALBUQUERQUE
REVISIONS	DRAINAGE STORM INLET GUTTER TRANSITION DWG. 2207
	AUG. 1986



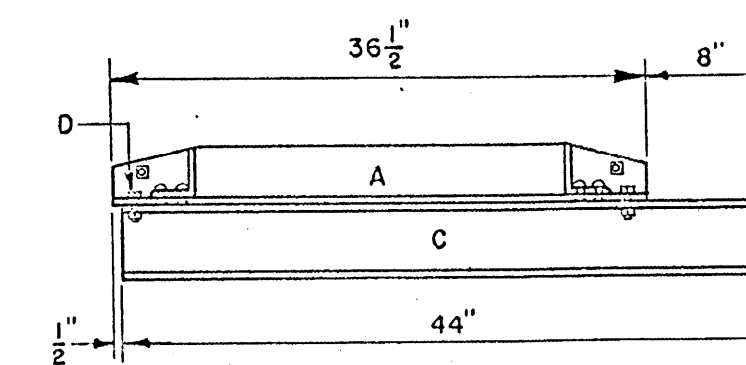
ASSEMBLY FOR DOUBLE "D" CATCH BASIN



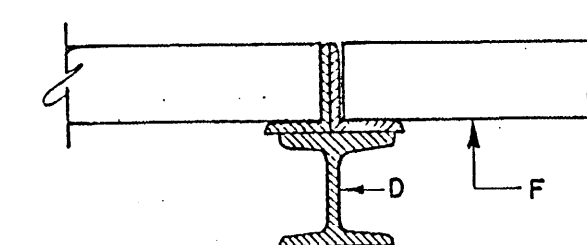
ASSEMBLY FOR DOUBLE "C" CATCH BASIN



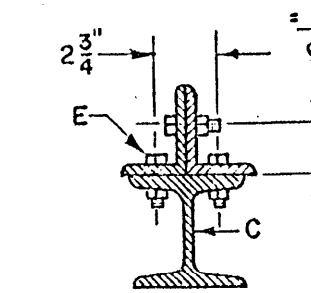
SECTION A A



SECTION B-B



SECTION C-C



SECTION D-D

GENERAL NOTES:

1. ALL BOLTS USED IN CENTER SUPPORT ASSEMBLY SHALL BE $\frac{1}{2}$ "
2. FRAME MAY BE RIVETED OR WELDED.
3. BOLTS (NOT RIVETS OR WELDS) SHALL BE USED TO JOIN TWO OR MORE FRAMES TOGETHER AND TO THE WF BEAM.
4. AFTER CLEANING SURFACE OF SCALE, RUST, ETC., GRATING, FRAME AND CENTER SUPPORT SHALL BE PAINTED WITH ONE SHOP COAT RED OXIDE, TWO FINISH COATS ALUMINUM PAINT (AASHTO M 69).
5. FOR SINGLE TYPE SINGLE BASIN, MOVE ONE END WALL TO FORM NEW SINGLE GRATE CATCH BASIN.

CONSTRUCTION NOTES:

- A. $4" \times 3" \times \frac{1}{2}" \times 36 \frac{1}{2}" \angle$.
 B. $3 \frac{1}{2}" \times 3" \times \frac{3}{8}" \times 40 \frac{3}{8}" \angle$.
 C. 5 X 5 WF 18.5 FLANGE BEAM, FOR CATCH BASIN
 TYPE DOUBLE "C".
 D. 5 X 5 WF 18.5 FLANGE BEAM, FOR CATCH BASIN
 TYPE DOUBLE "D".
 E. $\frac{1}{2}"$ BOLTS, WITH NUTS TO SECURE ANGLE TO BEAM.
 F. FOR FRAME & GRATE SEE DWGS. 2216, 2220, 2221.

CITY OF ALBUQUERQUE
DRAINAGE
STORM INLET
CENTER SUPPORT ASSEMBLY
DWG. 2215
AUG. 1986

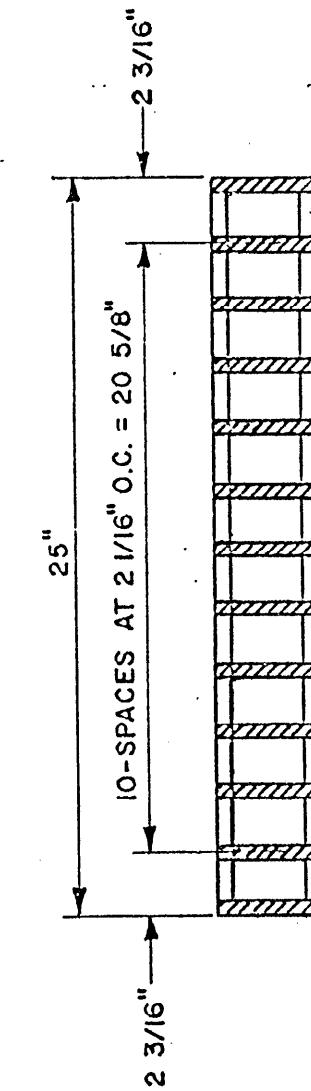
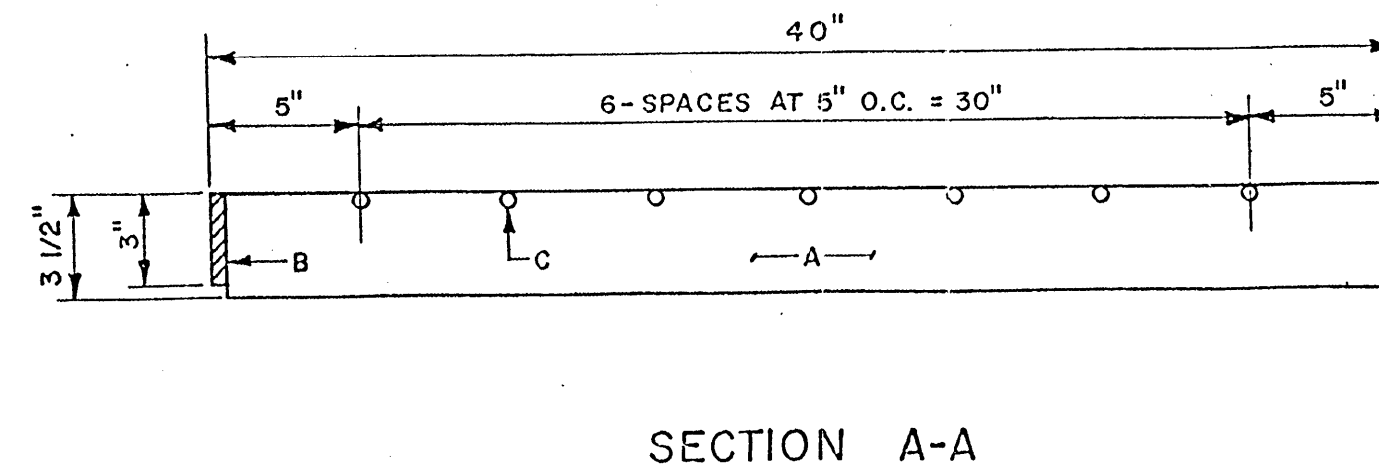
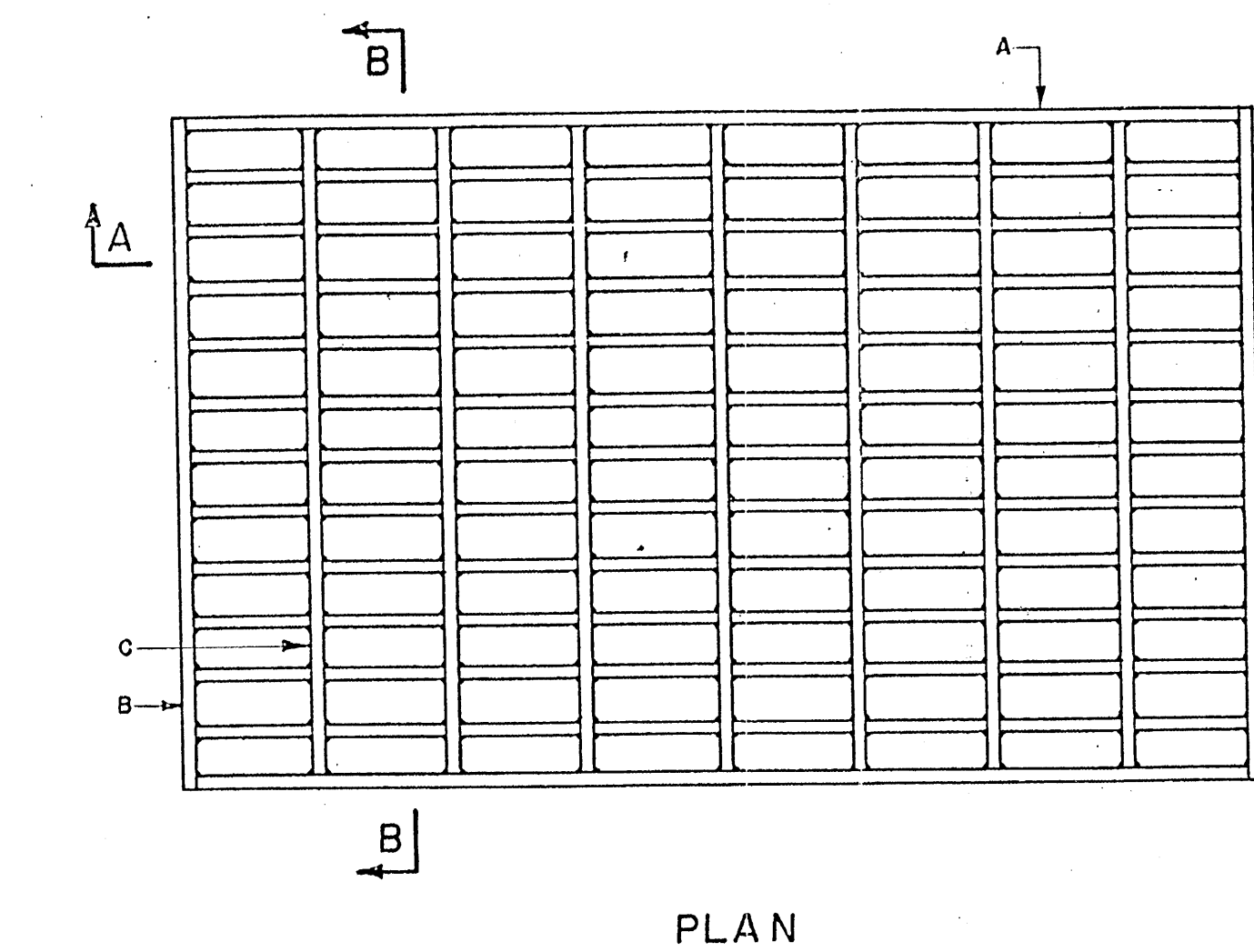
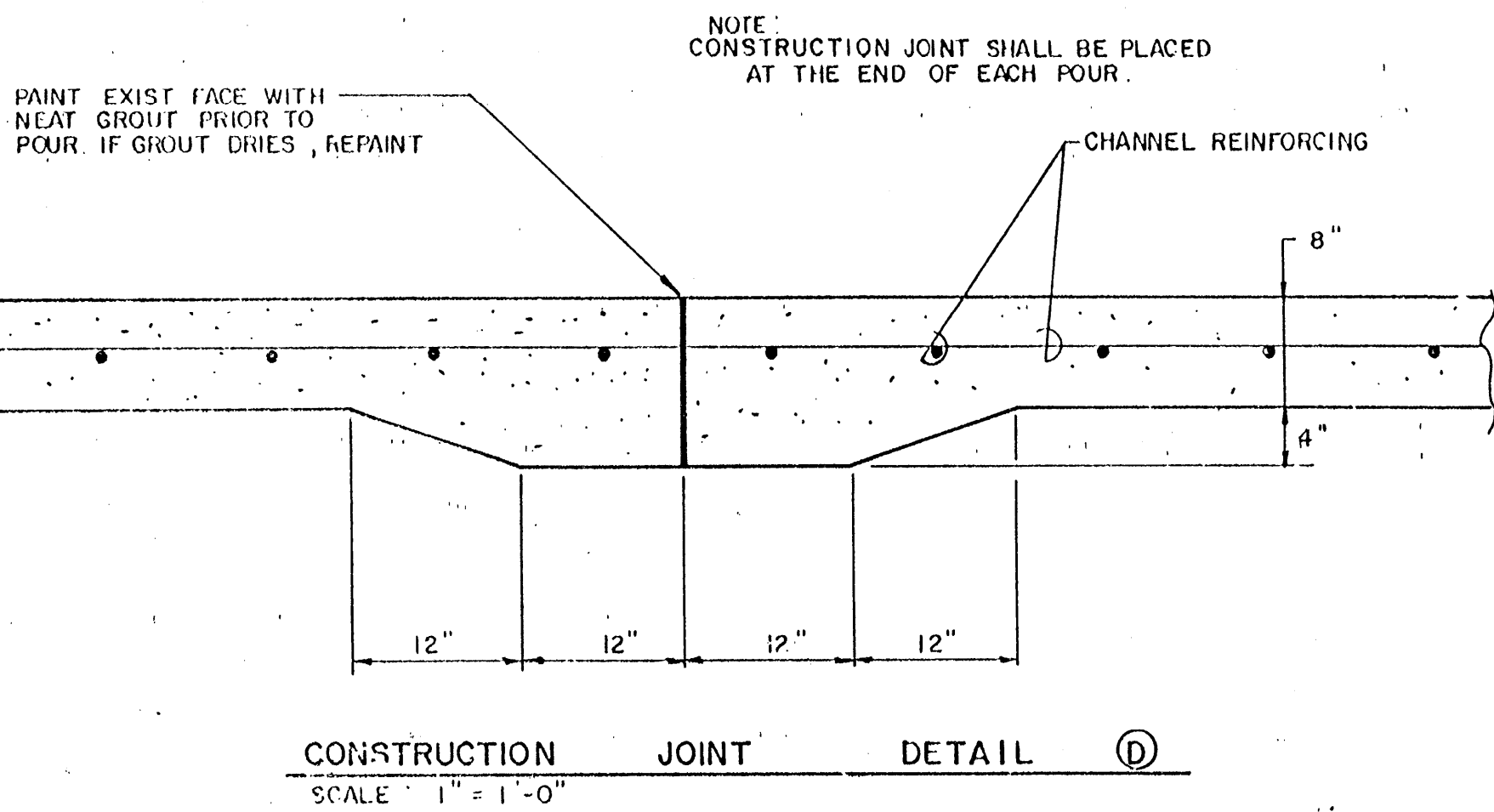
6			
5			
4			
3			
2			
1			
IDENT. NO.	DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)			

COUNTY OF BERNALILLO
NEW MEXICO

OSUNA ROAD

SPECIAL STORM DRAIN DETAILS

F.H.W.A. Region No.	STATE		SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	SP-(M)-4052(200)	2-13	



GENERAL NOTES:

- ALL BARS SHALL BE STRUCTURAL GRADE STEEL, GRADE A36.
- THE GRATE SHALL BE WELDED WITH 1/8" FILLET WELD AROUND BOTH SIDES OF CROSS BARS, 1/4". FILLET WELD BOTH SIDES OF BEARING BARS TO END BARS.
- AFTER CLEANING SURFACE OF SCALE, RUST, OILS, ETC., PAINT GRATE WITH ONE SHOP COAT RED OXIDE, TWO FINISH COATS ALUMINUM PAINT (AASHTO M 69).
- TOP OF CROSS BARS SHALL BE FLUSH WITH TOP OF GRATE.
- GRIND WELDS FLUSH WITH BEARING BARS.
- WHEN INSTALLED IN FRAME, PUSH TIGHT TO ONE SIDE, OTHER SIDE SHALL HAVE 1/2" MAX. OPENING. SPACERS WELDED TO FRAME MAY BE USED IF REQUIRED TO KEEP 1/2" SPACE OR LESS.

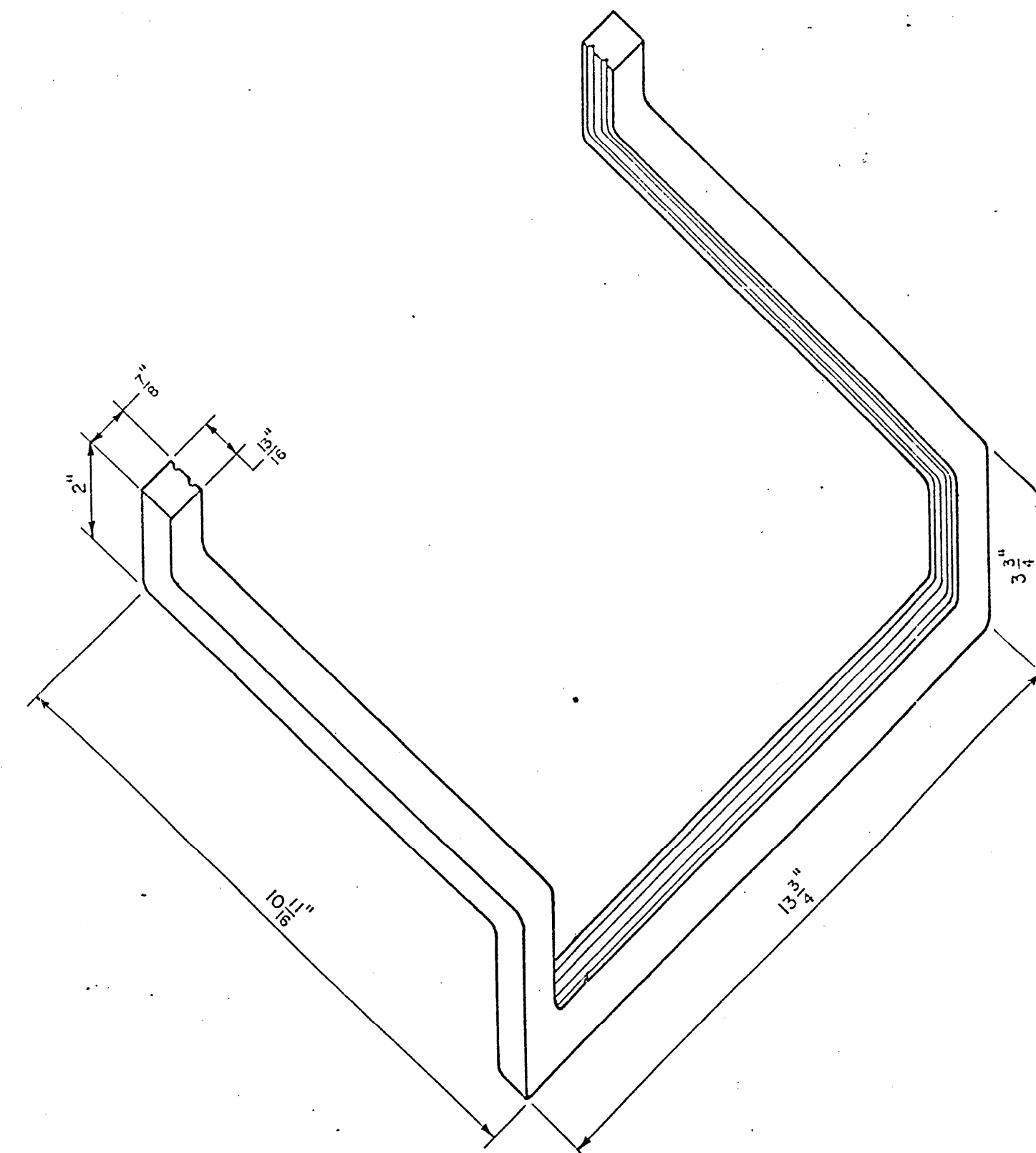
CONSTRUCTION NOTES:

- BEARING BARS, (13) 1/2" X 3 1/2" X 39".
- END BARS, (2) 1/2" X 3" X 25".
- CROSS BARS, (7) 1/2" DIA. X 24".

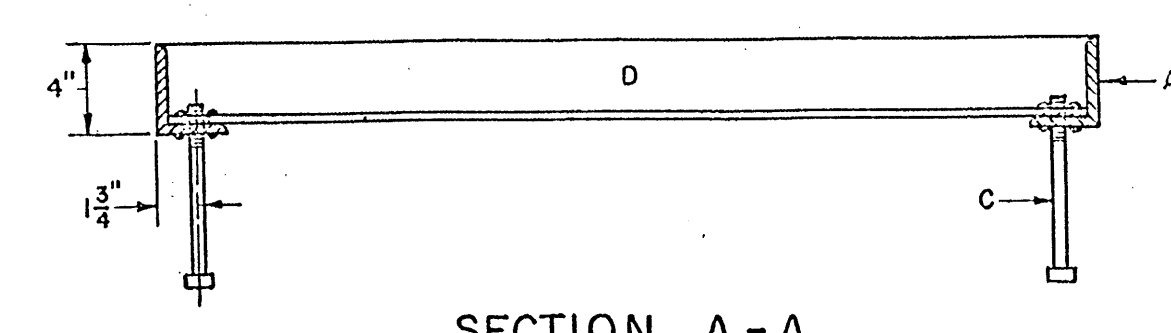
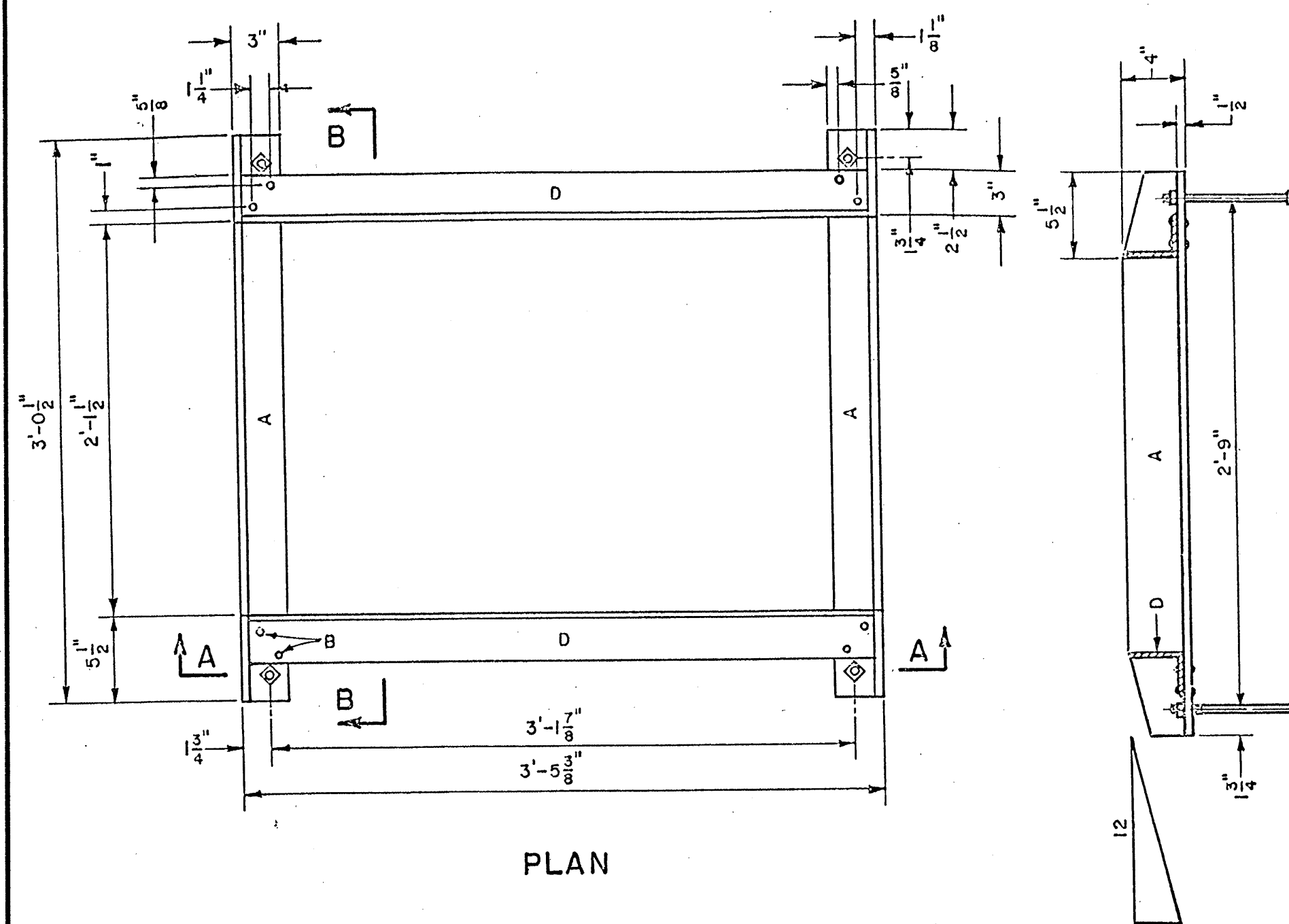
REVISIONS	CITY OF ALBUQUERQUE
	DRAINAGE STORM INLET ALBUQUERQUE GRATE DWG. 2220 AUG. 1986

GENERAL NOTES:

- ALUMINUM STEP, ALCOA NO. 12653A OR APPROVED EQUAL, STEPS TO BE PLACED AS NOTED ON PLANS.
- STORM INLETS: INLETS GREATER THAN 4' DEEP SHALL HAVE ALUMINUM STEPS INSTALLED IN UPSTREAM FACE OF INLET WALLS. STEPS SHALL PROTRUDE 7" FROM THE WALL AND BE CENTERED 12" FROM FACE OF CURB. STEPS SHALL BE 12" APART, WITH THE TOP STEP 18" FROM TOP OF GRATE AND THE BOTTOM STEP NO MORE THAN 16" ABOVE THE CONCRETE FILL IN THE BOTTOM OF THE INLET.
- DRAINAGE CHANNELS: CHANNELS SHALL HAVE ALUMINUM STEPS FOR ACCESS AND RESCUE. STEPS SHALL BE INSTALLED ON BOTH SIDES OF THE CHANNEL AND SHALL BE LOCATED IMMEDIATELY BEFORE THE INLET AND AFTER OUTLET TRANSITIONS FOR CROSSING STRUCTURES AND AT 700' MAXIMUM SPACING ALONG CHANNELS.



CITY OF ALBUQUERQUE
DRAINAGE ALUMINUM STEP DETAIL DWG. 2229 AUG. 1986



SECTION B-B

GENERAL NOTES:

- ALL EXPOSED METAL PARTS SHALL BE PAINTED PRIOR TO ASSEMBLY. WELDING, MACHINING AND DRILLING SHALL BE DONE PRIOR TO PAINTING. ALL DIMENSIONS ARE FINISH DIMENSIONS.
- ALL PARTS SHALL BE OF STRUCTURAL STEEL, GRADE 36.
- FOR CLEANING AND PAINTING OF FRAME SEE DWG. 2215, GENERAL NOTE NO. 4.
- FRAME MAY BE WELDED OR RIVETED.

CONSTRUCTION NOTES:

- 4" X 3" X 1/2" X 3'-1/2" L.
- 2-3/8" RIVETS AT EACH CORNER, SEE GENERAL NOTE NO. 5.
- 4'-1/2" X 8" BOLTS WITH SQUARE HEAD & NUT AT EACH CORNER FOR ANCHORING FRAME INTO CONCRETE WALL.
- 3'-1/2" X 3" X 3/8" X 3'-4-3/8" L.

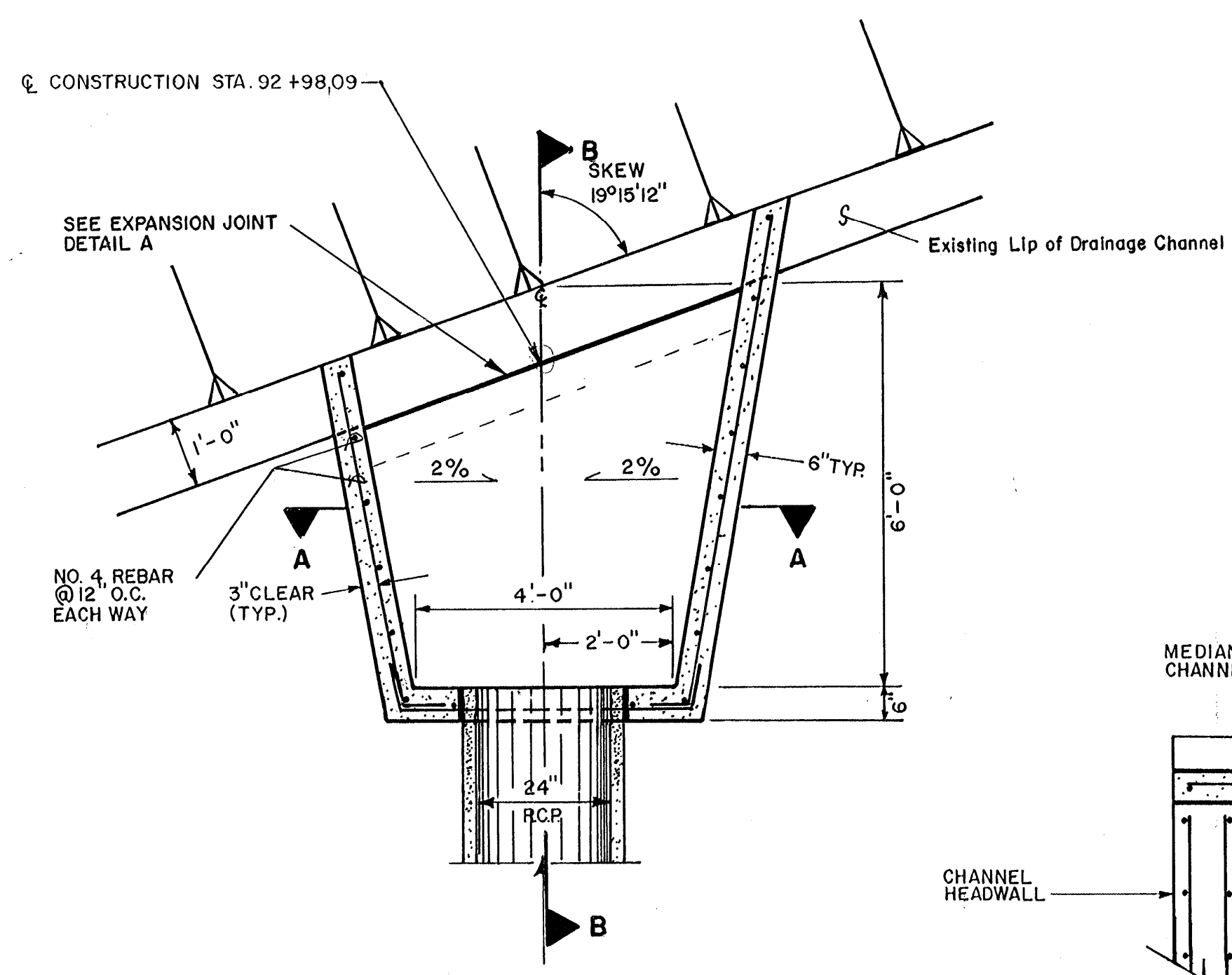
REVISIONS	CITY OF ALBUQUERQUE
	DRAINAGE STORM INLET FRAME DWG. 2216 AUG. 1986

IDENT. NO.	DESCRIPTION	DATE	BY
6			
5			
4			
3			
2			
1			

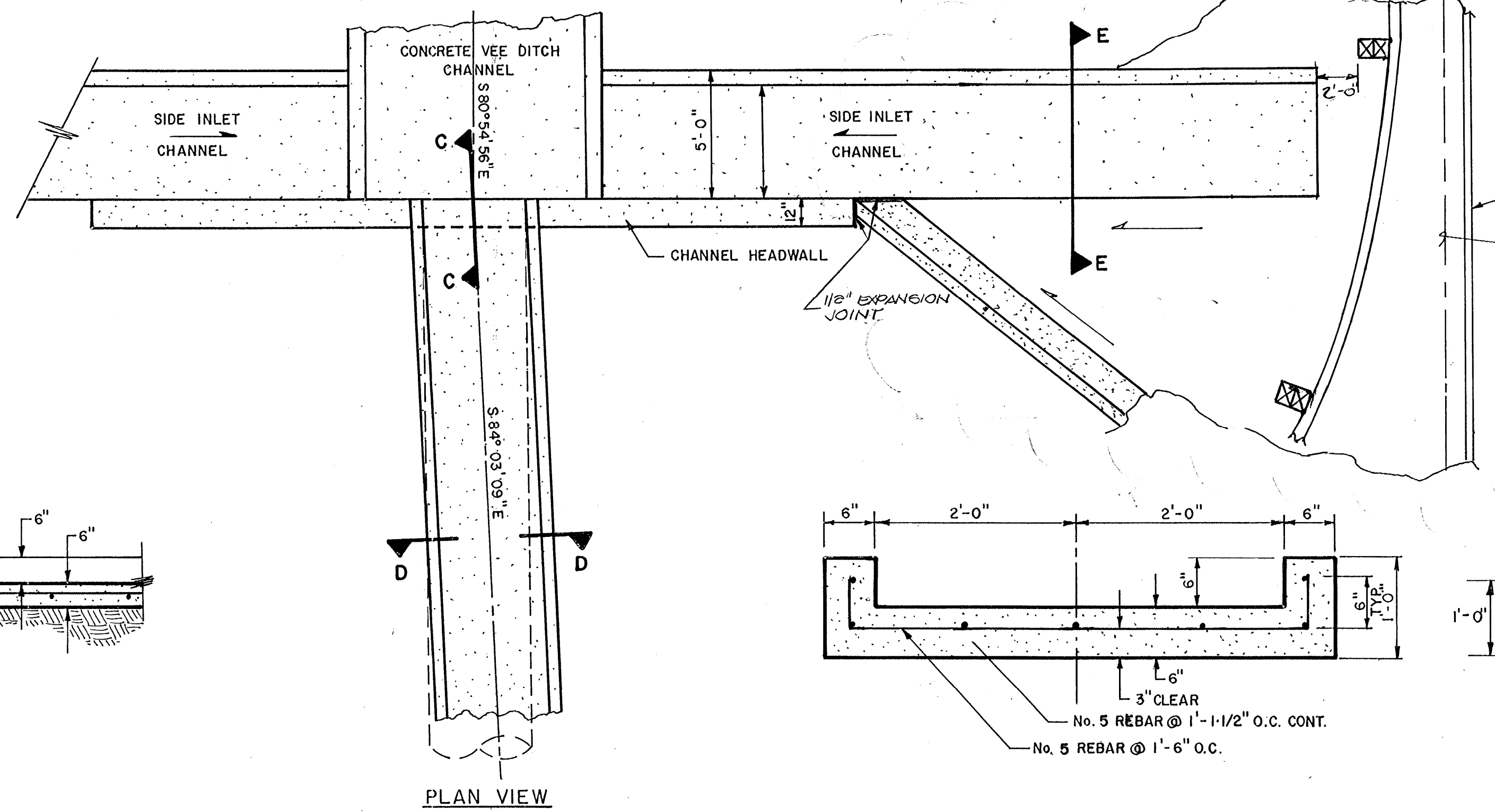
REVISIONS (OR CHANGE NOTICES)
COUNTY OF BERNALILLO NEW MEXICO

OSUNA ROAD
SPECIAL STORM DRAIN DETAILS

F.H.W.A. Region No.	STATE	SP-(M)-4052(200)	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		2-14	



**CONCRETE DRAINAGE OUTLET AT
NORTH DIVERSION CHANNEL**
N.T.S.

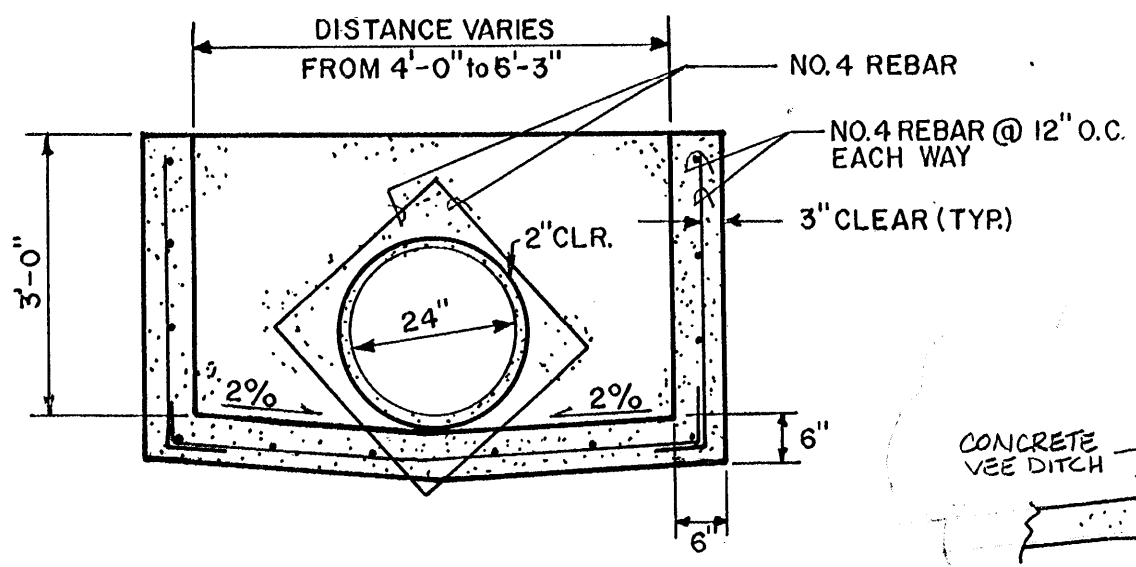


SECTION M.R. C-C
N.T.S.

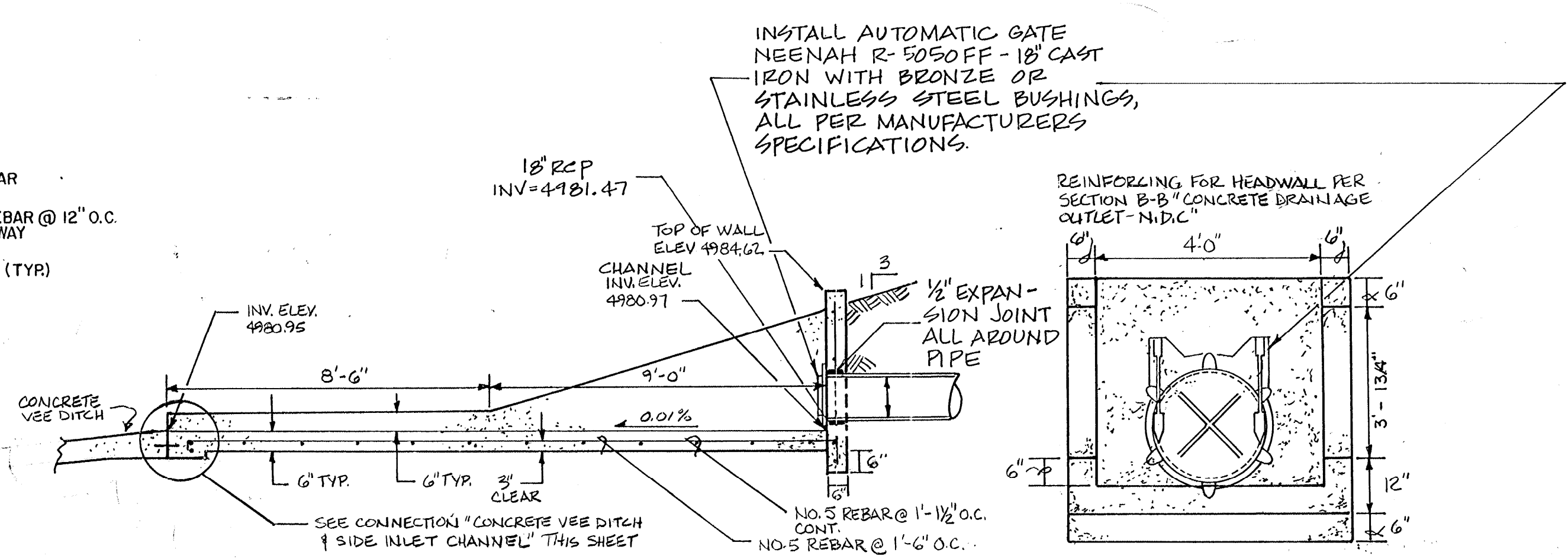
MEDIAN RUNDOWN CHANNEL
N.T.S.

SECTION M.R. D-D
N.T.S.

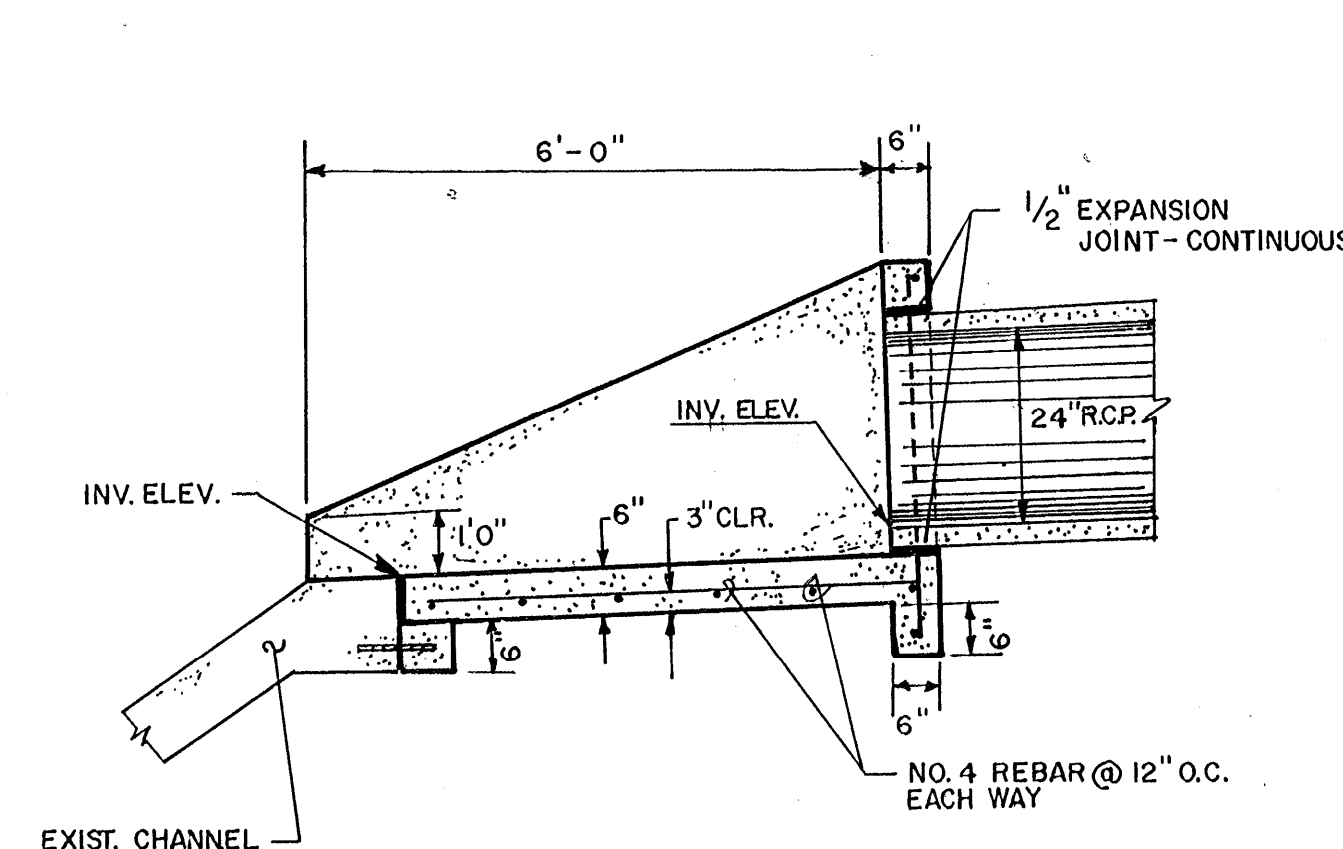
SIDE INLET SECTION E-E
N.T.S.



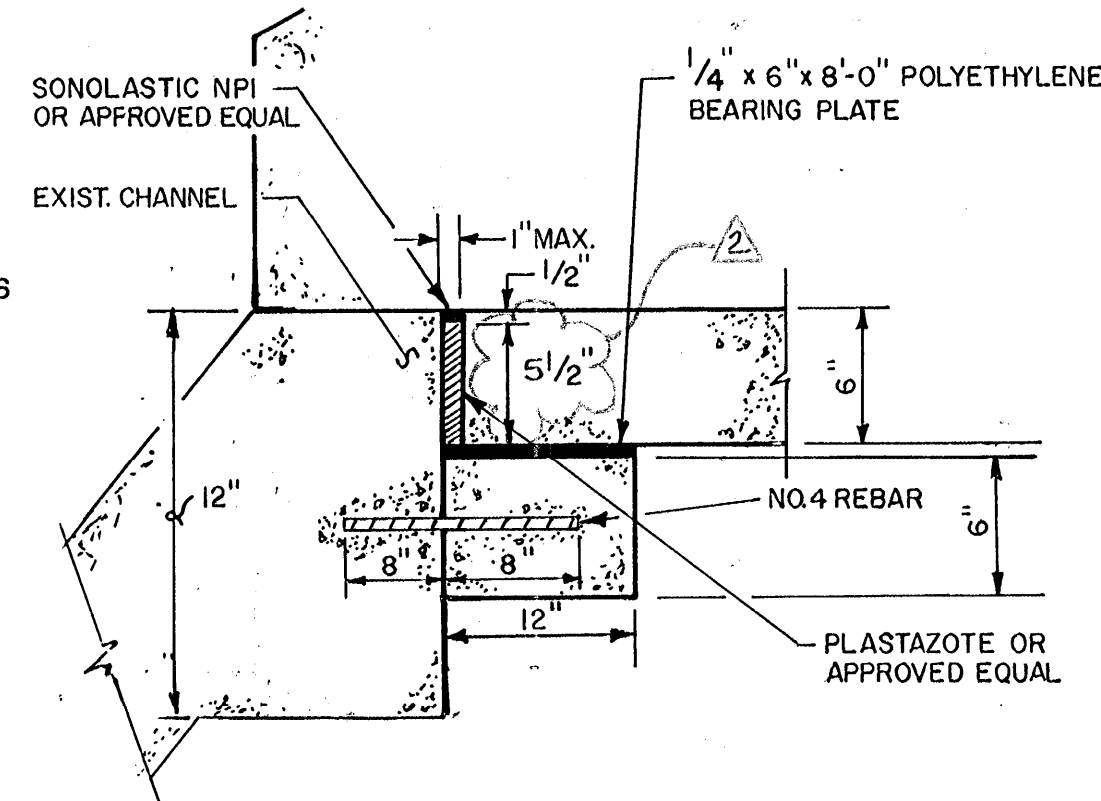
SECTION C.D.O. A-A
N.T.S.



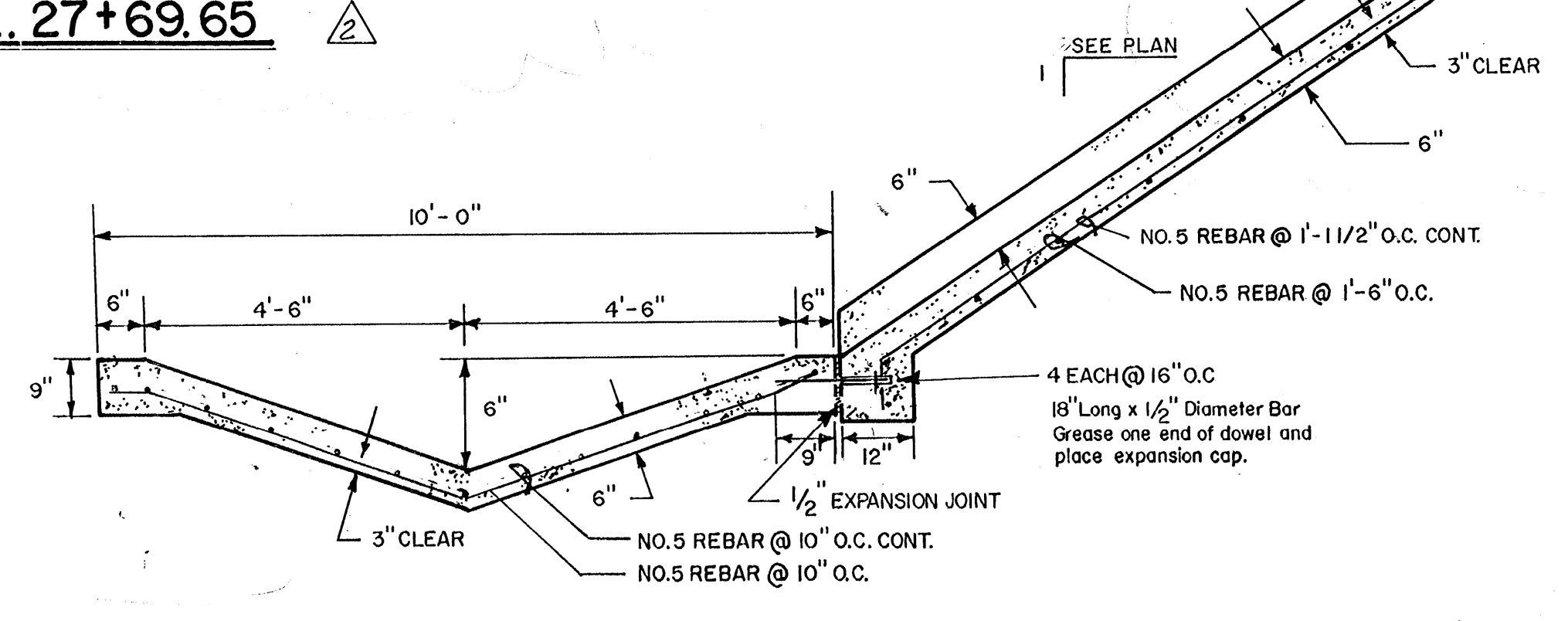
OUTLET STRUCTURE AT STA. 27+69.65
N.T.S.



SECTION C.D.O. B-B
N.T.S.



EXPANSION JOINT DETAIL-A
N.T.S.



**CONCRETE VEE DITCH CHANNEL &
SIDE INLET CHANNEL SECTION**
N.T.S.

CO#2 - EXP. JOINT DIMENSION	7-88	DL
CO#2 - NEENAH DRAINAGE GATE	6-88	DL
REVISED SIDE INLET GEO. CO#1	6-88	DL
REVISIONS (OR CHANGE NOTICES)		

COUNTY OF BERNALILLO
NEW MEXICO

OSUNA ROAD
SPECIAL DRAINAGE
DETAILS

ROADWAY

CURVE NO.	DELTA	RADIUS	LENGTH	TAN	DEGREE OF CURVE
1	81°28'42"	30.00	42.66	25.84	190°59'09"
2	88°51'18"	30.00	51.59	34.83	190°59'09"
3	88°40'35"	30.00	46.95	29.83	190°59'09"
4	90°19'25"	30.00	47.29	30.17	190°59'09"
5	180°00'00"	25.00	91.11	21.43	38°11'50"
6	15°15'37"	150.00	42.57	7.86	197°34'18"
7	180°00'00"	29.00	91.11	21.43	38°11'50"
8	34°54'55"	25.00	15.23	7.86	229°10'59"
9	34°54'55"	25.00	15.23	7.86	229°10'59"
10	90°00'00"	62.00	97.39	8.00	92°24'45"
11	59°27'23"	8.00	12.57	8.00	93°55'39"
12		61.00	63.30	8.00	
13					

NOTE:
ALL SIMPLE CURVES ON THIS
PROJECT ARE BASED ON THE
ARC DEFINITION (RADIUS OF
A 1° CURVE = 5729.58)

T.C.	R.
1	8725
2	8700
3	8675

T.C.	R.
1	8852
2	8828
3	8803

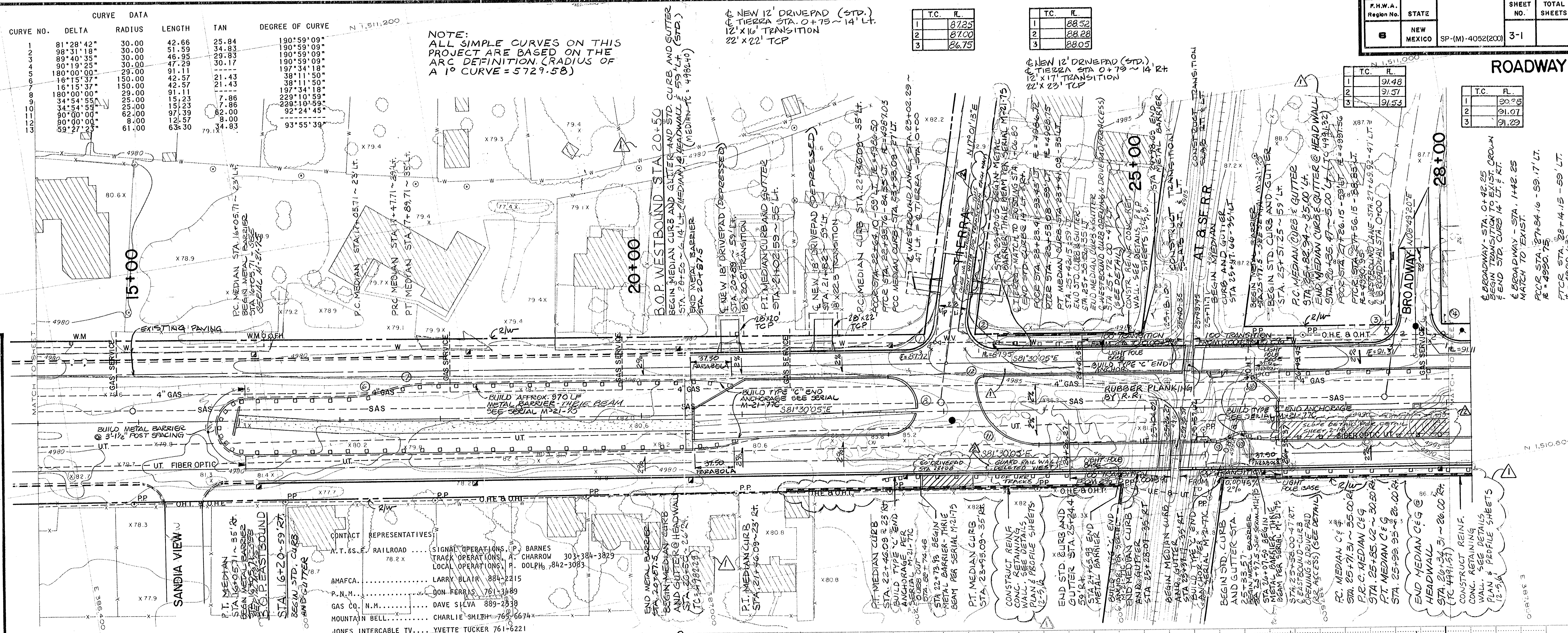
T.C.	R.
1	9148
2	9157
3	9153

T.C.	R.
1	9109
2	9107
3	9129

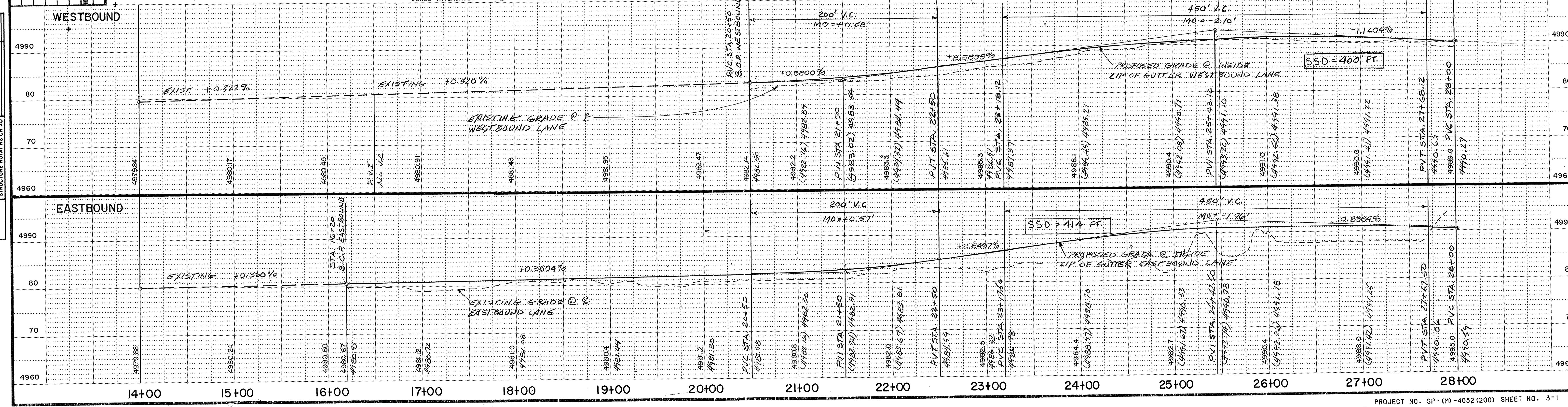
PLAN	DATE	BY
SURVEYED		
NOTE BOOK		
ALIGNMENT CHECKED		
RT. OF WAY CHECKED		

SCALE: 1" = 50'

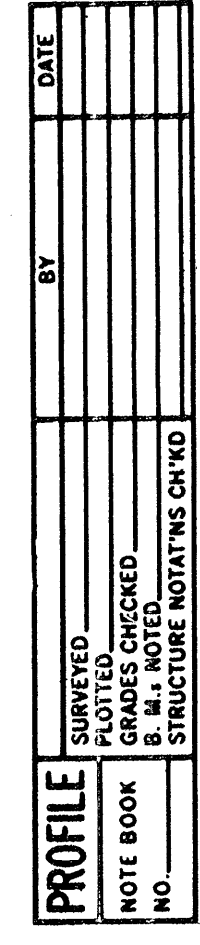
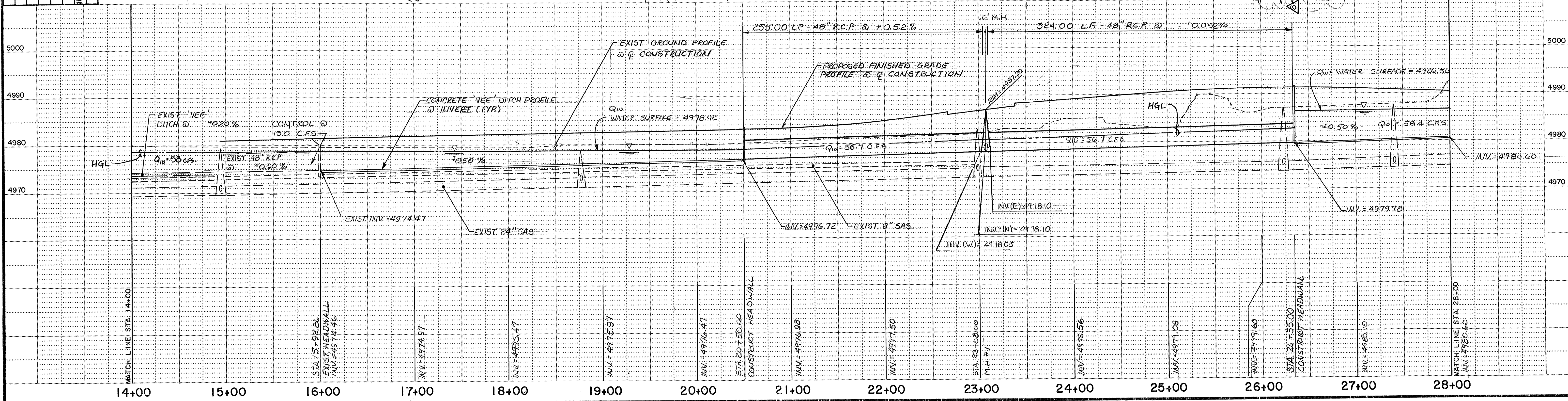
AS-BUILT	7/90	VS
CHANGE ORDER #1- RET. WALLS,	6-88	DL
DESCRIPTION	DATE	BY
REVISIONS (OR CHANGE NOTICES)		
IDENT. NO.		



PROFILE	DATE	BY
PLOTTED		
NOTE BOOK		
STRUCTURE NOTATIONS CHKD		



SEE SHEET 3-16

[illegible]

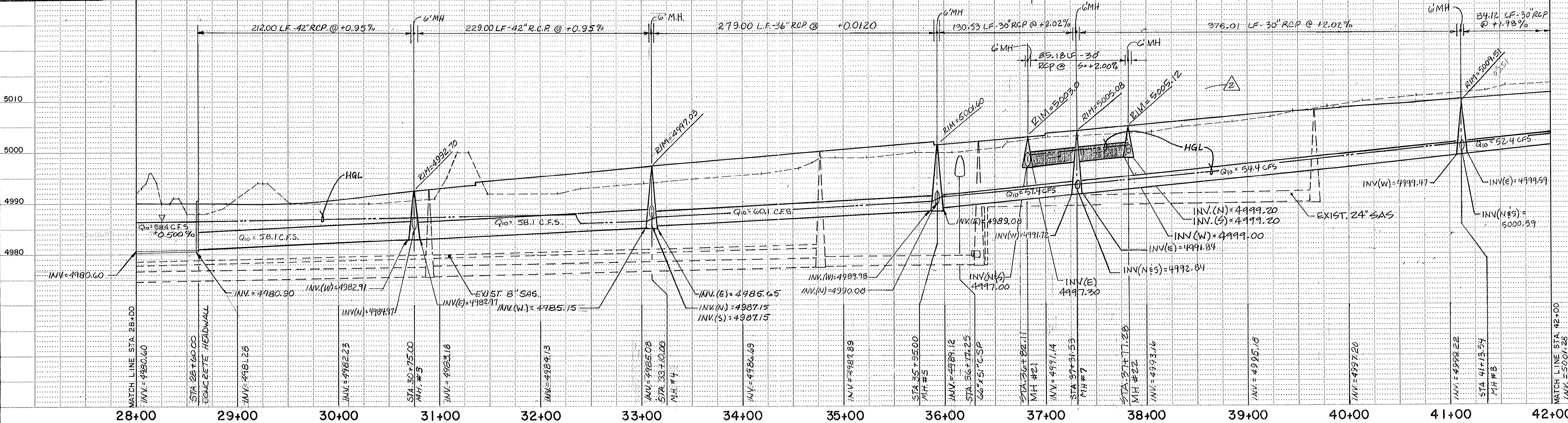
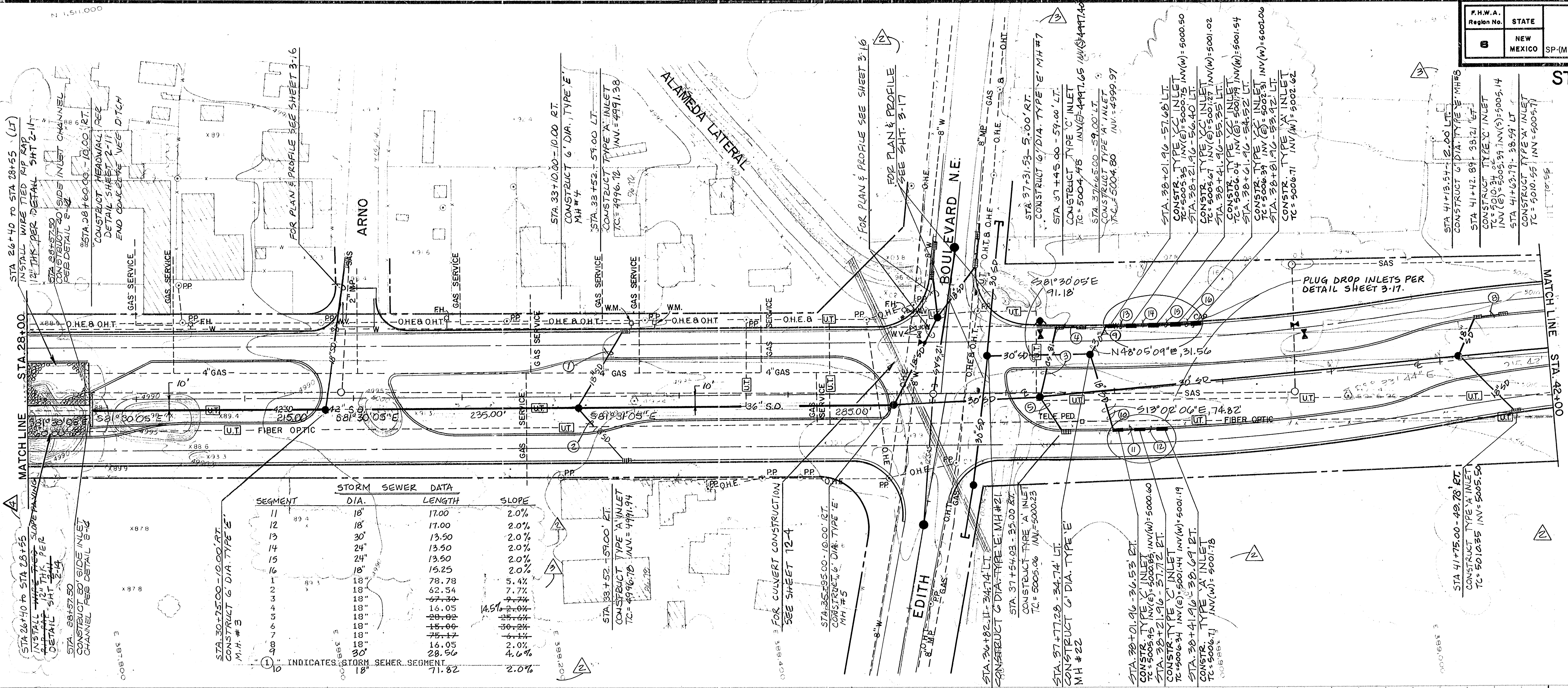
F.H.W.A. Region No.	STATE	SHEET NO.	TOTAL SHEETS
8	NEW MEXICO	SP-(M)-4052(200)	3-12

STORM DRAIN

PLAN	DATE	BY
SURVEYED		
NOTED		
PLANNED		
DESIGNED		
ENGINEERED		
CHECKED		
APPROVED		

PROFILE	DATE	BY
SURVEYED		
NOTED		
PLANNED		
DESIGNED		
ENGINEERED		
CHECKED		
APPROVED		

REVISIONS (OR CHANGE NOTICES)	DATE	BY
AS-BUILT	7/90	DL
SD REVISIONS PER CONTRACTOR	6-88	DL
CO#2 - ADDED 30" SD, MOVED D.I.	6-88	DL
CHANGE ORDER #1 - RIP RAP	6-88	DL



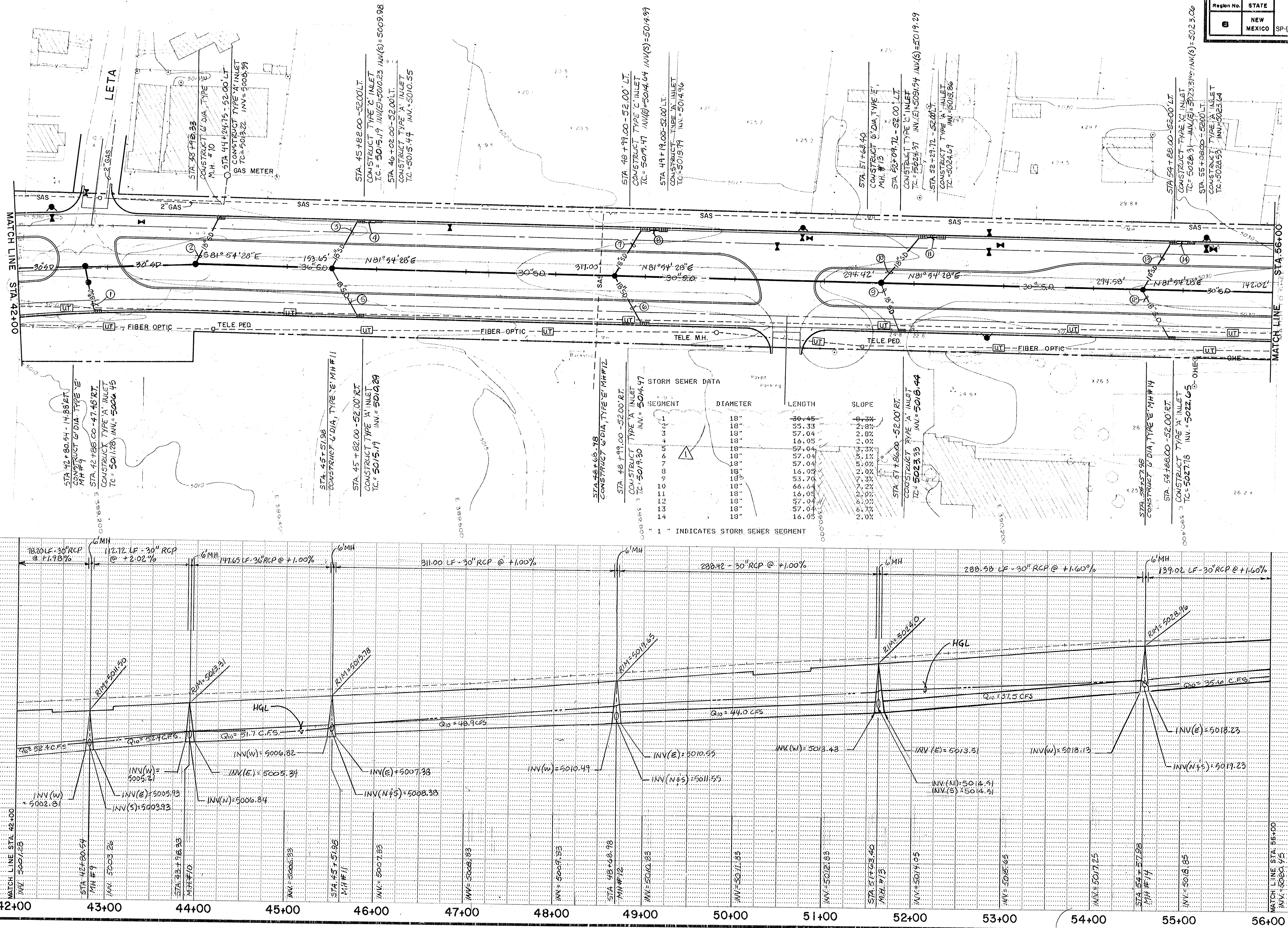
F.H.W.A. Region No.	STATE	SHEET NO.	TOTAL SHEETS
8	NEW MEXICO	3-13	

STORM DRAIN

SCALE: 1" = 50'

PLAN	DATE
BY	
DATE	
NOTE BOOK	
NO.	

PROFILE	DATE
BY	
DATE	
NOTE BOOK	
NO.	



STORM DRAIN

SCALE: 1" = 50'

CURVILINEAR PIPE DATA

NO.	RADIUS	DELTA	TANGENT	LENGTH
1	1835.60	03°32'57"	56.87	113.71
2	1835.60	09°43'10"	156.07	311.39
3	1835.60	14°02'46"	224.14	450.00

STORM SEWER DATA

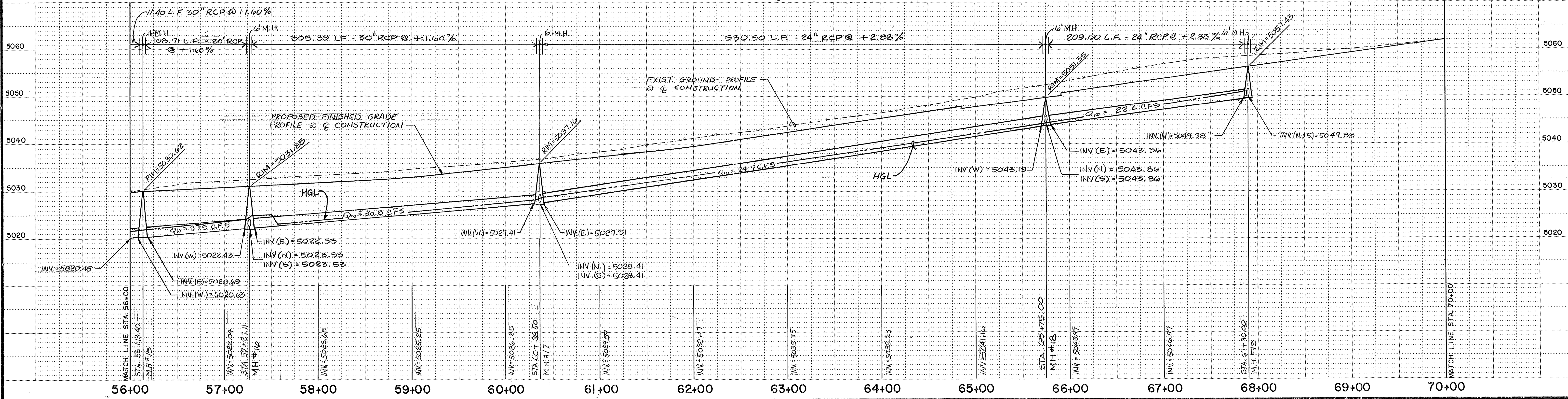
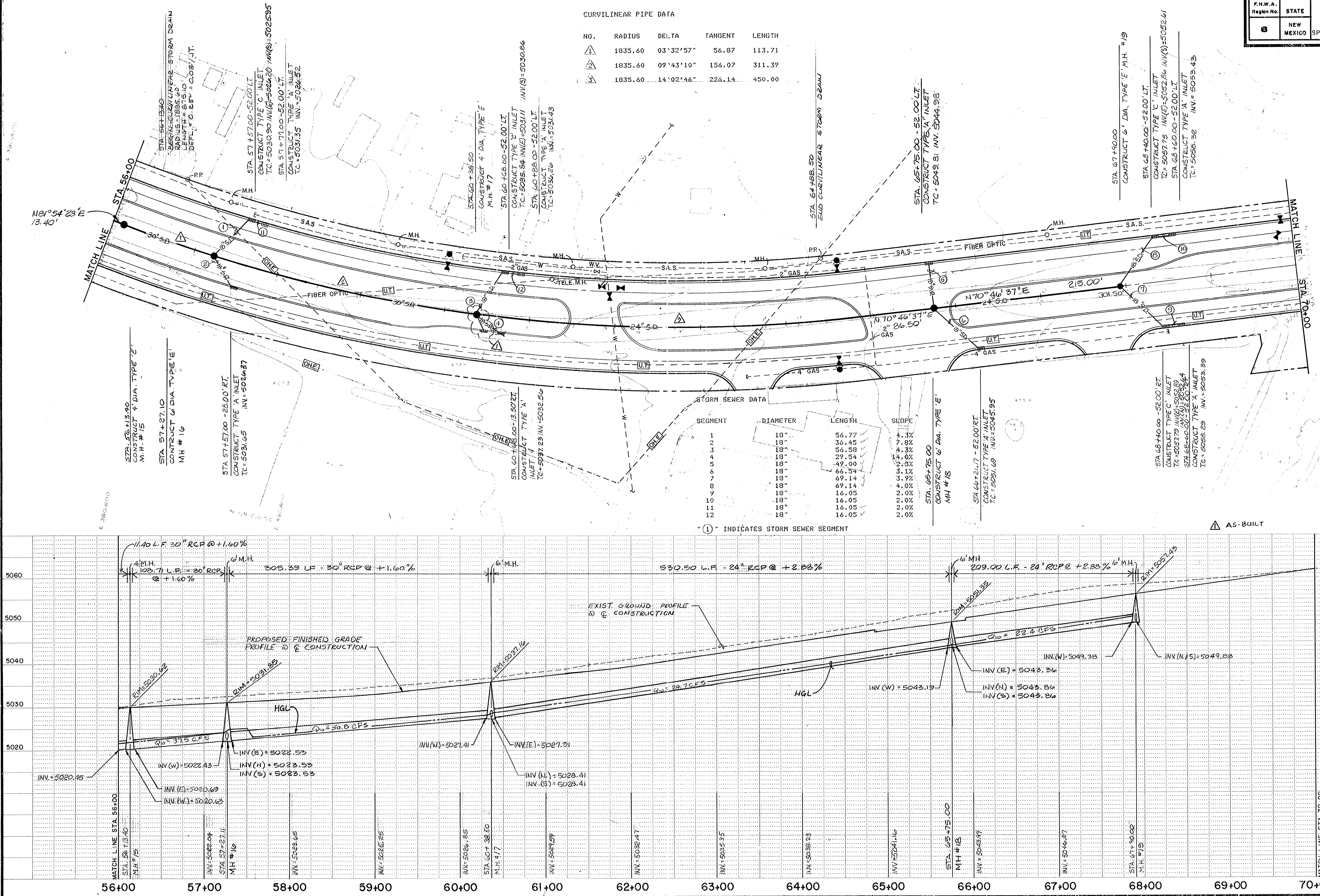
SEGMENT	DIAMETER	LENGTH	SLOPE
1	18"	56.77	4.3%
2	18"	36.45	7.8%
3	18"	36.58	4.8%
4	18"	29.54	14.0%
5	18"	42.00	5.5%
6	18"	66.54	3.1%
7	18"	69.14	3.9%
8	18"	69.14	4.0%
9	18"	16.05	2.0%
10	18"	16.05	2.0%
11	18"	16.05	2.0%
12	18"	16.05	2.0%

"1" INDICATES STORM SEWER SEGMENT

AS-BUILT

PLAN	DATE	BY
NO.		
NOTE BOOK		
NO.		

PROFILE	DATE	BY
NO.		
NOTE BOOK		
NO.		

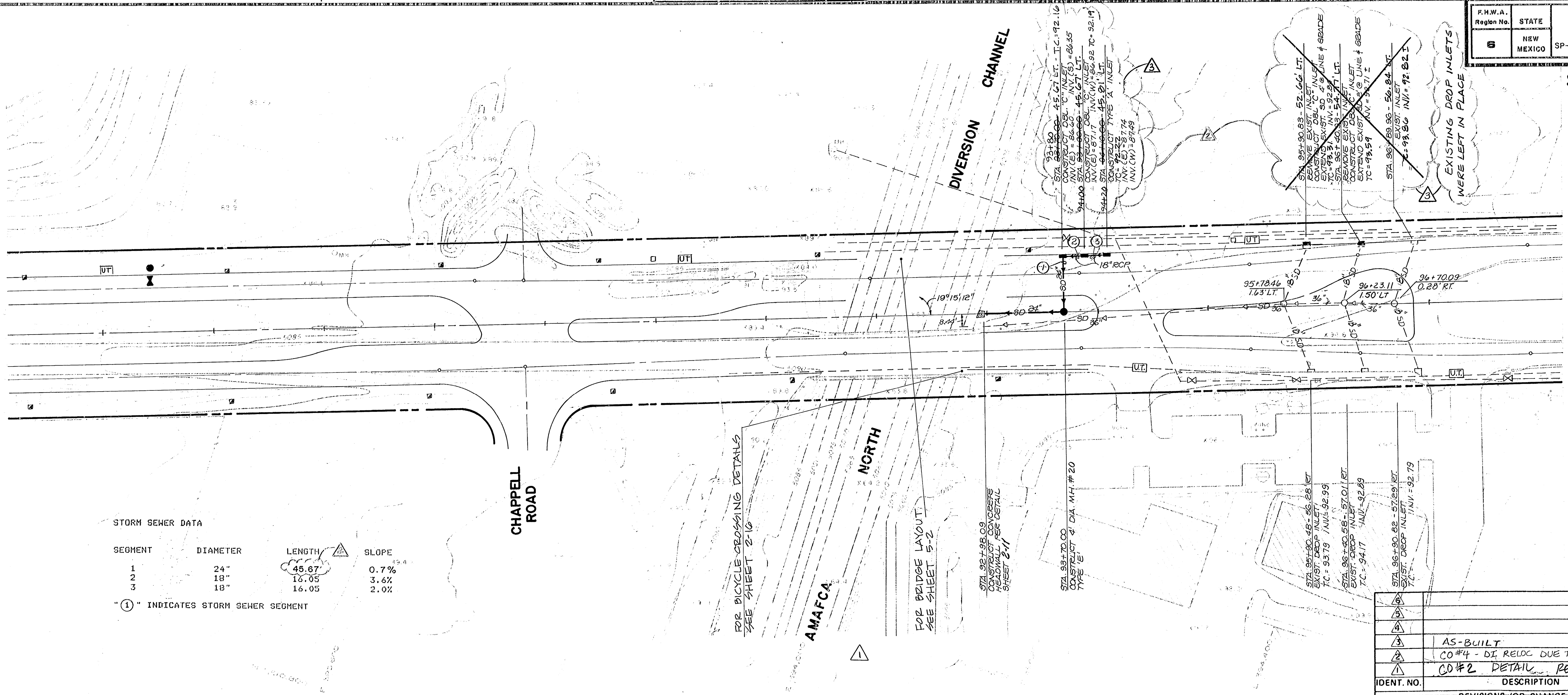


P.H.W.A. Region No.	STATE	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	3-15	

STORM DRAIN

PLAN	DATE	BY	DATE
SURVEYED			
ALIGNED			
CHECKED			
BY			
NO.			

SCALE: 1" = 50'



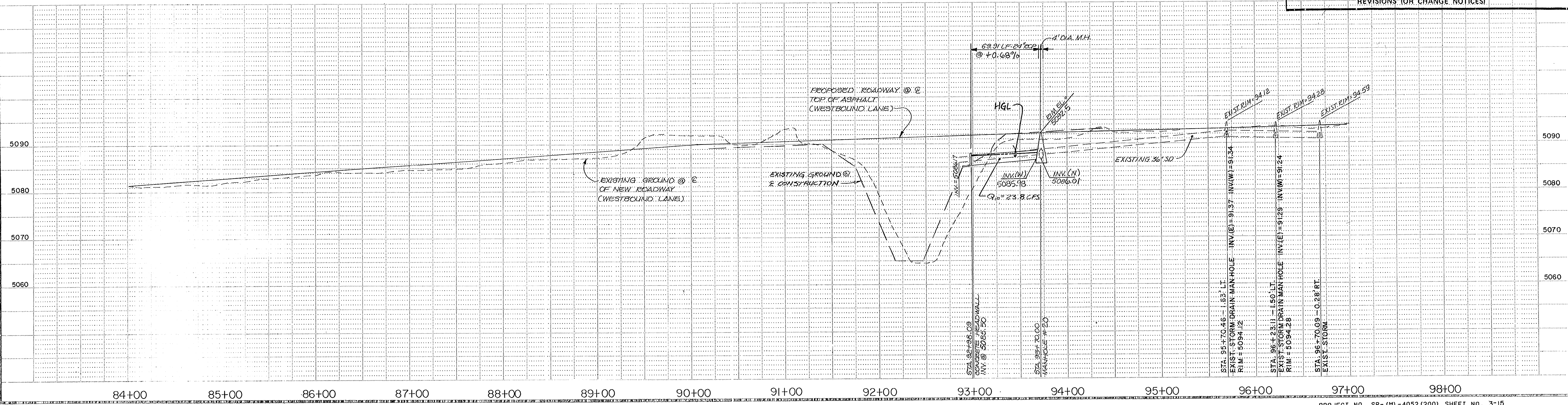
SEGMENT	DIAMETER	LENGTH	SLOPE
1	24"	45.67'	0.7%
2	18"	16.05'	3.6%
3	18"	16.05'	2.0%

"1" INDICATES STORM SEWER SEGMENT

IDENT. NO.	DESCRIPTION	DATE	BY
1	AS-BUILT	7/90	TS
2	CO #4 - DI. RELOC. DUE TO BRIDGE REL.	8-88	DL
3	CO #2 DETAIL, REFS	6-88	DL

REVISIONS (OR CHANGE NOTICES)

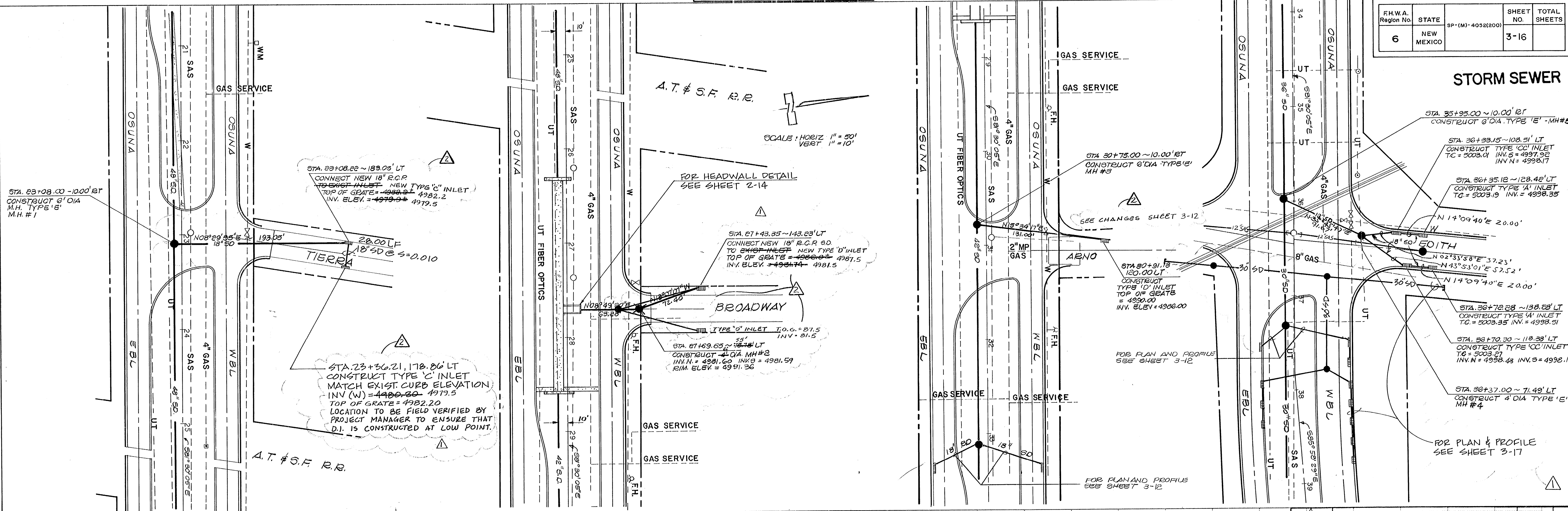
PROFILE	DATE	BY	DATE
SURVEYED			
GRADES CHECKED			
BY			
NO.			



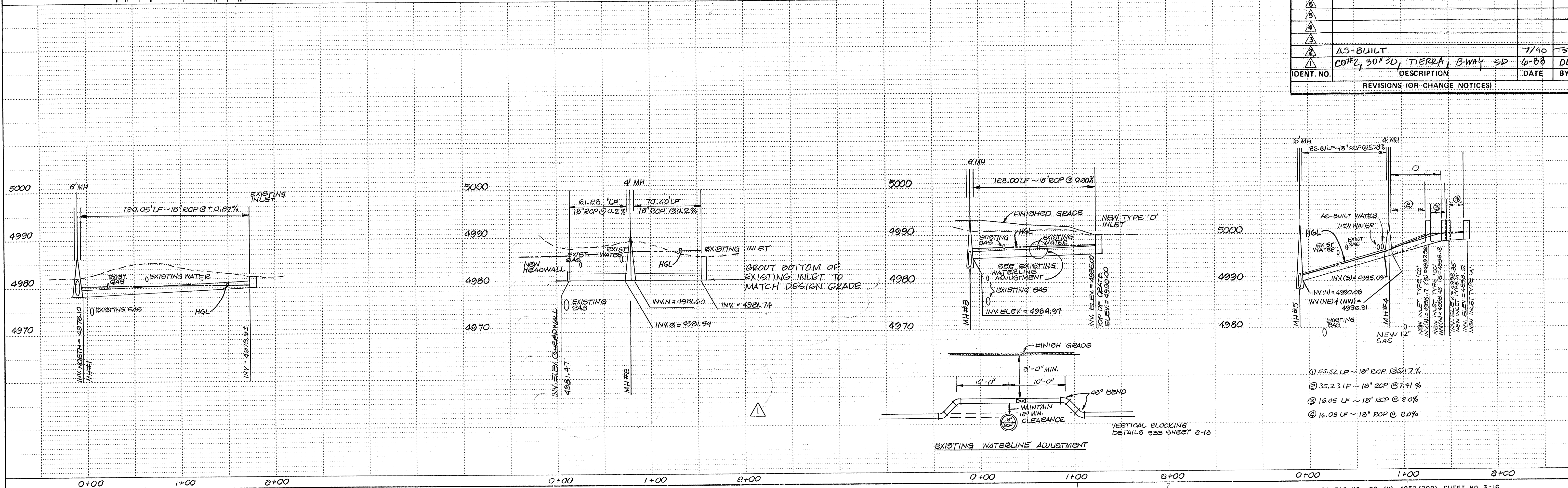
F.H.W.A. Region No.	STATE	SP-(M)-4052(200)	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		3-16	

STORM SEWER

PLAN	DATE	BY
SUBMITTED		
PLOTTED		
ALIGNMENT CHECKED		
AT OF MAY CHICAGO		
NO.		



PROFILE	DATE	BY
SURVEYED		
GRADES CHECKED		
B.M. NOTED		
STRUCTURE NOTATIONS OK		
NO.		



IDENT. NO.	DESCRIPTION	DATE	BY
1	AS-BUILT	7/90	TS
2	CO#2, 30" SD, TIERRA, B-WAY SD	6-88	DL
REVISIONS (OR CHANGE NOTICES)			

- 1. 55.52 LF ~ 18" RCP @ 0.7%
- 2. 35.23 LF ~ 18" RCP @ 7.41 %
- 3. 16.05 LF ~ 18" RCP @ 0.0%
- 4. 16.05 LF ~ 18" RCP @ 0.0%

F.H.W.A. Region No.	STATE	SP-(M)-4052(200)	SHEET NO.	TOTAL SHEETS
	NEW MEXICO		3-17	

STORM DRAIN

PLAN	DATE	BY
DESIGNED		
CHECKED		
APPROVED		
ROUTE BOOK		
NO.		

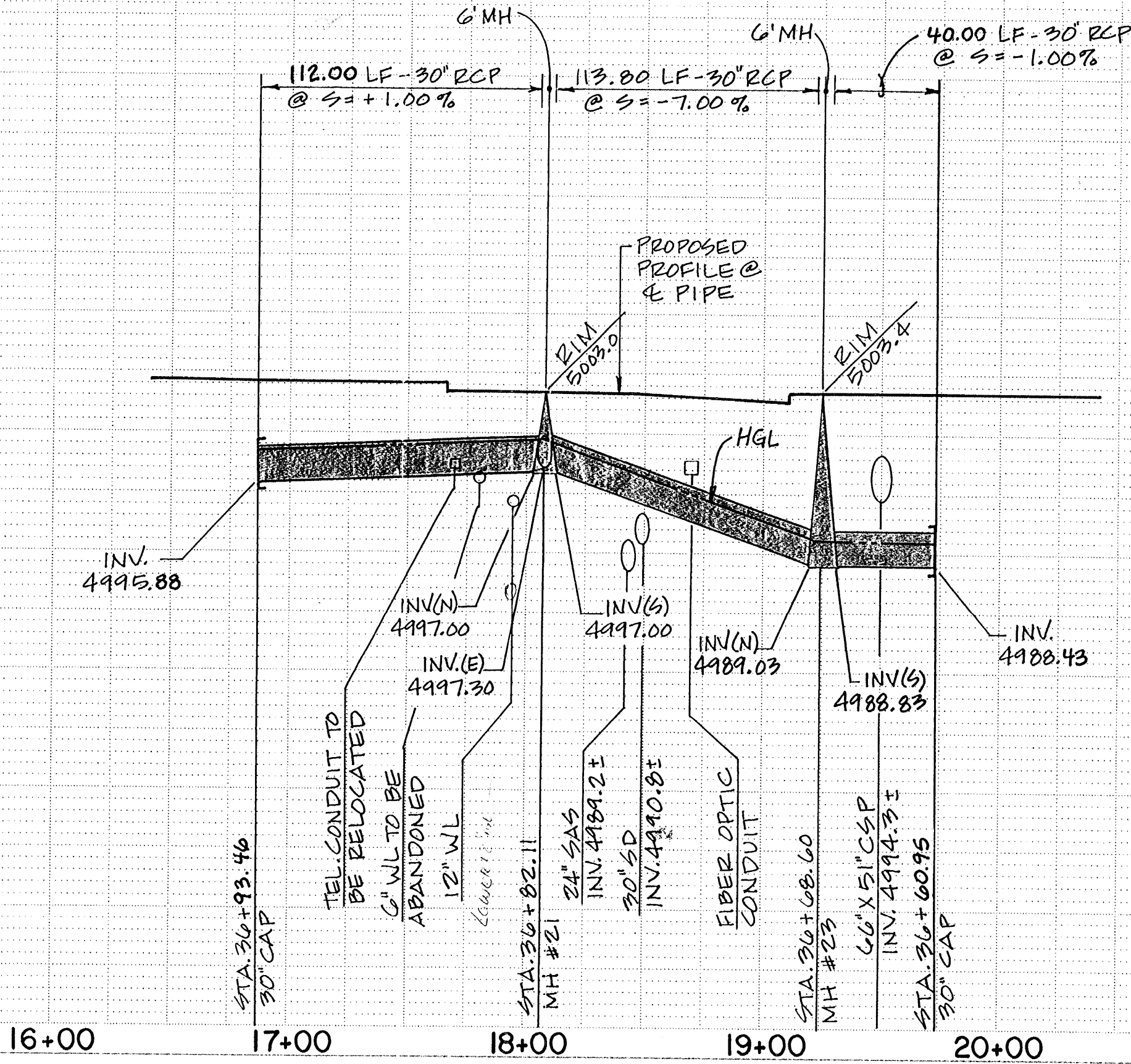
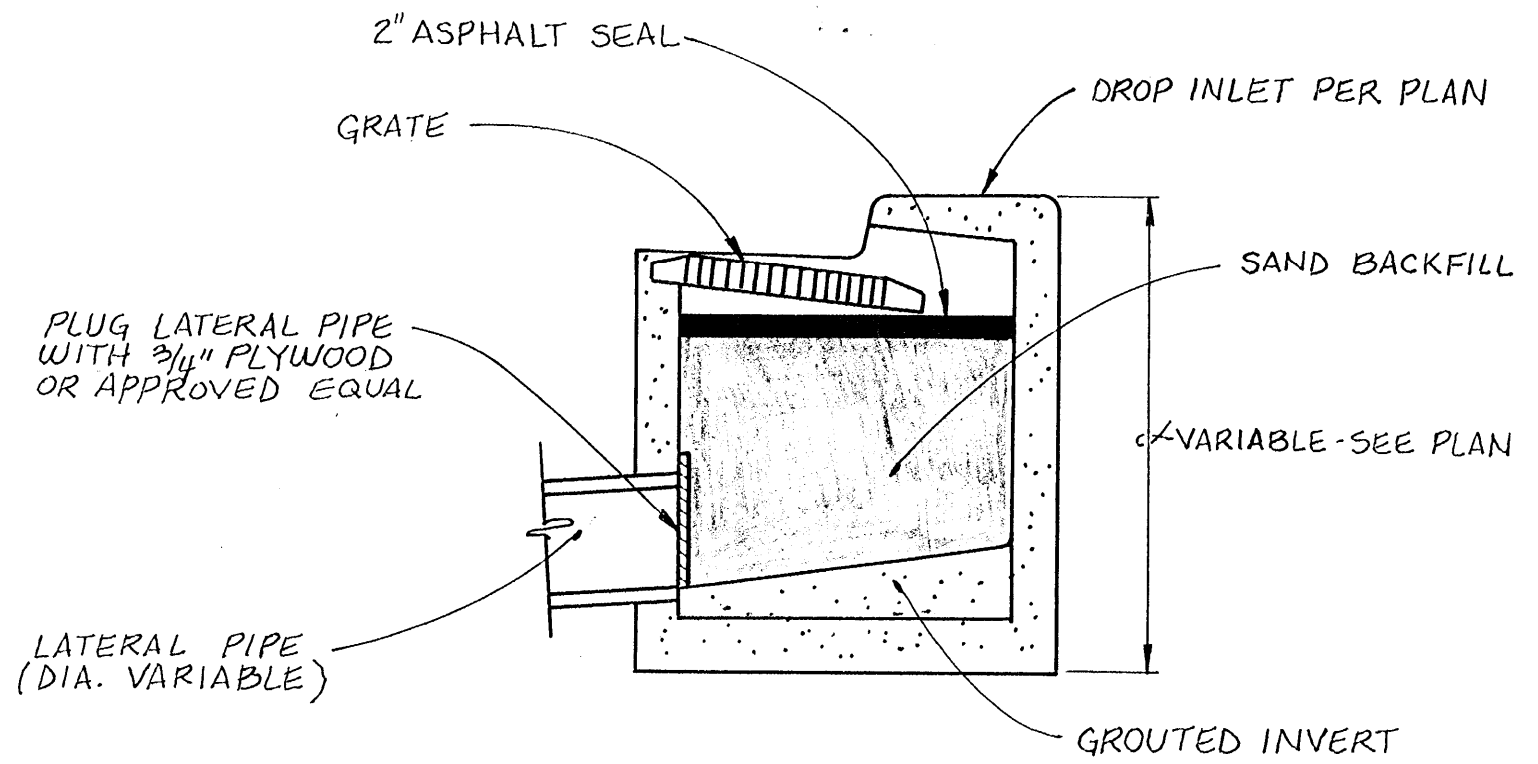
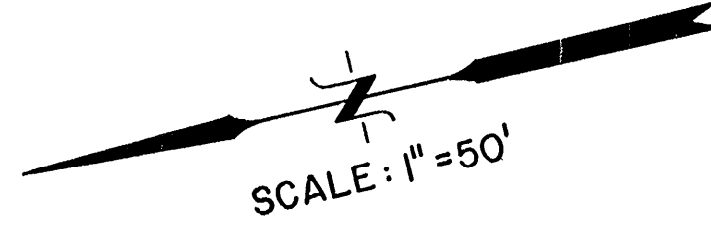
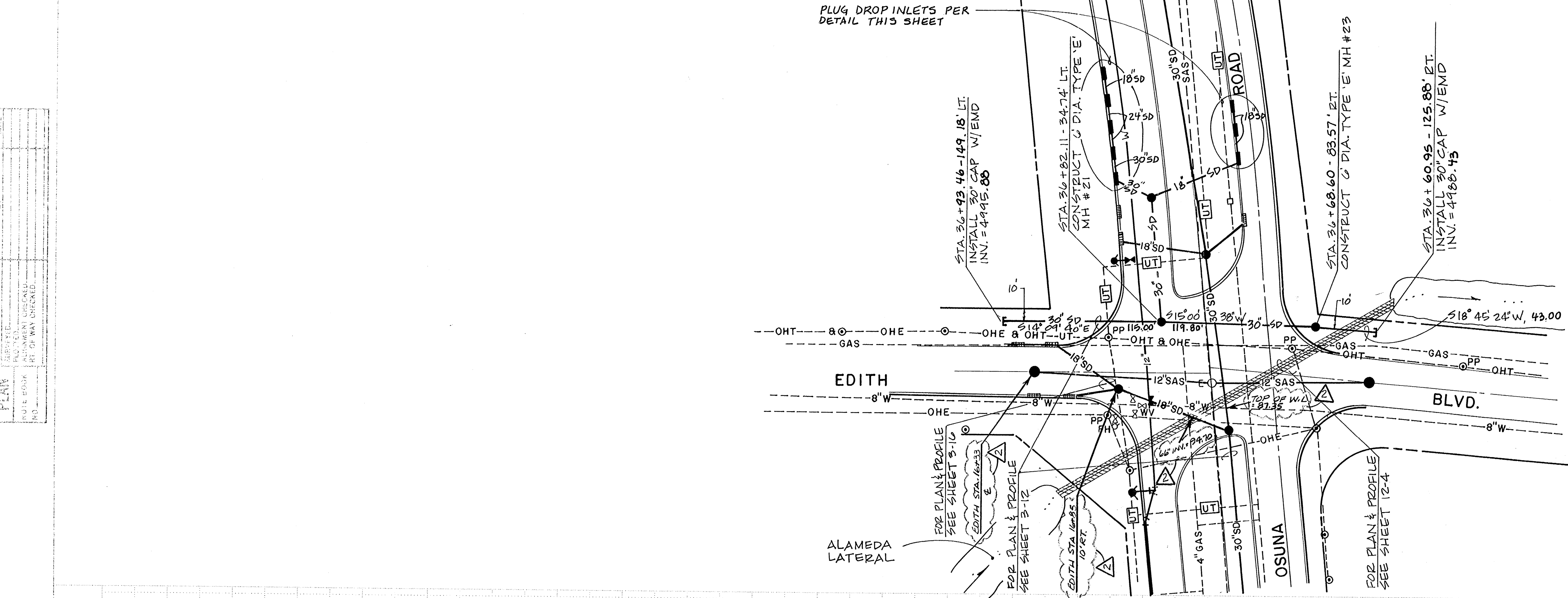
PROFILE	DATE	BY
DESIGNED		
CHECKED		
APPROVED		
ROUTE BOOK		
NO.		

5000
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PLATE 1 SINGLE PLAN - PROFILE - DOTTED
CHARLES BRUNING COMPANY
MADE IN U.S.A.

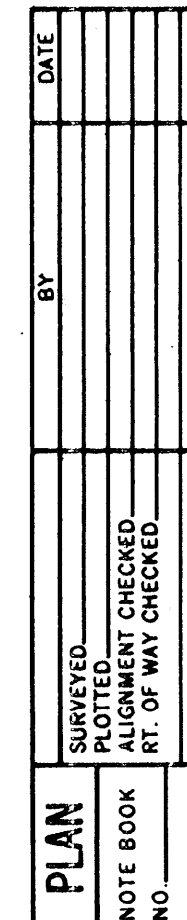
PROJECT NO. SP-(M)-4052(200) SHEET NO. 3-17



5000
4990
4980

F.H.W.A. Region No.	STATE		SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		3-2	

ROADWAY



PROFILE		BY	DATE
SURVEYED _____			
PLOTTED _____			
GRADE CHECKED _____			
B. M. NOTED _____			
NO. _____	STRUCTURE NOTATIONS CH'KD _____		

IDENT. NO.	DESCRIPTION	DATE	BY
16	AS-BUILT	7-80	RS
17	#2 RETURN ELVS EDITH BAND	6-88	DL
18	CHANGE ORDER #1-RET. WALL	6-88	DL
19	REVISIONS (OR CHANGE NOTICES)	7-83	

All existing fencing at the R.O.W, that is removed during construction shall be replaced by the direction of the Project Manager. Six(6) foot chain link fence shall be placed at the proposed retaining wall per detail sheet 12-6. The P.M. may at his discretion replace fencing that is determined not to be to NMSHTD standards.

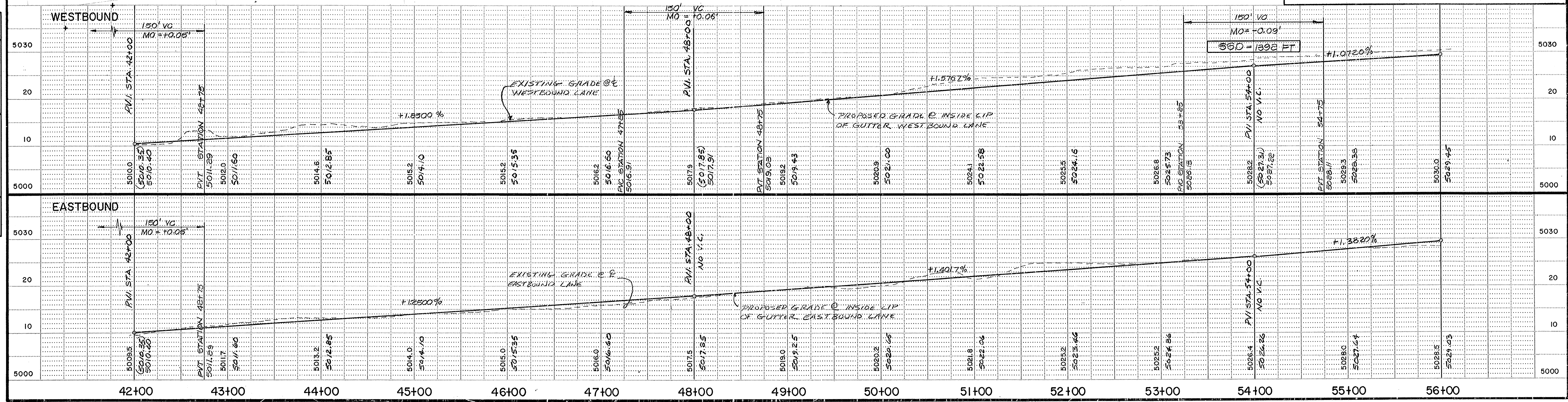
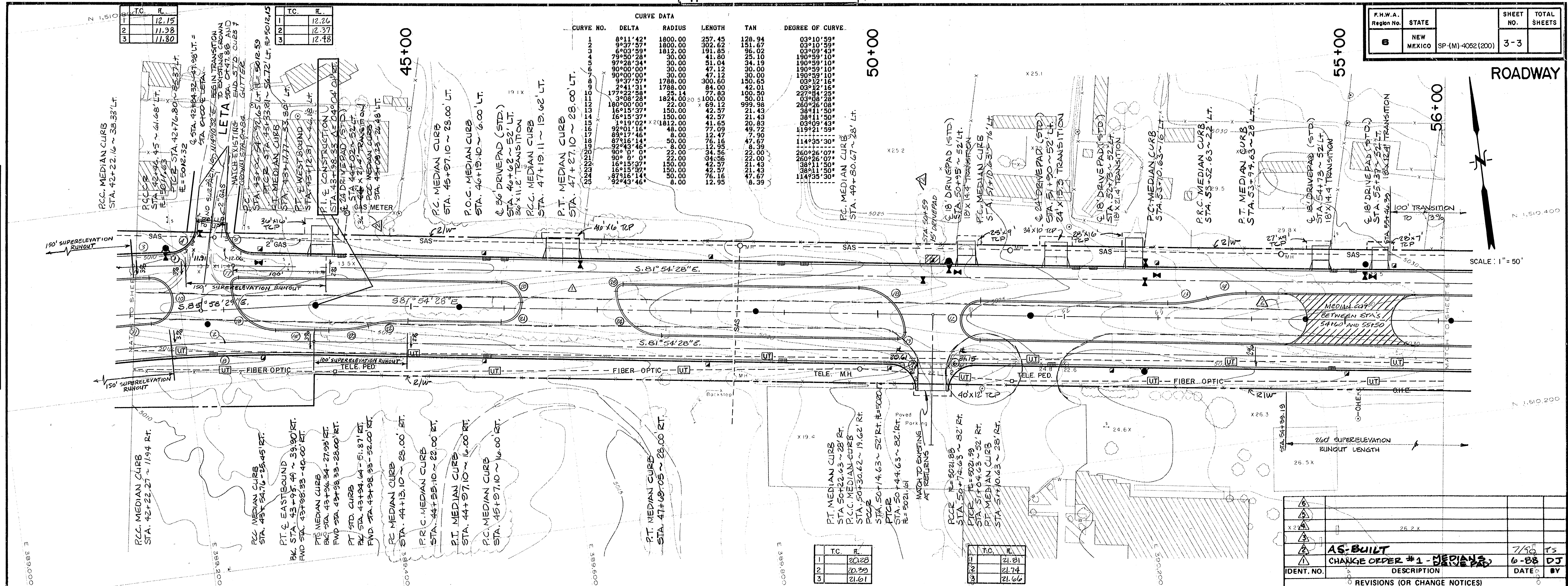
9.1 16159
11 12125
21 12115

PLAN	DATE	BY
DESIGNED		
NOTED		
ALIGNED		
CHECKED		
RT. OF WAY		
NO.		

PROFILE	DATE	BY
SURVEYED		
GRADES CHECKED		
S.M. NOTED		
SUBSTITUTE NOTATIONS CHVD		
NO.		

ESPEY, HUSTON & ASSOCIATES, INC.
ENGINEERING & ENVIRONMENTAL CONSULTANTS

F.H.W.A. Region No.	STATE	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO	3-3	

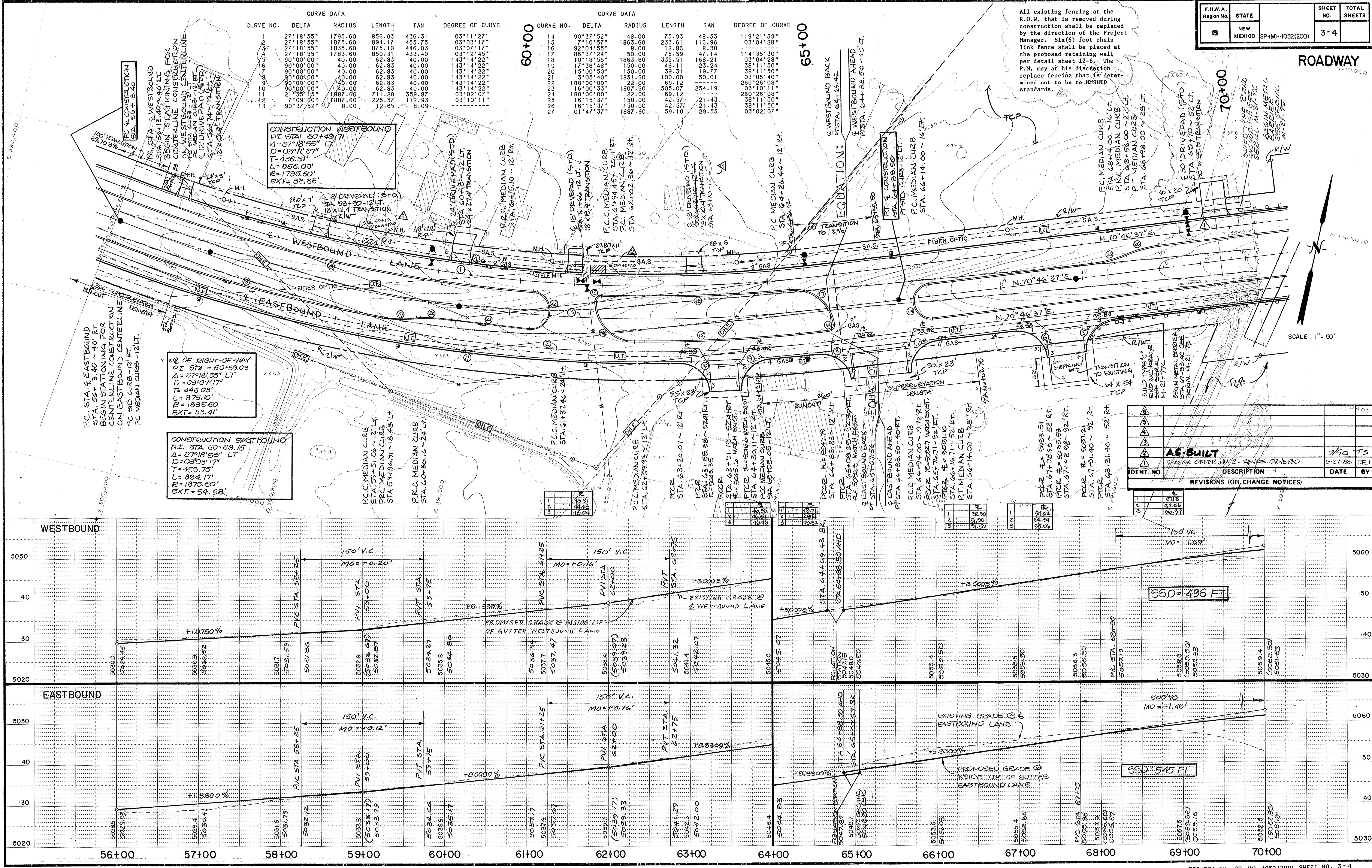


ROADWAY

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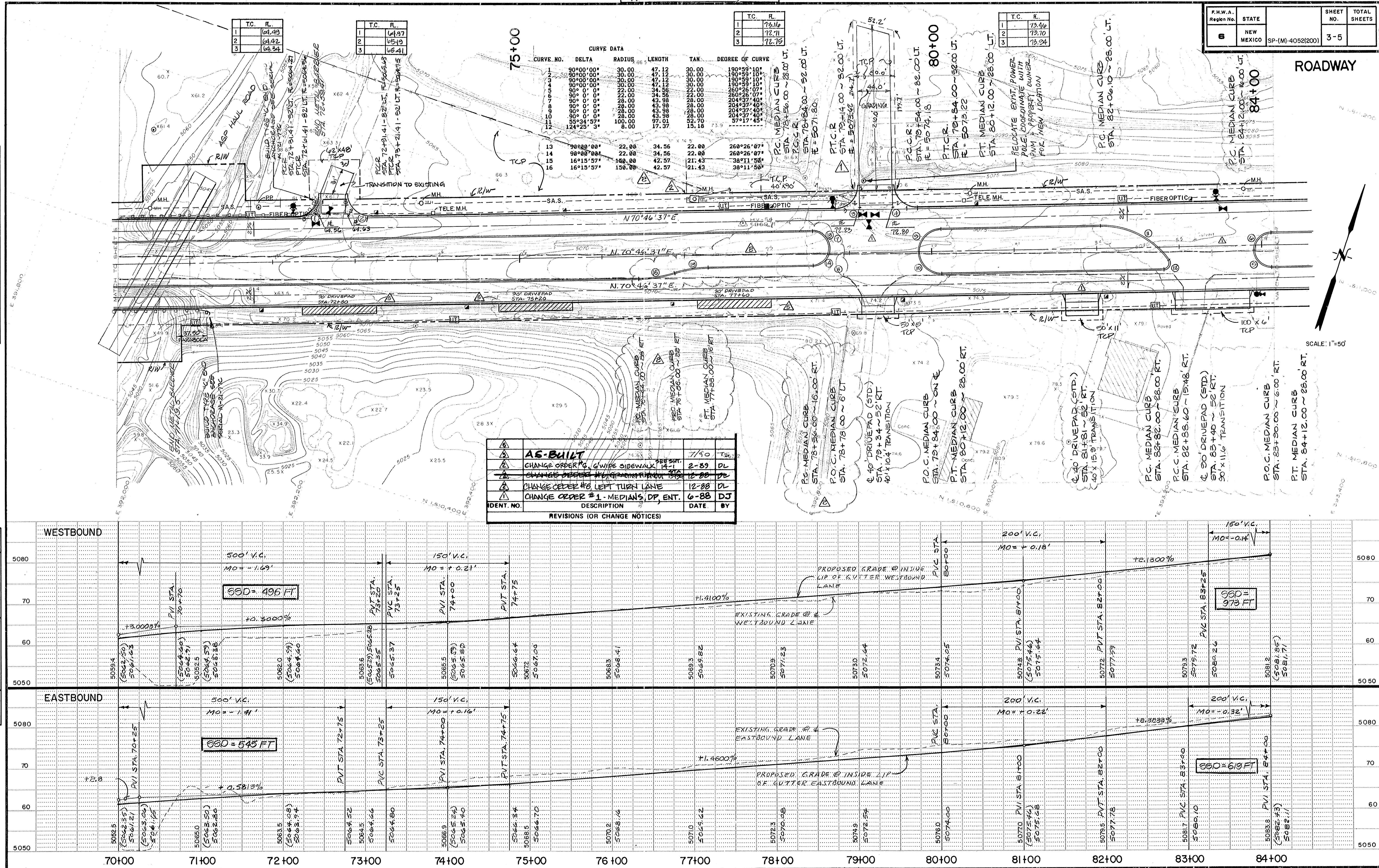
PLAN	DATE
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHKD	
NOTE BOOK	
NO.	

PROFILE	DATE
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHKD	
NOTE BOOK	
NO.	



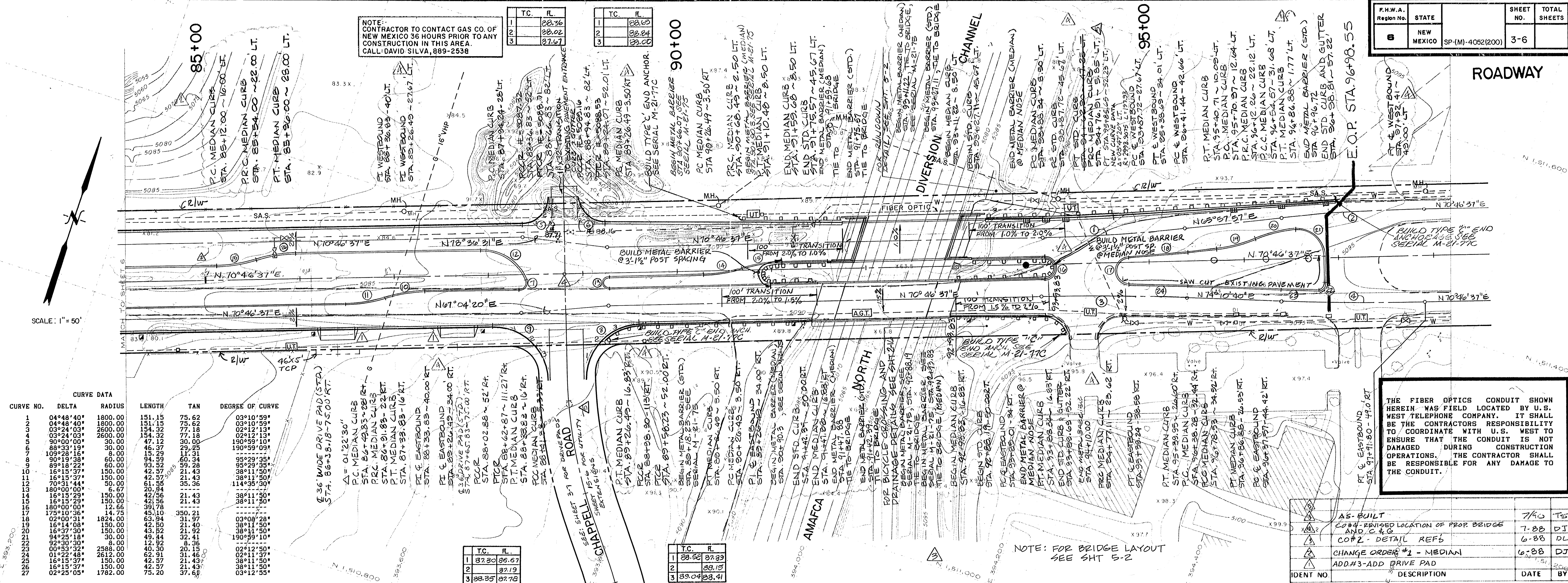
PLAN	DATE
SURVEYED	
NOTED	
ALIGNED	
CHECKED	
RT. OF WAY	
NO.	

PROFILE	DATE
SURVEYED	
NOTED	
GRADES	
CHECKED	
STRUCTURE	
NOTATIONS	
CHWD	
NO.	



ROADWAY

PLAN	DATE	BY
SURVEYED		
ALIGNED		
CHECKED		
NO.		



PROFILE	DATE	BY
SURVEYED		
GRADES CHECKED		
NO.		

