

INDEX OF SHEETS

SHEET NO.	TITLE PAGE
2-8	BRIDGE PLANS
9-13	ROADWAY PLANS & PROFILE
14	TYPICAL SECTION OF IMPROVEMENT
15-32	ROADWAY CROSS-SECTIONS
33	BEAM GUARD RAIL

STANDARD SHEETS		CONSTRUCTION SIGN STANDARD SHEETS	
NO.	REVISED	NO.	REVISED
2	JAN. 26, 1979	CS-1	MAY 10, 1980
3	NOV. 15, 1979	CS-2	MAY 2, 1979
3-A	JUNE 2, 1978	CS-3	SEPT. 22, 1980
3-B	MAY 8, 1981	CS-4	MAY 2, 1979
4	FEB. 26, 1975	CS-5	NOV. 15, 1979
6	JUNE 11, 1981	CS-7	MAY 10, 1980
6-A	MAY 8, 1981	CS-11	NOV. 15, 1979
6-B	JUNE 11, 1981	CS-12	MAY 2, 1979
11	MAY 21, 1981	CS-13	MAY 2, 1979
12	SEPT. 22, 1980		

STATE OF NEW HAMPSHIRE
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

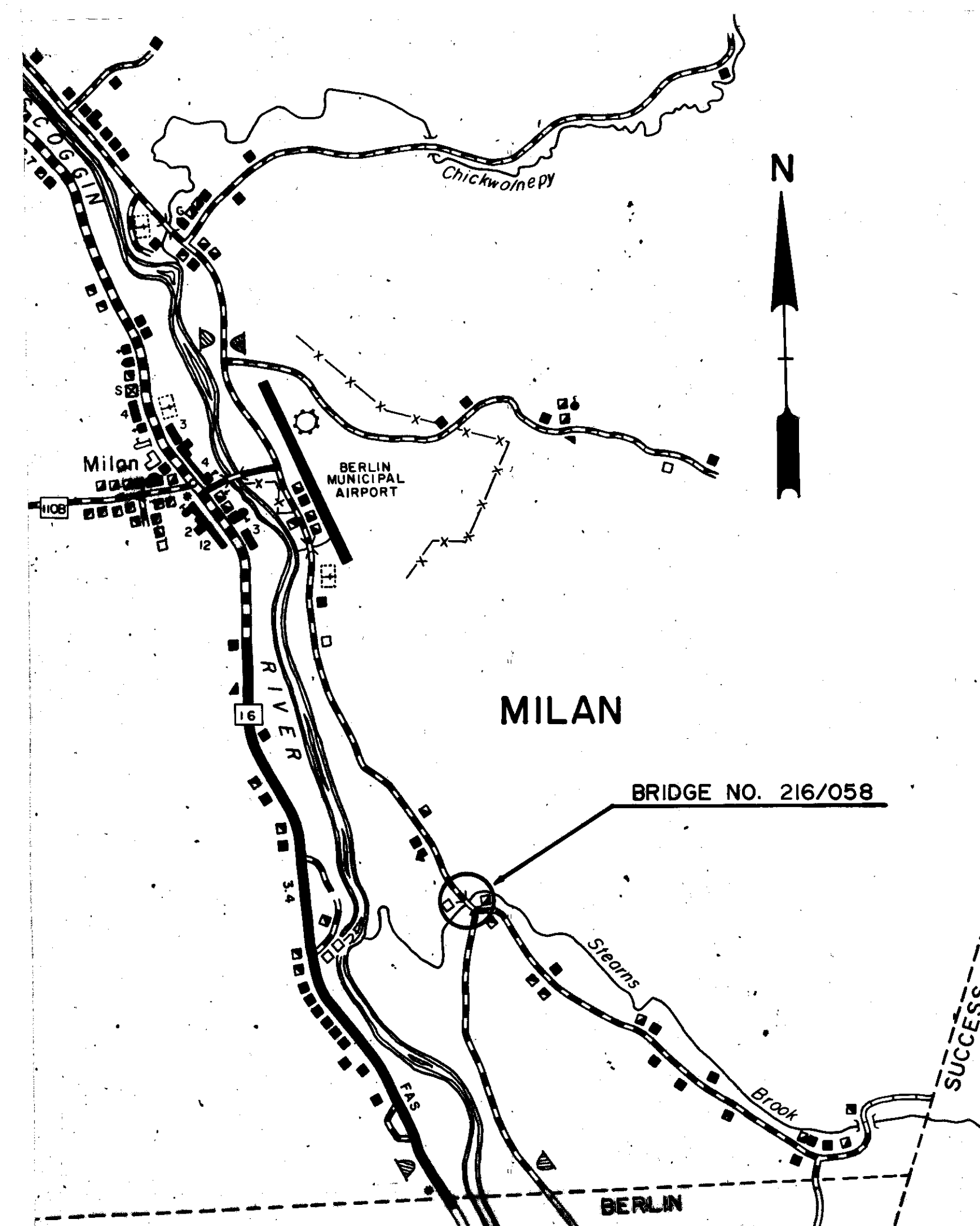
PLANS OF PROPOSED FEDERAL AID BRIDGE REPLACEMENT OFF-SYSTEM PROJECT RHS-BRZ - 301(I)

N.H. PROJECT NO. S-1457

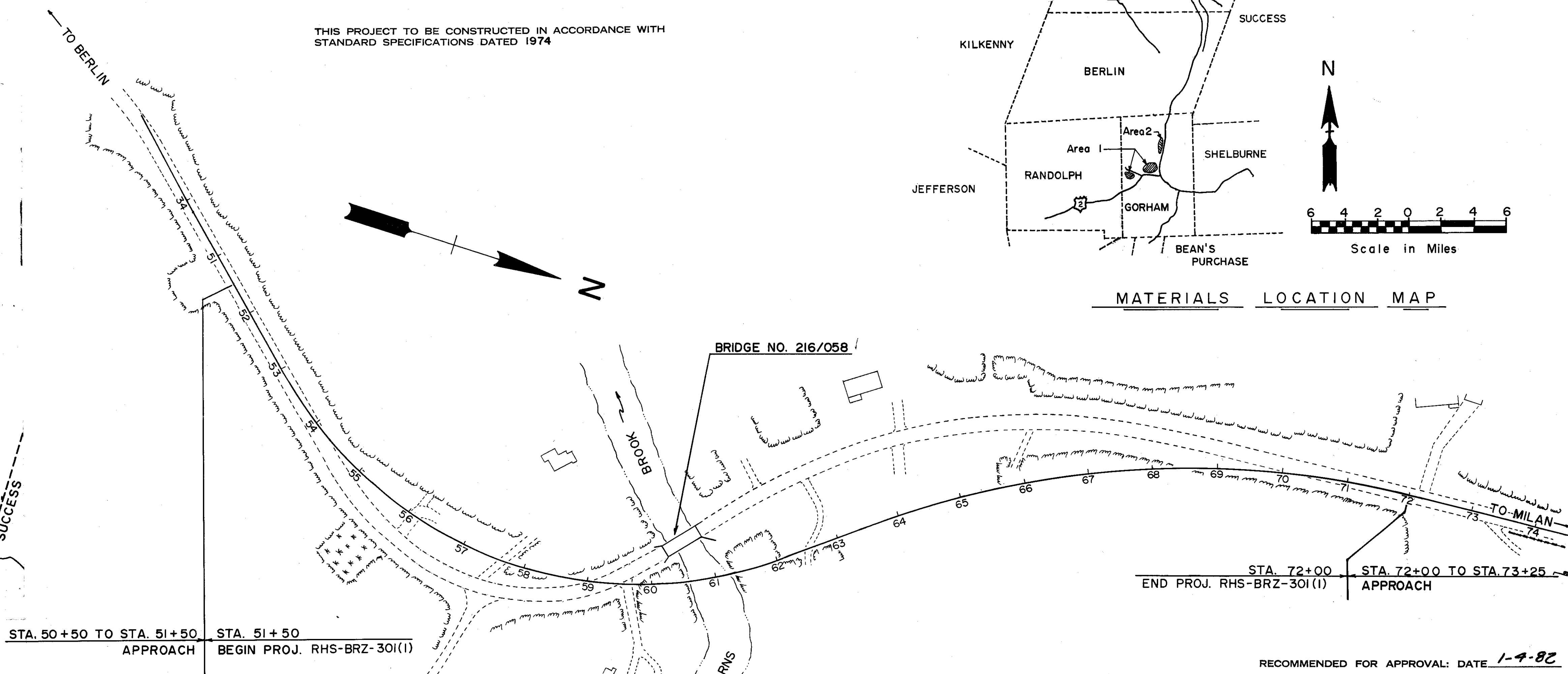
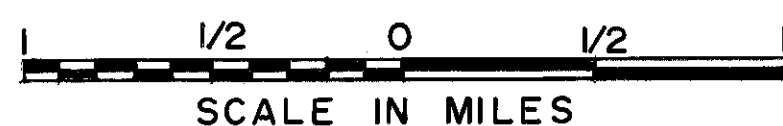
DESIGN DATA		
AVERAGE DAILY TRAFFIC	1980	500
AVERAGE DAILY TRAFFIC	2000	800
TRAFFIC CLASSIFICATION		M
DESIGN SPEED		40 M. P. H.
MAXIMUM CURVATURE		9°00' DEGREES
MAXIMUM GRADIENT		2.48 %
NON-PASSING SIGHT DISTANCE		
K FACTOR - CREST	212.8	SAG 90.1
LENGTH OF PROJECT		0.39 MILES

RIVER ROAD OVER STEARNS BROOK

THIS PROJECT TO BE CONSTRUCTED IN ACCORDANCE WITH
STANDARD SPECIFICATIONS DATED 1974



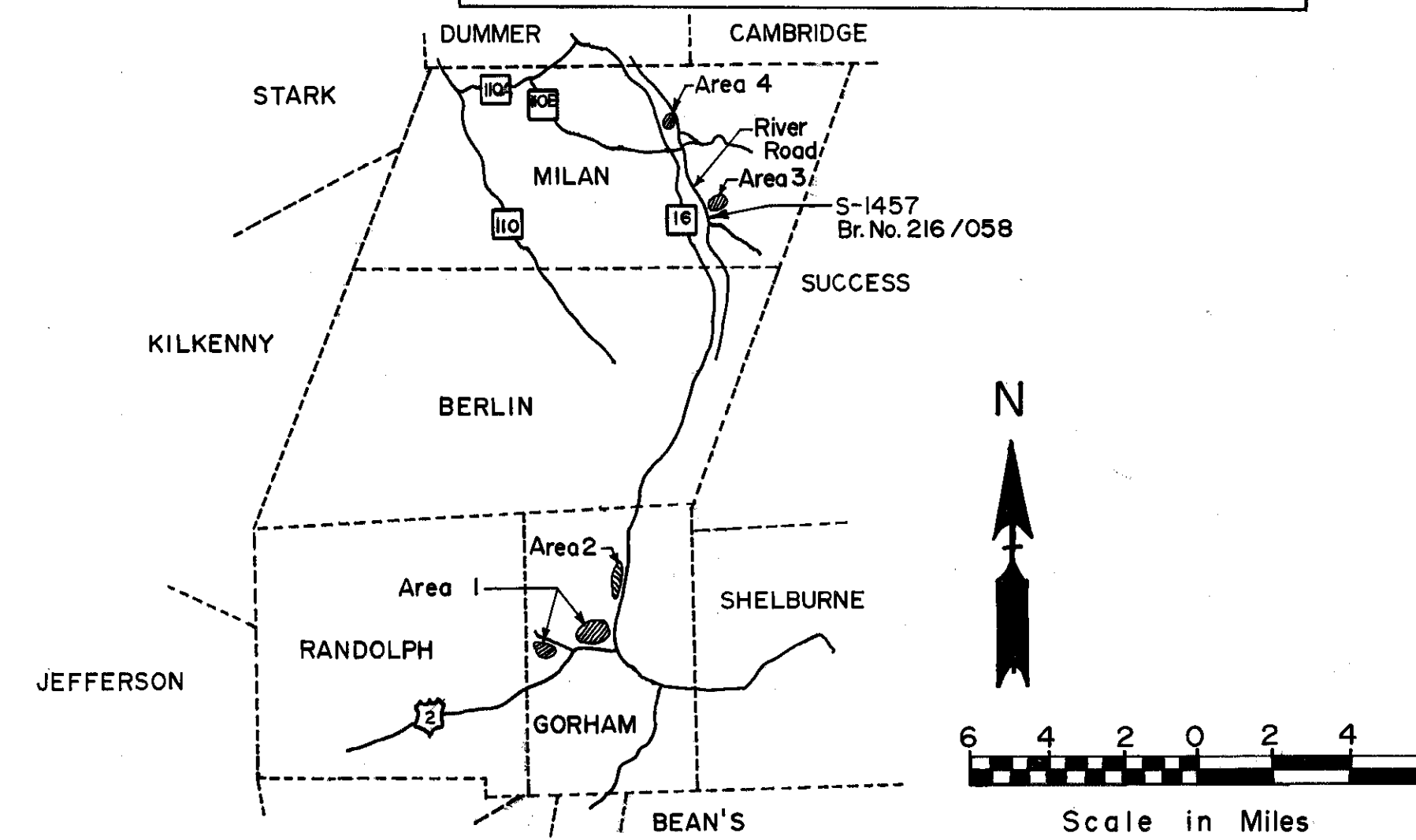
LOCATION MAP



LAYOUT

SCALE 1" = 100 FEET

TOWN OF MILAN
COUNTY OF COOS



MATERIALS LOCATION MAP

CONVENTIONAL SIGNS	
STATE LINE	— — — — —
TOWN LINE	— — — — —
FENCE	— — — — —
STONE WALL	— — — — —
UNFENCED PROPERTY	— — — — —
TRAVELED WAY	— — — — —
RAILROAD	— — — — —
RETAINING WALL	— — — — —
SEWER MANHOLE	— — — — —
HYDRANT	— — — — —
LEDGE	— — — — —
BRUSH LINE	— — — — —
SWAMP	— — — — —
PROPERTY PARCEL NO.	— — — — —

DRAWN BY BKJ DATE 7/80
 CHECKED BY M.W. Richardson DATE July 25, 1980

RECOMMENDED FOR APPROVAL: DATE 1-9-80

APPROVED: *David W. Sweet*
DEPUTY COMMISSIONER AND CHIEF ENGINEER

John C. Clements
COMMISSIONER

Robert A. Cope
MUNICIPAL HIGHWAYS ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

PLANS PREPARED UNDER THE SECONDARY
AND OFF-SYSTEM ROAD PLAN

SUMMARY OF ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
207.3	Unclassified Channel Excavation	1450	C.Y.
209.1	Granular Backfill (Bridge)	3150	C.Y.
502	Removal of Existing Bridge Structure	1	Unit
503	Cofferdams	1	Unit
504.1	Common Bridge Excavation	140	C.Y.
504.2	Rock Bridge Excavation	410	C.Y.
520.01	Concrete Class AA	294	C.Y.
520.12	Concrete Class A, Above Footings	343.2	C.Y.
520.21	Concrete Class B, Footings	295	C.Y.
520.211	Concrete Class B, Footings	50	C.Y.
520.95	Boiled Linseed Oil Mixture	5	Gal.
538	Barrier Membrane	236	S.Y.
541.4	PVC Waterstops, NH Type 4	110	L.F.
544	Reinforcing Steel	76/39	Lb.
562.1	Polyurethane Sealant	388	CT
587.1	Keyed Stone Fill, Class A	490	C.Y.
#1000	Temp. Proj. Water Pollution Control (Soil Erosion)		Dollar

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
603.36118	B.C.S. End Sect. for 18" Pipe Incl. Spec. Excav.	6	Ea.
203.1	Common Excavation	9500	C.Y.
603.36136	B.C.S. End Sect. for 36" Pipe Incl. Spec. Excav.	1	Ea.
203.2	Rock Excavation	500	C.Y.
604.15	Catch Basin, Type E	2	Unit
206.1	Common Structure Excavation	350	C.Y.
605.112	18" Part. Cor. Steel Pipe Und. Incl. Spec. Excav. & Bkfill.	235	L.F.
206.2	Rock Structure Excavation	50	C.Y.
605.706	6" Part. Cor. Poly. Und. Incl. Spec. Excav. & Bkfill.	1,970	L.F.
209	Granular Backfill	15	C.Y.
605.799	Underdrain Flushing Basins, Incl. Spec. Excav. & Bkfill.	5	Ea.
214	Fine Grading	1	Unit
606.140	Beam Guard Rail (Standard Section) GR-140	475	L.F.
304.2	Gravel	4600	C.Y.
606.1461	Beam Guard Rail Term. Unit, Type F Mod GR-1461	3	Unit
304.3	Crushed Gravel	1600	C.Y.
606.143	Beam Guard Rail Incl. Terminal Sects. GR-143	50	L.F.
403.11	Hot Bituminous Pavement, Machine Method	1500	Ton
615.411	Crystal Delineators, Single	44	Ea.
403.12	Hot Bituminous Pavement, Hand Method	22	Ton
615.44	ReflectORIZED Beam Guard Rail Delineators	11	Ea.
570.4	Mortar Rubble Masonry	0.5	C.Y.
618.109	Uniformed Officers and Flagmen		Do War
585.5	Stone Fill, Class E	145	C.Y.
619.1	Maintenance of Traf. Incl. Dust Laying	1	Unit
603.14012	12" B.C.C.S.P., .064", Incl. Spec. Excavation	40	L.F.
619.2	Construction Signs and Warning Devices	1	Unit
603.14015	15" B.C.C.S.P., .064", Incl. Spec. Excavation	90	L.F.
622.4	Stone Bounds	6	Ea.
603.14018	18" B.C.C.S.P., .064", Incl. Spec. Excavation	122	L.F.
646.11	Turf Establishment with Mulch	16,000	S.Y.
603.14236	36" B.C.C.S.P., .079", Incl. Spec. Excavation	48	L.F.
647.1	Humus	1,800	C.Y.
603.36112	B.C.S. End Sect. for 12" Pipe Incl. Spec. Excav.	2	Ea.
692	Mobilization	1	Unit
603.36115	B.C.S. End Sect. for 15" Pipe Incl. Spec. Excav.	3	Ea.
698.3	Field Office (Modified)	1	Unit
603.32112	Metal End Sect. for 12" Pipe Incl. Spec. Excav.	1	Ea.
604.242	Drop Inlets Type D-B	1	Unit
603.49012	12" Pipe for Slope Drainage Incl. Spec. Excav.	15	L.F.
609.81	Bituminous Concrete Curb, Unpainted	200	L.F.

Summary of Estimated Quantities is information for bidding purposes only.

GENERAL NOTES

Design Loading: HS 20-44
 Specifications: AASHTO 1977 with interims. NHDRAW 1974 as amended.
 Reinforcing Steel: Grade 60
 Concrete: Arch ring $f_c = 4000$ psi
 All other concrete $f_c = 3000$ psi
 Abutment Foundations: Concrete thrust blocks founded on ledge.
 Allowable rock pressure = 4 Tons/Sq Ft.

HYDRAULIC DATA

Drainage Area: 38.2 sq. mi.
 Design Flood: $Q_{50} = 9000$ cfs
 Design Velocity: 15.7 fps
 Bridge Opening: 545 sq. ft. below Choo El. 1119.4

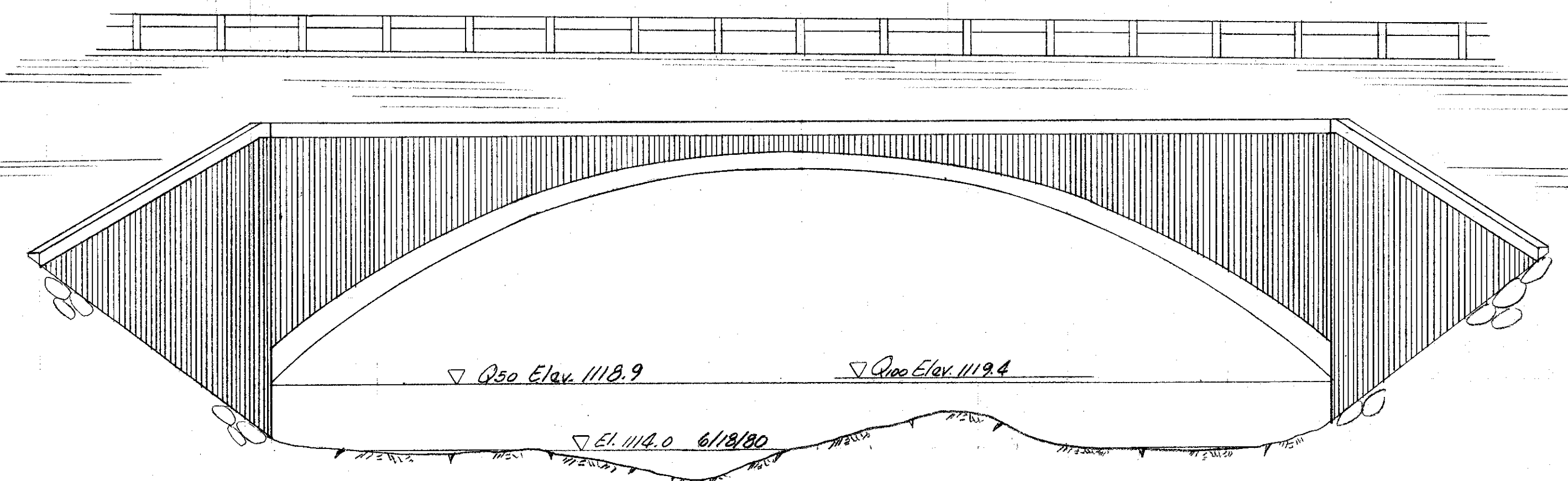
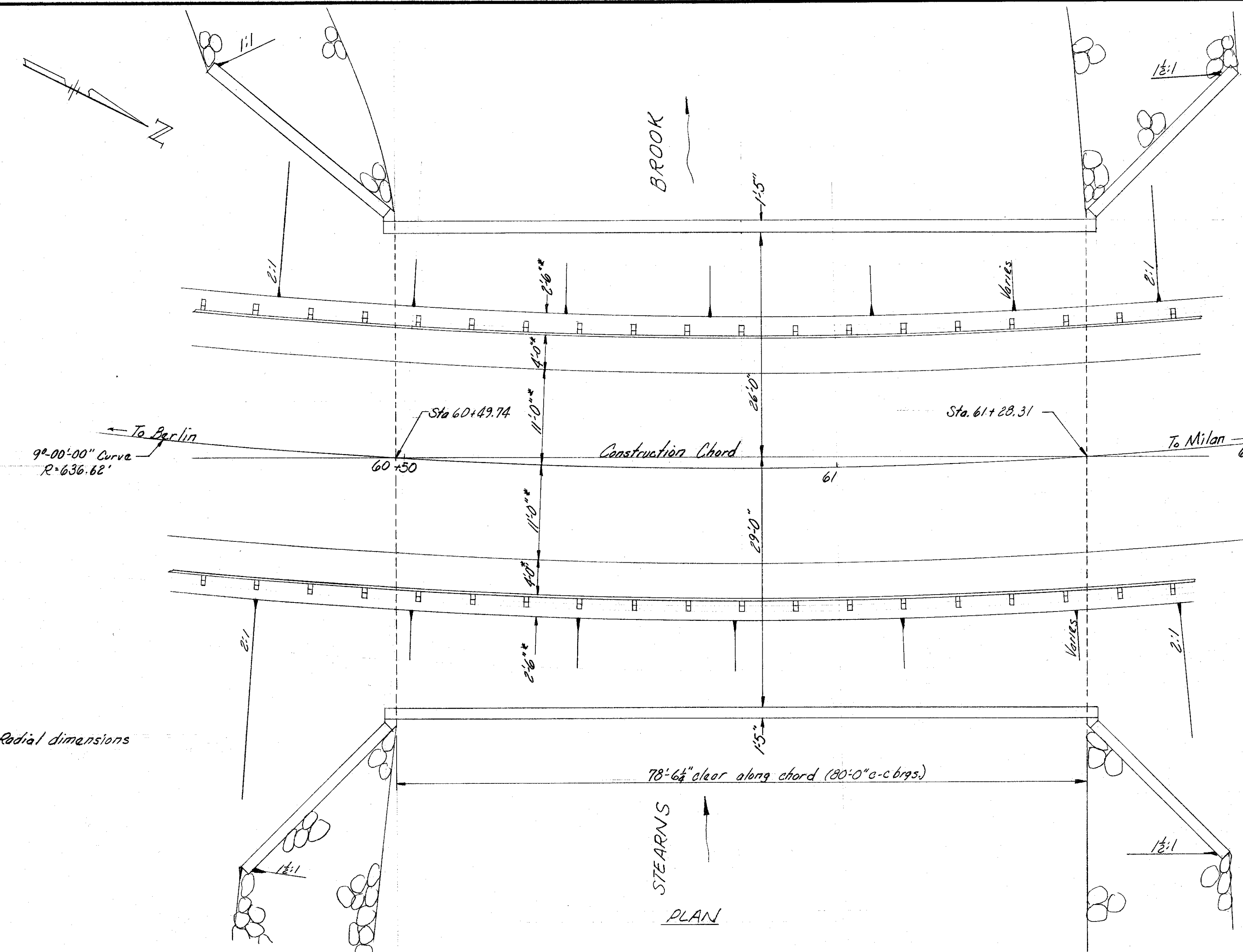
For Survey Layout see Br. Sh. 3077

STATE OF NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS BRIDGE DESIGN DIVISION	
TOWN MILAN	BRIDGE NO. 216/058
FEDERAL PROJECT RHS-BRZ-301(1)	STATE PROJECT S-1457
LOCATION RIVER ROAD OVER STEARNS BROOK	

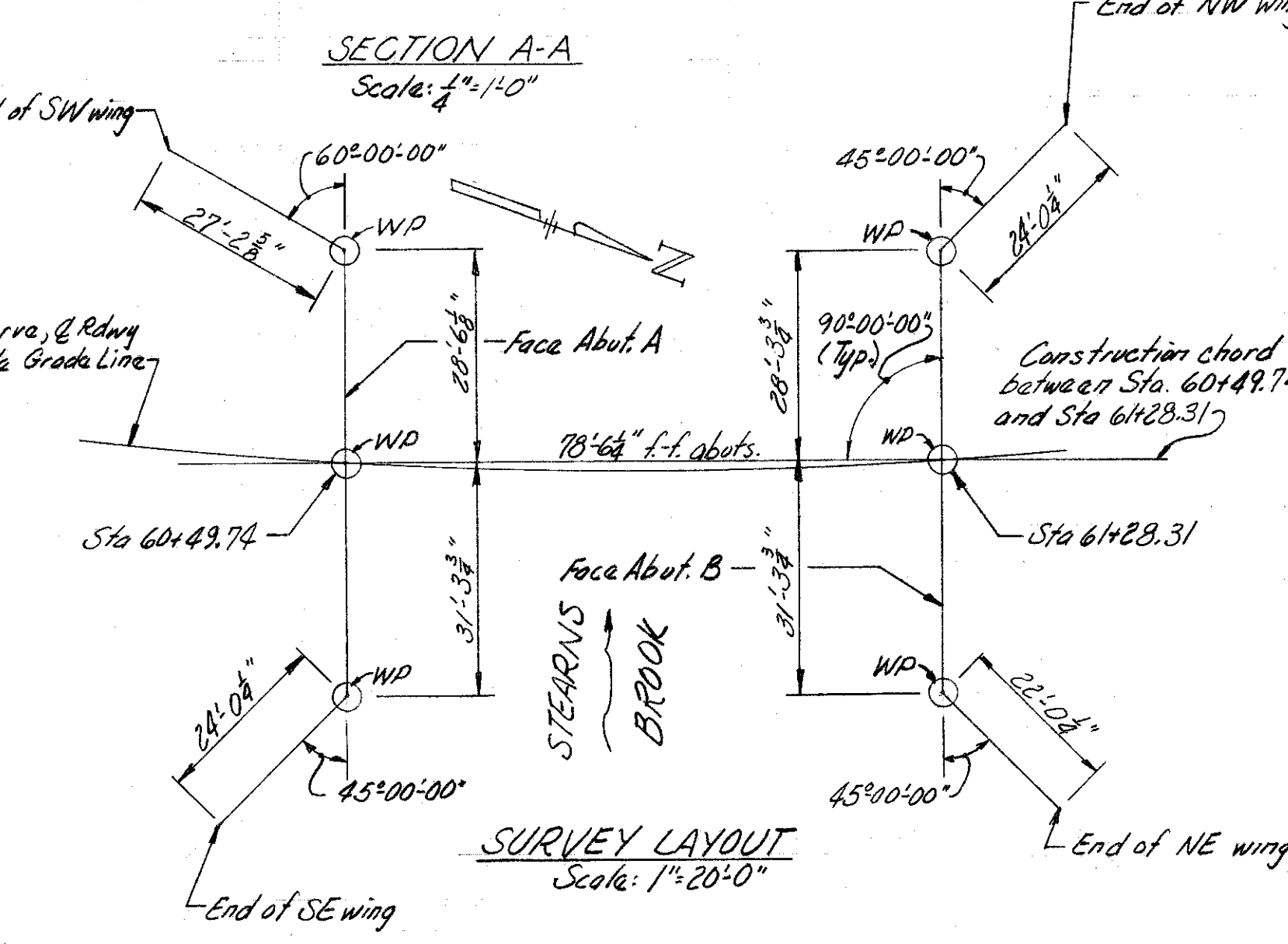
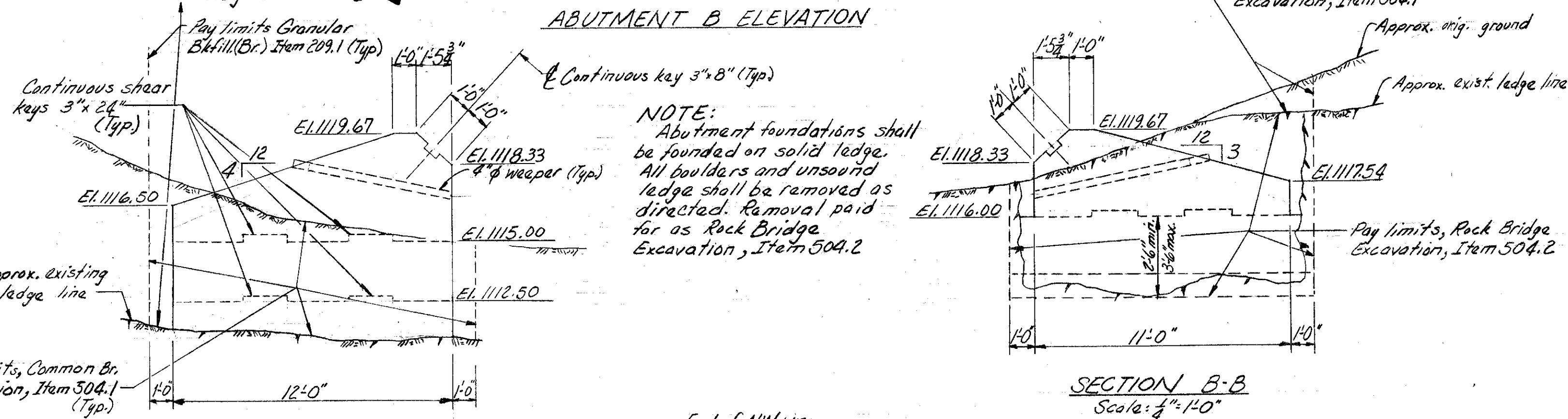
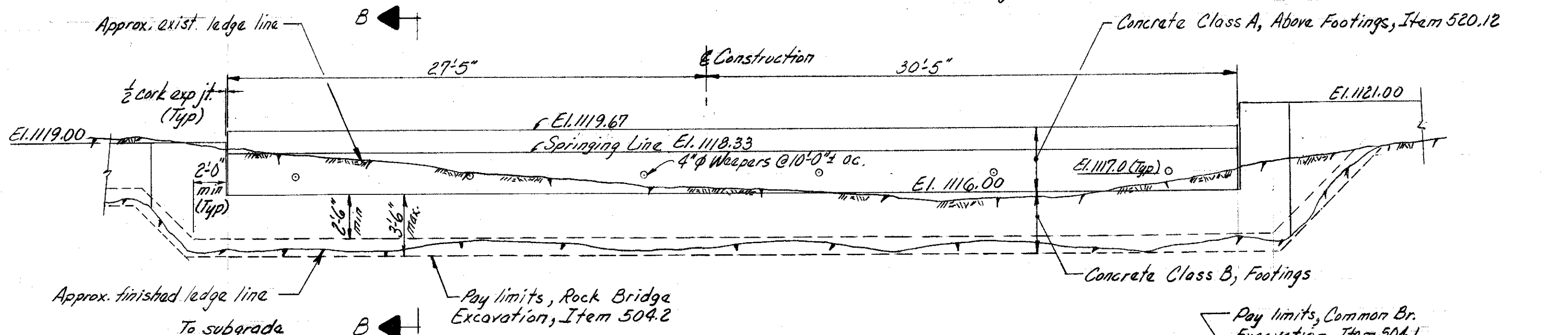
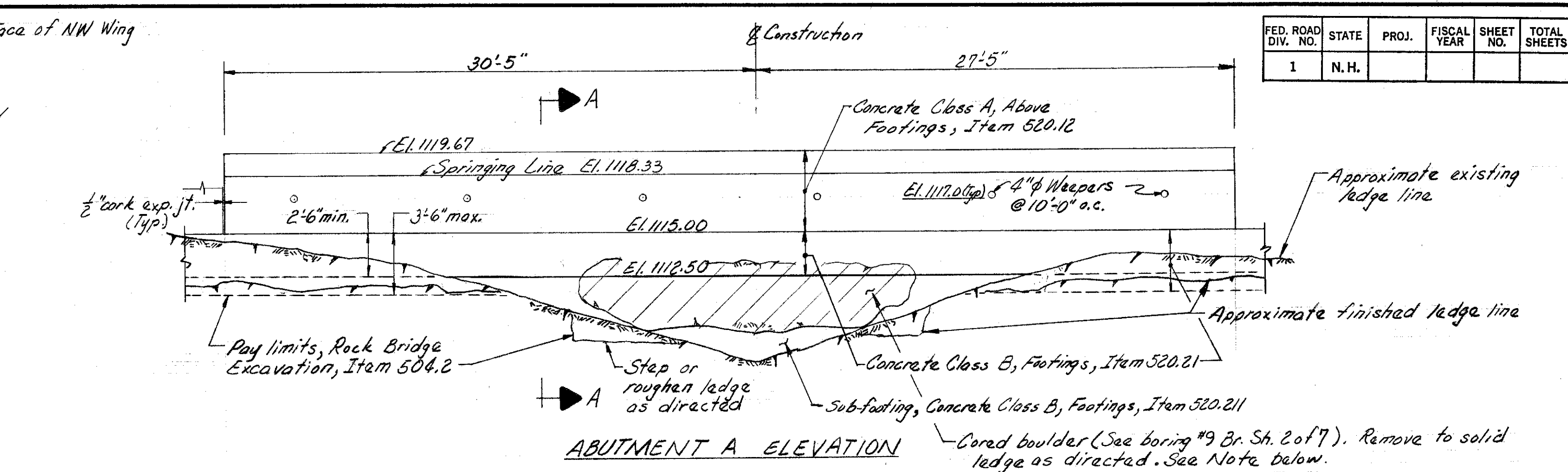
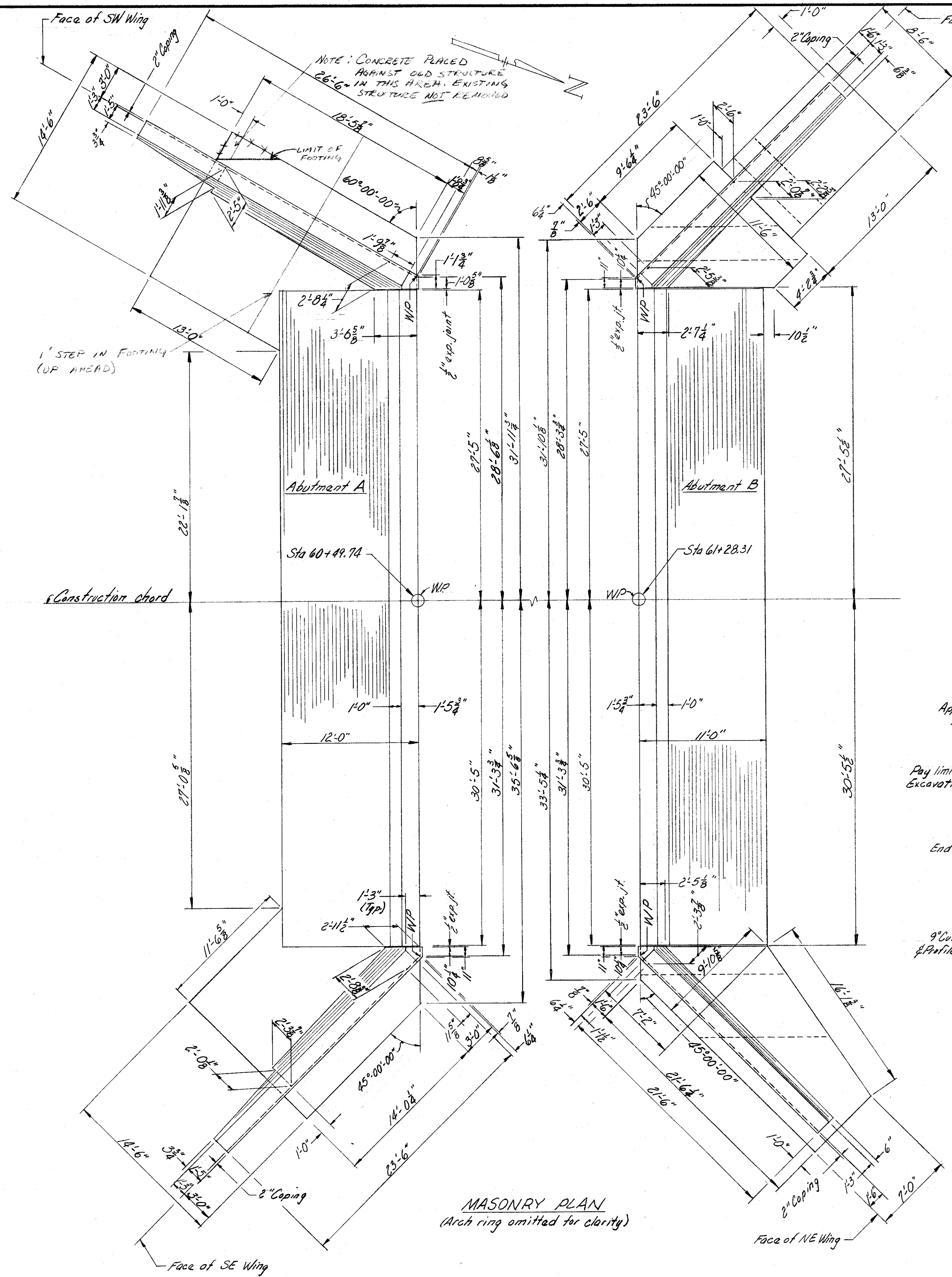
GENERAL PLAN & ELEVATION			
DESIGNED	BY DATE	CHECKED	BY DATE
JAM	JAM 1/81	DEP	DEP 4/81
DRAWN	JAM 1/81	CHECKED	DEP 4/81
TRACED		CHECKED	JAM 1/81
QUANTITIES	DEP 9/81	CHECKED	JAM 1/81

Sheet scale 1"=1'-0"

REVISIONS	BY	DATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
			RHS-BRZ-301(1)	2	33



BRUNING 45 107 3162



SUMMARY OF ABUTMENT AND WING QUANTITIES				
ITEM NO.	DESCRIPTION	ABUT. A	ABUT. B	UNIT
504.1	Common Bridge Excavation	110	30	C.Y.
504.2	Rock Bridge Excavation	185	225	C.Y.
520.12	Concrete Class A, Above Footings	141.3	104.0	C.Y.
520.21	Concrete Class B, Footings	144.4	150.6	C.Y.
520.21	Concrete Class B, Footings	50		C.Y.
520.95	Boiled Linseed Oil Mixture	1	1	Gal.
538	Barrier Membrane	16	15	S.Y.
541.4	PVC Waterstops, NH Type 4	47	45	L.F.
544	Reinforcing Steel	1381B	14,310	Lb.
562.1	Polyurethane Sealant	154	148	C.F.
587.1	Keyed Stone Fill, Class A	170	320	C.Y.

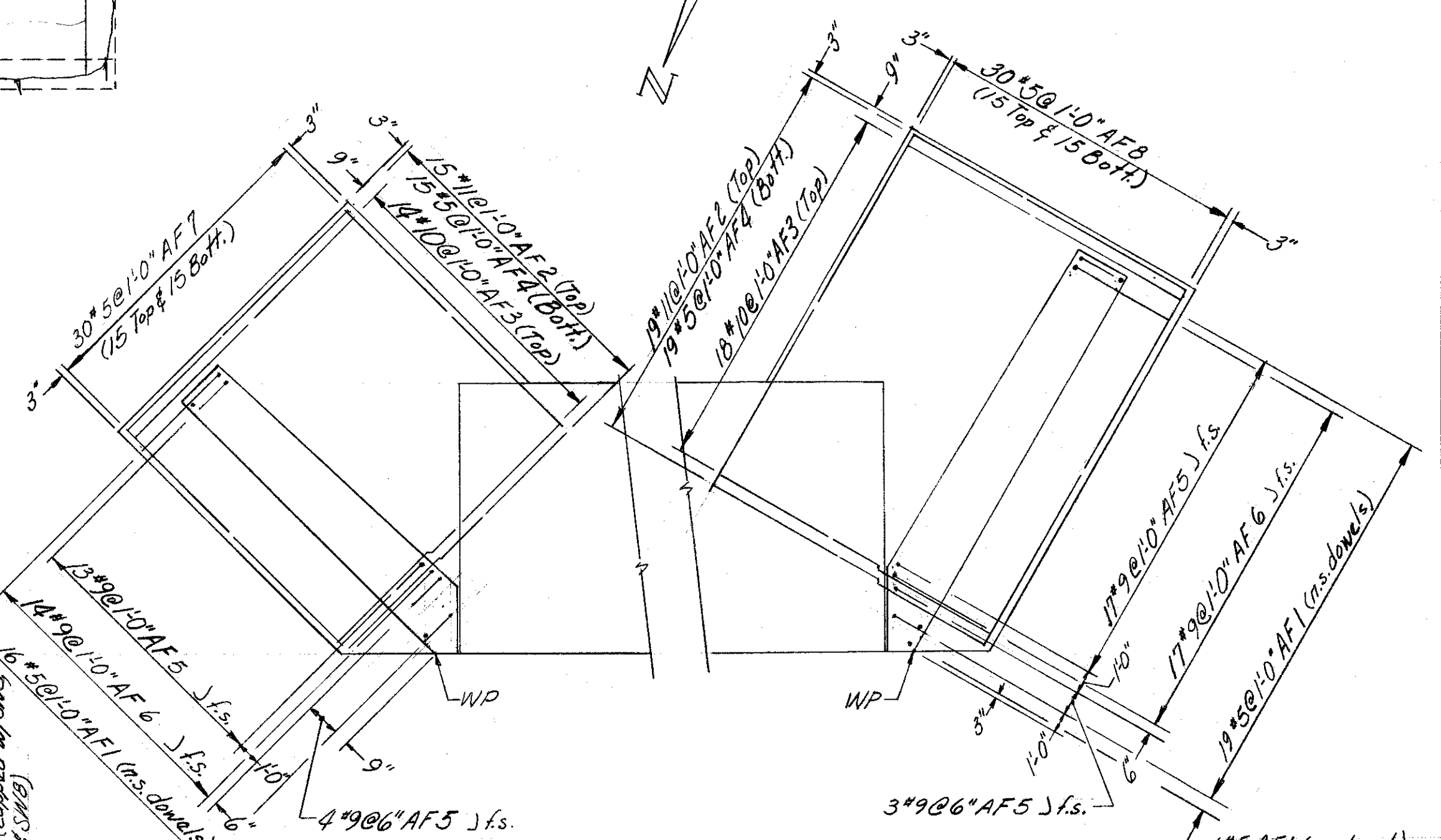
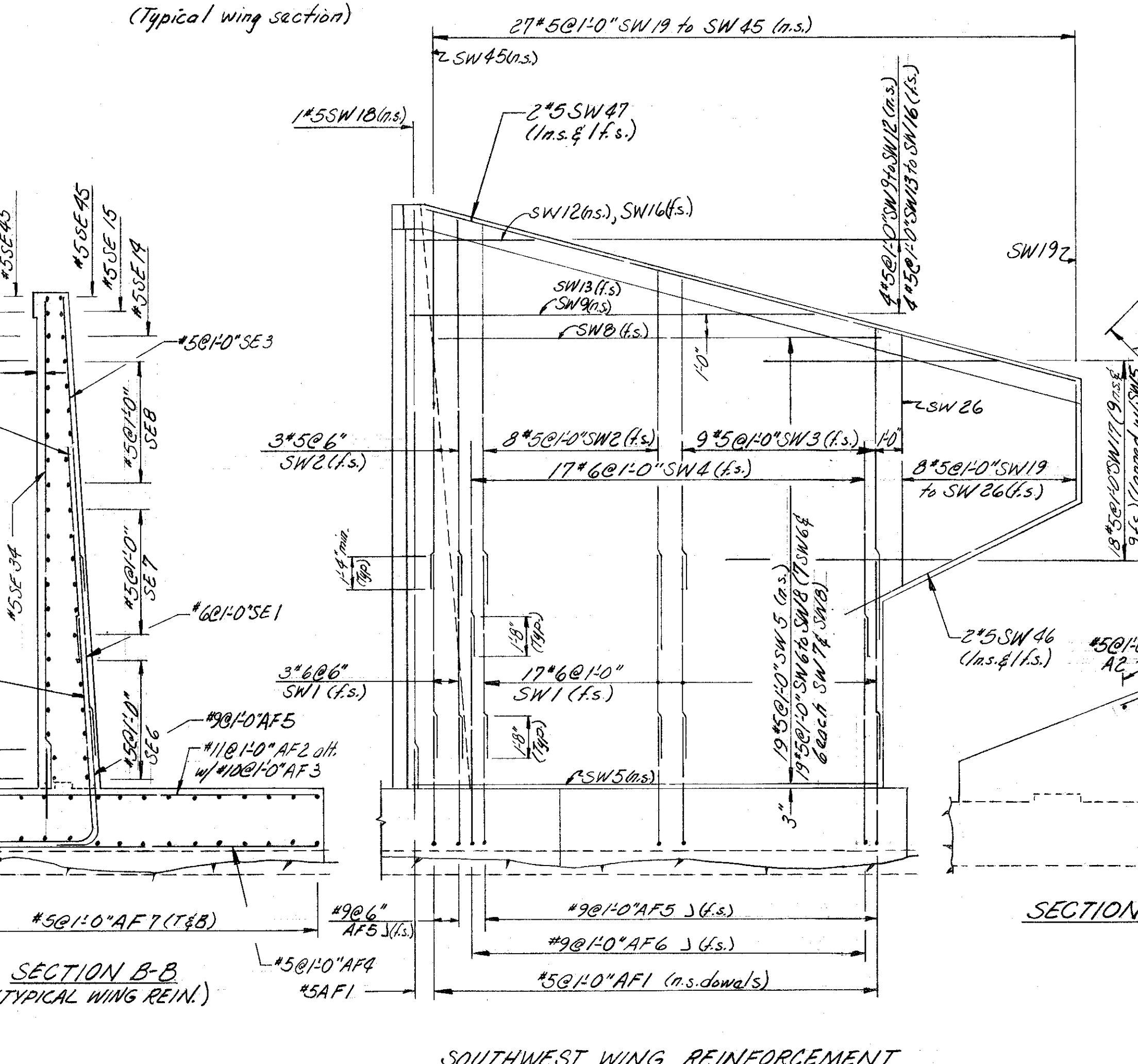
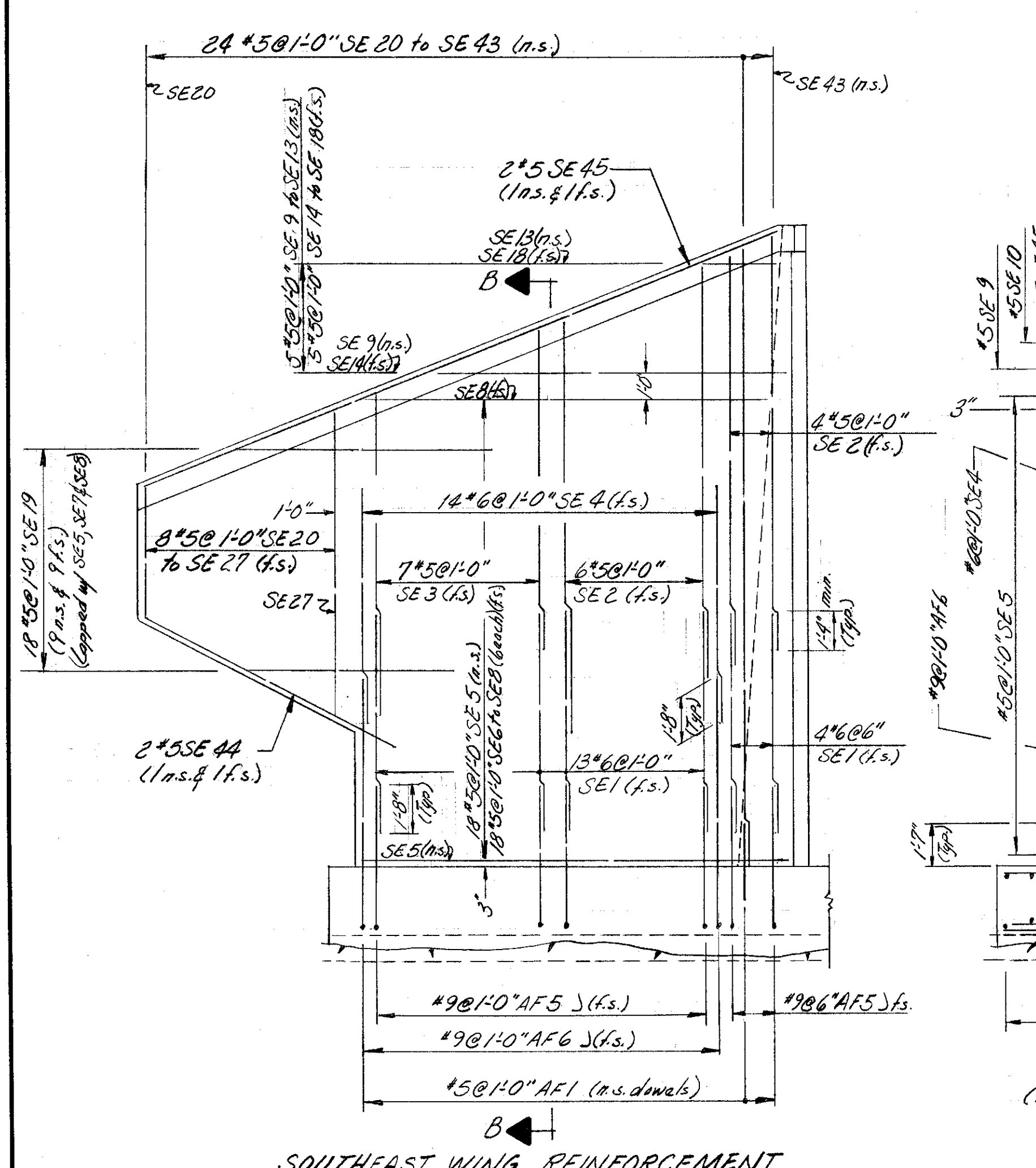
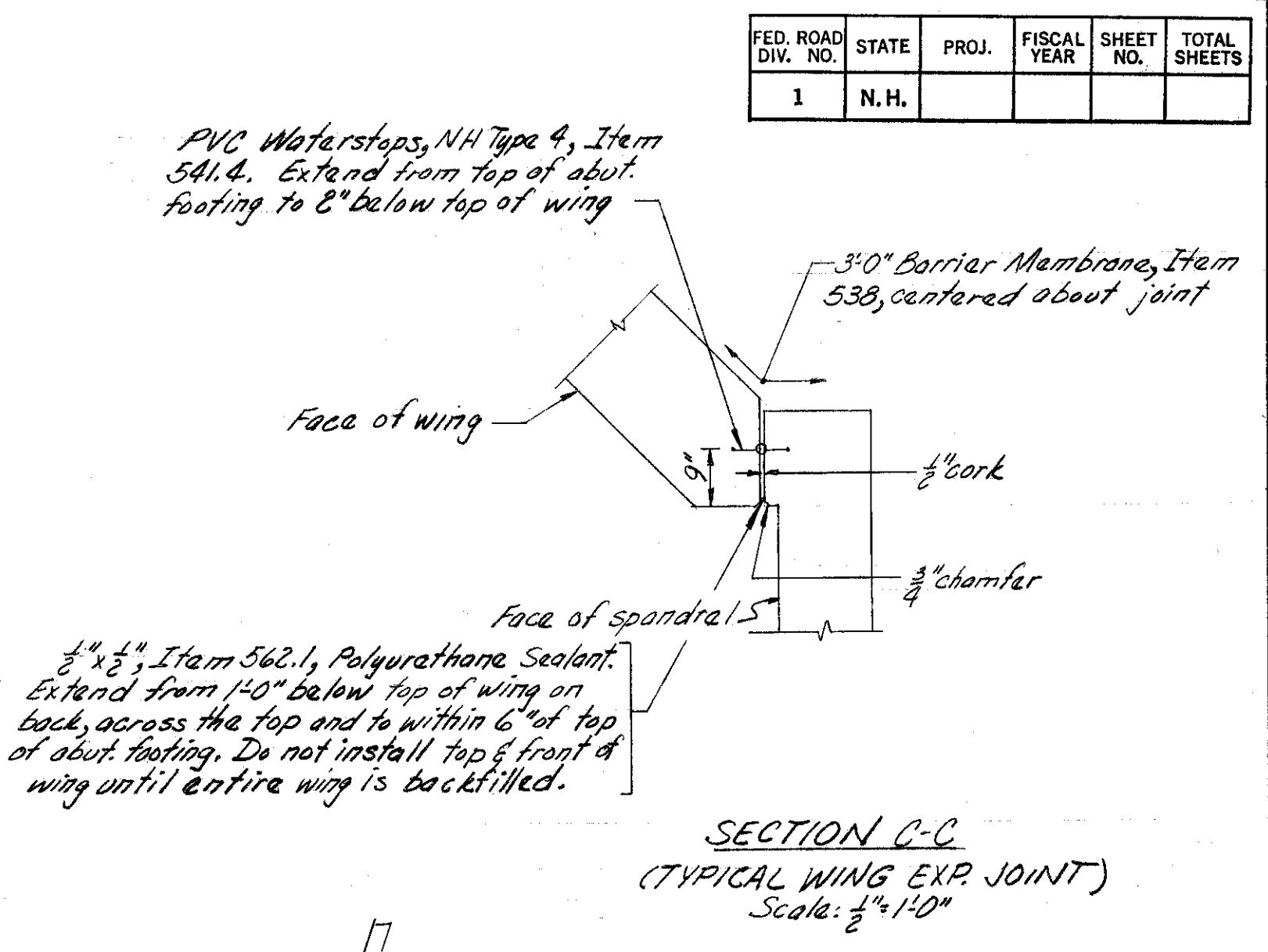
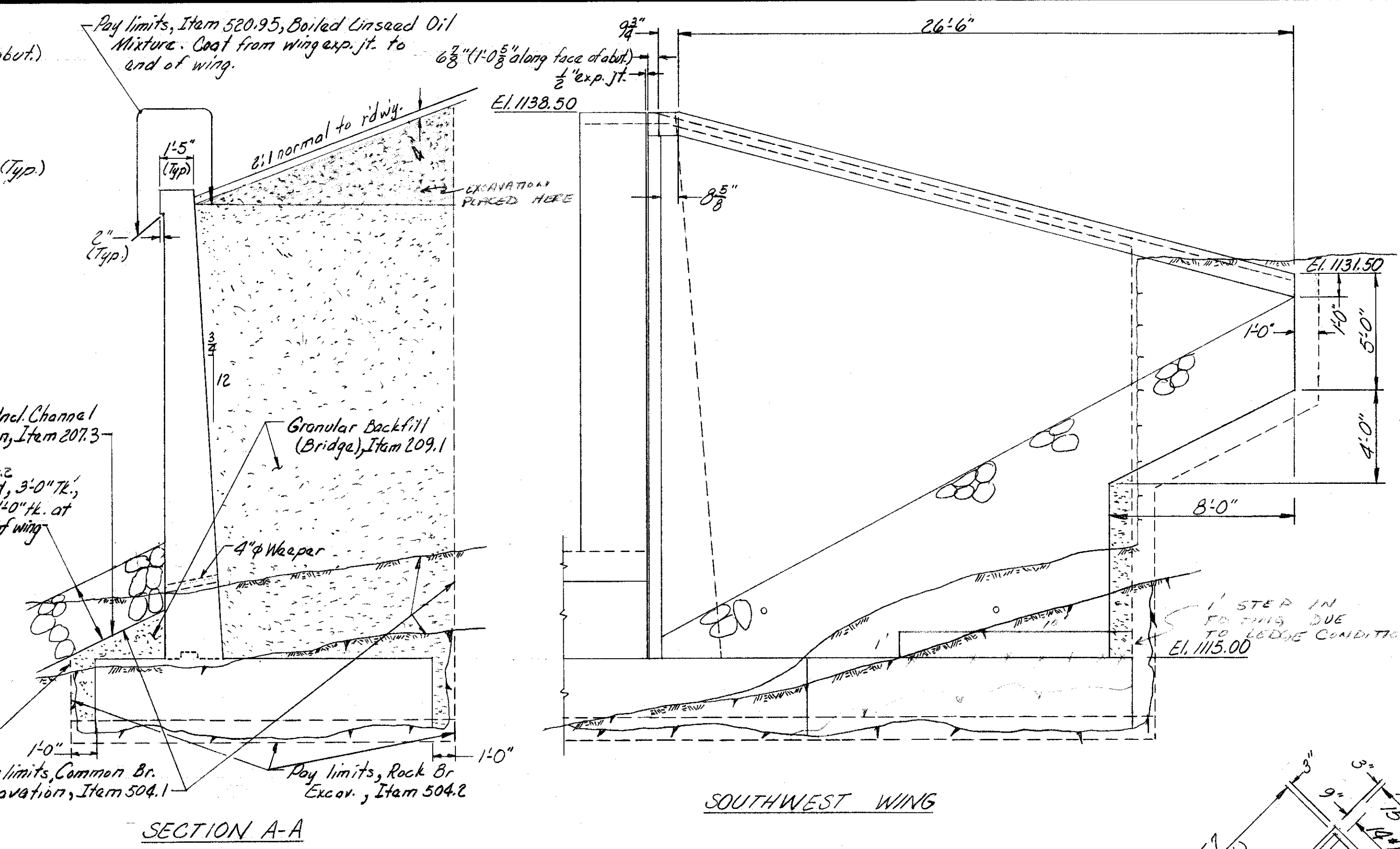
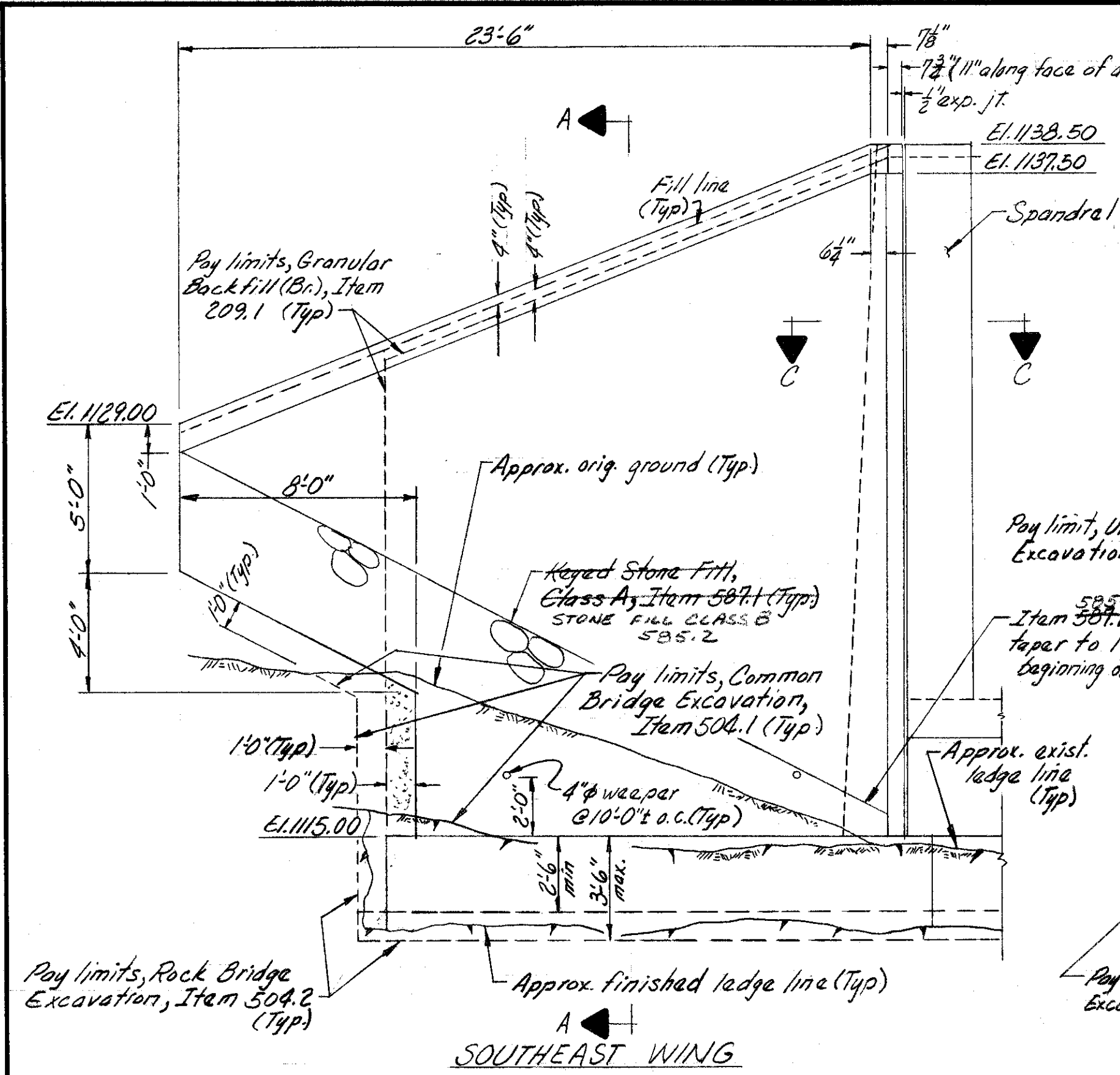
STATE OF NEW HAMPSHIRE
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
BRIDGE DESIGN DIVISION

TOWN MILAN BRIDGE NO. 216/058
FEDERAL PROJECT RHS-BRZ-301(1) STATE PROJECT S-1457
LOCATION RIVER ROAD OVER STEARNS BROOK

ABUTMENT MASONRY			
DESIGNED	BY	DATE	BRIDGE SHEET NO.
	JAM	8/01	3 OF 7
DRAWN	JAM	8/01	FILE NUMBER
TRACED			4-13-1-3
QUANTITIES	DEP	9/01	
REVISIONS			
REVIEWED BY		PROJ. NO.	SHEET NO.
		RHS-BRZ-301(1)	4
		TOTAL SHEETS	33

DRAWING 40-107-3162

FED. ROAD DIV. NO.	STATE	PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	N.H.				



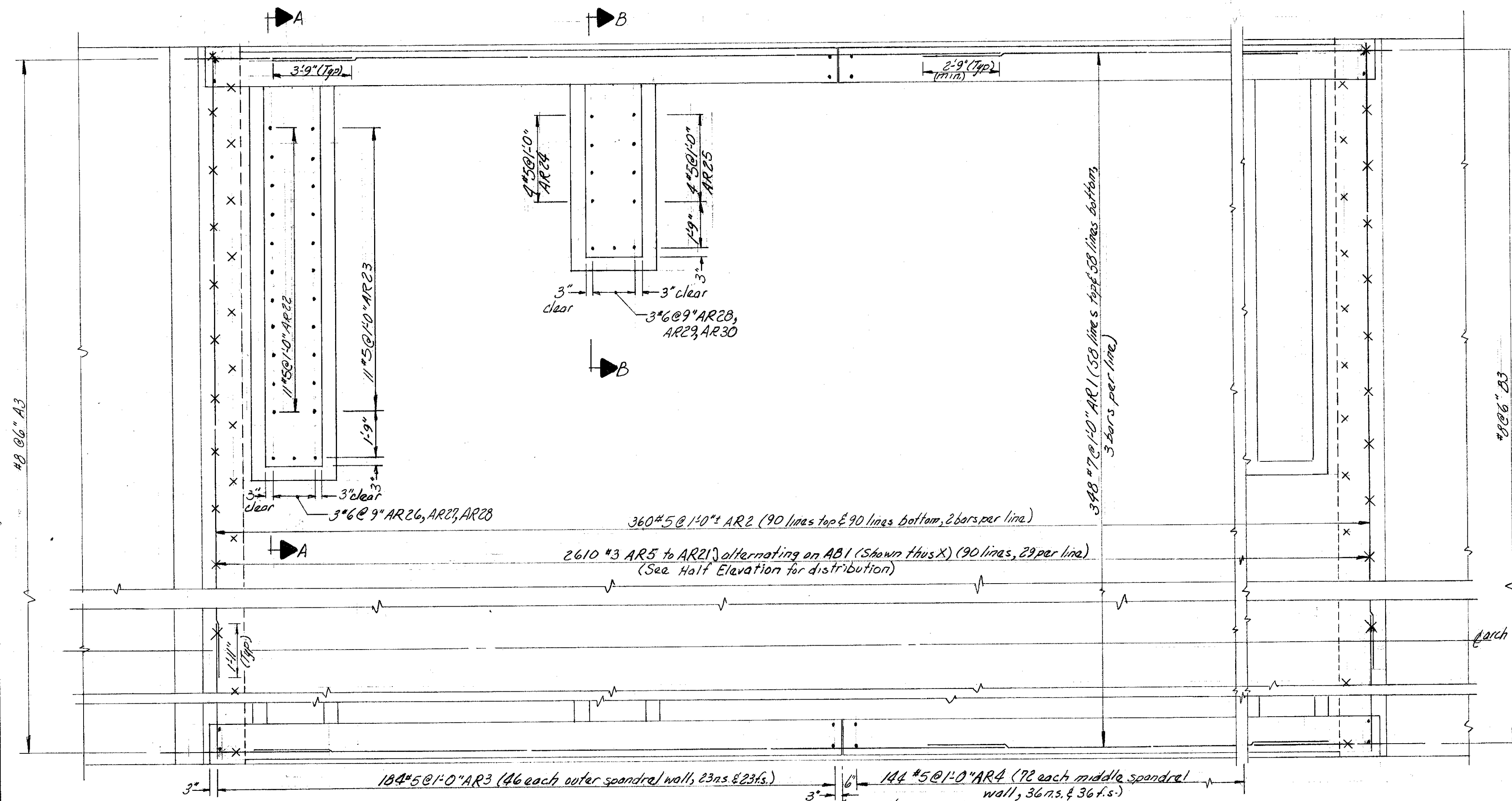
- NOTES:**
- Reinforcing steel shall be 3" clear from footing surfaces and 2 1/2" clear from all other surfaces except as noted. (See Sect. B-B)
 - The bottom mat of footing reinforcement shall be 3" clear from 2'-6" min thickness neat line.
 - See Detail A, Br. Sh. 5 of 7 for concrete finish on face of wing.

STATE OF NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS BRIDGE DESIGN DIVISION	
TOWN <u>MILAN</u>	BRIDGE NO. <u>216/258</u>
FEDERAL PROJECT <u>RHS-BRZ-30(1)</u>	STATE PROJECT <u>S-1457</u>
LOCATION <u>RIVER ROAD OVER STEARNS BROOK</u>	

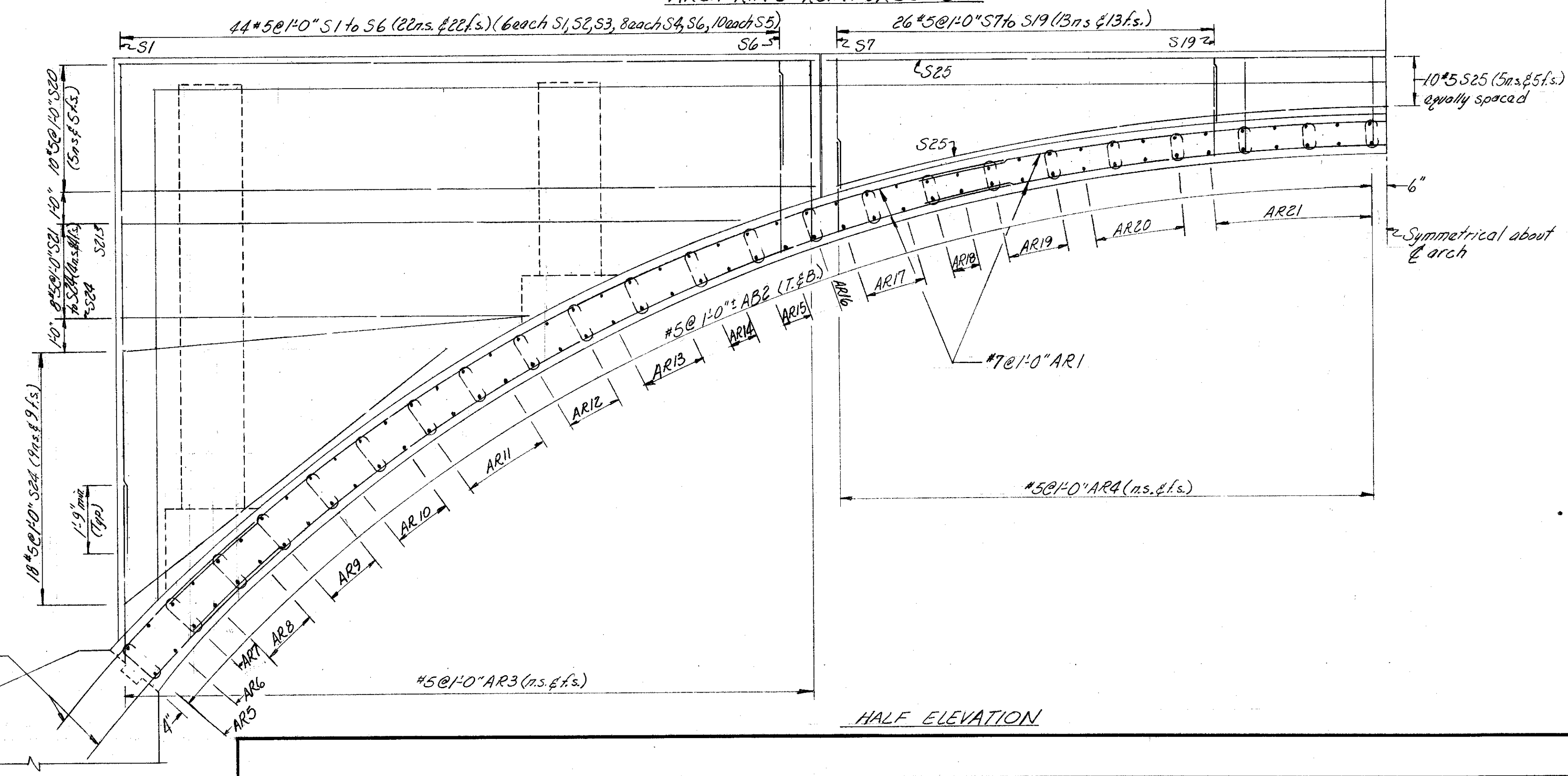
DESIGNED BY <u>JAM</u> DATE <u>8/81</u>				CHECKED BY <u>DEP</u> DATE <u>8/81</u>				BRIDGE SHEET NO. <u>4</u> OF <u>7</u>	
DRAWN BY <u>JAM</u> DATE <u>3/81</u>				CHECKED BY <u>DEP</u> DATE <u>8/81</u>				FILE NUMBER <u>4-13-1-3</u>	
TRACED BY <u>JAM</u> DATE <u>9/81</u>				CHECKED BY <u>JAM</u> DATE <u>10/81</u>					
QUANTITIES BY <u>DEP</u> DATE <u>9/81</u>				CHECKED BY <u>JAM</u> DATE <u>10/81</u>					
REVISIONS				REVIEWED BY				PROJ. NO. <u>RHS-BRZ-30(1)</u> SHEET NO. <u>5</u> TOTAL SHEETS <u>33</u>	

AS BUILT PLANS

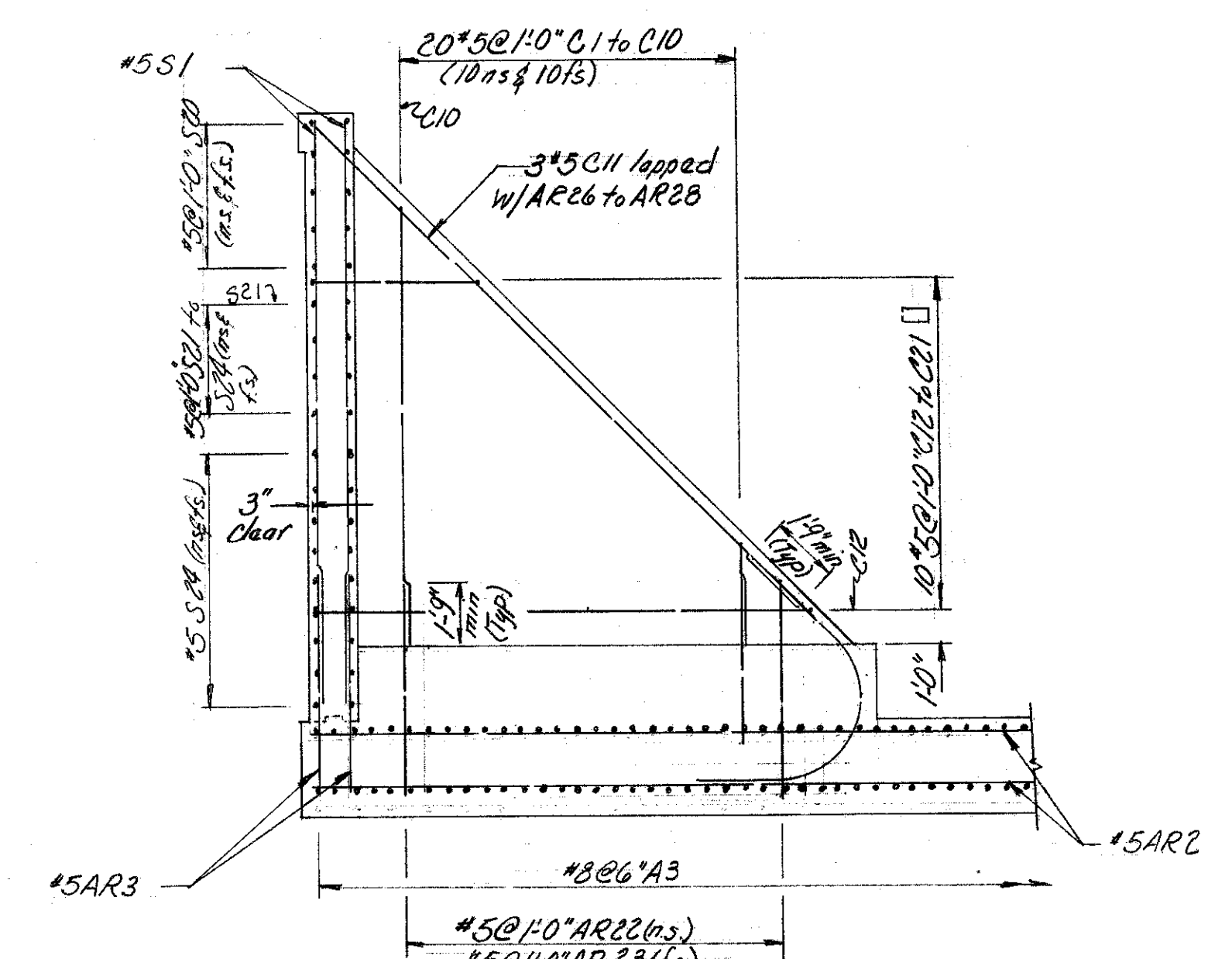
BRUNING 40-107 31682



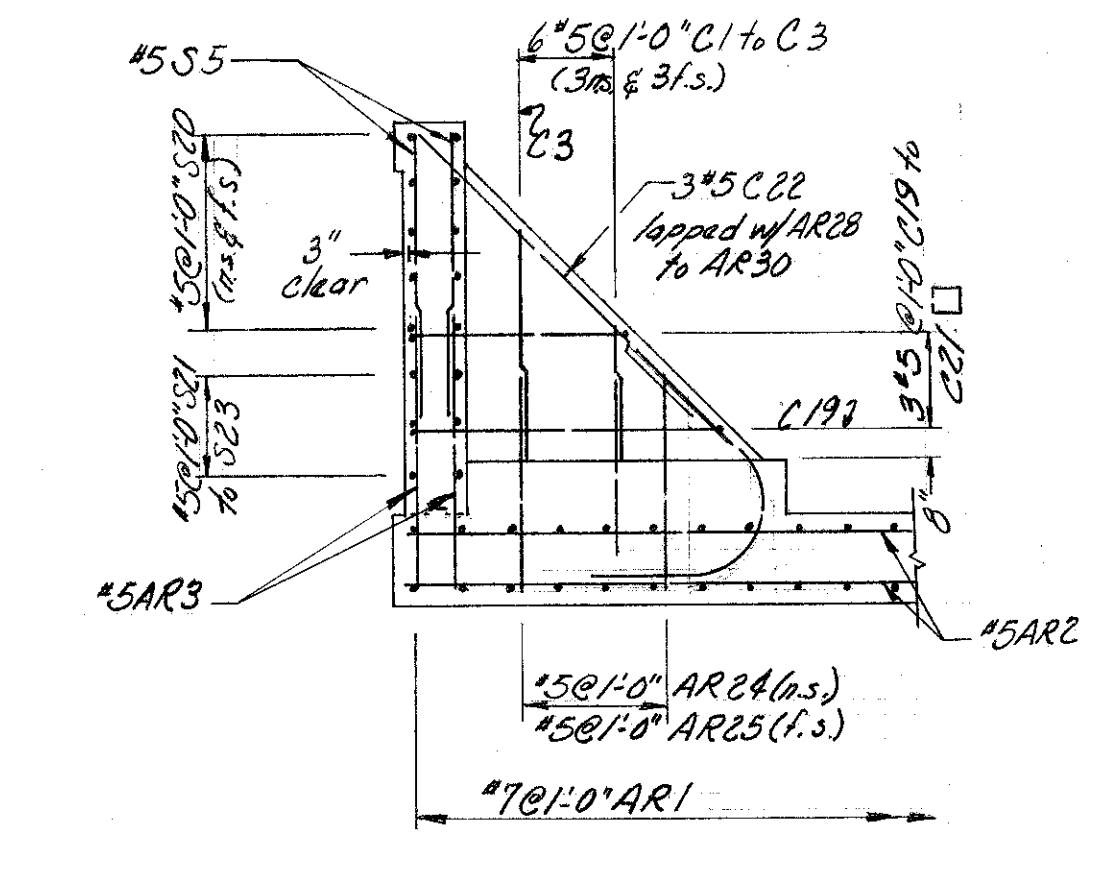
ARCH RING REINFORCEMENT



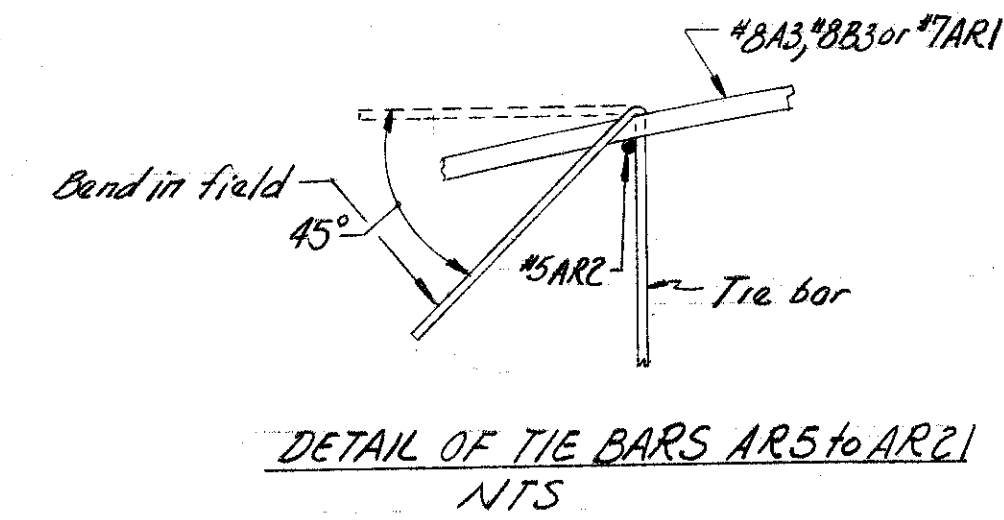
HALF ELEVATION



SECTION A-A
Scale: 1/4" = 1'-0"



SECTION B-B
Scale: 1/4" = 1'-0"



NOTE: Reinforcing steel shall be 2" clear from all surfaces except as noted

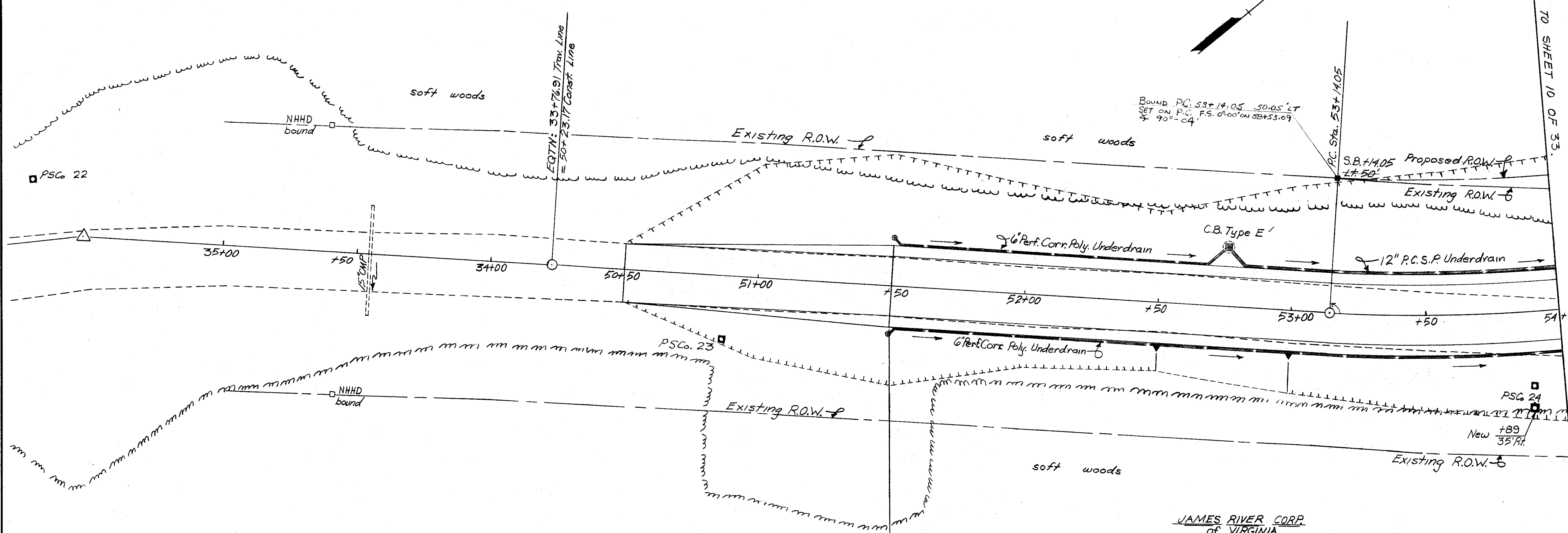
Sheet scale: 3/8" = 1'-0" except as noted

STATE OF NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS BRIDGE DESIGN DIVISION			
TOWN <u>MILAN</u>	BRIDGE NO. <u>21610SB</u>		
FEDERAL PROJECT <u>RHS-BRZ-301(1)</u>	STATE PROJECT <u>S-1457</u>		
LOCATION <u>RIVER ROAD OVER STEARNS BROOK</u>			

ARCH RING, SPANDREL & COUNTERFORT REINFORCEMENT			
DESIGNED <u>JAM 8/81</u>	CHECKED <u>DEP 10/81</u>	BY DATE <u>DEP 10/81</u>	BRIDGE SHEET NO. <u>7 OF 7</u>
DRAWN <u>JAM 9/81</u>	CHECKED <u>DEP 10/81</u>	FILE NUMBER <u>4-13-1-3</u>	
TRACED <u>DEP 9/81</u>	CHECKED <u>JAM 10/81</u>		
QUANTITIES <u>DEP 9/81</u>	CHECKED <u>JAM 10/81</u>		
REVIEWED BY _____	PROJ. NO. <u>RHS-BRZ-301(1)</u>	SHEET NO. <u>8</u>	TOTAL SHEETS <u>33</u>

FED. ROAD DIV. NO.	STATE	PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	N.H.				

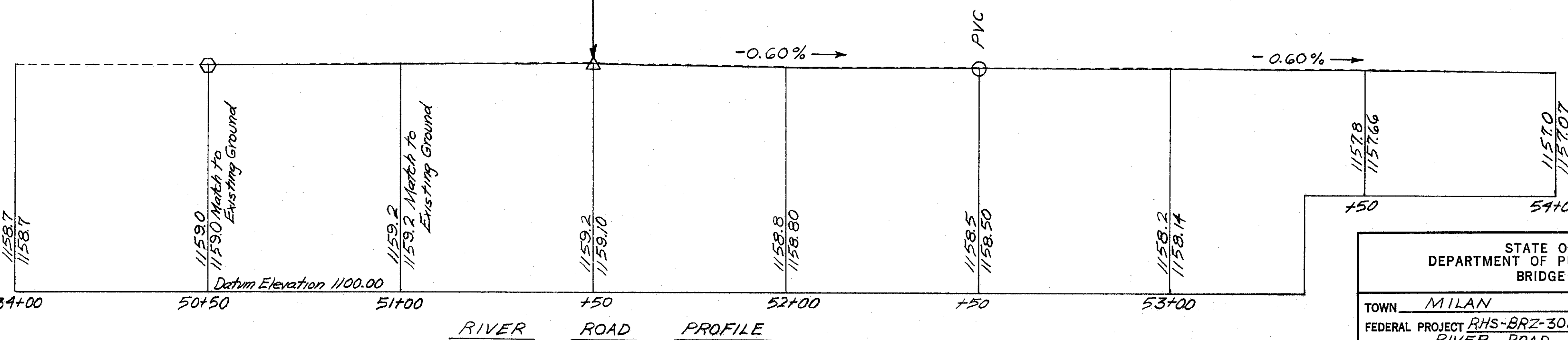
GUAY, RAYMOND A.



CONSTRUCTION NOTES

- (1) All trees cut for roadwork and R.O.W. shall be cut in 4' lengths and stacked on owners property. Cost is subsidiary. The burning of brush or cordwood is not permitted.
- (2) All new slopes shall be treated with; Humus, Item G47.1, 4" deep Turf Establishment w/mulch, Item G46.11
- (3) S.B. = Stone Bound, Item G22.4
- (4) Item G15.411, Crystal Delineators, Single, shall be installed Lt. & Rt. as directed by the Engineer.
- (5) Drainage Notes:
 - (a) Sta. 51+50; Construct Underdrain Flushing Basins, one each Lt. & Rt., Item G05.79, See sht. 1 of 33 for additional details.
 - (b) Sta. 51+50 to Sta. 52+75, Lt. Construct 12" LF of Item G05.706, 6" Perf. Corr. Polyethylene Underdrain Incl. Spec. Excav. & Backfill.
 - (c) Sta. 52+75, Lt. Construct C.B. Type E, Item G04.15
 - (d) Sta. 52+75 to Sta. 55+00, Lt. Construct 235' X 12" P.C. Steel Pipe Underdrain Incl. Spec. Excav. & Backfill, Item G05.112
 - (e) Sta. 51+50 to Sta. 56+50, Rt. Construct 529' LF of Item G05.706, 6" Perf. Corr. Polyethylene Underdrain Incl. Spec. Excav. & Backfill. Const. UL-4 HDR @ 56+50 RT
- (6) Roadway Shoulders shall be paved for the entire length of the project, including approaches, with 3" thick Hot Bituminous Pavement, Machine Method, Item 403.11, as shown or as directed.

STA. 50+50 to STA. 51+50 CONSTRUCT APPROACH TO PROJ. S-1457
 STA. 51+50 BEGIN PROJ. S-1457



Sheet Scale: 1"=20'

STATE OF NEW HAMPSHIRE
 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
 BRIDGE DESIGN DIVISION

TOWN MILAN BRIDGE NO. 216/058
 FEDERAL PROJECT RHS-BRZ-301(1) STATE PROJECT S-1457
 LOCATION RIVER ROAD OVER STEARNS BROOK

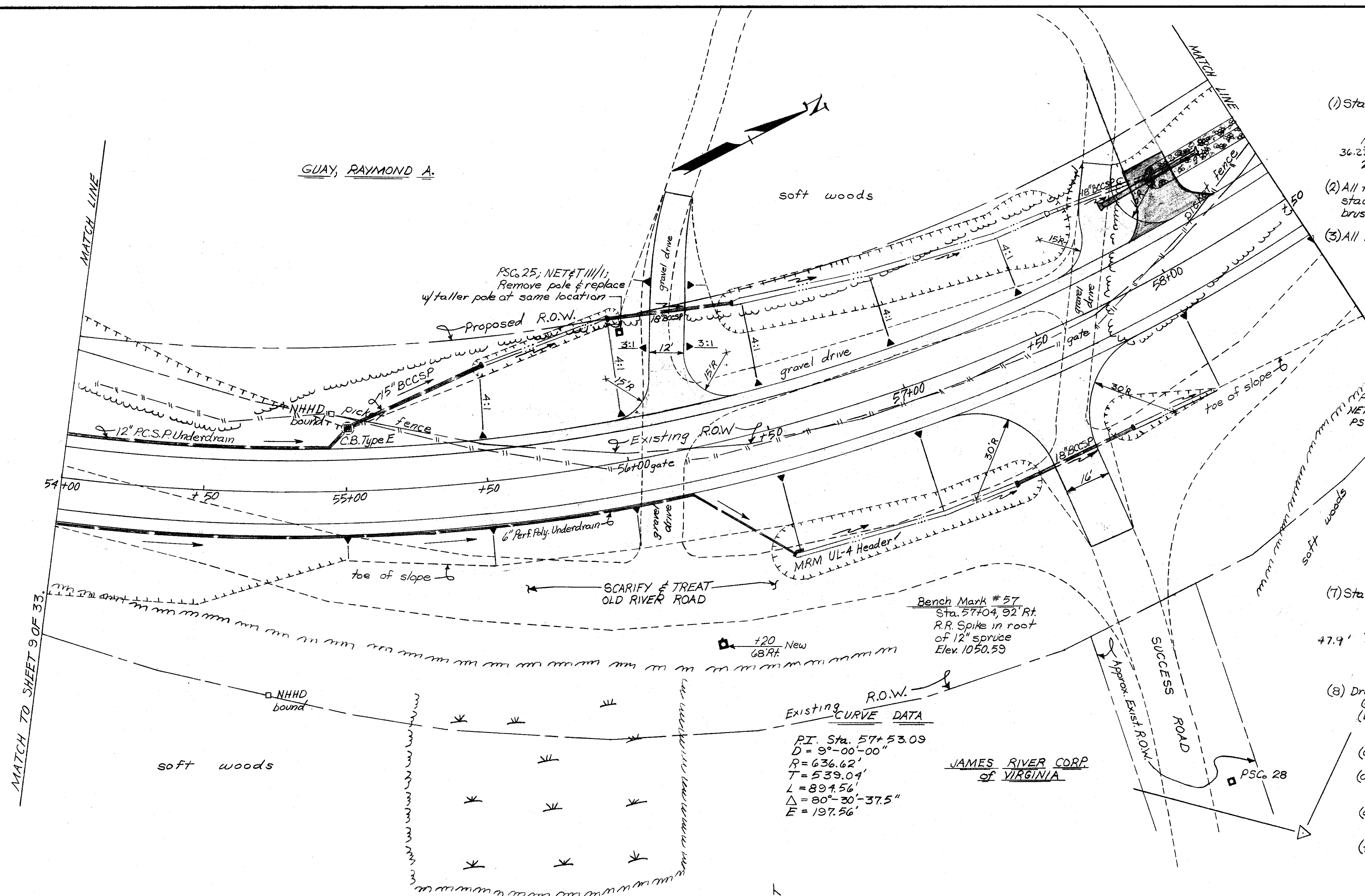
ROADWAY PLAN & PROFILE (Sheet 1 of 5)

DESIGNED	MWR	BY	DATE	CHECKED	BKJ	BY	DATE	BRIDGE SHEET NO.	
DRAWN	DJD	DATE	4/80	CHECKED	MWR	DATE	6/80	OF	
TRACED	MWR	DATE	6/80	CHECKED	BKJ/JAM	DATE	7/80	FILE NUMBER	4-13-1-3
QUANTITIES	MWR	DATE	11/81	CHECKED	DJW	DATE	11/81		
REVIEWED BY		PROJ. NO.	RHS-BRZ-301(1)	SHEET NO.	9	TOTAL SHEETS	33		

AS BUILT PLANS

BRUNING 40-107 31662

FED. ROAD DIV. NO.	STATE	PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	N.H.				

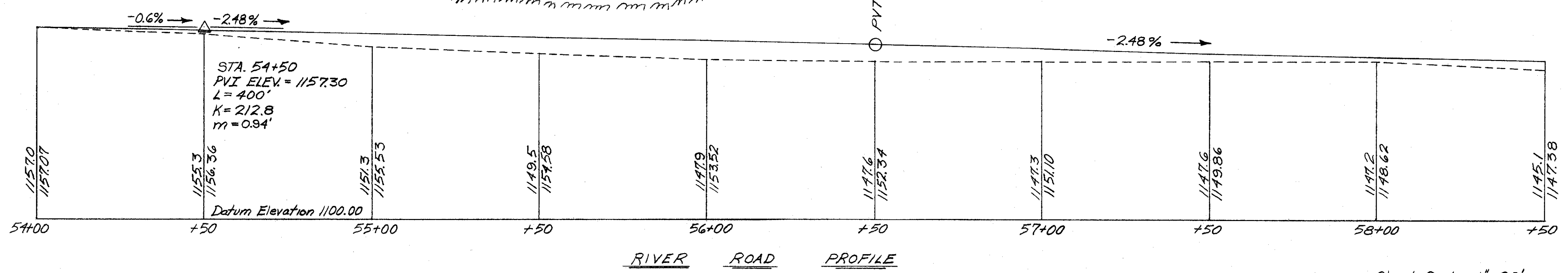


- CONSTRUCTION NOTES**
- Sta. 57+00, Lt. Construct paved approach to drive as shown or as directed with:
Gravel, 9" thick, Item 304.2
Crushed Gravel, 3" thick, Item 304.3
Hot Bituminous Pavement, Hand Method, 2 1/2" thick, Item 403.12
36-236X18" BCCSP, Item 603.1401B
2-B.C. Steel End Sections, Item 603.3611B ✓
 - All trees cut for roadwork and R.O.W. shall be cut in 4' lengths and stacked on owners property. Cost is subsidiary. The burning of brush or cordwood is not permitted.
 - All new slopes shall be treated with:
Humus, 4" deep, Item 647.1
Turf Establishment with Mulch, Item 646.11
 - Sta. 56+20, Lt. Construct paved approach to drive as shown or as directed with:
Gravel, 9" thick, Item 304.2
Crushed Gravel, 3" thick, Item 304.3
Hot Bituminous Pavement, Machine Method, 2 1/2" thick, Item 403.11
42-1 42"X18" BCCSP, Item 603.1401B
2-B.C. Steel End Sections, Item 603.3611B ✓
 - Remove pavement from all exposed areas of old River Road. Cost is subsidiary. Scarify old roadbed and treat with:
Humus, 4" thick, Item 647.1
Turf Establishment with mulch, Item 646.11
 - Item 615.41, Crystal Delineators, Single, shall be installed Lt. & Rt. as directed by the Engineer.

EXISTING CURVE DATA

P.I. Sta. 57+53.09
 D = 9°-00'-00"
 R = 636.62'
 T = 539.04'
 L = 897.56'
 Δ = 80°-30'-37.5"
 E = 197.56'

JAMES RIVER CORP. of VIRGINIA



- Sta. 57+45, Rt. Construct paved approach to Success Road with:
Gravel, 9" thick, Item 304.2
Crushed Gravel, 3" thick, Item 304.3
Hot Bituminous Pavement, Machine Method, 2 1/2" thick, Item 403.11
44"X18" BCCSP, Item 603.1401B
2-B.C. Steel End Sections, Item 603.3611B ✓
Backfill pipe as directed with Item 209, Granular Backfill
- Drainage Notes:
 (a) Sta. 55+00, Lt. Construct C.B. Type E, Item 604.15 ✓
 (b) Sta. 55+00 to Sta. 55+50, Lt. Construct 50"X15" BCCSP, Item 603.1401B with 1-B.C. Steel End Section, Item 603.3611B ✓
 (c) Sta. 55+50 to Stearns Brook, Lt. Construct drainage ditch as shown or as directed. ✓
 (d) Sta. 58+00 to Stearns Brook, Lt. Stone line drainage ditch as shown or as directed with Stone Fill, Class E, Item 585.5; (1'-0" min. thickness) ✓
 (e) Sta. 56+50, Rt. Construct Underdrain outlet Header UL-4 as shown or as directed with Item 570.4, Mortar Rubble Masonry. ✓
 (f) Sta. 56+50 to Sta. 58+00, Rt. Construct drainage ditch as shown or as directed. ✓

STATE OF NEW HAMPSHIRE
 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
 BRIDGE DESIGN DIVISION

TOWN MILAN BRIDGE NO. 216/05B
 FEDERAL PROJECT RHBPRZ-301(1) STATE PROJECT S-1457
 LOCATION RIVER ROAD OVER STEARNS BROOK

ROADWAY PLAN & PROFILE (Sheet 2 of 5)

DESIGNED	MWR	BY	DATE	CHECKED	BKJ	BY	DATE	BRIDGE SHEET NO.
DRAWN	DJD	BY	DATE	CHECKED	MWR	BY	DATE	OF
TRACED	MWR	BY	DATE	CHECKED	BKJ/JAM	BY	DATE	FILE NUMBER
QUANTITIES	MWR	BY	DATE	CHECKED	DSW	BY	DATE	4-13-1-3

REVIEWED BY: _____ PROJ. NO. RHBPRZ-301(1) SHEET NO. 10 TOTAL SHEETS 33

BRUNING 40-107 3166Z

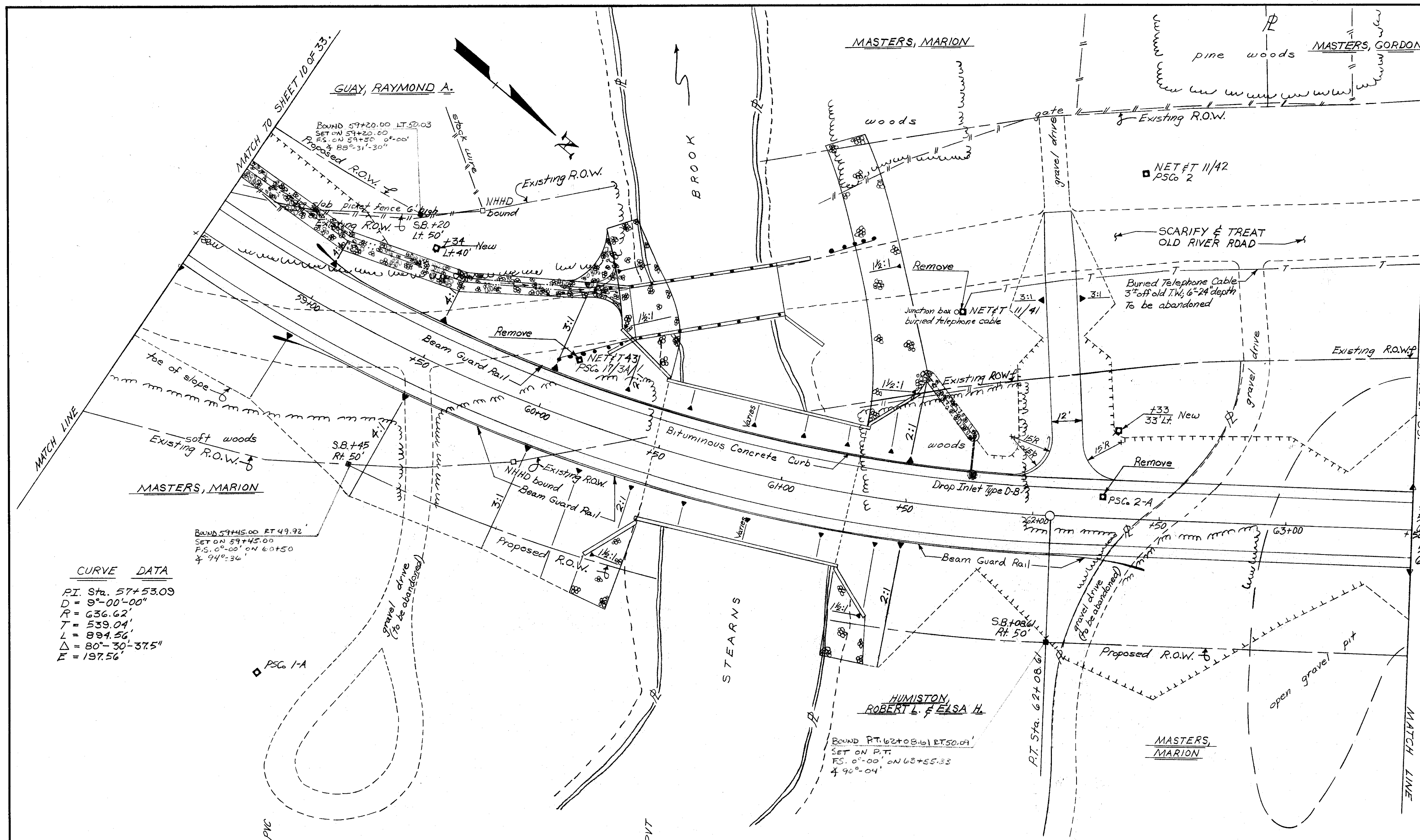
AS BUILT PLANS

CONSTRUCTION NOTES

- (1) Item 615.41, Crystal Delineators, Single, and Item 615.44, Reflectorized Beam Guard Rail Delineators shall be installed Lt. & Rt. as directed by the Engineer.
- (2) All trees cut for roadwork and ROW shall be cut in 4' lengths and stacked on owner's property. Cost is subsidiary. The burning of brush or cordwood is not permitted.
- (3) All new slopes shall be treated with; Humus, 4" deep, Item 647.1 Turf Establishment with mulch, Item 646.11
- (4) S.B. = Stone Bound, Item 622.4
- (5) Remove pavement from all exposed areas of old River Road. Cost is subsidiary. Scarify old roadbed and treat with; Humus, 4" deep, Item 647.1 Turf Establishment with mulch, Item 646.11
- (6) Sta. 59+75 to Sta. 61+75, Lt. Construct 200 L.F. of Item 609.81, Bituminous Concrete Curb, Type A, as shown or as directed.
- (7) Sta. 62+15, Lt.; Construct paved approach to drive as shown or as directed with; Gravel, 8" thick, Item 304.2 Crushed Gravel, 3" thick, Item 304.3 Hot Bituminous Pavement, Machine Method, 2 1/2" thick, Item 403.11
- (8) Rail Construction Notes:

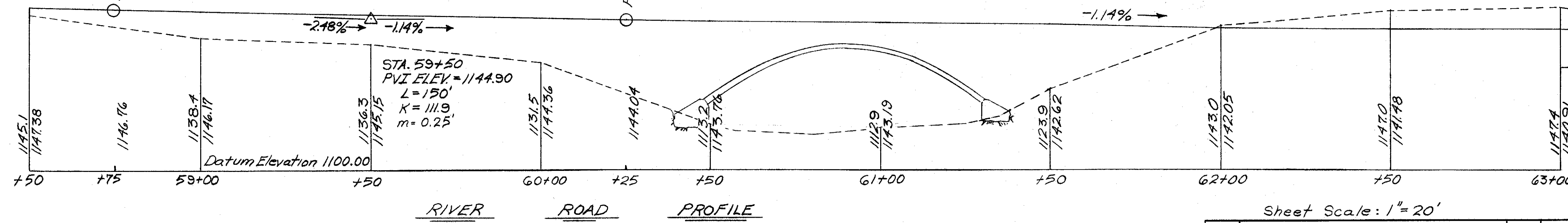
Sta.	Length & Description	Item Number
58+50 to 59+40, Lt.	Beam Guard Rail, Term. Unit, Type F, Mod.	606.146.1
59+40 to 61+45, Lt.	Beam Guard Rail, Std. Sec. 6R-140;	606.140
61+45 to 62+45, Lt.	Beam Guard Rail, Incl. Term. Sec. 7;	606.143
59+45 to 61+45, Rt.	Beam Guard Rail, Term. Unit, F, Mod.	606.146.1
61+45 to 62+45, Rt.	Beam Guard Rail, Std. Sec. 6R-140;	606.140
62+45 to 63+00, Rt.	Beam Guard Rail, Term. Unit, F, Mod.	606.146.1

See sheet 33 of 35 for Guard Rail layout.
- (9) Sta. 61+75, Lt. Construct Drop Inlet, Type D-B, Item 604.242 as shown or as directed with; 16.2 75 L.F. of 12" Pipe for Slope Drainage, Incl. Spec. Excav., Item 603.490.12 1-Metal End Section for 12" Pipe, Incl. Spec. Excav., Item 603.32.112
- (10) Sta. 61+50 to Sta. 61+75, Lt. Construct drainage ditch as shown or as directed. Stone line drainage ditch with Item 585.5, Stone Fill, Class E, (1'-0" minimum thickness).



CURVE DATA

PI. Sta.	57+53.09
D =	9°-00'-00"
R =	636.62'
T =	539.04'
L =	894.56'
Δ =	80°-30'-37.5"
E =	197.56'



STATE OF NEW HAMPSHIRE
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
BRIDGE DESIGN DIVISION

TOWN MILAN BRIDGE NO. 216/058
FEDERAL PROJECT RHS-BRZ-301(U) STATE PROJECT S-1457
LOCATION RIVER ROAD OVER STEARNS BROOK

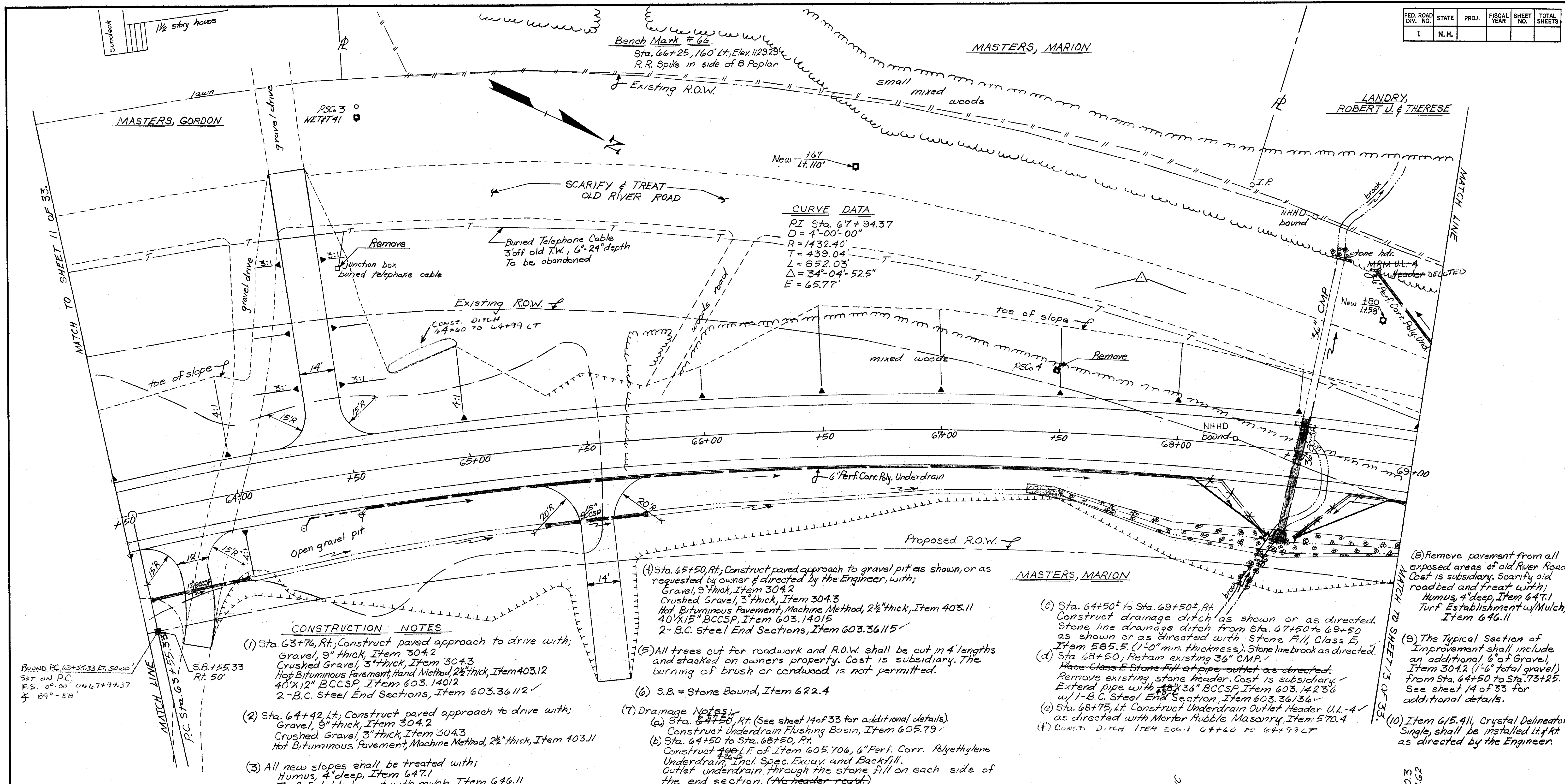
ROADWAY PLAN & PROFILE (Sheet 3 of 5)

DESIGNED	MWR	BY	DATE	CHECKED	BKL	BY	DATE	BRIDGE SHEET NO.
DRAWN	DJD		7/80		MWR		7/80	OF
TRACED	MWR		6/80		BK/JAM		7/80	FILE NUMBER
QUANTITIES	MWR		10/81		DSW		11/81	4-13-1-3

REVISIONS

REVIEWED BY	PROJ. NO.	SHEET NO.	TOTAL SHEETS
	RHS-BRZ-301(U)	11	33

BRUNING 40-107 31682

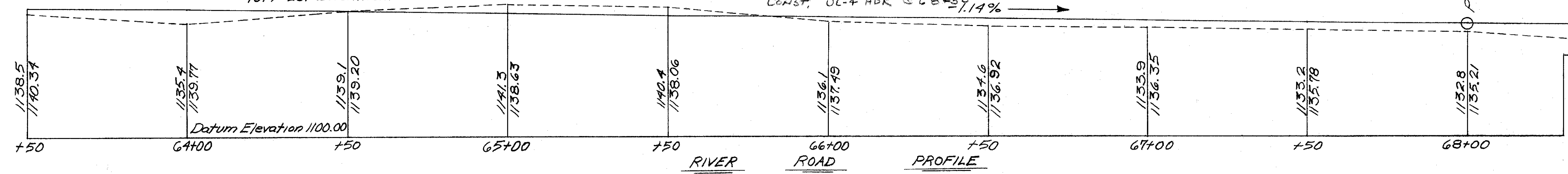


CURVE DATA
 PI Sta. 67+94.37
 D = 4'-00"-00"
 R = 1432.40'
 T = 439.04'
 L = 852.03'
 $\Delta = 34^{\circ}-04'-52.5''$
 E = 65.77'

- CONSTRUCTION NOTES**
- Sta. 63+76, Rt.; Construct paved approach to drive with; Gravel, 9" thick, Item 304.2
Crushed Gravel, 3" thick, Item 304.3
Hot Bituminous Pavement, Hand Method, 2 1/2" thick, Item 403.12
40" X 12" BCCSP, Item 603.14012
2-B.C. Steel End Sections, Item 603.36112
 - Sta. 64+42, Lt.; Construct paved approach to drive with; Gravel, 9" thick, Item 304.2
Crushed Gravel, 3" thick, Item 304.3
Hot Bituminous Pavement, Machine Method, 2 1/2" thick, Item 403.11
 - All new slopes shall be treated with; Humus, 4" deep, Item 647.1
Turf Establishment with mulch, Item 646.11

- Sta. 65+50, Rt.; Construct paved approach to gravel pit as shown, or as requested by owner & directed by the Engineer, with; Gravel, 9" thick, Item 304.2
Crushed Gravel, 3" thick, Item 304.3
Hot Bituminous Pavement, Machine Method, 2 1/2" thick, Item 403.11
40" X 15" BCCSP, Item 603.14015
2-B.C. Steel End Sections, Item 603.36115
 - All trees cut for roadwork and R.O.W. shall be cut in 4' lengths and stacked on owners property. Cost is subsidiary. The burning of brush or cordwood is not permitted.
 - S.B. = Stone Bound, Item 622.4
- (7) Drainage Notes:**
- Sta. 64+50, Rt. (See sheet 14 of 33 for additional details). Construct Underdrain Flushing Basin, Item 605.79
 - Sta. 64+50 to Sta. 68+50, Rt. Construct 40" L.F. of Item 605.706, 6" Perf. Corr. Polyethylene Underdrain, Incl. Spec. Excav. and Backfill. Outlet underdrain through the stone fill on each side of the end section. (No header req'd.)
CONST. UL-4 HDR 648+50 @ 1.14%

- Sta. 64+50 to Sta. 69+50, Rt. Construct drainage ditch as shown or as directed. Stone line drainage ditch from Sta. 67+50 to 69+50 as shown or as directed with Stone Fill, Class E, Item 585.5. (1'-0" min. thickness). Stone line brook as directed.
 - Sta. 68+50; Retain existing 36" CMP. Place Class E Stone Fill at pipe outlet as directed. Remove existing stone header. Cost is subsidiary. Extend pipe with 40" X 36" BCCSP, Item 603.14236 w/ 1-B.C. Steel End Section, Item 603.36136
 - Sta. 68+75, Lt. Construct Underdrain Outlet Header U.L.-4 as directed with Mortar Rubble Masonry, Item 570.4
 - CONST. DITCH ITEM 206.11 64+60 TO 64+99 LT
- (8) Remove pavement from all exposed areas of old River Road. Cost is subsidiary. Scarify old roadbed and treat with; Humus, 4" deep, Item 647.1
Turf Establishment w/ Mulch, Item 646.11
- (9) The Typical Section of Improvement shall include an additional 6" of Gravel, Item 304.2 (1'-6" total gravel) from Sta. 64+50 to Sta. 73+25. See sheet 14 of 33 for additional details.
- (10) Item 615.41, Crystal Delimiters, Single, shall be installed Lt. & Rt. as directed by the Engineer.



STATE OF NEW HAMPSHIRE
 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
 BRIDGE DESIGN DIVISION

TOWN MILAN BRIDGE NO. 216/058
 FEDERAL PROJECT RHS-BRZ-301(U) STATE PROJECT S-1157
 LOCATION RIVER ROAD OVER STEARNS BROOK

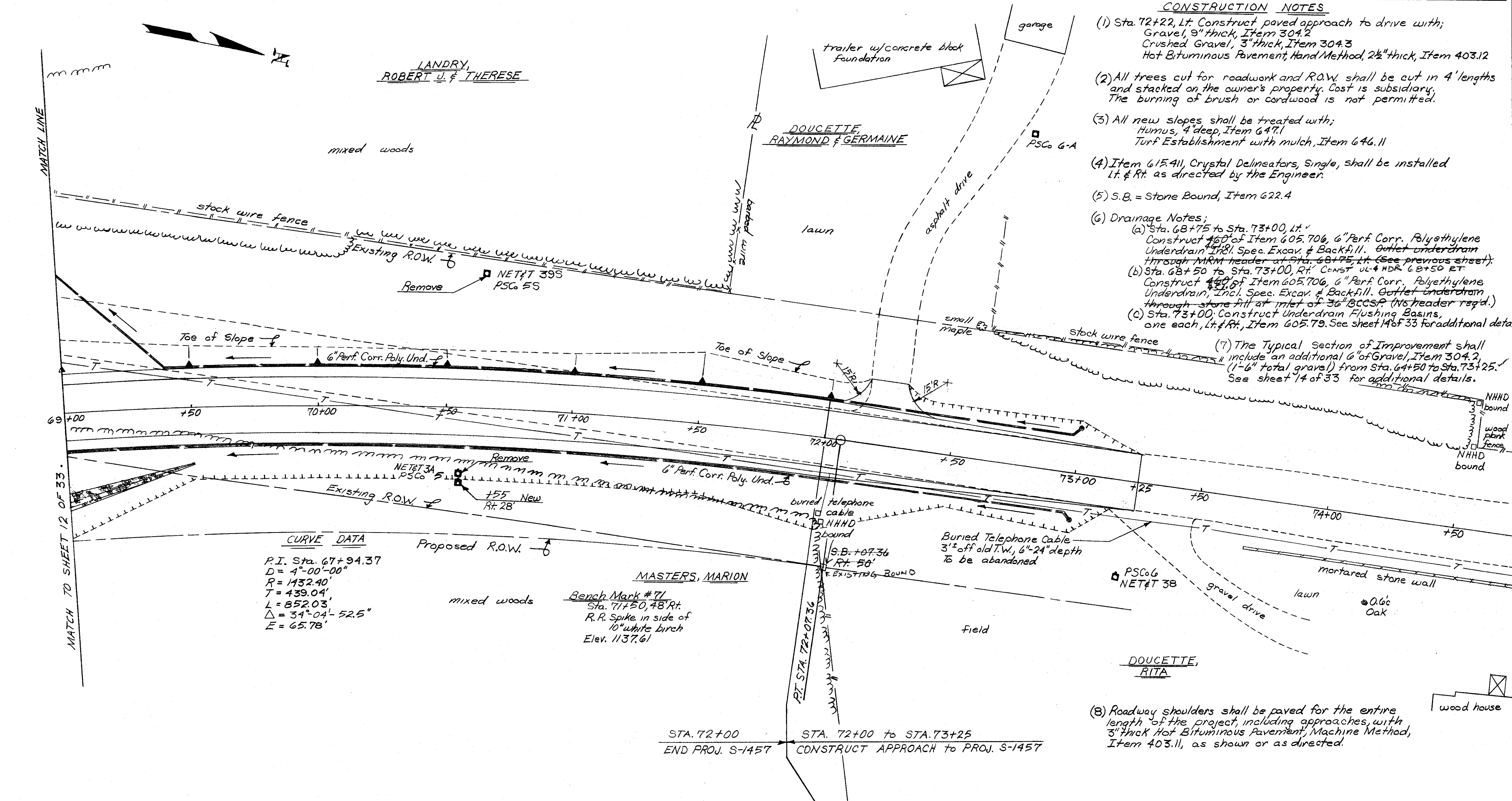
Sheet Scale: 1" = 20'

DESIGNED	MWR	BY DATE	7/80	CHECKED	BK1	BY DATE	7/80	BRIDGE SHEET NO.	12	OF	33
DRAWN	DJD	BY DATE	7/80	CHECKED	MWR	BY DATE	6/80	FILE NUMBER	4-13-1-3		
TRACED	MWR	BY DATE	7/80	CHECKED	BK1/JAM	BY DATE	7/80				
QUANTITIES	MWR	BY DATE	7/80	CHECKED	DSW	BY DATE	7/81				

REVISIONS	DESCRIPTION	BY	DATE

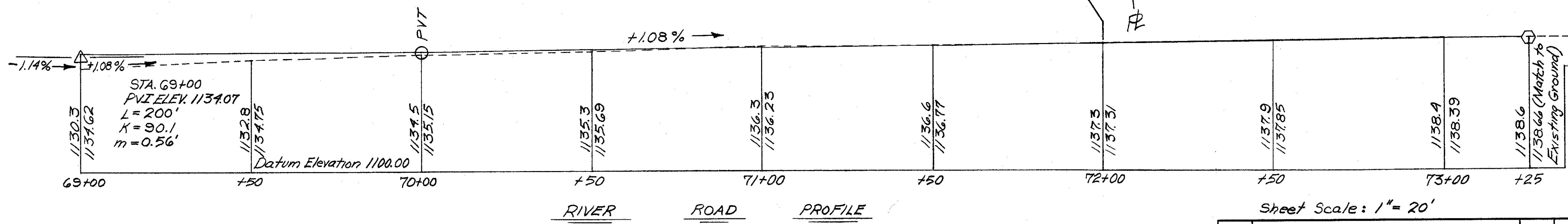
BRUNING 40-107 2166Z

- CONSTRUCTION NOTES**
- Sta. 72+22, Lt. Construct paved approach to drive with; Gravel, 9" thick, Item 304.2
Crushed Gravel, 3" thick, Item 304.3
Hot Bituminous Pavement, Hand Method, 2 1/2" thick, Item 403.12
 - All trees cut for roadwork and R.O.W. shall be cut in 4' lengths and stacked on the owner's property. Cost is subsidiary. The burning of brush or cordwood is not permitted.
 - All new slopes shall be treated with; Humus, 4" deep, Item 647.1
Turf Establishment with mulch, Item 646.11
 - Item 615.411, Crystal Delineators, Single, shall be installed Lt. & Rt. as directed by the Engineer.
 - S.B. = Stone Bound, Item 622.4
 - Drainage Notes;
 - Sta. 68+75 to Sta. 73+00, Lt. Construct 46" of Item 605.706, 6" Perf. Corr. Polyethylene Underdrain, Incl. Spec. Excav. & Backfill. Outlet underdrain through MRM header at Sta. 68+75, Lt. (See previous sheet).
 - Sta. 68+50 to Sta. 73+00, Rt. Construct 46" of Item 605.706, 6" Perf. Corr. Polyethylene Underdrain, Incl. Spec. Excav. & Backfill. Outlet underdrain through stone fill at inlet of 36" BCCSP (No header req'd.)
 - Sta. 73+00; Construct Underdrain Flushing Basins, one each, Lt. & Rt., Item 605.79. See sheet 14 of 33 for additional details.
 - The Typical Section of Improvement shall include an additional 6" of Gravel, Item 304.2, (1'-6" total gravel) from Sta. 64+50 to Sta. 73+25. See sheet 14 of 33 for additional details.



CURVE DATA

P.I. Sta. 67+94.37
 D = 4'-00"-00"
 R = 1432.40'
 T = 439.04'
 L = 852.03'
 Δ = 34°-04'-52.5"
 E = 65.78'



(B) Roadway shoulders shall be paved for the entire length of the project, including approaches, with 3" thick Hot Bituminous Pavement, Machine Method, Item 403.11, as shown or as directed.

STATE OF NEW HAMPSHIRE
 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
 BRIDGE DESIGN DIVISION

TOWN MILAN BRIDGE NO. 216/058
 FEDERAL PROJECT RHS-BRZ-30(1) STATE PROJECT S-1457
 LOCATION RIVER ROAD OVER STEARNS BROOK

ROADWAY PLAN & PROFILE (Sheet 5 of 5)

DESIGNED	MWR	BY	DATE	CHECKED	BKJ	BY	DATE	BRIDGE SHEET NO.	OF
DRAWN	DJD	BY	DATE	CHECKED	MWR	BY	DATE	FILE NUMBER	
TRACED	MWR	BY	DATE	CHECKED	BKJ/JAM	BY	DATE	4-13-1-3	
QUANTITIES	MWR	BY	DATE	CHECKED	DSW	BY	DATE		

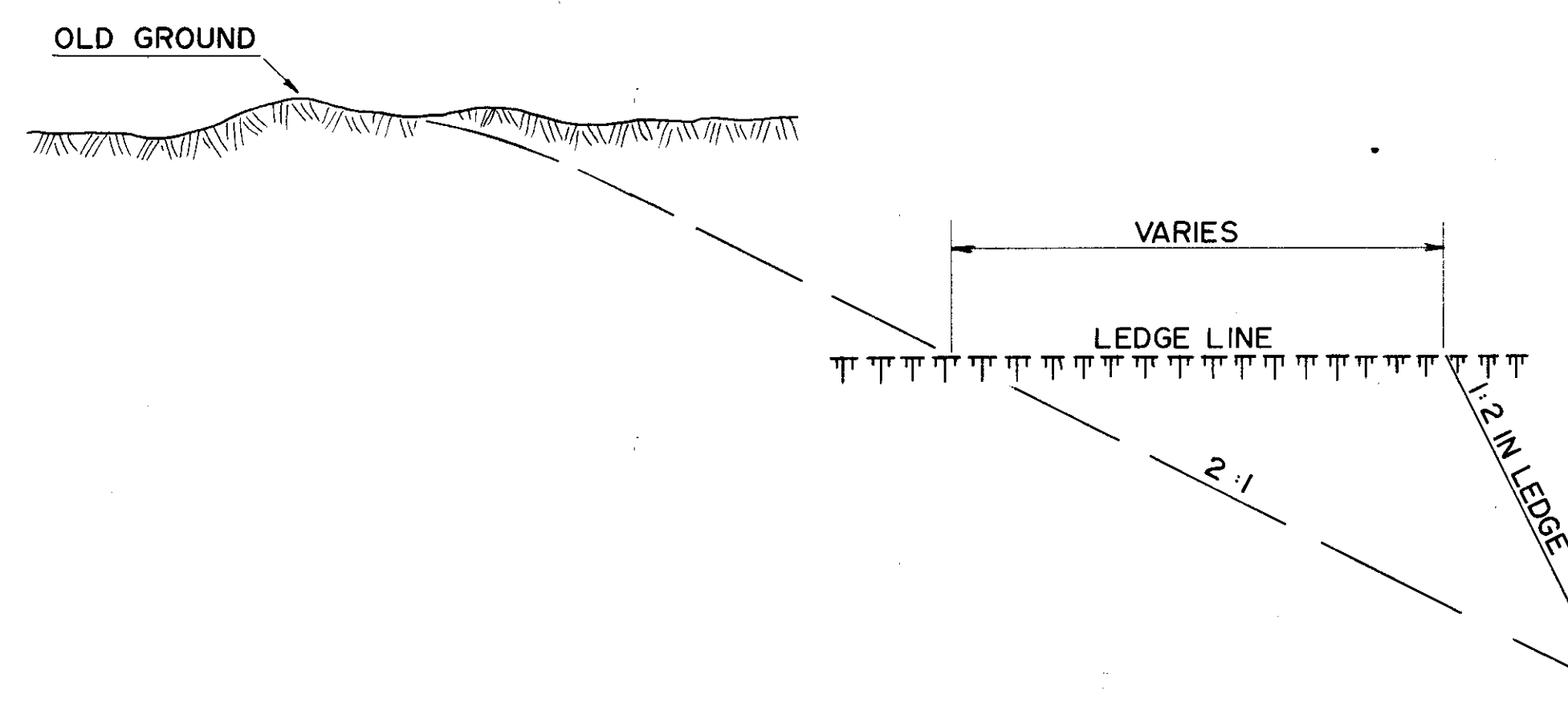
REVISIONS

REVIEWED BY	PROJ. NO.	SHEET NO.	TOTAL SHEETS
	RHS-BRZ-30(1)	13	33

BRUNING 40-107 3166Z

TYPICAL SECTION OF IMPROVEMENT : 11-4-4

SCALE : 1/4" = 1'-0"

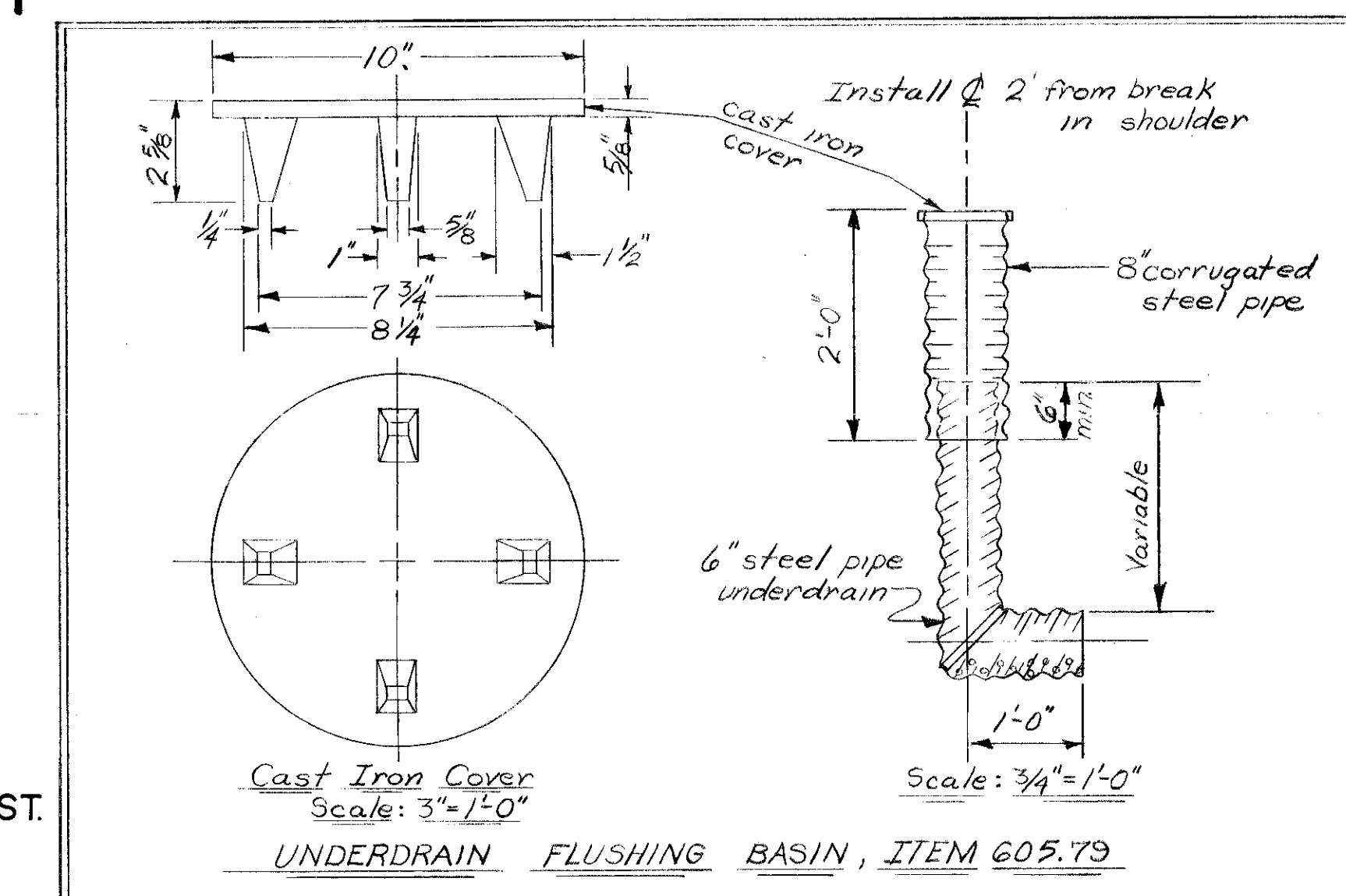


ROCK CUT

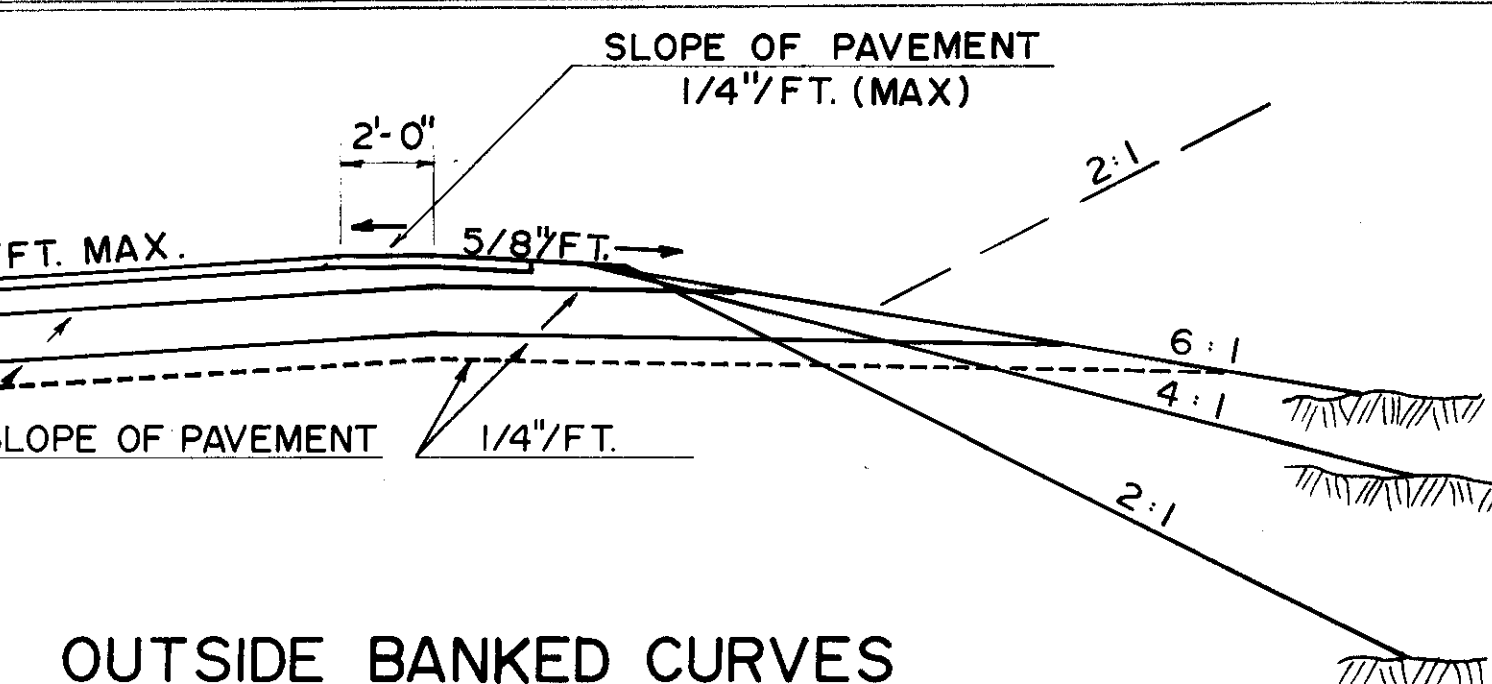
CONST. ϵ

NOTE: The signs listed below are the minimum requirement. Additional traffic control devices, if required, shall be included in Item 619.2 with no additional payment.

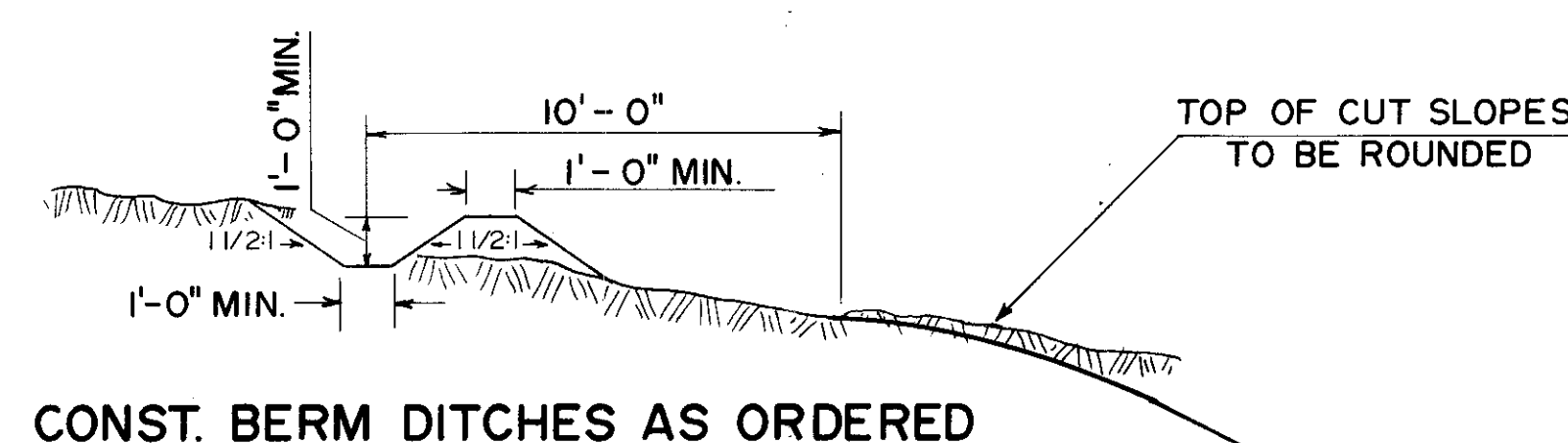
Sign No.	Description	No. Req'd.	No. Posts
G20-2	End Construction	3	6
W1-4L	Curve Sign	1	2
W1-4R	Curve Sign	1	2
W1-6	One Way Arrow	2	4
W20-1a	Bridge Construction Ahead	3	6
W20-1d	Bridge Construction 1500 Ft.	3	6
W20-1a	Flagman Ahead	3	3 easels
W20-9	Be Prepared to Stop	3	3 easels
	Barricades, Type II	25	
	Warning Lights, Type C	25	
	Delineators D-100 (3"x6")	25	
	Sign Paddles	2	



CONST. ϵ

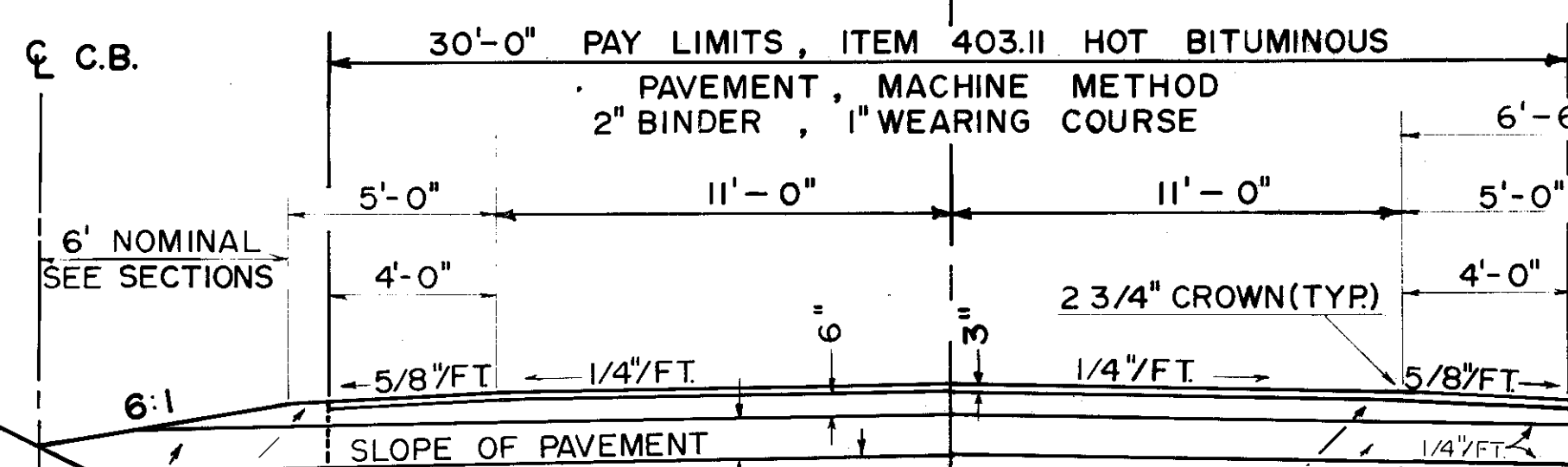


OUTSIDE BANKED CURVES



CUT SECTION

ϵ C.B.



FACE OF GUARD RAIL

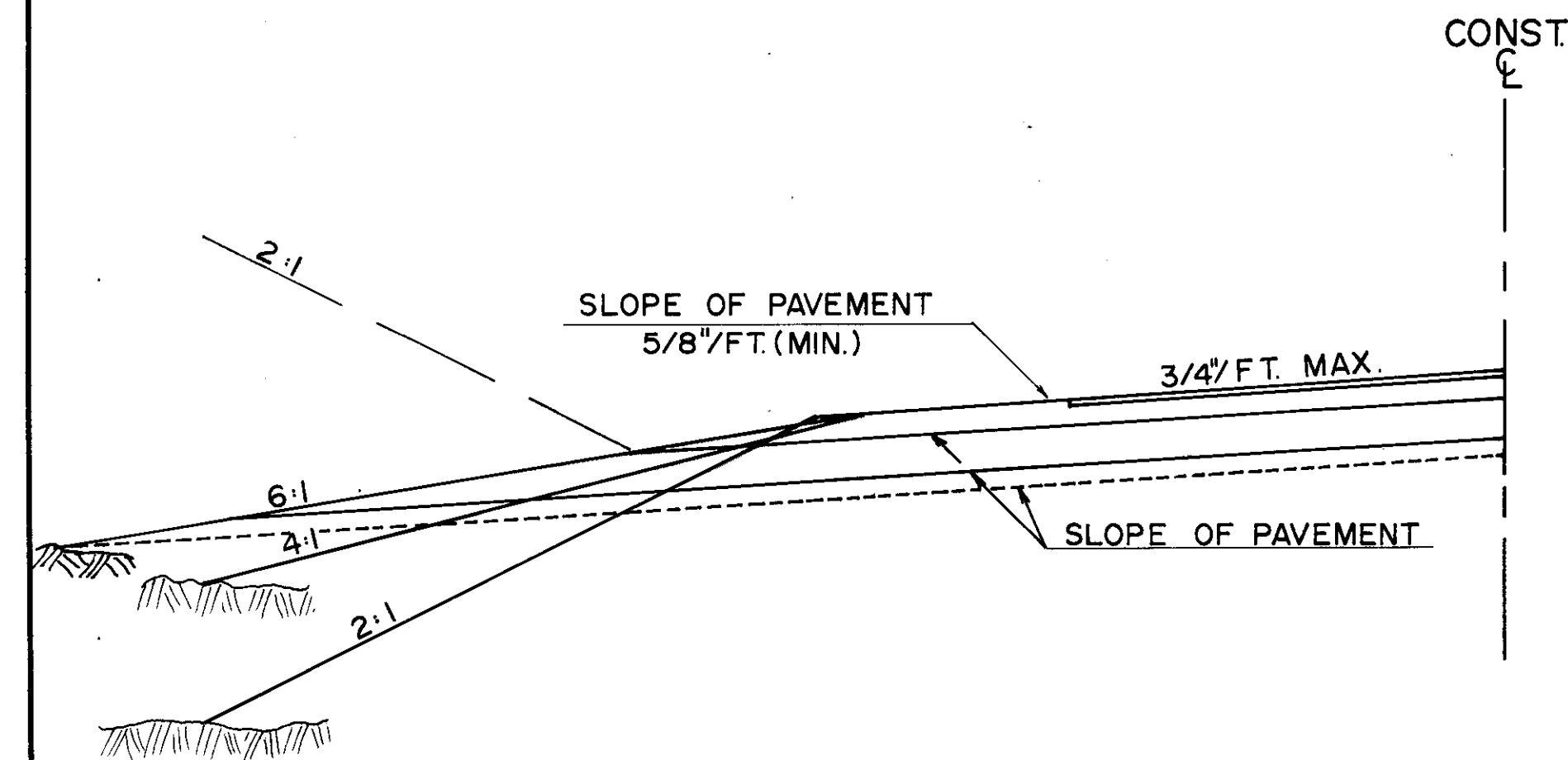
ITEM	QTY	UNIT
ITEM 304.3 CR. GRAVEL	6.1	C.Y./100 L.F.
	4.1	C.Y./100 L.F.
	2.1	C.Y./100 L.F.

ITEM	QTY	UNIT
ITEM 304.2 GRAVEL	6.1	31.5 C.Y./100 L.F.
	4.1	21.4 C.Y./100 L.F.
	2.1	17.4 C.Y./100 L.F.

ITEM	QTY	UNIT
ADDITIONAL ITEM 304.2 GRAVEL	6.1	25.3 C.Y./100 L.F.
	4.1	16.8 C.Y./100 L.F.
	2.1	11.6 C.Y./100 L.F.

ITEM	QTY	UNIT
ADDITIONAL ITEM 304.2 GRAVEL	55.6	C.Y./100 L.F.

FILL SECTION



INSIDE BANKED CURVES

NOTE: THE TYPICAL SECTION OF IMPROVEMENT SHALL INCLUDE AN ADDITIONAL 6" OF GRAVEL, ITEM 304.2 (1'-6" TOTAL GRAVEL), FROM STA. 64+50 TO STA. 73+25.

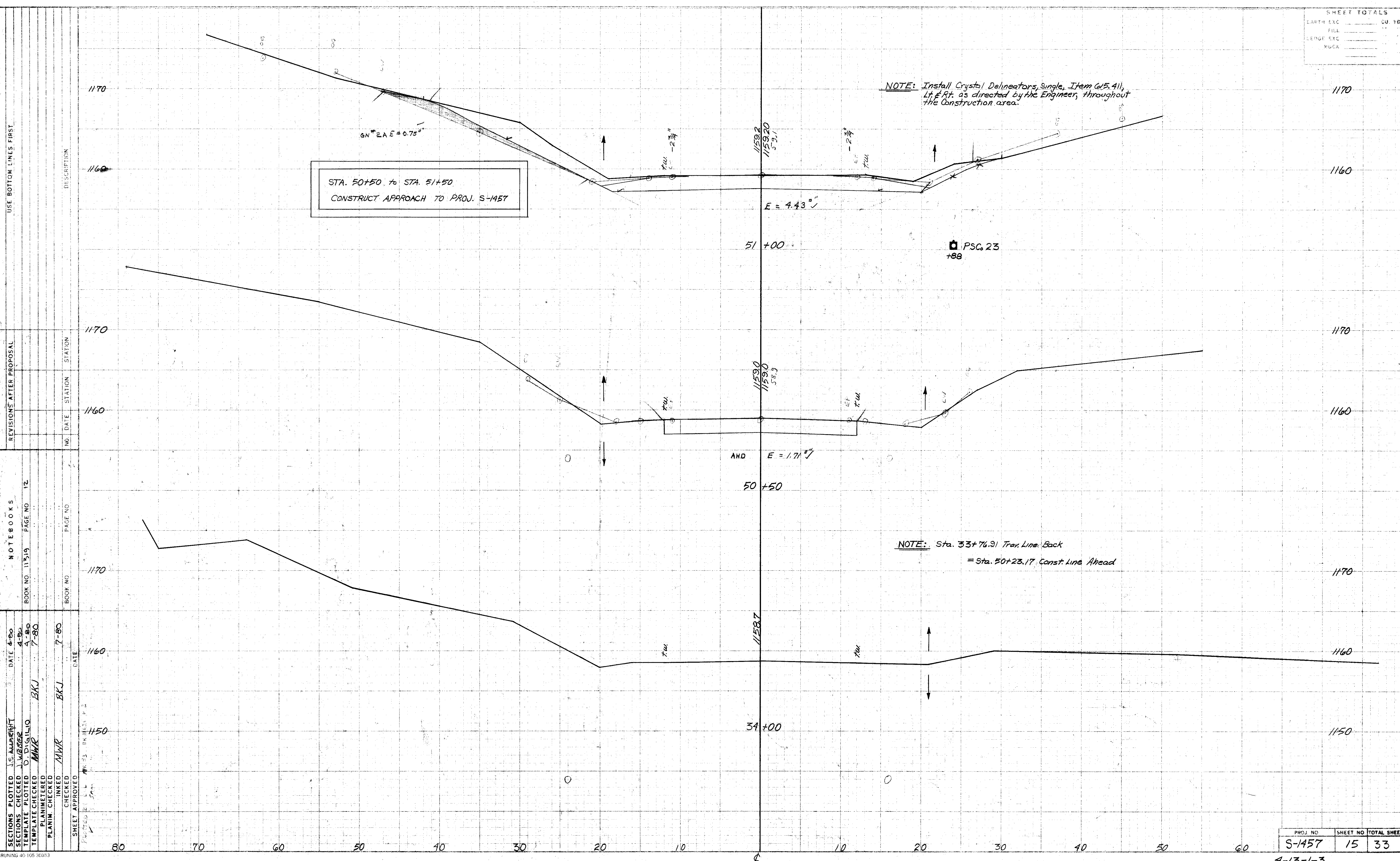
SEE CROSS SECTIONS FOR ADDITIONAL DETAILS.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
BRIDGE DESIGN DIVISION

TOWN MILAN BRIDGE NO. 216/058
FEDERAL PROJECT RHS-BRZ-30(1) STATE PROJECT S-1457
LOCATION RIVER ROAD OVER STEARNS BROOK

TYPICAL SECTION OF IMPROVEMENT			
DESIGNED	BY	DATE	BRIDGE SHEET NO.
DRAWN	BKJ/MWR	7/80	OF
TRACED	BKJ/MWR	7/80	FILE NUMBER
QUANTITIES	BKJ/MWR	7/80	4-13-1-3
REVIEWED BY		PROJ. NO.	SHEET NO. TOTAL SHEETS
		RHS-BRZ-30(1)	14 33

SHEET TOTALS	
EARTH EXC	CU. YDS
FILL	CU. YDS
LEGE EXC	CU. YDS
MUCK	CU. YDS



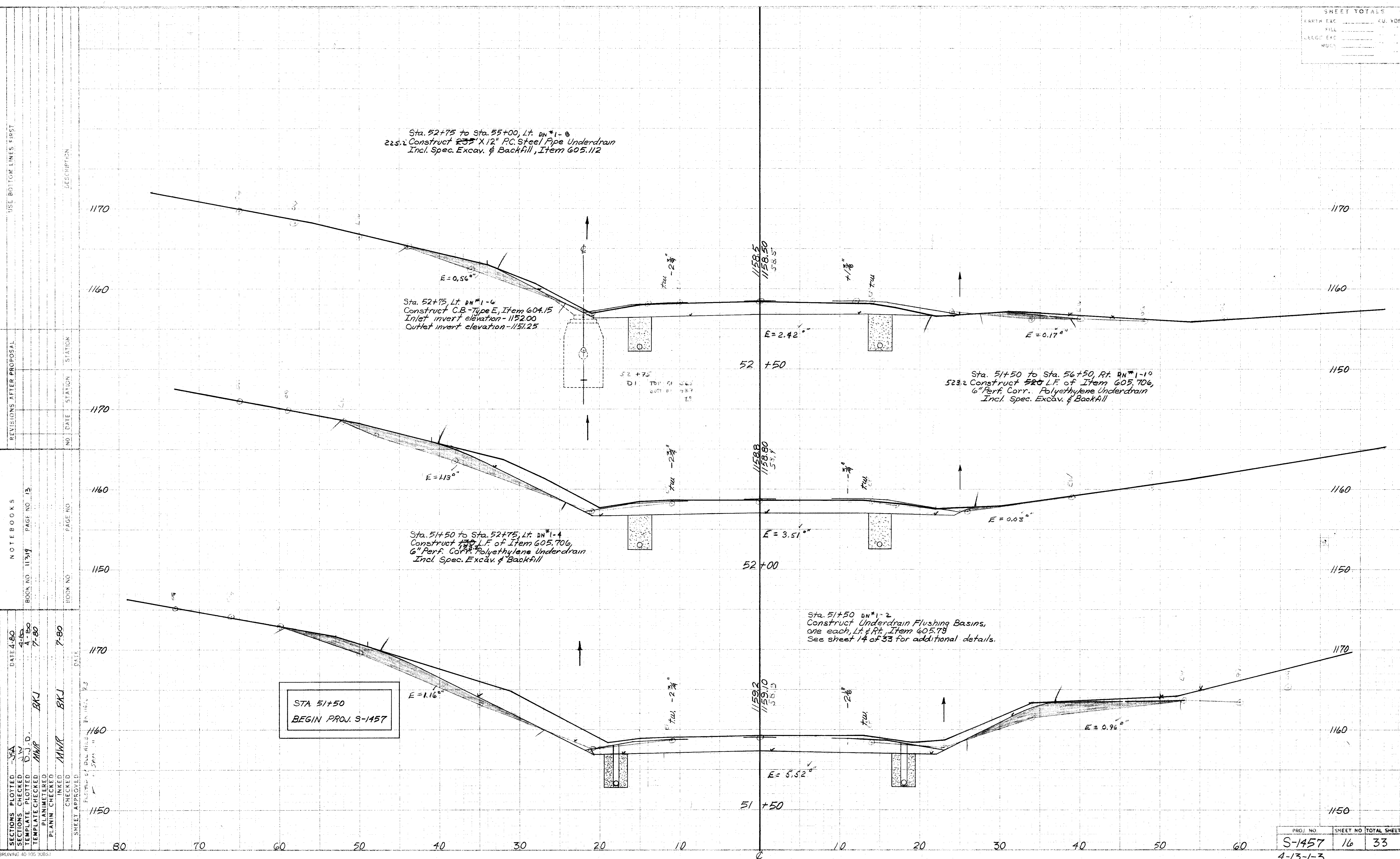
REVISIONS AFTER PROPOSAL		NOTE BOOKS	
NO.	DATE	STATION	DESCRIPTION

SECTIONS PLOTTED	DATE	BY
SECTIONS CHECKED	4-80	
TEMPLATE PLOTTED	4-80	
TEMPLATE CHECKED	7-80	
PLANIMETERED		
PLANIM CHECKED		
INKED	7-80	
CHECKED		
SHEET APPROVED		

PROJ. NO.	SHEET NO.	TOTAL SHEETS
S-1457	15	33

4-13-1-3

SHEET TOTALS	
EARTH EXC.	CU. YDS.
FILL	
BLDG EXC.	
MUDS	



REVISIONS AFTER PROPOSAL	NO.	DATE	STATION	DESCRIPTION

NOTEBOOKS	BOOK NO.	PAGE NO.

SECTIONS PLOTTED	DATE	BY

SECTIONS CHECKED	DATE	BY

TEMPLATE CHECKED	DATE	BY

PLANIMETERED	DATE	BY

PLAN CHECKED	DATE	BY

INKED	DATE	BY

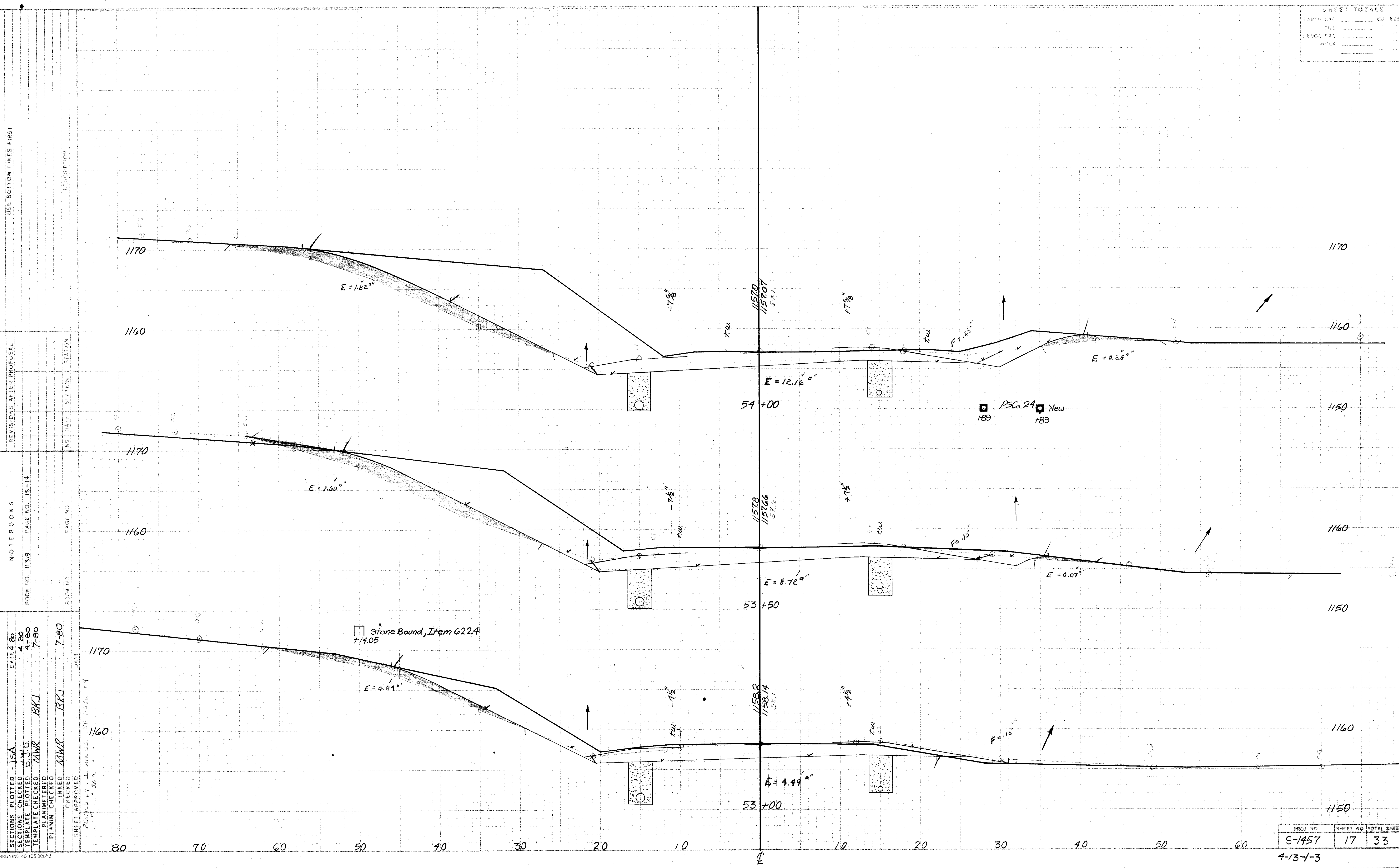
SHEET APPROVED	DATE	BY

STA 51+50
BEGIN PROJ. S-1457

PROJ. NO.	SHEET NO.	TOTAL SHEETS
S-1457	16	33

4-13-13

SHEET TOTALS	
EARTH EXC.	60 108
FILL	
SEWER EXC.	
BRICK	



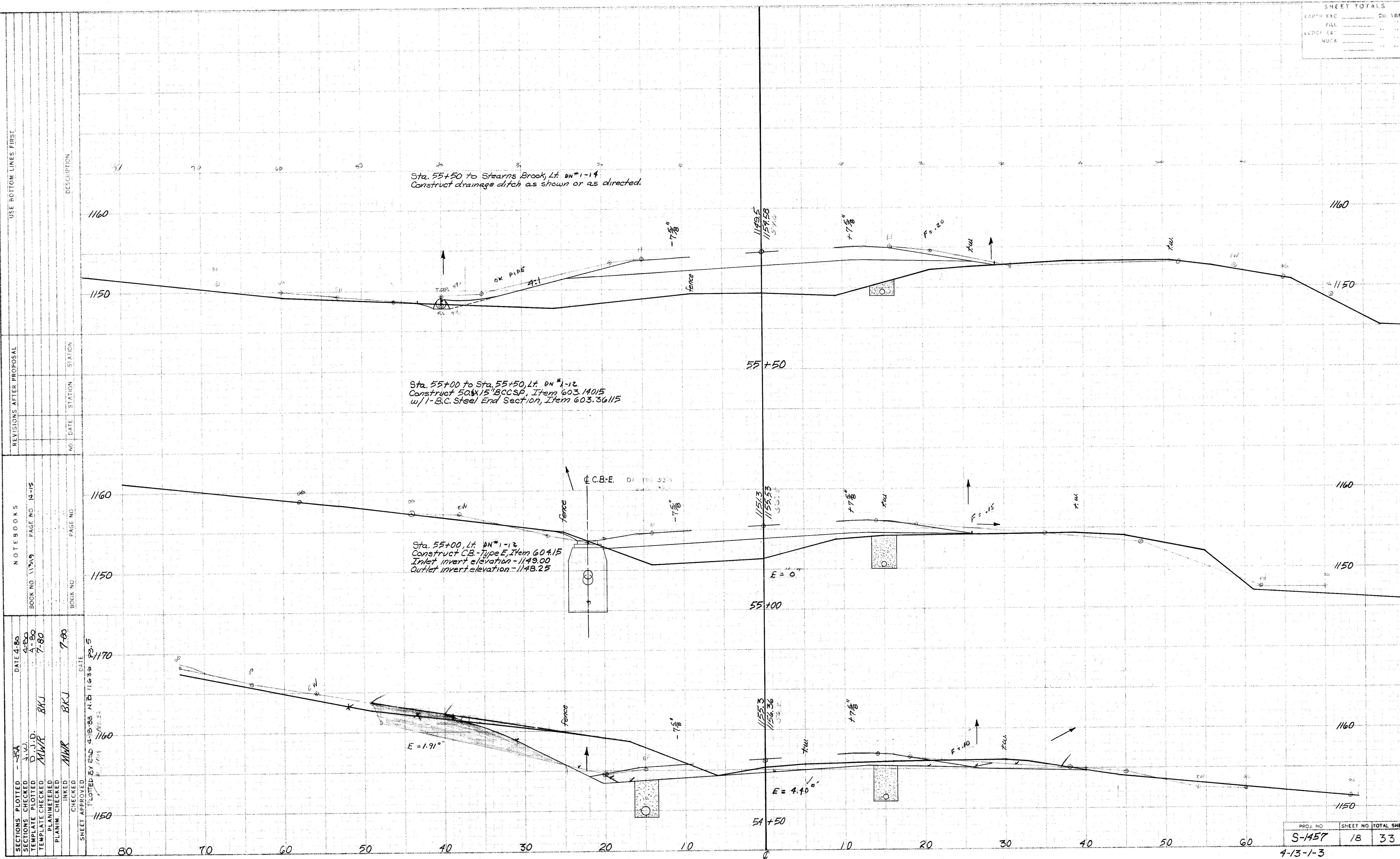
SECTIONS PLOTTED	DATE	BY
SECTIONS CHECKED	4-80	JSA
TEMPLATE PLOTTED	4-80	D.J.D.
TEMPLATE CHECKED	4-80	MWR
PLANIMETERED	7-80	BKJ
PLANIM CHECKED	7-80	BKJ
INKED		MWR
CHECKED		BKJ

BRUNING 40 105 9062

PROJ. NO.	SHEET NO.	TOTAL SHEETS
S-1457	17	33

4-13-1-3

SHEET TOTALS	
EARTH EXC	CU. YDS
FILL	..
LEDOY EXC	..
MUCT	..



Sta. 55+50 to Stearns Brook, Lt. DN#1-14
Construct drainage ditch as shown or as directed.

Sta. 55+00 to Sta. 55+50, Lt. DN#1-12
Construct 50x15" BCCSP, Item 603.14015
w/1-B.C. Steel End Section, Item 603.36115

Sta. 55+00, Lt. DN#1-12
Construct C.B.-Type E, Item 604.15
Inlet invert elevation - 1149.00
Outlet invert elevation - 1148.25

USE BOTTOM LINES FIRST	
SECTIONS PLOTTED	DATE 4-80
SECTIONS CHECKED	4-80
TEMPLATE PLOTTED	4-80
TEMPLATE CHECKED	7-80
PLANIMETERED	
PLANIM CHECKED	
INKED	MWR BKJ 7-80
CHECKED	MWR BKJ 7-80
SHEET APPROVED	
DATE	4-11-80
BY	ESD
DATE	4-11-80
BY	ESD

REVISIONS AFTER PROPOSAL	
NO.	DATE
STATION	STATION
DESCRIPTION	DESCRIPTION

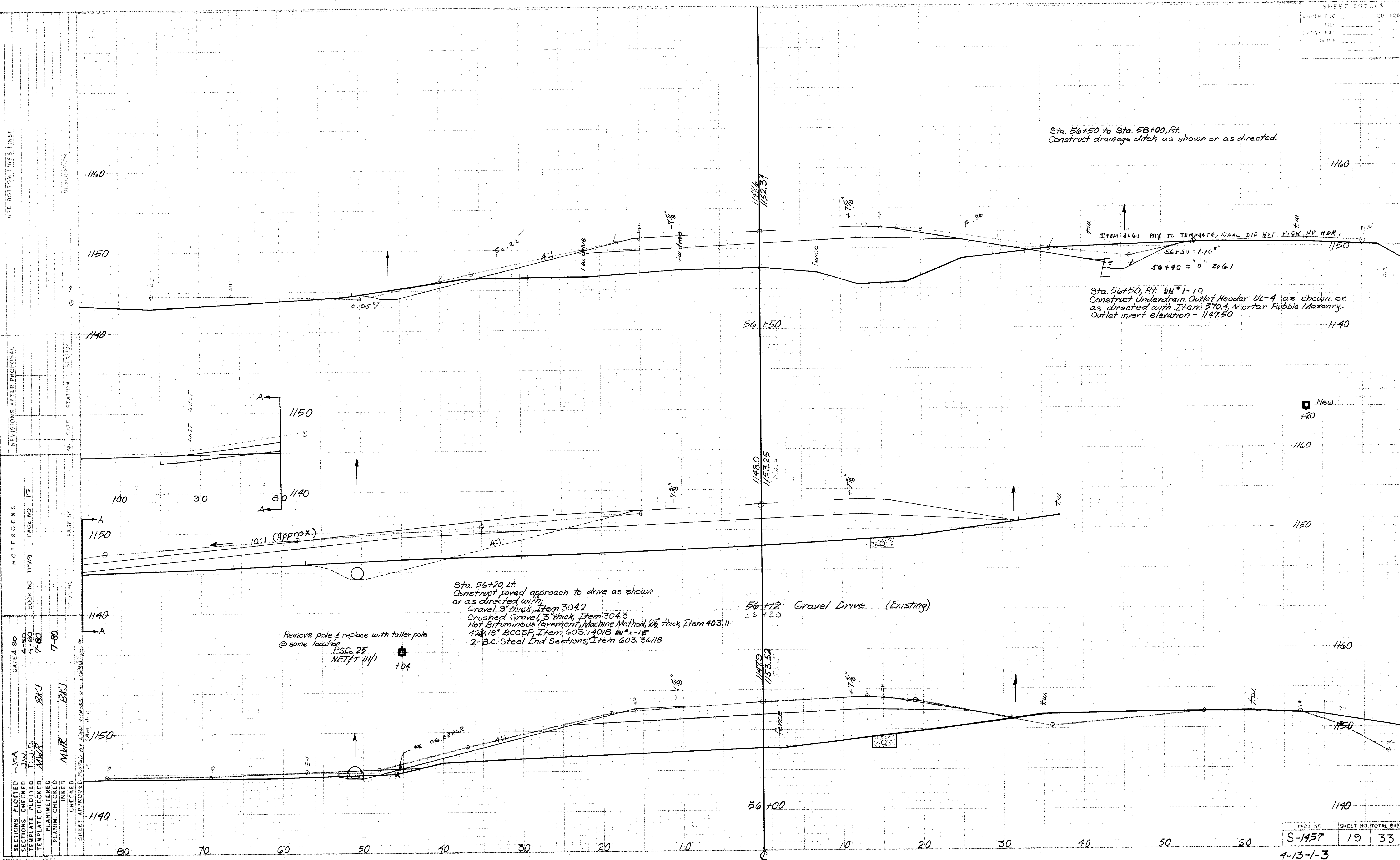
NOTE BOOKS	
BOOK NO.	PAGE NO.
11799	14-15

NOTES	
SECTION	DATE
4-80	4-80
4-80	4-80
7-80	7-80
7-80	7-80

PROJ. NO.	SHEET NO.	TOTAL SHEETS
S-1457	18	33

4-13-1-3

SHEET TOTALS	
EARTH EXC.	CU. YDS.
FILL	CU. YDS.
REBAR EXC.	...
PROCS.	...



SECTIONS PLOTTED		DATE	
SECTION 1	4-80	DATE	4-80
SECTION 2	4-80	DATE	4-80
SECTION 3	7-80	DATE	7-80
SECTION 4	7-80	DATE	7-80

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

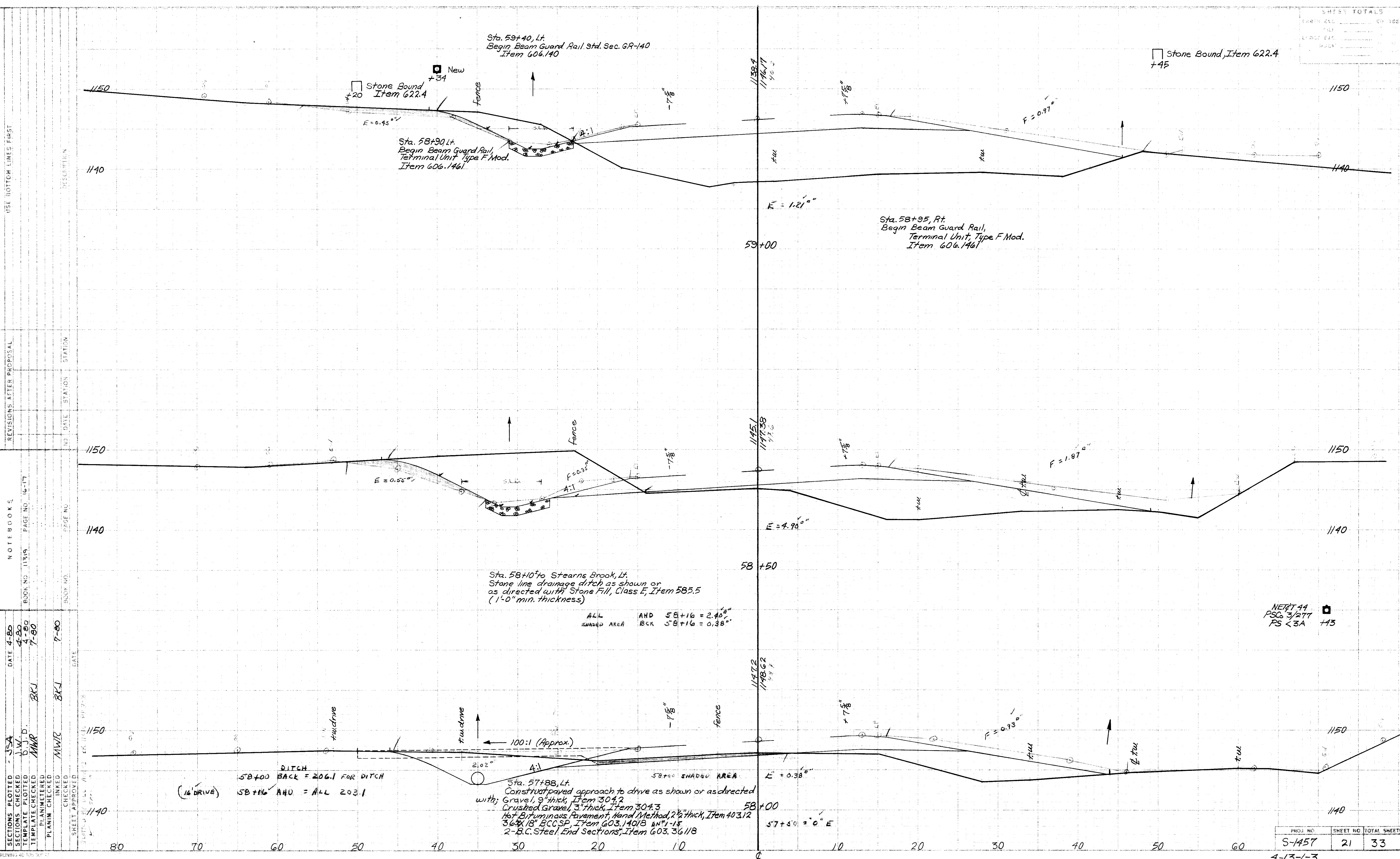
NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

NOTES			
BOOK NO.	11319		
PAGE NO.	15		
REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	DESCRIPTION

SHEET TOTALS	
DATE	CP 702
FILE	
PROJECT	
SCALE	



USE BOTTOM LINES FIRST

REVISIONS AFTER PROPOSAL

NOTE BOOK #

DATE 4-80

SECTION PLOTTED - JSA

SECTIONS CHECKED J.W.

BRUNNINGS 40 105 5077

BOOK NO. 11319 PAGE NO. 16-17

DATE 4-80

SECTION PLOTTED - J.W.

SECTIONS CHECKED J.W.

BRUNNINGS 40 105 5077

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

STATION

NO.

DATE

NO.

DATE

STATION

NO.

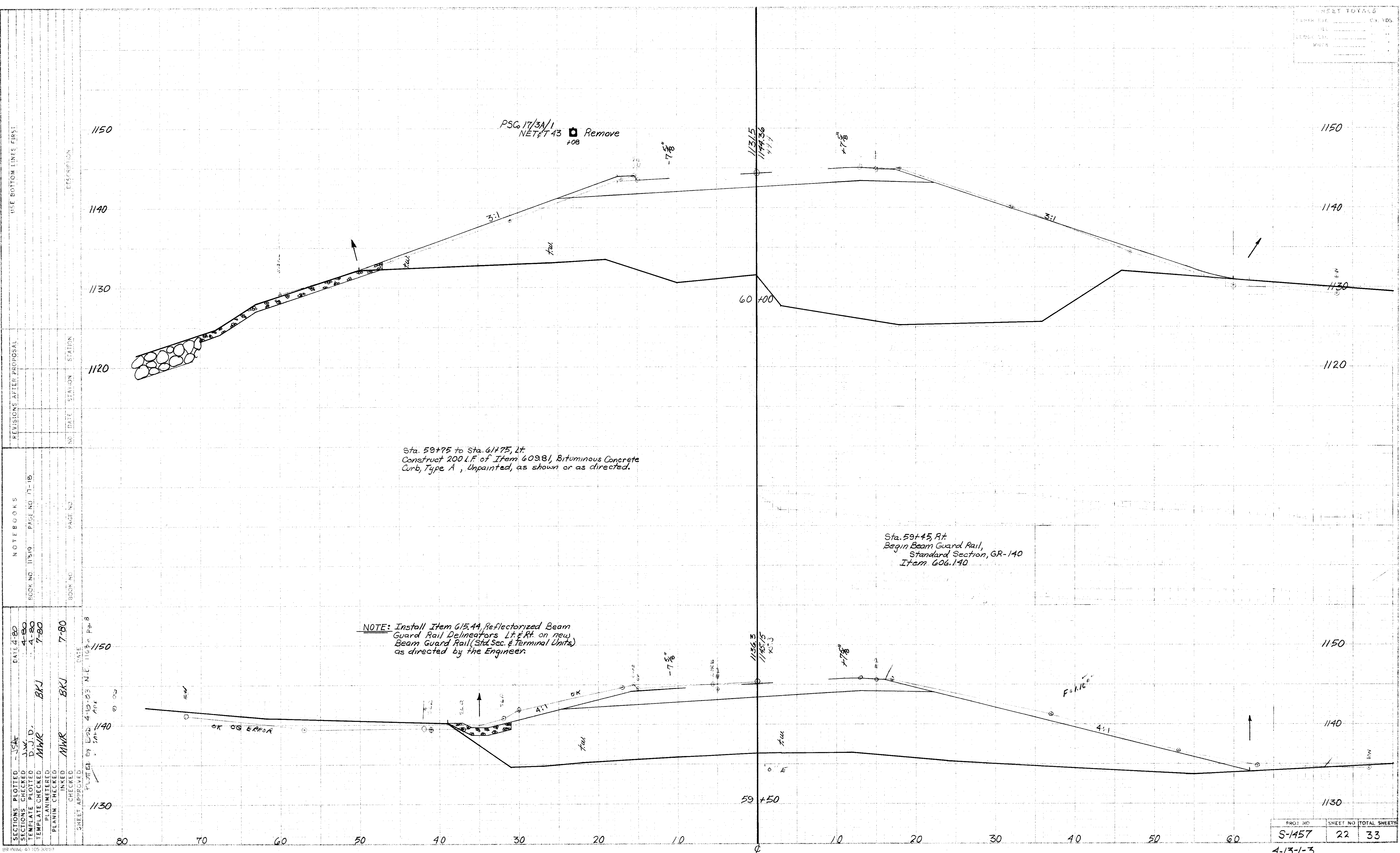
DATE

STATION

NO.

DATE

NEST TOTALS	
PLANIMETERED	0.00 YDS
FIELD	0.00
STAKE	0.00
OTHER	0.00



SECTIONS PLOTTED		DATE	
SECTIONS CHECKED	J.W.	4-80	
TEMPLATE PLOTTED	D.J.D.	4-80	
PLANIMETERED	MWR	7-80	
PLANIMETERED	BKJ	7-80	
INKEED	MWR		
INKEED	BKJ		
SHEET APPROVED			
PLOTTED BY	LDG	4-10-83	N.E. 115.8 Pa. 8
DATE		APR	

REVISIONS AFTER PROPOSAL	
NO.	DATE
STATION	DESCRIPTION

NOTE BOOKS	
BOOK NO.	PAGE NO.
117-19	17-18

Sta. 59+75 to Sta. 61+75, Lt.
Construct 200 L.F. of Item 609.81, Bituminous Concrete
Curb, Type A, Unpainted, as shown or as directed.

NOTE: Install Item 615.44, Reflectorized Beam
Guard Rail Delineators Lt & Rt. on new
Beam Guard Rail (Std. Sec. & Terminal Units)
as directed by the Engineer.

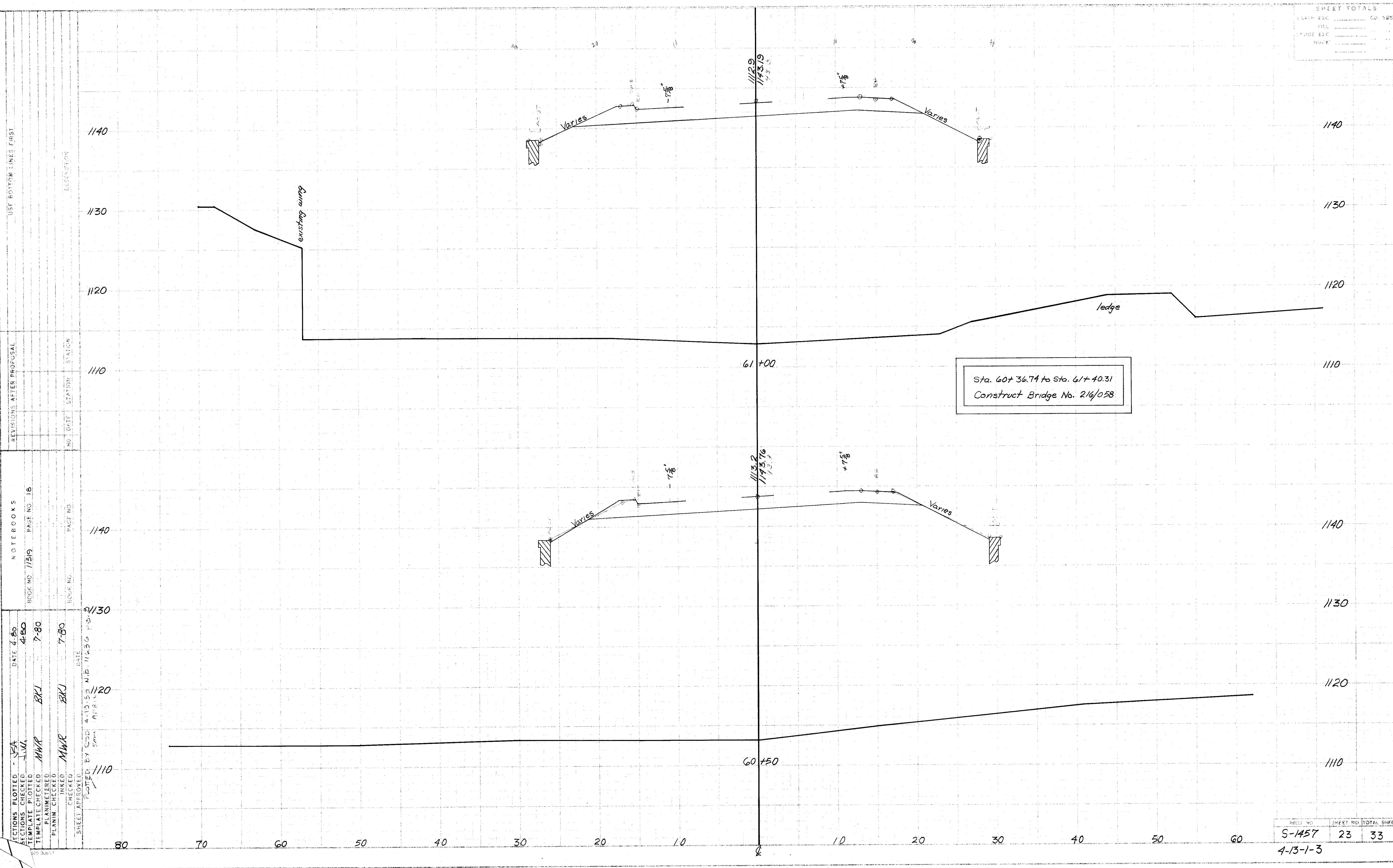
Sta. 59+45, Rt.
Begin Beam Guard Rail,
Standard Section, GR-140
Item 606.140

PSC 17/3A/1
NET ET 43
+08 Remove

PROJ. NO.	SHEET NO.	TOTAL SHEETS
S-1457	22	33

4-13-1-3

SHEET TOTALS	
LENGTH ETC	60 325
FILL	
CUT ETC	
BRICK	



REVISIONS AFTER PROPOSAL		NOTEBOOKS	
NO.	DATE	BOOK NO.	PAGE NO.

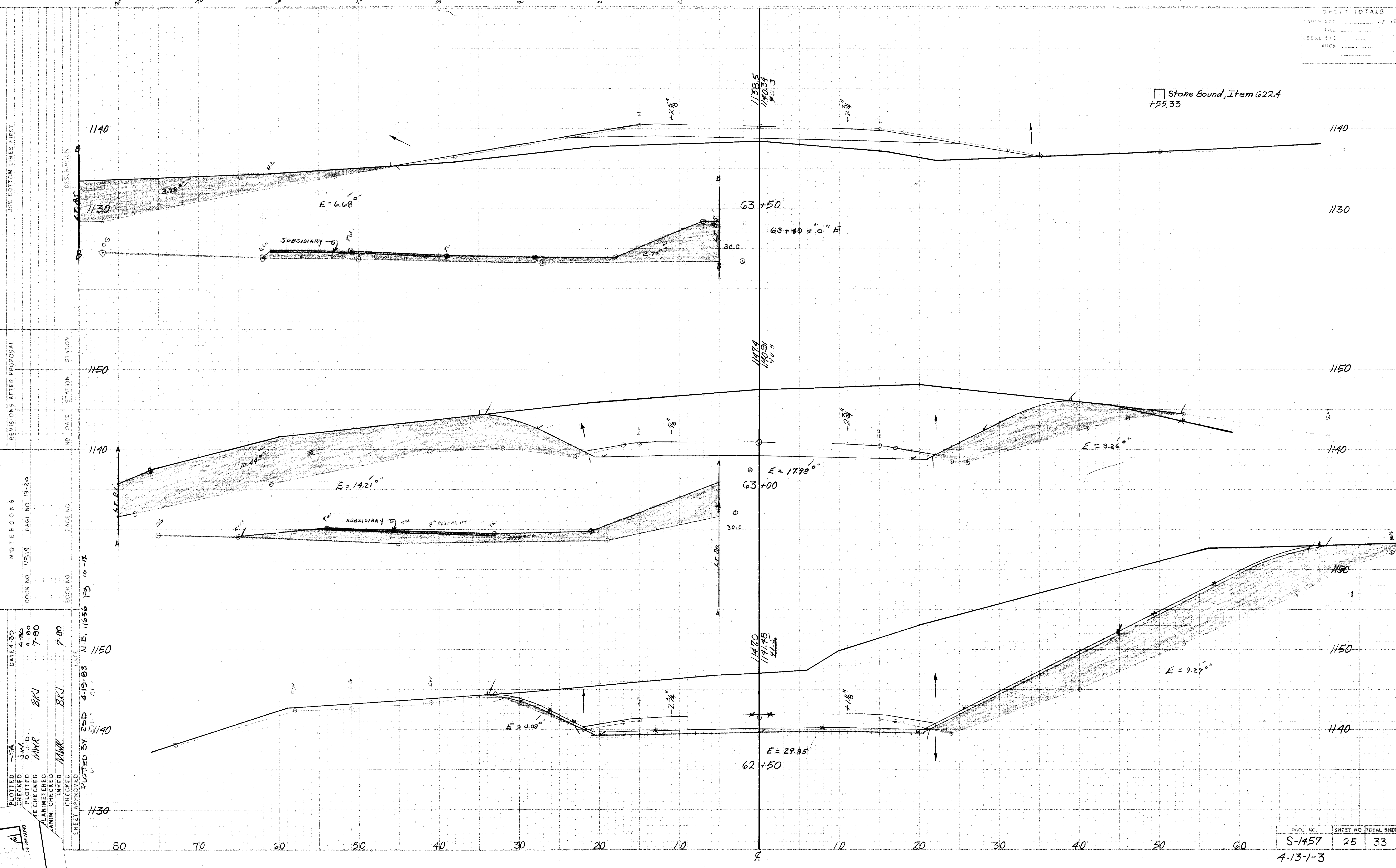
SECTIONS PLOTTED		DATE	

REVISIONS AFTER PROPOSAL		NOTEBOOKS	
NO.	DATE	BOOK NO.	PAGE NO.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
S-1457	23	33

4-13-1-3

SHEET TOTALS	
LENGTH	24.156
AREA	
PERCENT	
WIDTH	



USE BOTTOM LINES FIRST

REVISIONS AFTER PROPOSAL

NOTE BOOKS

DATE 4-80

4-80

7-80

7-80

BOOK NO. 11319

PAGE NO. 19-20

NO.	DATE	STATION	DESCRIPTION
1	4-13-83	63+50	Subsidiary
2	4-13-83	63+00	Subsidiary
3	4-13-83	62+50	Subsidiary

PLOTTED BY ESD 4-13-83

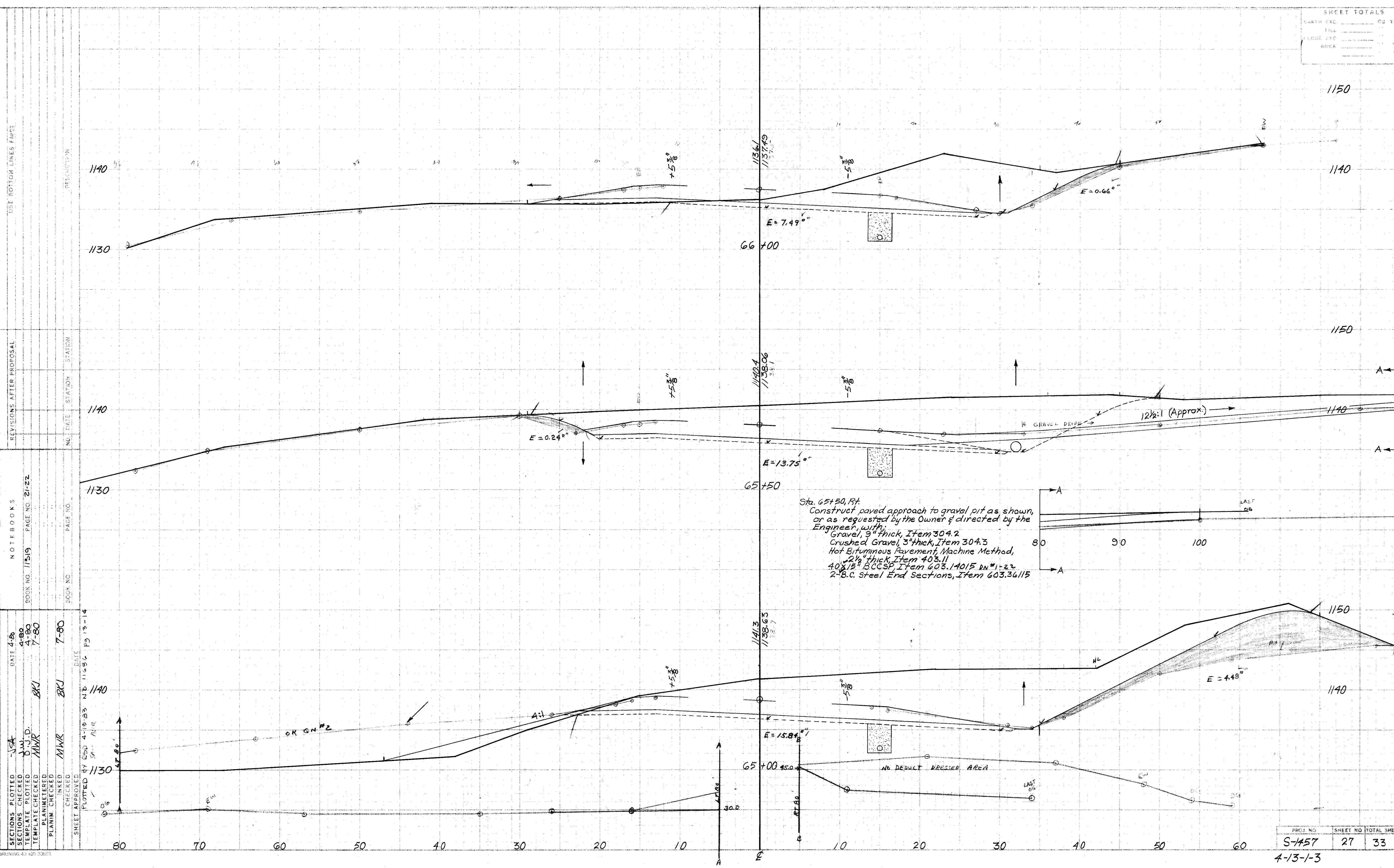
DATE 4-13-83

N.B. 11656 PG 10-12

PROJ. NO.	SHEET NO.	TOTAL SHEETS
S-1457	25	33

4-13-83

SHEET TOTALS	
MARKED	CS 108
FILL	
EDGE P/C	
ADDER	



Sta. 65+50, RT.
 Construct paved approach to gravel pit as shown,
 or as requested by the Owner & directed by the
 Engineer, with:
 Gravel, 9" thick, Item 304.2
 Crushed Gravel, 3" thick, Item 304.3
 Hot Bituminous Pavement, Machine Method,
 2 1/2" thick, Item 403.11
 40x15" BCCSP, Item 603.1401E RN#1-22
 2-B.C. Steel End Sections, Item 603.36115

SECTIONS PLOTTED	DATE	BY
SECTION CHECKED	4-80	JSA
TEMPLATE PLOTTED	4-80	D.J.D.
TEMPLATE CHECKED	7-80	MWR
PLANNED		BKJ
PLANNING CHECKED		MWR
INKED	7-80	BKJ
CHECKED		

BOOK NO. 11519 PAGE NO. 21-22
 BOOK NO. 11519 PAGE NO. 7-80
 SHEET APPROVED BY CSO 4-10-83 NB 11519 P. 13-14
 PLOTTED BY SP-11R

PROJ. NO.	SHEET NO.	TOTAL SHEETS
S-1457	27	33

4-13-1-3

SHEET TOTALS	
DATE PLOTTED	01-88
SCALE	1" = 40'
DATE CHECKED	
DATE APPROVED	

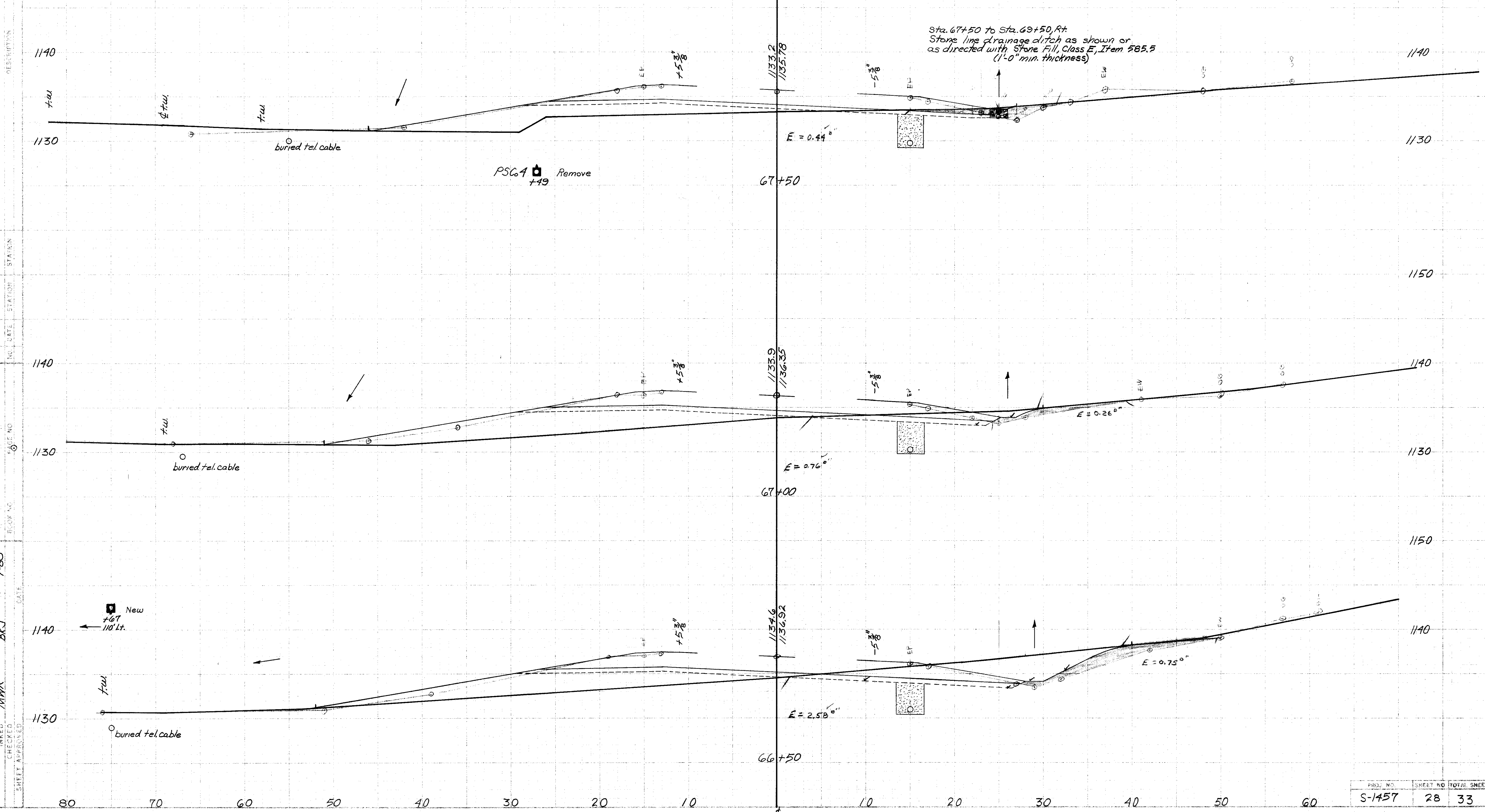
USE BOTTOM LINES FIRST

REVISIONS AFTER PROPOSAL

NOTE BOOKS

SECTIONS PLOTTED - 3/84
 SECTIONS CHECKED - J.V.V.
 TEMPLATE PLOTTED - D.J.D.
 TEMPLATE CHECKED - M.W.P.
 PLANIMETERED - M.W.P.
 PLANNING CHECKED - M.W.P.
 CHECKED - M.W.P.
 SHEET APPROVED - M.W.P.

BOOK NO. 11319 PAGE NO. 22



Sta. 67+50 to Sta. 69+50, Rt.
 Stone line drainage ditch as shown or
 as directed with Stone Fill, Class E, Item 585.3
 (1'-0" min. thickness)

PSC 4
 49 Remove

New
 67
 10' Lt.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
S-1457	28	33

4-13-1-3

SHEET TOTALS	
EARTH ETC.	20 100
FILL	
GRADE ETC.	
RUCCA	

USE BOTTOM LINES FIRST

REVISIONS AFTER PROPOSAL

NOTEBOOKS

DATE 4-80

4-80

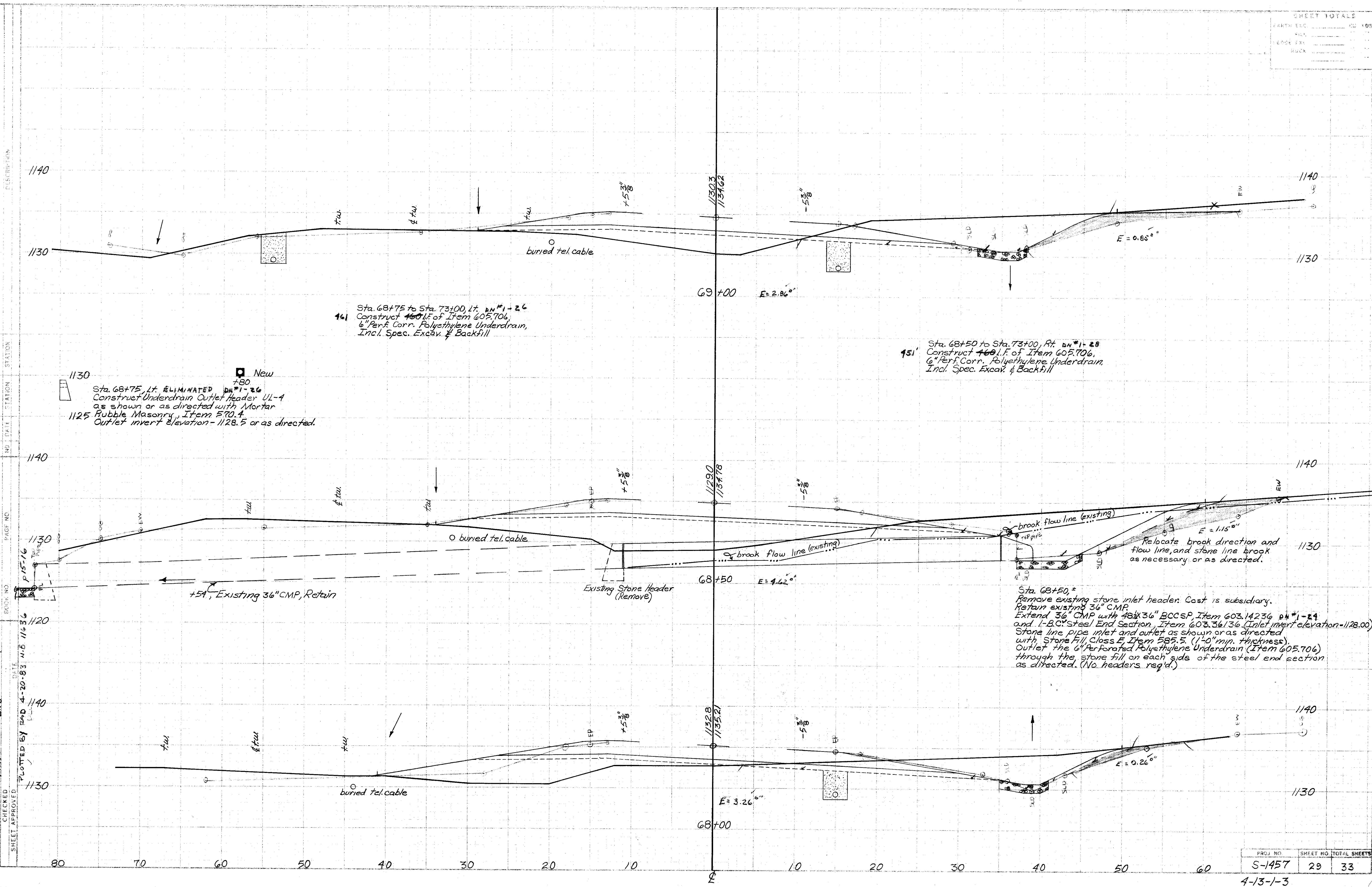
7-80

SECTIONS PLOTTED - JSA
 SECTIONS CHECKED
 TEMPLATE PLOTTED D-JD
 TEMPLATE CHECKED MMR
 PLANIMETERED
 PLANIM CHECKED
 INKED MMR
 CHECKED BKJ
 SHEET APPROVED

BRUNING 40105 300

BOOK NO. 11319 PAGE NO. 23

BOOK NO. 8008 NO. 11636
 PLOTTED BY BMD 4-20-83
 DATE 4-20-83



141 Sta. 68+75 to Sta. 73+00, Lt. DN #1-26
 Construct 400 L.F. of Item 605.706,
 6" Perf. Corr. Polyethylene Underdrain,
 Incl. Spec. Excav. & Backfill

151 Sta. 68+50 to Sta. 73+00, Rt. DN #1-28
 Construct 400 L.F. of Item 605.706,
 6" Perf. Corr. Polyethylene Underdrain,
 Incl. Spec. Excav. & Backfill

1130 New
 Sta. 68+75, Lt. ELIMINATED DN #1-26
 Construct Underdrain Outlet Header UL-4
 as shown or as directed with Mortar
 Rubble Masonry, Item 570.4
 Outlet invert elevation - 1128.5 or as directed.

Relocate brook direction and
 flow line, and stone line brook
 as necessary or as directed.

Sta. 68+50, +
 Remove existing stone inlet header. Cost is subsidiary.
 Retain existing 36" CMP.
 Extend 36" CMP with 48x36" BCCSP, Item 603.14236 DN #1-24
 and 1-B.C. steel End Section, Item 603.36136 (Inlet invert elevation=1128.00)
 Stone line pipe inlet and outlet as shown or as directed
 with Stone Fill Class E, Item 585.5, (1'-0" min. thickness).
 Outlet the 6" Perforated Polyethylene Underdrain (Item 605.706)
 through the stone fill on each side of the steel end section
 as directed. (No headers req'd.)

PROJ. NO.	SHEET NO.	TOTAL SHEETS
S-1457	29	33
4-13-1-3		

USE BOTTOM LINES FIRST

REVISIONS AFTER PROPOSAL

NOTEBOOKS

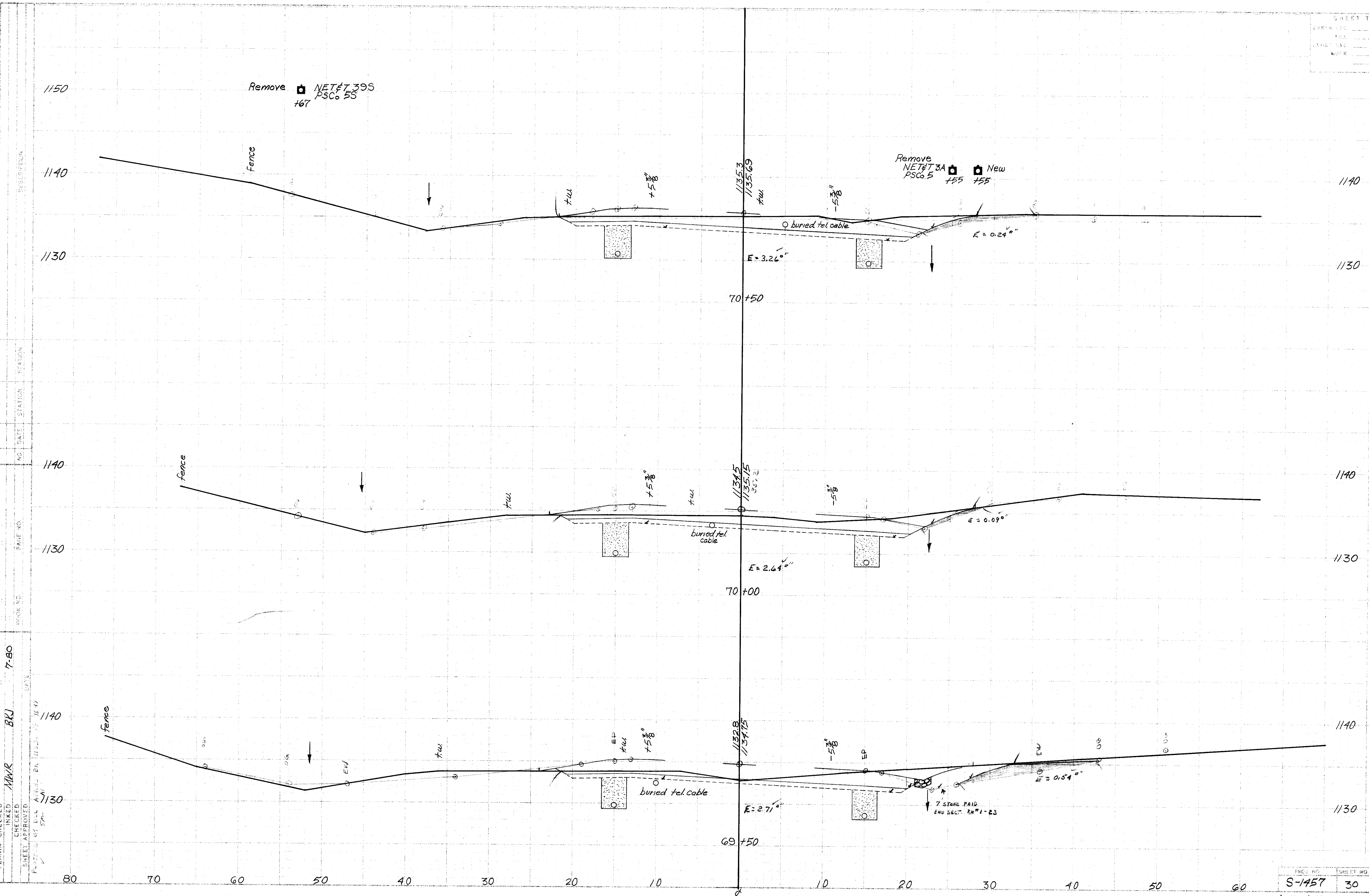
DATE 4-80

SECTIONS PLOTTED -JA
 SECTIONS CHECKED
 TEMPLATE PLOTTED D.J.D.
 TEMPLATE CHECKED MWR BKJ
 PLANIMETERED
 PLANIM CHECKED
 INKED
 CHECKED
 SHEET APPROVED
 DRAWN BY B.L. ARNOLD PA 11/22/77 1647
 5/20

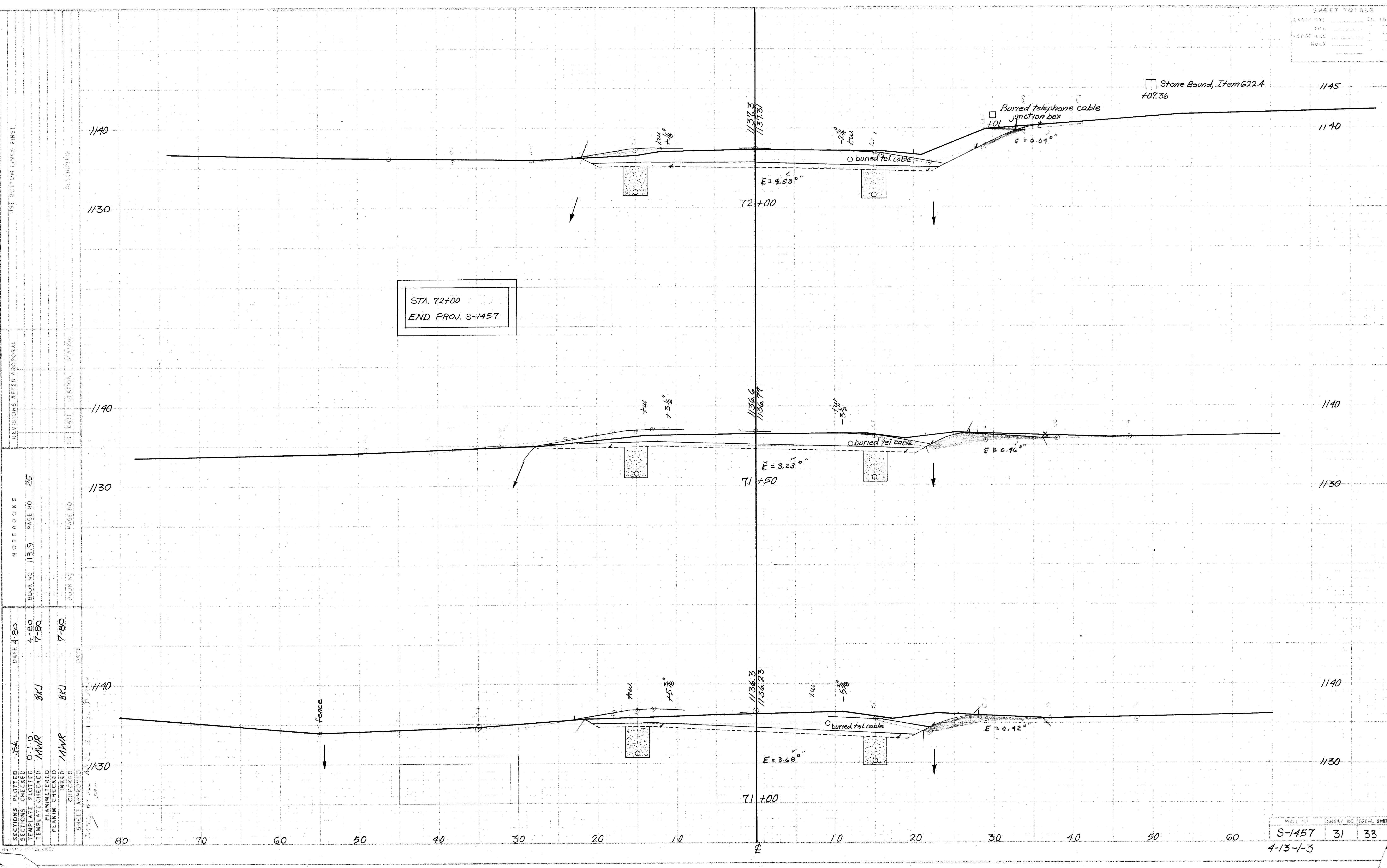
BOOK NO. 11319 PAGE NO. 24

4-80 7-80

BOOK NO. BKJ BKJ



SHEET TOTALS	
EXCISE	00
INCL	00
EDGE BYC	00
WUCK	00



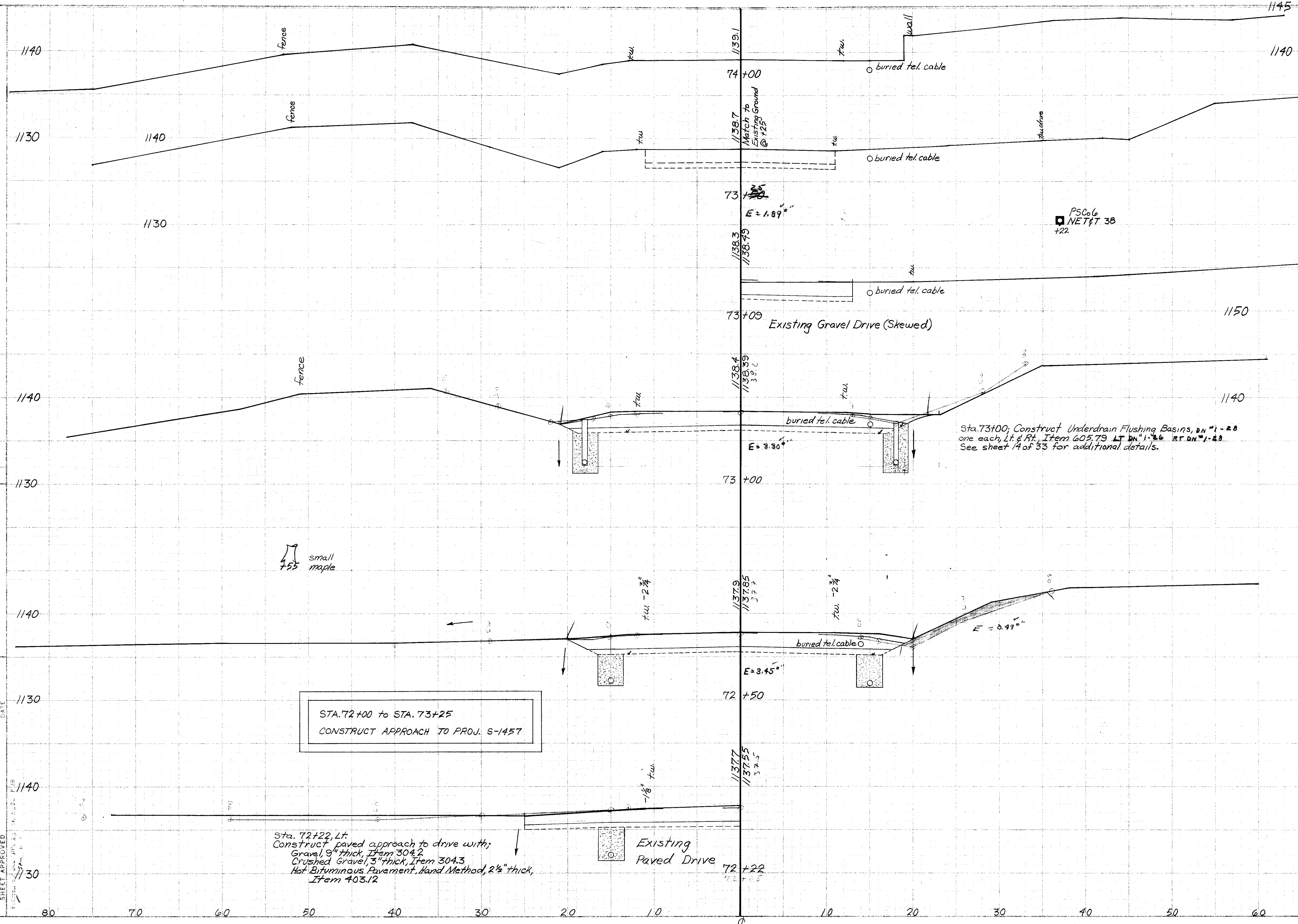
STA. 72+00
END PROJ. S-1457

SECTIONS PLOTTED	DATE	BY
SECTION CHECKED	4-80	JSA
TEMPLATE PLOTTED	4-80	D.J.D.
TEMPLATE CHECKED	7-80	MMR
PLANIMETERED		BKJ
PLANIM CHECKED		BKJ
INKED	7-80	MMR
INKED CHECKED		BKJ
CHECKED		
SHEET APPROVED		
DESIGNED BY		
DATE		

REVISIONS AFTER PROPOSAL	NO.	DATE	STATION	DESCRIPTION

NOTEBOOKS	BOOK NO.	PAGE NO.
	11319	25

SECTIONS PLOTTED	JSA	DATE	4-80
SECTIONS CHECKED			
TEMPLATE PLOTTED	D.J.D.	BOOK NO.	11319
TEMPLATE CHECKED	MWR	PAGE NO.	25-26
PLANIMETERED	BKT		
PLANIM CHECKED			
INKED	MWR	BOOK NO.	7-80
CHECKED			
SHEET APPROVED	BKT	DATE	1/18



SHEET TOTALS	
PAVING EXC.	CU. YDS.
FILL	
EDGE EXC.	
ROCK	

STA. 72+00 to STA. 73+25
CONSTRUCT APPROACH TO PROJ. S-1457

Sta. 72+22, Lt.
Construct paved approach to drive with:
Gravel, 9" thick, Item 304.2
Crushed Gravel, 3" thick, Item 304.3
Hot Bituminous Pavement, Hand Method, 2 1/2" thick,
Item 403.12

Sta. 73+00; Construct Underdrain Flushing Basins, DN #1-28
one each, Lt. & Rt., Item 605.79 LT DN #1-26 RT DN #1-28.
See sheet 14 of 33 for additional details.

PROJ. NO.	SHEET NO.	TOTAL SHEETS
S-1457	32	33

4-13-13

