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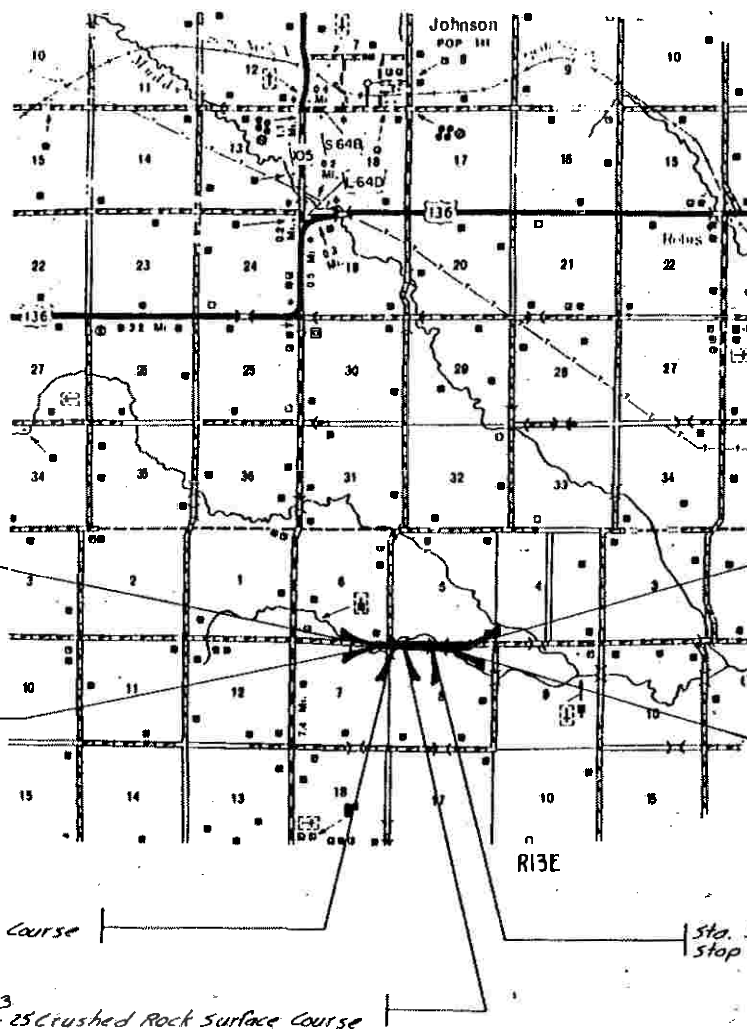
STATE OF NEBRASKA  
DEPARTMENT OF ROADS

PLANS FOR CONSTRUCTION  
JOHNSON SOUTHEAST  
NEMAHA COUNTY

PROJECT NO.	RS-BRS-3670 (4)	SHEET NO.	1
CONTROL NO.	11575		
CONTROL NO.			
CONTROL NO.			

THE NEBRASKA 1985 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, AND THE SPECIAL PROVISIONS APPLY TO THIS PROJECT.

THE WORK ON THIS PROJECT CONSISTS OF GROUPS	
1-Grading	5-Landscape
2-Aggregate	6-Bridge
4-Culverts	6A-Bridge
	7-Guard Rail
GROUPS 1, 2, 4, 5, 6, 6A, 7	ARE INCLUDED IN THE LETTING OF November 5, 1992
GROUPS	ARE INCLUDED IN THE LETTING OF
GROUPS	ARE INCLUDED IN THE LETTING OF



WORK ON THIS PROJECT IN THE VICINITY OF STATION(S) 40+15, 59+22 IS AUTHORIZED PURSUANT TO THE CONDITIONS STIPULATED IN THE ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT NO. 5 NE 25B DXT 2 92-50988. NB 25B DXT 2 92-50989

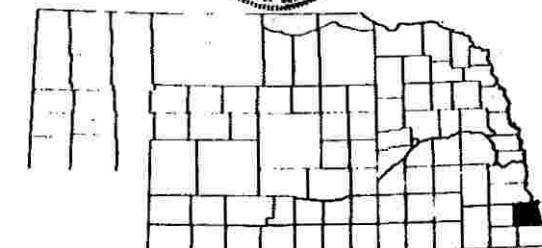
DESIGN DESIGNATION	
	1991 2011
ADT	100 185
DHV	15 20
T =	15 %
D =	60 %

Meets or Exceeds Federal-Aid Secondary Road Design Standards.

PLANS PREPARED BY

SPEECE LEWIS ENGINEERS

LINCOLN NEBRASKA



APPROVED August 4, 1992

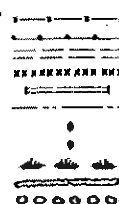
Monty W. Zakichon  
DEPUTY DIRECTOR - ENGINEERING

NOTICE  
HALF SIZE PLANS  
Scale Reduced approximately 50%

Nemaha COUNTY  
APPROVED  
Richard D. Body 9-26-89  
COUNTY CLERK

CONVENTIONAL SIGNS

- FENCE LINE
- GUARD RAIL
- TRAVELED WAY
- DIKE
- CULVERTS
- RAILROAD RIGHT OF WAY
- POWER POLE
- TELEPHONE or TELEGRAPH POLE
- MARSH
- HEDGE
- TREES



ROW LEGEND

- LIMITS OF CONSTRUCTION
- PREVIOUS ROW
- NEW ROW
- PERMANENT CHANNEL EASEMENT
- PERMANENT FILL ENCROACHMENT
- TEMPORARY EASEMENT
- EXCESS TAKING
- PERMANENT EASEMENT EXCEPT CHANNEL
- EXISTING RAILROAD EASEMENT
- NEW RAILROAD PERMANENT EASEMENT
- NEW RAILROAD TEMPORARY EASEMENT



REFERENCE POST NO. TO REFERENCE POST NO.

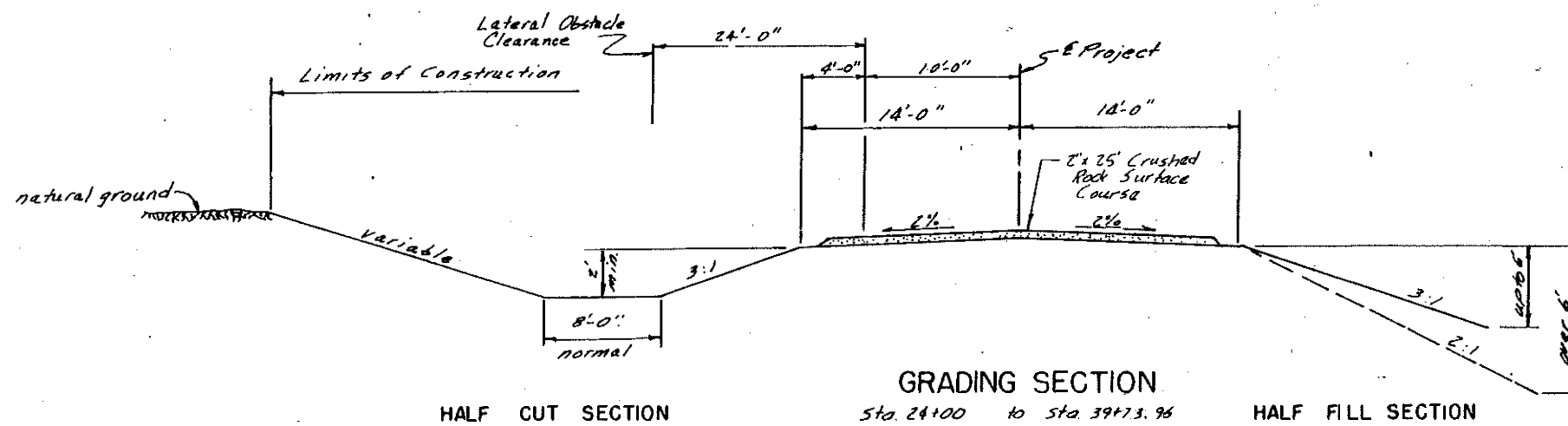
EXCEPTIONS: FROM STA. TO STA.

TOTAL LENGTH OF EXCEPTIONS FEET

TOTAL NET LENGTH OF PROJECT 4,700 FEET 0.870 MILES

# TYPICAL CROSS SECTION OF IMPROVEMENT

PROJECT NO. RS-BPS-3670(4)  
SHEET NO. 2-T

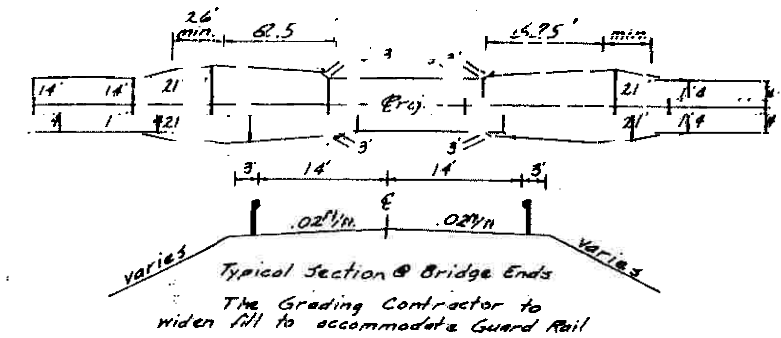


HALF CUT SECTION

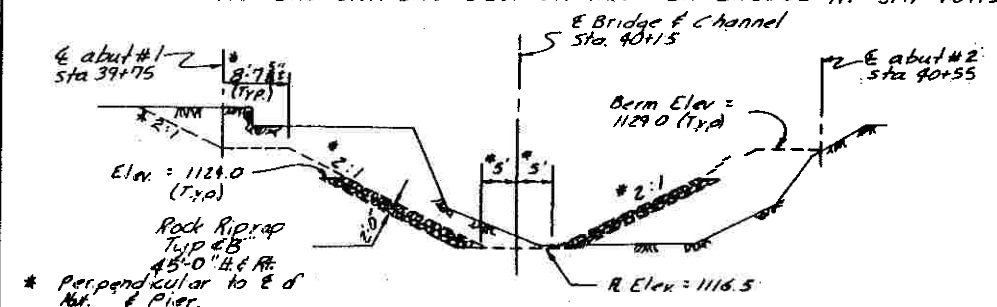
## GRADING SECTION

Sta. 24+00 to Sta. 39+73.96  
Sta. 40+56.03 to Sta. 59+70.58  
Sta. 59+73.41 to Sta. 71+00  
(Except as shown on Cross Sections)

HALF FILL SECTION



## TYPICAL GRADING SECTION THROUGH BRIDGE AT STA 40+15



\* Perpendicular to E & d  
No. of Pier.

See Channel Cross sections for additional details:  
Limits of grading through bridge which shall be done by the Grading Contractor before the bridge is built. (100' Lt. & 150' Rt.)

Exc = 1856 cu yds.  
Emb = 1309 cu yds  
Bal = 1.42

# SUMMARY OF QUANTITIES

PROJECT NO.	SHEET NO.
RS-BRS-3670 (4)	2-5

**GROUP 1 - GRADING**

ITEM	QUANTITY	UNITS
COVERCROP SEEDING	7.000	ACRE
MOBILIZATION	1.000	LS
CLEARING & GRUBBING TREES-OVER 12 TO 24 INCHES IN DIAMETER	29.000	EACH
CLEARING & GRUBBING TREES-OVER 24 TO 36 INCHES IN DIAMETER	2.000	EACH
CLEARING & GRUBBING TREES-OVER 36 TO 48 INCHES IN DIAMETER	1.000	EACH
CLEARING & GRUBBING TREES-OVER 48 INCHES IN DIAMETER	2.000	EACH
GRUBBING STUMPS-OVER 12 TO 24 INCHES IN DIAMETER	1.000	EACH
GRUBBING STUMPS-OVER 24 TO 36 INCHES IN DIAMETER	2.000	EACH
GRUBBING STUMPS-OVER 36 TO 48 INCHES IN DIAMETER	1.000	EACH
GRUBBING STUMPS-OVER 48 INCHES IN DIAM.	1.000	EACH
GENERAL CLEARING AND GRUBBING	1.000	EACH
EXCAVATION	25,413.000	CY
WATER, APPLIED	65.000	M GAL
24" DRIVEWAY CULVERT PIPE	202.000	LF
36" DRIVEWAY CULVERT PIPE	36.000	LF

**GROUP 2 - AGGREGATES**

ITEM	QUANTITY	UNITS
MOBILIZATION	1.000	LS
CRUSHED ROCK SURFACE COURSE	880.000	TON

**GROUP 5 - LANDSCAPING**

ITEM	QUANTITY	UNITS
SEEDING, TYPE "A"	7.000	ACRE
MOBILIZATION	1.000	LS

**GROUP 4 - CULVERTS**

ITEM	QUANTITY	UNITS
MOBILIZATION	1.000	LS
REMOVAL OF EXISTING PIPE CULVERT	140.000	LF
EXCAVATION FOR PIPE AND PIPE-ARCH CULVERTS AND HEADWALLS	1,182.000	CY
24" CULVERT PIPE	150.000	LF
30" CULVERT PIPE	90.000	LF
36" CULVERT PIPE	86.000	LF
42" CULVERT PIPE	92.000	LF
48" CULVERT PIPE	188.000	LF
24" FLARED END SECTION	2.000	EACH
30" FLARED END SECTION	1.000	EACH
36" FLARED END SECTION	2.000	EACH
42" FLARED END SECTION	1.000	EACH
48" FLARED END SECTION	3.000	EACH

**GROUP 7 - GUARD RAIL**

ITEM	QUANTITY	UNITS
MOBILIZATION	1.000	LS
BRIDGE APPROACH SECTION, TYPE "CD"	8.000	EACH
BREAKAWAY CABLE TERMINAL	8.000	EACH

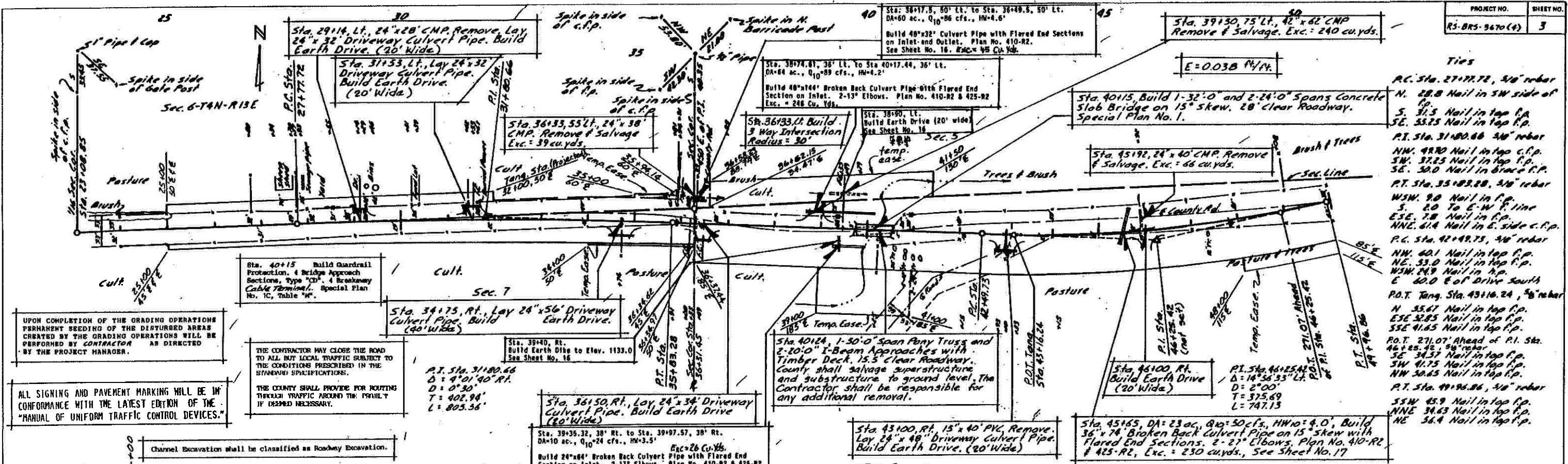
**GROUP 6 - BRIDGE AT STATION 40+15.00**  
2-24'0", 1-32'0" SPANS CONTINUOUS CONCRETE SLAB BRIDGE

ITEM	QUANTITY	UNITS
BARRICADES, TYPE III	1,672.000	DAY
TYPE "B" HIGH INTENSITY WARNING LIGHTS	240.000	LOAY
INSTALLATION OF PERMANENT SIGNS	70.000	SF
MAINTENANCE OF PERMANENT SIGNS	14,630.000	SFTD
REMOVAL OF PERMANENT SIGNS	70.000	SF
MOBILIZATION	1.000	LS
EXCAVATION FOR BRIDGES	245.000	CY
CLASS "47-B" CONCRETE FOR BRIDGES	213.000	CY
CLASS "47BD" CONCRETE FOR BRIDGES	107.800	CY
REINFORCING STEEL FOR BRIDGES	32,320.000	LB
REMOVAL OF EXISTING STRUCTURE AT STA. 40+24.0	1.000	EACH
STRUCTURAL STEEL FOR SUBSTRUCTURE	2,110.000	LB
ROCK RIPRAP, TYPE "B"	280.000	TON
HP 10"x42# STEEL PILING	1,370.000	LF
CONCRETE RAIL	163.520	LF

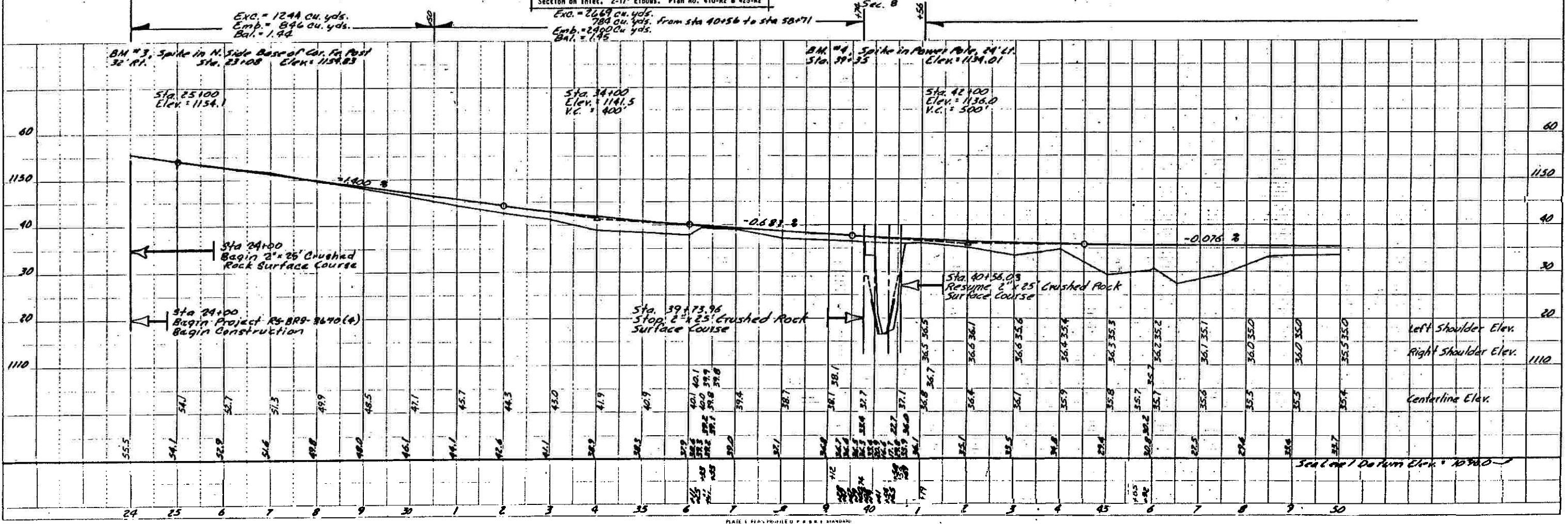
**GROUP 6A - BRIDGE AT STATION 59+22.00**  
2-30'0", 1-40'0" SPANS CONTINUOUS SLAB CONCRETE BRIDGE

ITEM	QUANTITY	UNITS
MOBILIZATION	1.000	LS
EXCAVATION FOR BRIDGES	255.000	CY
CLASS "47-B" CONCRETE FOR BRIDGES	203.600	CY
CLASS "47BD" CONCRETE FOR BRIDGES	164.700	CY
REINFORCING STEEL FOR BRIDGES	44,295.000	LB
REMOVAL OF EXISTING STRUCTURE AT STA. 59+25.5	1.000	EACH
STRUCTURAL STEEL FOR SUBSTRUCTURE	2,020.000	LB
ROCK RIPRAP, TYPE "B"	360.000	TON
HP 10"x42# STEEL PILING	950.000	LF
CONCRETE RAIL	203.340	LF

PLAN  
 DATE BOOK  
 NO.

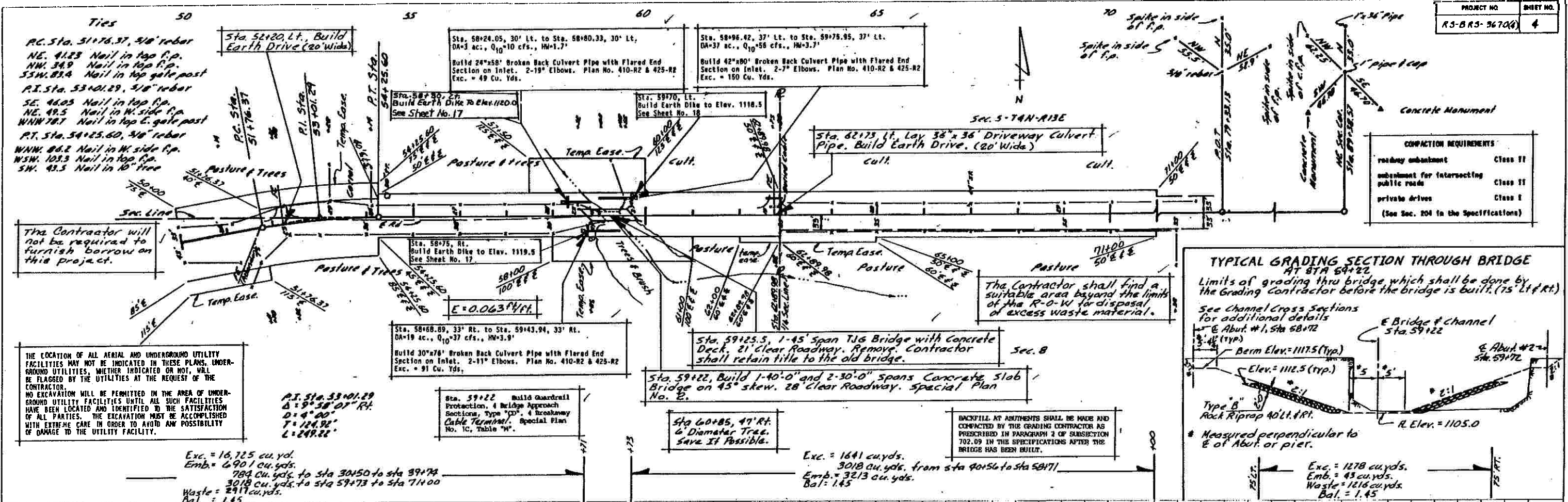


- Ties**
- AC Sta. 27+77.72, 3/8" rebar
  - N. 28.8 Nail in SW side of c.p.
  - S. 31.3 Nail in top c.p.
  - SE. 33.25 Nail in top c.p.
  - P.T. Sta. 31+80.66, 3/8" rebar
  - NW. 49.70 Nail in top c.p.
  - SW. 32.25 Nail in top c.p.
  - SE. 30.0 Nail in brace c.p.
  - P.T. Sta. 35+83.28, 3/8" rebar
  - WSW. 9.0 Nail in c.p.
  - S. 2.0 To E-W P. line
  - ESE. 7.8 Nail in c.p.
  - NNE. 61.4 Nail in E. side c.p.
  - P.C. Sta. 42+48.75, 3/8" rebar
  - NW. 60.1 Nail in top c.p.
  - NE. 33.0 Nail in top c.p.
  - WSW. 24.9 Nail in top c.p.
  - E. 60.0 E of Drive South
  - P.O.T. Tang. Sta. 43+16.24, 3/8" rebar
  - N. 35.67 Nail in top c.p.
  - ESE. 32.25 Nail in top c.p.
  - SSE. 41.65 Nail in top c.p.
  - P.O.T. 271.07' Ahead of P.I. Sta. 46+25.42, 3/8" rebar
  - SE. 34.75 Nail in top c.p.
  - SW. 41.75 Nail in top c.p.
  - NW. 30.65 Nail in top c.p.
  - P.T. Sta. 49+96.86, 3/8" rebar
  - SSW. 45.9 Nail in top c.p.
  - NNE. 34.63 Nail in top c.p.
  - NE. 36.4 Nail in top c.p.



PROFILE  
 DATE BOOK  
 NO.

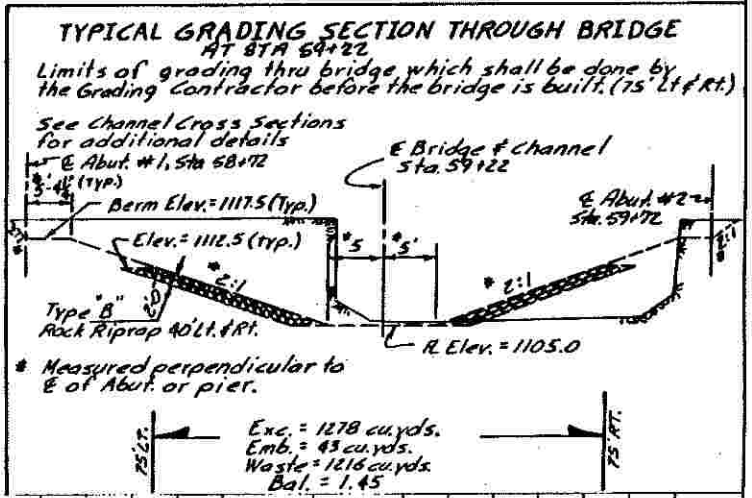
PLAN  
NOTE BOOK



**COMPACTION REQUIREMENTS**

roadway embankment	Class II
embankment for intersecting public roads	Class II
private drives	Class I

(See Sec. 204 in the Specifications)



THE LOCATION OF ALL AERIAL AND UNDERGROUND UTILITY FACILITIES MAY NOT BE INDICATED IN THESE PLANS. UNDERGROUND UTILITIES, WHETHER INDICATED OR NOT, WILL BE FLAGGED BY THE UTILITIES AT THE REQUEST OF THE CONTRACTOR. NO EXCAVATION WILL BE PERMITTED IN THE AREA OF UNDERGROUND UTILITY FACILITIES UNTIL ALL SUCH FACILITIES HAVE BEEN LOCATED AND IDENTIFIED TO THE SATISFACTION OF ALL PARTIES. THE EXCAVATION MUST BE ACCOMPLISHED WITH EXTREME CARE IN ORDER TO AVOID ANY POSSIBILITY OF DAMAGE TO THE UTILITY FACILITY.

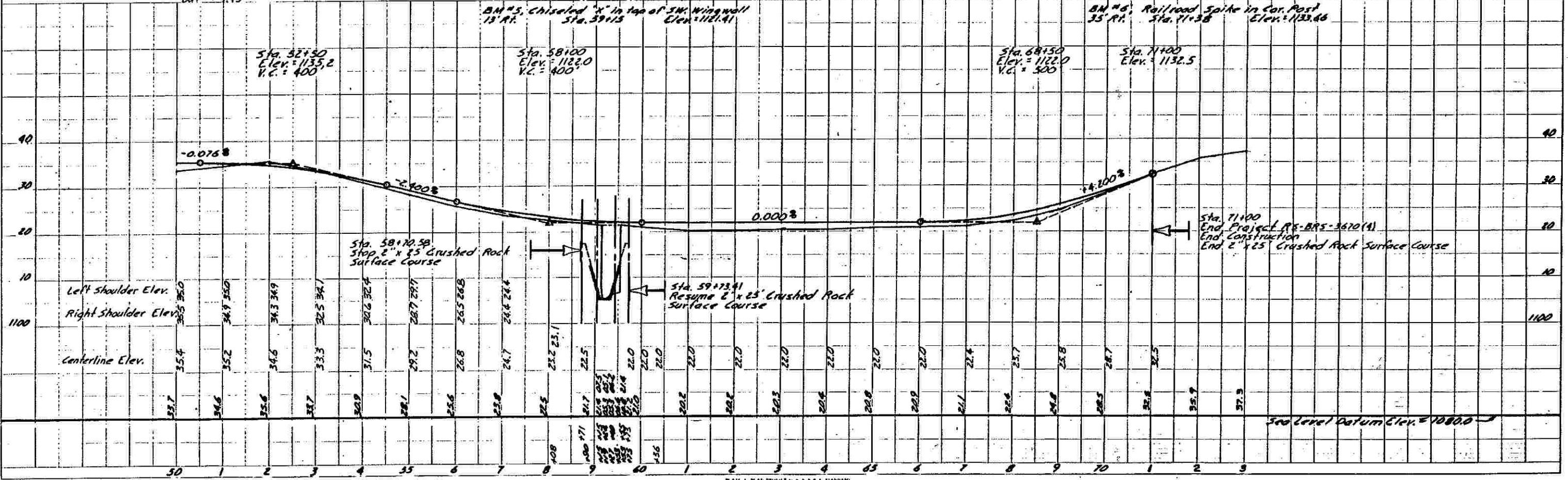
The Contractor shall find a suitable area beyond the limits of the R-O-W for disposal of excess waste material.

BACKFILL AT ABUTMENTS SHALL BE MADE AND COMPACTED BY THE GRADING CONTRACTOR AS PRESCRIBED IN PARAGRAPH 2 OF SUBSECTION 702.09 IN THE SPECIFICATIONS AFTER THE BRIDGE HAS BEEN BUILT.

Exc. = 16,725 cu. yd.  
Emb. = 6,901 cu. yds.  
784 cu. yds. to sta 30+50 to sta 39+74  
3018 cu. yds. to sta 59+73 to sta 71+00  
Waste = 2,917 cu. yds.  
Bal. = 1.45

Exc. = 1641 cu. yds.  
3018 cu. yds. from sta 40+56 to sta 58+71  
Emb. = 3213 cu. yds.  
Bal. = 1.45

Exc. = 1278 cu. yds.  
Emb. = 43 cu. yds.  
Waste = 1216 cu. yds.  
Bal. = 1.45

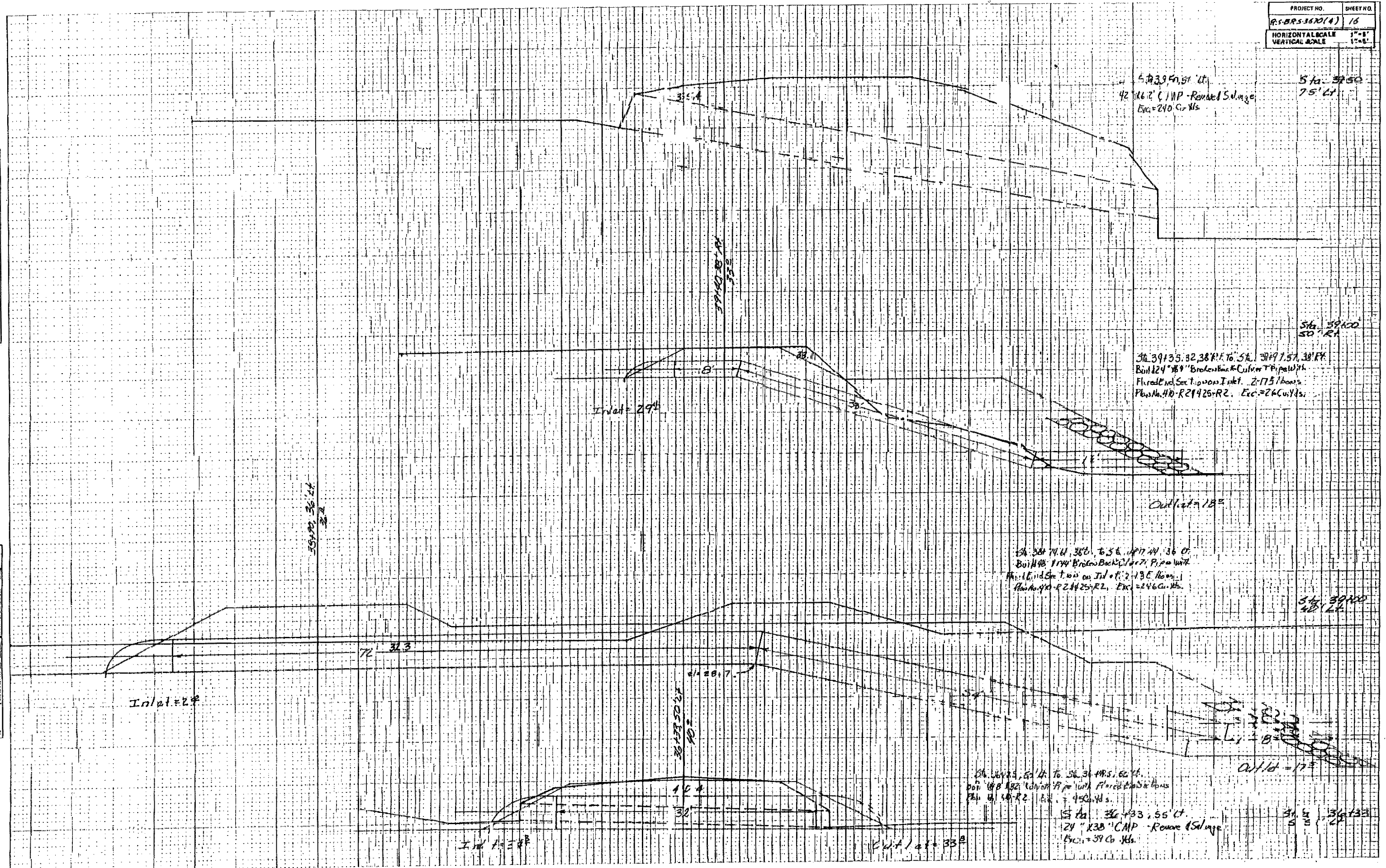


PROFILE  
NOTE BOOK

PROJECT NO.	SHEET NO.
RS-SPC-5772(4)	16
HORIZONTAL SCALE 1" = 10'	
VERTICAL SCALE 1" = 5'	

NO.	DATE
1	12/1/57
2	12/1/57
3	12/1/57
4	12/1/57
5	12/1/57
6	12/1/57
7	12/1/57
8	12/1/57
9	12/1/57
10	12/1/57

NO.	DATE
1	12/1/57
2	12/1/57
3	12/1/57
4	12/1/57
5	12/1/57
6	12/1/57
7	12/1/57
8	12/1/57
9	12/1/57
10	12/1/57



Sta. 391.55  
 42" x 62" CMP - Round Salage  
 Exc. = 240 Cu Yds.

Sta. 395.00  
 75' Lt

Sta. 391.00  
 50' Lt

Sta. 391.55, 32.38' Ft. To Sta. 391.57, 38' Ft.  
 Build 24" x 38" Broken Back Culvert Pipe with  
 Flared End Section upon Inlet. 2-175' bases.  
 Plan No. 410-R21425-R2. Exc. = 24 Cu Yds.

Inlet = 294

Outlet = 185

Sta. 381.74, 36' To Sta. 381.74, 36' 0"  
 Build 18" Broken Back Culvert Pipe with  
 Flared End Section upon Inlet. 2-135' bases.  
 Plan No. 410-R21425-R2. Exc. = 246 Cu Yds.

Sta. 390.00  
 48' Lt

Inlet = 224

26' x 33' 50' Lt  
 40"  
 32'

Sta. 364.44, 52' Lt To Sta. 364.44, 62' Ft.  
 Build 24" x 38" CMP Pipe with Flared End Sections  
 Plan No. 410-R2. Exc. = 45 Cu Yds.

Sta. 364.33, 55' Lt  
 24" x 38" CMP - Round Salage  
 Exc. = 39 Cu Yds.

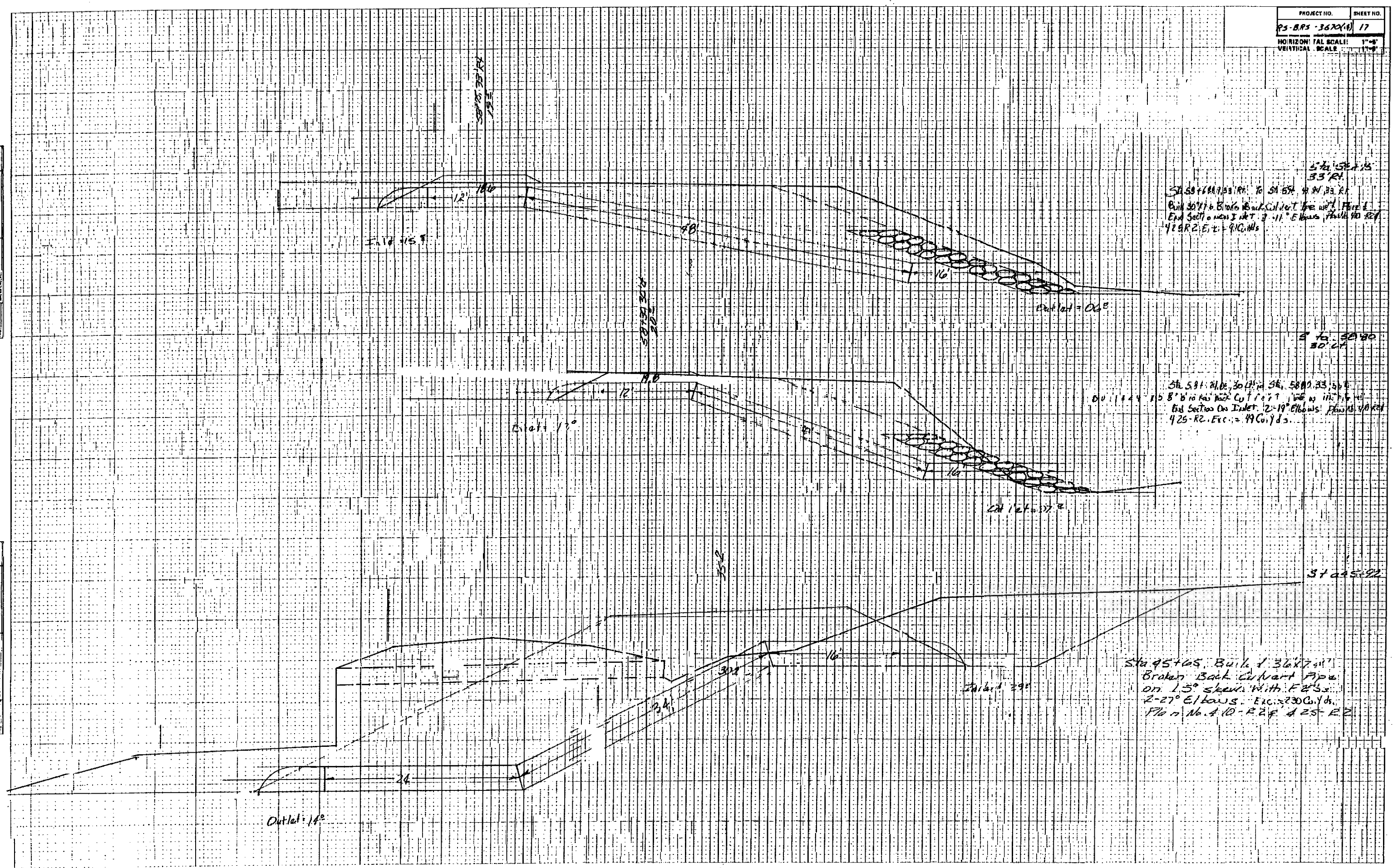
Outlet = 175

Sta. 361.33  
 24'

PROJECT NO.	SHEET NO.
PS-BRS-3600(1)	17
HORIZONTAL SCALE:	1"=5'
VERTICAL SCALE:	1"=2'

DATE	
NO.	
REVISION	
BY	
CHECKED	
DATE	
NO.	
REVISION	
BY	
CHECKED	
DATE	
NO.	

DATE	
NO.	
REVISION	
BY	
CHECKED	
DATE	
NO.	
REVISION	
BY	
CHECKED	
DATE	
NO.	



Sta 45+05 to Sta 48+33 R/L  
 Built 30" dia. Broken Back Culvert Pipe with Flange  
 End Section on Inlet 2-11° Elbows Flange 40 R/L  
 425-R2, E.L. = 910.115

Sta 48+33 to Sta 50+00  
 Built 30" dia. Broken Back Culvert Pipe with Flange  
 End Section on Inlet 2-19° Elbows Flange 40 R/L  
 425-R2, Exc. = 19 Cuyds.

Sta 45+05, Built 36"x7" dia.  
 Broken Back Culvert Pipe  
 on 1.5° skew with Flanges  
 2-27° Elbows, Exc. = 230 Cuyds.  
 Flange No. 4 10-R2 & 25-R2

PROJECT NO.	SHEET NO.
RS-BRS-3670(4)	18
HORIZONTAL SCALE	1" = 5'
VERTICAL SCALE	1" = 5'

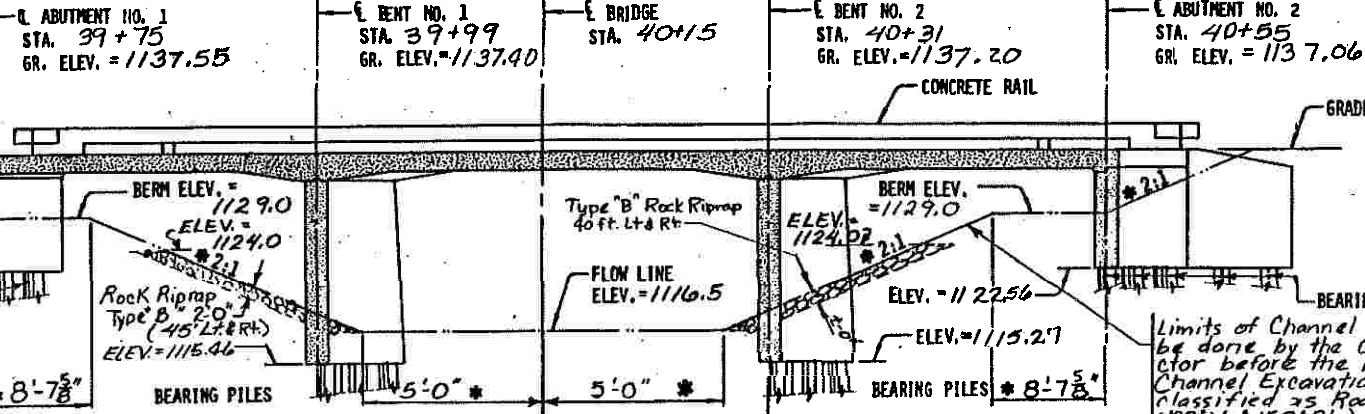
FINAL SURVEY NOTE BOOK

ORIGINAL SURVEY NOTE BOOK





NOTE: GRADE ELEVATIONS SHOWN ARE PROFILE GRADE ELEVATIONS AT E. ROADWAY.



P.I. STA. 34+00 ELEV. = 1141.50 V.C. = 400ft.  
 P.I. STA. 42+00 ELEV. = 1136.00 V.C. = 500ft.  
 P.I. STA. 52+00 ELEV. = 1135.20 V.C. = 400ft.

STATE	PROJECT NUMBER	SHEET NO.
NEBR.	RS-BRS-3670(4)	19
REVISIONS		

NOTE: THIS STRUCTURE IS LOCATED IN NEMAHA COUNTY, ACROSS MUDDY CREEK TRIBUTARY IN NW 1/4 of Sec 8-T4N-R13E

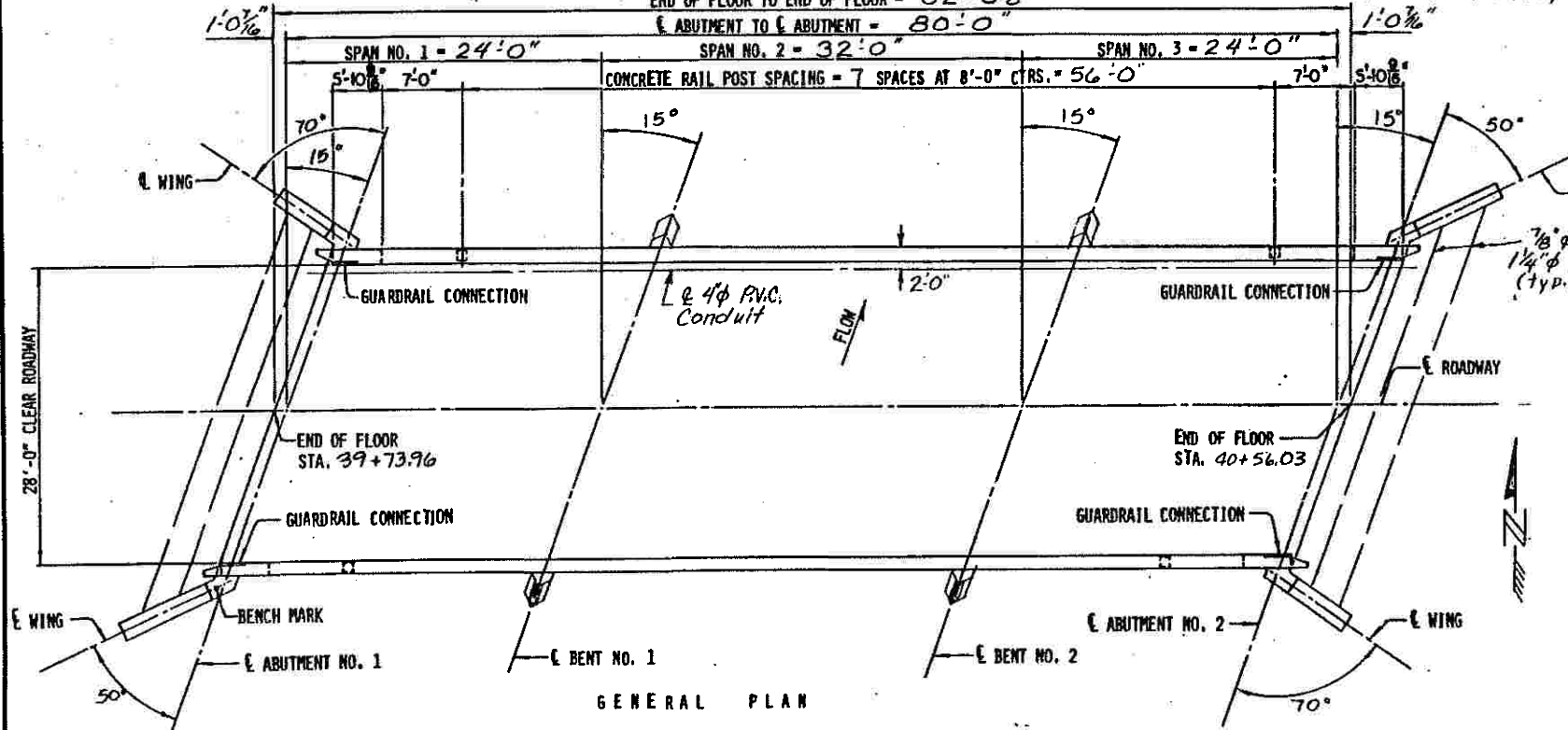
SECTIONAL ELEVATION

NOTE: FOR PROFILE OF NATURAL GROUND AT E. ROADWAY, SEE SHEET NO. 2 OF 5. See sheets 3 of 5 for additional details of Rock Riprap.

TRAFFIC DATA		
YEAR	1992	2012
ADT	100	135
DIV	15	20
% TRUCKS	15%	15%
HEAVY TRUCKS	—	—

VERTICAL CURVE

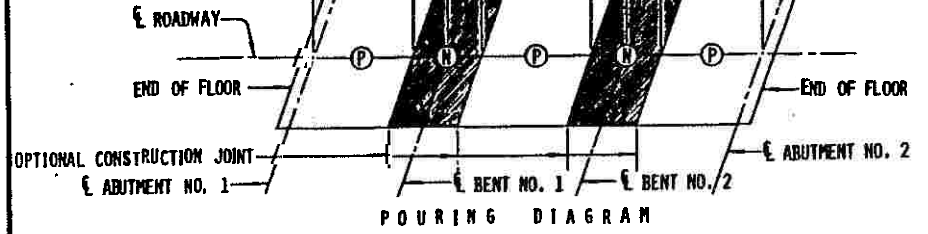
**NOTES**  
 THIS STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 14TH EDITION OF THE A.A.S.H.T.O. "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" INCLUDING SUBSEQUENT INTERIM SPECIFICATIONS THROUGH 1991.  
 TYPING OF THE BRIDGE SLAB WILL BE REQUIRED.  
 ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED.  
 THE MINIMUM CLEARANCE, MEASURED FROM THE FACE OF THE CONCRETE TO THE SURFACE OF ANY REINFORCING BAR SHALL BE 2". EXCEPT WHERE OTHERWISE NOTED, CONCRETE FOR SLAB AND CONCRETE RAIL SHALL BE CLASS "47BD". THE MINIMUM 28-DAY STRENGTH SHALL BE 3,500 P.S.I., WITH A WORKING STRESS OF 1,400 P.S.I.  
 ALL OTHER POURED-IN-PLACE CONCRETE SHALL BE CLASS "47B" CONCRETE. THE MINIMUM 28-DAY STRENGTH SHALL BE 3,000 P.S.I., WITH A WORKING STRESS OF 1,200 P.S.I.  
 BRIDGE SLAB SHALL BE POURED IN ACCORDANCE WITH THE POURING DIAGRAM AND SHALL BE FINISHED WITH A MECHANICAL FINISHER.  
 ALL REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. A615 OR A.S.T.M. A617, GRADE 60 STEEL WITH A WORKING STRESS OF 24,000 P.S.I.  
 LOAD-FACTOR DESIGN WAS USED FOR SLAB.  
 THE ITEM, "STRUCTURAL STEEL FOR SUBSTRUCTURE", SHALL INCLUDE ARMOR ANGLES AT END OF FLOOR, NOSE ANGLES AND TIE RODS AND TURNBUCKLES.  
 THE CONTRACTOR MAY SUBSTITUTE ANY ONE OF THE ALTERNATE DESIGNS SHOWN ON THE PLANS FOR THE ORIGINAL DESIGN. ALL QUANTITIES ARE BASED ON THE ORIGINAL DESIGN AND NO ADDITIONS OR DEDUCTIONS WILL BE ALLOWED FOR THE USE OF AN ALTERNATE DESIGN.  
 AFTER FABRICATION, ALL EXPOSED SURFACES OF ARMOR ANGLES, TIE RODS AND NOSE ANGLES, SHALL BE GIVEN A 3-MIL DRY-FILM THICKNESS OF INORGANIC ZINC-SILICATE PRIMER IN ACCORDANCE WITH THE SPECIFICATIONS FOR PAINTING OF STRUCTURAL STEEL. THE VINYL FINISH COATING IS NOT REQUIRED.  
 ARMOR ANGLES, TIE RODS AND NOSE ANGLES SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. A36.  
 "PREFORMED JOINT FILLER (SPONGE RUBBER TYPE)" MATERIAL SHALL BE FLEXIBLE CELLULAR RUBBER TYPE.  
 TURNBUCKLES SHALL CONFORM TO ASTM-66B CLASS C.



GENERAL PLAN

NOTE: FOR "X" DIMENSION SEE SHEET NO. 5 OF 5.

P = POSITIVE SECTION  
 N = NEGATIVE SECTION



NOTE: THE ENTIRE SLAB SHALL BE POURED, STARTING AT ONE END AND PROCEEDING TO THE OTHER END, STOPPING AT THE COMPLETION OF ANY "P" SECTION.

POURING DIAGRAM

BRIDGE HYDRAULIC INFORMATION FORMAT

**WITHOUT ROAD OVERFLOW:**  
 (STREAM NAME) Muddy Creek Tributary  
 D.A. = 2.2 SQ. MI.  
 Q<sub>100</sub> = 4400 CFS. (DESIGN FLOOD)  
 H.W. ELEV. = 1129.0 (D.S. SIDE)  
 M.W.A. BELOW H.W. = 453 SQ. FT.

**WITH ROAD OVERFLOW:**  
 (STREAM NAME)  
 D.A. = SQ. MI.  
 Q<sub>100</sub> = CFS. (BASE FLOOD)  
 Q<sub>100</sub> = CFS. (BRIDGE - BASE FLOOD)  
 H.W. ELEV. = (D.S. SIDE)  
 M.W.A. BELOW H.W. = SQ. FT. (BELOW L.S.)  
 Q = CFS. (OVERTOPPING FLOOD)  
 LOW ROAD ELEV. =

QUANTITIES FOR INFORMATION ONLY	
CONCRETE RAIL	
CLASS "47BD" CONCRETE	11.9 CU. YDS.
REINFORCING STEEL	2,625 POUNDS

QUANTITIES	
EXCAVATION FOR BRIDGES	245 CU. YDS.
CLASS "47BD" CONCRETE FOR BRIDGES	1078 CU. YDS.
CLASS "47B" CONCRETE FOR BRIDGES	213.0 CU. YDS.
BENTS	105.5 CU. YDS.
ABUTMENTS AND WINGS	107.5 CU. YDS.
REINFORCING STEEL FOR BRIDGES	32,320 POUNDS
SLAB	23,050 POUNDS
BENTS	4260 POUNDS
ABUTMENTS AND WINGS	5010 POUNDS
CONCRETE RAIL	163.52 LIN. FT.
STRUCTURAL STEEL FOR SUBSTRUCTURE	2110 POUNDS
ROCK RIPRAP, TYPE "B"	280 TONS
HPIOX42 STEEL PILING	1,370 LIN. FT.



STANDARD PLANS

GROUP 6

NEBRASKA DEPARTMENT OF ROADS  
 BRIDGE DIVISION

STATE ROAD JOHNSON- S.E. SKREW 15° (RHB)  
 HWY. NO. DESIGN HS20-44  
 REF. POST ROADWAY 28'-0"  
 COUNTY NEMAHA STA. 40+15

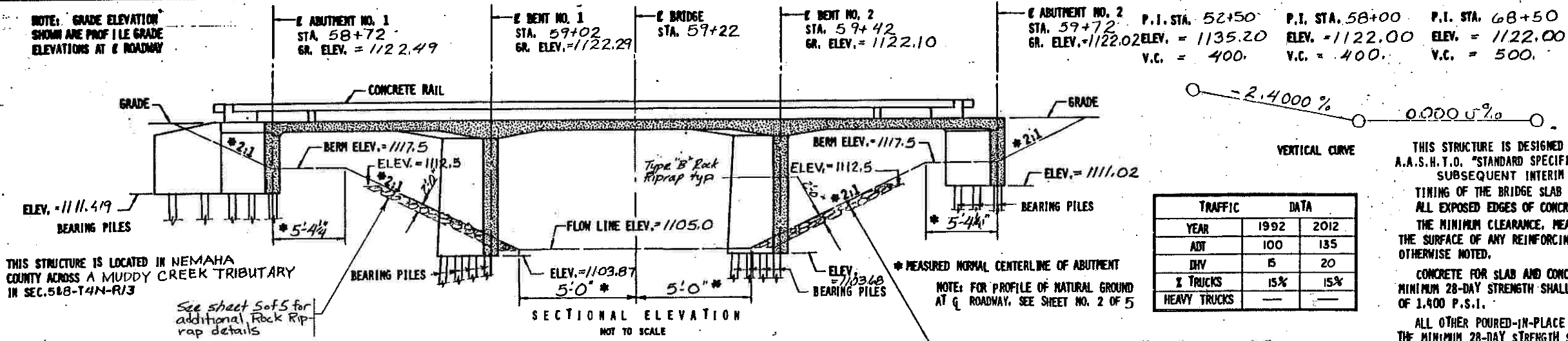
2-24'-0" AND 1-32'-0" SPANS CONCRETE SLAB BRIDGE-CONTINUOUS TYPE

DESIGNED BY NDOR	BRIDGE ENGINEER	1 5
DETAILED BY RCH	PROJECT NUMBER	
CHECKED BY LAL	SPECIAL PLAN NO.	
DATE JUNE 1990	RS-BRS-3670(4)	

STRUCTURE NO. C006402805

STATE	PROJECT NUMBER	DATE
NEB	RS-BRS-3670(4)	2/91
	REVISION	
	1	

NOTE: GRADE ELEVATION SHOWN ARE PROFILE GRADE ELEVATIONS AT ROADWAY



THIS STRUCTURE IS LOCATED IN NEMAHA COUNTY ACROSS A MUDDY CREEK TRIBUTARY IN SEC. 548-T4N-R13

See sheet 5 of 5 for additional Rock Riprap details

Limits of Channel Excavation to be done by the Grading Contractor before the Bridge is built: Channel Excavation is to be classified as Roadway Excavation (75 L.F. R.F.)

NOTES -

THIS STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 14TH EDITION OF THE A.A.S.H.T.O. "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES", INCLUDING SUBSEQUENT INTERIM SPECIFICATIONS THROUGH 1991.

TIMING OF THE BRIDGE SLAB WILL BE REQUIRED.

ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED.

THE MINIMUM CLEARANCE, MEASURED FROM THE FACE OF THE CONCRETE TO THE SURFACE OF ANY REINFORCING BAR SHALL BE 2", EXCEPT WHERE OTHERWISE NOTED.

CONCRETE FOR SLAB AND CONCRETE RAIL SHALL BE CLASS "4780". THE MINIMUM 28-DAY STRENGTH SHALL BE 3,500 P.S.I. WITH A WORKING STRESS OF 1,400 P.S.I.

ALL OTHER POURED-IN-PLACE CONCRETE SHALL BE CLASS "47B" CONCRETE, THE MINIMUM 28-DAY STRENGTH SHALL BE 3,000 P.S.I. WITH A WORKING STRESS OF 1,200 P.S.I.

BRIDGE SLAB SHALL BE POURED IN ACCORDANCE WITH THE POURING DIAGRAM AND SHALL BE FINISHED WITH A MECHANICAL FINISHER.

ALL REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. A615 OR A.S.T.M. A617, GRADE 60 STEEL WITH A WORKING STRESS OF 24,000 P.S.I.

THE CONTRACTOR MAY SUBSTITUTE ANY ONE OF THE ALTERNATE DESIGN SHOWN ON THE PLANS FOR THE ORIGINAL DESIGN. ALL QUANTITIES ARE BASED ON THE ORIGINAL DESIGN AND NO ADDITIONS OR DEDUCTIONS WILL BE ALLOWED FOR THE USE OF AN ALTERNATE DESIGN.

AFTER FABRICATION, ALL EXPOSED SURFACES OF NOSE ANGLES AND ARMOR ANGLES AT END OF FLOOR, SHALL BE GIVEN A 3-MIL DRY-FILM THICKNESS OF INORGANIC ZINC-SILICATE PRIMER IN ACCORDANCE WITH THE SPECIFICATIONS FOR PAINTING OF STRUCTURAL STEEL. THE VINYL FINISH COATING IS NOT REQUIRED. THIS ALSO APPLIES TO TIE RODS AND TURNBUCKLES.

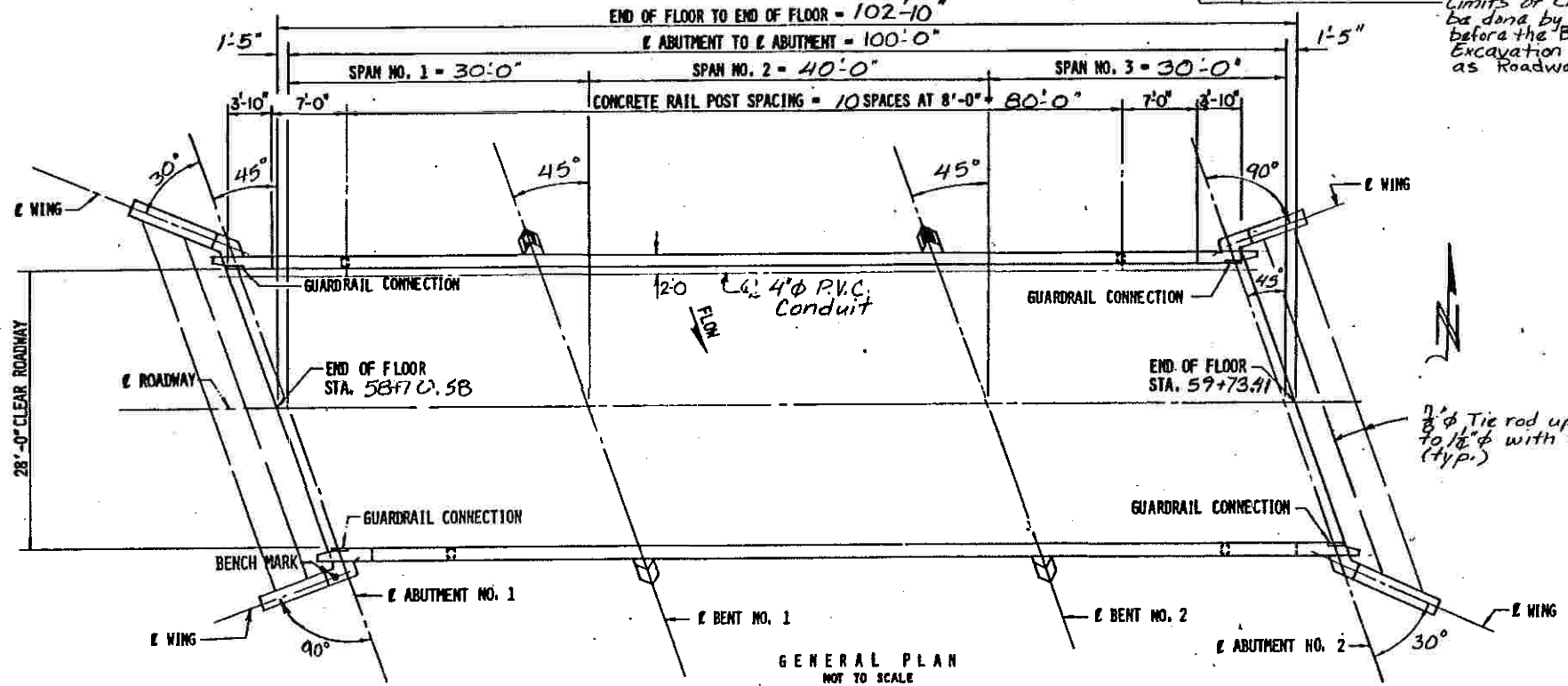
ARMOR ANGLES, TIE RODS AND NOSE ANGLES SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. A36

TURNBUCKLES SHALL CONFORM TO ASTM 668, CLASS C

THE ITEM, "STRUCTURAL STEEL FOR SUBSTRUCTURE," SHALL INCLUDE NOSE ANGLES, ARMOR ANGLES AT END OF FLOOR, TIE RODS AND TURNBUCKLES.

LOAD-FACTOR DESIGN USED FOR SLAB.

"PREFORMED JOINT FILLER (SPONGE RUBBER TYPE)" MATERIAL SHALL BE FLEXIBLE CELLULAR RUBBER TYPE.

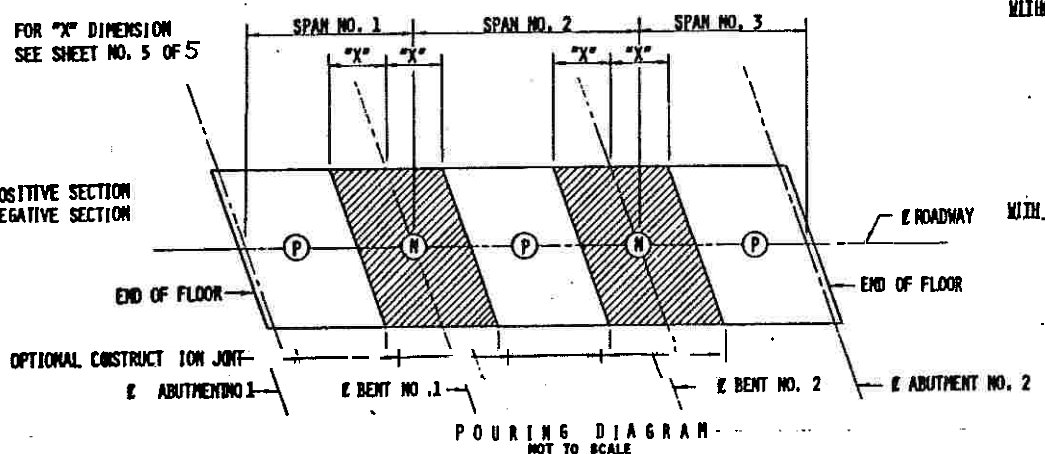


QUANTITIES

EXCAVATION FOR BRIDGES	255 CU. YDS.
CLASS "4780" CONCRETE FOR BRIDGES	164.7 CU. YDS.
CLASS "47B" CONCRETE FOR BRIDGES	203.6 CU. YDS.
BENTS	1149 CU. YDS.
ABUTMENTS	887 CU. YDS.
REINFORCING STEEL FOR BRIDGES	44,295 POUNDS
SLAB	34,790 POUNDS
BENTS	4070 POUNDS
ABUTMENTS AND WINGS	4,835 POUNDS
CONCRETE RAIL	203.34 LIN. FT.
STRUCTURAL STEEL FOR SUBSTRUCTURE	2020 POUNDS
ROCK RIPRAP Type B	360 TONS
HP 10x42 STEEL PILING	950 LIN. FT.

NOTE: FOR "X" DIMENSION SEE SHEET NO. 5 OF 5

P = POSITIVE SECTION  
N = NEGATIVE SECTION



QUANTITIES FOR INFORMATION ONLY

CONCRETE RAIL	
CLASS "4780" CONCRETE	14.2 CU YDS
REINFORCING STEEL	3,165 POUNDS

STANDARD PLANS

STRUCTURE NO. C006402810

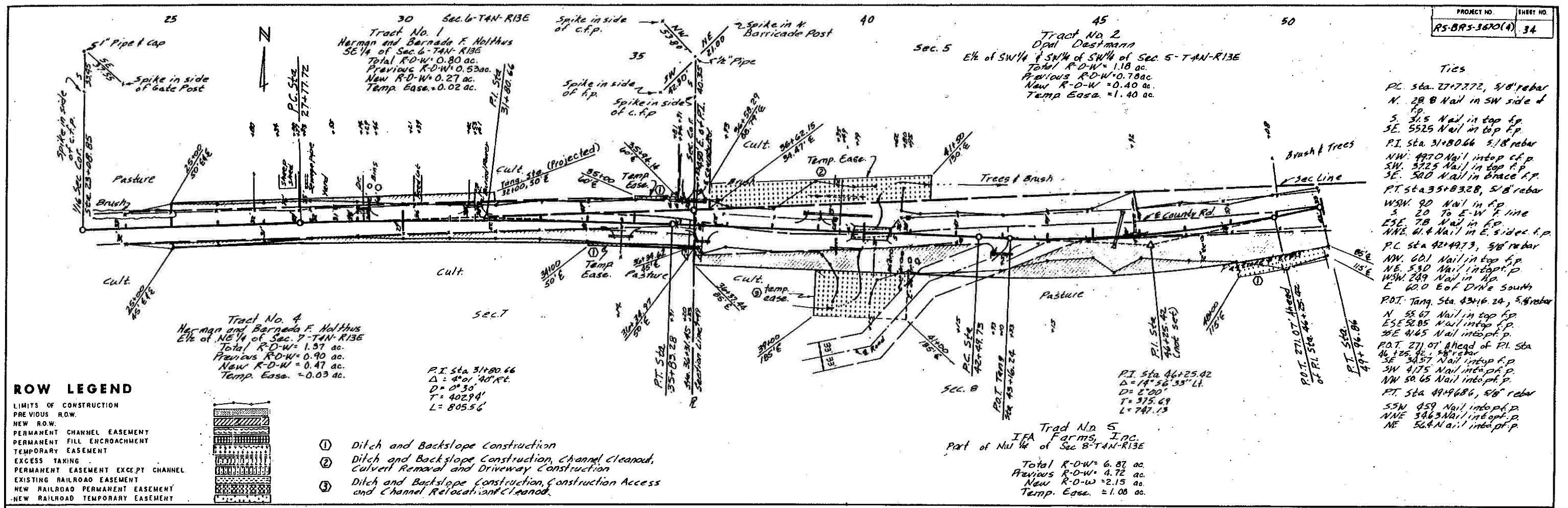
GROUP 6A

NEBRASKA DEPARTMENT OF ROADS  
BRIDGE DIVISION

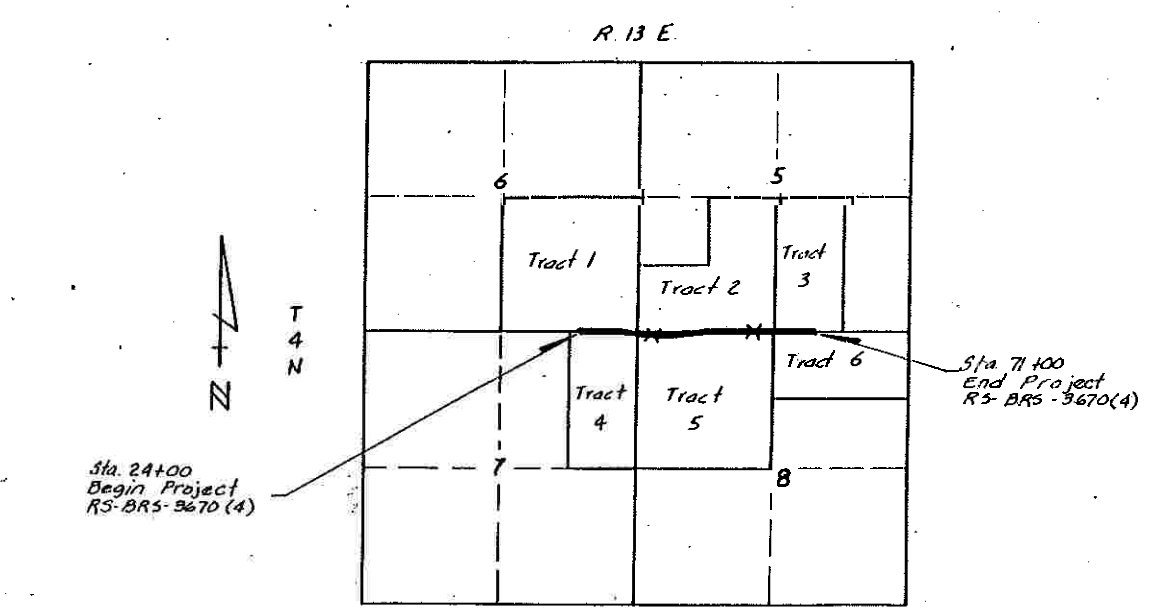
STATE ROAD JOHNSON-S.E. SKREW 45°(LHB)  
HWY. NO. DESIGN 11S20-44  
REF. POST ROADWAY 28'-0"  
COUNTY NEMAHA STA. 59+22

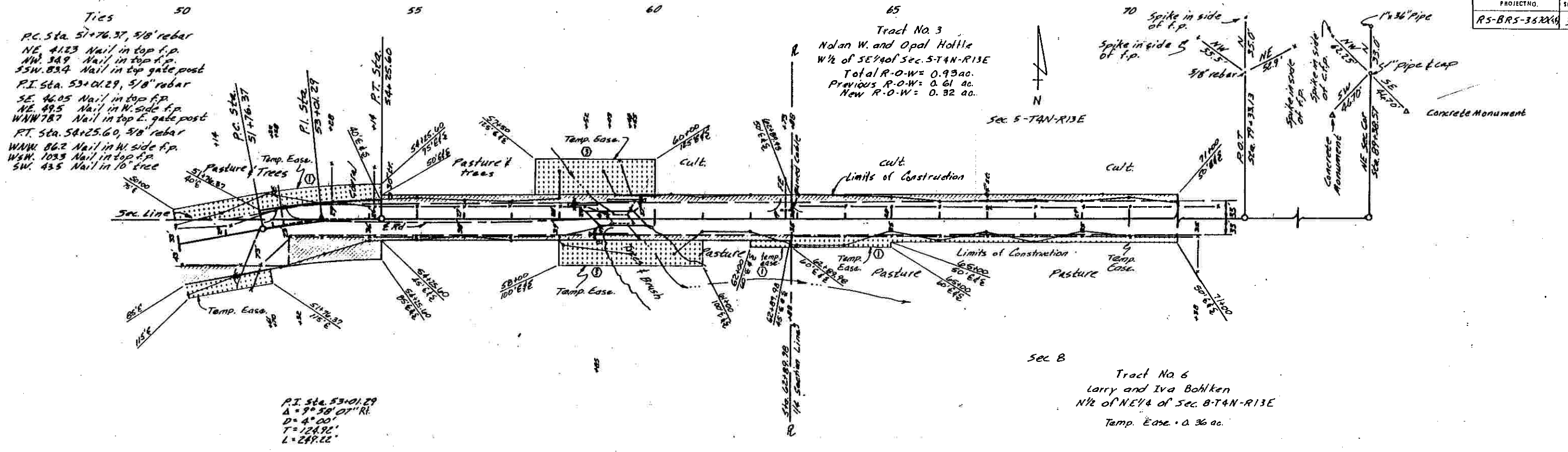
2-30'-0" AND 1-40'-0" SPANS CONCRETE  
SLAB BRIDGE-CONTINUOUS TYPE

DESIGNED BY DOR	BRIDGE ENGINEER	1
DRAWN BY RCH	PROJECT NUMBER	
CHECKED BY LAL	DATE JUNE 1990	RS-BRS-3670(4)
		57



Tract No.	Owner	Description	Total Area	Total Taking	New Taking	Excess Land	Easement		Remainder	
							Perm.	Temp.	Left	Right
1	Herman & Bernada F. Holthus	SE 1/4 of Sec. 6-TAN-R13E		0.80 ac.	0.27 ac.			0.02 ac.		
2	Opal Oestmann	E 1/2 of SW 1/4 & SW 1/4 of SW 1/4 of Sec. 5-TAN-R13E		1.18 ac.	0.40 ac.			1.40 ac.		
3	Nolan W. & Opal Hottle	W 1/2 of SE 1/4 of Sec. 5-TAN-R13E		0.93 ac.	0.32 ac.					
4	Herman & Bernada F. Holthus	E 1/2 of NE 1/4 of Sec. 7-TAN-R13E		1.37 ac.	0.47 ac.			0.03 ac.		
5	IFA Farms, Inc.	NW 1/4 Except 2.4 acres for Road		6.87 ac.	2.15 ac.			1.08 ac.		
6	Larry & Iva Bohlken	N 1/2 of NE 1/4 of Sec. 8-TAN-R13E						0.36 ac.		





Ties  
PC Sta. 51+76.37, 5/8" rebar  
NE. 41.23 Nail in top f.p.  
NW. 38.9 Nail in top f.p.  
SSW. 83.4 Nail in top gate post  
P.I. Sta. 53+01.29, 5/8" rebar  
SE. 46.05 Nail in top f.p.  
NE. 49.5 Nail in N. side f.p.  
WNW. 78.7 Nail in top E. gate post  
RT. Sta. 54+25.60, 5/8" rebar  
WAN. 86.2 Nail in W. side f.p.  
WSW. 103.3 Nail in top f.p.  
SW. 43.5 Nail in 10" tree

Tract No. 3  
Nolan W. and Opal Hottle  
W 1/2 of SE 1/4 of Sec. 5-T4N-R13E  
Total R.O.W. = 0.93 ac.  
Previous R.O.W. = 0.61 ac.  
New R.O.W. = 0.32 ac.

70 Spike in side of f.p.  
Spike in side of f.p.  
5/8" rebar  
1 1/2" pipe  
5" pipe & cap

Sec. 5-T4N-R13E

Sec. 8

Tract No. 6  
Larry and Iva Bohlken  
N 1/2 of NE 1/4 of Sec. 8-T4N-R13E  
Temp. Easement = 0.36 ac.

P.I. Sta. 53+01.29  
Δ = 2° 38' 07" RI  
D = 4° 00'  
T = 124.92'  
L = 249.22'