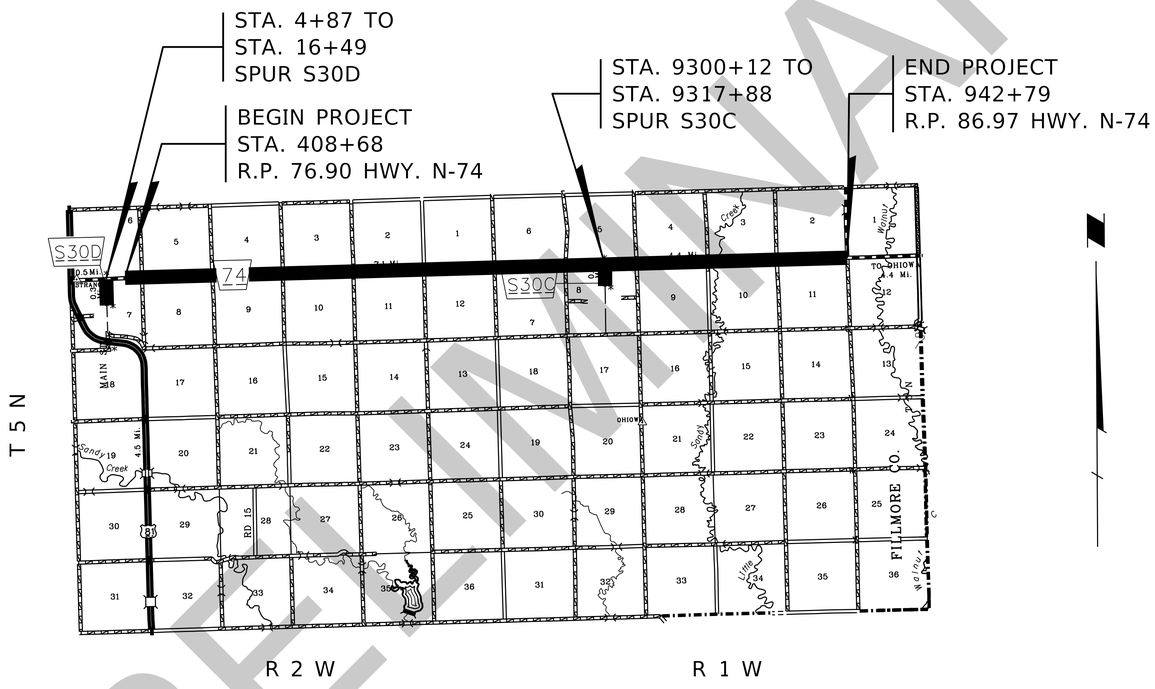
STATE OF NEBRASKA
DEPARTMENT OF TRANSPORTATION

PLANS FOR CONSTRUCTION

STRANG SPUR EAST

FILLMORE COUNTY

PRELIMINARY



THE WORK ON THIS PROJECT CONSISTS OF GROUPS
1 - GRADING, 3 - CONCRETE PAVEMENT, 4 - CULVERTS,
5 - SEEDING, 6 - BRIDGE, 7 - GUARDRAIL,
8 - MISCELLANEOUS, 9 - BITUMINOUS & 10 - GENERAL

◣ GROUPS 1, 3, 4, 5, 6, 7, 8, 9 & 10 ARE INCLUDED
IN THE LETTING OF AUGUST 29, 2024

▲ GROUPS _____ ARE INCLUDED
IN THE LETTING OF _____

■ GROUPS _____ ARE INCLUDED
IN THE LETTING OF _____

THE 2017 EDITION OF THE NEBRASKA STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS APPLY TO THIS PROJECT.

DESIGN DESIGNATION
3R RURAL TRAFFIC
HWY. N-74

YEAR:	2024	2034
ADT:	615	615
DHV:	-	-

T= 20 % D= - %

DESIGN DESIGNATION
3R RURAL TRAFFIC
SPUR 30-D

YEAR:	2024	2034
ADT:	225	225
DHV:	-	-

T= 20 % D= - %

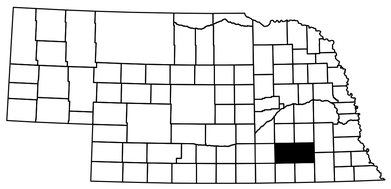
DESIGN DESIGNATION
3R RURAL TRAFFIC
SPUR 30-C

YEAR:	2024	2034
ADT:	370	400
DHV:	-	-

T= 5 % D= - %

TO REFERENCE POST NO. 86+97 11.74 MILES
REFERENCE POST NO. 76+90 61,987 FEET
TOTAL NET LENGTH OF PROJECT:

Project Raw Materials (Tons)
37,335
Post Consumer Recycle Content in Project Raw Materials (Tons)
15,120
Post Consumer Recycle Content
40%
Estimated Value of Post Consumer Content Recycled
$1,172,534



A1

Project Number
STP-74-5(112)

C.N. 42832

◣C.N.

▲C.N.

■C.N.

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

PROFESSIONAL CIVIL ENGINEER
BRANDIE S. NEEMANN
E-11829
STATE OF NEBRASKA

I, Brandie Neemann, am the Coordinating Professional on the STRANG SPUR EAST project.

FILE: 42832 Sheets Title and Index.dgn DATE: 9-MAY-2024 10:10 COMPUTER: BG04190M674

SHEET NO.	
A1	TITLE PAGE
A2	INDEX OF SHEETS
B1 - B3	TYPICAL CROSS SECTIONS
C1	SUMMARY OF QUANTITIES
E1 - E10	ENVIRONMENTAL
F1 - F15	HORIZONTAL ALIGNMENT & ORIENTATION
G1 - G2	GENERAL INFORMATION
H1 - H6	PHASING PLANS
J1 - J11	EROSION AND SEDIMENT CONTROL
L1 - L10	PLAN SHEETS
M1 - M2	TRAFFIC CONTROL PLAN--CULVERT @ STA. 418+20 PHASE 2
M3 - M4	TRAFFIC CONTROL PLAN--CULVERT @ STA. 455+62 PHASE 2
M5 - M6	TRAFFIC CONTROL PLAN--CULVERT @ STA. 460+28 PHASE 2
M7 - M8	TRAFFIC CONTROL PLAN--CULVERT @ STA. 535+42 PHASE 2
M9 - M10	TRAFFIC CONTROL PLAN--CULVERT @ STA. 731+76 PHASE 2
M11 - M12	TRAFFIC CONTROL PLAN--CULVERT @ STA. 783+72 PHASE 2
M13	TYPICAL TRAFFIC CONTROL PLAN--LANE CLOSURE USING AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)
M14 - M15	TEMPORARY TRAFFIC SIGNAL PLAN--SHORT TERM CLOSURE
M16 - M17	TRAFFIC CONTROL PLAN--MOBILE OPERATIONS TWO-LANE AND MULTI-LANE
M18	TYPICAL TRAFFIC CONTROL PLAN--ONE LANE, TWO WAY OPERATION WITH BARRIERS
M19	TYPICAL SIGNAL CONTROL PLAN--TEMPORARY TRAFFIC SIGNAL DETAILS
Q1	EARTHWORK DATA SHEETS
R1 - R11	DRAINAGE CROSS SECTIONS
T1 - T2	SPECIAL PLAN 1C BOX CULVERT STANDARD DETAILS STA. VARIERS
T3 - T5	SPECIAL PLAN 2C TWIN SPAN CONCRETE BOX CULVERT STA. 418+20
T6	SPECIAL PLAN 3C TWIN SPAN CONCRETE BOX CULVERT STA. 455+62
T7 - T9	SPECIAL PLAN 4C TWIN SPAN CONCRETE BOX CULVERT STA. 490+70
T10 - T11	SPECIAL PLAN 5C HEADWALL WITH WINGS AND PAVED APRON STA. 490+47 LT
T12 - T15	SPECIAL PLAN 6C HEADWALL WITH ENERGY DISSIPATOR STA. 535+42 RT
T16 - T18	SPECIAL PLAN 7C HEADWALL WITH WINGS STA. 731+76
T19 - T21	SPECIAL PLAN 8C HEADWALL WITH ENERGY DISSIPATOR STA. 921+14
U1 - U2	SPECIAL PLAN 9C MILLED RUMBLE STRIPS
U3 - U6	SPECIAL PLAN 10CSILT CHECKS ALL TYPES
W1 - W2	RIGHT-OF-WAY SHEETS
X1 - X7	ROADWAY CROSS SECTIONS

STANDARD PLANS	
307-R3	(2 SHEETS) MAILBOX TURNOUT
410-R4	(2 SHEETS) FLARED END SECTIONS FOR CULVERT PIPES
411-R2	(4 SHEETS) BEDDING AND BACKFILL REQUIREMENTS FOR CONCRETE PIPE
501-R7	(3 SHEETS) EROSION CONTROL
502-R2	(2 SHEETS) SILT FENCE DETAILS
503	CONCRETE WASHOUT & CONSTRUCTION EXIT
870	(2 SHEETS) CONCRETE PROTECTION BARRIER
920-R7	(3 SHEETS) TRAFFIC CONTROL, CONSTRUCTION AND MAINTENANCE
921-R8	(2 SHEETS) TRAFFIC CONTROL, CONSTRUCTION AND MAINTENANCE
922-R11	(2 SHEETS) TRAFFIC CONTROL FOR ASPHALT SURFACING
941-R1	(2 SHEETS) PAVEMENT MARKING
943	(4 SHEETS) TEMPORARY PAVEMENT MARKING

PRELIMINARY

FILE: 42832 Sheets Title and Index.dgn
DATE: 9-MAY-2024 10:03
COMPUTER: BG0419M674

A2

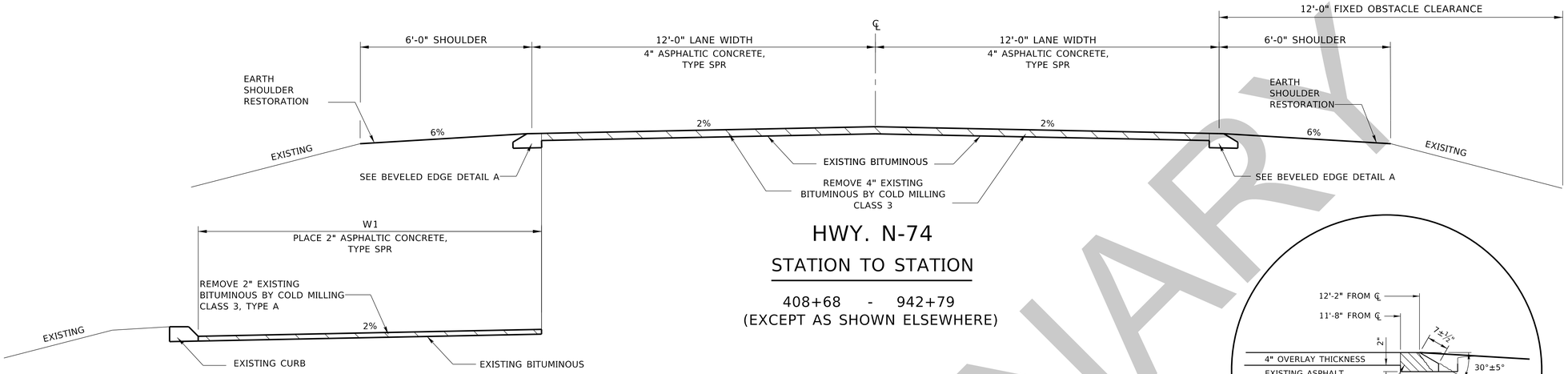
Project Number
STP-74-5(112)

C.N. 42832

INDEX OF SHEETS

NEBRASKA
Good LIfe. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

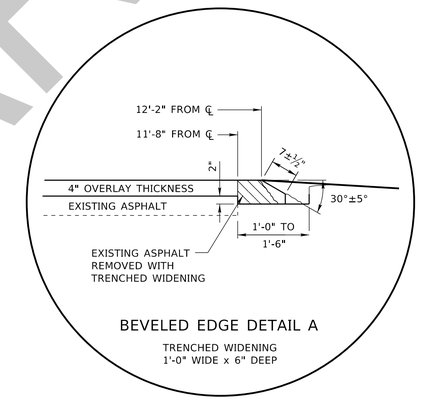


HWY. N-74

STATION TO STATION

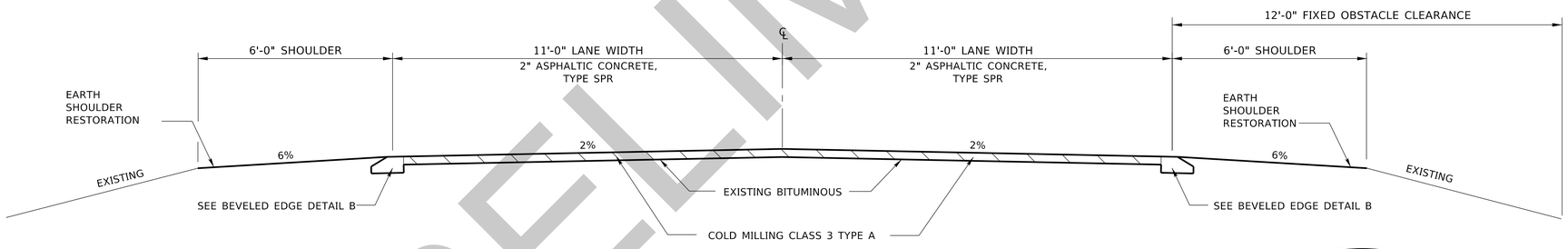
408+68 - 942+79
(EXCEPT AS SHOWN ELSEWHERE)

STATION TO STATION			W1		
786+70	-	792+56		12'-0"	
792+56	-	793+68	12'-0"	-	0'-0"



BEVELED EDGE DETAIL A

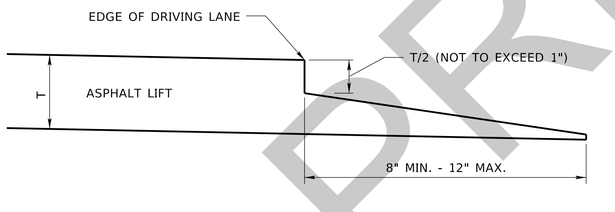
TRENCHED WIDENING
1'-0" WIDE x 6" DEEP



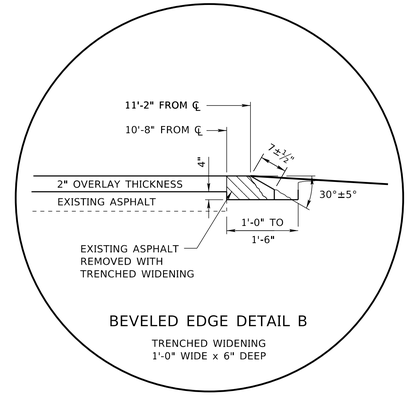
SPUR 30D

STATION TO STATION

4+87 - 16+49
(EXCEPT AS SHOWN ELSEWHERE)



NOTCHED WEDGE JOINT
(CONSTRUCTION DETAIL)



BEVELED EDGE DETAIL B

TRENCHED WIDENING
1'-0" WIDE x 6" DEEP

PRELIMINARY

B1

Project Number
74-5(112)

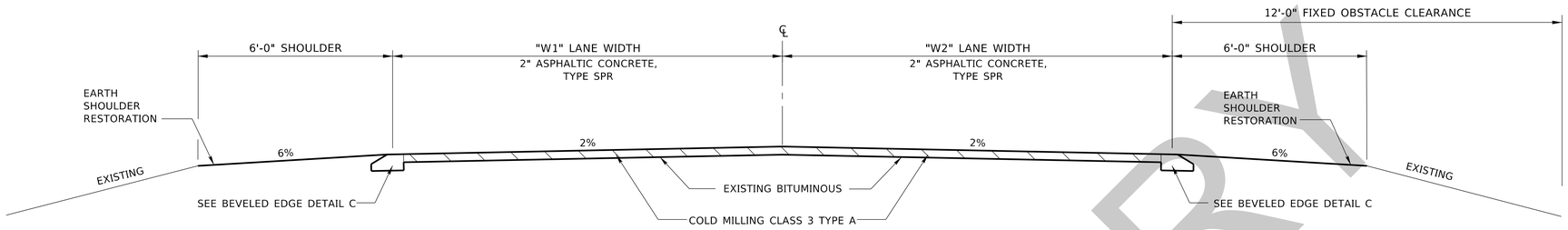
C.N. 42832

TYPICAL CROSS SECTIONS

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

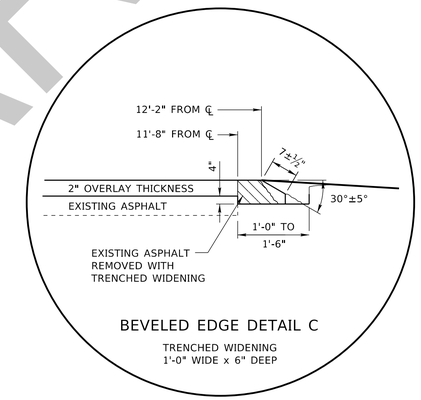
FILE: 42832 Sheets Typical Cross Sections.dgn DATE: 9-MAY-2024 10:03 COMPUTER: BG04190M674



SPUR 30C

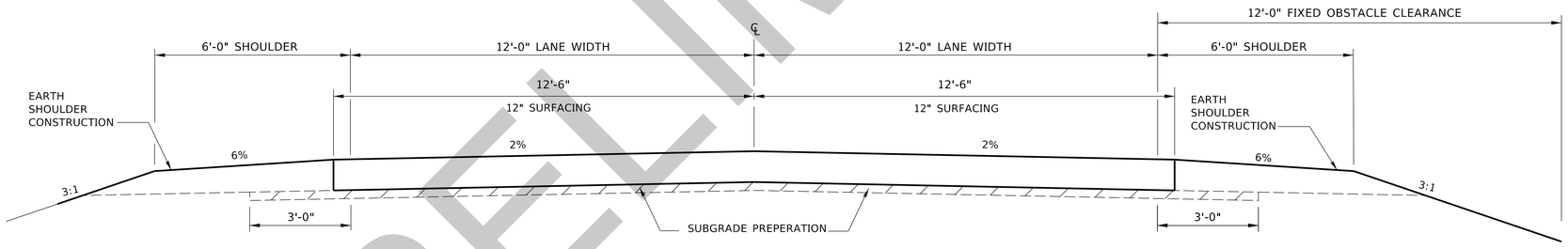
STATION TO STATION			"W1"			"W2"		
9300+12	-	9303+11	92'-8"	-	13'-6"	97'-3"	-	12'-0"
9303+11	-	9303+55	13'-6"	-	12'-0"	12'-0"		
9303+55	-	9317+88	12'-0"			12'-0"		

(EXCEPT AS SHOWN ELSEWHERE)



BEVELED EDGE DETAIL C

TRENCHED WIDENING
1'-0" WIDE x 6" DEEP



SURFACING AT CULVERT REPLACEMENTS

STATION TO STATION			STATION TO STATION		
418+08	-	418+33	667+34	-	667+46
455+07	-	456+18	679+27	-	679+39
459+92	-	460+64	698+47	-	698+73
479+70	-	479+82	731+62	-	731+91
503+51	-	503+72	735+47	-	735+69
535+28	-	535+55	742+83	-	742+94
552+07	-	552+18	753+36	-	753+47
573+83	-	573+94	759+65	-	759+77
575+09	-	575+30	764+06	-	764+18
599+31	-	599+44	783+62	-	783+81
628+52	-	628+63	793+42	-	793+52
650+95	-	651+07	877+50	-	877+61

PRELIMINARY

B2

Project Number
74-5(112)

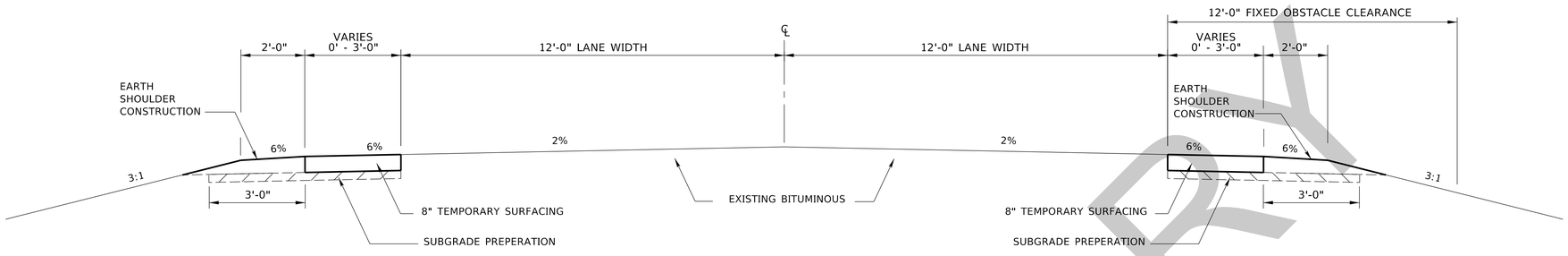
C.N. 42832

TYPICAL CROSS SECTIONS

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway
Design
Division

FILE: 42832 Sheets Typical Cross Sections.dgn DATE: 8-MAY-2024 08:09 COMPUTER: BG04139M674



TEMPORARY SURFACING AT CULVERT REPLACEMENTS

STATION TO STATION		
417+09	-	420+22
453+40	-	462+54
477+79	-	481+73
501+60	-	505+63
533+37	-	537+46
550+16	-	554+09
571+92	-	577+21
597+40	-	601+34
626+61	-	630+54
650+05	-	652+98
665+45	-	669+37
677+36	-	681+30
696+57	-	700+64
729+71	-	744+85
751+45	-	766+09
781+79	-	785+73
793+78	-	795+43
875+59	-	879+52

STATION TO STATION		
417+09	-	420+22
453+69	-	462+54
477+79	-	481+73
501+60	-	505+62
533+37	-	537+46
550+17	-	554+10
571+93	-	577+21
597+41	-	601+35
626+61	-	630+54
650+04	-	652+98
665+44	-	669+37
677+37	-	681+30
696+56	-	700+64
729+71	-	744+85
751+45	-	766+09
781+70	-	784+65
791+51	-	795+43
875+59	-	879+51

PRELIMINARY

B3

Project Number
74-5(112)

C.N. 42832

TYPICAL CROSS SECTIONS

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway
Design
Division

FILE: 42832 Sheets Typical Cross Sections.dgn DATE: 8-MAY-2024 08:09 COMPUTER: BG04190674

PRELIMINARY

COMPACTION REQUIREMENTS
Class III (See Specifications)

	SOIL TYPE	DEPTH BELOW FINISH SUBGRADE	PERCENT DENSITY	MOISTURE REQUIREMENTS MINIMUM	MAXIMUM
Embankment / Roadway Grading, including driveways, to receive concrete pavement	Silt-Clay	Upper 3 feet	98 Min.	Opt. -3%	Opt. +2%
	Silt-Clay	At depths greater than 3 feet	95 Min.	Opt. -3%	Opt. +2%
	Granular	All depths	100 Min.	**	**
Embankment / Roadway Grading, including detours, temporary roads, and driveways, to receive flexible pavement	Silt-Clay	Upper 3 feet	100 Min.	Opt. -2%	Opt. +1%
	Silt-Clay	At depths greater than 3 feet	95 Min.	Opt. -3%	Opt. +2%
	Granular	All depths	100 Min.	**	**
Embankment / Roadway Grading not to be surfaced	All	All depths	95 Min.	Opt. -3%	Opt. +2%
Embankment / Roadway Grading to receive gravel surfacing / crushed rock embedment	All	All depths	95 Min.	**	**
Subgrade Preparation, Shoulder Subgrade Preparation (Concrete Pavement)	Silt-Clay	The upper 6 inches of subgrade soil	98 Min.	Opt. -3%	Opt. +2%
	Granular	The upper 6 inches of subgrade soil	100 Min.	**	**
Subgrade Preparation, Shoulder Subgrade Preparation (Flexible Pavement)	Silt-Clay	The upper 6 inches of subgrade soil	100 Min.	Opt. -2%	Opt. +1%
	Granular	The upper 6 inches of subgrade soil	100 Min.	**	**
Trench Widening	- -	- -		(See Special Provisions)	
Bituminous Pavement Patching	All	Underlying Material	100 Min.	(See Specifications)	
Foundation Course / Subgrade Stabilization	- -	- -	100 Min.	(See Specifications)	
Stabilized Subgrade (ie Lime, Flyash, etc.)	- -	- -	100 Min.	(See Special Provisions)	
Granular Structural Fill (MSE Walls, Granular Fill for bridges, Culverts, etc)	Granular	All depths	100 Min.	Opt. -3%	Opt. +3%

** Moisture as necessary to obtain density.
(A moisture target value at maximum density shall be established in the field by the Contractor during the compaction process. The acceptable moisture content shall be ± 2% of the target value.)

****

TYPES OF ASPHALTIC OIL TO BE USED
TACK COAT: SS-1, SS-1H, CSS-1, CSS-1H, CFS-1, FS-1
FOG SEAL: SS-1H, CSS-1H, CFS-1 OR FS-1

C1

Project Number
74-5(112)

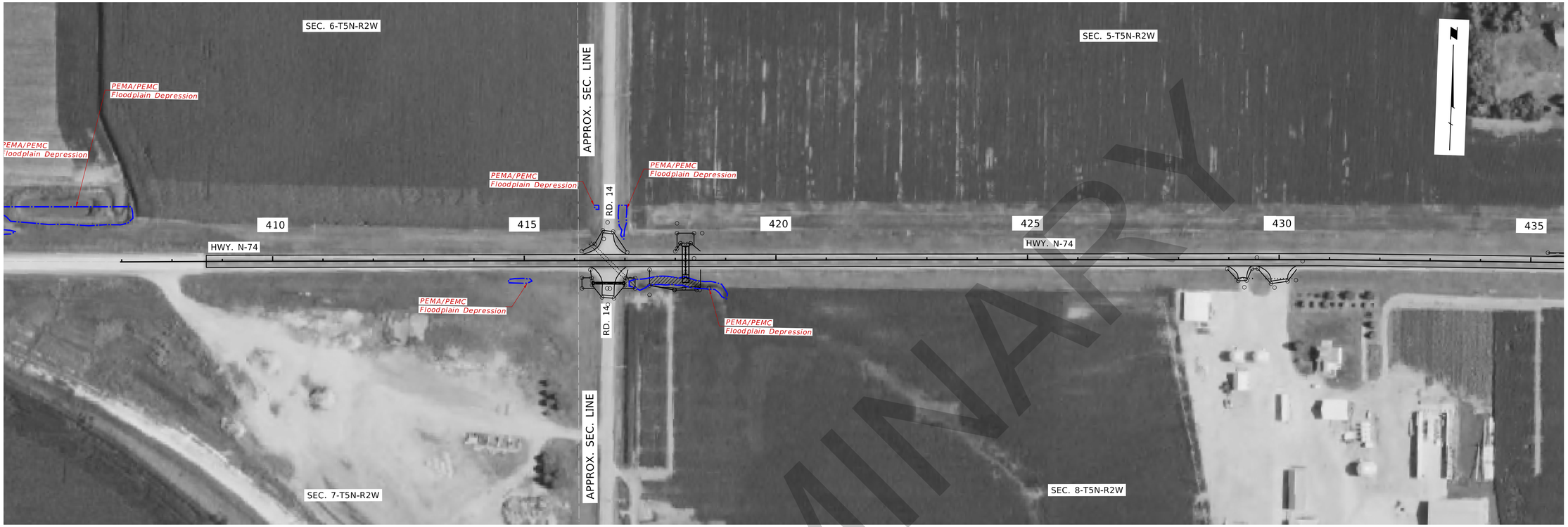
C.N. 42832

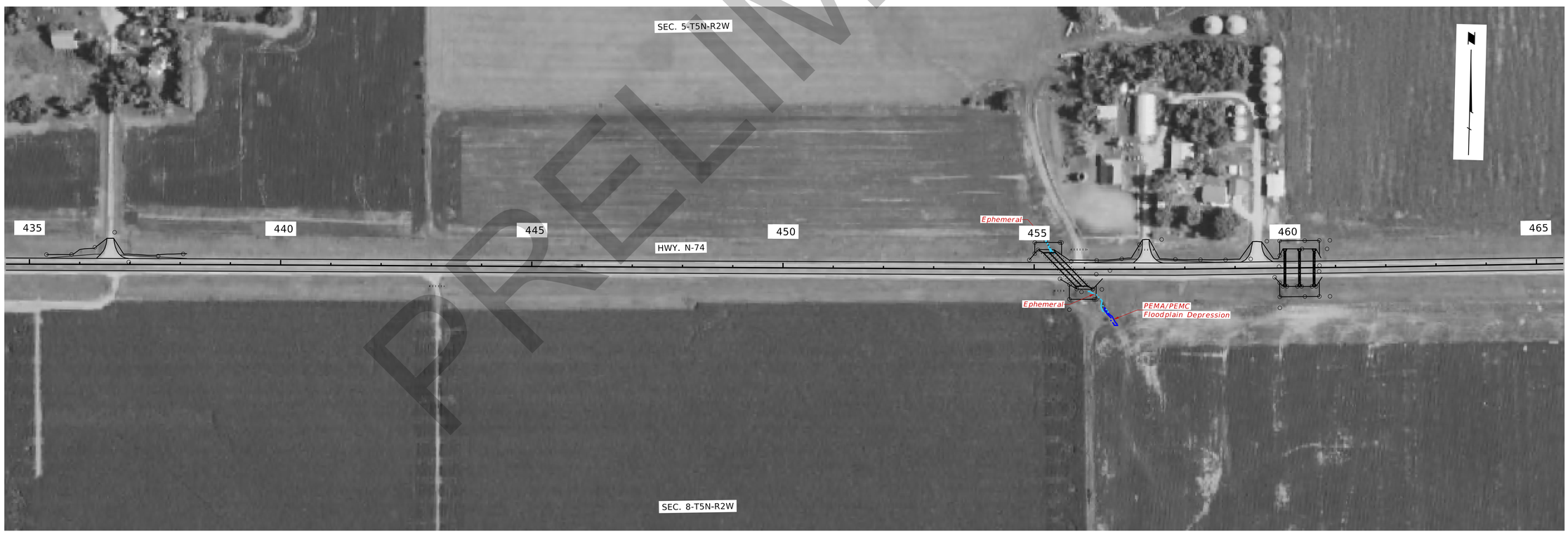
SUMMARY OF QUANTITIES

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 09:09
FILE: 42832 Sheets Summary of Quantities.dgn





PRELIMINARY

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:09
FILE: 42832 Sheets Aerial.dgn

E1

Project Number
74-5(112)

C.N. 42832

DATE: 2018
FLIGHT: NAIP

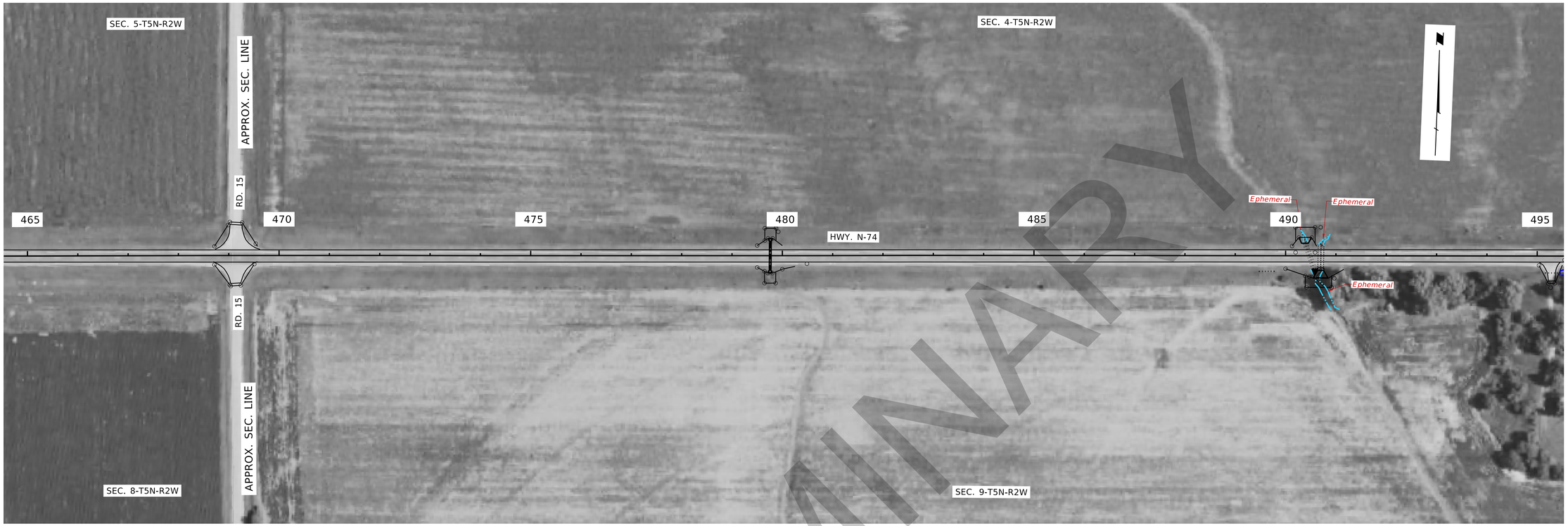
LEGEND

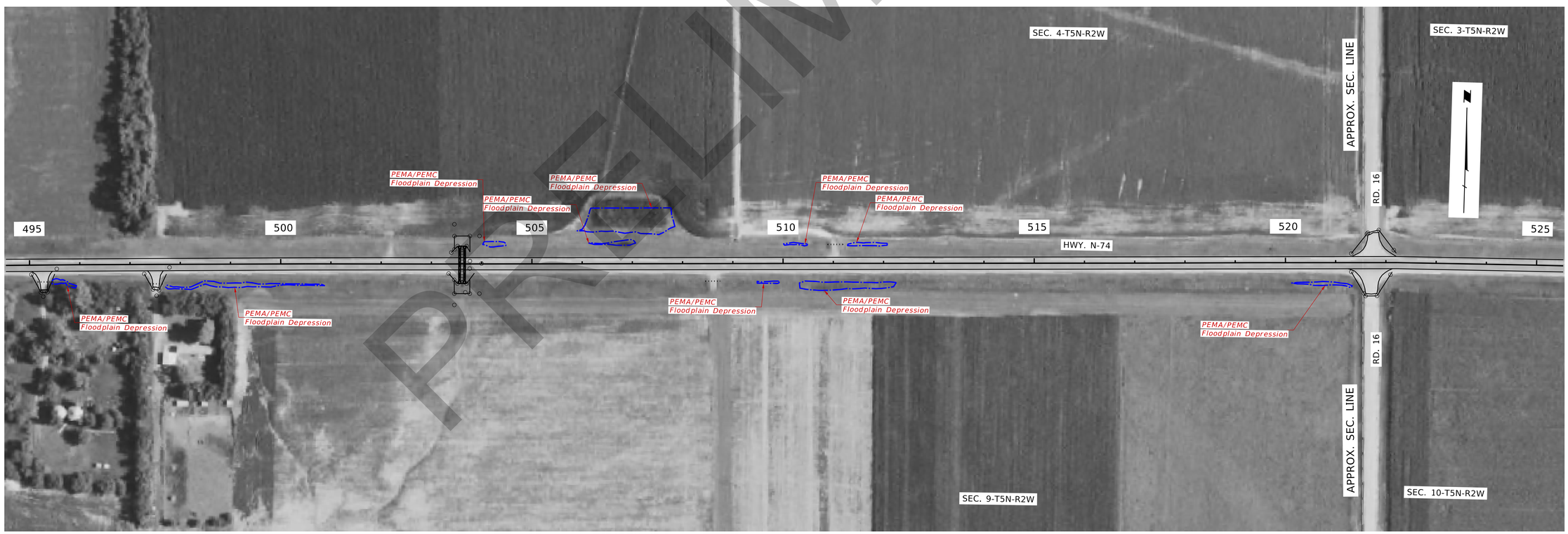
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- IMPACTED WETLANDS
- TEMPORARY IMPACTED WETLANDS

ENVIRONMENTAL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division





PRELIMINARY

E2

Project Number
74-5(112)

C.N. 42832

DATE: 2018
FLIGHT: NAIP

LEGEND

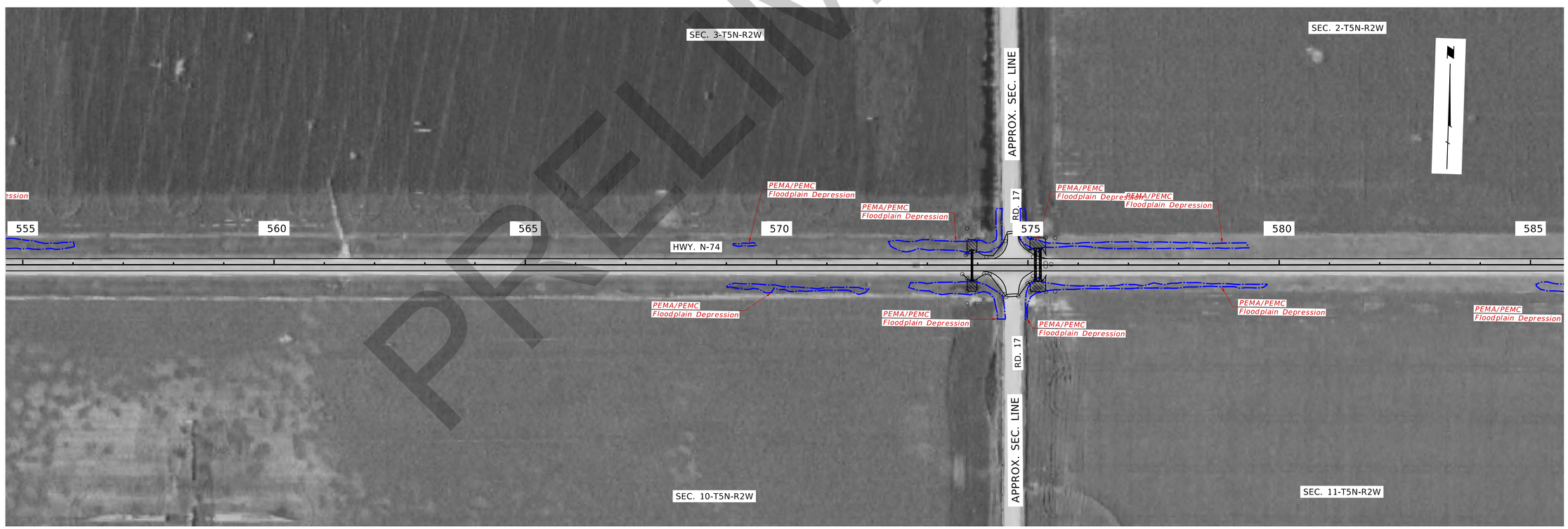
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- IMPACTED WETLANDS
- TEMPORARY IMPACTED WETLANDS

ENVIRONMENTAL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:09
FILE: 42832 Sheets Aerial.dgn



PRELIMINARY

E3

Project Number
74-5(112)

C.N. 42832

DATE: 2018
FLIGHT: NAIP

LEGEND

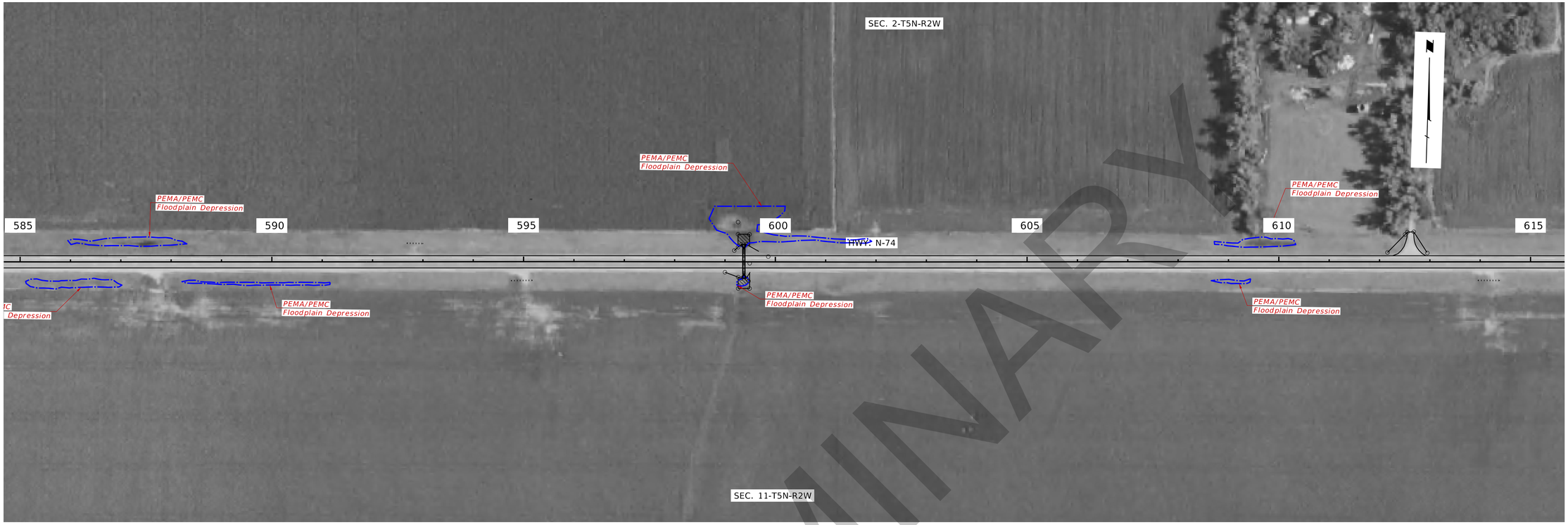
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- IMPACTED WETLANDS
- TEMPORARY IMPACTED WETLANDS

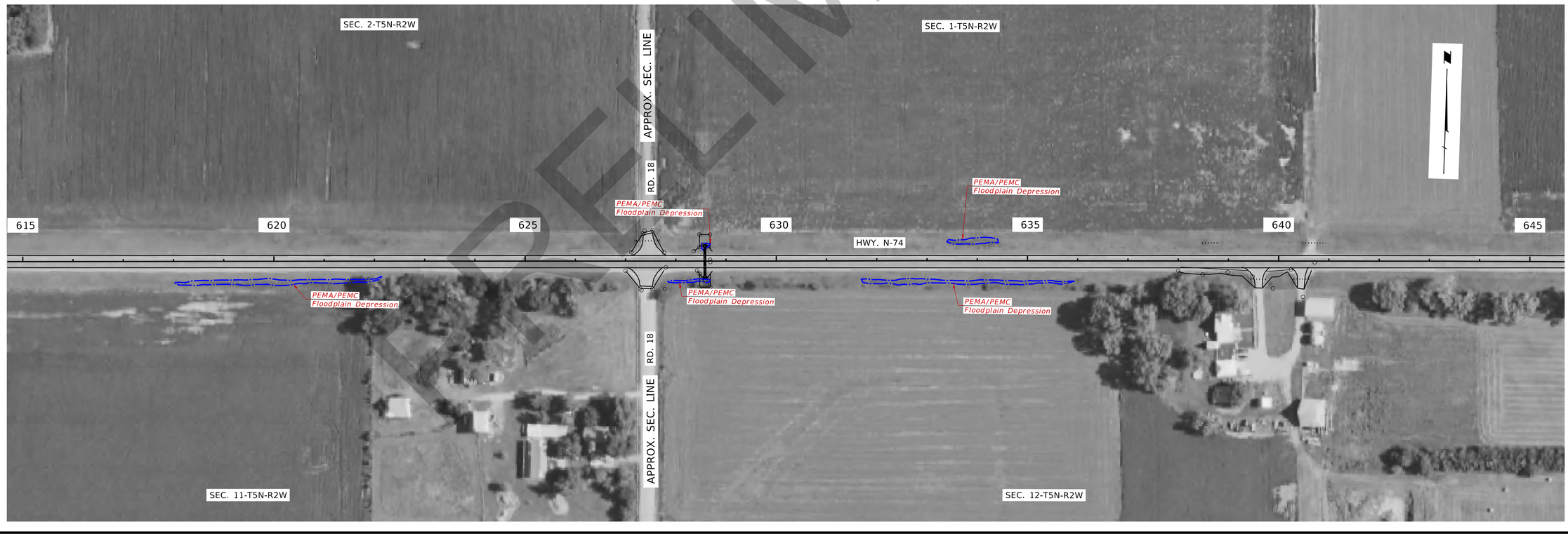
ENVIRONMENTAL

NEBRASKA
Good LIfe. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:10
FILE: 42832 Sheets Aerial.dgn





PRELIMINARY

E4

Project Number
74-5(112)

C.N. 42832

DATE: 2018
FLIGHT: NAIP

LEGEND

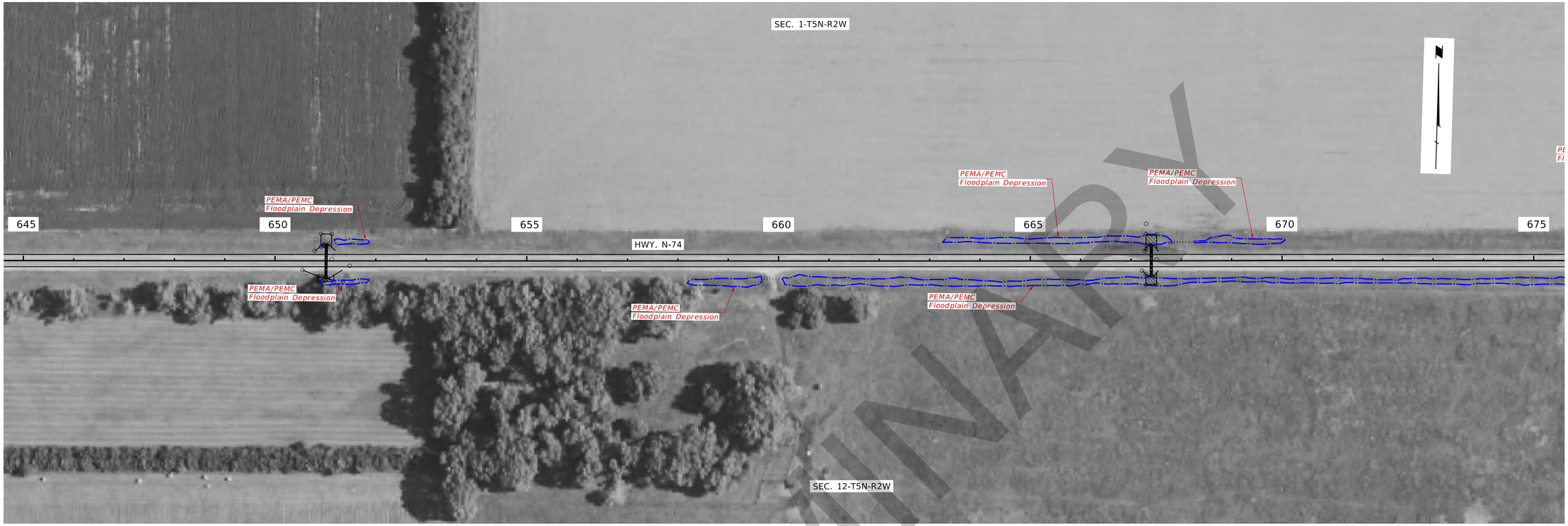
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- IMPACTED WETLANDS
- TEMPORARY IMPACTED WETLANDS

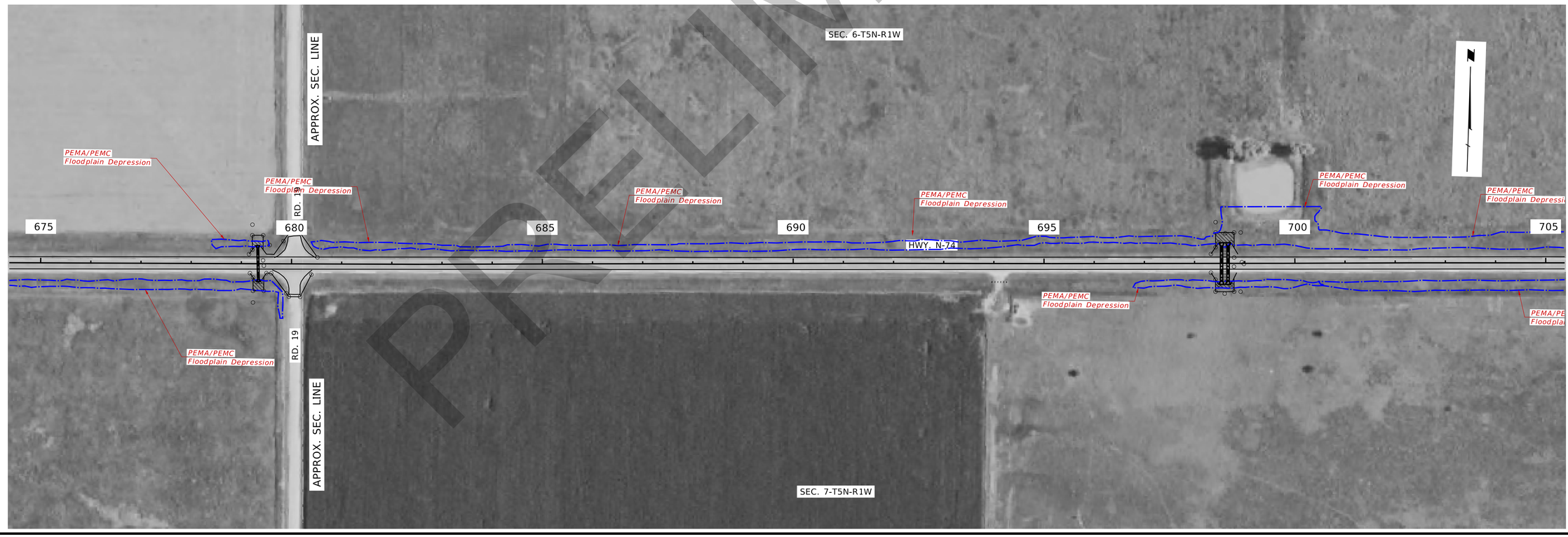
ENVIRONMENTAL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG04139M674
DATE: 8-MAY-2024 08:10
FILE: 42832 Sheets Aerial.dgn





PRELIMINARY

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:10
FILE: 42832 Sheets Aerial.dgn

E5

Project Number
74-5(112)

C.N. 42832

DATE: 2018
FLIGHT: NAIP

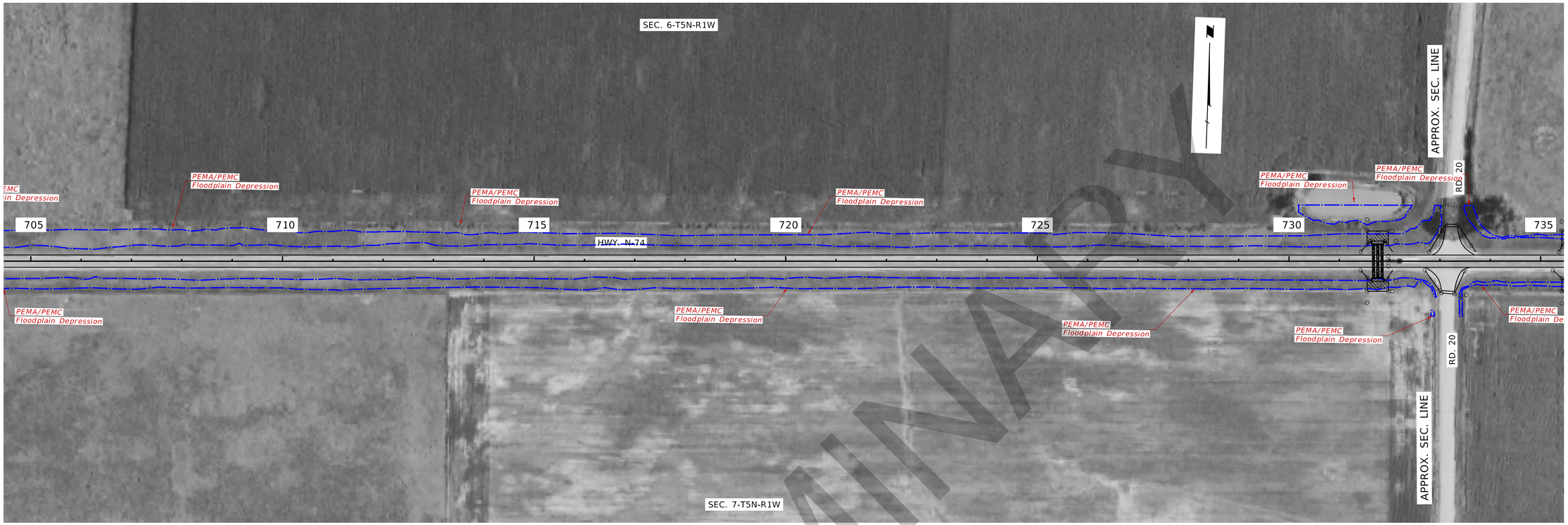
LEGEND

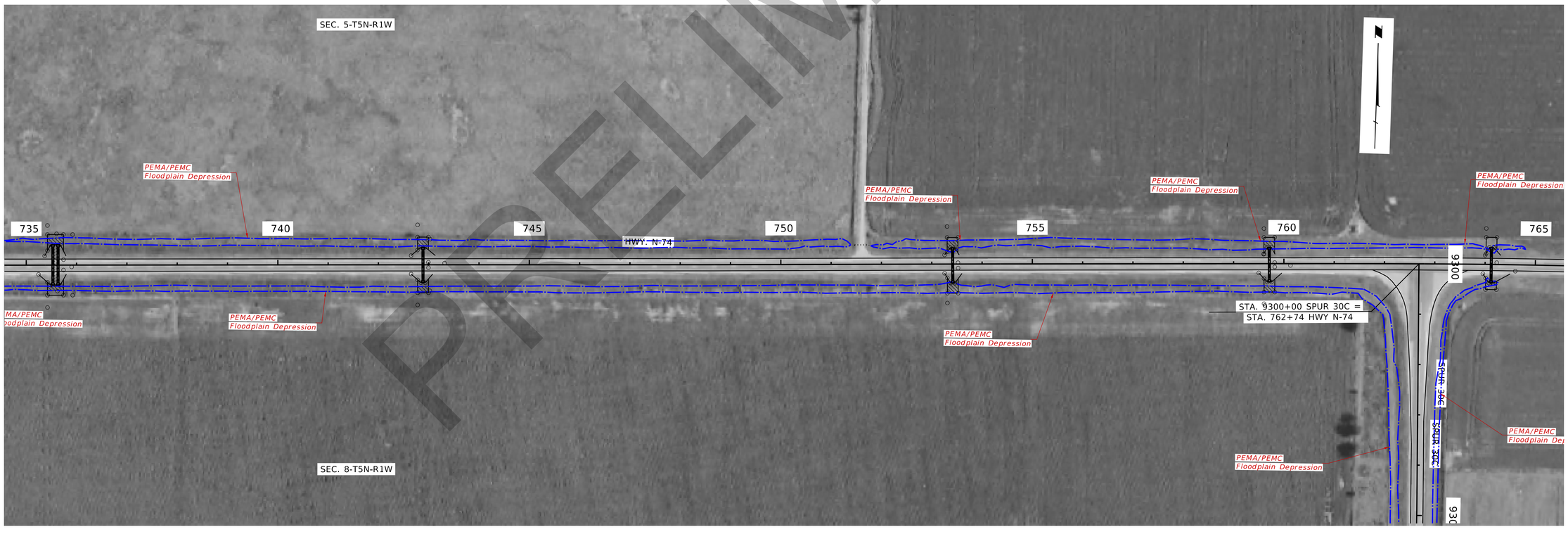
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- IMPACTED WETLANDS
- TEMPORARY IMPACTED WETLANDS

ENVIRONMENTAL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division





PRELIMINARY

E6

Project Number
74-5(112)

C.N. 42832

DATE: 2018
FLIGHT: NAIP

LEGEND

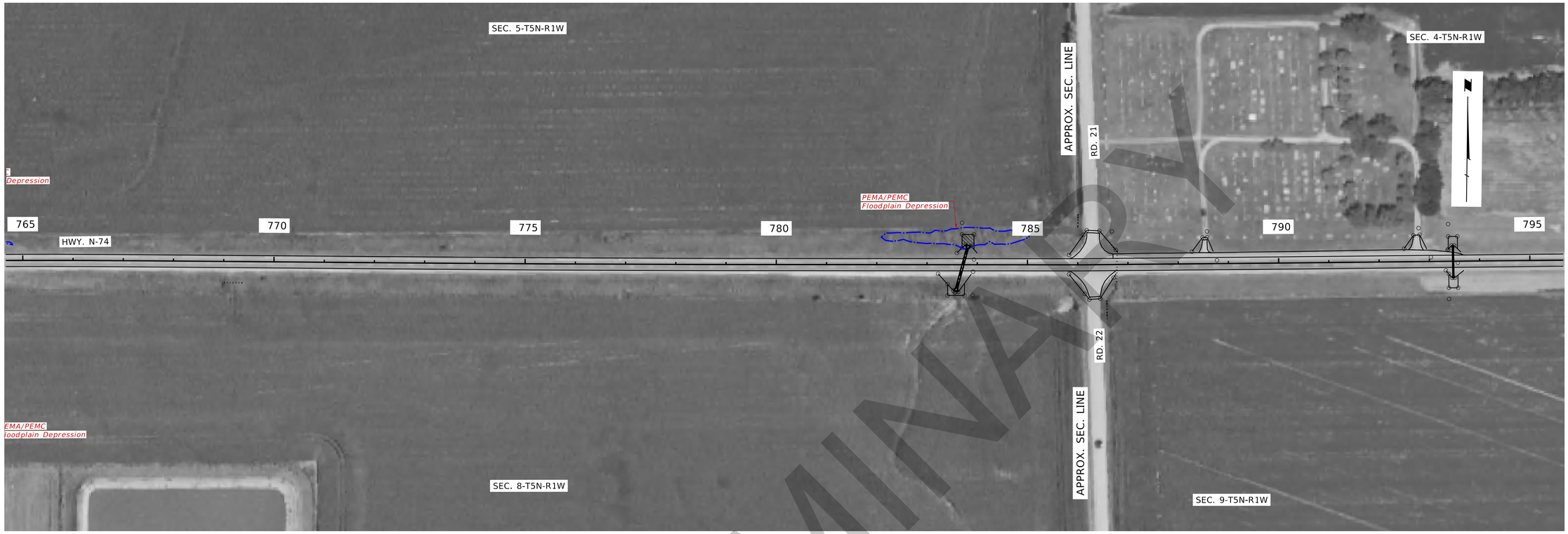
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- IMPACTED WETLANDS
- TEMPORARY IMPACTED WETLANDS

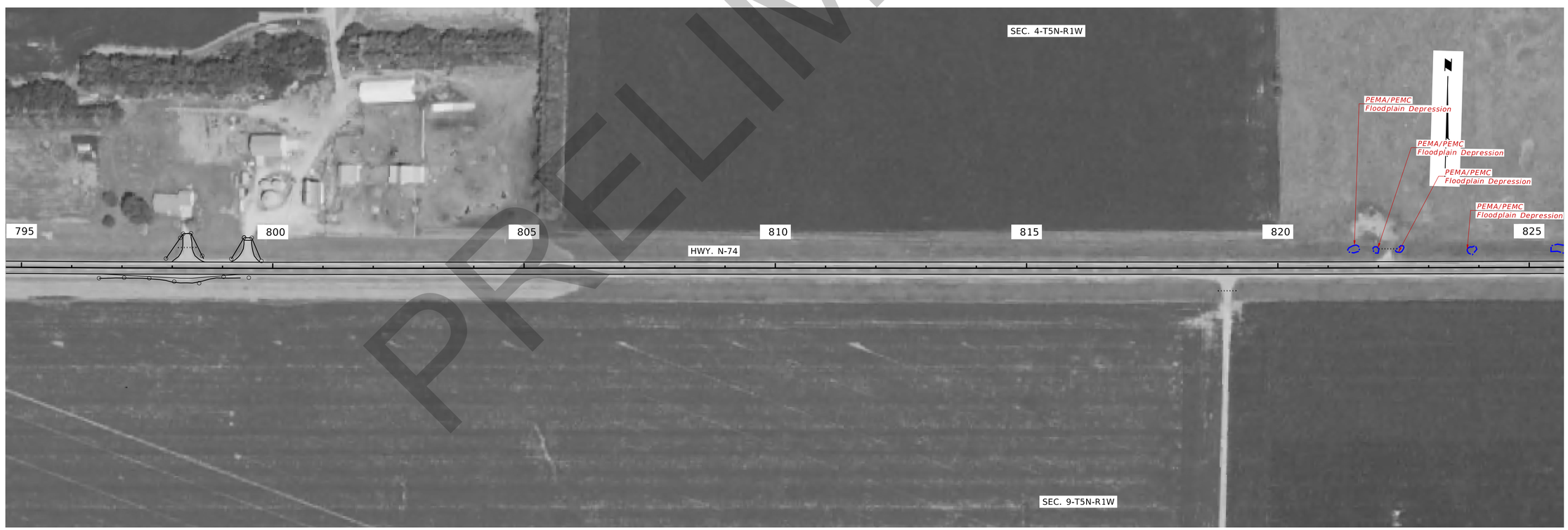
ENVIRONMENTAL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG04191M674
DATE: 9-MAY-2024 10:03
FILE: 42832 Sheets Aerial.dgn





PRELIMINARY

E7

Project Number
74-5(112)

C.N. 42832

DATE: 2018
FLIGHT: NAIP

LEGEND

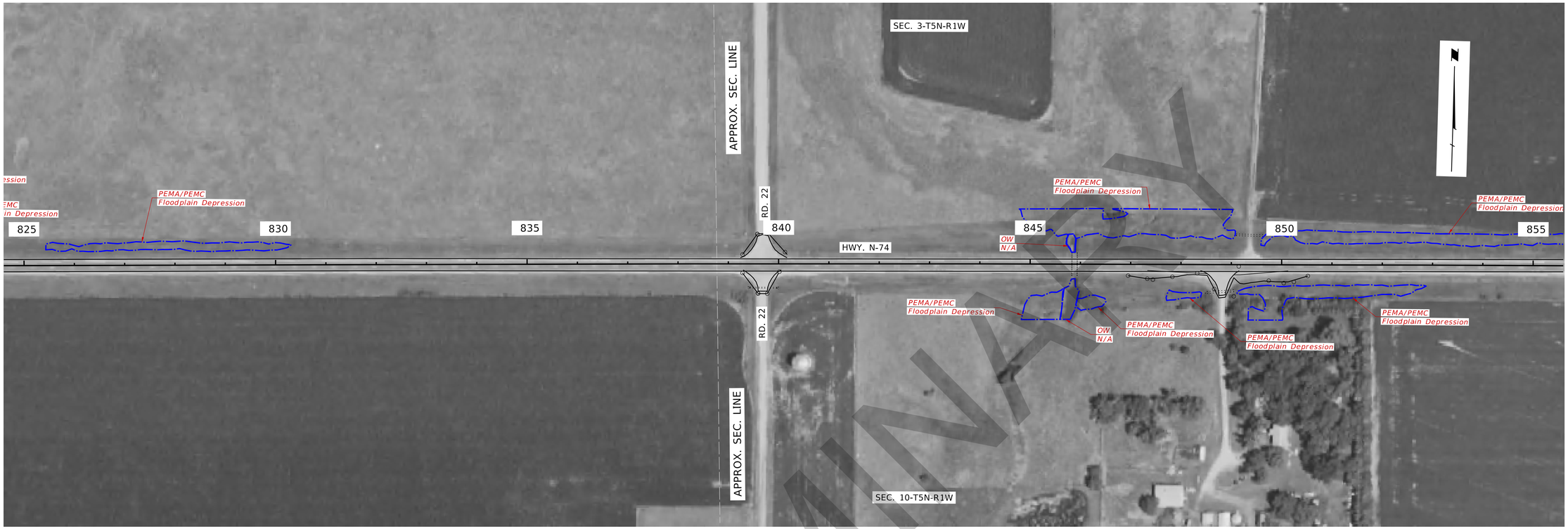
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- IMPACTED WETLANDS
- TEMPORARY IMPACTED WETLANDS

ENVIRONMENTAL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 9-MAY-2024 10:04
FILE: 42832 Sheets Aerial.dgn



PRELIMINARY

E8

Project Number
74-5(112)

C.N. 42832

DATE: 2018
FLIGHT: NAIP

LEGEND

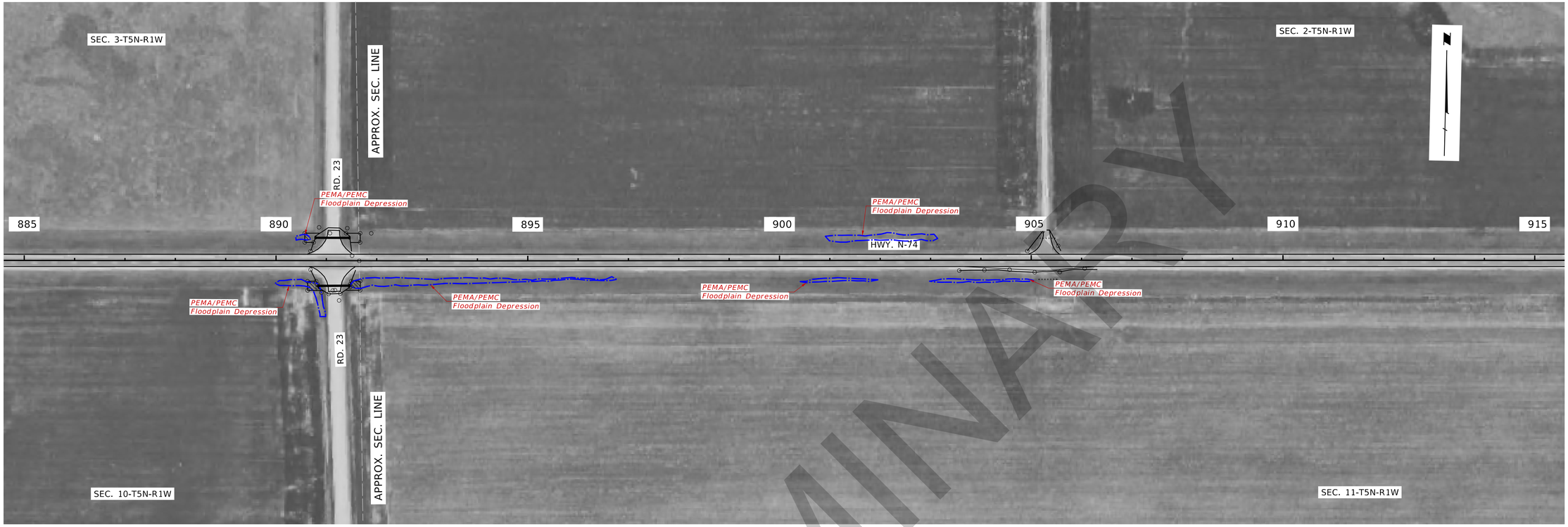
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- IMPACTED WETLANDS
- TEMPORARY IMPACTED WETLANDS

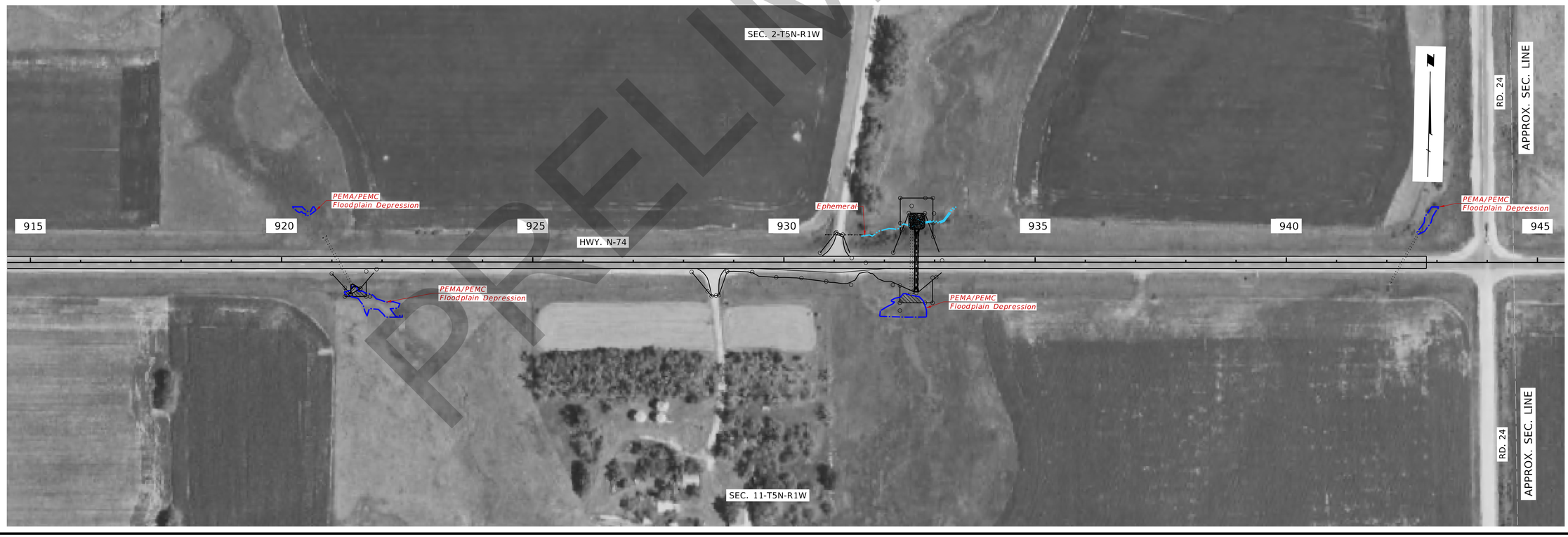
ENVIRONMENTAL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:10
FILE: 42832 Sheets Aerial.dgn





PRELIMINARY

E9

Project Number
74-5(112)

C.N. 42832

DATE: 2018
FLIGHT: NAIP

LEGEND

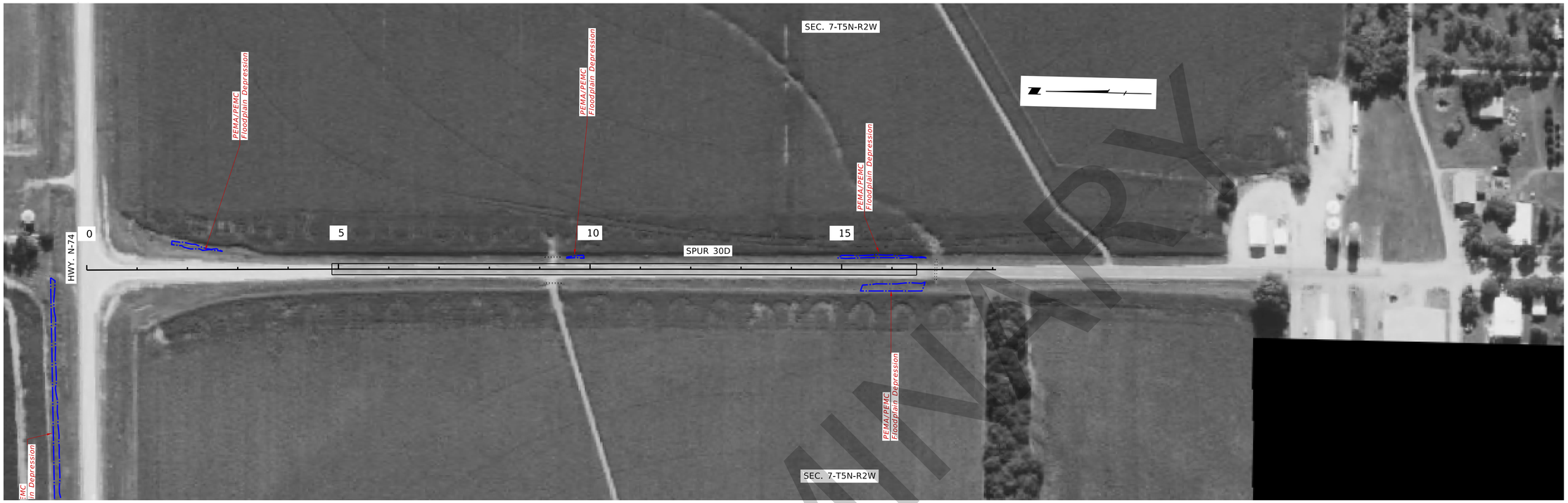
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- IMPACTED WETLANDS
- TEMPORARY IMPACTED WETLANDS

ENVIRONMENTAL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:10
FILE: 42832 Sheets Aerial.dgn



PRELIMINARY

E10

Project Number
74-5(112)

C.N. 42832

DATE: 2018
FLIGHT: NAIP

LEGEND

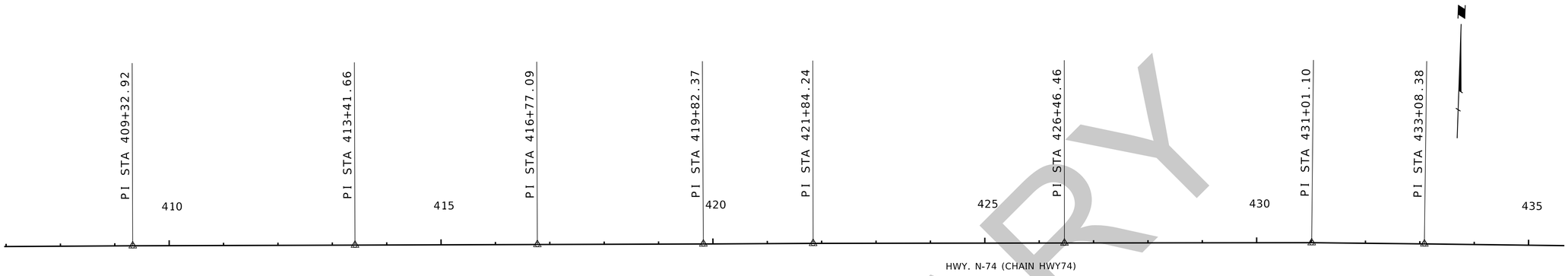
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- IMPACTED WETLANDS
- TEMPORARY IMPACTED WETLANDS

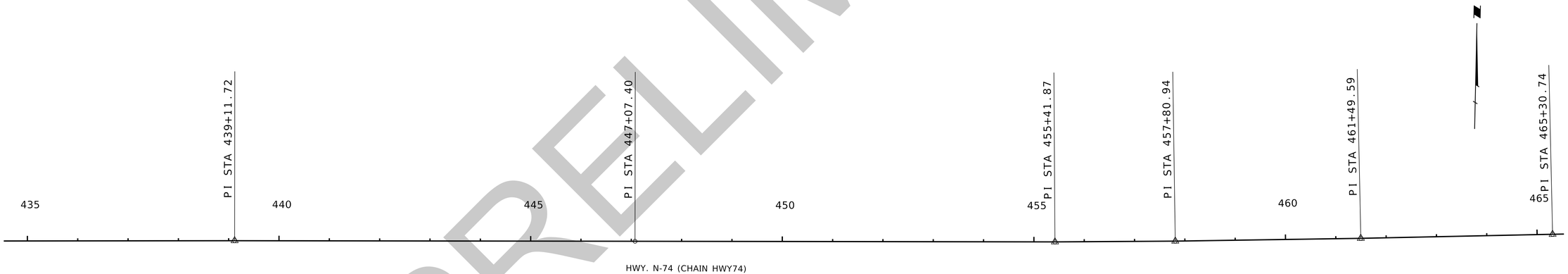
ENVIRONMENTAL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:09
FILE: 42832 Sheets Aerial.dgn





PRELIMINARY

ALIGNMENT INFORMATION		
ALIGNMENT	CHAIN	PROFILE
HWY. N-71	HWY74	-
SPUR 30C	S30C	-
SPUR 30D	S30D	-

NOTE: ALIGNMENT HAS BEEN CREATED FROM ASBUILT INFORMATION AND MODIFIED TO REPRESENT THE FIELD SURVEY DATA COLLECTED.

F1

Project Number
74-5(112)

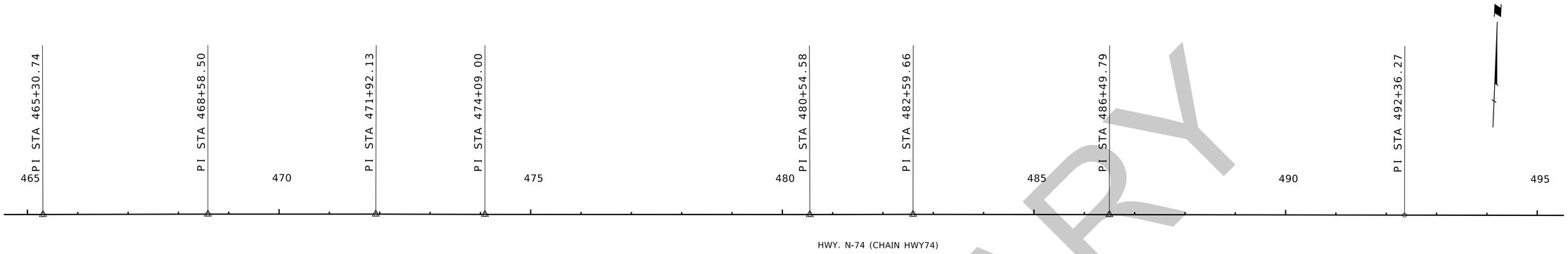
C.N. 42832

HORIZONTAL ALIGNMENT & ORIENTATION

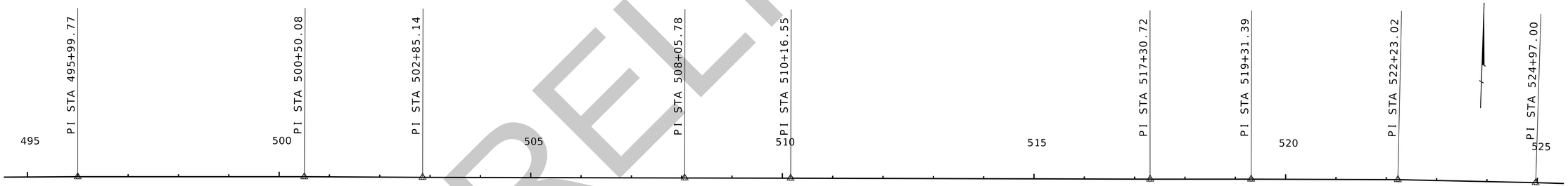
NEBRASKA
Good LIfe. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

FILE: 42832 Sheets Horiz Align.dgn
DATE: 8-MAY-2024 08:10
COMPUTER: BG0419M674



HWY. N-74 (CHAIN HWY74)



HWY. N-74 (CHAIN HWY74)

PRELIMINARY

F2

Project Number
74-5(112)

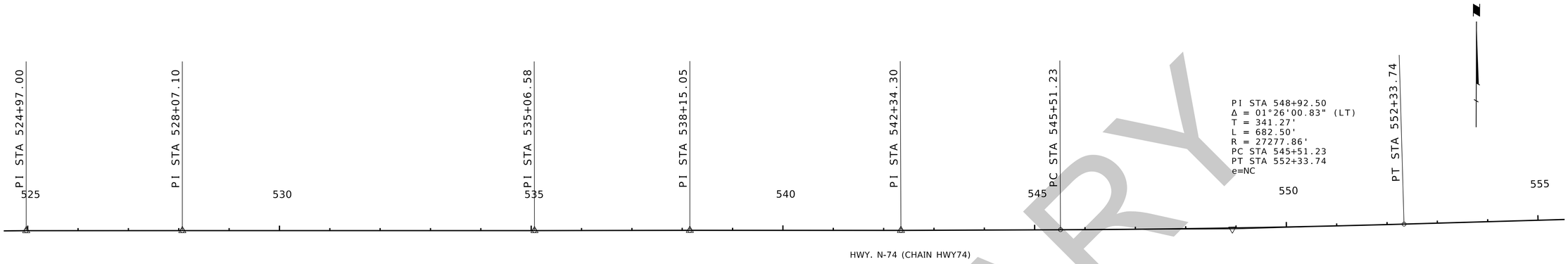
C.N. 42832

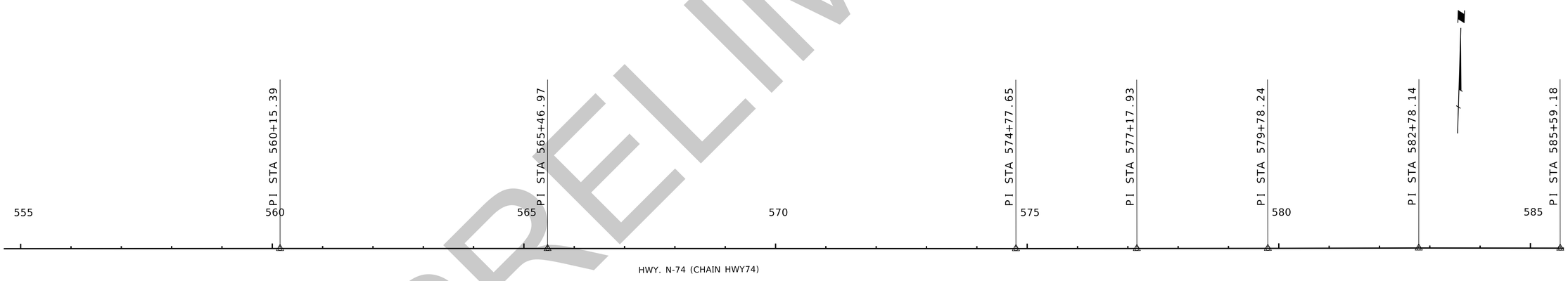
HORIZONTAL ALIGNMENT & ORIENTATION

NEBRASKA
Good LIfe. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

FILE: 42832 Sheets Horiz Align.dgn
DATE: 8-MAY-2024 08:10
COMPUTER: BG0419M674





PRELIMINARY

F3

Project Number
74-5(112)

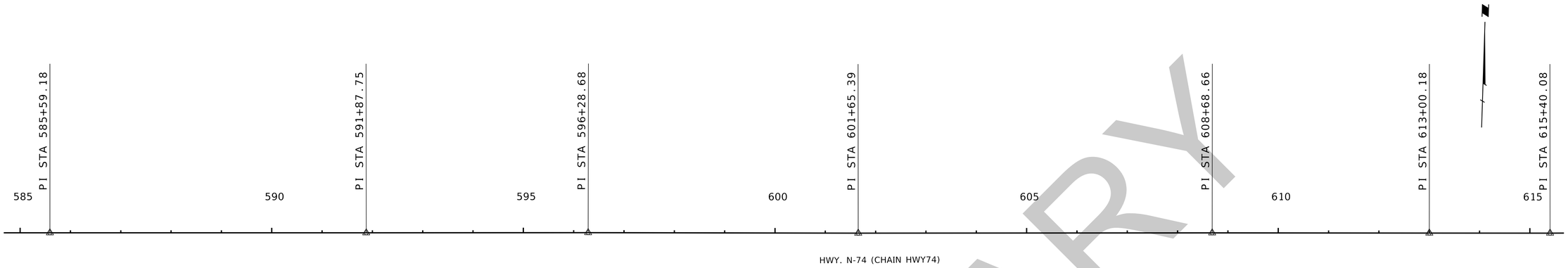
C.N. 42832

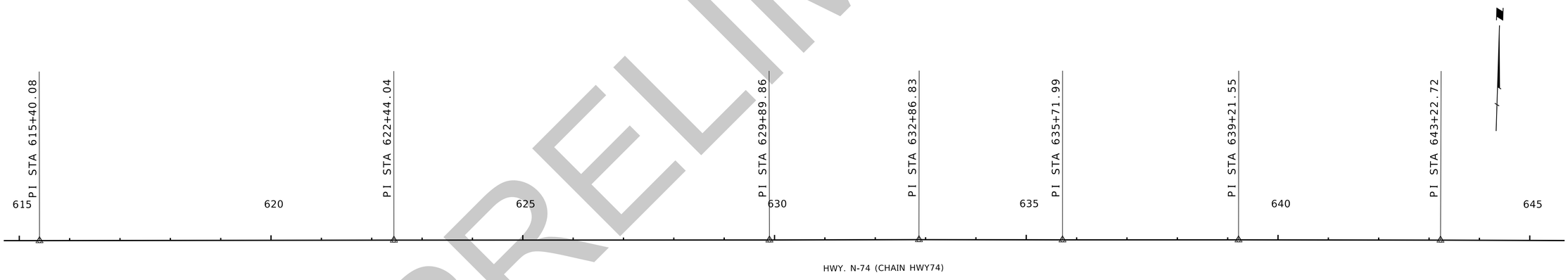
HORIZONTAL ALIGNMENT & ORIENTATION

NEBRASKA
Good LIfe. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

FILE: 42832 Sheets Horiz Align.dgn
DATE: 8-MAY-2024 08:10
COMPUTER: BG04190M674





PRELIMINARY

F4

Project Number
74-5(112)

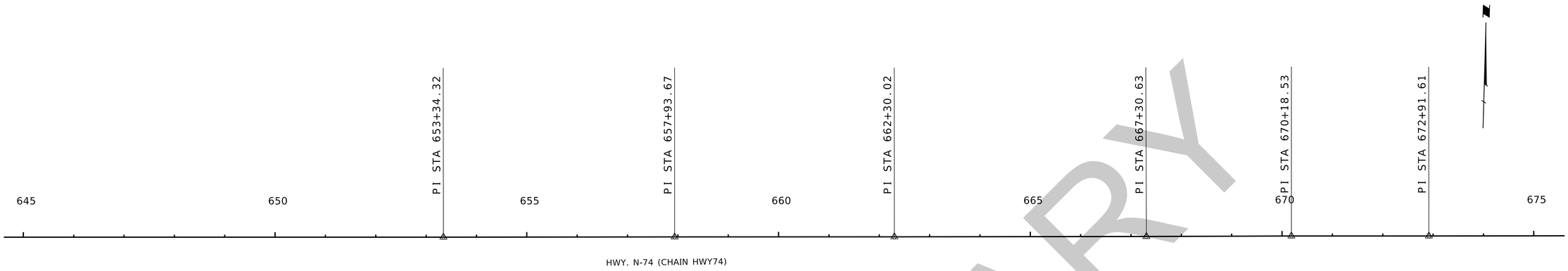
C.N. 42832

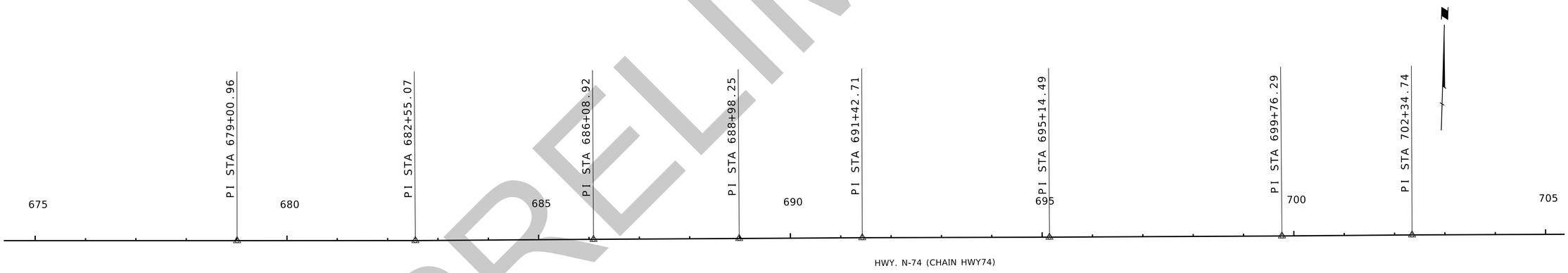
HORIZONTAL ALIGNMENT & ORIENTATION

NEBRASKA
Good LIfe. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

FILE: 42832 Sheets Horiz Align.dgn
DATE: 8-MAY-2024 08:10
COMPUTER: BG0419M674





PRELIMINARY

F5

Project Number
74-5(112)

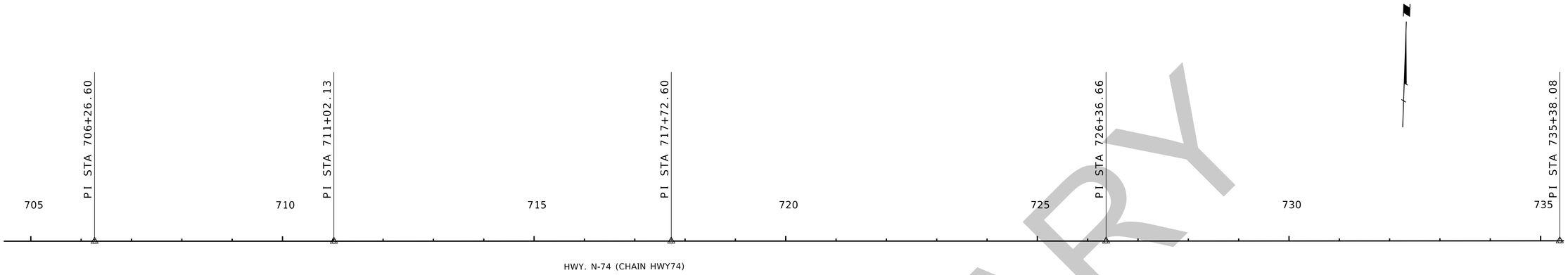
C.N. 42832

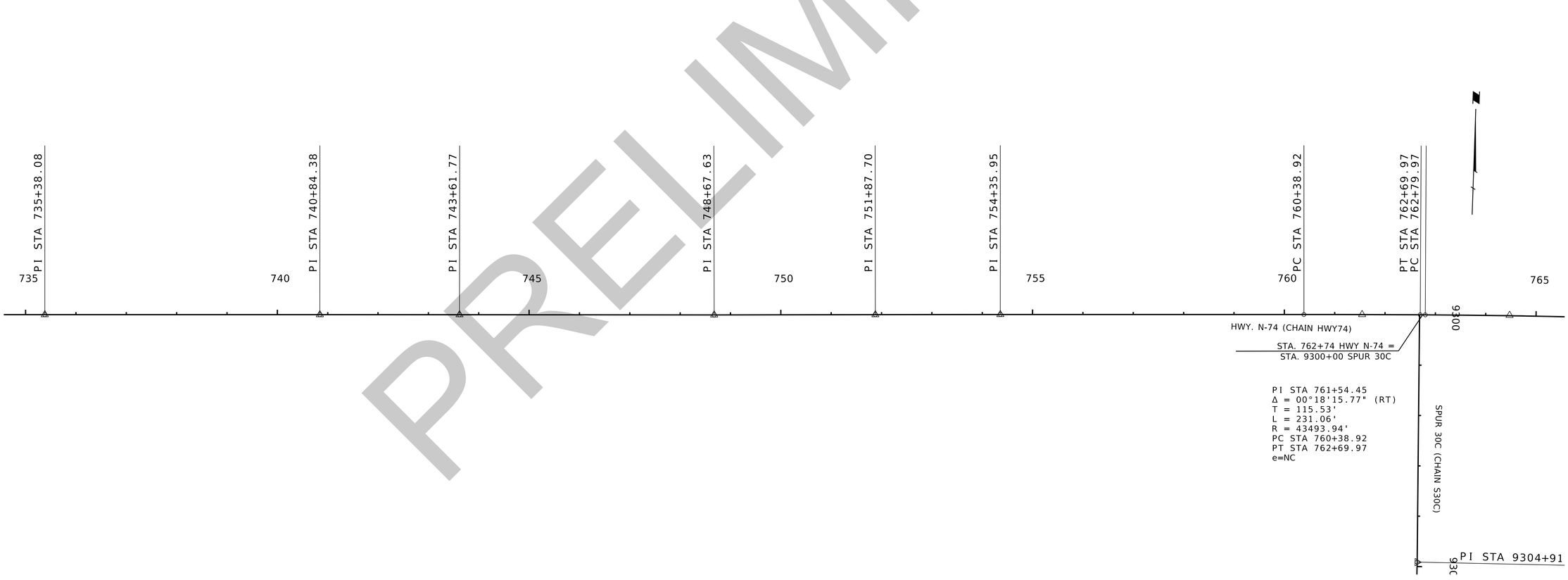
HORIZONTAL ALIGNMENT & ORIENTATION

NEBRASKA
Good LIfe. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

FILE: 42832 Sheets Horiz Align.dgn DATE: 8-MAY-2024 08:10 COMPUTER: BG0419M674





PRELIMINARY

F6

Project Number
74-5(112)

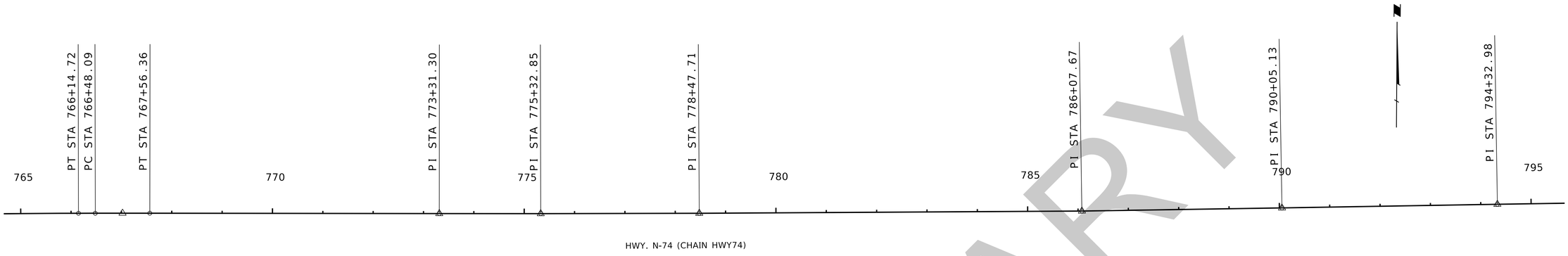
C.N. 42832

HORIZONTAL ALIGNMENT & ORIENTATION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

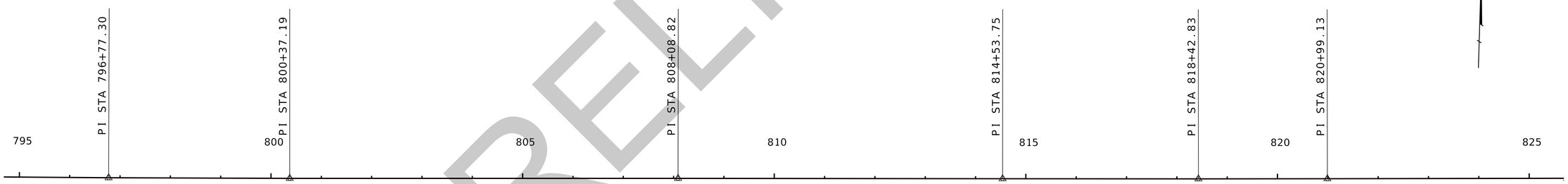
FILE: 42832 Sheets Horiz Align.dgn
DATE: 8-MAY-2024 08:10
COMPUTER: BG0419M674



HWY. N-74 (CHAIN HWY74)

PI STA 764+47.35
Δ = 01°11'43.35" (RT)
T = 167.38'
L = 334.75'
R = 16044.83'
PC STA 762+79.97
PT STA 766+14.72
e=NC

PI STA 767+02.23
Δ = 00°11'04.58" (RT)
T = 54.14'
L = 108.27'
R = 33604.73'
PC STA 766+48.09
PT STA 767+56.36
e=NC



HWY. N-74 (CHAIN HWY74)

PRELIMINARY

F7

Project Number
74-5(112)

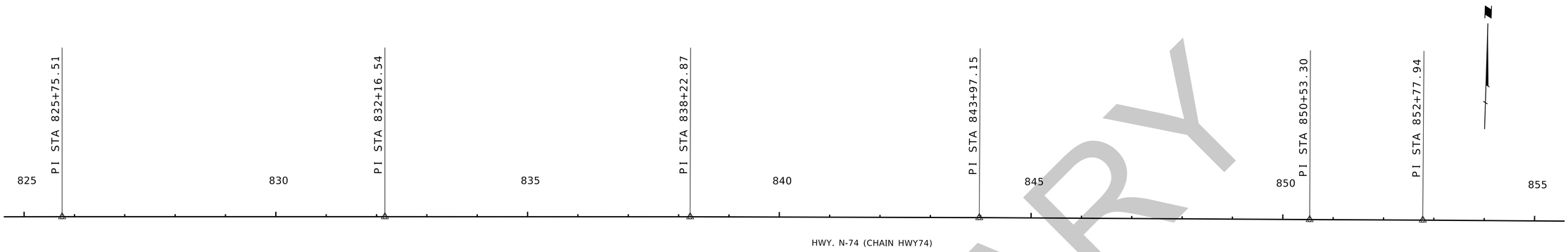
C.N. 42832

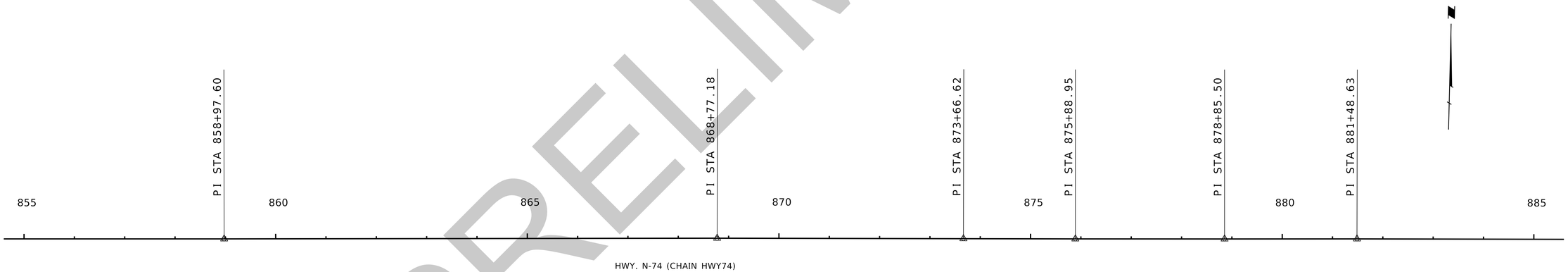
HORIZONTAL ALIGNMENT & ORIENTATION

NEBRASKA
Good LIfe. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

FILE: 42832 Sheets Horiz Align.dgn
DATE: 8-MAY-2024 08:10
COMPUTER: BG0419M674





PRELIMINARY

F8

Project Number
74-5(112)

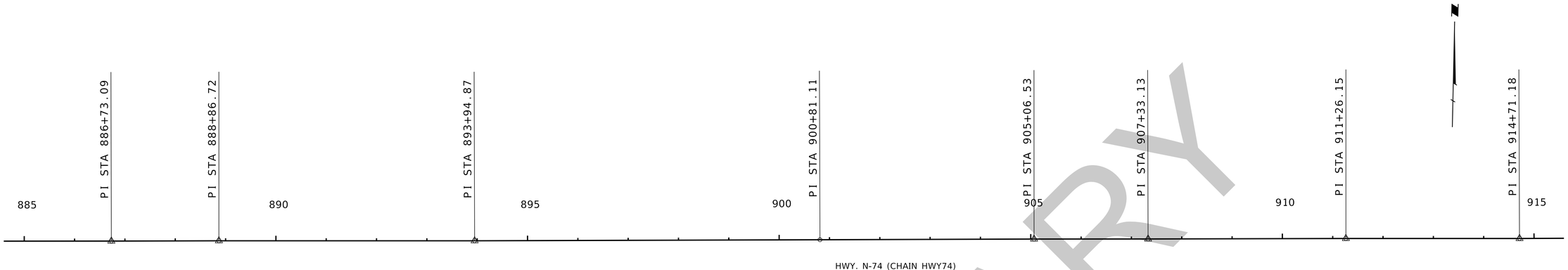
C.N. 42832

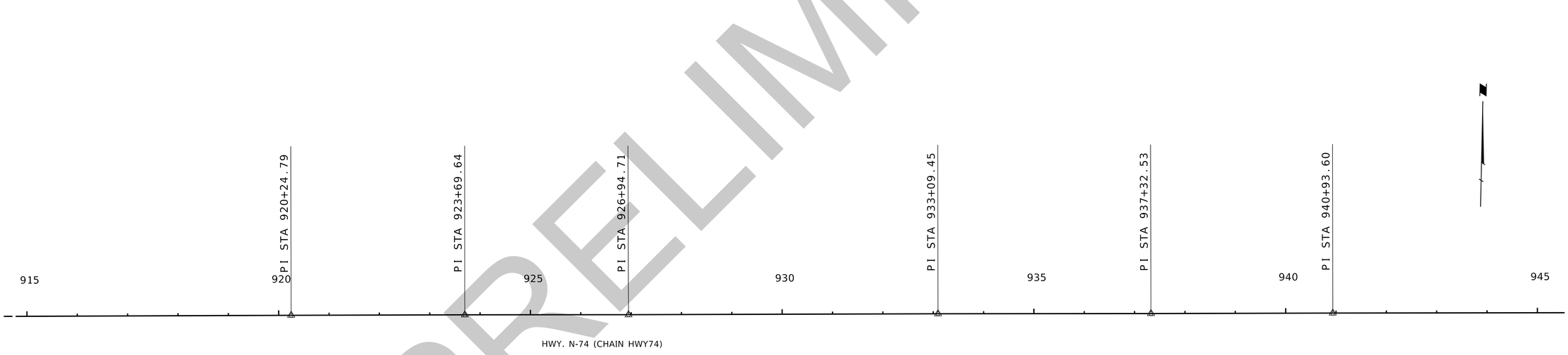
HORIZONTAL ALIGNMENT & ORIENTATION

NEBRASKA
Good LIfe. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

FILE: 42832 Sheets Horiz Align.dgn
DATE: 8-MAY-2024 08:10
COMPUTER: BG0419M674





PRELIMINARY

F9

Project Number
74-5(112)

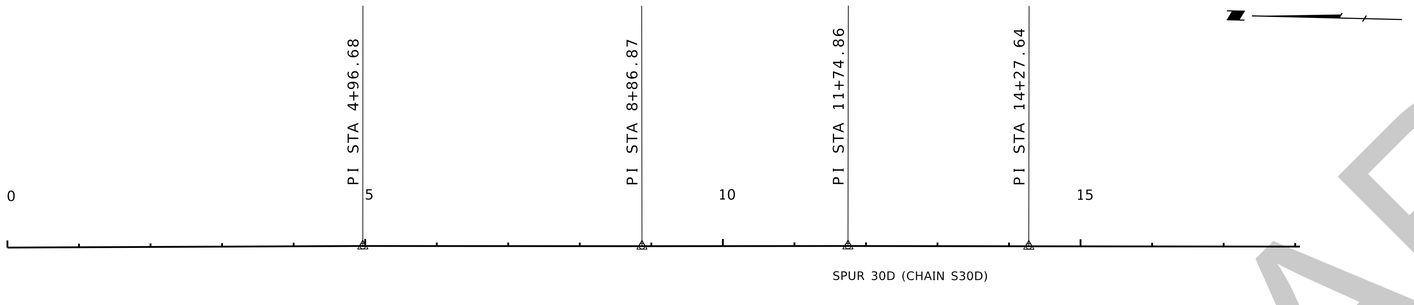
C.N. 42832

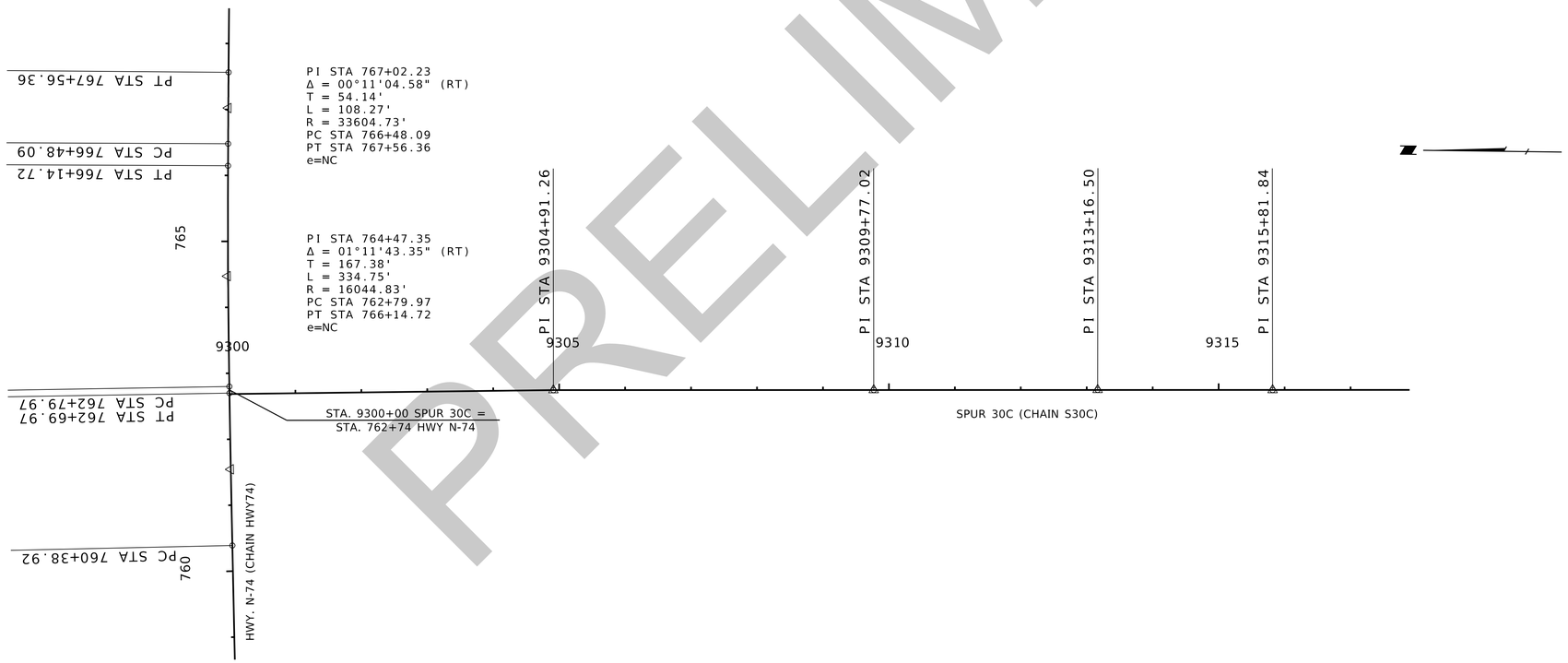
HORIZONTAL ALIGNMENT & ORIENTATION

NEBRASKA
Good LIfe. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

FILE: 42832 Sheets Horiz Align.dgn
DATE: 8-MAY-2024 08:10
COMPUTER: BG0419M674





PRELIMINARY

F10

Project Number
74-5(112)

C.N. 42832

HORIZONTAL ALIGNMENT & ORIENTATION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

FILE: 42832 Sheets Horiz Align.dgn
DATE: 8-MAY-2024 08:10
COMPUTER: BG0419M674

HWY. N-75

Alignment Name:	HWY75			
Alignment Description:				
Alignment Style:	Alignment\Mainline			
	Station		X	Y
Element: Linear				
START	( )	406+96.50 R1	2314391.18	224291.99
HPI	( )	409+32.92 R1	2314627.41	224301.67
Tangential Direction:		87.65°		
Tangential Length:		236.42		
Element: Linear				
HPI	( )	409+32.92 R1	2314627.41	224301.67
HPI	( )	413+41.66 R1	2315035.84	224317.38
Tangential Direction:		87.80°		
Tangential Length:		408.74		
Element: Linear				
HPI	( )	413+41.66 R1	2315035.84	224317.38
HPI	( )	416+77.09 R1	2315371.02	224330.36
Tangential Direction:		87.78°		
Tangential Length:		335.43		
Element: Linear				
HPI	( )	416+77.09 R1	2315371.02	224330.36
HPI	( )	419+82.37 R1	2315676.08	224342.13
Tangential Direction:		87.79°		
Tangential Length:		305.28		
Element: Linear				
HPI	( )	419+82.37 R1	2315676.08	224342.13
HPI	( )	421+84.24 R1	2315877.78	224350.34
Tangential Direction:		87.67°		
Tangential Length:		201.87		
Element: Linear				
HPI	( )	421+84.24 R1	2315877.78	224350.34
HPI	( )	426+46.46 R1	2316339.69	224367.36
Tangential Direction:		87.89°		
Tangential Length:		462.22		
Element: Linear				
HPI	( )	426+46.46 R1	2316339.69	224367.36
HPI	( )	431+01.10 R1	2316794.02	224383.88
Tangential Direction:		87.92°		
Tangential Length:		454.63		
Element: Linear				
HPI	( )	431+01.10 R1	2316794.02	224383.88
HPI	( )	433+08.38 R1	2317001.24	224389.1
Tangential Direction:		88.56°		
Tangential Length:		207.28		
Element: Linear				
HPI	( )	433+08.38 R1	2317001.24	224389.1
HPI	( )	439+11.72 R1	2317604.42	224402.78
Tangential Direction:		88.70°		
Tangential Length:		603.34		
Element: Linear				
HPI	( )	439+11.72 R1	2317604.42	224402.78
HPI	( )	447+07.40 R1	2318399.95	224418.66
Tangential Direction:		88.86°		
Tangential Length:		795.68		
Element: Linear				
HPI	( )	447+07.40 R1	2318399.95	224418.66
HPI	( )	455+41.87 R1	2319234.25	224435.29
Tangential Direction:		88.86°		
Tangential Length:		834.47		
Element: Linear				
HPI	( )	455+41.87 R1	2319234.25	224435.29
HPI	( )	457+80.94 R1	2319473.23	224441.97
Tangential Direction:		88.40°		
Tangential Length:		239.08		
Element: Linear				
HPI	( )	457+80.94 R1	2319473.23	224441.97
HPI	( )	461+49.59 R1	2319841.64	224455.38
Tangential Direction:		87.92°		
Tangential Length:		368.65		
Element: Linear				
HPI	( )	461+49.59 R1	2319841.64	224455.38
HPI	( )	465+30.74 R1	2320222.44	224471.57
Tangential Direction:		87.57°		
Tangential Length:		381.14		
Element: Linear				
HPI	( )	465+30.74 R1	2320222.44	224471.57
HPI	( )	468+58.50 R1	2320549.88	224485.96
Tangential Direction:		87.48°		
Tangential Length:		327.76		
Element: Linear				
HPI	( )	468+58.50 R1	2320549.88	224485.96
HPI	( )	471+92.13 R1	2320883.23	224499.69
Tangential Direction:		87.64°		
Tangential Length:		333.63		
Element: Linear				
HPI	( )	471+92.13 R1	2320883.23	224499.69
HPI	( )	474+09.00 R1	2321099.93	224508.1
Tangential Direction:		87.78°		
Tangential Length:		216.87		
Element: Linear				
HPI	( )	474+09.00 R1	2321099.93	224508.1
HPI	( )	480+54.58 R1	2321744.97	224534.51
Tangential Direction:		87.66°		
Tangential Length:		645.58		
Element: Linear				
HPI	( )	480+54.58 R1	2321744.97	224534.51
HPI	( )	482+59.66 R1	2321949.86	224543.44
Tangential Direction:		87.50°		
Tangential Length:		205.08		
Element: Linear				
HPI	( )	482+59.66 R1	2321949.86	224543.44
HPI	( )	486+49.79 R1	2322339.68	224559.12
Tangential Direction:		87.70°		
Tangential Length:		390.14		
Element: Linear				
HPI	( )	486+49.79 R1	2322339.68	224559.12
HPI	( )	492+36.27 R1	2322925.7	224582.39
Tangential Direction:		87.73°		
Tangential Length:		586.48		
Element: Linear				
HPI	( )	492+36.27 R1	2322925.7	224582.39
HPI	( )	495+99.77 R1	2323288.91	224596.78
Tangential Direction:		87.73°		
Tangential Length:		363.5		
Element: Linear				
HPI	( )	495+99.77 R1	2323288.91	224596.78
HPI	( )	500+50.08 R1	2323738.96	224612.26
Tangential Direction:		88.03°		
Tangential Length:		450.31		
Element: Linear				
HPI	( )	500+50.08 R1	2323738.96	224612.26
HPI	( )	502+85.14 R1	2323973.91	224619.14
Tangential Direction:		88.32°		
Tangential Length:		235.06		
Element: Linear				
HPI	( )	502+85.14 R1	2323973.91	224619.14
HPI	( )	508+05.78 R1	2324494.28	224635.84
Tangential Direction:		88.16°		
Tangential Length:		520.64		
Element: Linear				
HPI	( )	508+05.78 R1	2324494.28	224635.84
HPI	( )	510+16.55 R1	2324704.95	224642.65
Tangential Direction:		88.15°		
Tangential Length:		210.77		
Element: Linear				
HPI	( )	510+16.55 R1	2324704.95	224642.65
HPI	( )	517+30.72 R1	2325418.76	224665.2
Tangential Direction:		88.19°		
Tangential Length:		714.17		
Element: Linear				
HPI	( )	517+30.72 R1	2325418.76	224665.2
HPI	( )	519+31.39 R1	2325619.31	224672.17
Tangential Direction:		88.01°		
Tangential Length:		200.67		
Element: Linear				
HPI	( )	519+31.39 R1	2325619.31	224672.17
HPI	( )	522+23.02 R1	2325910.8	224681.18
Tangential Direction:		88.23°		
Tangential Length:		291.62		
Element: Linear				
HPI	( )	522+23.02 R1	2325910.8	224681.18
HPI	( )	524+97.00 R1	2326184.75	224684.59
Tangential Direction:		89.29°		
Tangential Length:		273.98		
Element: Linear				
HPI	( )	524+97.00 R1	2326184.75	224684.59
HPI	( )	528+07.10 R1	2326494.86	224685.68
Tangential Direction:		89.80°		
Tangential Length:		310.1		
Element: Linear				
HPI	( )	528+07.10 R1	2326494.86	224685.68
HPI	( )	535+06.58 R1	2327194.33	224688.03
Tangential Direction:		89.81°		
Tangential Length:		699.48		
Element: Linear				
HPI	( )	535+06.58 R1	2327194.33	224688.03
HPI	( )	538+15.05 R1	2327502.8	224689.64
Tangential Direction:		89.70°		
Tangential Length:		308.47		
Element: Linear				
HPI	( )	538+15.05 R1	2327502.8	224689.64
HPI	( )	542+34.30 R1	2327922.05	224690.97
Tangential Direction:		89.82°		
Tangential Length:		419.25		
Element: Linear				
HPI	( )	542+34.30 R1	2327922.05	224690.97
PC	( )	545+51.23 R1	2328238.97	224693.27
Tangential Direction:		89.58°		
Tangential Length:		316.93		
Element: Circular				
PC	( )	545+51.23 R1	2328238.97	224693.27
HPI	( )	548+92.50 R1	2328580.23	224695.74
CC	( )		2328041.32	251970.42
PT	( )	552+33.74 R1	2328921.32	224706.75
Radius:		27277.86		
Delta:		1°	Left	
		0°		
Length:		682.5		
Tangent:		341.27		
Chord:		682.49		
Middle Ordinate:		2.13		
External:		2.13		
Tangent Direction:		89.58°		
Radial Direction:		179.58°		
Chord Direction:		88.87°		
Radial Direction:		178.15°		
Tangent Direction:		88.15°		
Element: Linear				
PT	( )	552+33.74 R1	2328921.32	224706.75
HPI	( )	560+15.39 R1	2329702.57	224731.97
Tangential Direction:		88.15°		
Tangential Length:		781.66		
Element: Linear				
HPI	( )	560+15.39 R1	2329702.57	224731.97
HPI	( )	565+46.97 R1	2330233.89	224748.65
Tangential Direction:		88.20°		
Tangential Length:		531.58		
Element: Linear				
HPI	( )	565+46.97 R1	2330233.89	224748.65
HPI	( )	574+77.65 R1	2331164.12	224777.61
Tangential Direction:		88.22°		
Tangential Length:		930.68		
Element: Linear				
HPI	( )	574+77.65 R1	2331164.12	224777.61
HPI	( )	577+17.93 R1	2331404.27	224785.36
Tangential Direction:		88.15°		
Tangential Length:		240.28		
Element: Linear				
HPI	( )	577+17.93 R1	2331404.27	224785.36
HPI	( )	579+78.24 R1	2331664.44	224793.84
Tangential Direction:		88.13°		
Tangential Length:		260.31		
Element: Linear				
HPI	( )	579+78.24 R1	2331664.44	224793.84
HPI	( )	582+78.14 R1	2331964.17	224803.9
Tangential Direction:		88.08°		
Tangential Length:		299.9		
Element: Linear				
HPI	( )	582+78.14 R1	2331964.17	224803.9
HPI	( )	585+59.18 R1	2332245.08	224812.53
Tangential Direction:		88.24°		

PRELIMINARY

FILE: 42832 Sheets Horiz Align.dgn
DATE: 8-MAY-2024 08:10
COMPUTER: BG0419M674

F11

Project Number
74-5(112)

C.N. 42832

HORIZONTAL ALIGNMENT & ORIENTATION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

HWY. N-75 (CONT.)

Tangential Length:	281.04		
Element: Linear			
HPI	( ) 585+59.18 R1	2332245.08	224812.53
HPI	( ) 591+87.75 R1	2332873.33	224832.75
Tangential Direction:	88.16°		
Tangential Length:	628.57		
Element: Linear			
HPI	( ) 591+87.75 R1	2332873.33	224832.75
HPI	( ) 596+28.68 R1	2333314.02	224847.34
Tangential Direction:	88.10°		
Tangential Length:	440.93		
Element: Linear			
HPI	( ) 596+28.68 R1	2333314.02	224847.34
HPI	( ) 601+65.39 R1	2333850.48	224863.6
Tangential Direction:	88.26°		
Tangential Length:	536.71		
Element: Linear			
HPI	( ) 601+65.39 R1	2333850.48	224863.6
HPI	( ) 608+68.66 R1	2334553.37	224886.77
Tangential Direction:	88.11°		
Tangential Length:	703.27		
Element: Linear			
HPI	( ) 608+68.66 R1	2334553.37	224886.77
HPI	( ) 613+00.18 R1	2334984.68	224900.26
Tangential Direction:	88.21°		
Tangential Length:	431.52		
Element: Linear			
HPI	( ) 613+00.18 R1	2334984.68	224900.26
HPI	( ) 615+40.08 R1	2335224.46	224907.83
Tangential Direction:	88.19°		
Tangential Length:	239.9		
Element: Linear			
HPI	( ) 615+40.08 R1	2335224.46	224907.83
HPI	( ) 622+44.04 R1	2335928.03	224930.89
Tangential Direction:	88.12°		
Tangential Length:	703.96		
Element: Linear			
HPI	( ) 622+44.04 R1	2335928.03	224930.89
HPI	( ) 629+89.86 R1	2336673.48	224954.63
Tangential Direction:	88.18°		
Tangential Length:	745.83		
Element: Linear			
HPI	( ) 629+89.86 R1	2336673.48	224954.63
HPI	( ) 632+86.83 R1	2336970.28	224964.59
Tangential Direction:	88.08°		
Tangential Length:	296.96		
Element: Linear			
HPI	( ) 632+86.83 R1	2336970.28	224964.59
HPI	( ) 635+71.99 R1	2337255.32	224973.2
Tangential Direction:	88.27°		
Tangential Length:	285.16		
Element: Linear			
HPI	( ) 635+71.99 R1	2337255.32	224973.2
HPI	( ) 639+21.55 R1	2337604.7	224984.11
Tangential Direction:	88.21°		
Tangential Length:	349.56		
Element: Linear			
HPI	( ) 639+21.55 R1	2337604.7	224984.11
HPI	( ) 643+22.72 R1	2338005.69	224996.24
Tangential Direction:	88.27°		
Tangential Length:	401.17		
Element: Linear			
HPI	( ) 643+22.72 R1	2338005.69	224996.24
HPI	( ) 653+34.32 R1	2339016.91	225024.25
Tangential Direction:	88.41°		
Tangential Length:	1011.61		
Element: Linear			
HPI	( ) 653+34.32 R1	2339016.91	225024.25
HPI	( ) 657+93.67 R1	2339476.06	225037.43
Tangential Direction:	88.36°		
Tangential Length:	459.35		
Element: Linear			
HPI	( ) 657+93.67 R1	2339476.06	225037.43
HPI	( ) 662+30.02 R1	2339912.24	225049.74
Tangential Direction:	88.38°		
Tangential Length:	436.35		
Element: Linear			
HPI	( ) 662+30.02 R1	2339912.24	225049.74
HPI	( ) 667+30.63 R1	2340412.64	225064.19
Tangential Direction:	88.35°		
Tangential Length:	500.61		
Element: Linear			
HPI	( ) 667+30.63 R1	2340412.64	225064.19
HPI	( ) 670+18.53 R1	2340700.4	225073.23
Tangential Direction:	88.20°		
Tangential Length:	287.9		
Element: Linear			
HPI	( ) 670+18.53 R1	2340700.4	225073.23
HPI	( ) 672+91.61 R1	2340973.38	225080.7
Tangential Direction:	88.43°		
Tangential Length:	273.08		
Element: Linear			
HPI	( ) 672+91.61 R1	2340973.38	225080.7
HPI	( ) 679+00.96 R1	2341582.47	225098.53
Tangential Direction:	88.32°		
Tangential Length:	609.35		
Element: Linear			
HPI	( ) 679+00.96 R1	2341582.47	225098.53
HPI	( ) 682+55.07 R1	2341936.42	225109.13
Tangential Direction:	88.28°		
Tangential Length:	354.11		
Element: Linear			
HPI	( ) 682+55.07 R1	2341936.42	225109.13
HPI	( ) 686+08.92 R1	2342290.04	225121.91
Tangential Direction:	87.93°		
Tangential Length:	353.84		
Element: Linear			
HPI	( ) 686+08.92 R1	2342290.04	225121.91
HPI	( ) 688+98.25 R1	2342579.19	225132.1
Tangential Direction:	87.98°		
Tangential Length:	289.33		
Element: Linear			
HPI	( ) 688+98.25 R1	2342579.19	225132.1
HPI	( ) 691+42.71 R1	2342823.49	225140.77
Tangential Direction:	87.97°		
Tangential Length:	244.45		
Element: Linear			
HPI	( ) 691+42.71 R1	2342823.49	225140.77
HPI	( ) 695+14.49 R1	2343195.08	225152.7
Tangential Direction:	88.16°		
Tangential Length:	371.78		
Element: Linear			
HPI	( ) 695+14.49 R1	2343195.08	225152.7
HPI	( ) 699+76.29 R1	2343656.61	225168.64
Tangential Direction:	88.02°		
Tangential Length:	461.8		
Element: Linear			
HPI	( ) 699+76.29 R1	2343656.61	225168.64
HPI	( ) 702+34.74 R1	2343914.87	225178.31
Tangential Direction:	87.86°		
Tangential Length:	258.45		
Element: Linear			
HPI	( ) 702+34.74 R1	2343914.87	225178.31
HPI	( ) 706+26.60 R1	2344306.52	225191.37
Tangential Direction:	88.09°		
Tangential Length:	391.86		
Element: Linear			
HPI	( ) 706+26.60 R1	2344306.52	225191.37
HPI	( ) 711+02.13 R1	2344781.78	225207.53
Tangential Direction:	88.05°		
Tangential Length:	475.53		
Element: Linear			
HPI	( ) 711+02.13 R1	2344781.78	225207.53
HPI	( ) 717+72.60 R1	2345451.85	225230.67
Tangential Direction:	88.02°		
Tangential Length:	670.47		
Element: Linear			
HPI	( ) 717+72.60 R1	2345451.85	225230.67
HPI	( ) 726+36.66 R1	2346315.41	225260.07
Tangential Direction:	88.05°		
Tangential Length:	864.06		
Element: Linear			
HPI	( ) 726+36.66 R1	2346315.41	225260.07
HPI	( ) 735+38.08 R1	2347216.29	225291.15
Tangential Direction:	88.02°		
Tangential Length:	901.42		
Element: Linear			
HPI	( ) 735+38.08 R1	2347216.29	225291.15
HPI	( ) 740+84.38 R1	2347762.27	225309.84
Tangential Direction:	88.04°		
Tangential Length:	546.3		
Element: Linear			
HPI	( ) 740+84.38 R1	2347762.27	225309.84
HPI	( ) 743+61.77 R1	2348039.5	225319.2
Tangential Direction:	88.07°		
Tangential Length:	277.39		
Element: Linear			
HPI	( ) 743+61.77 R1	2348039.5	225319.2
HPI	( ) 748+67.63 R1	2348545.07	225336.14
Tangential Direction:	88.08°		
Tangential Length:	505.86		
Element: Linear			
HPI	( ) 748+67.63 R1	2348545.07	225336.14
HPI	( ) 751+87.70 R1	2348864.94	225347.66
Tangential Direction:	87.94°		
Tangential Length:	320.08		
Element: Linear			
HPI	( ) 751+87.70 R1	2348864.94	225347.66
HPI	( ) 754+35.95 R1	2349113.03	225356.45
Tangential Direction:	87.97°		
Tangential Length:	248.24		
Element: Linear			
HPI	( ) 754+35.95 R1	2349113.03	225356.45
PC	( ) 760+38.92 R1	2349715.65	225377.05
Tangential Direction:	88.04°		
Tangential Length:	602.97		
Element: Circular			
PC	( ) 760+38.92 R1	2349715.65	225377.05
HPI	( ) 761+54.45 R1	2349831.11	225381
CC	( )	2351201.76	181908.51
PT	( ) 762+69.97 R1	2349946.59	225384.33
Radius:	43493.94		
Delta:	0°	Right	
	0°		
Length:	231.06		
Tangent:	115.53		
Chord:	231.06		
Middle Ordinate:	0.15		
External:	0.15		
Tangent Direction:	88.04°		
Radial Direction:	178.04°		
Chord Direction:	88.19°		
Radial Direction:	178.35°		
Tangent Direction:	88.35°		
Element: Linear			
PT	( ) 762+69.97 R1	2349946.59	225384.33
PC	( ) 762+79.97 R1	2349956.59	225384.62
Tangential Direction:	88.35°		
Tangential Length:	10		
Element: Circular			
PC	( ) 762+79.97 R1	2349956.59	225384.62
HPI	( ) 764+47.35 R1	2350123.9	225389.45
CC	( )	2350419.62	209346.47
PT	( ) 766+14.72 R1	2350291.27	225390.79
Radius:	16044.83		
Delta:	1°	Right	
	0°		
Length:	334.75		
Tangent:	167.38		
Chord:	334.74		
Middle Ordinate:	0.87		
External:	0.87		
Tangent Direction:	88.35°		
Radial Direction:	178.35°		
Chord Direction:	88.94°		
Radial Direction:	179.54°		
Tangent Direction:	89.54°		
Element: Linear			
PT	( ) 766+14.72 R1	2350291.27	225390.79
PC	( ) 766+48.09 R1	2350324.64	225391.06
Tangential Direction:	89.54°		

PRELIMINARY

Project Number
74-5(112)

C.N. 42832

HORIZONTAL ALIGNMENT & ORIENTATION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

FILE: 42832 Sheets Horiz Align.dgn
DATE: 8-MAY-2024 08:10
COMPUTER: BG0419M674

HWY. N-75 (CONT.)

Tangential Length:	33.37		
Element: Circular			
PC	( ) 766+48.09 R1	2350324.64	225391.06
HPI	( ) 767+02.23 R1	2350378.77	225391.49
CC	( )	2350593.45	191787.4
PT	( ) 767+56.36 R1	2350432.91	225391.75
Radius:	33604.73		
Delta:	0°	Right	
	0°		
Length:	108.27		
Tangent:	54.14		
Chord:	108.27		
Middle Ordinate:	0.04		
External:	0.04		
Tangent Direction:	89.54°		
Radial Direction:	179.54°		
Chord Direction:	89.63°		
Radial Direction:	179.73°		
Tangent Direction:	89.73°		
Element: Linear			
PT	( ) 767+56.36 R1	2350432.91	225391.75
HPI	( ) 773+31.30 R1	2351007.84	225394.5
Tangential Direction:	89.73°		
Tangential Length:	574.93		
Element: Linear			
HPI	( ) 773+31.30 R1	2351007.84	225394.5
HPI	( ) 775+32.85 R1	2351209.38	225395.64
Tangential Direction:	89.68°		
Tangential Length:	201.55		
Element: Linear			
HPI	( ) 775+32.85 R1	2351209.38	225395.64
HPI	( ) 778+47.71 R1	2351524.23	225398.3
Tangential Direction:	89.52°		
Tangential Length:	314.86		
Element: Linear			
HPI	( ) 778+47.71 R1	2351524.23	225398.3
HPI	( ) 786+07.67 R1	2352284.14	225407.33
Tangential Direction:	89.32°		
Tangential Length:	759.96		
Element: Linear			
HPI	( ) 786+07.67 R1	2352284.14	225407.33
HPI	( ) 790+05.13 R1	2352681.51	225415.91
Tangential Direction:	88.76°		
Tangential Length:	397.46		
Element: Linear			
HPI	( ) 790+05.13 R1	2352681.51	225415.91
HPI	( ) 794+32.98 R1	2353109.25	225425.74
Tangential Direction:	88.68°		
Tangential Length:	427.86		
Element: Linear			
HPI	( ) 794+32.98 R1	2353109.25	225425.74
HPI	( ) 796+77.30 R1	2353353.51	225431.18
Tangential Direction:	88.72°		
Tangential Length:	244.32		
Element: Linear			
HPI	( ) 796+77.30 R1	2353353.51	225431.18
HPI	( ) 800+37.19 R1	2353713.27	225440.56
Tangential Direction:	88.51°		
Tangential Length:	359.89		
Element: Linear			
HPI	( ) 800+37.19 R1	2353713.27	225440.56
HPI	( ) 808+08.82 R1	2354484.57	225463.23
Tangential Direction:	88.32°		
Tangential Length:	771.64		
Element: Linear			
HPI	( ) 808+08.82 R1	2354484.57	225463.23
HPI	( ) 814+53.75 R1	2355129.24	225481.41
Tangential Direction:	88.38°		
Tangential Length:	644.92		
Element: Linear			
HPI	( ) 814+53.75 R1	2355129.24	225481.41
HPI	( ) 818+42.83 R1	2355518.16	225492.62
Tangential Direction:	88.35°		
Tangential Length:	389.08		
Element: Linear			
HPI	( ) 818+42.83 R1	2355518.16	225492.62
HPI	( ) 820+99.13 R1	2355774.34	225500.35
Tangential Direction:	88.27°		
Tangential Length:	256.3		
Element: Linear			
HPI	( ) 820+99.13 R1	2355774.34	225500.35
HPI	( ) 825+75.51 R1	2356250.49	225515.22
Tangential Direction:	88.21°		
Tangential Length:	476.38		
Element: Linear			
HPI	( ) 825+75.51 R1	2356250.49	225515.22
HPI	( ) 832+16.54 R1	2356891.22	225535.11
Tangential Direction:	88.22°		
Tangential Length:	641.04		
Element: Linear			
HPI	( ) 832+16.54 R1	2356891.22	225535.11
HPI	( ) 838+22.87 R1	2357497.26	225553.8
Tangential Direction:	88.23°		
Tangential Length:	606.33		
Element: Linear			
HPI	( ) 838+22.87 R1	2357497.26	225553.8
HPI	( ) 843+97.15 R1	2358071.31	225570
Tangential Direction:	88.38°		
Tangential Length:	574.28		
Element: Linear			
HPI	( ) 843+97.15 R1	2358071.31	225570
HPI	( ) 850+53.30 R1	2358727.25	225586.53
Tangential Direction:	88.56°		
Tangential Length:	656.14		
Element: Linear			
HPI	( ) 850+53.30 R1	2358727.25	225586.53
HPI	( ) 852+77.94 R1	2358951.82	225592.39
Tangential Direction:	88.50°		
Tangential Length:	224.65		
Element: Linear			
HPI	( ) 852+77.94 R1	2358951.82	225592.39
HPI	( ) 858+97.60 R1	2359571.29	225607.29
Tangential Direction:	88.62°		
Tangential Length:	619.65		
Element: Linear			
HPI	( ) 858+97.60 R1	2359571.29	225607.29
HPI	( ) 868+77.18 R1	2360550.55	225632.29
Tangential Direction:	88.54°		
Tangential Length:	979.58		
Element: Linear			
HPI	( ) 868+77.18 R1	2360550.55	225632.29
HPI	( ) 873+66.62 R1	2361039.87	225643.16
Tangential Direction:	88.73°		
Tangential Length:	489.44		
Element: Linear			
HPI	( ) 873+66.62 R1	2361039.87	225643.16
HPI	( ) 875+88.95 R1	2361262.16	225648.03
Tangential Direction:	88.75°		
Tangential Length:	222.34		
Element: Linear			
HPI	( ) 875+88.95 R1	2361262.16	225648.03
HPI	( ) 878+85.50 R1	2361558.62	225655.06
Tangential Direction:	88.64°		
Tangential Length:	296.55		
Element: Linear			
HPI	( ) 878+85.50 R1	2361558.62	225655.06
HPI	( ) 881+48.63 R1	2361821.67	225661.45
Tangential Direction:	88.61°		
Tangential Length:	263.13		
Element: Linear			
HPI	( ) 881+48.63 R1	2361821.67	225661.45
HPI	( ) 886+73.09 R1	2362346	225673.13
Tangential Direction:	88.72°		
Tangential Length:	524.45		
Element: Linear			
HPI	( ) 886+73.09 R1	2362346	225673.13
HPI	( ) 888+86.72 R1	2362559.56	225678.35
Tangential Direction:	88.60°		
Tangential Length:	213.63		
Element: Linear			
HPI	( ) 888+86.72 R1	2362559.56	225678.35
HPI	( ) 893+94.87 R1	2363067.6	225689.43
Tangential Direction:	88.75°		
Tangential Length:	508.16		
Element: Linear			
HPI	( ) 893+94.87 R1	2363067.6	225689.43
HPI	( ) 900+81.11 R1	2363753.62	225706.5
Tangential Direction:	88.57°		
Tangential Length:	686.23		
Element: Linear			
HPI	( ) 900+81.11 R1	2363753.62	225706.5
HPI	( ) 905+06.53 R1	2364178.92	225717.1
Tangential Direction:	88.57°		
Tangential Length:	425.43		
Element: Linear			
HPI	( ) 905+06.53 R1	2364178.92	225717.1
HPI	( ) 907+33.13 R1	2364405.45	225722.14
Tangential Direction:	88.72°		
Tangential Length:	226.59		
Element: Linear			
HPI	( ) 907+33.13 R1	2364405.45	225722.14
HPI	( ) 911+26.15 R1	2364798.35	225731.8
Tangential Direction:	88.59°		
Tangential Length:	393.02		
Element: Linear			
HPI	( ) 911+26.15 R1	2364798.35	225731.8
HPI	( ) 914+71.18 R1	2365143.3	225739.3
Tangential Direction:	88.75°		
Tangential Length:	345.03		
Element: Linear			
HPI	( ) 914+71.18 R1	2365143.3	225739.3
HPI	( ) 920+24.79 R1	2365696.73	225753.58
Tangential Direction:	88.52°		
Tangential Length:	553.62		
Element: Linear			
HPI	( ) 920+24.79 R1	2365696.73	225753.58
HPI	( ) 923+69.64 R1	2366041.48	225762.01
Tangential Direction:	88.60°		
Tangential Length:	344.85		
Element: Linear			
HPI	( ) 923+69.64 R1	2366041.48	225762.01
HPI	( ) 926+94.71 R1	2366366.47	225769.32
Tangential Direction:	88.71°		
Tangential Length:	325.07		
Element: Linear			
HPI	( ) 926+94.71 R1	2366366.47	225769.32
HPI	( ) 933+09.45 R1	2366981.02	225784.66
Tangential Direction:	88.57°		
Tangential Length:	614.74		
Element: Linear			
HPI	( ) 933+09.45 R1	2366981.02	225784.66
HPI	( ) 937+32.53 R1	2367403.99	225794.29
Tangential Direction:	88.69°		
Tangential Length:	423.08		
Element: Linear			
HPI	( ) 937+32.53 R1	2367403.99	225794.29
HPI	( ) 940+93.60 R1	2367764.95	225803.08
Tangential Direction:	88.61°		
Tangential Length:	361.07		
Element: Linear			
HPI	( ) 940+93.60 R1	2367764.95	225803.08
END	( ) 945+86.98 R1	2368258.19	225814.65
Tangential Direction:	88.66°		
Tangential Length:	493.37		

PRELIMINARY

Project Number
74-5(112)

C.N. 42832

HORIZONTAL ALIGNMENT & ORIENTATION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

FILE: 42832 Sheets Horiz Align.dgn DATE: 8-MAY-2024 08:10 COMPUTER: BG0419M674

SPUR 30C

Alignment Name:		S30C		
Alignment Description:				
Alignment Style:		Alignment\Mainline		
		Station	X	Y
Element: Linear				
START	( )	9300+00.00 R1	2349945.2	225384.29
HPI	( )	9304+91.26 R1	2349957.22	224893.18
Tangential Direction:		178.60°		
Tangential Length:		491.26		
Element: Linear				
HPI	( )	9304+91.26 R1	2349957.22	224893.18
HPI	( )	9309+77.02 R1	2349963.48	224407.47
Tangential Direction:		179.26°		
Tangential Length:		485.76		
Element: Linear				
HPI	( )	9309+77.02 R1	2349963.48	224407.47
HPI	( )	9313+16.50 R1	2349967.94	224068.01
Tangential Direction:		179.25°		
Tangential Length:		339.49		
Element: Linear				
HPI	( )	9313+16.50 R1	2349967.94	224068.01
HPI	( )	9315+81.84 R1	2349970.95	223802.69
Tangential Direction:		179.35°		
Tangential Length:		265.34		
Element: Linear				
HPI	( )	9315+81.84 R1	2349970.95	223802.69
END	( )	9317+89.57 R1	2349973.77	223594.98
Tangential Direction:		179.22°		
Tangential Length:		207.72		

SPUR 30D

Alignment Name:		S30D		
Alignment Description:				
Alignment Style:		Alignment\Mainline		
		Station	X	Y
Element: Linear				
START	( )	0+00.00 R1	2312689.49	224225.41
HPI	( )	4+96.68 R1	2312703.71	223728.93
Tangential Direction:		178.36°		
Tangential Length:		496.68		
Element: Linear				
HPI	( )	4+96.68 R1	2312703.71	223728.93
HPI	( )	8+86.87 R1	2312713	223338.85
Tangential Direction:		178.64°		
Tangential Length:		390.2		
Element: Linear				
HPI	( )	8+86.87 R1	2312713	223338.85
HPI	( )	11+74.86 R1	2312720.25	223050.95
Tangential Direction:		178.56°		
Tangential Length:		287.99		
Element: Linear				
HPI	( )	11+74.86 R1	2312720.25	223050.95
HPI	( )	14+27.64 R1	2312726	222798.24
Tangential Direction:		178.70°		
Tangential Length:		252.78		
Element: Linear				
HPI	( )	14+27.64 R1	2312726	222798.24
END	( )	18+06.66 R1	2312734.8	222419.32
Tangential Direction:		178.67°		
Tangential Length:		379.02		

PRELIMINARY

FILE: 42832 Sheets Horiz Align.dgn
DATE: 8-MAY-2024 08:10
COMPUTER: BG0419M674

F14

Project Number
74-5(112)

C.N. 42832

HORIZONTAL ALIGNMENT & ORIENTATION

NEBRASKA
Good LIfe. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

DATUM INFORMATION

HORIZONTAL	VERTICAL
NAD 83 (1995)	NAVD 88

D.A.F. = 1.0002406

UNITS = US Survey Foot

CONTROL POINT DATA

CONTROL POINT	X	Y	Z	STATION	OFFSET	OBJECT USED FOR STATION
CP77-901	2319455.8440	224388.2320	1610.9090	457+62.06	53.2296	ALUM. CAP IN CONC. MONU.
CP79-902	2325810.9850	224623.1660	1605.6370	521+21.46	54.9040	ALUM. CAP IN CONC. MONU.
CP79-903	2330494.7260	224705.4920	1599.0910	568+06.34	51.2562	ALUM. CAP IN CONC. MONU.
CP80-904	2335282.7610	224856.8830	1600.3480	615+96.68	52.8340	ALUM. CAP IN CONC. MONU.
CP82-905	2341713.1710	225256.0580	1590.7810	680+36.32	-153.5416	ALUM. CAP IN CONC. MONU.
CP83-906	2347252.5010	225266.2620	1592.1750	735+73.42	26.1140	ALUM. CAP IN CONC. MONU.
CP84-907	2352322.7170	225589.7090	1596.4860	786+50.17	-181.5007	ALUM. CAP IN CONC. MONU.
CP85-908	2357847.7710	225516.6250	1576.6240	841+72.20	47.0495	ALUM. CAP IN CONC. MONU.
CP86-909	2362885.8120	225632.1530	1592.9500	892+11.88	53.3028	ALUM. CAP IN CONC. MONU.
STRANGAZMKRESET	2308204.0650	224039.8530	0.0000	Beyond Reference Limits		
CP87-911	2373137.3600	225921.2770	1594.1800	Beyond Reference Limits		ALUM. CAP IN CONC. MONU.
CP87-910	2368501.0240	225754.8210	1587.4870	Beyond Reference Limits		ALUM. CAP IN CONC. MONU.
CP76-900	2313702.4760	224205.8870	1624.3900	Beyond Reference Limits		ALUM. CAP IN CONC. MONU.
56WHV	0.0000	0.0000	1601.4040	Beyond Reference Limits		CONC. MONU. W/ BRASS DISK

NOTE: CONTROL POINT TIE INFORMATION AVAILABLE UPON REQUEST.

PRELIMINARY

F15

Project Number
74-5(112)

C.N. 42832

CONTROL POINT INFORMATION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

FILE: 42832 Sheets Horiz Align.dgn DATE: 8-MAY-2024 08:10 COMPUTER: BG0419M674

NOTES

- The locations of all aerial and underground utility facilities may not be indicated in these plans. Underground utilities, whether indicated or not will be located and 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.

- Unless Otherwise Noted on the Plans, Determination of Design Discharge (Q) and Headwater (HW) by Standard Methods is not Applicable

- The Contractor will be required to furnish Waste Areas for Excess Excavation on this Project

CULVERT PIPE LEGEND

TYPE		DESCRIPTION
1	RCSP	Reinforced Concrete Sewer Pipe
2	RCP	Reinforced Concrete Pipe
3	GCCMP	Galvanized (zinc) Coated Corrugated Metal Pipe
4	ACCMP	Aluminum Coated Corrugated Metal Pipe
5	PCCMP	Polymer Coated Corrugated Metal Pipe
6	HDPE-CI	High Density Polyethylene (corrugated interior)
7	HDPE-SI	High Density Polyethylene (smooth interior)
8	PVC	Polyvinyl Chloride Pipe

MAILBOX POSTS

STATION	SIDE	EACH
436+60	LT	1
457+24	LT	1
639+60	RT	1
798+31	RT	1
848+80	RT	1
905+30	RT	1
931+09	RT	1

ASPHALTIC CONCRETE, TYPE SPR FOR MAILBOX TURNOUT, PLAN 307

STATION	SIDE	SQ. YDS.
436+60	LT	95
457+24	LT	94
639+60	RT	83
798+31	RT	135
848+80	RT	85
905+30	RT	132
931+09	RT	135

SPECIAL DITCH RIGHT

NO.	STATION	ELEV.	STATION	ELEV.	SLOPE
SDR1	417+49	1613.10	418+06	1613.00	0.18%
SDR2	418+06	1613.00	418+35	1613.00	0.00%
SDR3	418+35	1613.00	418+50	1611.90	7.34%

BUILD RUMBLE STRIPS, SPECIAL PLAN _C

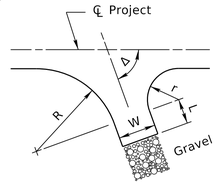
STATION TO STATION	CENTERLINE	SHOULDER		EDGELINE	
	(STA.)	(STA.)	SIDE	(STA.)	SIDE
408+68 - 942+79	534.11	-	-	-	-
TOTAL	534.11	-		-	

EARTHWORK

STATION TO STATION	EXCAVATION ESTABLISHED QUANTITY (CU. YDS.)	EMBANKMENT (CU. YDS.)	BALANCE FACTOR	EXCESS EXCAVATION (CU. YDS.)
417+49 - 418+50	144	24	1.4	110
435+81 - 437+34	17	4	1.4	11
456+46 - 458+02	21	0	1.4	21
638+83 - 640+29	19	4	1.4	13
797+40 - 798+89	16	8	1.4	5
848+13 - 849+66	7	23	1.4	-25
904+35 - 905+87	16	1	1.4	15
930+12 - 931+65	11	46	1.4	-53
TOTAL	251	110	-	97

THE CONTRACTOR MAY USE THE EXCESS EXCAVATION FOR SHOULDER CONSTRUCTION AND/OR OTHER EMBANKMENT.

2" ASPHALTIC CONCRETE, TYPE SPR ON MILLED SURFACE



SUMMARY OF QUANTITIES AND LOCATION OF SURFACED DRIVEWAYS

STATION	SIDE	RETURN RADIUS R	RETURN RADIUS r	WIDTH W	LENGTH L	INTERSECTION ANGLE	PLACEMENT	ASPHALTIC CONCRETE	2" COLD MILLING CLASS 5	GRAVEL
		FEET	FEET	FEET	FEET	Δ	SQ. YDS.	TONS	SQ. YDS.	CU. YDS.
429+26	RT	25	20	16	-	90	71	8	71	5
430+00	RT	30	25	33	-	90	143	16	143	5
436+60	LT	30	25	13	-	90	117	13	117	5
457+24	LT	30	25	13	-	90	123	14	123	5
459+43	LT	30	25	18	-	90	139	16	139	5
495+27	RT	25	25	13	-	90	86	10	86	5
497+51	RT	20	20	12	-	90	65	8	65	5
612+63	LT	30	25	13	-	90	134	15	134	5
639+60	RT	30	25	15	-	90	110	12	110	5
640+45	RT	25	20	13	-	90	86	10	86	5
788+52	LT	20	15	9	-	90	35	4	35	5
792+75	LT	20	20	12	-	90	57	7	57	5
798+31	LT	30	30	16	-	90	161	18	161	-
799+50	LT	30	25	15	-	90	125	14	125	5
848+80	RT	40	35	13	-	90	169	19	169	5
875+46	LT	30	30	13	-	90	136	15	136	5
905+31	LT	30	25	13	-	90	131	15	131	5
928+59	RT	35	30	15	-	90	154	17	154	5
931+09	LT	35	30	13	-	90	122	14	122	5
9315+40	LT	20	20	20	-	90	98	11	98	5
9317+23	LT	25	20	41	-	90	208	23	208	5

LEGEND

- GAS LINE
- ELECTRICAL SERVICE
- POWER LINE
- OVERHEAD POWER LINE
- SANITARY SEWER
- STORM SEWER
- TELEPHONE LINE
- FIBER OPTIC TELE. LINE
- OVERHEAD TELEPHONE LINE
- CABLE TV LINE
- OVERHEAD CABLE TV LINE
- WATER LINE
- FENCE - CHAIN LINK
- FENCE - R.O.W. OR WIRE
- FENCE - WOOD
- FLOWLINE
- CENTER LINE DRIVE
- BENCH MARK
- CENTER PIVOT
- CONTROL POINT
- CULVERT
- DIKE
- GAS METER
- GAS VALVE
- GRID TICK
- GUARDRAIL
- GUARD POST
- GUY POLE
- GUY WIRE
- LIGHT POLE
- MAILBOX
- MANHOLE
- MARSH
- OIL WELL
- PHOTO CODE POINT
- POWER BOX
- POWER POLE
- POWER PULL BOX
- PROPANE TANK
- R.O.W. MARKER
- ADVANCED R.R. WARNING SIGN
- RAILROAD WARNING
- RAILROAD TRACKS
- RETAINING WALL
- SATELLITE DISH
- SIGN
- TRAFFIC SIGNAL
- TRAFFIC SIGNAL/ST. LIGHT
- TELEPHONE BOX
- TELE. FIBER OPTICS BOX
- TELEPHONE PULL BOX
- TELEPHONE POLE
- TELEVISION BOX
- TRAVELED WAY
- TREE - CONIFEROUS
- TREE - DECIDUOUS
- TREE STUMP
- WATER (FIRE) HYDRANT
- WATER VALVE
- WATER METER
- WELL
- WINDMILL

PRELIMINARY

G1

Project Number 74-5(112)

C.N. 42832

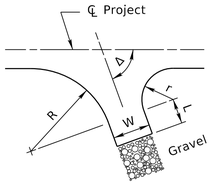
GENERAL INFORMATION

NEBRASKA Good Life. Great Journey. DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 9-MAY-2024 10:04
FILE: 42832 Sheets General Info.dgn

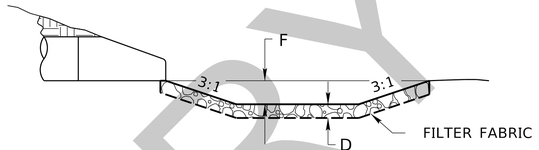
8" ASPHALTIC CONCRETE,
TYPE SPR ON PREPARED SUBGRADE



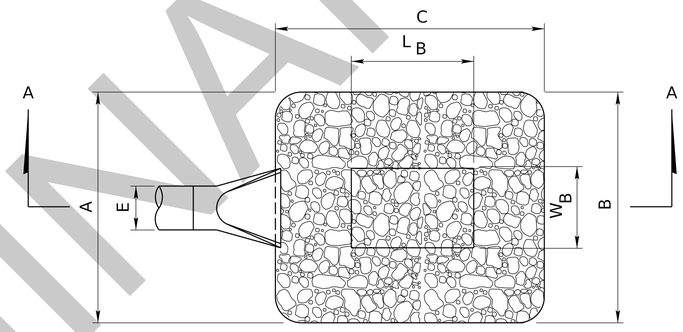
SUMMARY OF QUANTITIES AND LOCATION OF SURFACED INTERSECTIONS										
STATION	SIDE	RETURN RADIUS		WIDTH W	LENGTH L	INTERSECTION ANGLE	PLACEMENT	ASPHALTIC CONCRETE	PREPARATION	GRAVEL
		R	r							
		FEET	FEET	FEET	FEET	Δ	SQ. YDS.	TONS	SQ. YDS.	CU. YDS.
416+66	RT	45	35	24	-	90	212	94	212	-
891+18	RT	45	40	23	-	90	228	101	228	10
891+15	LT	40	40	23	-	90	224	99	224	10

2" ASPHALITIC CONCRETE,
TYPE SPR ON MILLED SURFACE

SUMMARY OF QUANTITIES AND LOCATION OF SURFACED INTERSECTIONS									
STATION	SIDE	RETURN RADIUS		WIDTH W	LENGTH L	INTERSECTION ANGLE	PLACEMENT	ASPHALTIC CONCRETE	2" COLD MILLING CLASS 5	GRAVEL
		R	r							
		FEET	FEET	FEET	FEET	Δ	SQ. YDS.	TONS	SQ. YDS.	CU. YDS.
416+66	LT	35	30	21	-	90	179	20	179	10
469+12	RT	45	40	20	-	90	197	22	197	10
469+13	LT	40	40	24	-	90	218	24	218	10
521+71	RT	35	35	23	-	90	216	24	216	10
521+75	LT	45	35	22	-	90	206	23	206	10
574+70	RT	40	35	24	-	90	212	24	212	10
574+70	LT	50	35	20	-	90	235	26	235	10
627+42	RT	40	35	25	-	90	163	18	163	10
627+44	LT	45	30	19	-	90	148	17	148	10
680+06	RT	40	35	22	-	90	191	21	191	10
680+04	LT	40	35	24	-	90	199	22	199	10
733+16	RT	40	30	26	-	90	225	25	225	10
733+23	LT	45	40	24	-	90	251	28	251	10
786+31	LT	45	30	25	-	90	245	27	245	10
786+34	RT	50	45	21	-	90	261	29	261	10
839+67	RT	40	35	18	-	90	167	19	167	10
839+68	LT	45	45	22	-	90	220	24	220	10



SECTION A-A



PLAN

DETAIL OF ROCK RIPRAP

BUILD ROCK RIPRAP											
STATION	A	B	C	D	E	F	W_B	L_B	TONS	RIPRAP TYPE	FILTER FABRIC SQ. YDS.
932+54, 65' Lt.	32	32	32	2.4	6.0	3.2	12.8	12.8	126	B	153

PRELIMINARY

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets General Info.dgn

G2

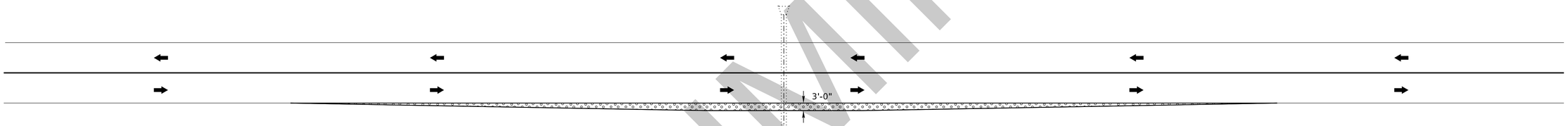
Project Number
74-5(112)

C.N. 42832

GENERAL INFORMATION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division



TYPICAL PHASING FOR CULVERT REPLACEMENT

PHASE 1

BUILD TEMPORARY SURFACING				
STATION	TO	STATION	SIDE	SQ. YDS.
417+09	-	420+22	Rt.	72
453+69	-	462+54	Rt.	238
477+79	-	481+73	Rt.	75
501+60	-	505+62	Rt.	79
533+37	-	537+46	Rt.	81
550+17	-	554+10	Rt.	75
571+93	-	577+21	Rt.	92
597+41	-	601+35	Rt.	76
626+61	-	630+54	Rt.	65
650+04	-	652+98	Rt.	76
665+44	-	669+37	Rt.	77
677+37	-	681+30	Rt.	57
696+56	-	700+64	Rt.	80
729+71	-	744+85	Rt.	422
751+45	-	766+09	Rt.	344
781+70	-	784+65	Rt.	76
791+51	-	795+43	Rt.	76
875+59	-	879+51	Rt.	75

PRELIMINARY

H1

Project Number
74-5(112)

C.N. 42832

LEGEND

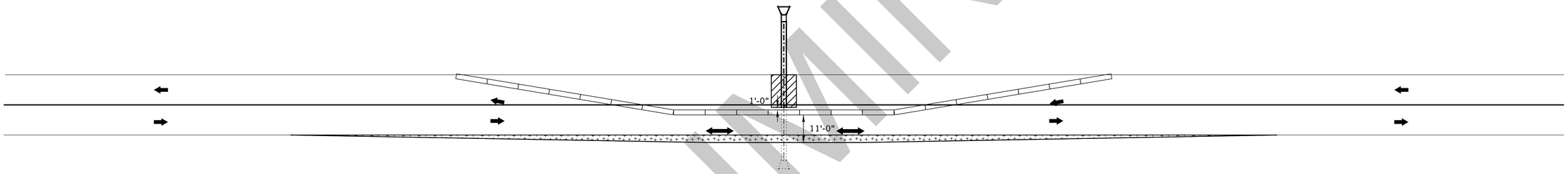
- REMOVE ASPHALT
- REMOVE TEMPORARY SURFACING
- BULD 11" SURFACING
- BUILD TEMPORARY SURFACING
- COMPLETED SURFACING
- TRAFFIC FLOW
- CONCRETE BARRIER

PHASING

NEBRASKA
Good LIfe. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Phasing.dgn



TYPICAL PHASING FOR CULVERT REPLACEMENT

PHASE 2

PRELIMINARY

H2

Project Number
74-5(112)

C.N. 42832

LEGEND

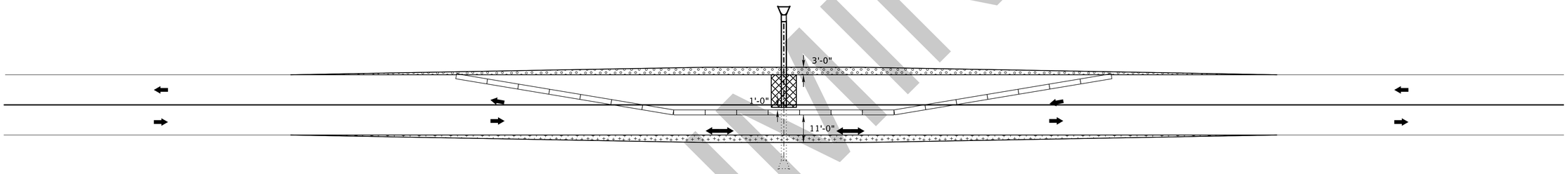
- REMOVE ASPHALT
- REMOVE TEMPORARY SURFACING
- BULD 11" SURFACING
- BUILD TEMPORARY SURFACING
- COMPLETED SURFACING
- TRAFFIC FLOW
- CONCRETE BARRIER

PHASING

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Phasing.dgn



TYPICAL PHASING FOR CULVERT REPLACEMENT

PHASE 3

BUILD TEMPORARY SURFACING				
STATION	TO	STATION	SIDE	SQ. YDS.
417+09	-	420+22	Lt.	73
453+40	-	462+54	Lt.	205
477+79	-	481+73	Lt.	77
501+60	-	505+63	Lt.	80
533+37	-	537+46	Lt.	81
550+16	-	554+09	Lt.	77
571+92	-	577+21	Lt.	88
597+40	-	601+34	Lt.	76
626+61	-	630+54	Lt.	66
650+05	-	652+98	Lt.	76
665+45	-	669+37	Lt.	76
677+36	-	681+30	Lt.	57
696+57	-	700+64	Lt.	82
729+71	-	744+85	Lt.	423
751+45	-	766+09	Lt.	430
781+79	-	785+73	Lt.	76
793+78	-	795+43	Lt.	32
875+59	-	879+52	Lt.	76

PRELIMINARY

H3

Project Number
74-5(112)

C.N. 42832

LEGEND

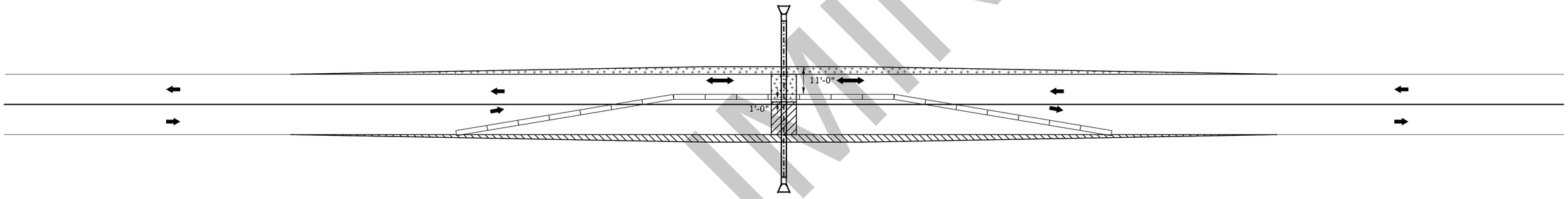
- REMOVE ASPHALT
- REMOVE TEMPORARY SURFACING
- BULD 11" SURFACING
- BUILD TEMPORARY SURFACING
- COMPLETED SURFACING
- TRAFFIC FLOW
- CONCRETE BARRIER

PHASING

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Phasing.dgn



TYPICAL PHASING FOR CULVERT REPLACEMENT

PHASE 4

PRELIMINARY

H4

Project Number
74-5(112)

C.N. 42832

LEGEND

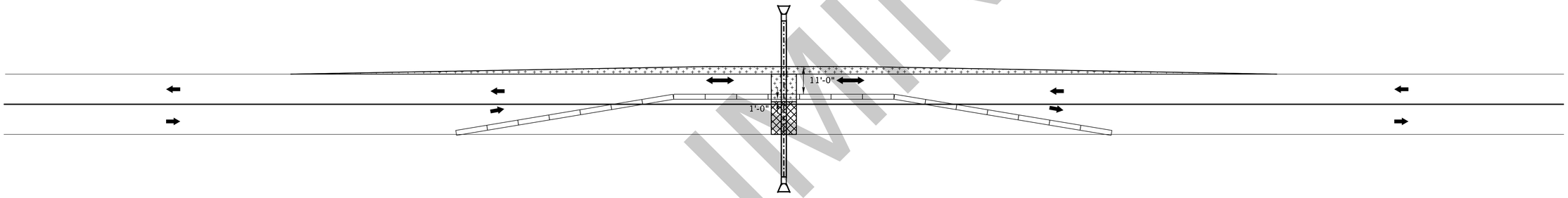
- REMOVE ASPHALT
- REMOVE TEMPORARY SURFACING
- BULD 11" SURFACING
- BUILD TEMPORARY SURFACING
- COMPLETED SURFACING
- TRAFFIC FLOW
- CONCRETE BARRIER

PHASING

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Phasing.dgn



TYPICAL PHASING FOR CULVERT REPLACEMENT

PHASE 5

PRELIMINARY

H5

Project Number
74-5(112)

C.N. 42832

LEGEND

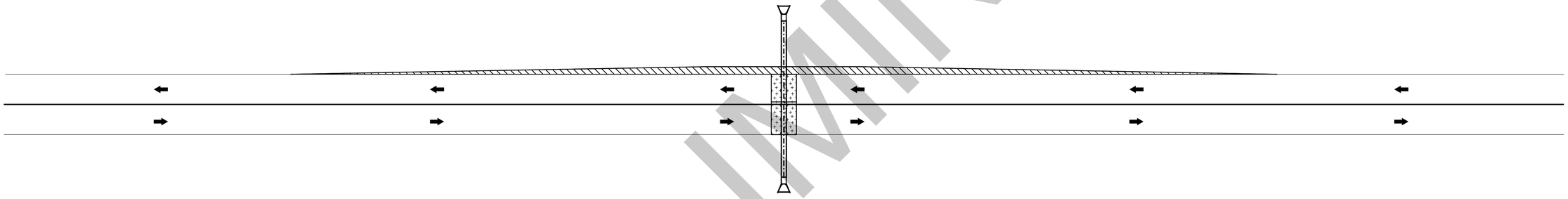
- REMOVE ASPHALT
- REMOVE TEMPORARY SURFACING
- BULD 11" SURFACING
- BUILD TEMPORARY SURFACING
- COMPLETED SURFACING
- TRAFFIC FLOW
- CONCRETE BARRIER

PHASING

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Phasing.dgn



TYPICAL PHASING FOR CULVERT REPLACEMENT

PHASE 6

PRELIMINARY

H6

Project Number
74-5(112)

C.N. 42832

LEGEND

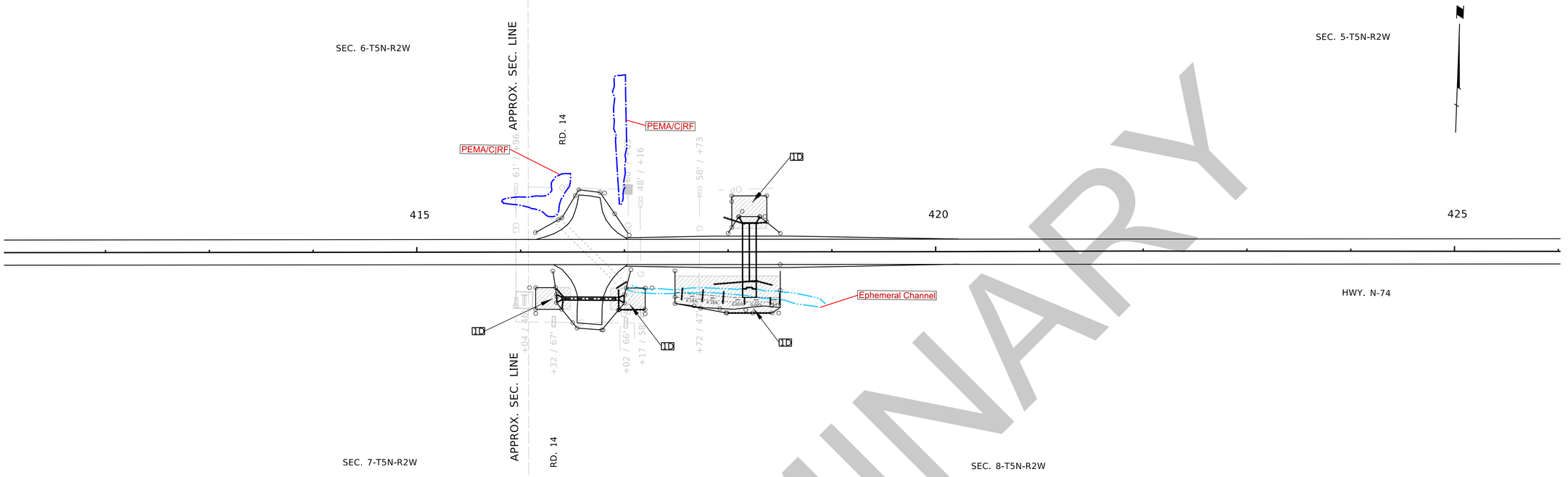
- REMOVE ASPHALT
- REMOVE TEMPORARY SURFACING
- BULD 11" SURFACING
- BUILD TEMPORARY SURFACING
- COMPLETED SURFACING
- TRAFFIC FLOW
- CONCRETE BARRIER

PHASING

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Phasing.dgn

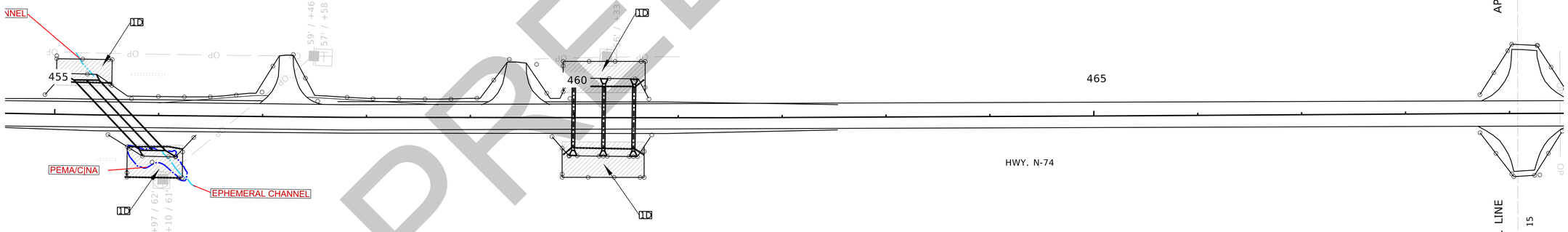


BUILD EROSION CONTROL-CLASS 1D, PLAN 501

STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
416+14	-	416+48	Rt.	Culvert Inlet	33	78
416+87	-	417+20	Rt.	Culvert Outlet	33	78
417+49	-	418+50	Rt.	Culvert Outlet	101	373
418+04	-	418+37	Lt.	Culvert Inlet	38	118

BUILD SILT CHECKS, SPECIAL PLAN _C

STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
416+34	-	416+41	Rt.	-	2-HIGH	-	24
416+94	-	417+20	Rt.	-	2-HIGH	-	58
417+55	-	417+95	Rt.	20	2-HIGH	12	36
417+85	-	418+42	Rt.	-	2-HIGH	-	58
417+95	-	418+37	Lt.	-	2-HIGH	-	44
417+99	-	418+37	Rt.	-	2-HIGH	-	44
418+16	-	418+41	Rt.	25	2-HIGH	8	16
418+50	-	418+50	Rt.	-	2-HIGH	-	12



BUILD EROSION CONTROL-CLASS 1D, PLAN 501

STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
455+01	-	455+55	Lt.	Culvert Inlet	53	150
455+70	-	456+23	Rt.	Culvert Outlet	53	186
459+88	-	460+67	Rt.	Culvert Outlet	79	299
459+89	-	460+68	Lt.	Culvert Inlet	79	264

BUILD SILT CHECKS, SPECIAL PLAN _C

STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
455+01	-	455+55	Lt.	-	2-HIGH	-	53
455+70	-	456+23	Rt.	-	2-HIGH	-	53
455+70	-	456+23	Rt.	-	2-HIGH	-	61
459+88	-	460+67	Rt.	-	2-HIGH	-	83
459+89	-	460+68	Lt.	-	2-HIGH	-	84

SEC. 8-T5N-R2W

PRELIMINARY

J1

Project Number
74-5(112)

C.N. 42832

LEGEND

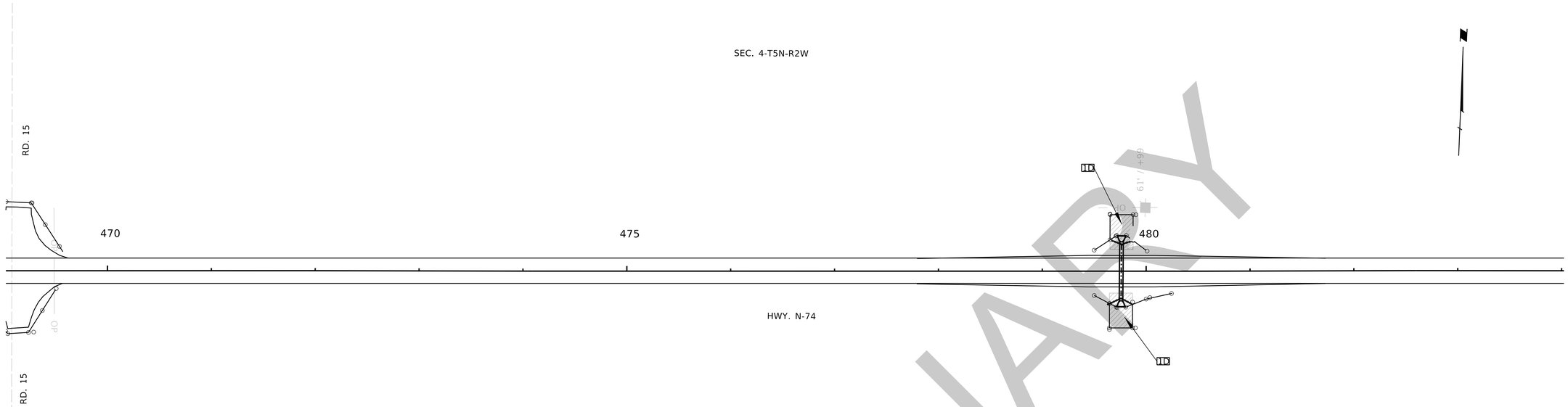
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- EROSION CONTROL, CLASS 1D
- EROSION CONTROL, CLASS 2A
- SILT CHECKS

EROSION & SEDIMENT CONTROL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Erosion Control.dgn

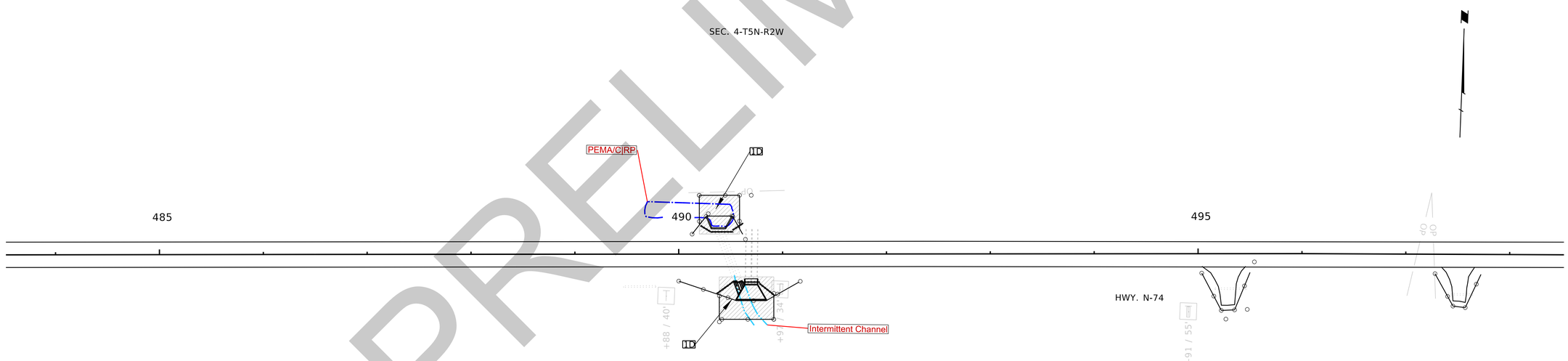


BUILD EROSION CONTROL-CLASS 1D, PLAN 501

STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
479+65	-	479+87	Rt.	Culvert Outlet	22	83
479+65	-	479+87	Lt.	Culvert Inlet	22	83

BUILD SILT CHECKS, SPECIAL PLAN _C

STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
479+61	-	479+90	Rt.	-	2-HIGH	-	29
479+65	-	479+87	Lt.	-	2-HIGH	-	24



BUILD EROSION CONTROL-CLASS 1D, PLAN 501

STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
490+20	-	490+59	Lt.	Culvert Inlet	39	160
490+29	-	490+91	Rt.	Culvert Outet	52	238

BUILD SILT CHECKS, SPECIAL PLAN _C

STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
490+20	-	490+61	Lt.	-	2-HIGH	-	45
490+36	-	490+91	Rt.	-	2-HIGH	-	64

LEGEND

- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- EROSION CONTROL, CLASS 1D
- EROSION CONTROL, CLASS 2A
- SILT CHECKS

J2

Project Number
74-5(112)

C.N. 42832

EROSION & SEDIMENT CONTROL

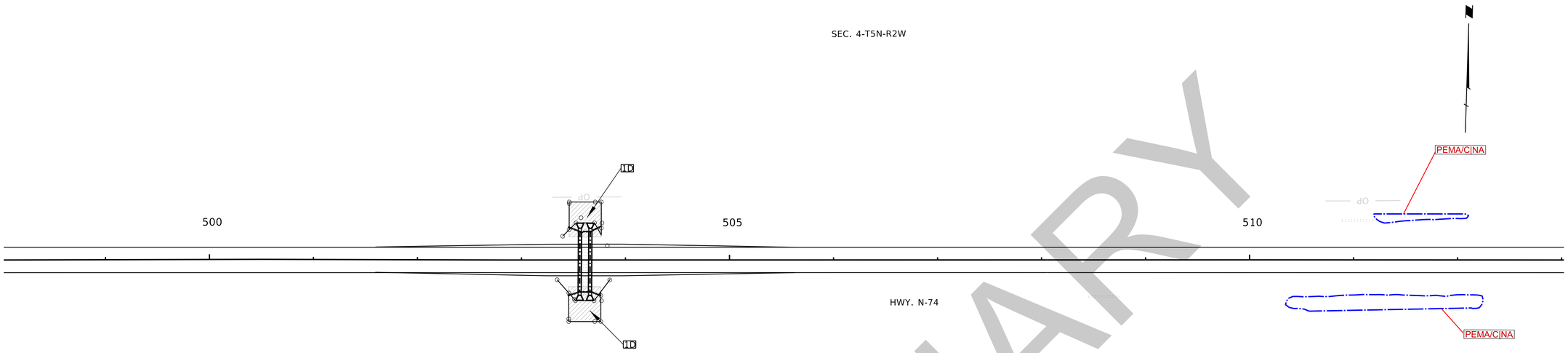
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

PRELIMINARY

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Erosion Control.dgn

SEC. 4-T5N-R2W

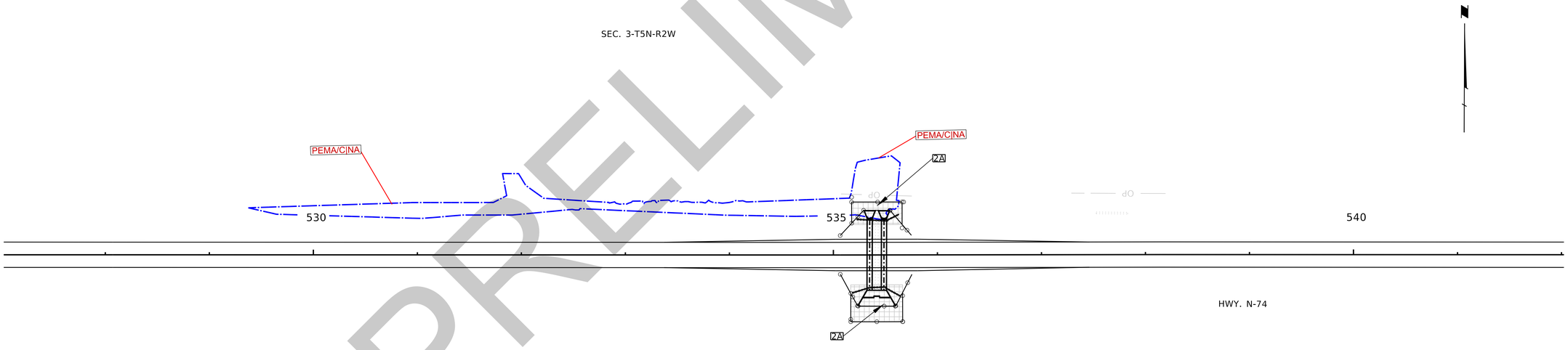


SEC. 9-T5N-R2W

BUILD EROSION CONTROL-CLASS 1D, PLAN 501						
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
503+45	-	503+76	Rt.	Culvert Outlet	31	115
503+46	-	503+77	Lt.	Culvert Inlet	31	115

BUILD SILT CHECKS, SPECIAL PLAN _C							
STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
503+43	-	503+77	Rt.	-	2-HIGH	-	35
503+44	-	503+77	Lt.	-	2-HIGH	-	35

SEC. 3-T5N-R2W



BUILD EROSION CONTROL-CLASS 2A, PLAN 501						
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
535+17	-	535+66	Rt.	Culvert Outlet	50	130
535+18	-	535+66	Lt.	Culvert Inlet	49	117

BUILD SILT CHECKS, SPECIAL PLAN _C							
STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
535+17	-	535+64	Rt.	-	2-HIGH	-	51
535+21	-	535+62	Lt.	-	2-HIGH	-	43

SEC. 10-T5N-R2W

PRELIMINARY

J3

Project Number
74-5(112)

C.N. 42832

LEGEND

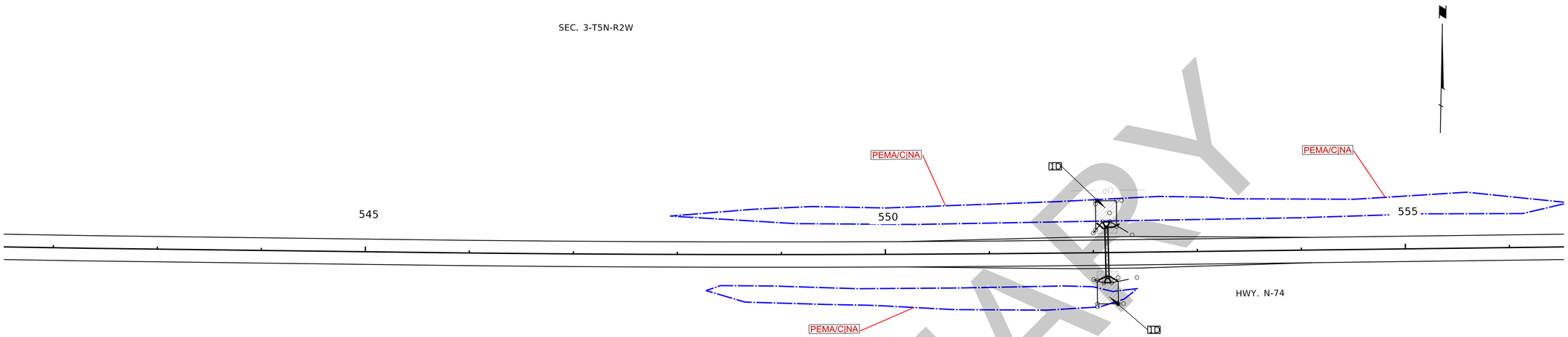
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- EROSION CONTROL, CLASS 1D
- EROSION CONTROL, CLASS 2A
- SILT CHECKS

EROSION & SEDIMENT CONTROL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

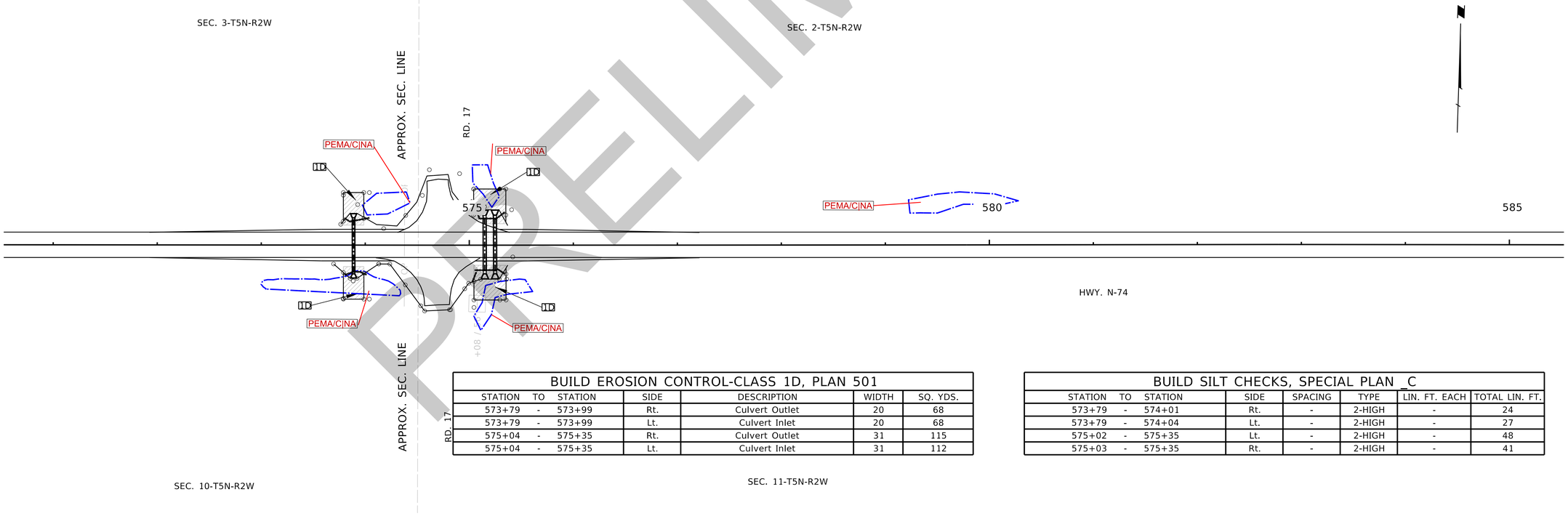
COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Erosion Control.dgn



SEC. 10-T5N-R2W

BUILD EROSION CONTROL-CLASS 1D, PLAN 501						
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
552+03	-	552+23	Lt.	Culvert Inlet	20	70
552+03	-	552+24	Rt.	Culvert Outlet	20	70

BUILD SILT CHECKS, SPECIAL PLAN _C						
STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
552+03	-	552+24	Rt.	-	2-HIGH	-	22
552+03	-	552+24	Lt.	-	2-HIGH	-	24



BUILD EROSION CONTROL-CLASS 1D, PLAN 501						
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
573+79	-	573+99	Rt.	Culvert Outlet	20	68
573+79	-	573+99	Lt.	Culvert Inlet	20	68
575+04	-	575+35	Rt.	Culvert Outlet	31	115
575+04	-	575+35	Lt.	Culvert Inlet	31	112

BUILD SILT CHECKS, SPECIAL PLAN _C							
STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
573+79	-	574+01	Rt.	-	2-HIGH	-	24
573+79	-	574+04	Lt.	-	2-HIGH	-	27
575+02	-	575+35	Lt.	-	2-HIGH	-	48
575+03	-	575+35	Rt.	-	2-HIGH	-	41

PRELIMINARY

J4

Project Number
74-5(112)

C.N. 42832

LEGEND

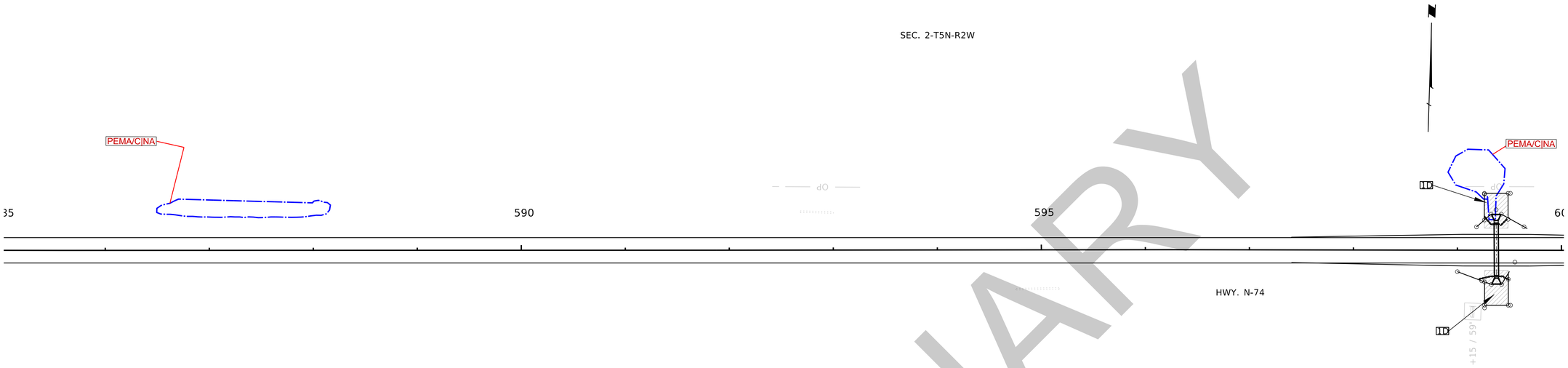
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- EROSION CONTROL, CLASS 1D
- EROSION CONTROL, CLASS 2A
- SILT CHECKS

EROSION & SEDIMENT CONTROL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

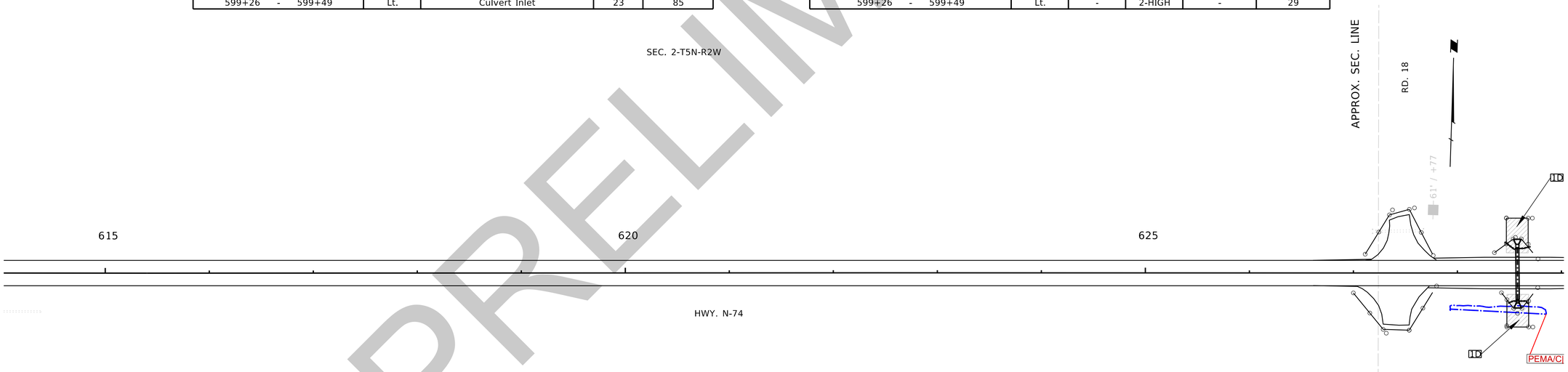
COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Erosion Control.dgn



BUILD EROSION CONTROL-CLASS 1D, PLAN 501						
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
599+26	-	599+49	Rt.	Culvert Outlet	23	85
599+26	-	599+49	Lt.	Culvert Inlet	23	85

BUILD SILT CHECKS, SPECIAL PLAN _C							
STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
599+20	-	599+49	Rt.	-	2-HIGH	-	30
599+26	-	599+49	Lt.	-	2-HIGH	-	29

SEC. 2-T5N-R2W



BUILD EROSION CONTROL-CLASS 1D, PLAN 501						
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
628+47	-	628+68	Lt.	Culvert Inlet	21	78
628+48	-	628+69	Rt.	Culvert Outlet	21	73

BUILD SILT CHECKS, SPECIAL PLAN _C							
STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
628+44	-	628+70	Lt.	-	2-HIGH	-	28
628+48	-	628+69	Rt.	-	2-HIGH	-	22

SEC. 11-T5N-R2W

PRELIMINARY

J5

Project Number
74-5(112)

C.N. 42832

LEGEND

- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- EROSION CONTROL, CLASS 1D
- EROSION CONTROL, CLASS 2A
- SILT CHECKS

EROSION & SEDIMENT CONTROL

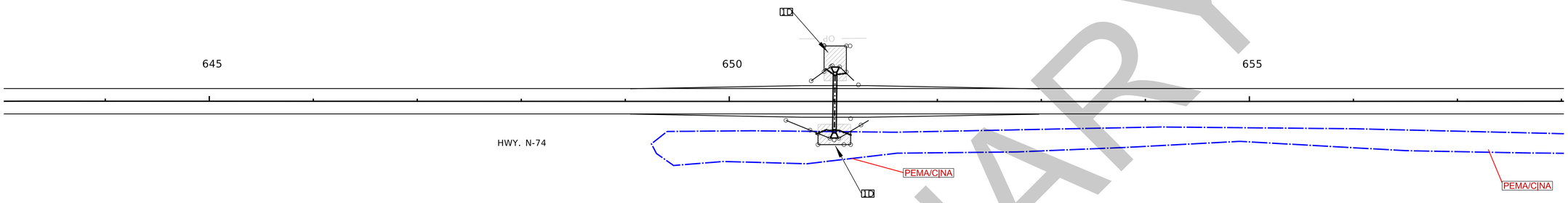
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Erosion Control.dgn

PRELIMINARY

SEC. 1-T5N-R2W



SEC. 12-T5N-R2W

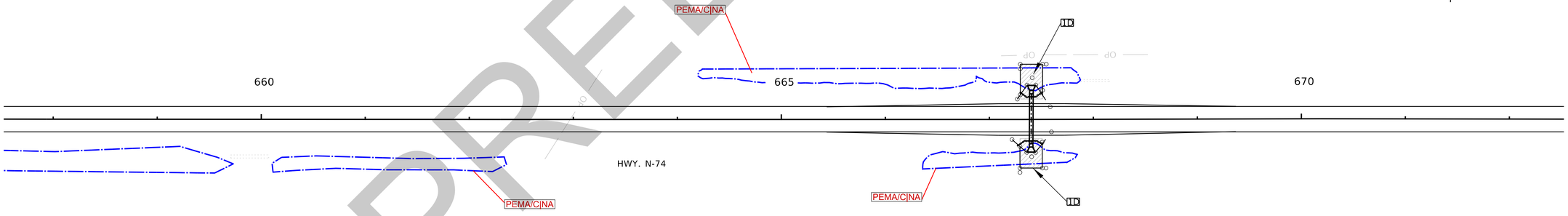
BUILD EROSION CONTROL-CLASS 1D, PLAN 501

STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
650+85	-	651+17	Rt.	Culvert Outet	31	68
650+91	-	651+13	Lt.	Culvert Inlet	21	80

BUILD SILT CHECKS, SPECIAL PLAN _C

STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
650+82	-	651+17	Rt.	-	2-HIGH	-	37
650+91	-	651+13	Lt.	-	2-HIGH	-	24

SEC. 1-T5N-R2W



BUILD EROSION CONTROL-CLASS 1D, PLAN 501

STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
667+29	-	667+51	Rt.	Culvert Inlet	21	68
667+30	-	667+51	Lt.	Culvert Outlet	21	79

BUILD SILT CHECKS, SPECIAL PLAN _C

STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
667+26	-	667+51	Rt.	-	2-HIGH	-	27
667+28	-	667+51	Lt.	-	2-HIGH	-	26

SEC. 12-T5N-R2W

J6

Project Number
74-5(112)

C.N. 42832

LEGEND

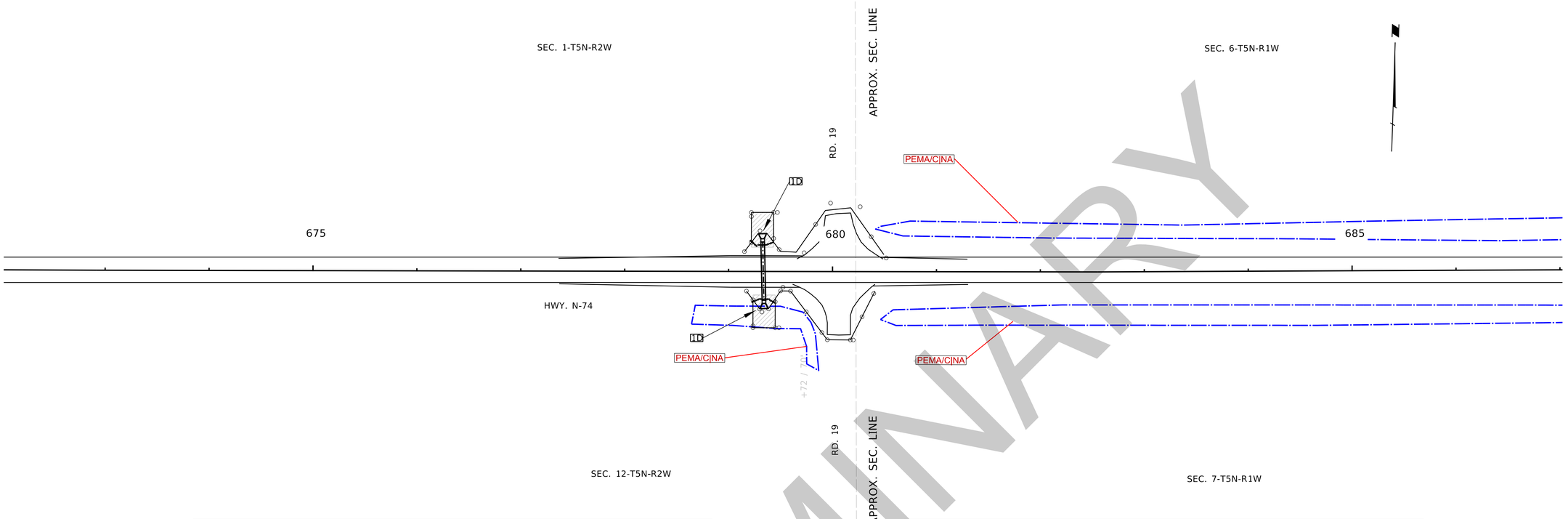
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- EROSION CONTROL, CLASS 1D
- EROSION CONTROL, CLASS 2A
- SILT CHECKS

EROSION & SEDIMENT CONTROL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

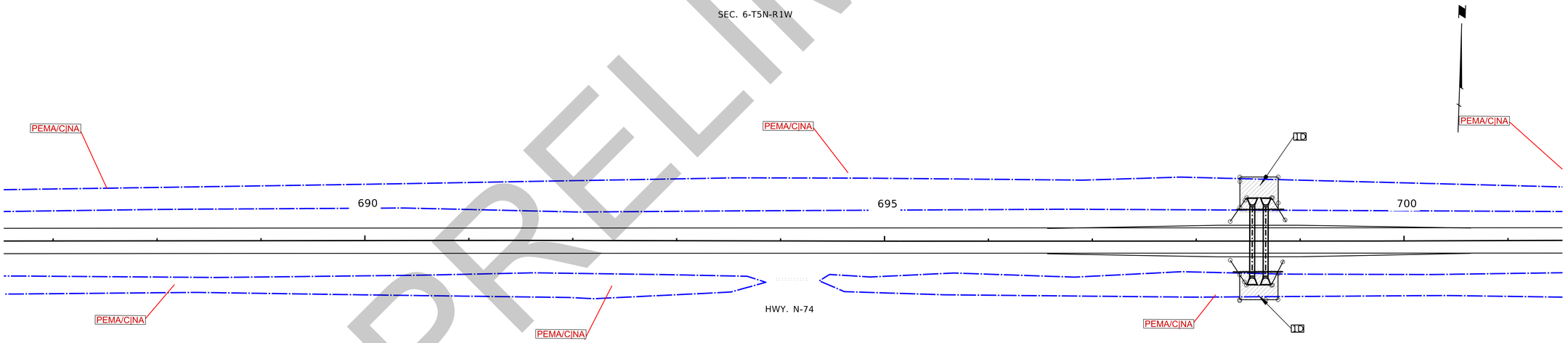
COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Erosion Control.dgn



BUILD EROSION CONTROL-CLASS 1D, PLAN 501						
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
679+22	-	679+43	Lt.	Culvert Inlet	21	80
679+23	-	679+45	Rt.	Culvert Oulet	21	75

BUILD SILT CHECKS, SPECIAL PLAN _C							
STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
679+20	-	679+43	Lt.	-	2-HIGH	-	26
679+21	-	679+45	Rt.	-	2-HIGH	-	25

SEC. 6-T5N-R1W



BUILD EROSION CONTROL-CLASS 1D, PLAN 501						
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
698+42	-	698+79	Rt.	Culvert Oulet	37	113
698+42	-	698+79	Lt.	Culvert Inlet	37	138

BUILD SILT CHECKS, SPECIAL PLAN _C							
STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
698+34	-	698+83	Rt.	-	2-HIGH	-	49
698+37	-	698+85	Lt.	-	2-HIGH	-	47

SEC. 7-T5N-R1W

PRELIMINARY

J7

Project Number
74-5(112)

C.N. 42832

LEGEND

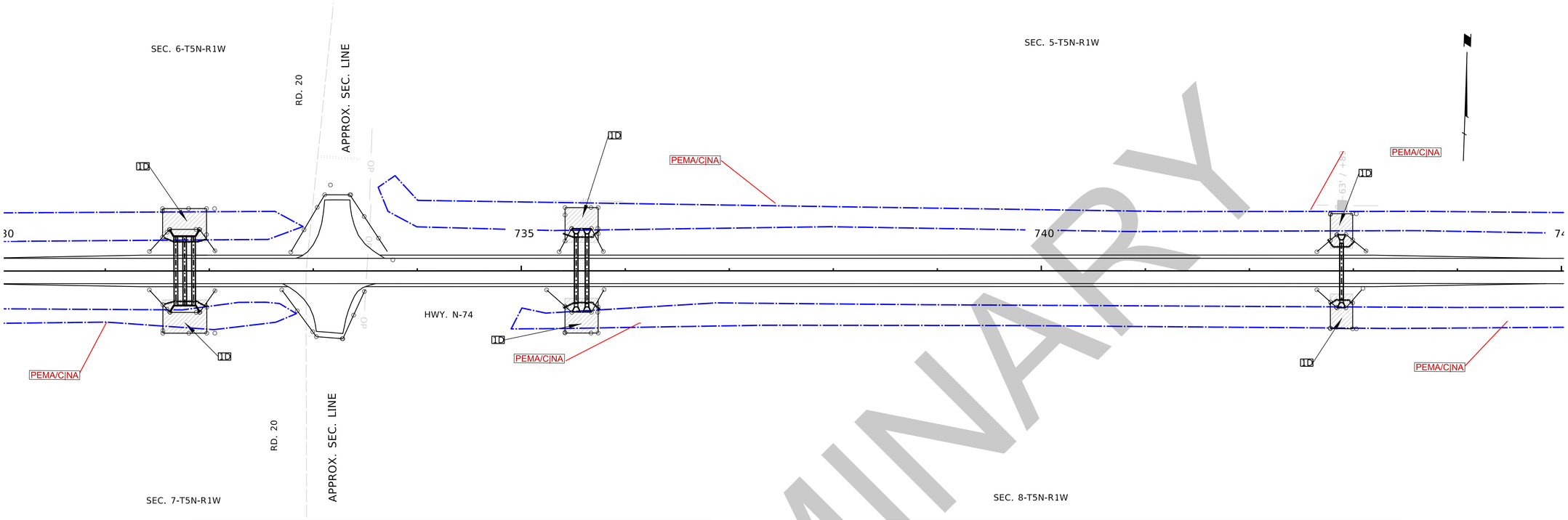
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- EROSION CONTROL, CLASS 1D
- EROSION CONTROL, CLASS 2A
- SILT CHECKS

EROSION & SEDIMENT CONTROL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

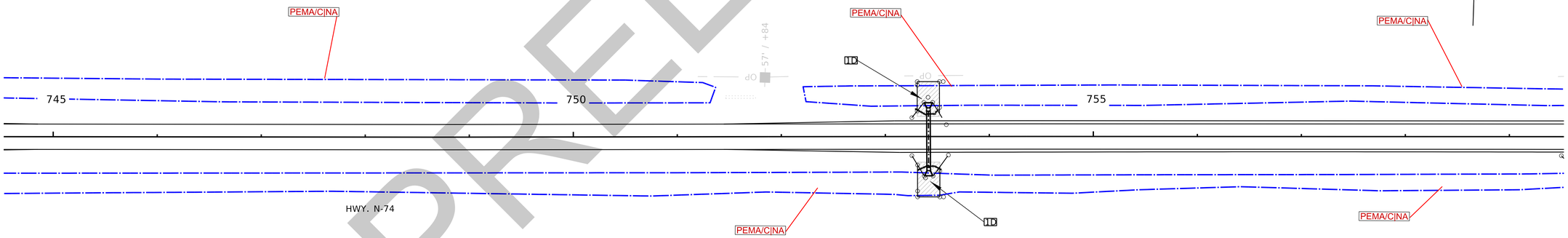
Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Erosion Control.dgn



BUILD EROSION CONTROL-CLASS 1D, PLAN 501						
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
731+55	-	731+98	Rt.	Culvert Oulet	42	150
731+55	-	731+97	Lt.	Culvert Inlet	42	150
735+42	-	735+74	Rt.	Culvert Oulet	32	118
735+42	-	735+74	Lt.	Culvert Inlet	32	118
742+78	-	742+99	Rt.	Culvert Oulet	21	79
742+78	-	742+99	Lt.	Culvert Inlet	21	79

BUILD SILT CHECKS, SPECIAL PLAN _C							
STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
731+55	-	731+98	Rt.	-	2-HIGH	-	44
731+55	-	731+97	Lt.	-	2-HIGH	-	44
735+39	-	735+75	Rt.	-	2-HIGH	-	40
735+39	-	735+75	Lt.	-	2-HIGH	-	39
742+75	-	743+01	Lt.	-	2-HIGH	-	33
742+76	-	742+99	Rt.	-	2-HIGH	-	26



BUILD EROSION CONTROL-CLASS 1D, PLAN 501						
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
753+31	-	753+52	Rt.	Culvert Oulet	21	79
753+31	-	753+52	Lt.	Culvert Inlet	21	79

BUILD SILT CHECKS, SPECIAL PLAN _C							
STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
753+28	-	753+51	Lt.	-	2-HIGH	-	27
753+30	-	753+54	Rt.	-	2-HIGH	-	26

SEC. 8-T5N-R1W

PRELIMINARY

J8

Project Number
74-5(112)

C.N. 42832

LEGEND

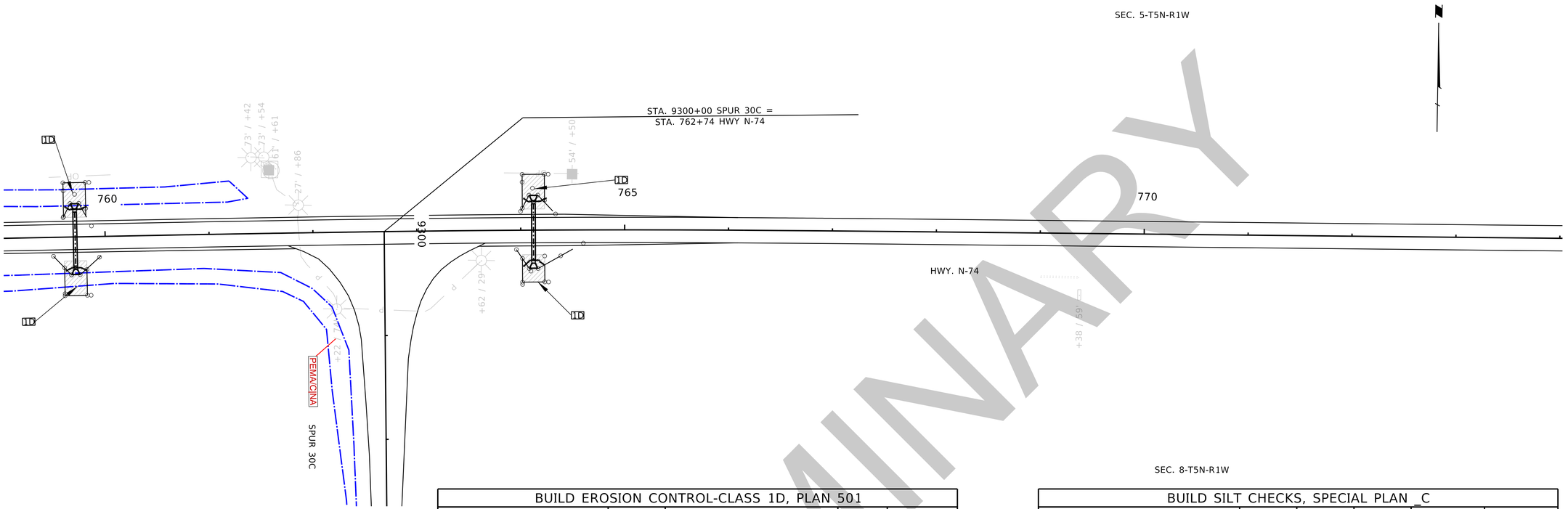
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- EROSION CONTROL, CLASS 1D
- EROSION CONTROL, CLASS 2A
- SILT CHECKS

EROSION & SEDIMENT CONTROL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:12
FILE: 42832 Sheets Erosion Control.dgn



BUILD EROSION CONTROL-CLASS 1D, PLAN 501

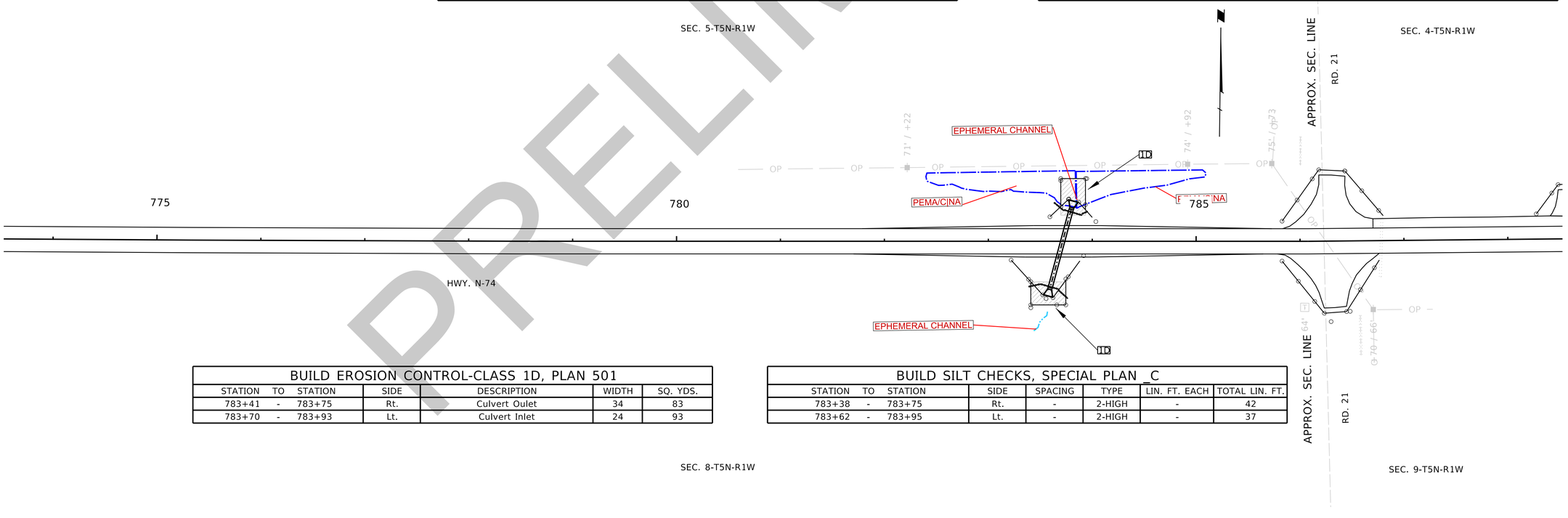
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
759+60	-	759+82	Rt.	Culvert Oulet	21	79
759+60	-	759+82	Lt.	Culvert Inlet	21	79
764+01	-	764+23	Rt.	Culvert Oulet	21	63
764+02	-	764+23	Lt.	Culvert Inlet	21	79

BUILD SILT CHECKS, SPECIAL PLAN _C

STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
759+60	-	759+82	Rt.	-	2-HIGH	-	23
759+60	-	759+83	Lt.	-	2-HIGH	-	24
764+01	-	764+22	Rt.	-	2-HIGH	-	24
764+02	-	764+24	Lt.	-	2-HIGH	-	24

SEC. 5-T5N-R1W

SEC. 4-T5N-R1W



BUILD EROSION CONTROL-CLASS 1D, PLAN 501

STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
783+41	-	783+75	Rt.	Culvert Oulet	34	83
783+70	-	783+93	Lt.	Culvert Inlet	24	93

BUILD SILT CHECKS, SPECIAL PLAN _C

STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
783+38	-	783+75	Rt.	-	2-HIGH	-	42
783+62	-	783+95	Lt.	-	2-HIGH	-	37

SEC. 8-T5N-R1W

SEC. 9-T5N-R1W

PRELIMINARY

J9

Project Number
74-5(112)

C.N. 42832

LEGEND

- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- EROSION CONTROL, CLASS 1D
- EROSION CONTROL, CLASS 2A
- SILT CHECKS

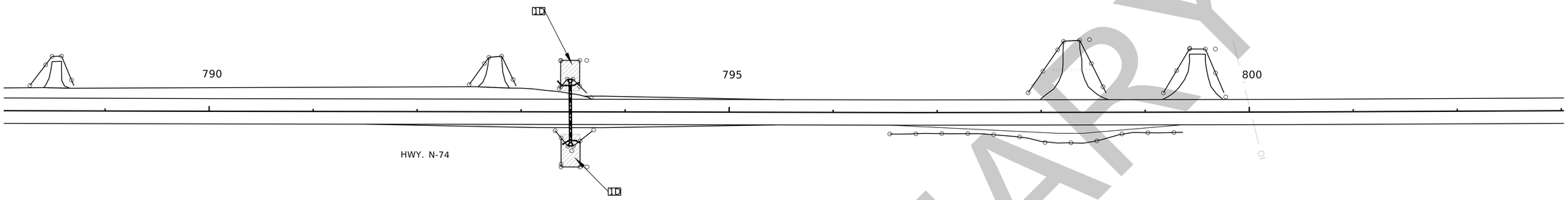
EROSION & SEDIMENT CONTROL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:12
FILE: 42832 Sheets Erosion Control.dgn

SEC. 4-T5N-R1W

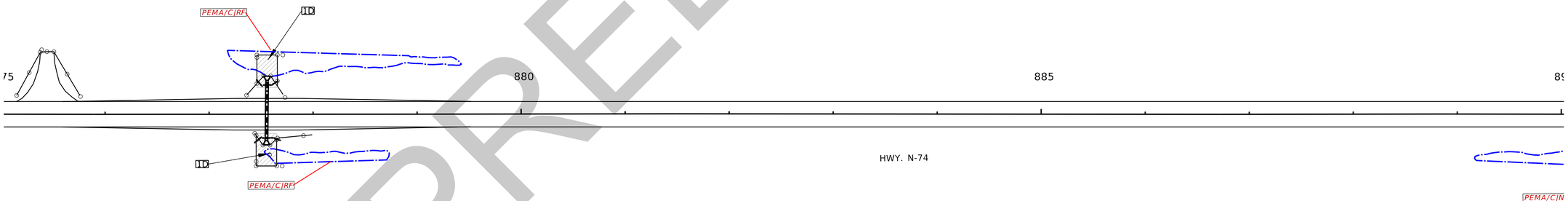


SEC. 9-T5N-R1W

BUILD EROSION CONTROL-CLASS 1D, PLAN 501						
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
793+38	-	793+57	Rt.	Culvert Outlet	18	63
793+38	-	793+57	Lt.	Culvert Inlet	18	59

BUILD SILT CHECKS, SPECIAL PLAN _C							
STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
793+34	-	793+56	Lt.	-	2-HIGH	-	25
793+38	-	793+57	Rt.	-	2-HIGH	-	20

SEC. 3-T5N-R1W



BUILD EROSION CONTROL-CLASS 1D, PLAN 501						
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
877+45	-	877+65	Rt.	Culvert Inlet	20	68
877+46	-	877+66	Lt.	Culvert Oulet	20	68

BUILD SILT CHECKS, SPECIAL PLAN _C							
STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
877+43	-	877+69	Rt.	-	2-HIGH	-	29
877+45	-	877+67	Lt.	-	2-HIGH	-	26

SEC. 10-T5N-R1W

PRELIMINARY

J10

Project Number
74-5(112)

C.N. 42832

LEGEND

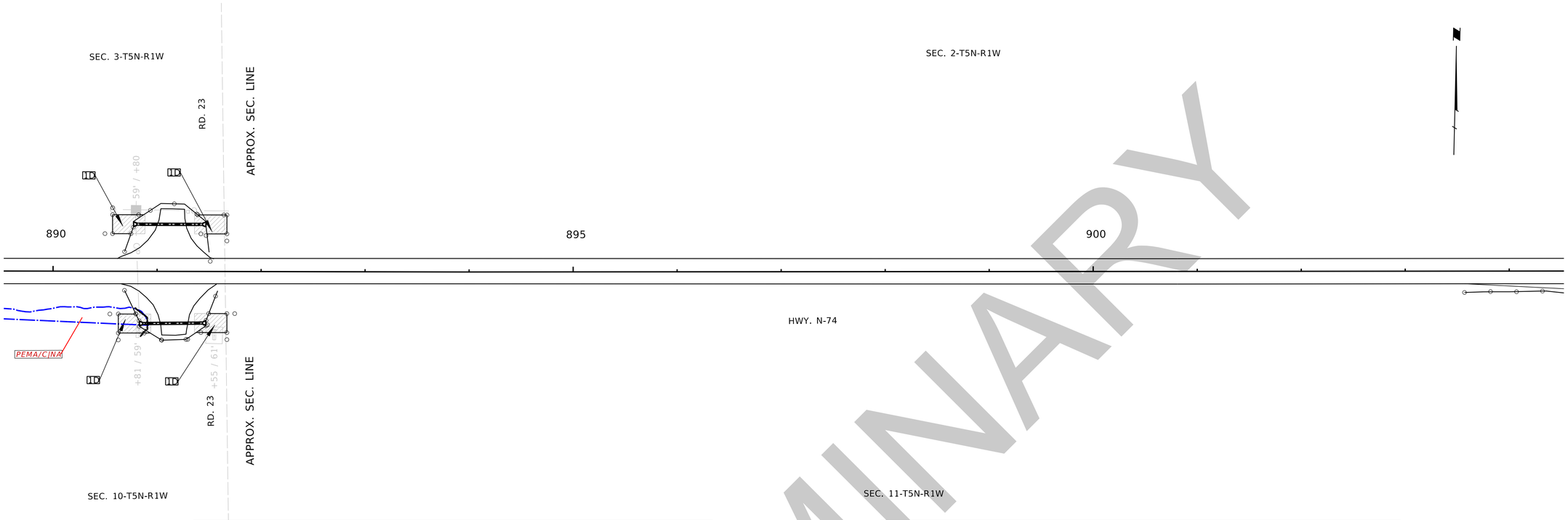
- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- EROSION CONTROL, CLASS 1D
- EROSION CONTROL, CLASS 2A
- SILT CHECKS

EROSION & SEDIMENT CONTROL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

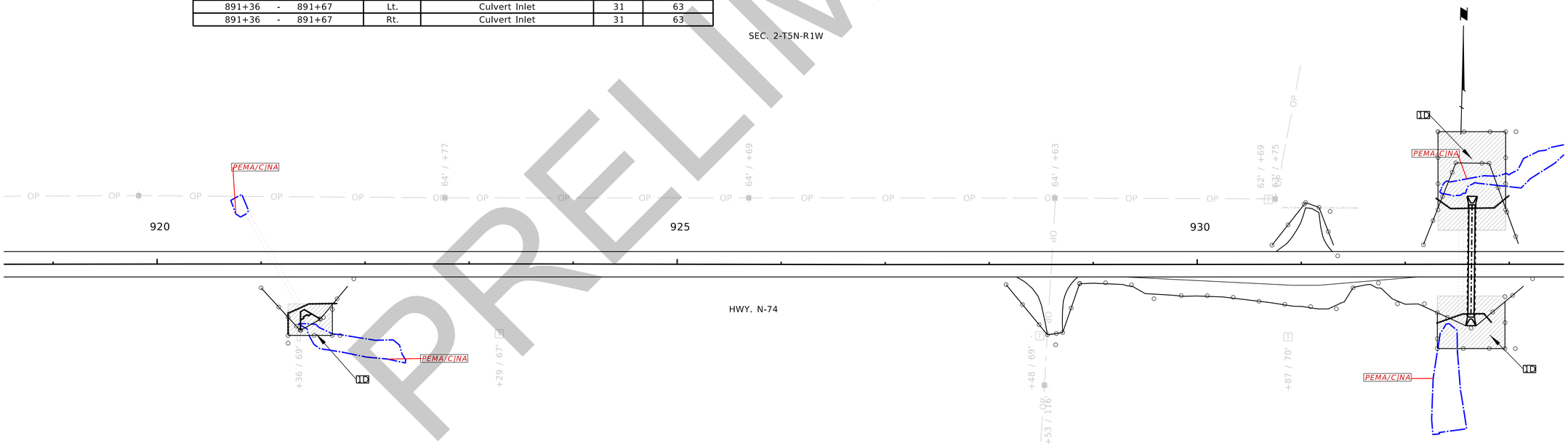
Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Erosion Control.dgn



BUILD EROSION CONTROL-CLASS 1D, PLAN 501						
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
890+57	-	890+88	Lt.	Culvert Outlet	31	63
890+63	-	890+94	Rt.	Culvert Oulet	31	63
891+36	-	891+67	Lt.	Culvert Inlet	31	63
891+36	-	891+67	Rt.	Culvert Inlet	31	63

BUILD SILT CHECKS, SPECIAL PLAN _C						
STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
890+78	-	890+91	Rt.	-	2-HIGH	-	36



BUILD EROSION CONTROL-CLASS 1D, PLAN 501						
STATION	TO	STATION	SIDE	DESCRIPTION	WIDTH	SQ. YDS.
921+26	-	921+69	Rt.	Culvert Outlet	43	143
932+31	-	932+96	Rt.	Culvert Inlet	65	366
932+32	-	932+97	Lt.	Culvert Oulet	65	685

BUILD SILT CHECKS, SPECIAL PLAN _C						
STATION	TO	STATION	SIDE	SPACING	TYPE	LIN. FT. EACH	TOTAL LIN. FT.
921+26	-	921+72	Rt.	-	2-HIGH	-	70
932+28	-	933+00	Lt.	-	2-HIGH	-	79
932+29	-	932+83	Rt.	-	2-HIGH	-	60

PRELIMINARY

J11

Project Number
74-5(112)

C.N. 42832

LEGEND

- LIMITS OF CONSTRUCTION
- WETLANDS - DO NOT DISTURB -
- EROSION CONTROL, CLASS 1D
- EROSION CONTROL, CLASS 2A
- SILT CHECKS

EROSION & SEDIMENT CONTROL

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:11
FILE: 42832 Sheets Erosion Control.dgn

PRELIMINARY

SEC. 6-T5N-R2W

Surface 3-Way Intersection.
See Sheet G.

APPROX. SEC. LINE

RD. 14

STA. 416+66
6' x 4' x 100' CONC. BOX CULV.
ON 45° SKEW W/WINGWALLS

Sta. 418+08 to
Sta. 418+33
Remove 67 Sq. Yds. of
Asphalt Surface.

STA. 418+20
36" x 62' C.M. PIPE W/F.E.S. LT.
D.A.=358Ac.,Q25=402.0cfs,
H.W.=3.87'
Remove & Build Twin
6' x 4' x 56' Concrete Box
Culvert w/Wingwalls
& Energy Dissipator Rt.
Special Plan _C.
Fill=3'. Exc.=410 Cu. Yds.

SEC. 5-T5N-R2W

Sta. 429+36 to
Sta. 430+21 Lt.
Remove 44 Sq. Yds. of
Asphalt Surface.

For Drainage Details not shown,
See Sheet R

410 415 420 425 430 435

HWY. N-74

HWY. N-74

Sta. 408+68
Begin Project
Begin Construction

Build 3-Way Intersection.
See Sheet G.

Sta. 416+32 to
Sta. 417+03 Rt.
Remove 212 Sq. Yds. of
Asphalt Surface.

APPROX. SEC. LINE

RD. 14

STA. 416+67 45' RT.
36" x 48' C.M. PIPE W/F.E.S.
Remove & Build 36" x 48'
Culvert Pipe
Type 2, 5, 7 or 8
w/Flared End Sections.
Plans 410 & 411.
See Sheet G.
Exc.= 68 Cu. Yds.

SEC. 7-T5N-R2W

SEC. 8-T5N-R2W

Sta. 429+26 Rt.
Surface Driveway.
See Sheet G.

STA. 429+29 38' RT.
18" x 36' C.M. DR. PIPE

STA. 429+99 39' RT.
18" x 52' C.M. DR. PIPE

Sta. 430+00 Rt.
Surface Driveway.
See Sheet G.

Sta. 430+60 Lt.
Surface Driveway.
See Sheet G.

Sta. 436+74 to
Sta. 437+27 Lt.
Remove 28 Sq. Yds. of
Asphalt Surface.

435 440 445 450 455 460 465

HWY. N-74

SEC. 5-T5N-R2W

STA. 455+89 39' LT.
24" x 32' C.M. DR. PIPE

STA. 457+22 39' LT.
24" x 30' C.M. DR. PIPE

Sta. 457+24 Lt.
Surface Driveway.
See Sheet G.

Sta. 457+34 to
Sta. 457+90 Lt.
Remove 19 Sq. Yds. of
Pavement.

Sta. 459+43 Lt.
Surface Driveway.
See Sheet G.

STA. 443+10 40' RT.
24" x 30' C.M. F.E. PIPE

SEC. 8-T5N-R2W

Sta. 455+07 to
Sta. 456+18
Remove 299 Sq. Yds. of
Asphalt Surface.

STA. 455+49 43' RT.
24" x 20' C.M. F.E. PIPE

STA. 455+62 (S074 07778)
QUADRUPLE 48" X 92' C.M PIPE
ON 44° SKEW W/HDWLS.
DA=143Ac.,Q25=234.9cfs,
HW=3.26'
Remove & Build Twin
8' x 3' x 92' Concrete Box
Culvert on 44° Skew
w/Wingwalls
Special Plan _C.
Fill= 2'. Exc.=649 Cu. Yds.

Sta. 459+92 to
Sta. 460+64.
Remove 195 Sq. Yds. of
Asphalt Surface.

STA. 460+28
TRIPLE 36" x 58' C.M. PIPE W/F.E.S.
DA=59Ac.,Q25=72.3cfs,
HW=2.60'
Remove & Build Triple
36" x 58' Culvert Pipe
Type 2, 5, 7 or 8
w/Flared End Sections
Plans 410 & 411.
Fill= 3'. Exc.=218 Cu. Yds.

L1

Project Number
74-5(112)

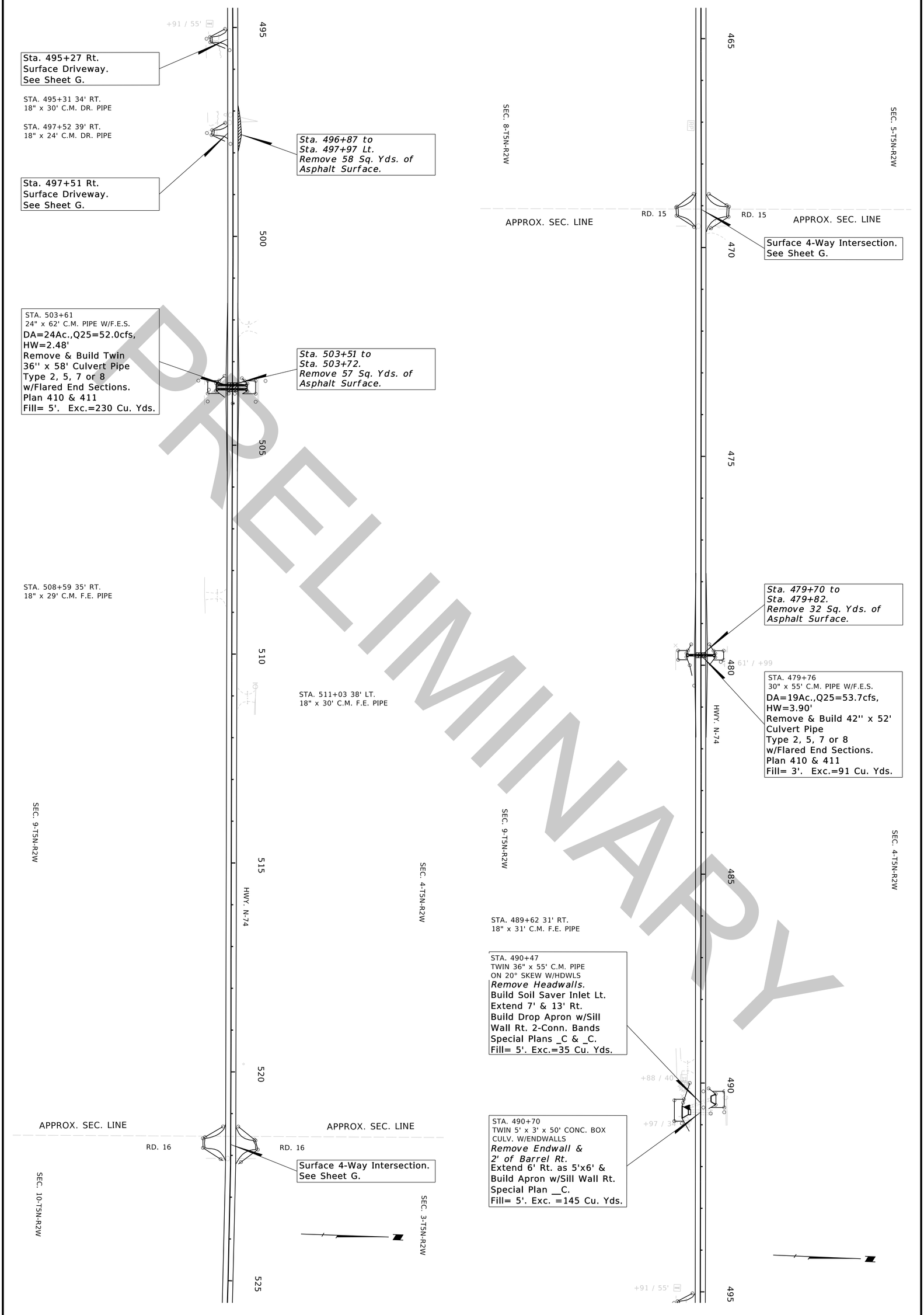
C.N. 42832

PLAN

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway
Design
Division

FILE: 42832 Sheets Construction.dgn DATE: 8-MAY-2024 08:12 COMPUTER: BG0419M674



PRELIMINARY

Roadway Design Division

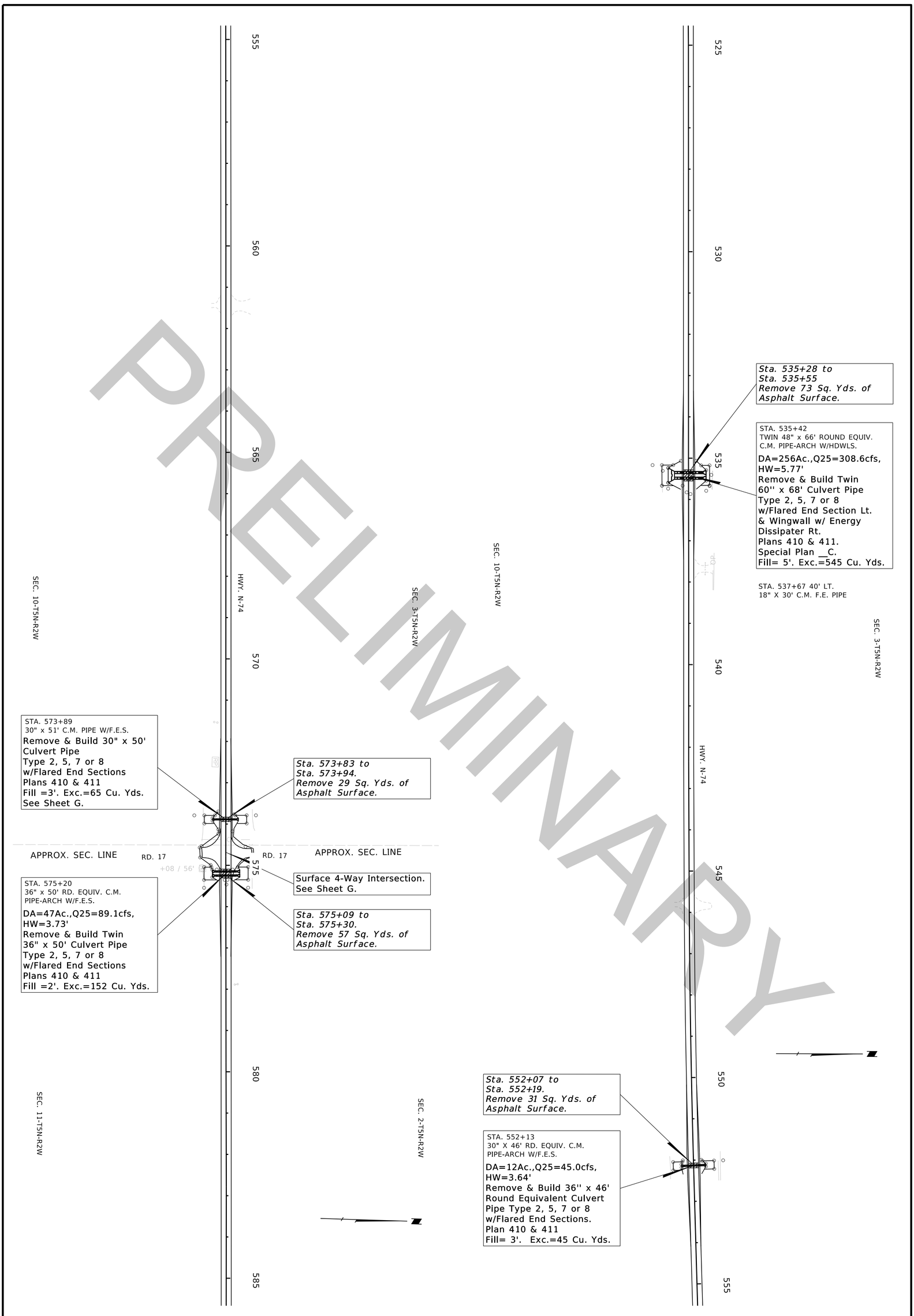
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

PLAN

C.N. 42832

Project Number 74-5(112)

L2



PRELIMINARY

Roadway Design Division

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

PLAN

Project Number 74-5(112)

C.N. 42832

L3

PRELIMINARY

SEC. 2-T5N-R2W

STA. 592+84 36' LT.
18" x 32' C.M. F.E. PIPE

Sta. 612+62 Lt.
Surface Driveway.
See Sheet G.

585 590 595 600 605 610 615

HWY. N-74

+15 / 59'

STA. 594+96 37' RT.
18" x 42' C.M. F.E. PIPE

STA. 599+37
36" x 50' RD. EQUIV. C.M. PIPE-ARCH W/F.E.S.
DA=25Ac.,Q25=55.4cfs,
HW=3.64'.
Remove & Build 42" x 50' Round Equivalent Culvert Pipe Type 2, 5, 7 or 8 w/Flared End Sections
Plans 410 & 411
Fill =2'. Exc.=75 Cu. Yds.

SEC. 11-T5N-R2W

Sta. 599+31 to
Sta. 599+44.
Remove 33 Sq. Yds. of Asphalt Surface.

STA. 614+16 38' RT.
18" x 42' C.M. F.E. PIPE

SEC. 2-T5N-R2W

Surface 4-Way Intersection.
See Sheet G.

APPROX. SEC. LINE RD. 18

STA. 627+42 40' LT.
24" x 42' C.M. PIPE W/F.E.S.

SEC. 1-T5N-R2W

STA. 638+62 35' LT.
18" x 30' C.M. F.E. PIPE

STA. 640+70 36' LT.
18" x 46' C.M. F.E. PIPE

615 620 625 630 635 640 645

HWY. N-74

APPROX. SEC. LINE RD. 18

STA. 628+58
36" x 51' RD. EQUIV. C.M. PIPE-ARCH W/F.E.S.
Remove & Build 36" x 50' Round Equivalent Culvert Pipe Type 2, 5, 7 or 8 w/Flared End Sections
Plans 410 & 411
Fill =3'. Exc.=59 Cu. Yds.
See Sheet G.

Sta. 628+52 to
Sta. 628+63.
Remove 30 Sq. Yds. of Asphalt Surface.

SEC. 11-T5N-R2W

SEC. 12-T5N-R2W

Sta. 561+68 Rt.
Surface Driveway.
See Sheet G.

STA. 639+58 37' RT.
18" x 30' C.M. DR. PIPE

STA. 640+44 36' RT.
18" x 30' C.M. DR. PIPE

Sta. 615+00 Rt.
Build Driveway.
See Sheet G.

FILE: 42832 Sheets Construction.dgn DATE: 8-MAY-2024 08:12 COMPUTER: BG0419M674

L4

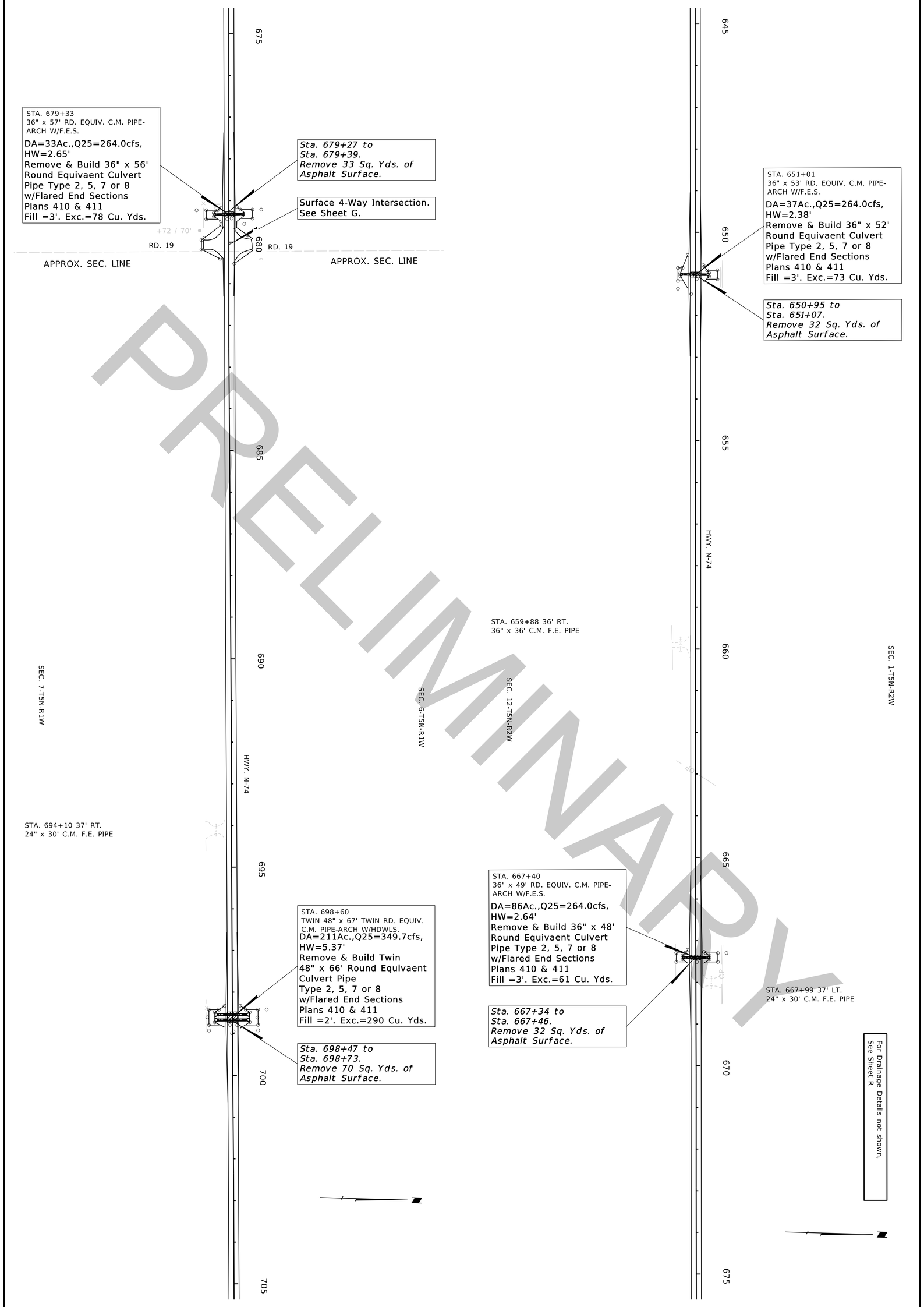
Project Number
74-5(112)

C.N. 42832

PLAN

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division



PRELIMINARY

Roadway Design Division

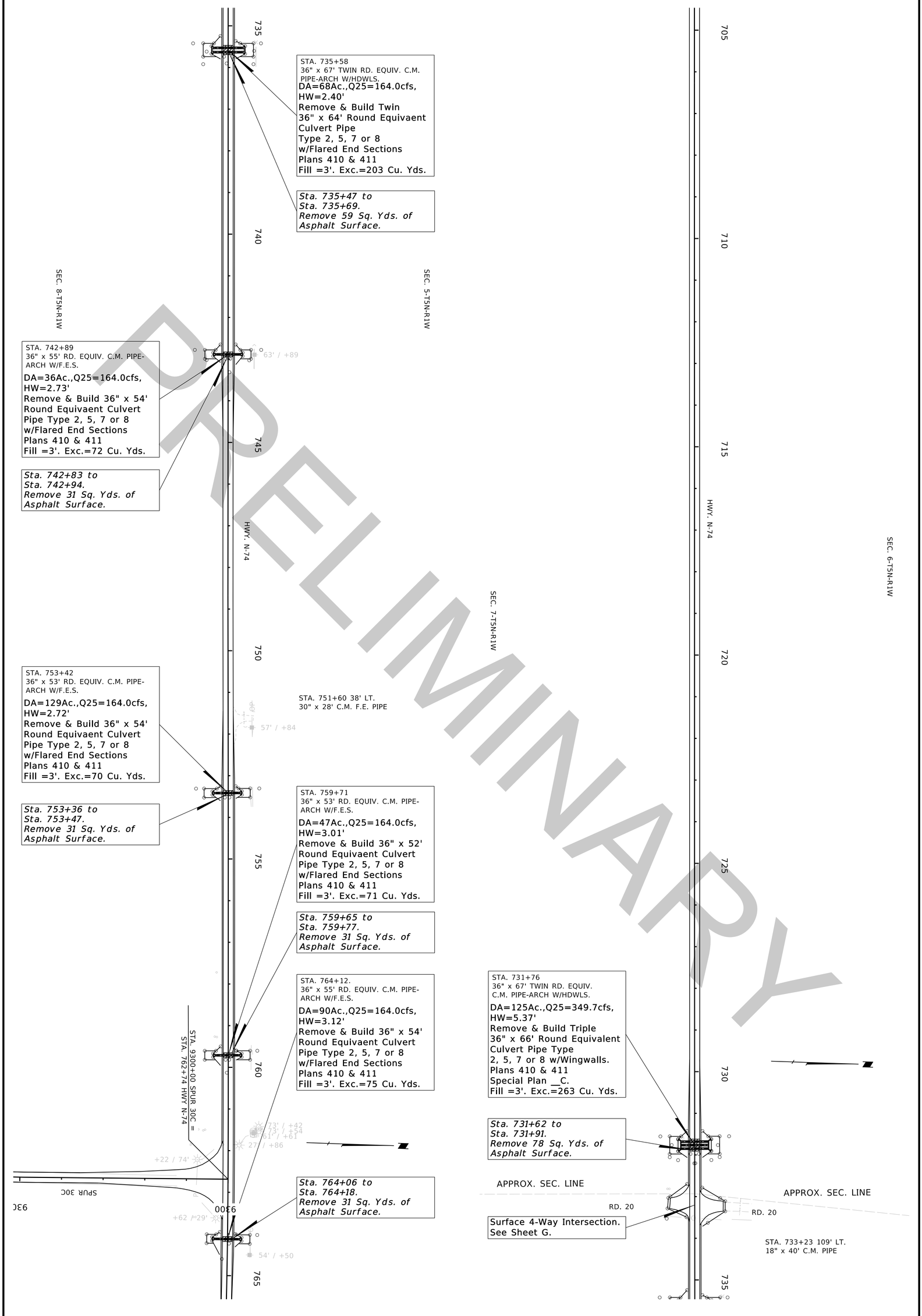
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

PLAN

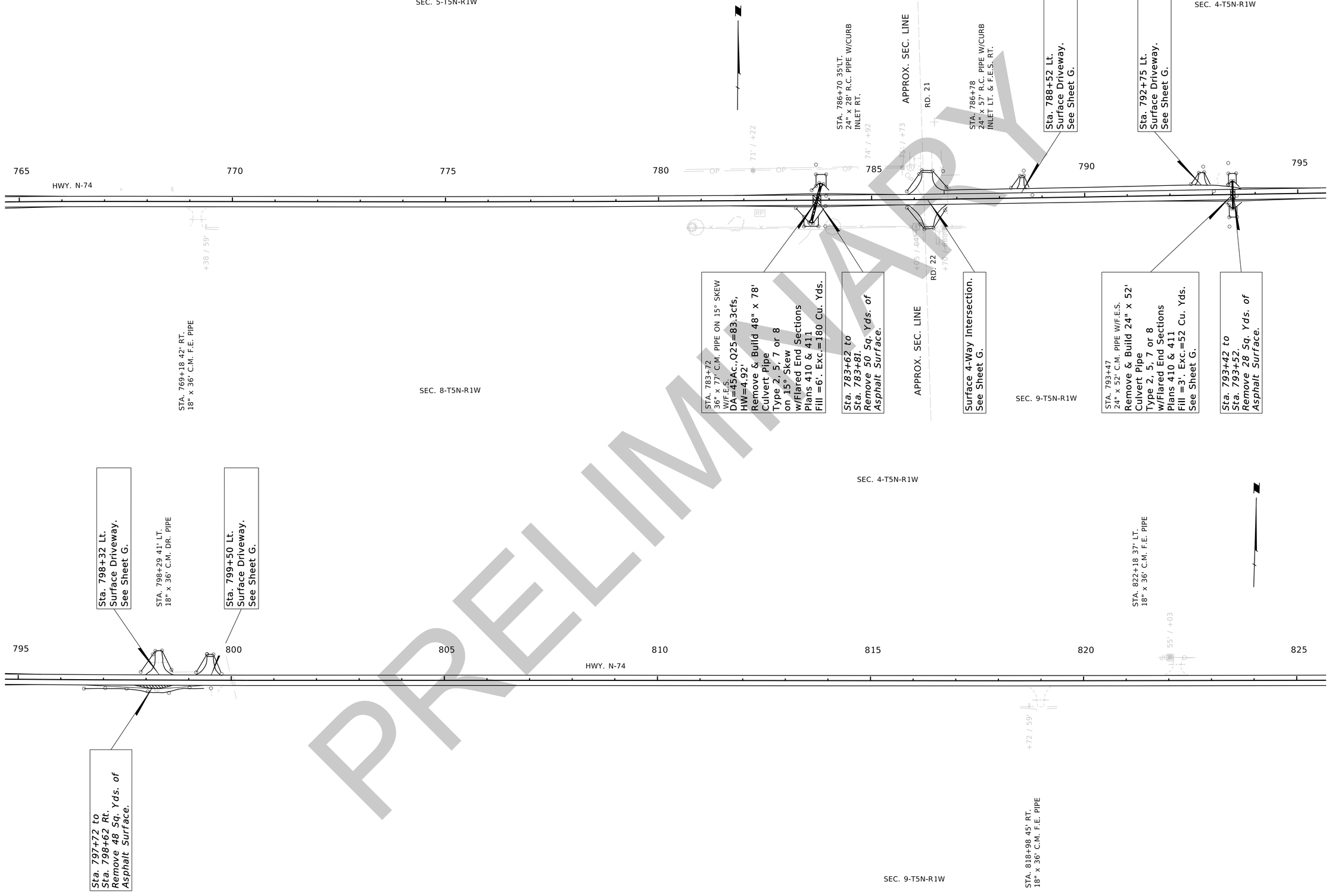
C.N. 42832

Project Number 74-5(112)

L5



PRELIMINARY



PRELIMINARY

L7

Project Number
74-5(112)

C.N. 42832

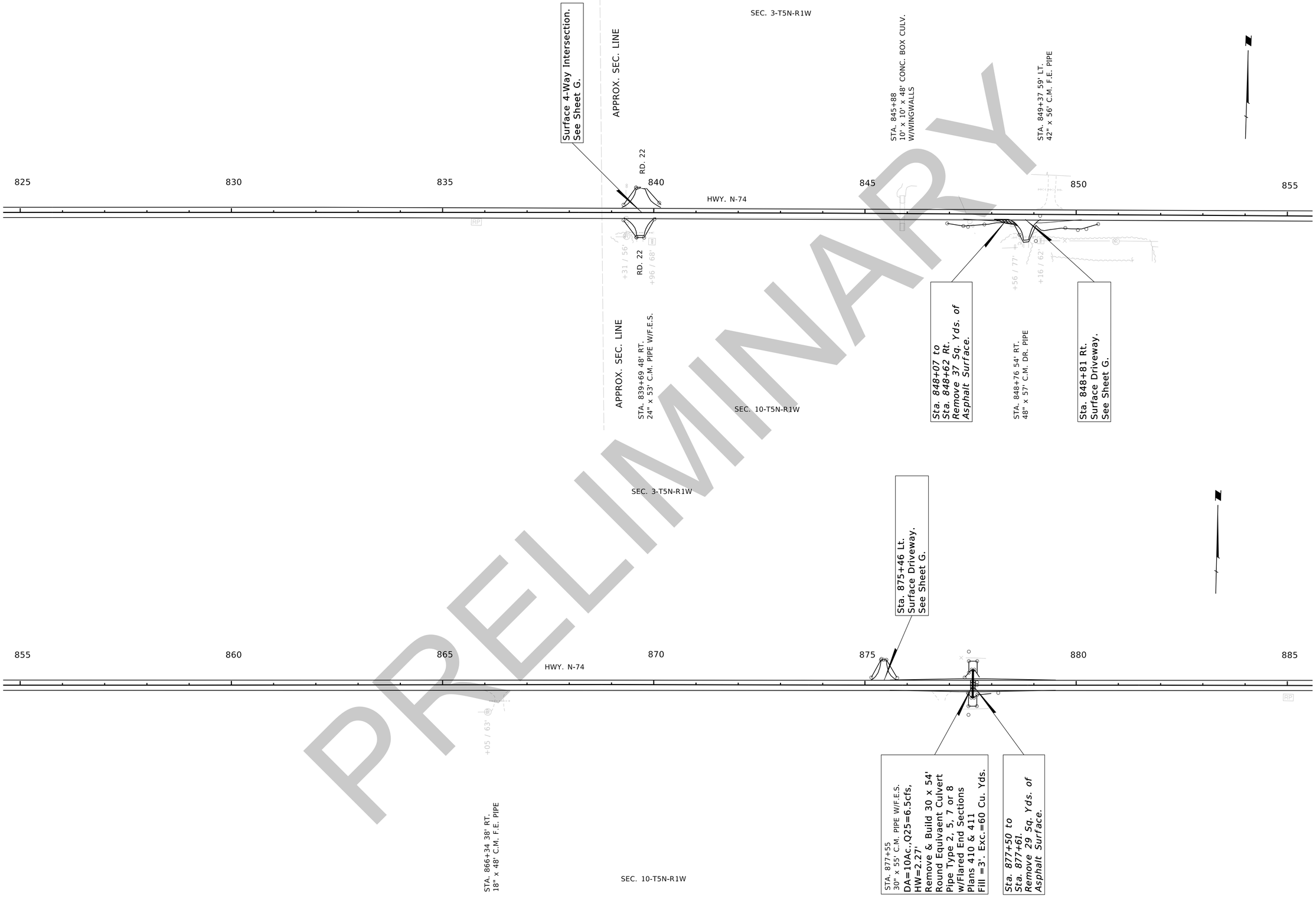
PLAN

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

FILE: 42832 Sheets Construction.dgn
DATE: 8-MAY-2024 08:12
COMPUTER: BG0419M674

PRELIMINARY



L8

Project Number
74-5(112)

C.N. 42832

PLAN

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway
Design
Division

FILE: 42832 Sheets Construction.dgn
DATE: 8-MAY-2024 08:12
COMPUTER: BG0419M674

PRELIMINARY

SEC. 3-T5N-R1W

STA. 891+12, 45' LT.
24" x 58' C.M. PIPE W/F.E.S.
Remove & Build 24" x 58'
Culvert Pipe
Type 2, 5, 7 or 8
w/Flared End Sections.
Plans 410 & 411.
See Sheet G.
Exc.= 46 Cu. Yds.

RD. 23

APPROX. SEC. LINE

Sta. 890+62 to
Sta. 891+55 Lt.
Remove 224 Sq. Yds. of
Asphalt Surface.

Build 4-Way Intersection.
See Sheet G.

885 890 895 900 905 910 915

HWY. N-74

Sta. 905+31 Lt.
Surface Driveway.
See Sheet G.

STA. 905+29 44' LT.
18" x 36' C.M. DR. PIPE

SEC. 2-T5N-R1W

For Drainage Details not shown,
See Sheet R

SEC. 10-T5N-R1W

STA. 891+14, 50' RT.
24" x 53' C.M. PIPE W/F.E.S.
Remove & Build 24" x 52'
Culvert Pipe
Type 2, 5, 7 or 8
w/Flared End Sections.
Plans 410 & 411.
See Sheet G.
Exc.= 38 Cu. Yds.

RD. 23

APPROX. SEC. LINE

Sta. 890+66 to
Sta. 891+57 Rt.
Remove 228 Sq. Yds. of
Asphalt Surface.

Sta. 904+56 to
Sta. 905+72 Rt.
Remove 46 Sq. Yds. of
Asphalt Surface.

STA. 905+33 38' RT.
18" x 36' C.M. F.E. PIPE

SEC. 11-T5N-R1W

SEC. 2-T5N-R1W

Sta. 931+09 Lt.
Surface Driveway.
See Sheet G.

Sta. 932+54, 65' Lt.
Build 126 Tons Rock Riprap,
Type B, See Sheet G.

STA. 932+54
54" x 119' C.M. PIPE W/F.E.S.
Remove Flared End
Sections & 5' of Pipe Lt.
& 1' of Pipe Rt.
Sandfill 67 Cu. Yds.
Exc.=11 Cu. Yds.

Sta. 932+64
D.A.=352Ac.,Q25=324.4cfs,
H.W.=9.17'
Build 72" x 108' Culvert
Pipe Type 2 (Includes 64'
Jacked Culvert Pipe Type 2
Class IV) w/ Concrete
Flared End Sections.
Plans 410 & 411.
Fill=13'.
Exc.=1048 Cu. Yds.

STA. 942+30
42" x 117' C.M. PIPE ON 30° SKEW
W/HDWLS.

915 920 925 930 935 940 945

HWY. N-74

RD. 24

APPROX. SEC. LINE

STA. 921+14
48" x 102' C.M. PIPE ON 30° SKEW
W/F.E.S.
Remove Flared End
Section Rt.
Build Headwall
w/ Energy Dissipater Rt.
Special Plan __C.
Fill =9'. Exc.=27 Cu. Yds.

Sta. 928+59 Rt.
Surface Driveway.
See Sheet G.

Sta. 931+00 to
Sta. 931+72 Rt.
Remove 51 Sq. Yds. of
Asphalt Surface.

SEC. 11-T5N-R1W

Sta. 942+79
End Project
End Construction

RD. 24

APPROX. SEC. LINE

L9

Project Number
74-5(112)

C.N. 42832

PLAN

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway
Design
Division

FILE: 42832 Sheets Construction.dgn DATE: 8-MAY-2024 08:12 COMPUTER: BG04191M674

SEC. 7-T5N-R2W

STA. 9+25 24' LT.
18" x 31' C.M. F.E. PIPE

HWY. N-74

0 5 10 15

SPUR 30D

Sta. 4+87
Resume Construction

Sta. 16+49
Stop Construction

STA. 9+26 27' RT.
24" x 34' C.M. F.E. PIPE

SEC. 7-T5N-R2W

SEC. 8-T5N-R1W

HWY. N-74

765

STA. 9300+00 SPUR 30C =
STA. 762+74 HWY N-74

9300 9305 9310 9315

SPUR 30C

STA. 9310+35 38' LT.
24" x 47' C.M. PIPE W/F.E.S.

STA. 9313+25
TWIN 8' x 4' x 44' CONC. BOX
CULV. W/WINGWALLS
Use in Place.

Sta. 9315+40 Lt.
Surface Driveway.
See Sheet G.

STA. 9315+41 36' LT.
18" x 32' C.M. DR. PIPE

Sta. 9317+23 Lt.
Surface Driveway.
See Sheet G.

Sta. 9300+12
Resume Construction

Sta. 9317+88
Stop Construction

760

STA. 9315+41 34' RT.
18" x 30' C.M. F.E. PIPE

SEC. 8-T5N-R1W

PRELIMINARY

L10

Project Number
74-5(112)

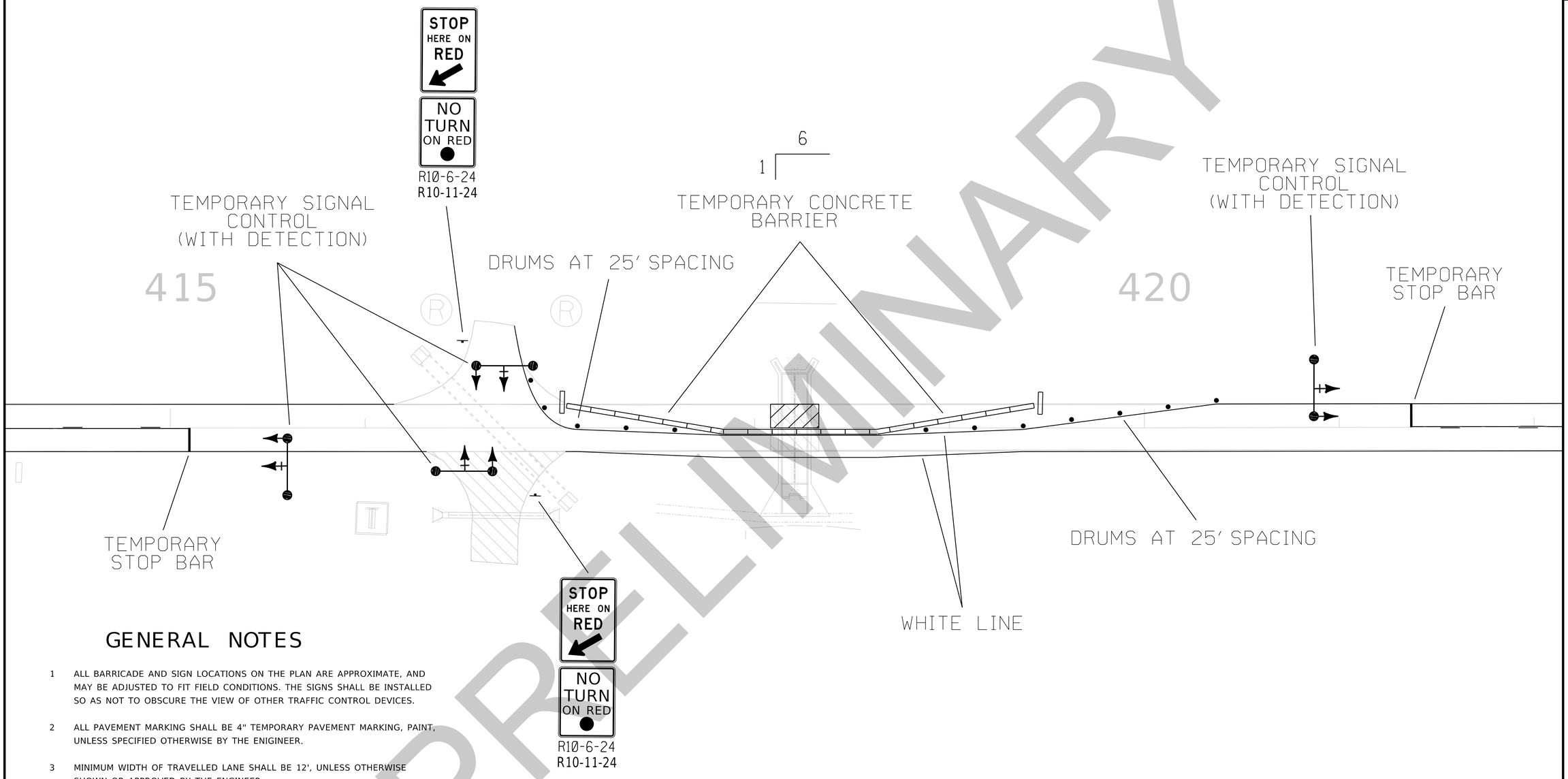
C.N. 42832

PLAN

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway
Design
Division

FILE: 42832 Sheets Construction.dgn
DATE: 8-MAY-2024 08:12
COMPUTER: BG0419M674



PRELIMINARY

GENERAL NOTES

1 ALL BARRICADE AND SIGN LOCATIONS ON THE PLAN ARE APPROXIMATE, AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS. THE SIGNS SHALL BE INSTALLED SO AS NOT TO OBSCURE THE VIEW OF OTHER TRAFFIC CONTROL DEVICES.

2 ALL PAVEMENT MARKING SHALL BE 4" TEMPORARY PAVEMENT MARKING, PAINT, UNLESS SPECIFIED OTHERWISE BY THE ENGINEER.

3 MINIMUM WIDTH OF TRAVELLED LANE SHALL BE 12', UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER.

4 ALL TEMPORARY AND/OR PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED WITH SMOOTH AND GRADUAL TRANSITIONS AND ALIGNMENTS. WHEN NECESSARY THE CONTRACTOR SHALL PREMARK THE PAVEMENT PRIOR TO PLACING THE MARKINGS.

5 NEW PAVEMENT MARKING SHALL BE ALIGNED WITH EXISTING PAVEMENT MARKING WHERE NECESSARY.

6 SEE SHEET "TYPICAL TRAFFIC SIGNAL CONTROL PLAN: ONE LANE, TWO-WAY OPERATION WITH BARRIERS" FOR DETAILS NOT SHOWN.

TYPE III BARRICADE
BUILD BRIDGE
COMPLETED BRIDGE
REFLECTIVE PLASTIC DRUM

M1

Project Number
74-5(112)

C.N. 42832

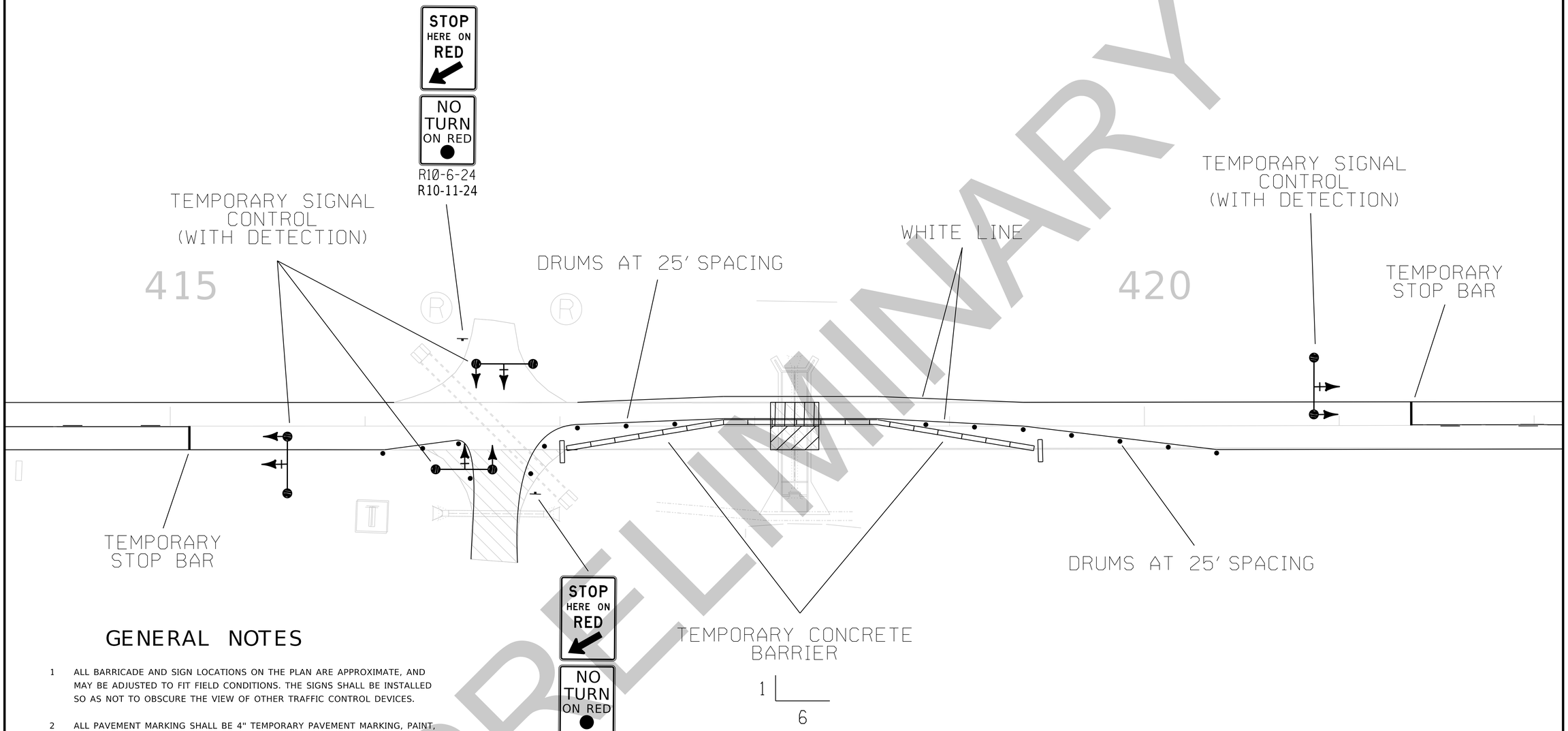
TRAFFIC CONTROL PLAN
CULVERT @ STA 418+20
PHASE 2

DESIGNED BY AJM DATE 03/24

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 1/2

COMPUTER: BG04194687
DATE: 5-MAR-2024 14:25
FILE: w42832.dgn



PRELIMINARY

GENERAL NOTES

1 ALL BARRICADE AND SIGN LOCATIONS ON THE PLAN ARE APPROXIMATE, AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS. THE SIGNS SHALL BE INSTALLED SO AS NOT TO OBSCURE THE VIEW OF OTHER TRAFFIC CONTROL DEVICES.

2 ALL PAVEMENT MARKING SHALL BE 4" TEMPORARY PAVEMENT MARKING, PAINT, UNLESS SPECIFIED OTHERWISE BY THE ENIGINEER.

3 MINIMUM WIDTH OF TRAVELLED LANE SHALL BE 12', UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER.

4 ALL TEMPORARY AND/OR PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED WITH SMOOTH AND GRADUAL TRANSITIONS AND ALIGNMENTS. WHEN NECESSARY THE CONTRACTOR SHALL PREMARK THE PAVEMENT PRIOR TO PLACING THE MARKINGS.

5 NEW PAVEMENT MARKING SHALL BE ALIGNED WITH EXISTING PAVEMENT MARKING WHERE NECESSARY.

6 SEE SHEET "TYPICAL TRAFFIC SIGNAL CONTROL PLAN: ONE LANE, TWO-WAY OPERATION WITH BARRIERS" FOR DETAILS NOT SHOWN.

TYPE III BARRICADE
BUILD BRIDGE
COMPLETED BRIDGE
REFLECTIVE PLASTIC DRUM

M2

Project Number
74-5(112)

C.N. 42832

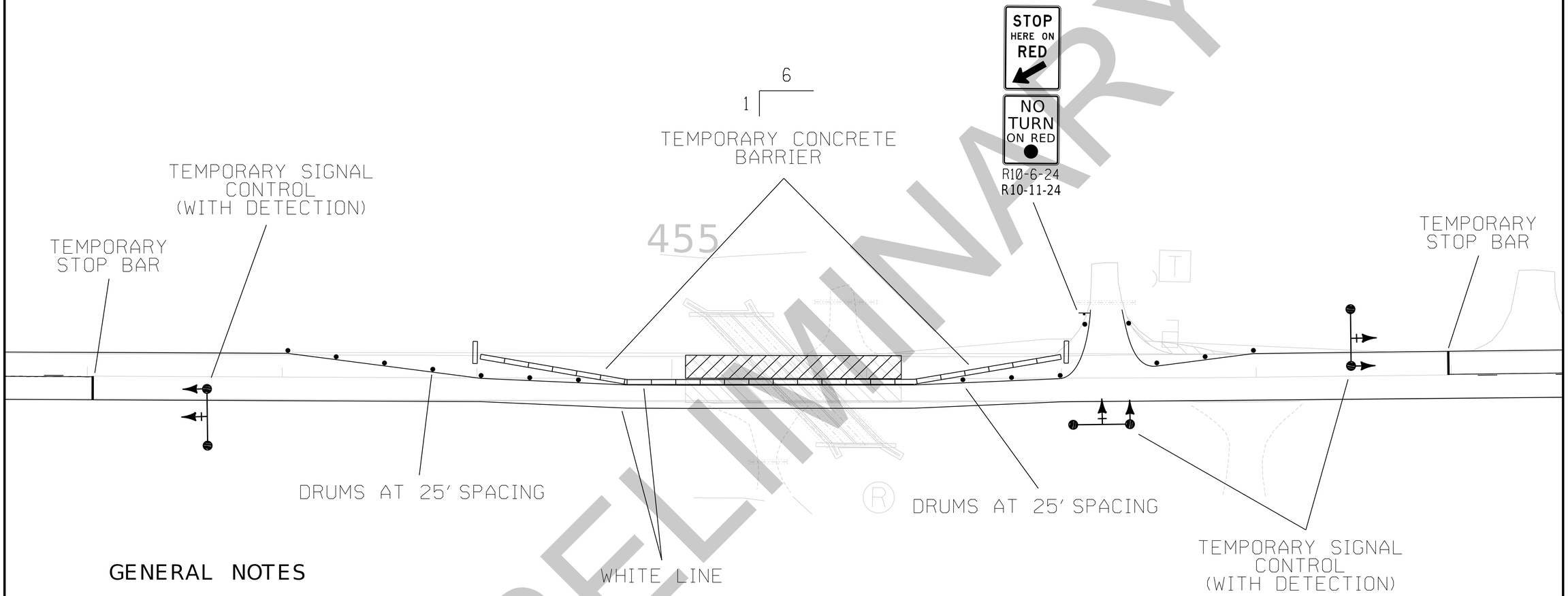
TRAFFIC CONTROL PLAN
CULVERT @ STA 418+20
PHASE 4

DESIGNED BY AJM
DATE 03/24

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 2/2

COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:25
FILE: w42832.dgn



PRELIMINARY

GENERAL NOTES

1 ALL BARRICADE AND SIGN LOCATIONS ON THE PLAN ARE APPROXIMATE, AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS. THE SIGNS SHALL BE INSTALLED SO AS NOT TO OBSCURE THE VIEW OF OTHER TRAFFIC CONTROL DEVICES.

2 ALL PAVEMENT MARKING SHALL BE 4" TEMPORARY PAVEMENT MARKING, PAINT, UNLESS SPECIFIED OTHERWISE BY THE ENIGINEER.

3 MINIMUM WIDTH OF TRAVELLED LANE SHALL BE 12', UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER.

4 ALL TEMPORARY AND/OR PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED WITH SMOOTH AND GRADUAL TRANSITIONS AND ALIGNMENTS. WHEN NECESSARY THE CONTRACTOR SHALL PREMARK THE PAVEMENT PRIOR TO PLACING THE MARKINGS.

5 NEW PAVEMENT MARKING SHALL BE ALIGNED WITH EXISTING PAVEMENT MARKING WHERE NECESSARY.

6 SEE SHEET "TYPICAL TRAFFIC SIGNAL CONTROL PLAN: ONE LANE, TWO-WAY OPERATION WITH BARRIERS" FOR DETAILS NOT SHOWN.

TYPE III BARRICADE
BUILD BRIDGE
COMPLETED BRIDGE
REFLECTIVE PLASTIC DRUM

M3

Project Number
74-5(112)

C.N. 42832

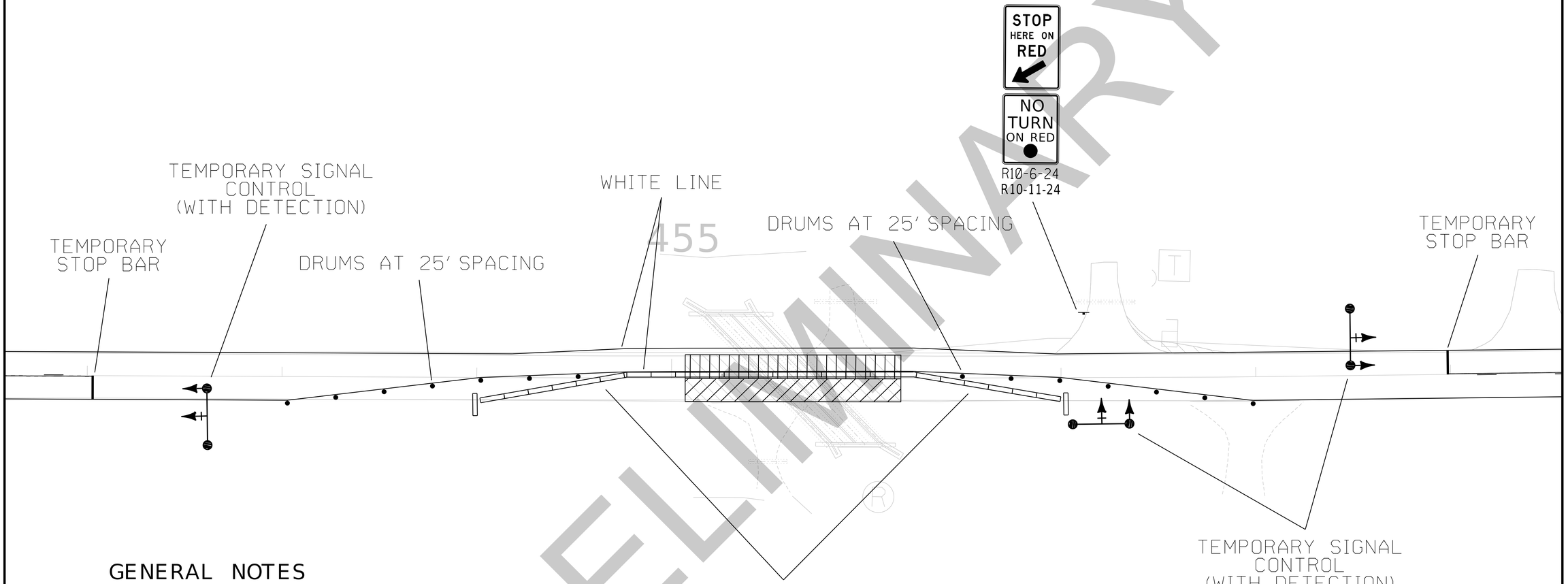
TRAFFIC CONTROL PLAN
CULVERT @ STA 455+62
PHASE 2

DESIGNED BY AJM
DATE 03/24

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 1/2

COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:25
FILE: w42832.dgn



PRELIMINARY

GENERAL NOTES

1 ALL BARRICADE AND SIGN LOCATIONS ON THE PLAN ARE APPROXIMATE, AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS. THE SIGNS SHALL BE INSTALLED SO AS NOT TO OBSCURE THE VIEW OF OTHER TRAFFIC CONTROL DEVICES.

2 ALL PAVEMENT MARKING SHALL BE 4" TEMPORARY PAVEMENT MARKING, PAINT, UNLESS SPECIFIED OTHERWISE BY THE ENGINEER.

3 MINIMUM WIDTH OF TRAVELLED LANE SHALL BE 12', UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER.

4 ALL TEMPORARY AND/OR PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED WITH SMOOTH AND GRADUAL TRANSITIONS AND ALIGNMENTS. WHEN NECESSARY THE CONTRACTOR SHALL PREMARK THE PAVEMENT PRIOR TO PLACING THE MARKINGS.

5 NEW PAVEMENT MARKING SHALL BE ALIGNED WITH EXISTING PAVEMENT MARKING WHERE NECESSARY.

6 SEE SHEET "TYPICAL TRAFFIC SIGNAL CONTROL PLAN: ONE LANE, TWO-WAY OPERATION WITH BARRIERS" FOR DETAILS NOT SHOWN.

TYPE III BARRICADE
BUILD BRIDGE
COMPLETED BRIDGE
REFLECTIVE PLASTIC DRUM

COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:25
FILE: w42832.dgn

M4

Project Number
74-5(112)

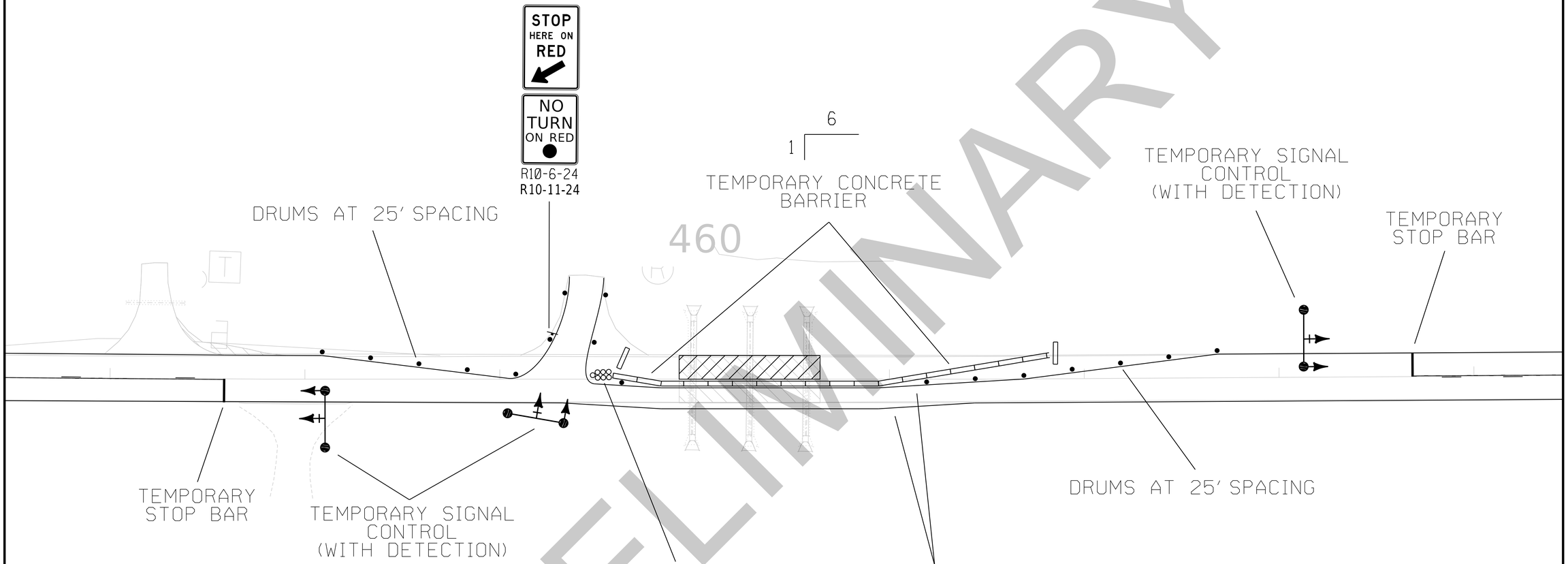
C.N. 42832

TRAFFIC CONTROL PLAN
CULVERT @ STA 455+62
PHASE 4

DESIGNED BY AJM
DATE 03/24

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 2/2



PRELIMINARY

GENERAL NOTES

1 ALL BARRICADE AND SIGN LOCATIONS ON THE PLAN ARE APPROXIMATE, AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS. THE SIGNS SHALL BE INSTALLED SO AS NOT TO OBSCURE THE VIEW OF OTHER TRAFFIC CONTROL DEVICES.

2 ALL PAVEMENT MARKING SHALL BE 4" TEMPORARY PAVEMENT MARKING, PAINT, UNLESS SPECIFIED OTHERWISE BY THE ENIGINEER.

3 MINIMUM WIDTH OF TRAVELLED LANE SHALL BE 12', UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER.

4 ALL TEMPORARY AND/OR PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED WITH SMOOTH AND GRADUAL TRANSITIONS AND ALIGNMENTS. WHEN NECESSARY THE CONTRACTOR SHALL PREMARK THE PAVEMENT PRIOR TO PLACING THE MARKINGS.

5 NEW PAVEMENT MARKING SHALL BE ALIGNED WITH EXISTING PAVEMENT MARKING WHERE NECESSARY.

6 SEE SHEET "TYPICAL TRAFFIC SIGNAL CONTROL PLAN: ONE LANE, TWO-WAY OPERATION WITH BARRIERS" FOR DETAILS NOT SHOWN.

TYPE III BARRICADE
BUILD BRIDGE
COMPLETED BRIDGE
REFLECTIVE PLASTIC DRUM

M5

Project Number
74-5(112)

C.N. 42832

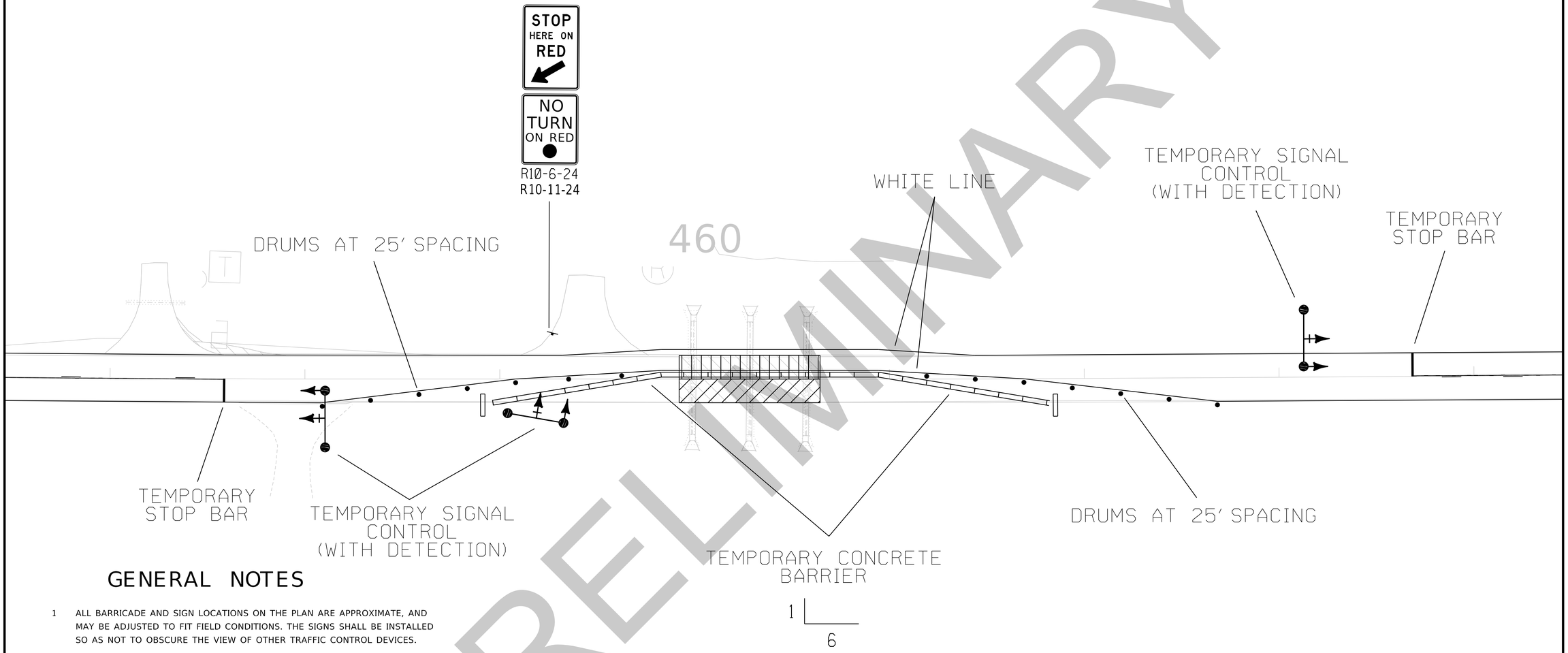
TRAFFIC CONTROL PLAN
CULVERT @ STA 460+28
PHASE 2

DESIGNED BY AJM
DATE 03/24

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 1/2

COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:25
FILE: w42832.dgn



PRELIMINARY

GENERAL NOTES

1 ALL BARRICADE AND SIGN LOCATIONS ON THE PLAN ARE APPROXIMATE, AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS. THE SIGNS SHALL BE INSTALLED SO AS NOT TO OBSCURE THE VIEW OF OTHER TRAFFIC CONTROL DEVICES.

2 ALL PAVEMENT MARKING SHALL BE 4" TEMPORARY PAVEMENT MARKING, PAINT, UNLESS SPECIFIED OTHERWISE BY THE ENIGINEER.

3 MINIMUM WIDTH OF TRAVELLED LANE SHALL BE 12', UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER.

4 ALL TEMPORARY AND/OR PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED WITH SMOOTH AND GRADUAL TRANSITIONS AND ALIGNMENTS. WHEN NECESSARY THE CONTRACTOR SHALL PREMARK THE PAVEMENT PRIOR TO PLACING THE MARKINGS.

5 NEW PAVEMENT MARKING SHALL BE ALIGNED WITH EXISTING PAVEMENT MARKING WHERE NECESSARY.

6 SEE SHEET "TYPICAL TRAFFIC SIGNAL CONTROL PLAN: ONE LANE, TWO-WAY OPERATION WITH BARRIERS" FOR DETAILS NOT SHOWN.

TYPE III BARRICADE
BUILD BRIDGE
COMPLETED BRIDGE
REFLECTIVE PLASTIC DRUM

M6

Project Number
74-5(112)

C.N. 42832

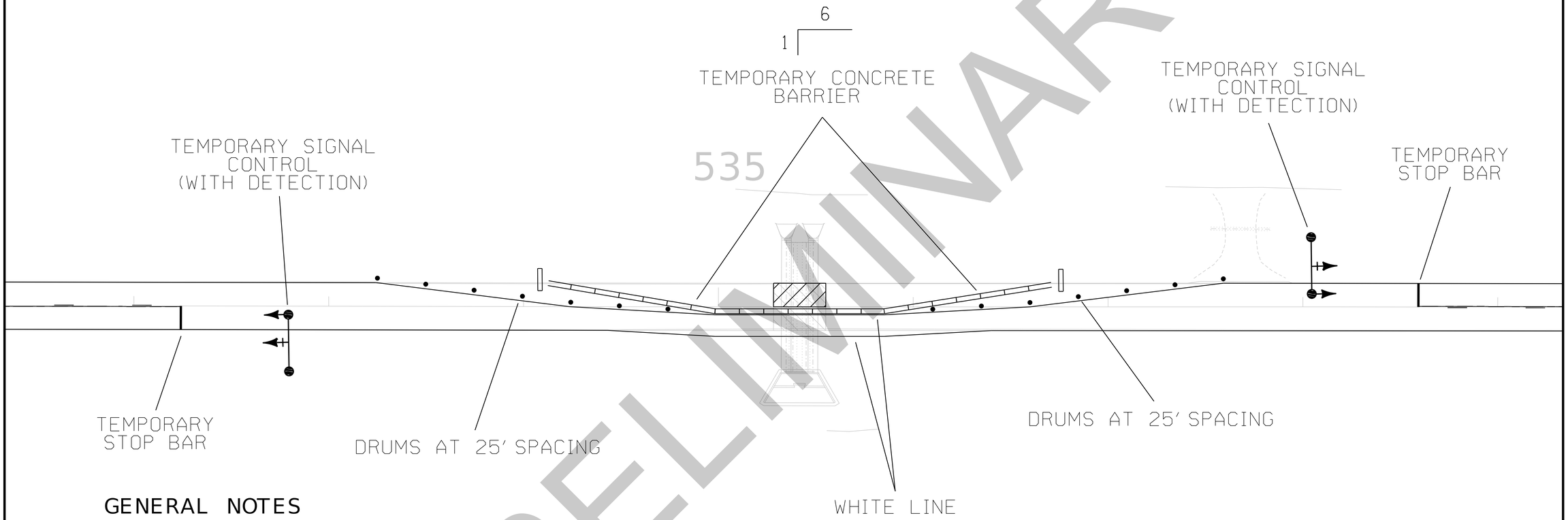
TRAFFIC CONTROL PLAN
CULVERT @ STA 460+28
PHASE 4

DESIGNED BY AJM
DATE 03/24

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 2/2

COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:25
FILE: w42832.dgn



PRELIMINARY

GENERAL NOTES

1 ALL BARRICADE AND SIGN LOCATIONS ON THE PLAN ARE APPROXIMATE, AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS. THE SIGNS SHALL BE INSTALLED SO AS NOT TO OBSCURE THE VIEW OF OTHER TRAFFIC CONTROL DEVICES.

2 ALL PAVEMENT MARKING SHALL BE 4" TEMPORARY PAVEMENT MARKING, PAINT, UNLESS SPECIFIED OTHERWISE BY THE ENIGINEER.

3 MINIMUM WIDTH OF TRAVELLED LANE SHALL BE 12', UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER.

4 ALL TEMPORARY AND/OR PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED WITH SMOOTH AND GRADUAL TRANSITIONS AND ALIGNMENTS. WHEN NECESSARY THE CONTRACTOR SHALL PREMARK THE PAVEMENT PRIOR TO PLACING THE MARKINGS.

5 NEW PAVEMENT MARKING SHALL BE ALIGNED WITH EXISTING PAVEMENT MARKING WHERE NECESSARY.

6 SEE SHEET "TYPICAL TRAFFIC SIGNAL CONTROL PLAN: ONE LANE, TWO-WAY OPERATION WITH BARRIERS" FOR DETAILS NOT SHOWN.

TYPE III BARRICADE
BUILD BRIDGE
COMPLETED BRIDGE
REFLECTIVE PLASTIC DRUM

COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:25
FILE: w42832.dgn

M7

Project Number
74-5(112)

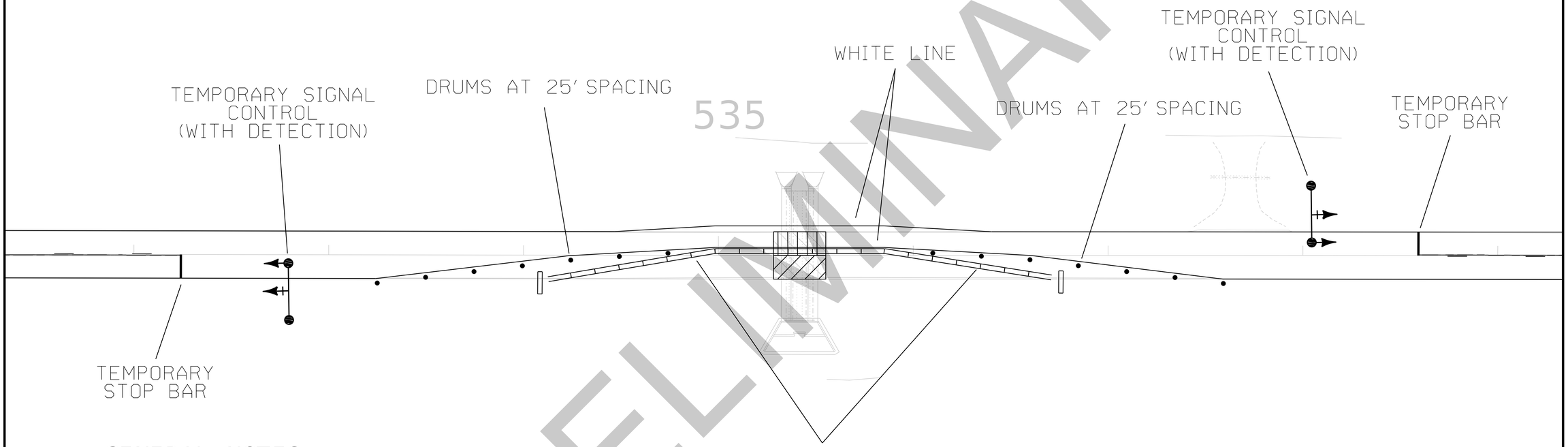
C.N. 42832

TRAFFIC CONTROL PLAN
CULVERT @ STA 535+42
PHASE 2

DESIGNED BY AJM
DATE 03/24

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 1/2



PRELIMINARY

GENERAL NOTES

1 ALL BARRICADE AND SIGN LOCATIONS ON THE PLAN ARE APPROXIMATE, AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS. THE SIGNS SHALL BE INSTALLED SO AS NOT TO OBSCURE THE VIEW OF OTHER TRAFFIC CONTROL DEVICES.

2 ALL PAVEMENT MARKING SHALL BE 4" TEMPORARY PAVEMENT MARKING, PAINT, UNLESS SPECIFIED OTHERWISE BY THE ENIGINEER.

3 MINIMUM WIDTH OF TRAVELLED LANE SHALL BE 12', UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER.

4 ALL TEMPORARY AND/OR PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED WITH SMOOTH AND GRADUAL TRANSITIONS AND ALIGNMENTS. WHEN NECESSARY THE CONTRACTOR SHALL PREMARK THE PAVEMENT PRIOR TO PLACING THE MARKINGS.

5 NEW PAVEMENT MARKING SHALL BE ALIGNED WITH EXISTING PAVEMENT MARKING WHERE NECESSARY.

6 SEE SHEET "TYPICAL TRAFFIC SIGNAL CONTROL PLAN: ONE LANE, TWO-WAY OPERATION WITH BARRIERS" FOR DETAILS NOT SHOWN.

TYPE III BARRICADE
BUILD BRIDGE
COMPLETED BRIDGE
REFLECTIVE PLASTIC DRUM

M8

Project Number
74-5(112)

C.N. 42832

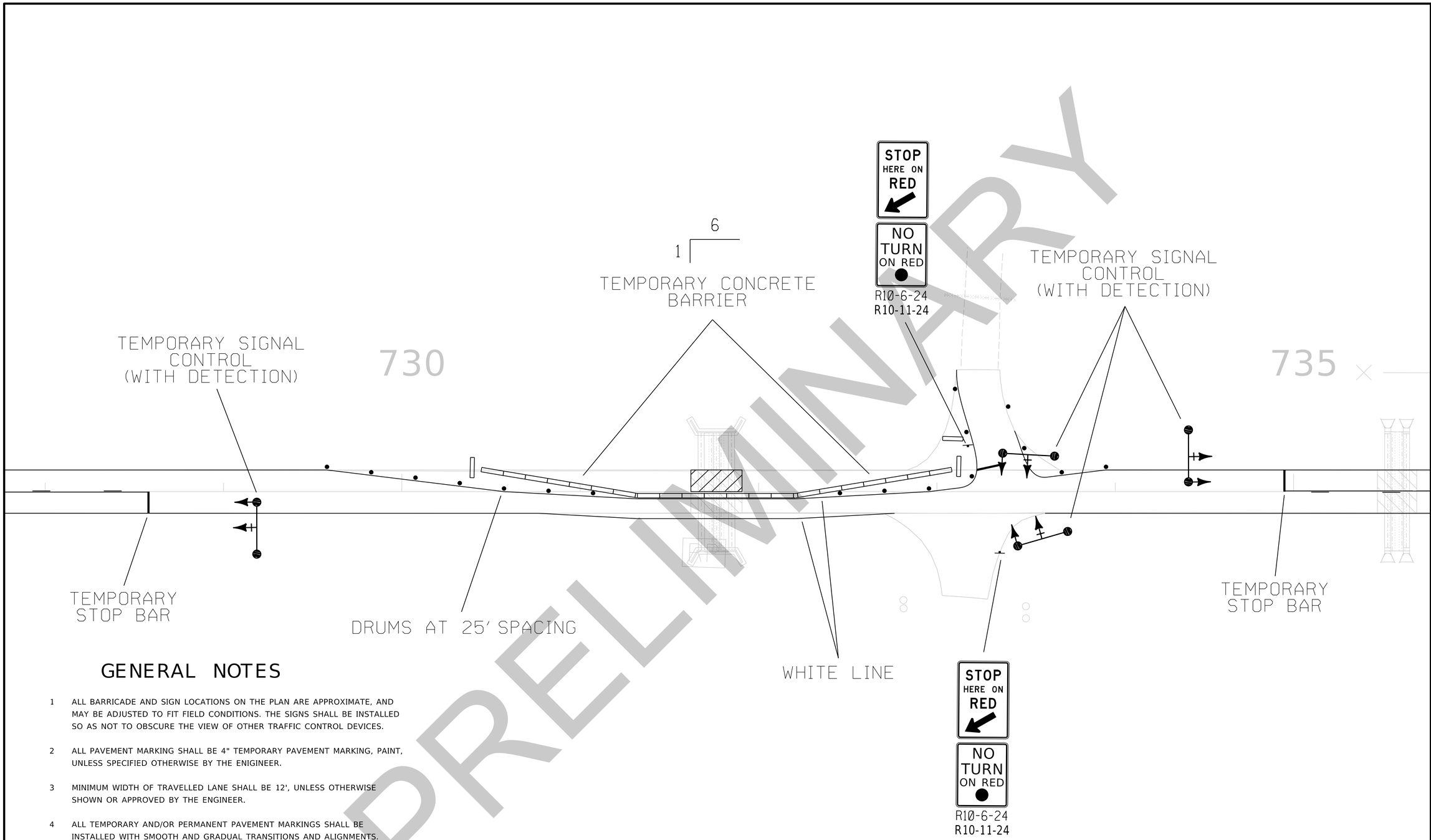
TRAFFIC CONTROL PLAN
CULVERT @ STA 535+42
PHASE 4

DESIGNED BY AJM
DATE 03/24

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 2/2

COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:25
FILE: w42832.dgn



PRELIMINARY

GENERAL NOTES

1 ALL BARRICADE AND SIGN LOCATIONS ON THE PLAN ARE APPROXIMATE, AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS. THE SIGNS SHALL BE INSTALLED SO AS NOT TO OBSCURE THE VIEW OF OTHER TRAFFIC CONTROL DEVICES.

2 ALL PAVEMENT MARKING SHALL BE 4" TEMPORARY PAVEMENT MARKING, PAINT, UNLESS SPECIFIED OTHERWISE BY THE ENIGINEER.

3 MINIMUM WIDTH OF TRAVELLED LANE SHALL BE 12', UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER.

4 ALL TEMPORARY AND/OR PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED WITH SMOOTH AND GRADUAL TRANSITIONS AND ALIGNMENTS. WHEN NECESSARY THE CONTRACTOR SHALL PREMARK THE PAVEMENT PRIOR TO PLACING THE MARKINGS.

5 NEW PAVEMENT MARKING SHALL BE ALIGNED WITH EXISTING PAVEMENT MARKING WHERE NECESSARY.

6 SEE SHEET "TYPICAL TRAFFIC SIGNAL CONTROL PLAN: ONE LANE, TWO-WAY OPERATION WITH BARRIERS" FOR DETAILS NOT SHOWN.

TYPE III BARRICADE
BUILD BRIDGE
COMPLETED BRIDGE
REFLECTIVE PLASTIC DRUM

M9

Project Number
74-5(112)

C.N. 42832

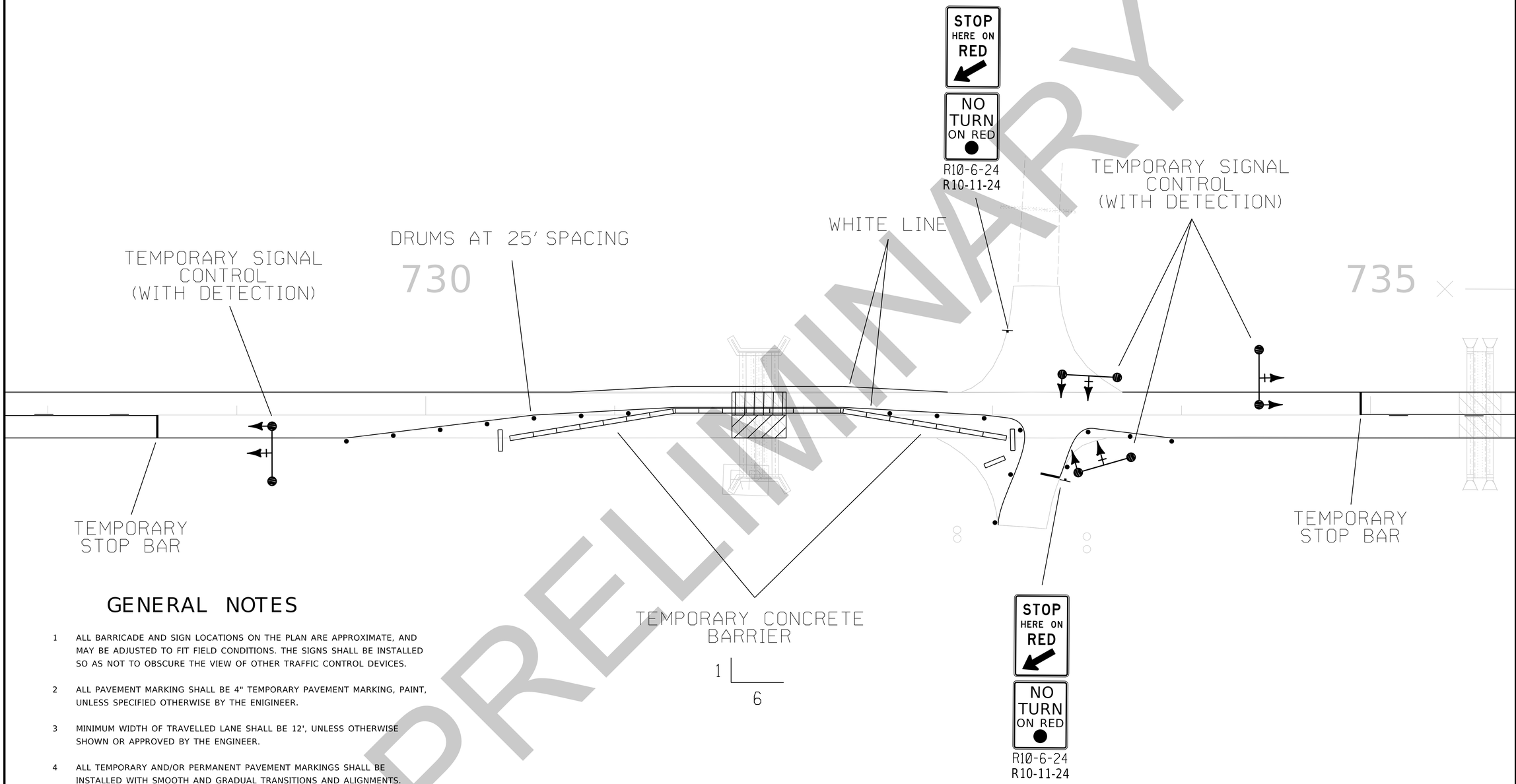
TRAFFIC CONTROL PLAN
CULVERT @ STA 731+76
PHASE 2

DESIGNED BY AJM
DATE 03/24

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 1/2

COMPUTER: BG04190687
DATE: 5-MAR-2024 14:25
FILE: w42832.dgn



GENERAL NOTES

1 ALL BARRICADE AND SIGN LOCATIONS ON THE PLAN ARE APPROXIMATE, AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS. THE SIGNS SHALL BE INSTALLED SO AS NOT TO OBSCURE THE VIEW OF OTHER TRAFFIC CONTROL DEVICES.

2 ALL PAVEMENT MARKING SHALL BE 4" TEMPORARY PAVEMENT MARKING, PAINT, UNLESS SPECIFIED OTHERWISE BY THE ENIGINEER.

3 MINIMUM WIDTH OF TRAVELLED LANE SHALL BE 12', UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER.

4 ALL TEMPORARY AND/OR PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED WITH SMOOTH AND GRADUAL TRANSITIONS AND ALIGNMENTS. WHEN NECESSARY THE CONTRACTOR SHALL PREMARK THE PAVEMENT PRIOR TO PLACING THE MARKINGS.

5 NEW PAVEMENT MARKING SHALL BE ALIGNED WITH EXISTING PAVEMENT MARKING WHERE NECESSARY.

6 SEE SHEET "TYPICAL TRAFFIC SIGNAL CONTROL PLAN: ONE LANE, TWO-WAY OPERATION WITH BARRIERS" FOR DETAILS NOT SHOWN.

TYPE III BARRICADE
BUILD BRIDGE
COMPLETED BRIDGE
REFLECTIVE PLASTIC DRUM

PRELIMINARY

M10

Project Number
74-5(112)

C.N. 42832

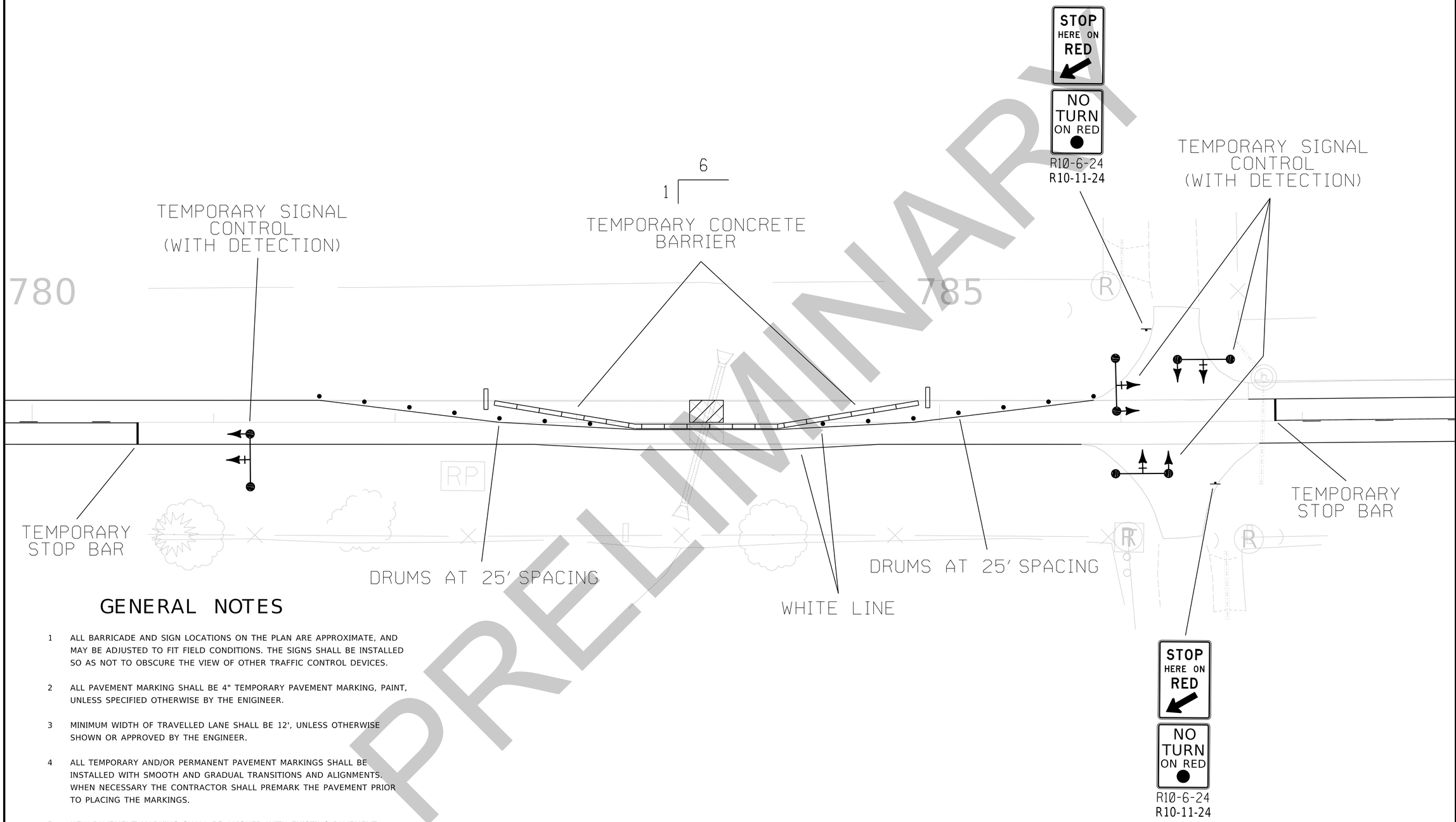
TRAFFIC CONTROL PLAN
CULVERT @ STA 731+76
PHASE 4

DESIGNED BY AJM
DATE 03/24

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 2/2

COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:25
FILE: w42832.dgn



PRELIMINARY

GENERAL NOTES

1 ALL BARRICADE AND SIGN LOCATIONS ON THE PLAN ARE APPROXIMATE, AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS. THE SIGNS SHALL BE INSTALLED SO AS NOT TO OBSCURE THE VIEW OF OTHER TRAFFIC CONTROL DEVICES.

2 ALL PAVEMENT MARKING SHALL BE 4" TEMPORARY PAVEMENT MARKING, PAINT, UNLESS SPECIFIED OTHERWISE BY THE ENIGINEER.

3 MINIMUM WIDTH OF TRAVELLED LANE SHALL BE 12', UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER.

4 ALL TEMPORARY AND/OR PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED WITH SMOOTH AND GRADUAL TRANSITIONS AND ALIGNMENTS. WHEN NECESSARY THE CONTRACTOR SHALL PREMARK THE PAVEMENT PRIOR TO PLACING THE MARKINGS.

5 NEW PAVEMENT MARKING SHALL BE ALIGNED WITH EXISTING PAVEMENT MARKING WHERE NECESSARY.

6 SEE SHEET "TYPICAL TRAFFIC SIGNAL CONTROL PLAN: ONE LANE, TWO-WAY OPERATION WITH BARRIERS" FOR DETAILS NOT SHOWN.

TYPE III BARRICADE
BUILD BRIDGE
COMPLETED BRIDGE
REFLECTIVE PLASTIC DRUM

COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:25
FILE: w42832.dgn

M11

Project Number
74-5(112)

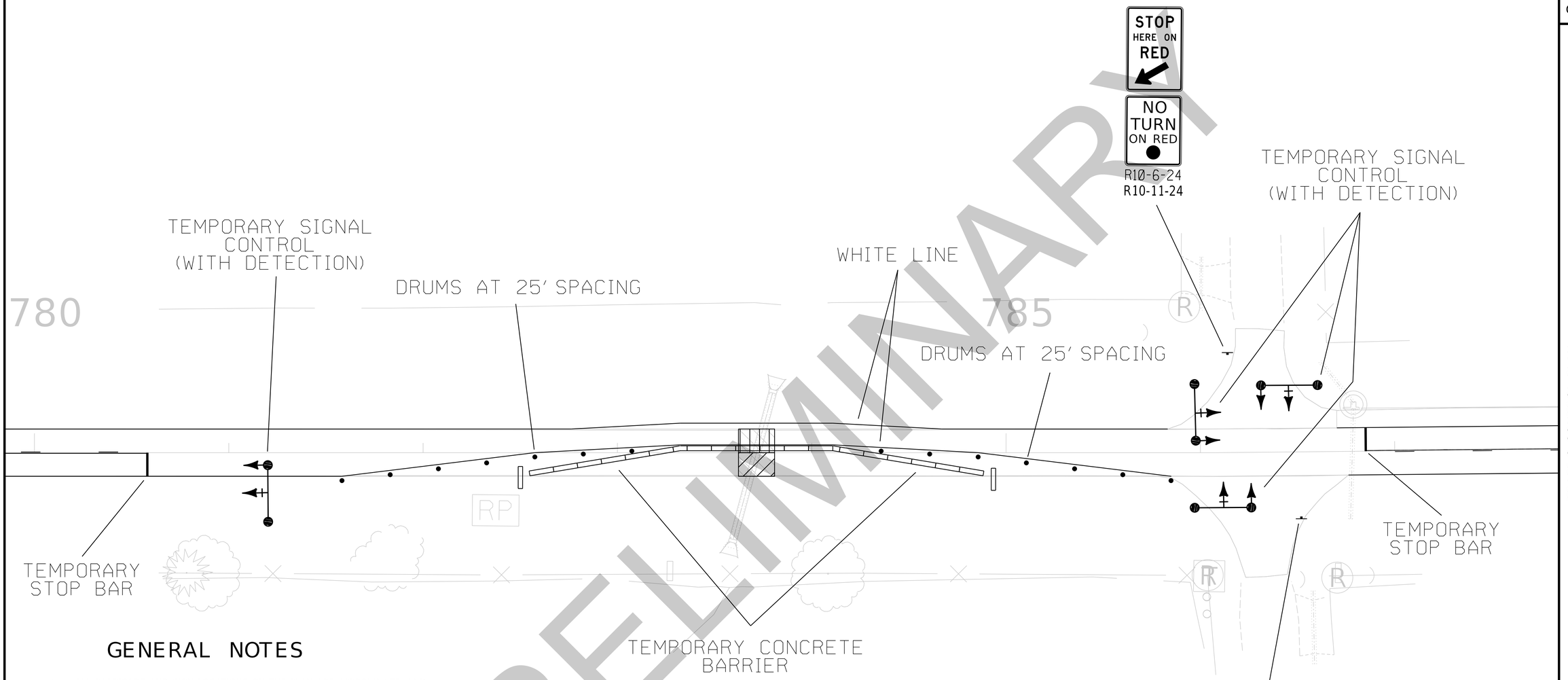
C.N. 42832

TRAFFIC CONTROL PLAN
CULVERT @ STA 783+72
PHASE 2

DESIGNED BY AJM
DATE 03/24

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 1/2



GENERAL NOTES

1 ALL BARRICADE AND SIGN LOCATIONS ON THE PLAN ARE APPROXIMATE, AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS. THE SIGNS SHALL BE INSTALLED SO AS NOT TO OBSCURE THE VIEW OF OTHER TRAFFIC CONTROL DEVICES.

2 ALL PAVEMENT MARKING SHALL BE 4" TEMPORARY PAVEMENT MARKING, PAINT, UNLESS SPECIFIED OTHERWISE BY THE ENIGINEER.

3 MINIMUM WIDTH OF TRAVELLED LANE SHALL BE 12', UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER.

4 ALL TEMPORARY AND/OR PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED WITH SMOOTH AND GRADUAL TRANSITIONS AND ALIGNMENTS. WHEN NECESSARY THE CONTRACTOR SHALL PREMARK THE PAVEMENT PRIOR TO PLACING THE MARKINGS.

5 NEW PAVEMENT MARKING SHALL BE ALIGNED WITH EXISTING PAVEMENT MARKING WHERE NECESSARY.

6 SEE SHEET "TYPICAL TRAFFIC SIGNAL CONTROL PLAN: ONE LANE, TWO-WAY OPERATION WITH BARRIERS" FOR DETAILS NOT SHOWN.

TYPE III BARRICADE
BUILD BRIDGE
COMPLETED BRIDGE
REFLECTIVE PLASTIC DRUM

PRELIMINARY

M12

Project Number
74-5(112)

C.N. 42832

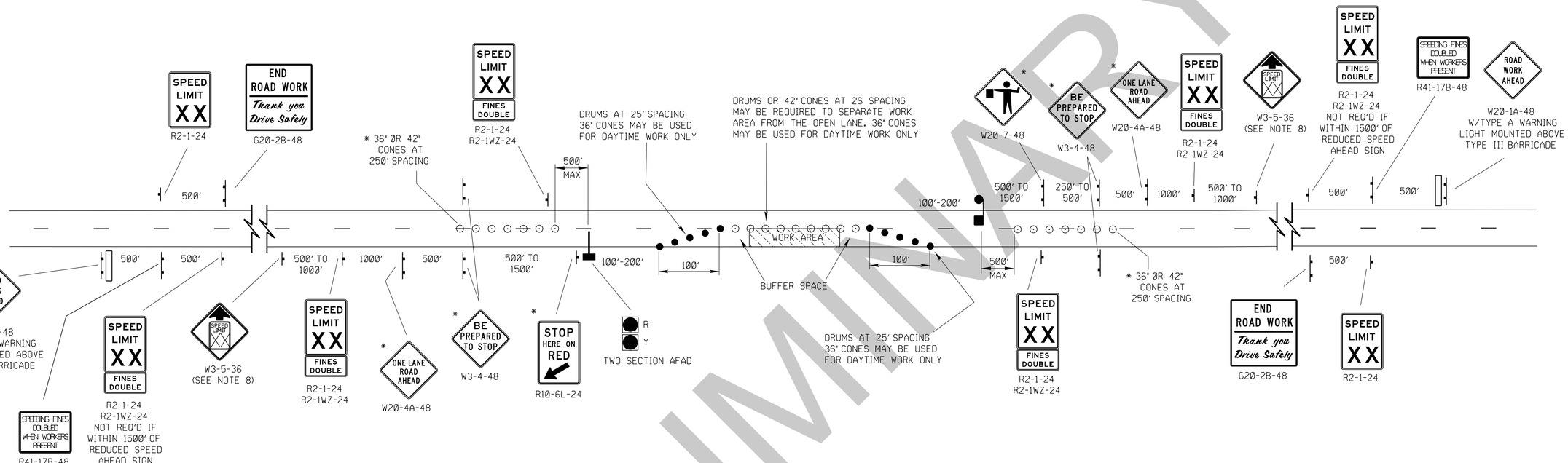
TRAFFIC CONTROL PLAN
CULVERT @ STA 783+72
PHASE 4

DESIGNED BY AJM
DATE 03/24

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 1/2

COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:25
FILE: w42832.dgn



LEGEND

- FLAGGER
- REFLECTORIZED PLASTIC DRUM
- REFLECTORIZED PLASTIC DRUM OR 42" CONE
- TYPE III BARRICADE
- SINGLE POSTED SIGN
- DOUBLE POSTED SIGN
- AFAD

LANE CLOSURE

* SIGNS AND CONES ARE SUBSIDIARY TO THE FLAGGING/AFAD OPERATION.

NOTES

1. "FLAGGER AHEAD SYMBOL" SIGN (W20-7) SHALL BE USED WHEN A FLAGGER IS PRESENT, AND REMOVED WHEN NOT APPLICABLE.
2. THE CONTRACTOR SHALL INSTALL, MAINTAIN, AND REMOVE ALL SIGNS IN ACCORDANCE WITH THE DETAILS OF AND AT THE LOCATIONS SHOWN IN THE PLANS. SIGNS INSTALLED BY THE DEPARTMENT OF TRANSPORTATION OR OTHER GOVERNMENT AGENCY SHALL BE MAINTAINED AND REMOVED BY THEIR FORCES.
3. WHEN MESSAGE IS NOT PERTINENT, SIGNS SHALL BE TAKEN DOWN, COVERED OR FOLDED. TAPE IS NOT PERMITTED ON THE FACE OF THE SIGN.
4. VEHICLES OR EQUIPMENT SHALL NOT BE PARKED SO AS TO OBSCURE OR DISTRACT FROM TRAFFIC CONTROL DEVICES.
5. ORANGE FLAGS MAY BE USED TO CALL ATTENTION TO WARNING SIGNS.
6. REFER TO STANDARD PLAN 920 FOR GENERAL INFORMATION NOT SHOWN.
7. A MINIMUM ØF 7-36" OR 42" CONES SHALL BE PLACED ON THE CENTERLINE IN ADVANCE OF THE FLAGGER. THE CONES SHOULD BE SPACED AT 250 FEET.
8. THE SPEED IN FLAGGING/PILOT CAR OPERATIONS IS GENERALLY CONTROLLED BY THE PILOT CAR, A SPEED REDUCTION MAY NOT BE NECESSARY IF THE WORK ZONE CONDITIONS WILL NOT EXIST UPON COMPLETION OF EACH DAYS WORK. W3-5 SIGN IS NOT NEEDED IF SPEED LIMIT IS NOT REDUCED.

PRELIMINARY

M13

Project Number
74-5(112)

C.N. 42832

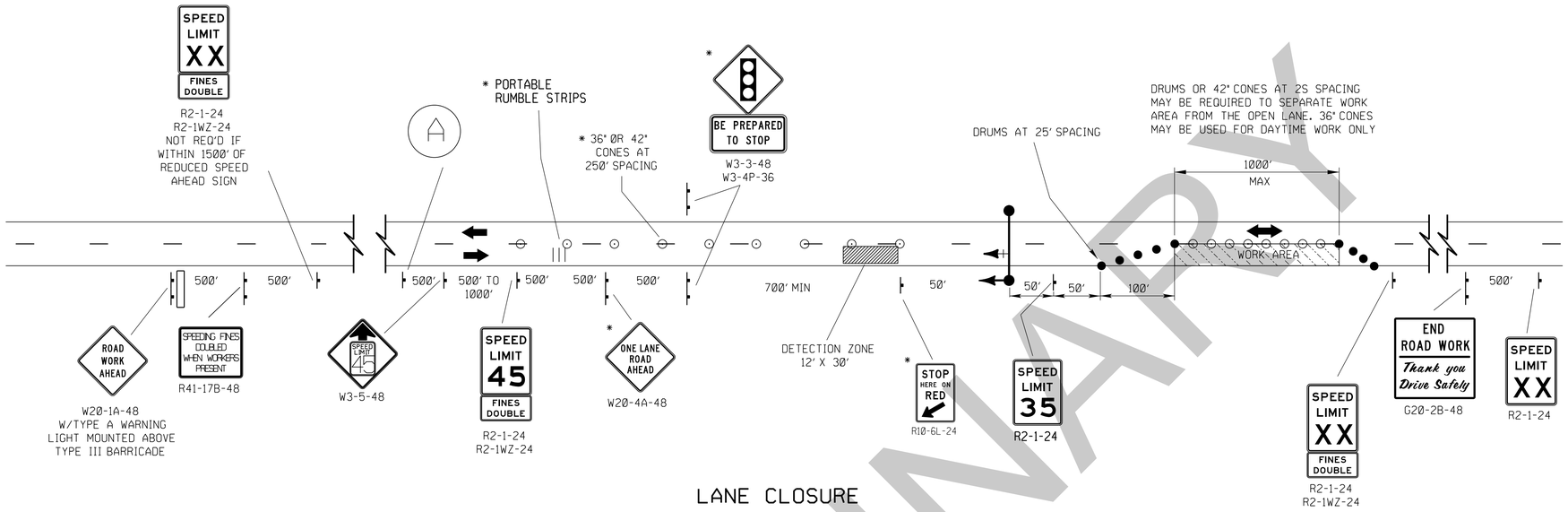
TYPICAL TRAFFIC CONTROL PLAN
LANE CLOSURE USING AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

DESIGNED BY NRL
DATE 05/22

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 1/1

COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:25
FILE: Flagger Assistance Device (AFAD).dgn



LANE CLOSURE

* SIGNS, CONES, AND PORTABLE RUMBLE STRIPS ARE SUBSIDIARY TO THE SIGNAL OPERATION.

GENERAL NOTES

1. SIGNS SHOWN ARE USUALLY FOR ONE DIRECTION OF TRAVEL ONLY.
2. THE CONTRACTOR SHALL INSTALL, MAINTAIN, AND REMOVE ALL SIGNS IN ACCORDANCE WITH THE DETAILS OF AND AT THE LOCATIONS SHOWN IN THE PLANS. SIGNS INSTALLED BY THE DEPARTMENT OF TRANSPORTATION OR OTHER GOVERNMENT AGENCIES SHALL BE MAINTAINED AND REMOVED BY THEIR FORCES.
3. WHEN MESSAGE IS NOT PERTINENT, SIGNS SHALL BE TAKEN DOWN, COVERED OR FOLDED. TAPE WILL NOT BE PERMITTED ON THE FACE OF THE SIGN.
4. ALL BARRICADE AND SIGN LOCATIONS ARE APPROXIMATE, AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS. THE SIGNS SHALL BE INSTALLED SO AS TO NOT OBSCURE THE VIEW OF OTHER TRAFFIC CONTROL DEVICES FROM MOTORISTS.
5. VEHICLES OR EQUIPMENT SHALL NOT BE PARKED AS TO OBSCURE OR DISTRACT FROM TRAFFIC CONTROL DEVICES.
6. "NO PASSING ZONES NOT MARKED" SIGN (W25-6-48) SHOULD BE INSTALLED AT EACH END OF THE PROJECT WHENEVER THE EXISTING NO PASSING ZONE PAVEMENT MARKINGS HAVE BEEN REMOVED OR COVERED AND NO PASSING ZONE PAVEMENT MARKINGS ARE NOT INCLUDED IN THE PROJECT.
7. SPEED LIMIT SIGN IS NOT REQUIRED IF WITHIN 1500 FT OF A REDUCED SPEED AHEAD SIGN.
8. WORK ZONE SPEED LIMITS SHALL NOT BE INSTALLED WITHOUT A SPEED ZONE AUTHORIZATION COMPLETED BY THE DEPARTMENT. THE WORK ZONE SPEED LIMIT SHALL BE ESTABLISHED ACCORDING TO DOT-OI 60-18. SEE WORK ZONE SPEED LIMIT NOTES ON STANDARD PLAN 920.
9. A SPEED LIMIT SIGN ENDING THE REDUCED SPEED ZONE SHALL BE INSTALLED AT THE END OF EACH ZONE.
10. PLACE TYPE II BARRICADES, REFLECTORIZED PLASTIC DRUMS, OR 42" CONES ON THE TRAFFIC SIDE OF THE DROP-OFF WHERE SUFFICIENT LATERAL DISTANCE EXISTS BETWEEN THE TRAVEL LANE AND THE DROP-OFF (DROP-OFF DETAIL ON STANDARD PLAN 922).
11. THE LEAD SIGNS ARE NOT NEEDED IF TWO PROJECTS ARE LESS THAN 1 MILE APART. THE "END CONSTRUCTION" SIGN (G20-2B-48) SHOULD NOT BE INSTALLED BETWEEN THE PROJECTS.
12. ON ARMOR COAT SURFACING, A "LOOSE GRAVEL" SIGN (W8-7-36) IS REQUIRED AT THE BEGINNING OF THE DAYS WORK AND SHALL REMAIN IN PLACE UNTIL THE LOOSE GRAVEL HAS BEEN SWEPT OFF.
13. SIGN SIZES SHOWN ARE FOR TYPICAL SITUATIONS- REFER TO NEBRASKA SUPPLEMENT TO THE MUTCD FOR FURTHER SIZE INFORMATION.
14. REFER TO STANDARD PLAN 920 FOR GENERAL INFORMATION NOT SHOWN.
15. A MINIMUM OF 7-36" OR 42" CONES SHALL BE PLACED ON CENTERLINE IN ADVANCE OF THE TEMPORARY SIGNAL. THE CONES SHOULD BE SPACED AT 250 FEET.

LEGEND

- FLAGGER
- REFLECTORIZED PLASTIC DRUM
- REFLECTORIZED PLASTIC DRUM OR 42" CONE
- TYPE III BARRICADE
- SINGLE POSTED SIGN
- DOUBLE POSTED SIGN
- TRAFFIC SIGNAL

TAPER FORMULA

L = S x W FOR SPEEDS OF 45 MPH OR MORE.

$L = \frac{WS^2}{60}$ FOR SPEEDS OF 40 MPH OR LESS.

WHERE:
L = MINIMUM LENGTH OF TAPER.
S = NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK.
W = WIDTH OF OFFSET (LANE WIDTH).

A

FRESH OIL
W21-2-36
ASPHALT SURFACING OR FOG SEAL

REDUCE SPEED LOOSE GRAVEL ON SURFACE
W8-7C-48
ARMOR COAT SURFACING

MILLED SURFACE
W41-24-36
MILLING

TABLE A: TEMPORARY TRAFFIC SIGNAL TIMING

RECOMMENDED SETTINGS (SEC.)
INITIAL GREEN - 15
EXTENSION - 2.5
MAX. GREEN - 45
YELLOW - 5

DISTANCE BETWEEN "STOP HERE ON RED" SIGN LOCATIONS (FT)	ALL RED (SEC.)
500' - 700'	19
700' - 850'	24
850' - 1,000'	28
1,000' - 1,250'	34
1,250' - 1,500'	41

LOOSE GRAVEL
W8-7-36
WHERE REQUIRED BY THE ENGINEER

ADDITIONAL SIGNS USE WHERE APPLICABLE

PRELIMINARY

M14

Project Number 74-5(112)

C.N. 42832

TEMPORARY TRAFFIC SIGNAL PLAN
SHORT TERM CLOSURE

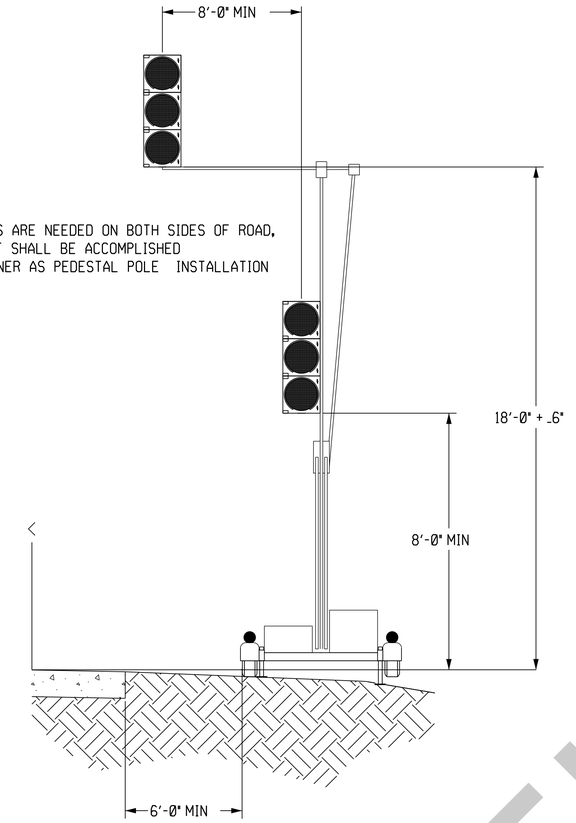
DESIGNED BY NRL
DATE 12/22

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

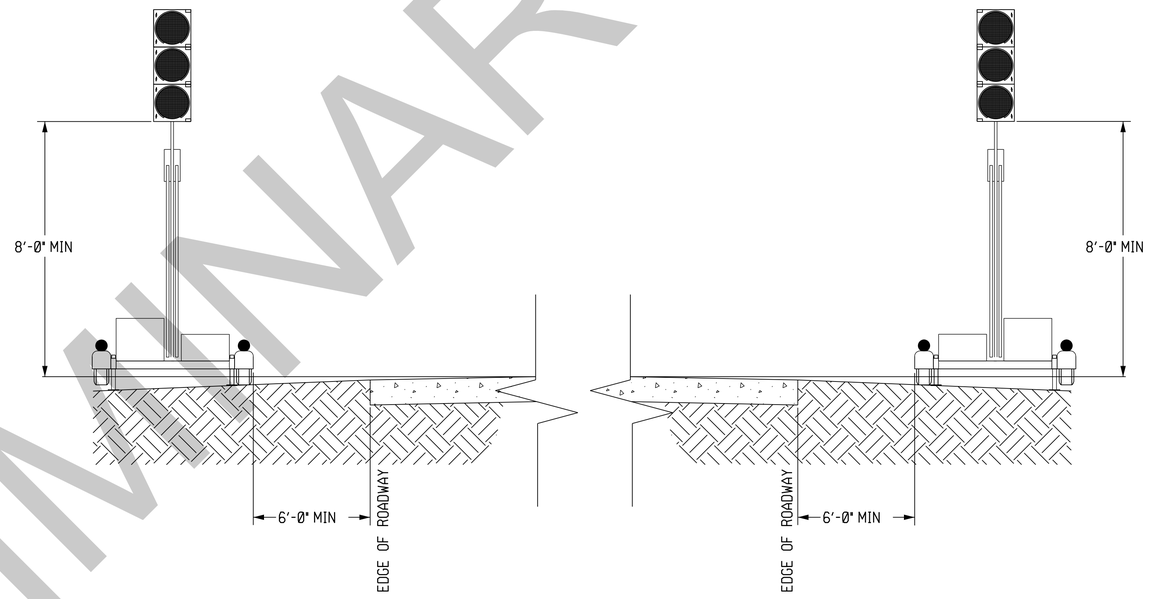
PLAN SHEET NUMBER 1/2

COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:25
FILE: Short Term Temporary Signal Plan.dgn

PORTABLE SIGNAL TRAILER (MULTI SIGNAL UNIT) INSTALLATION



PORTABLE SIGNAL TRAILER (SINGLE SIGNAL UNIT) INSTALLATION



NOTES

1. THE CONTRACTOR SHALL FURNISH ALL EQUIPMENT AND MATERIAL REQUIRED FOR THE TEMPORARY SIGNAL UNLESS OTHERWISE SPECIFIED. ALL EQUIPMENT AND MATERIAL FURNISHED BY THE CONTRACTOR SHALL REMAIN HIS PROPERTY.
2. ANY STATE SUPPLIED EQUIPMENT OR MATERIAL SHALL REMAIN THE PROPERTY OF THE STATE OF NEBRASKA.
3. THE SIGNAL HEAD LENSES SHALL BE A MINIMUM OF 12 INCHES IN DIAMETER.
4. ALL SIGNAL LAMPS SHALL BE EXTENDED ANGLE LED.
5. MAINTENANCE OF THE TEMPORARY SIGNAL SHALL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR.
6. TRAFFIC SIGNALS POWERED BY MEANS OF A PORTABLE GENERATOR SHALL HAVE STANDBY BATTERY POWER CAPABLE OF OPERATING THE SIGNAL NOT LESS THAN 26 HOURS. PORTABLE TRAFFIC SIGNALS SHALL BE CHECKED EVERY 24 HOURS TO INSURE PROPER OPERATION.
7. THE SIGNAL SHALL BE PLACED INTO FLASHING AMBER OPERATION FOR BOTH DIRECTIONS DURING PERIODS WHEN THE LANE ARE OPEN TO TWO-WAY TRAFFIC. UNDER NO CIRCUMSTANCES SHALL AN INOPERATIVE TRAFFIC SIGNAL BE LEFT UNCOVERED ON AN OPEN ROAD TO THE PUBLIC.
8. INSTALLATION OF THE TEMPORARY SIGNAL SHALL BE IN COMPLIANCE WITH THE NATIONAL ELECTRIC CODE (LATEST EDITION), THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, ALL LOCAL ORDINANCES AND REGULATIONS, THE SPECIFICATIONS AND THE PROJECT PLANS.
9. SEE SIGNING STANDARD FOR REQUIRED SIGNING TO ACCOMPANY SIGNAL.
10. WHEN REQUIRED, THE CONTRACTOR SHALL FURNISH ALL EQUIPMENT AND MATERIAL REQUIRED FOR VEHICLE DETECTION ON ALL APPROACHES.

PRELIMINARY

M15

Project Number
74-5(112)

C.N. 42832

TEMPORARY TRAFFIC SIGNAL PLAN
SHORT TERM CLOSURE

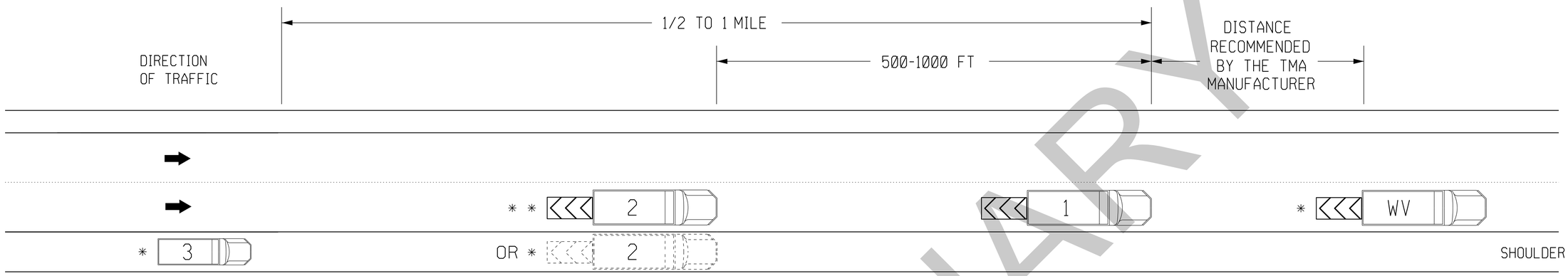
DESIGNED BY NRL DATE 12/22

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

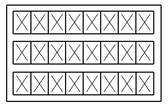
PLAN SHEET NUMBER 2/2

FILE: Short Term Temporary Signal Plan.dgn DATE: 5-MAR-2024 14:25 COMPUTER: BG04191M687

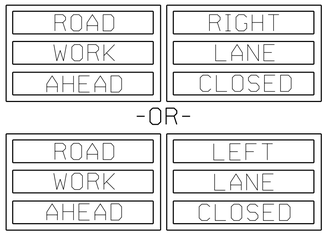
MOBILE OPERATIONS ON RURAL MULTI-LANE ROADWAY



SHADOW VEHICLE 3
& PORTABLE DYNAMIC MESSAGE SIGN
WITH 2-360° BEACONS OR
APPROVED MINI-BAR LIGHT
* TMA OPTIONAL

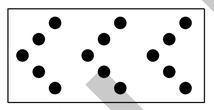


PORTABLE DYNAMIC MESSAGE SIGN



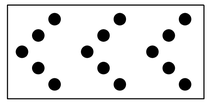
TWO MESSAGES (1.6 - 2.0 SECONDS PER MESSAGE)

OPTIONAL SHADOW VEHICLE 2
& FLASHING ARROW PANEL ON REAR
WITH 2-360° BEACONS OR
APPROVED MINI-BAR LIGHT
* TMA OPTIONAL IF COMPLETELY ON SHOULDER AND NOT STRADDLING EDGE LINE.
* * TMA REQUIRED IF STRADDLING EDGE LINE OR IN CLOSED LANE.



FLASHING ARROW PANEL ON REAR

SHADOW VEHICLE 1 WITH TMA
& FLASHING ARROW PANEL ON REAR
WITH 2-360° BEACONS OR
APPROVED MINI-BAR LIGHT



FLASHING ARROW PANEL ON REAR

WORKING VEHICLE(S)
WITH 2-360° BEACONS OR
APPROVED MINI-BAR LIGHT
* TMA OPTIONAL

TRUCK MOUNTED ATTENUATOR SYSTEM:

1. THE CONTACTOR SHALL FURNISH A FEDERALLY APPROVED TRUCK MOUNTED ATTENUATOR SYSTEM, MOUNTED ON A MINIMUM 16,000 POUND TRUCK. THE TRUCK SHALL BE EQUIPPED WITH 60" X 30" FLASHING ARROW PANEL, SECURLY MOUNTED ON THE TRUCK. THE TMA SYSTEM SHALL BE LOCATED IN THE FIELD AS REQUIRED BY THE MANUFACTURER. A COMPLETE SET OF REPLACEMENT MODULES SHALL BE AVAILABLE NEAR THE PROJECT SITE IN THE EVENT OF DAMAGE TO THE INSTALLED TMA. DAMAGED TMA'S SHALL BE REMOVED FROM THE ROADWAY AND PROJECT WORK STOPPED UNTIL REPAIRS TO THE UNIT HAVE BEEN COMPLETED.
2. THE TRUCK MOUNTED ATTENUATOR SHALL BE AN NCHRP 350 TEST LEVEL 3 (OR MASH EQUIVALENT) APPROVED TMA FOR 100 km PER HOUR (60 MPH).
3. THE TRUCK SHALL BE A 16,000 TO 35,000 POUND (GVW) VEHICLE AS REQUIRED BY THE TMA MANUFACTURER.
4. THE FLASHING ARROW PANEL SHALL BE SECURLY MOUNTED AS HIGH AS PRACTICABLE ON THE VEHICLE. THE ARROW PANEL SHALL NOT COME LOOSE UPON IMPACT TO THE TMA.

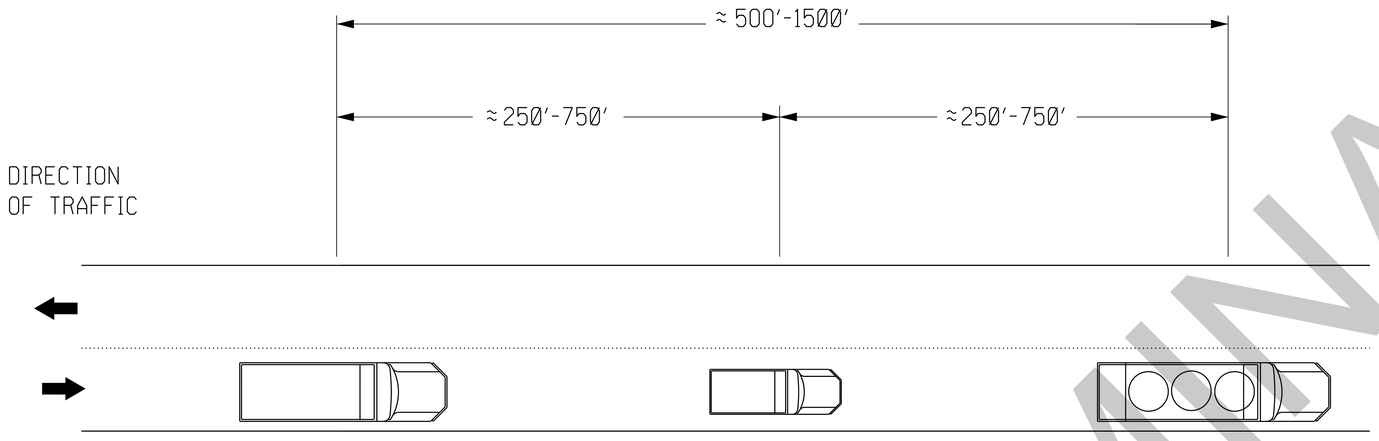
NOTES:

1. SHADOW VEHICLE 1 SHALL HAVE A TRUCK MOUNTED ATTENUATOR. SHADOW VEHICLE 2 IS OPTIONAL AND SHALL HAVE A TRUCK-MOUNTED ATTENUATOR IF IN THE CLOSED LANE OR STRADDLING THE EDGE LINE. SHADOW VEHICLE 3 MAY HAVE A TMA.
2. SHADOW VEHICLE 1 AND WHEN USED, SHADOW VEHICLE 2 SHALL HAVE A FLASHING ARROW PANEL.
3. SHADOW VEHICLE NUMBER 3 SHALL HAVE A PORTABLE DYNAMIC MESSAGE SIGN.
4. WHEN USED, SHADOW VEHICLE 2 SHALL BE PLACED IN ADVANCE OF HORIZONTAL OR VERTICAL CURVES TO PROVIDE ADVANCE WARNING FOR WORK OPERATIONS HIDDEN BY CURVES.
5. FOR LEFT LANE CLOSURES, SHADOW VEHICLE 3 WILL REMAIN ON RIGHT SHOULDER WHEN AN 8' OR WIDER PAVED INSIDE (LEFT) SHOULDER DOES NOT EXIST.
6. IN URBAN AREAS THE DISTANCE MAINTAINED BETWEEN VEHICLES MAY BE DECREASED AS NEEDED.
7. VEHICLE HAZARD LIGHT WARNING SIGNALS SHALL NOT BE USED INSTEAD OF THE VEHICLE'S HIGH-INTENSITY ROTATING, FLASHING OSCILLATING, OR STROBE LIGHTS.
8. DETAIL MAY BE USED FOR LEFT OR RIGHT LANE/SHOULDER WORK.

PRELIMINARY

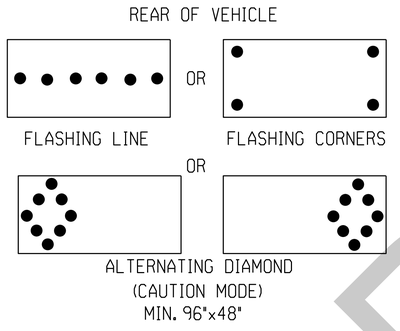
M16
Project Number
74-5(112)
C.N. 42832
TRAFFIC CONTROL PLAN
MOBILE OPERATIONS
TWO-LANE AND MULTI-LANE
DESIGNED BY NRL
DATE 12/22
NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION
PLAN SHEET NUMBER 1/2
COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:26
FILE: Mobile Operations.dgn

MOBILE OPERATIONS RURAL TWO-LANE TWO-WAY ROADS



REAR VEHICLE

WITH 2 HIGH INTENSITY FLASHING LIGHTS MOUNTED ON THE REAR AND 2-360° BEACONS OR APPROVED MINI-BAR LIGHT (TMA OPTIONAL)



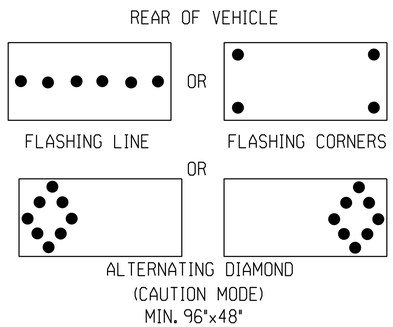
OPTIONAL VEHICLE

WITH 2-360° BEACONS OR APPROVED MINI-BAR LIGHT

WORK VEHICLE

WITH 4 HIGH INTENSITY FLASHING LIGHTS MOUNTED ON REAR AND 2-360° BEACONS OR APPROVED MINI-BAR LIGHT

SINGLE STROBE LIGHT ON FRONT OF VEHICLE



NOTES:

1. CAUTION MODE ON WORK VEHICLE AND REAR VEHICLE SHALL BE ALTERNATING DIAMOND OR THE FLASHING 4 CORNER LIGHTS IF THE DIAMOND MODE IS NOT AVAILABLE.

2. REAR VEHICLE SHALL BE PLACED IN ADVANCE OF HORIZONTAL OR VERTICAL CURVES TO PROVIDE ADVANCE WARNING FOR WORK OPERATIONS HIDDEN BY CURVES.

PRELIMINARY

M17

Project Number 74-5(112)

C.N. 42832

TRAFFIC CONTROL PLAN
MOBILE OPERATIONS
TWO-LANE AND MULTI-LANE

DESIGNED BY NRL

DATE 12/22

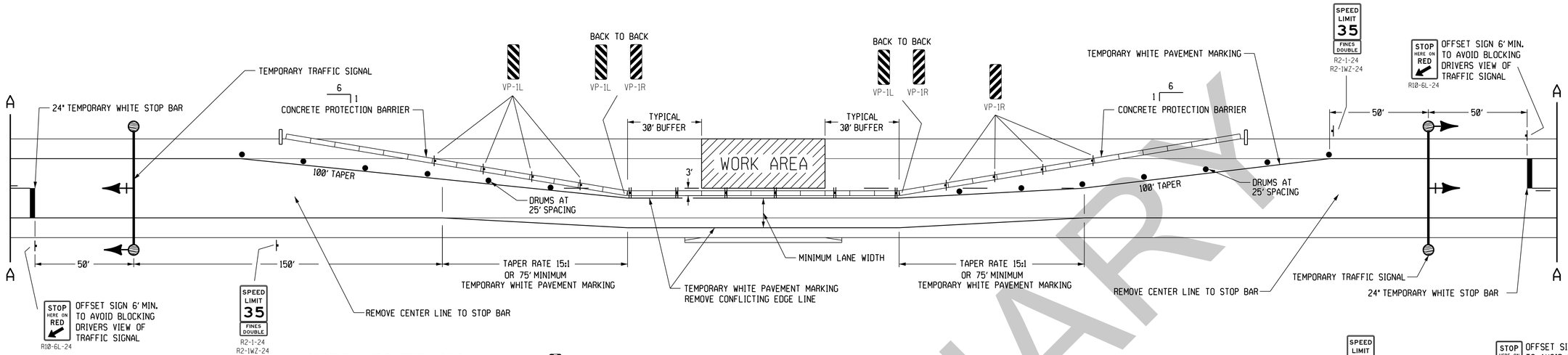
NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

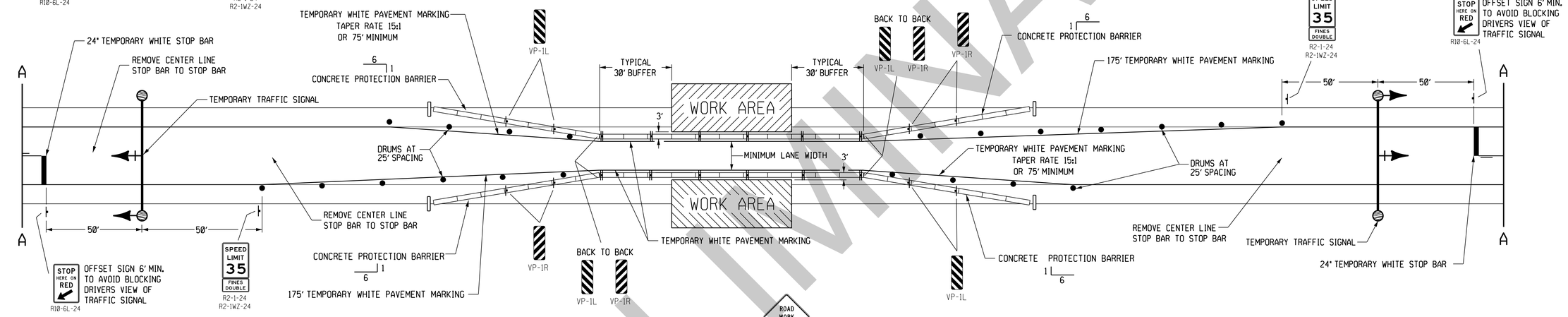
PLAN SHEET NUMBER 2/2

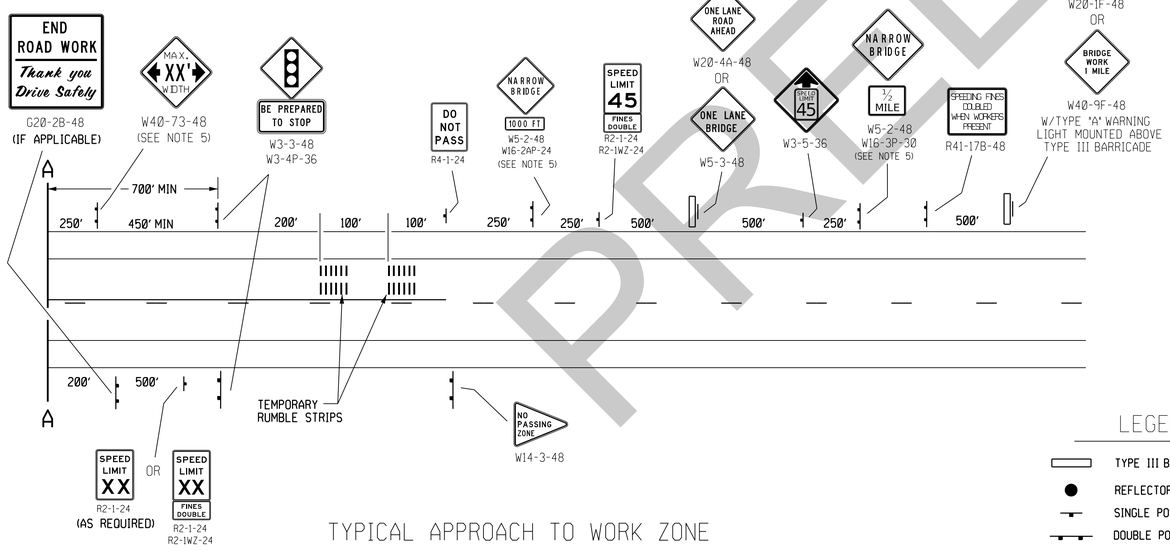
COMPUTER: BG0419M687

DATE: 5-MAR-2024 14:26

FILE: Mobile Operations.dgn

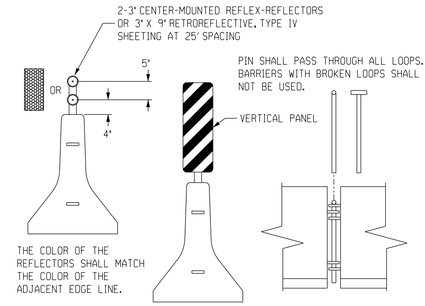






TYPICAL APPROACH TO WORK ZONE

CONCRETE PROTECTION BARRIER DETAIL



LEGEND

- TYPE III BARRICADE
- REFLECTORIZED PLASTIC DRUM
- SINGLE POST SIGN
- DOUBLE POST SIGN

NOTES

1. THE CONTRACTOR SHALL FURNISH REFLECTORS, VERTICAL PANELS AND A BRACKET TO SUPPORT THEM IN A STABLE POSITION ON THE CONCRETE BARRIERS. THE BRACKET SHALL BE CONSTRUCTED OF MATERIAL THAT MAY BEND, BUT NOT COME LOOSE IF STRUCK BY A PASSING VEHICLE.
2. CONCRETE PROTECTION BARRIERS SHOULD EXTEND TO EDGE OF PAVEMENT. NO EQUIPMENT OR CONSTRUCTION MATERIAL IS TO BE PLACED IN FRONT OF THE PROTECTION BARRIERS AT ANY TIME. IF BARRIERS ARE REQUIRED TO BE MOVED FOR WORK ACCESS THEY SHALL BE REPOSITIONED BACK EACH NIGHT. AT NO TIME WILL A BLUNT END OF THE BARRIER BE ALLOWED IN THE TRAVEL LANE OF APPROACHING TRAFFIC.
3. REFLECTORS USED FOR WORK ZONE TRAFFIC CONTROL SHALL BE SUBSIDIARY TO OTHER TRAFFIC CONTROL DEVICES.
4. MINIMUM WIDTH OF TRAVELED LANE SHALL BE DETERMINED BY THE ENGINEER.
5. INSTALL WHEN LANE WIDTH ACROSS IS LESS THAN APPROACH LANE WIDTH.
6. SIGNS R41-17B-48, W20-1F-48 AND W40-9F-48 ARE NOT REQUIRED IF INSTALLED ON THE PROJECT IN ADVANCE OF THIS WORK SITE.

PRELIMINARY

M18

Project Number
74-5(112)

C.N. 42832

TYPICAL TRAFFIC CONTROL PLAN
ONE LANE, TWO WAY OPERATION WITH BARRIERS

DESIGNED BY NRL
DATE 12/22

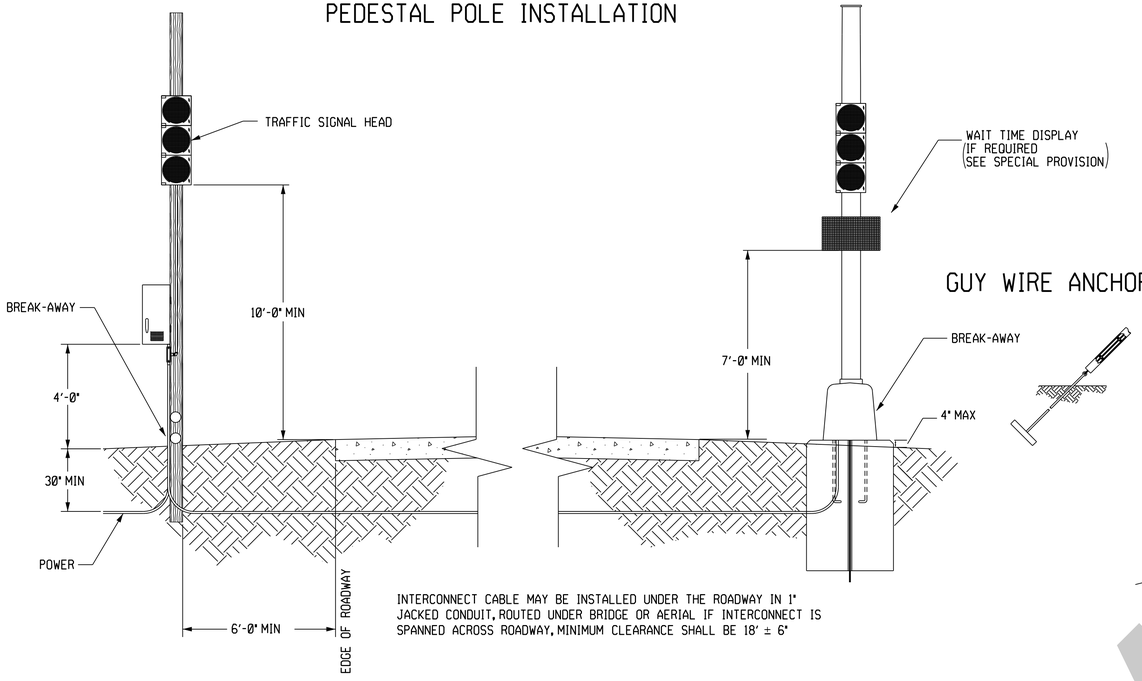
NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 1/1

COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:26
FILE: wz111e-1 r9.dgn

PRELIMINARY

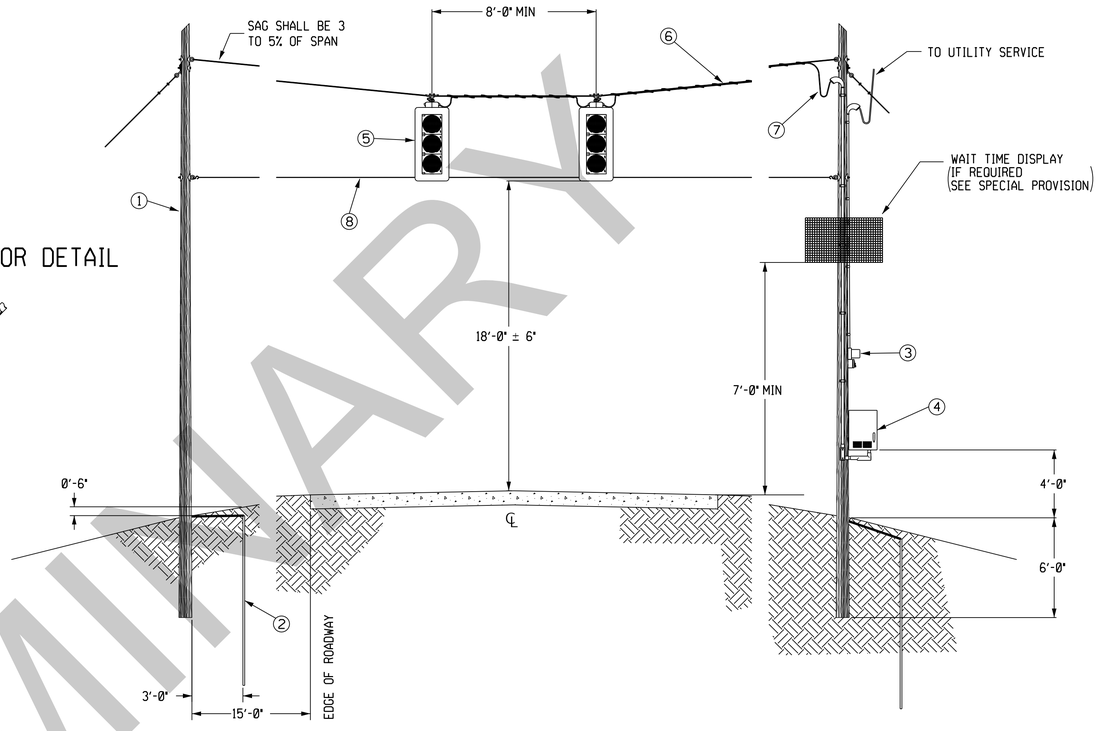
PEDESTAL POLE INSTALLATION



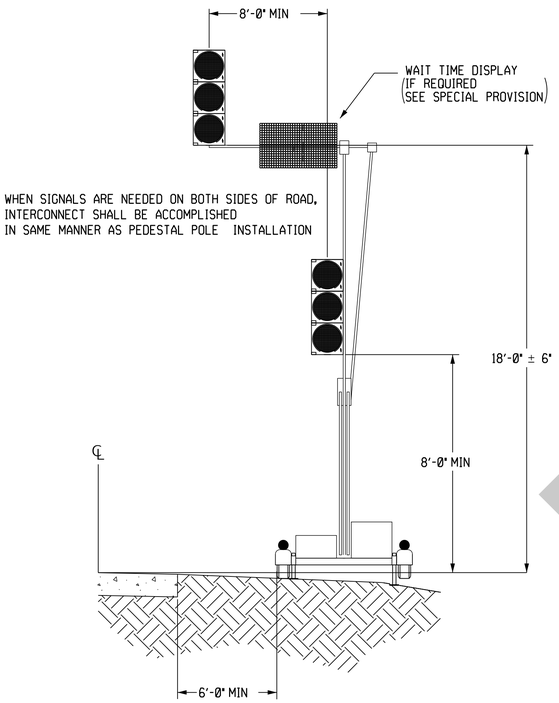
INTERCONNECT CABLE MAY BE INSTALLED UNDER THE ROADWAY IN 1" JACKED CONDUIT, ROUTED UNDER BRIDGE OR AERIAL IF INTERCONNECT IS SPANNED ACROSS ROADWAY, MINIMUM CLEARANCE SHALL BE 18' ± 6"

GUY WIRE ANCHOR DETAIL

SPAN WIRE INSTALLATION



PORTABLE SIGNAL



NOTES

1. THE LOCATIONS OF ALL AERIAL AND UNDERGROUND UTILITY FACILITIES MAY NOT BE INDICATED IN THESE PLANS, UNDERGROUND UTILITIES, WHETHER INDICATED OR NOT WILL BE LOCATED AND 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 BE RESPONSIBLE FOR PROTECTING ALL AERIAL AND UNDERGROUND UTILITIES AND CONSTRUCTIONS.
2. THE CONTRACTOR SHALL FURNISH ALL EQUIPMENT AND MATERIAL REQUIRED FOR THE TEMPORARY SIGNAL UNLESS OTHERWISE SPECIFIED. ALL EQUIPMENT AND MATERIAL FURNISHED BY THE CONTRACTOR SHALL REMAIN HIS PROPERTY.
3. ANY STATE SUPPLIED EQUIPMENT OR MATERIAL SHALL REMAIN THE PROPERTY OF THE STATE OF NEBRASKA.
4. THE SIGNAL HEAD LENSES SHALL BE A MINIMUM OF 12 INCHES IN DIAMETER.
5. ALL SIGNAL LAMPS SHALL BE EXTENDED ANGLE LED.
6. MAINTENANCE OF THE TEMPORARY SIGNAL SHALL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR.
7. TRAFFIC SIGNALS POWERED BY MEANS OF A PORTABLE GENERATOR SHALL HAVE STANDBY BATTERY POWER CAPABLE OF OPERATING THE SIGNAL NOT LESS THAN 26 HOURS. PORTABLE TRAFFIC SIGNALS SHALL BE CHECKED EVERY 24 HOURS TO INSURE PROPER OPERATION.
8. SIGNAL POLE LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER UNLESS THE EXACT PLACEMENT IS NOTED IN THE PLANS.
9. THE TIMING OF THE SIGNAL CYCLE SHALL BE DETERMINED BY THE NDOT TRAFFIC ENGINEERING DIVISION. FOR THE SPECIFIC INSTALLATION, CALL TRAFFIC ENGINEERING DIVISION AT 402-479-4594. HAVE THE FOLLOWING INFORMATION READY WHEN YOU CALL. PROJECT NAME, CONTROL NUMBER, DISTANCE BETWEEN STOP BARS, NUMBER OF SIDE STREET SIGNALS AND ADT FOR HIGHWAYS. TIMING SHOULD BE REQUESTED ONE WEEK PRIOR TO INSTALLATION TO AVOID UNEXPECTED PROJECT DELAYS.
10. THE SIGNAL SHALL BE PLACED INTO FLASHING AMBER OPERATON FOR BOTH DIRECTIONS DURING PERIODS WHEN THE BRIDGE IS OPEN TO TWO-WAY TRAFFIC. UNDER NO CIRCUMSTANCES SHALL AN INOPERATIVE TRAFFIC SIGNAL BE LEFT UNCOVERED ON AN OPEN ROAD TO THE PUBLIC.

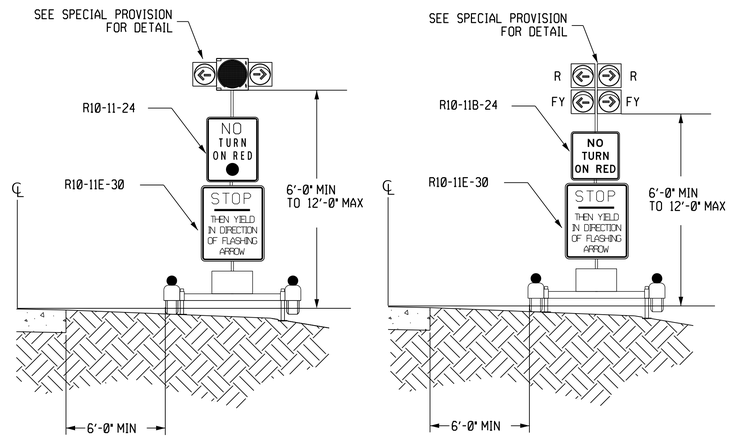
ITEM NO.	DESCRIPTION
1	CLASS IV BUTT TREATED WOOD POLE W/DOWN GUYS
2	5/8" X 10' COPPERWELD GROUND ROD
3	METER SOCKET (IF REQ'D BY UTILITY)
4	CONTROLLER CABINET •
5	TRAFFIC SIGNAL W/BACKPLATE
6	3/8" HIGH STRENGTH 7 STRAND WIRE ROPE
7	600 VOLT NO. 12 AWG 5/C TRAFFIC SIGNAL CABLE
8	1/4" SIEMANS MARTIN 7 STRAND WIRE ROPE

• CONTRACTOR SHALL FURNISH A SOLID STATE DIGITAL CONTROLLER WITH A PROGRAMMING MANUAL.

SIGNAL	APPROXIMATE LOCATION OF TEMP TRAFFIC SIGNAL
1	CULVERT @ STA 418+20
2	CULVERT @ STA 455+62
3	CULVERT @ STA 460+28
4	CULVERT @ STA 535+42
5	CULVERT @ STA 731+76
6	CULVERT @ STA 783+72
7	
8	
9	
10	
11	
12	

11. INSTALLATION OF THE TEMPORARY SIGNAL SHALL BE IN COMPLIANCE WITH THE NATIONAL ELECTRIC CODE (LATEST EDITION), THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, ALL LOCAL ORDINANCES AND REGULATIONS, THE SPECIFICATIONS AND THE PROJECT PLANS.
12. THE TRAFFIC SIGNAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE ITEM "TEMPORARY TRAFFIC SIGNAL" OR "TEMPORARY TRAFFIC SIGNAL WITH WAIT TIME DISPLAY". THIS PRICE SHALL BE FULL COMPENSATION FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE COMPLETE TEMPORARY SIGNAL.
13. SEE SIGNING STANDARD FOR REQUIRED SIGNING TO ACCOMPANY SIGNAL.
14. WHEN REQUIRED, THE CONTRACTOR SHALL FURNISH ALL EQUIPMENT AND MATERIAL REQUIRED FOR VEHICLE DETECTION ON ALL APPROACHES.

DRIVEWAY ASSISTANCE DEVICE



M19

Project Number 74-5(112)

C.N. 42832

TYPICAL SIGNAL CONTROL PLAN
TEMPORARY TRAFFIC SIGNAL DETAILS

DESIGNED BY NRL DATE 12/22

NEBRASKA DEPARTMENT OF TRANSPORTATION - TRAFFIC ENGINEERING DIVISION

PLAN SHEET NUMBER 1/1

COMPUTER: BG0419M687
DATE: 5-MAR-2024 14:26
FILE: Spts_r4.dgn

		Cut			Fill				
Station	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Mass Ordinate
417+49.38 R1	1	5.041	0	0	1	0.196	0	0	0
418+00.00 R1	1	72.323	72.521	72.521	1	9.607	9.190	9.190	63.331
418+05.72 R1	1	62.829	14.316	14.316	1	3.957	1.437	1.437	76.211
418+35.25 R1	1	25.616	48.366	48.366	1	13.387	9.485	9.485	115.092
418+50.23 R1	1	4.784	8.433	8.433	1	0.929	3.972	3.972	119.554
	Factor		Volume	Adjusted	Factor		Volume	Adjusted	
Grand Total	1		144	144	1		24	24	

		Cut			Fill				
Station	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Mass Ordinate
435+81.00 R1	1	1.982	0	0	1	0.148	0	0	0
436+30.00 R1	1	2.946	4.472	4.472	1	3.489	3.3	3.3	1.172
436+41.00 R1	1	4.058	1.427	1.427	1	0.026	0.716	0.716	1.882
436+81.00 R1	1	3.313	5.46	5.46	1	0	0.019	0.019	7.323
437+34.00 R1	1	2.123	5.336	5.336	1	0.015	0.015	0.015	12.644
	Factor		Volume	Adjusted	Factor		Volume	Adjusted	
Grand Total	1		17	17	1		4	4	

		Cut			Fill				
Station	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Mass Ordinate
456+46.00 R1	1	2.473	0	0	1	0	0	0	0
456+93.00 R1	1	4.126	5.744	5.744	1	0.01	0.008	0.008	5.736
457+05.00 R1	1	4.249	1.861	1.861	1	0	0.002	0.002	7.595
457+43.00 R1	1	3.783	5.652	5.652	1	0	0	0	13.247
458+02.00 R1	1	2.923	7.328	7.328	1	0	0	0	20.574
	Factor		Volume	Adjusted	Factor		Volume	Adjusted	
Grand Total	1		21	21	1		0	0	

		Cut			Fill				
Station	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Mass Ordinate
638+83.00 R1	1	1.836	0	0	1	1.239	0	0	0
639+39.00 R1	1	4.033	6.087	6.087	1	0	1.285	1.285	4.802
639+75.00 R1	1	4.522	5.704	5.704	1	0.003	0.002	0.002	10.504
639+87.00 R1	1	4.487	2.002	2.002	1	2.695	0.6	0.6	11.906
640+29.00 R1	1	2.606	5.516	5.516	1	0.006	2.101	2.101	15.322
	Factor		Volume	Adjusted	Factor		Volume	Adjusted	
Grand Total	1		19	19	1		4	4	

		Cut			Fill				
Station	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Mass Ordinate
797+40.00 R1	1	2.077	0	0	1	0.403	0	0	0
798+16.00 R1	1	3.641	8.047	8.047	1	1.856	3.179	3.179	4.868
798+41.00 R1	1	3.506	3.309	3.309	1	2.81	2.16	2.16	6.017
798+89.00 R1	1	2.194	5.066	5.066	1	0.115	2.6	2.6	8.483
	Factor		Volume	Adjusted	Factor		Volume	Adjusted	
Grand Total	1		16	16	1		8	8	

		Cut			Fill				
Station	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Mass Ordinate
848+13.00 R1	1	1.551	0	0	1	0.359	0	0	0
848+52.00 R1	1	1.85	2.456	2.456	1	0.247	0.438	0.438	2.019
849+06.00 R1	1	0.971	2.821	2.821	1	2.154	2.401	2.401	2.439
849+18.00 R1	1	1.058	0.451	0.451	1	11.822	3.106	3.106	-0.215
849+66.00 R1	1	0.796	1.647	1.647	1	6.8	16.553	16.553	-15.121
	Factor		Volume	Adjusted	Factor		Volume	Adjusted	
Grand Total	1		7	7	1		23	23	

		Cut			Fill				
Station	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Mass Ordinate
904+35.00 R1	1	2.196	0	0	1	0.074	0	0	0
905+13.00 R1	1	3.384	8.06	8.06	1	0.141	0.31	0.31	7.749
905+38.00 R1	1	3.662	3.262	3.262	1	0	0.066	0.066	10.946
905+87.00 R1	1	1.759	4.919	4.919	1	0.04	0.037	0.037	15.829
	Factor		Volume	Adjusted	Factor		Volume	Adjusted	
Grand Total	1		16	16	1		1	1	

		Cut			Fill				
Station	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Factor	Area (SF)	Volume (CY)	Adjusted (CY)	Mass Ordinate
930+12.00 R1	1	1.801	0	0	1	1.361	0	0	0
930+92.00 R1	1	2.011	5.647	5.647	1	13.983	22.732	22.732	-17.085
931+17.00 R1	1	2.474	2.076	2.076	1	12.169	12.108	12.108	-27.117
931+65.00 R1	1	1.522	3.552	3.552	1	0.253	11.042	11.042	-34.608
	Factor		Volume	Adjusted	Factor		Volume	Adjusted	
Grand Total	1		11	11	1		46	46	

PRELIMINARY

Q1

Project Number
74-5(112)

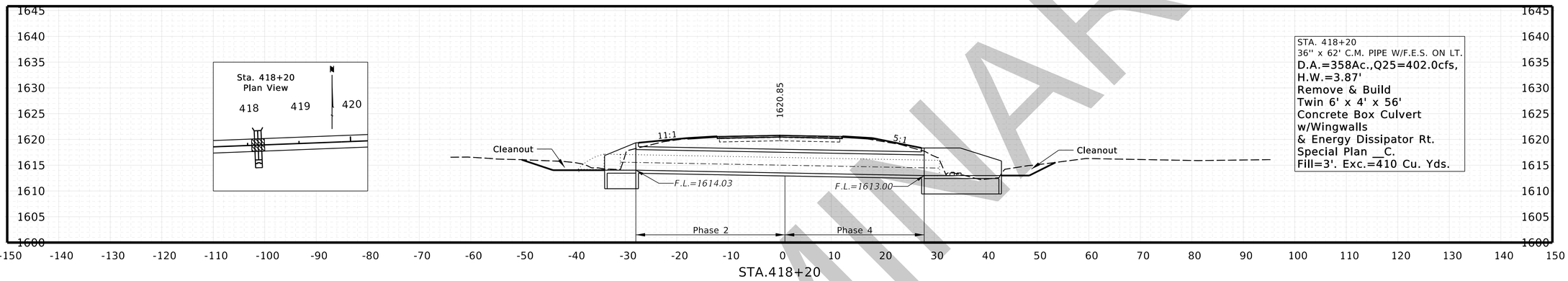
C.N. 42832

EARTHWORK

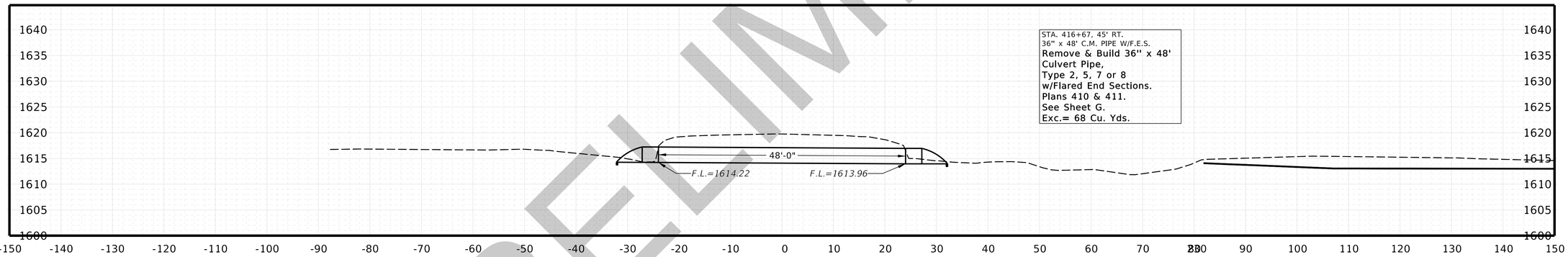
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

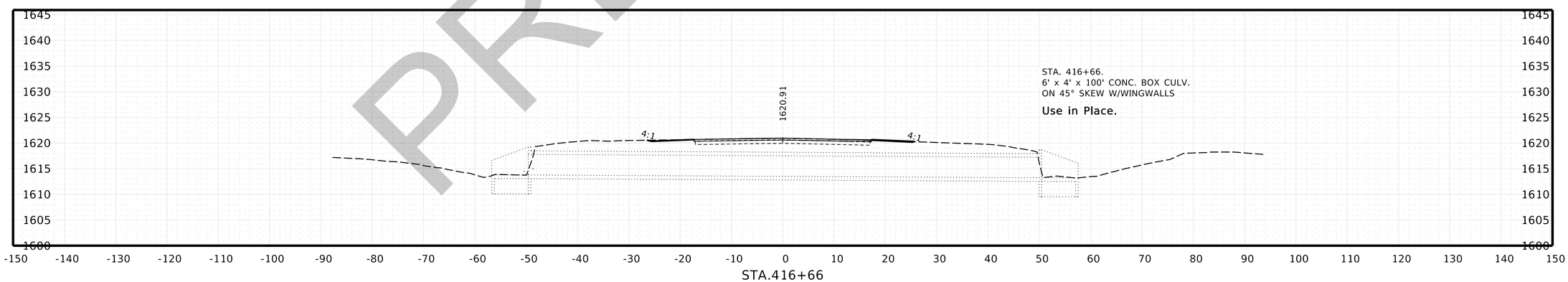
COMPUTER: BG04139M674
DATE: 8-MAY-2024 08:12
FILE: 42832 Sheets Earthwork.dgn



STA.418+20



STA.415+17, 45' Rt. - STA.418+17, 45' RT.



STA.416+66

PRELIMINARY

R1

Project Number
74-5(112)

C.N. 42832

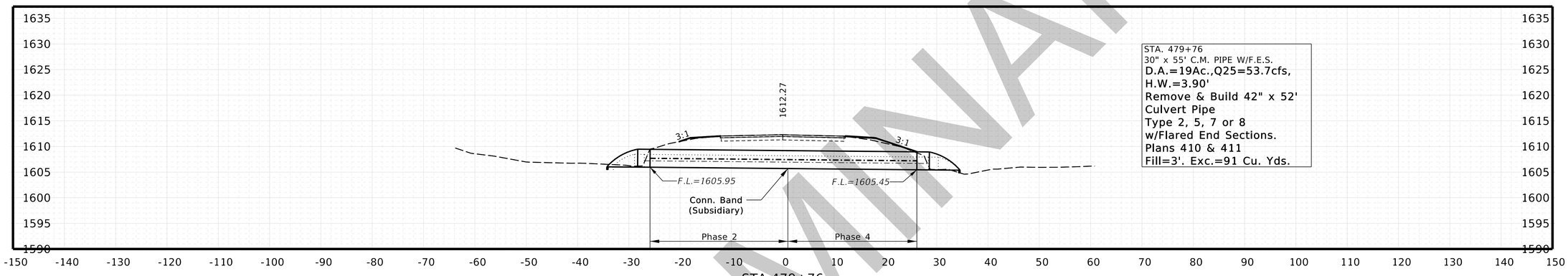
DRAINAGE CROSS SECTIONS

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

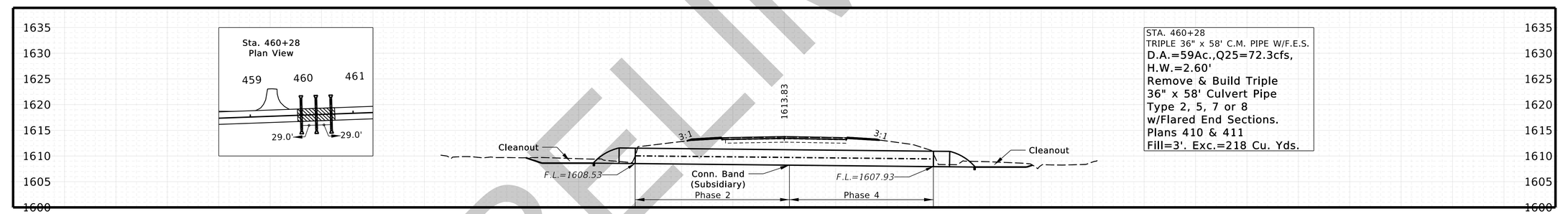
Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:12
FILE: 42832 Sheets Drainage X Sections.dgn

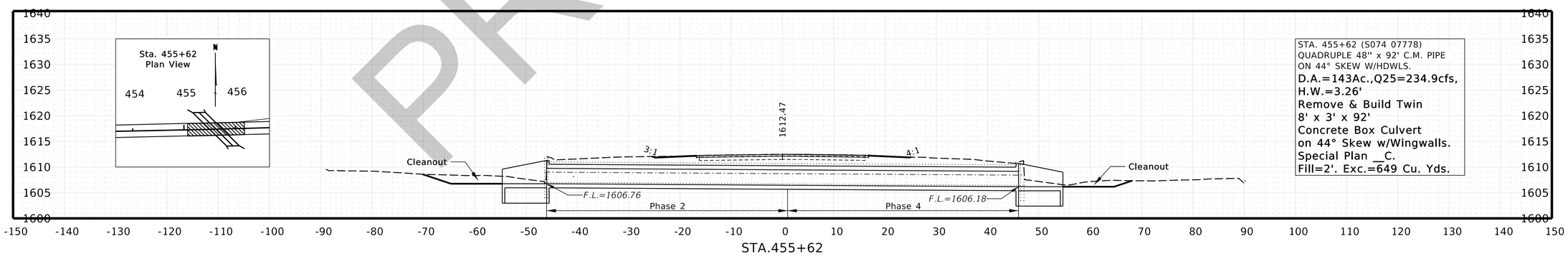
PRELIMINARY



STA.479+76



STA.460+28



STA.455+62

R2

Project Number
74-5(112)

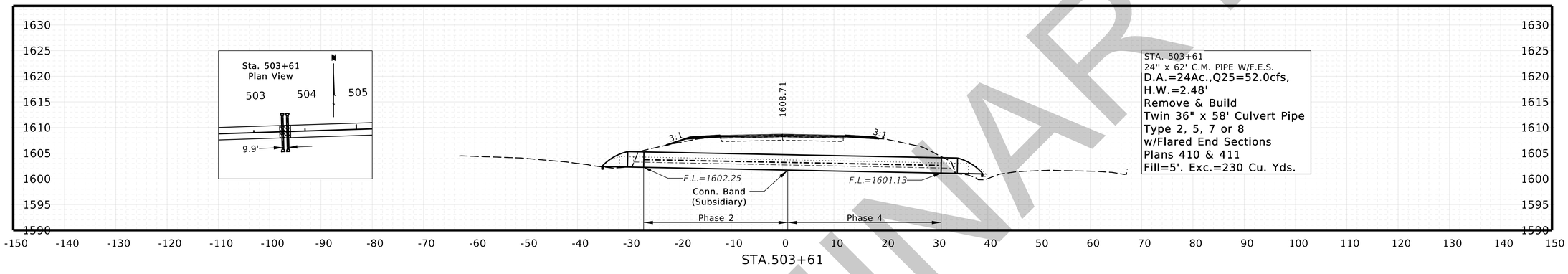
C.N. 42832

DRAINAGE CROSS SECTIONS

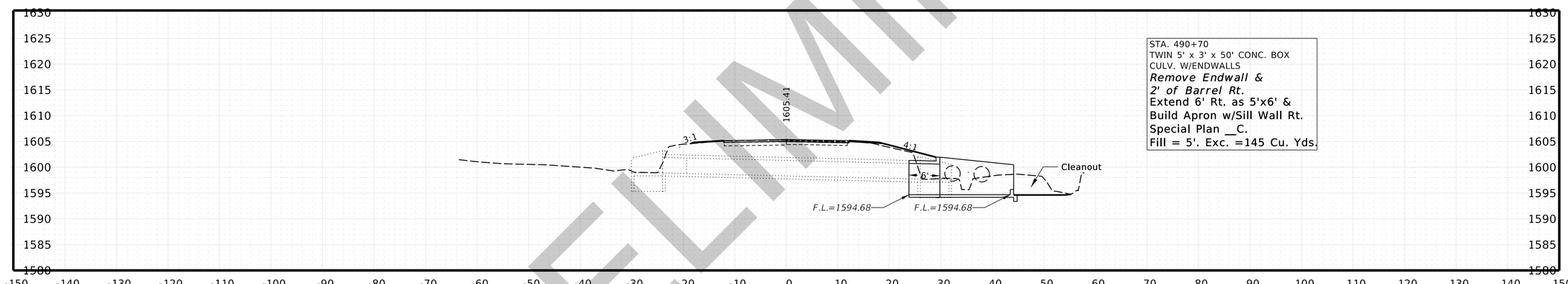
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway
Design
Division

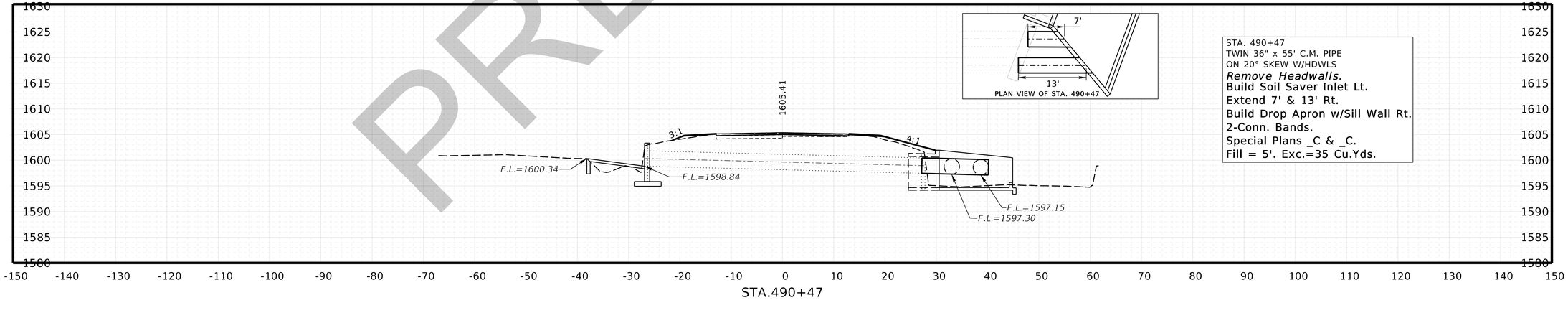
COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:13
FILE: 42832 Sheets Drainage X Sections.dgn



STA.503+61



STA.490+70



STA.490+47

PRELIMINARY

R3

Project Number
74-5(112)

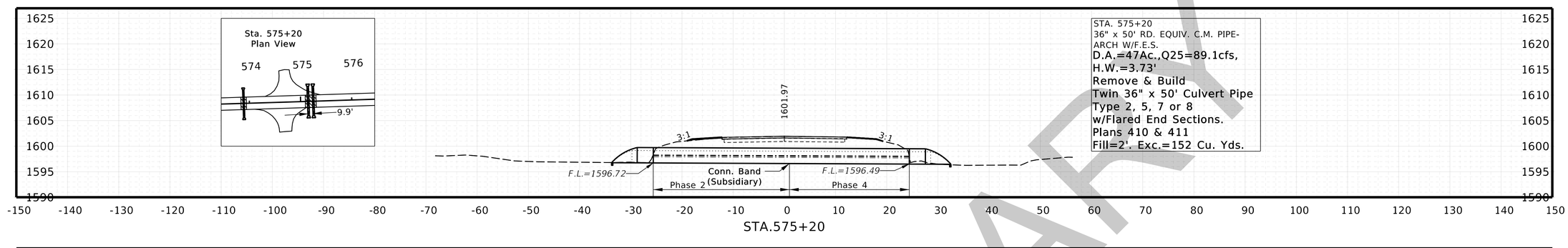
C.N. 42832

DRAINAGE CROSS SECTIONS

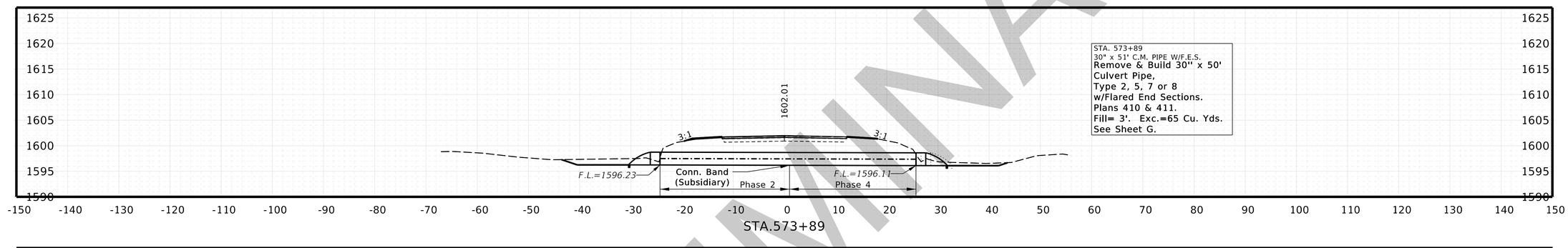
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway
Design
Division

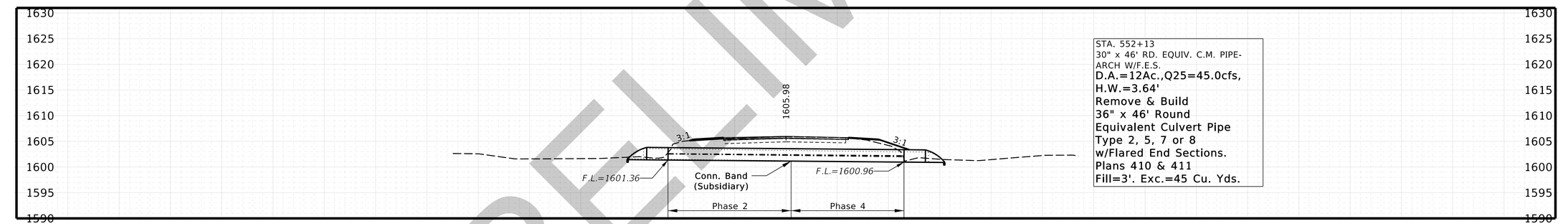
COMPUTER: BG04190M674
DATE: 8-MAY-2024 08:13
FILE: 42832 Sheets Drainage X Sections.dgn



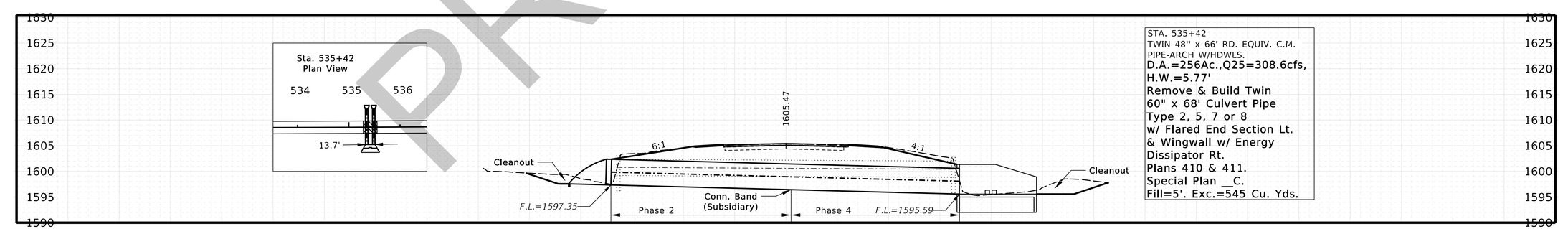
STA.575+20



STA.573+89



STA.552+13



STA.535+42

PRELIMINARY

R4

Project Number
74-5(112)

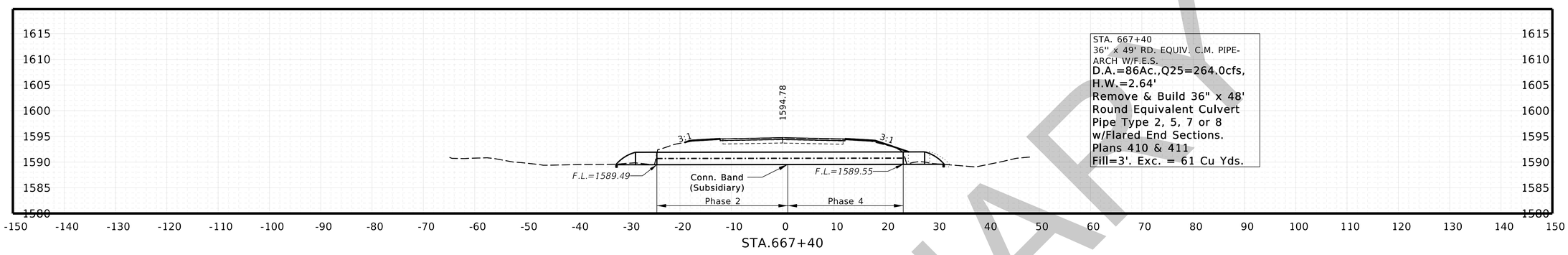
C.N. 42832

DRAINAGE CROSS SECTIONS

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

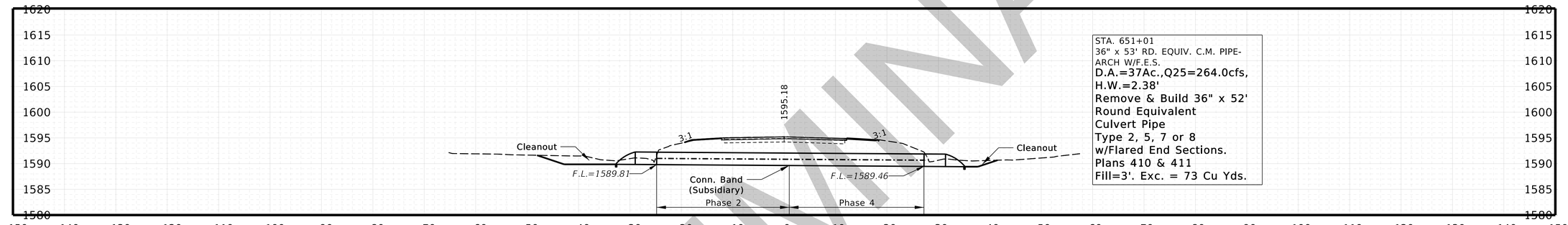
Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:13
FILE: 42832 Sheets Drainage X Sections.dgn



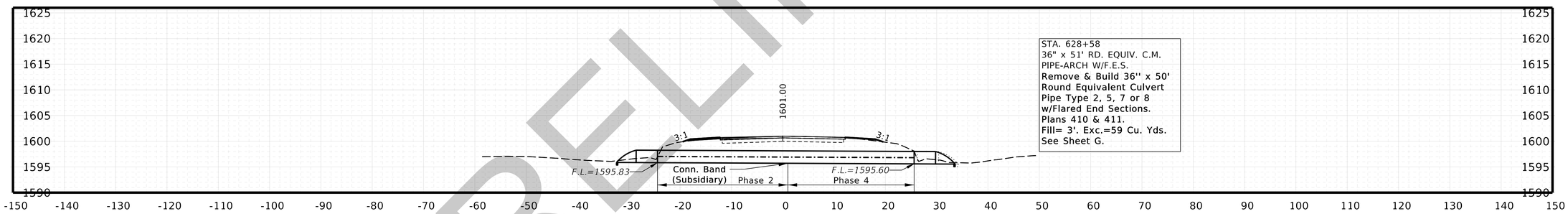
STA. 667+40
36'' x 49' RD. EQUIV. C.M. PIPE-ARCH W/F.E.S.
D.A.=86Ac.,Q25=264.0cfs,
H.W.=2.64'
Remove & Build 36" x 48'
Round Equivalent Culvert
Pipe Type 2, 5, 7 or 8
w/Flared End Sections.
Plans 410 & 411
Fill=3'. Exc. = 61 Cu Yds.

STA.667+40



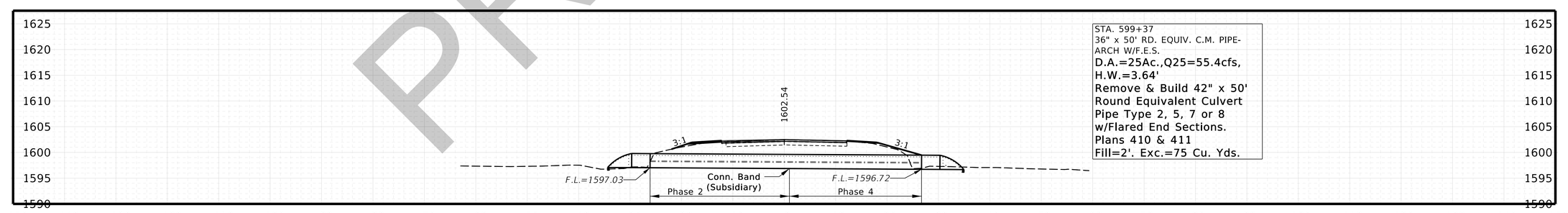
STA. 651+01
36" x 53' RD. EQUIV. C.M. PIPE-ARCH W/F.E.S.
D.A.=37Ac.,Q25=264.0cfs,
H.W.=2.38'
Remove & Build 36" x 52'
Round Equivalent
Culvert Pipe
Type 2, 5, 7 or 8
w/Flared End Sections.
Plans 410 & 411
Fill=3'. Exc. = 73 Cu Yds.

STA.651+01



STA. 628+58
36" x 51' RD. EQUIV. C.M. PIPE-ARCH W/F.E.S.
Remove & Build 36'' x 50'
Round Equivalent Culvert
Pipe Type 2, 5, 7 or 8
w/Flared End Sections.
Plans 410 & 411.
Fill= 3'. Exc.=59 Cu. Yds.
See Sheet G.

STA.628+58



STA. 599+37
36" x 50' RD. EQUIV. C.M. PIPE-ARCH W/F.E.S.
D.A.=25Ac.,Q25=55.4cfs,
H.W.=3.64'
Remove & Build 42" x 50'
Round Equivalent Culvert
Pipe Type 2, 5, 7 or 8
w/Flared End Sections.
Plans 410 & 411
Fill=2'. Exc.=75 Cu. Yds.

STA.599+37

PRELIMINARY

R5

Project Number
74-5(112)

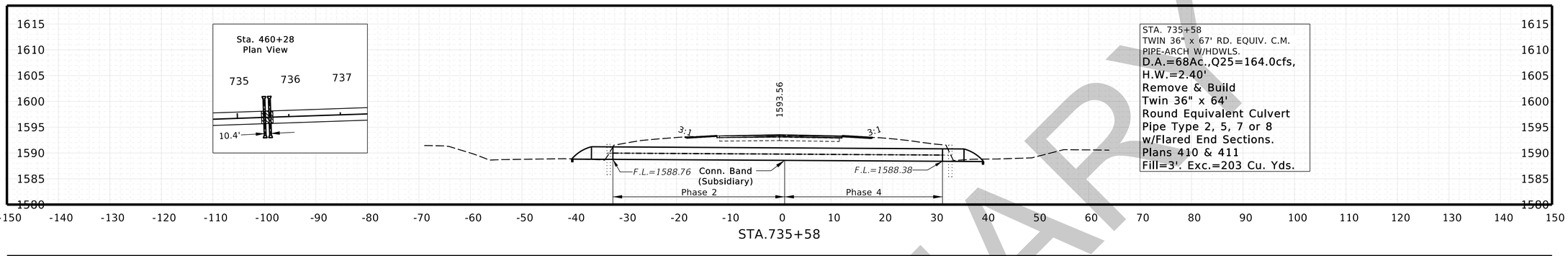
C.N. 42832

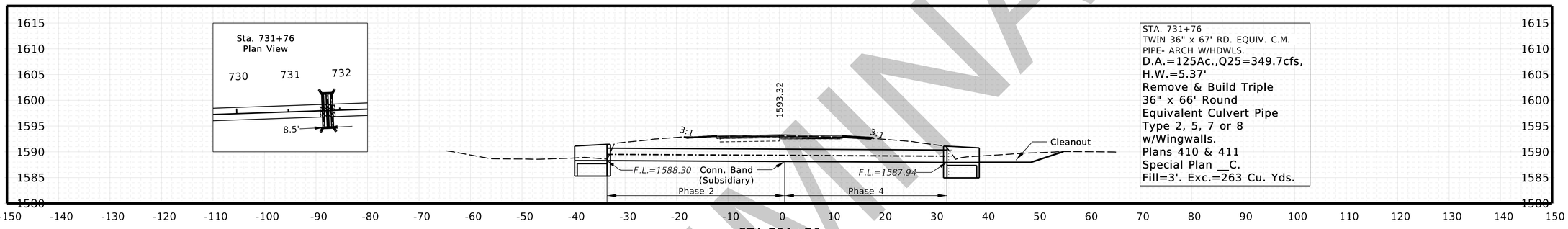
DRAINAGE CROSS SECTIONS

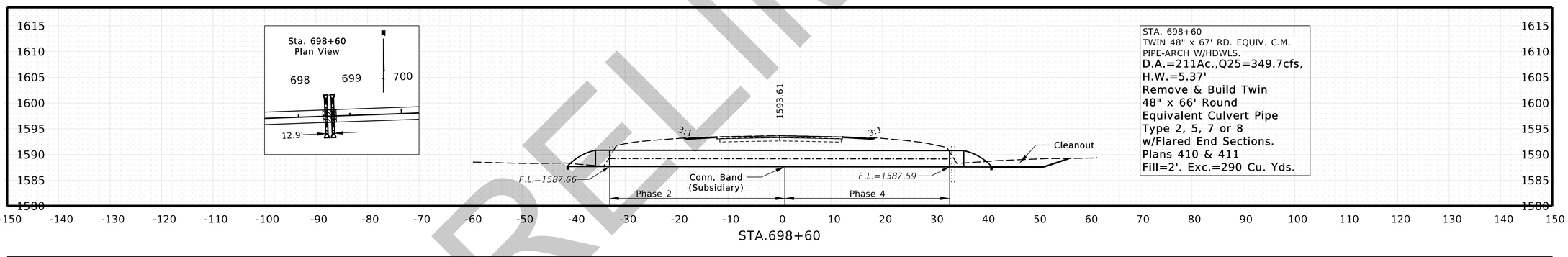
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

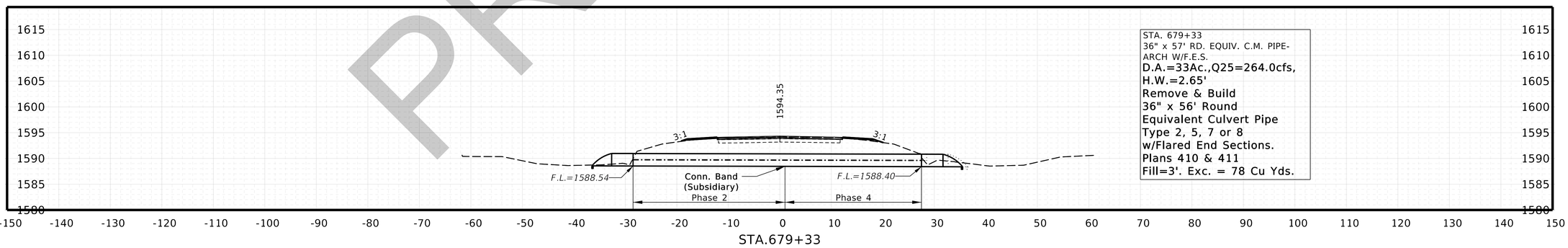
Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:13
FILE: 42832 Sheets Drainage X Sections.dgn









PRELIMINARY

R6

Project Number
74-5(112)

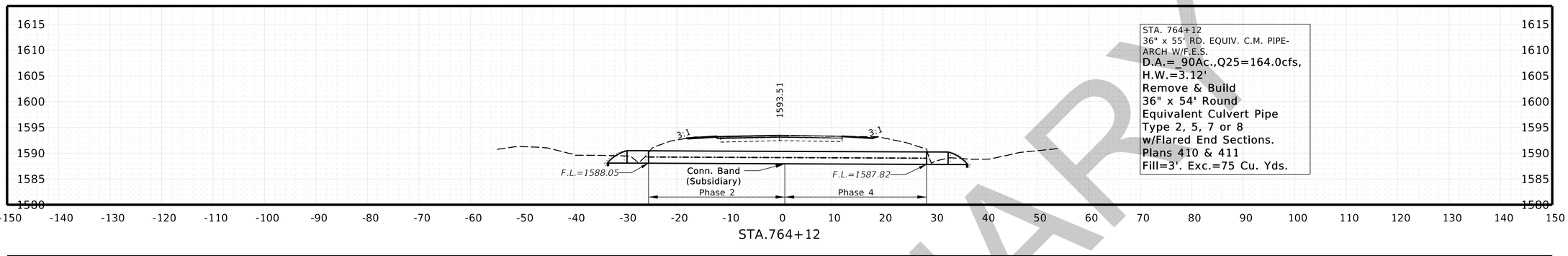
C.N. 42832

DRAINAGE CROSS SECTIONS

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

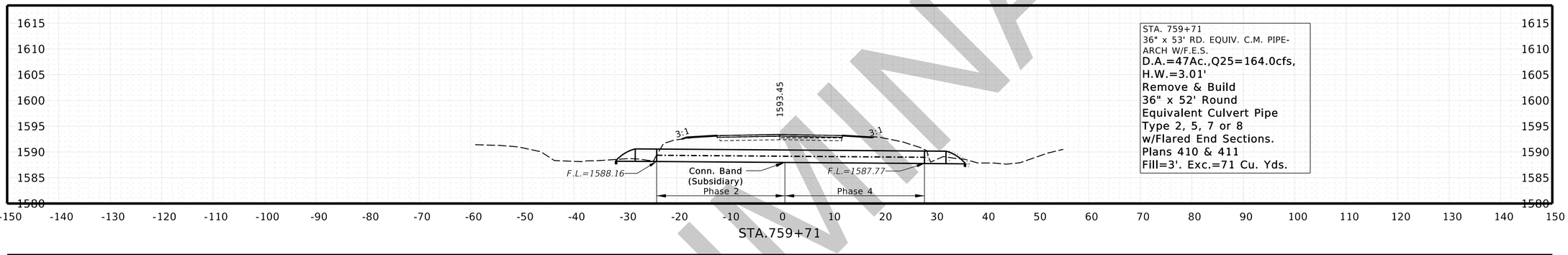
Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:13
FILE: 42832 Sheets Drainage X Sections.dgn



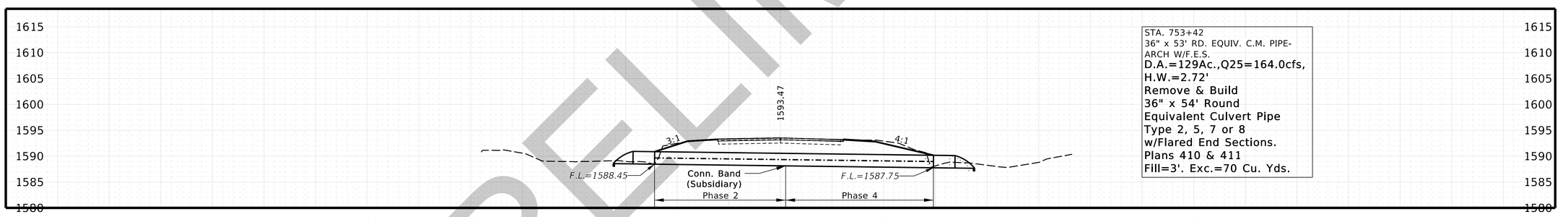
STA. 764+12
36" x 55' RD. EQUIV. C.M. PIPE-ARCH W/F.E.S.
D.A.=_90Ac.,Q25=164.0cfs,
H.W.=3.12'
Remove & Build
36" x 54' Round
Equivalent Culvert Pipe
Type 2, 5, 7 or 8
w/Flared End Sections.
Plans 410 & 411
Fill=3'. Exc.=75 Cu. Yds.

STA.764+12



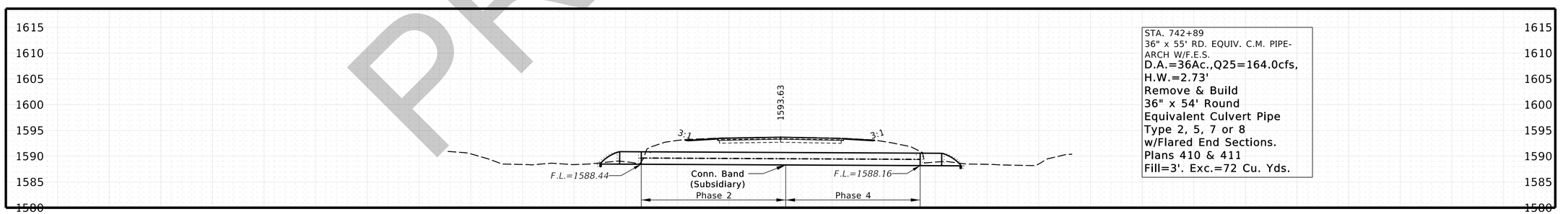
STA. 759+71
36" x 53' RD. EQUIV. C.M. PIPE-ARCH W/F.E.S.
D.A.=47Ac.,Q25=164.0cfs,
H.W.=3.01'
Remove & Build
36" x 52' Round
Equivalent Culvert Pipe
Type 2, 5, 7 or 8
w/Flared End Sections.
Plans 410 & 411
Fill=3'. Exc.=71 Cu. Yds.

STA.759+71



STA. 753+42
36" x 53' RD. EQUIV. C.M. PIPE-ARCH W/F.E.S.
D.A.=129Ac.,Q25=164.0cfs,
H.W.=2.72'
Remove & Build
36" x 54' Round
Equivalent Culvert Pipe
Type 2, 5, 7 or 8
w/Flared End Sections.
Plans 410 & 411
Fill=3'. Exc.=70 Cu. Yds.

STA.753+42



STA. 742+89
36" x 55' RD. EQUIV. C.M. PIPE-ARCH W/F.E.S.
D.A.=36Ac.,Q25=164.0cfs,
H.W.=2.73'
Remove & Build
36" x 54' Round
Equivalent Culvert Pipe
Type 2, 5, 7 or 8
w/Flared End Sections.
Plans 410 & 411
Fill=3'. Exc.=72 Cu. Yds.

STA.742+89

PRELIMINARY

R7

Project Number
74-5(112)

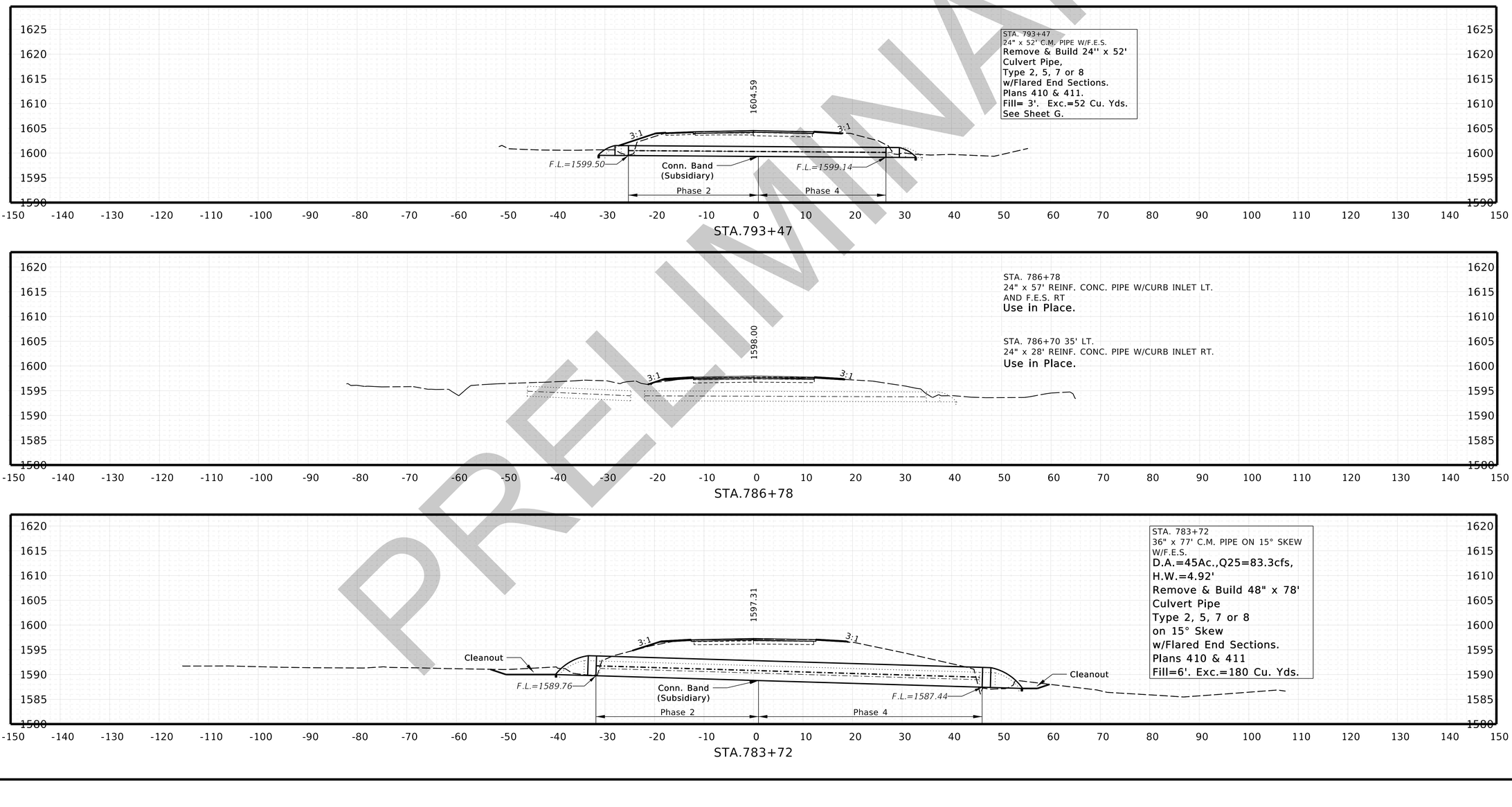
C.N. 42832

DRAINAGE CROSS SECTIONS

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG04
DATE: 8-MAY-2024 08:13
FILE: 42832 Sheets Drainage X Sections.dgn



PRELIMINARY

R8

Project Number
74-5(112)

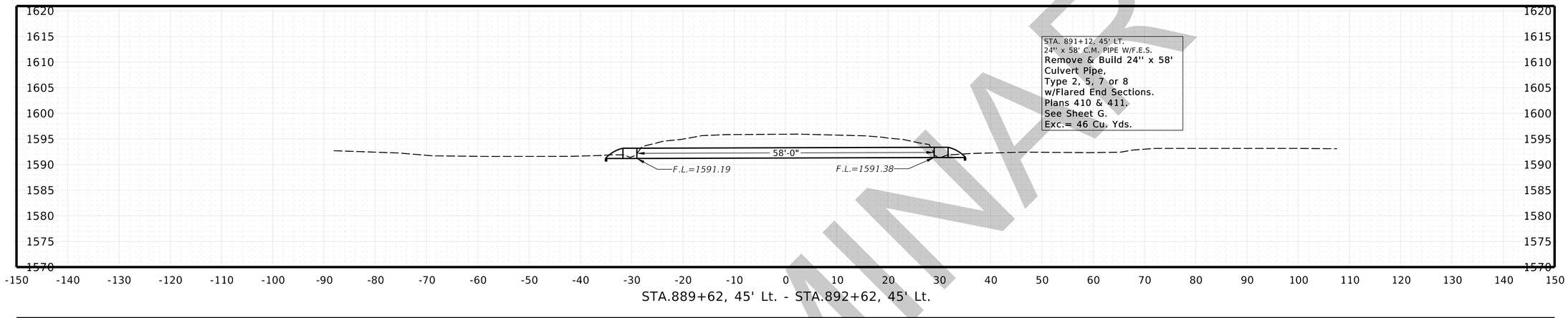
C.N. 42832

DRAINAGE CROSS SECTIONS

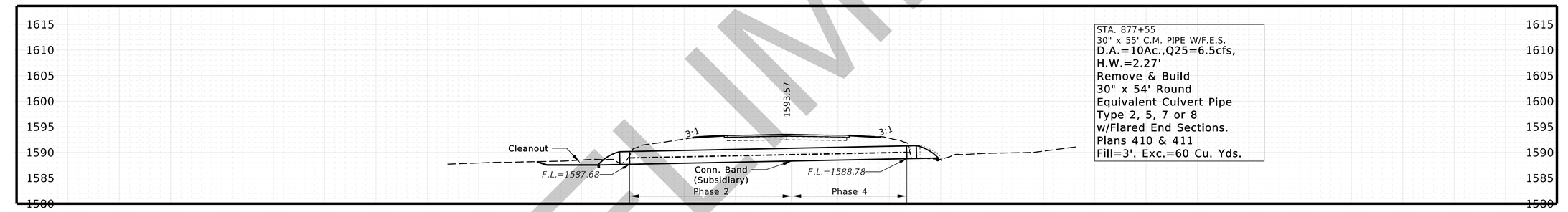
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway
Design
Division

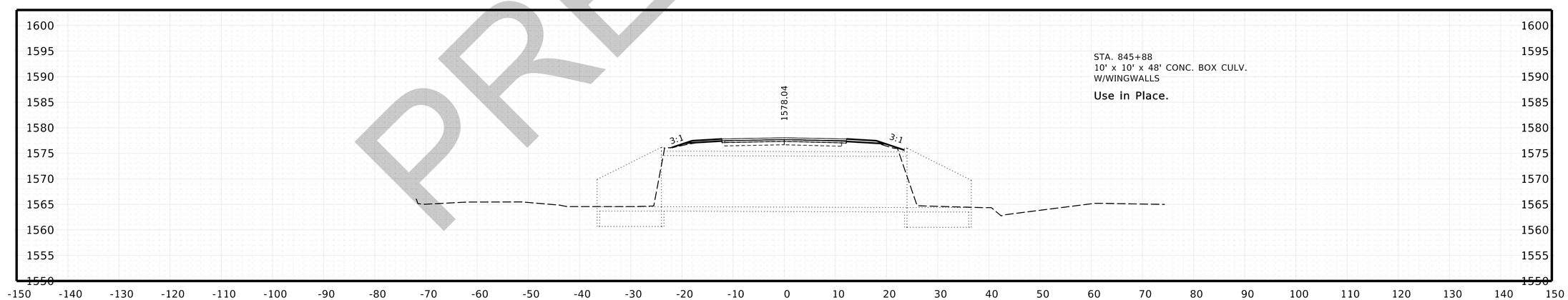
COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:13
FILE: 42832 Sheets Drainage X Sections.dgn



STA.889+62, 45' Lt. - STA.892+62, 45' Lt.



STA.877+55



STA.845+88

PRELIMINARY

R9

Project Number
74-5(112)

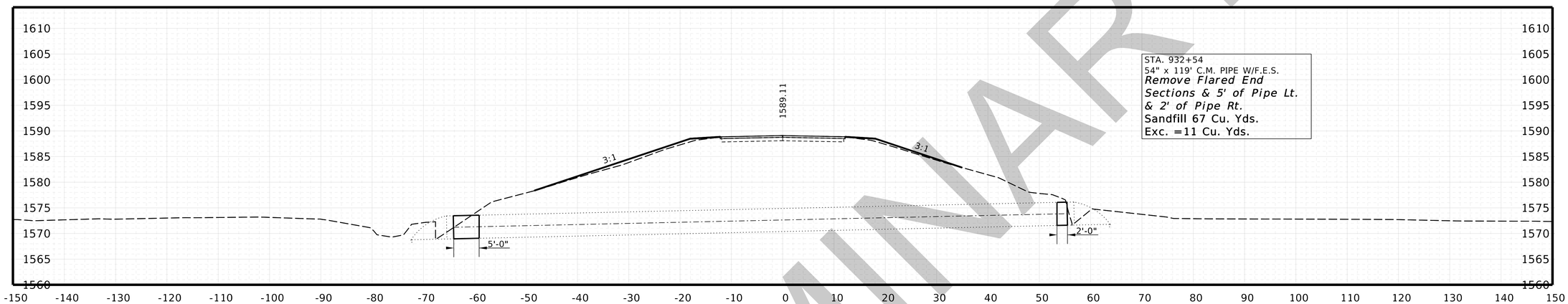
C.N. 42832

DRAINAGE CROSS SECTIONS

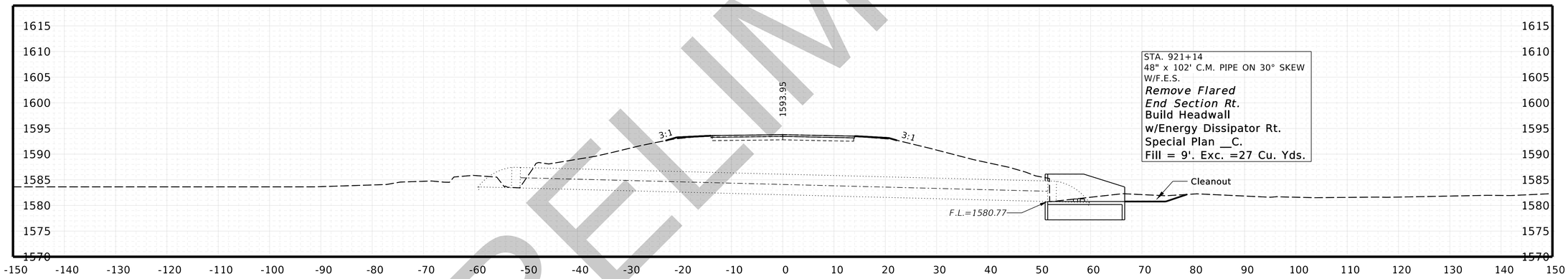
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway
Design
Division

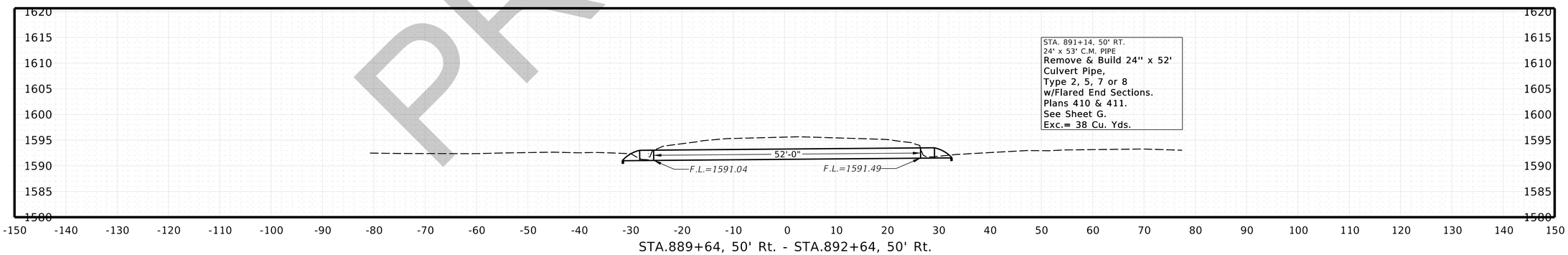
COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:13
FILE: 42832 Sheets Drainage X Sections.dgn



STA.932+54



STA.921+14



STA.889+64, 50' Rt. - STA.892+64, 50' Rt.

PRELIMINARY

R10

Project Number
74-5(112)

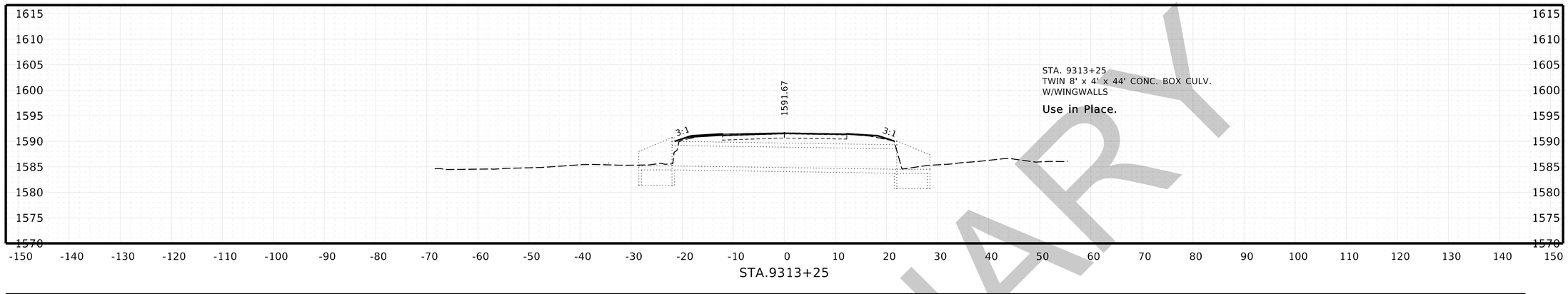
C.N. 42832

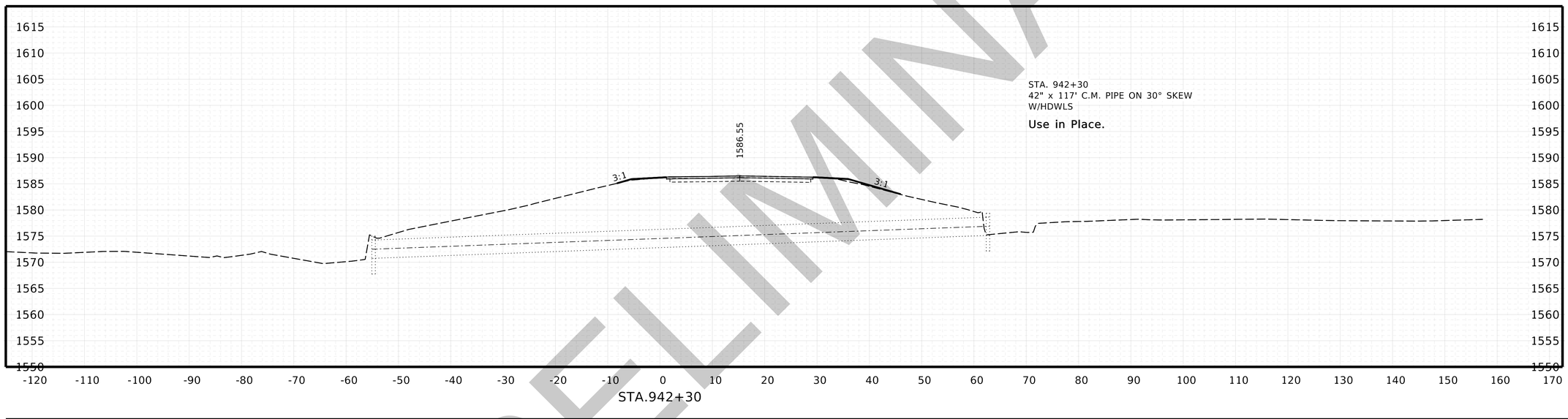
DRAINAGE CROSS SECTIONS

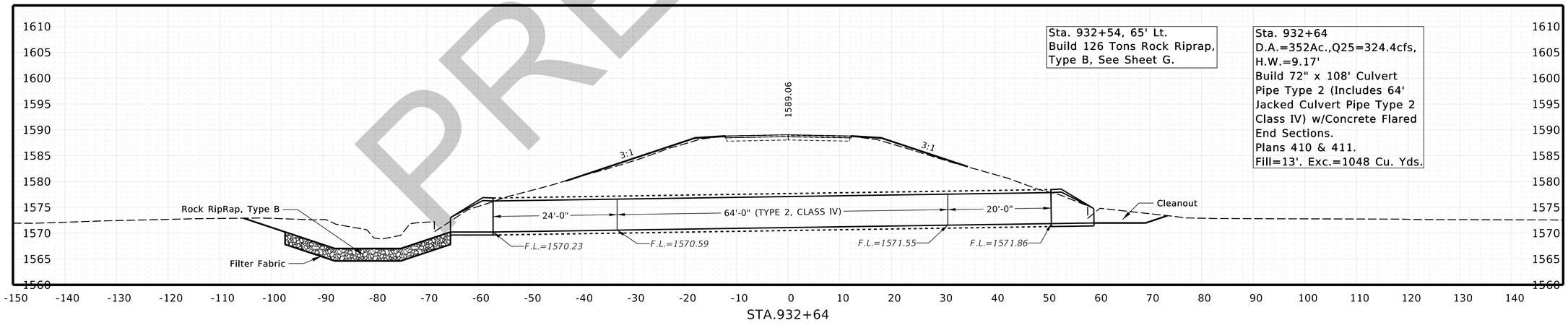
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:12
FILE: 42832 Sheets Drainage X Sections.dgn







PRELIMINARY

R11

Project Number
74-5(112)

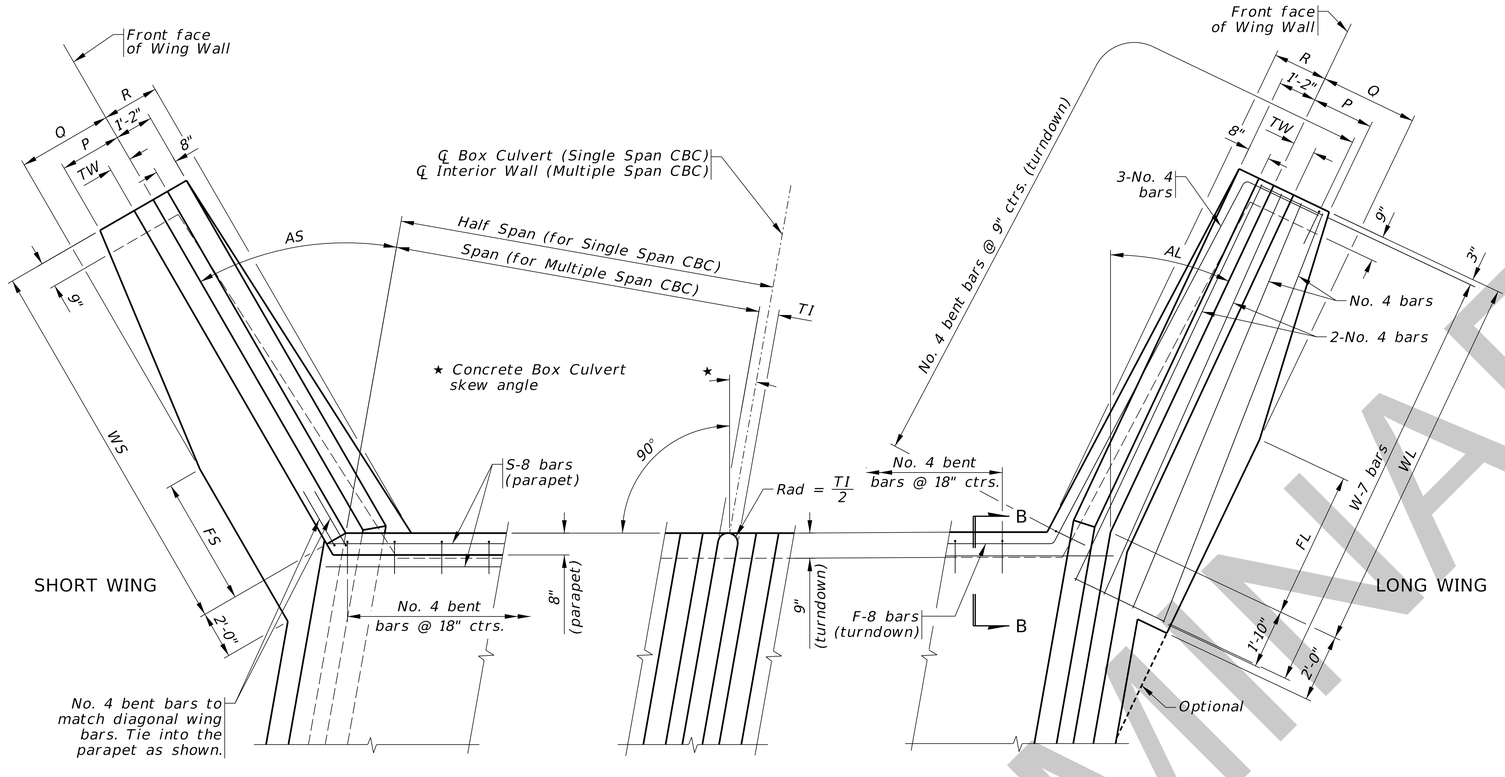
C.N. 42832

DRAINAGE CROSS SECTIONS

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

COMPUTER: BG0419M674
DATE: 8-MAY-2024 08:12
FILE: 42832 Sheets Drainage X Sections.dgn



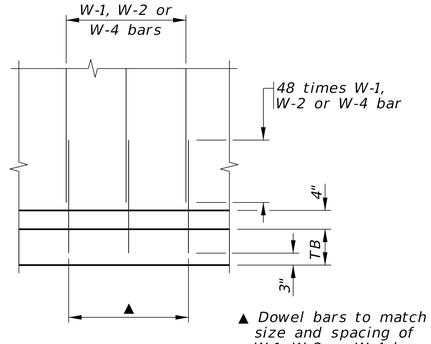
PARTIAL PLAN AT END

(Right Hand Back box culvert skew shown
Left Hand Back identical, but opposite-hand)
Not to Scale

NOTES

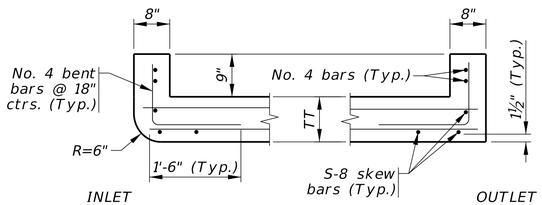
The Contractor shall have the option of using dowel bars to match vertical wall bars as shown on the Optional Bar Detail. No allowances will be made for additional steel required for bar laps.

Details for parapets and concrete turndowns are typical unless otherwise noted on respective Box Culvert Design Special Plan sheets.



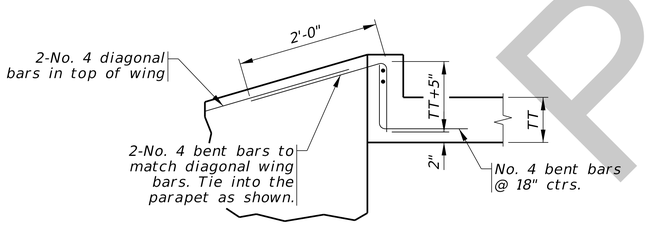
OPTIONAL BAR DETAIL

Not to Scale



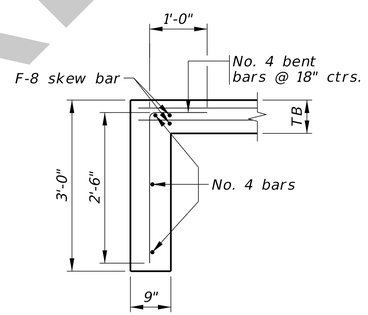
SECTION THROUGH PARAPETS

(Transverse slab bars not shown)
Not to Scale



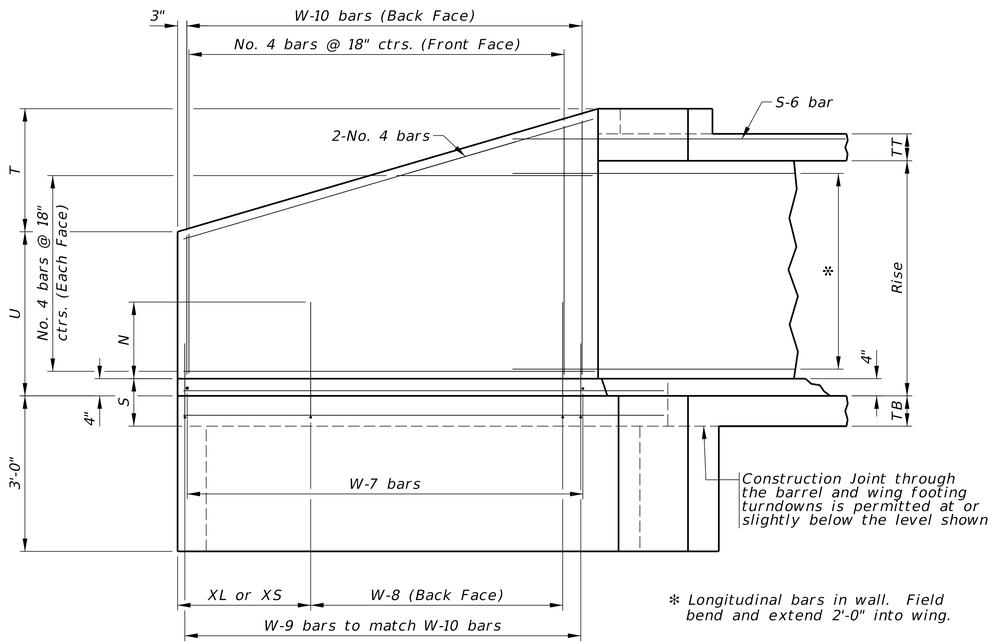
WING REINFORCEMENT AT PARAPET CONNECTION

Not to Scale



SECTION B-B

(Transverse floor bars not shown)
Not to Scale



※ *Longitudinal bars in wall. Field bend and extend 2'-0" into wing.*

TYPICAL ELEVATION OF WING

Not to Scale

PRELIMINARY

T1

PROJECT NUMBER
74-5(112)

C.N. 42832

STRUCTURE NUMBER
N/A

BRIDGE ENGINEER

BOX CULVERT STANDARD DETAILS

COUNTY FILLMORE LOCATION STRANG SPUR EAST
HWY. NO. N-74 SKEW VARIES
REF. POST. N/A ROADWAY N/A
STA. VARIES DESIGN LIVE LOAD HL-93
DESIGNED BY NDOT DETAILED BY JGH CHECKED BY JWB DATE APRIL 2024

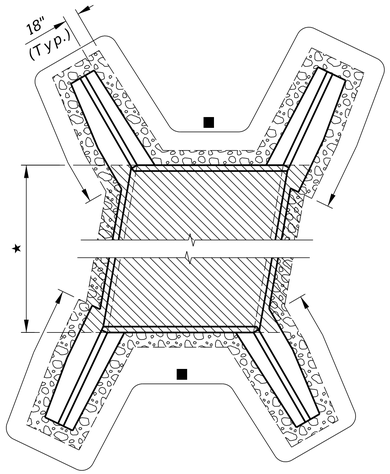
NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

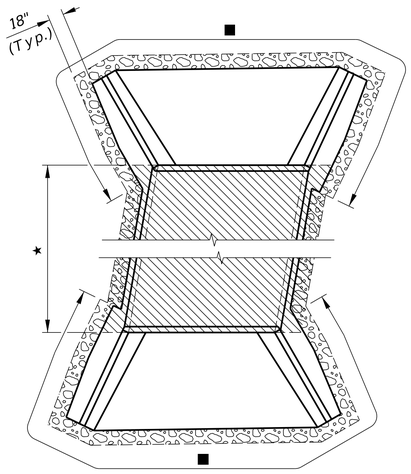
SPECIAL PLAN NO. 1C

1/2

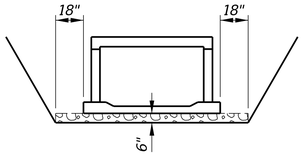
Computer: BG0419M631
Date: 29-APR-2024 11:26
File: cn42843jgh01.dgn



PLAN VIEW
(without paved apron(s))



PLAN VIEW
(with paved apron(s))



SECTIONAL VIEW

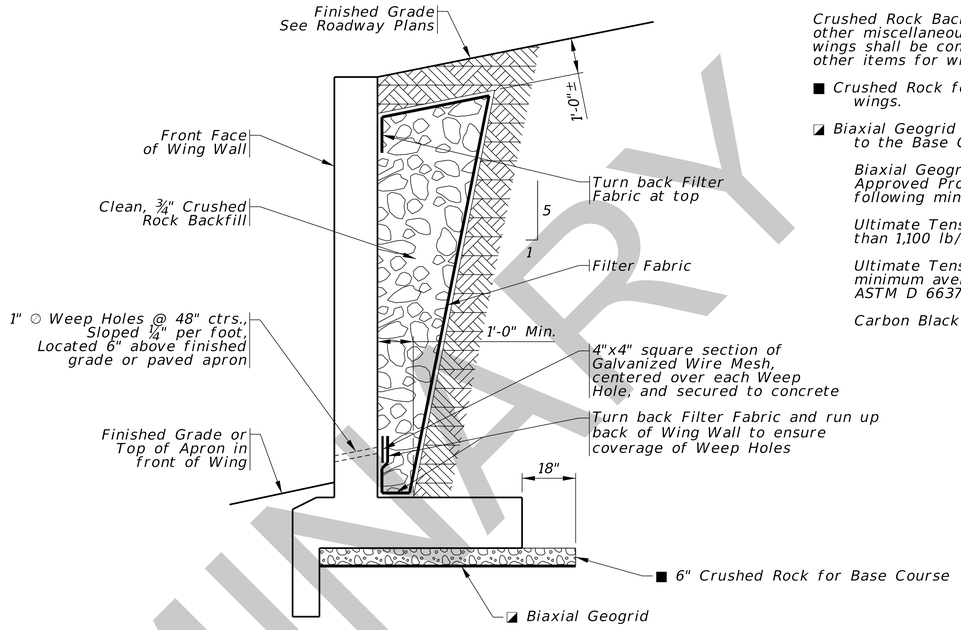
NOTES

■ = *See Wing Wall Drainage and Foundation Detail.*

★ = *Per linear foot of barrel quantity.*

See Design Data for quantities.

CRUSHED ROCK BASE COURSE
Not to Scale



WING WALL DRAINAGE AND FOUNDATION DETAIL
Not to Scale

NOTES

Crushed Rock Backfill, Filter Fabric, and all other miscellaneous drainage items behind the wings shall be considered as subsidiary to other items for which payment is made.

■ *Crushed Rock for Base Course is required under wings.*

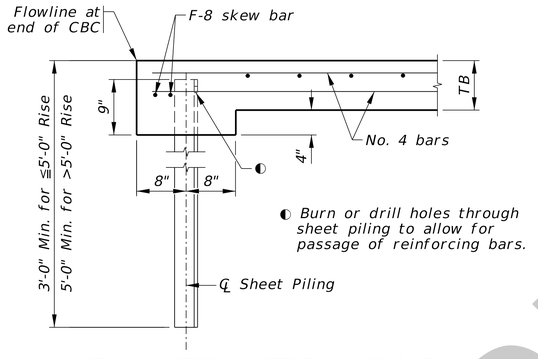
◪ *Biaxial Geogrid shall be considered as subsidiary to the Base Course pay item.*

Biaxial Geogrid shall be selected from the NDOT Approved Products List (APL) and shall have the following minimum properties:

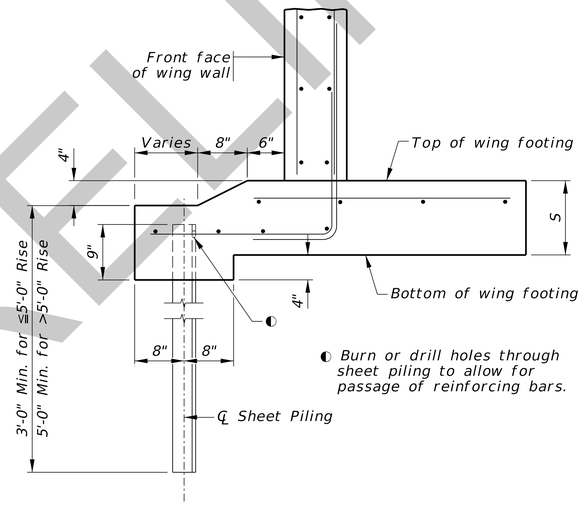
Ultimate Tensile Strength (Ta) shall be no less than 1,100 lb/ft (MD).

Ultimate Tensile Strength (Tult) shall be the minimum average roll value (MARV) as per the ASTM D 6637.

Carbon Black Content of 2%.



OPTIONAL STEEL SHEET PILING TURNDOWN AT END OF BARREL FLOOR
(Longitudinal section taken at midspan)
Not to Scale

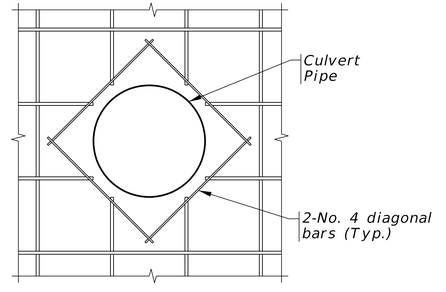


OPTIONAL STEEL SHEET PILING TURNDOWN AT WING FOOTING
(For concrete box culvert wings)
Not to Scale

NOTES

When sheet piling is used in the turndown, the barrel floor and wing footing shall be increased by 4" around the sheet piling. The extension shall be poured monolithically with the rest of the barrel floor and wing footing. All sheet piling, additional concrete, preparation, equipment, tools, labor and incidentals necessary to complete the work shall be supplied at no additional cost.

All sheet piling shall be interlocking. Steel sheet piling shall have a minimum thickness of 7 gauge.



Place No. 4 diagonal bars around pipe openings when a pipe is required through box culvert wall or wing wall.

DIAGONAL REINFORCING AROUND PIPE
Not to Scale

PRELIMINARY

T2

PROJECT NUMBER
74-5(112)

C.N. 42832

STRUCTURE NUMBER
N/A

BRIDGE ENGINEER

BOX CULVERT STANDARD DETAILS

DATE APRIL 2024

COUNTY FILLMORE
HWY. NO. N-74
REF. POST. N/A
STA. VARIES

LOCATION STRANG SPUR EAST
SKEW VARIES
ROADWAY N/A
DESIGN LIVE LOAD HL-93

DESIGNED BY NDOT
DETAILED BY JGH
CHECKED BY JWB

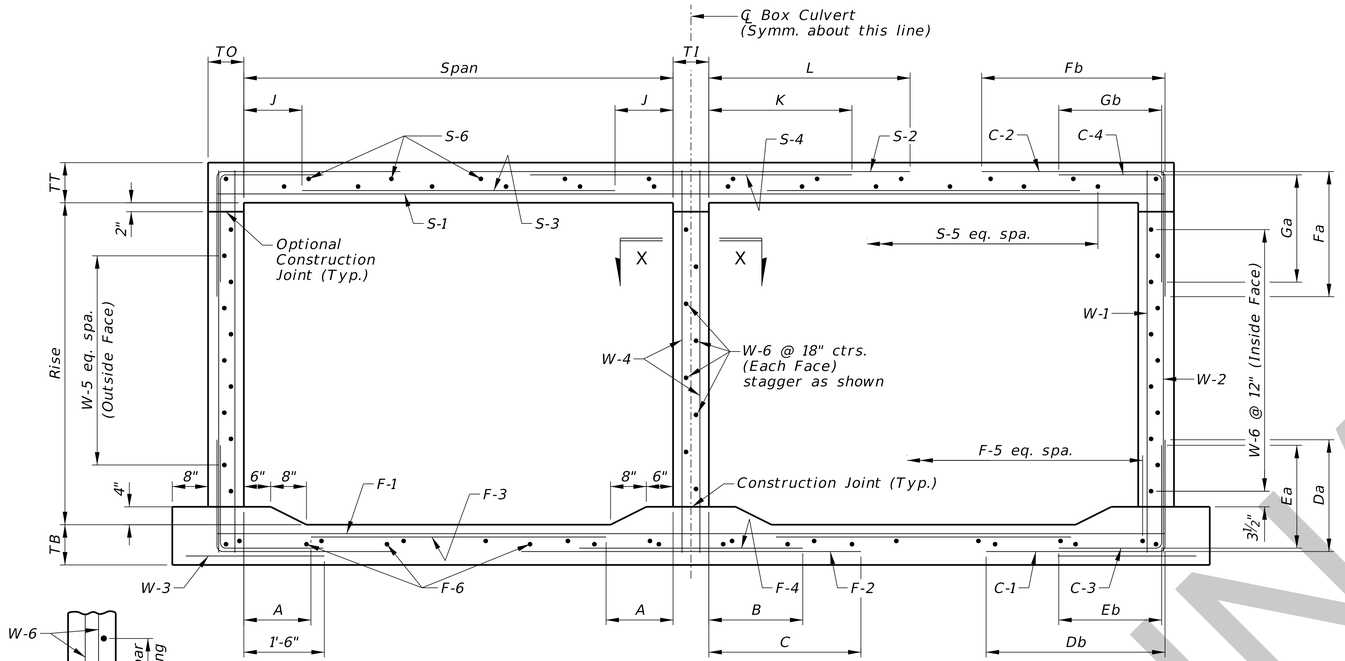
NEBRASKA DEPARTMENT OF TRANSPORTATION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

SPECIAL PLAN NO. 1C

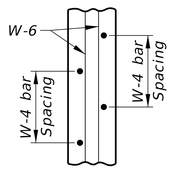
2/2

Computer: BG0419M631
Date: 29-APR-2024 11:26
File: cn42843gh01.dgn

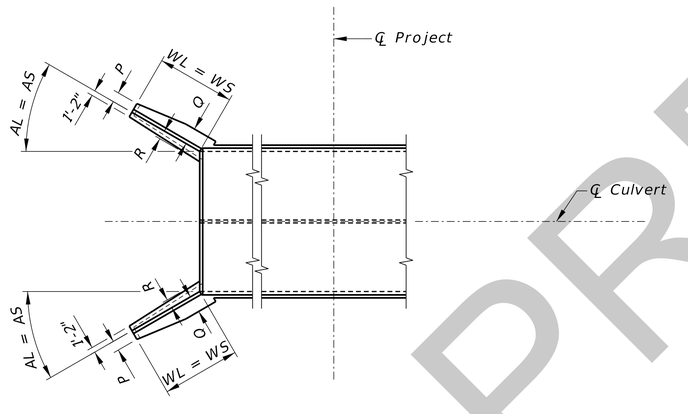


CROSS SECTION OF BOX CULVERT

Not to Scale

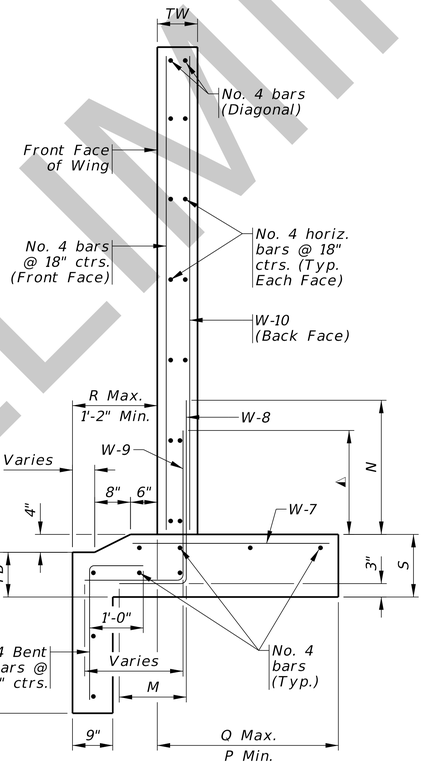


SECTION X-X



PLAN OF BOX CULVERT

Not to Scale



TYPICAL WING SECTION

Not to Scale

◭ *Length = 36 x diameter of bar*

NOTES

This structure is designed in accordance with the AASHTO LRFD Bridge Design Specifications, Ninth Edition, including subsequent revisions.

Fill is the depth of earth cover (including pavement) above top of culvert.

All concrete used shall be Class "47B", with a 28-day strength of 4,000 psi.

All reinforcing steel shall conform to the requirements of ASTM A615, Grade 60 steel.

The minimum clearance, measured from the face of the concrete to the surface of any reinforcing bar shall be 3" for bars near bottom of culvert floor and wing footings, and 2" for all other bars, except where otherwise noted.

Field bend and/or clip reinforcing bars to maintain minimum clearance.

Payment for reinforcing steel shall be based on quantities as shown in the Design Data. No allowance will be made for additional steel required for splices.

The minimum lap for spliced bars shall be 48 bar diameters.

Concrete and steel quantities per foot of barrel include concrete and steel in the floor, walls and slab for one-foot length of barrel as shown in cross section.

Concrete and steel quantities for ends include all concrete and steel beyond vertical planes passing through ends of barrel, plus all concrete and steel not included in the barrel cross section.

Excavation for ends consists of neat excavation for barrel turndowns, wing footings and footing turndowns, but only for the portions below flow line.

Transverse barrel bars shall be placed normal to ℄ Culvert. Bar lengths shall be adjusted to fit skewed barrel ends.

Place F-3 bars midway between F-1 bars, S-3 bars midway between S-1 bars, C-3 bars midway between C-1 bars, and C-4 bars midway between C-2 bars.

Spacing of F-5 bars equals (Span Length + 3½") divided by (# F-5 bars).

Spacing of S-5 bars equals (Span Length) divided by (# S-5 bars), with first bar being placed one-half space from inside face of wall.

For details not shown, See Special Plan "Box Culvert Standard Details".

DESIGN DATA

REINFORCED CONCRETE BOX CULVERT DESIGN — TWIN SPAN AT STATION 418+20 LT

SPAN	RISE	FILL	BOX SKEW	DES LOAD	WINGS	WINGS ON	WING SLOPE
6 FT.	4 FT.	3 FT.	0 DEG.	HL-93	FLARED	ONE END	3 : 1

BARREL SLAB THICKNESSES:

BOTTOM	(TB) =	8.0"
SIDE	(TO) =	8.0"
TOP	(TT) =	8.0"
INTERIOR	(TI) =	8.0"

BARREL BAR DIMENSIONS

A	= 0'- 0.0"	B	= 0'- 0.0"	C	= 3'- 0.0"
Da	= 2'- 8.0"	Ea	= 0'- 0.0"	Fa	= 4'- 1.0"
Db	= 2'- 8.0"	Eb	= 0'- 0.0"	Fb	= 2'- 0.0"
J	= 0'- 7.0"	K	= 2'- 0.0"	L	= 3'- 6.0"

Ga = 1'-10.0"
Gb = 1'- 9.0"

BARREL REINFORCING STEEL

BAR	SIZE	SPAC	NO	LENGTH	BAR	SIZE	SPAC	NO	LENGTH	BAR	SIZE	SPAC	NO	LENGTH
C-1	4	12.0"		5'- 4.0"						C-2	4	18.0"		6'- 1.0"
C-3	0	0.0"		0'- 0.0"						C-4	4	18.0"		3'- 7.0"
F-1	4	12.0"		14'- 0.0"	W-1	4	12.0"		4'-11.0"	S-1	4	18.0"		13'- 8.0"
F-2	5	12.0"		6'- 8.0"	W-2	0	0.0"		0'- 0.0"	S-2	4	12.0"		7'- 8.0"
F-3	0	0.0"		0'- 0.0"	W-3	4	18.0"		2'- 8.0"	S-3	4	18.0"		4'-10.0"
F-4	0	0.0"		0'- 0.0"	W-4	4	12.0"		4'-11.0"	S-4	4	12.0"		4'- 8.0"
F-5	4		10		W-5	4		4		S-5	4		9	
F-6	4		9		W-6	4		14		S-6	4		10	

QUANTITIES (PER FOOT OF BARREL)

CONCRETE	1.078 CY
REINFORCING	103.6 LB
BASE COURSE	0.340 CY

PARAPET WIDTH = 8.0"

WING ANGLES AND DIMENSIONS

WALL THICKNESS (TW) = 8.0"

AL = 30.0 DEG	AS = 30.0 DEG	M = 1'- 0.0"	N = 2'- 0.0"	Q = 1'-11.0"	R = 1'- 2.0"
WL = 8'- 3.0"	WS = 8'- 3.0"	P = 1'-11.0"	Q = 1'-11.0"	R = 1'- 2.0"	S = 1'- 0.0"
FL = 0'- 0.0"	FS = 0'- 0.0"	R = 1'- 2.0"	S = 1'- 0.0"	T = 2'- 5.0"	U = 3'- 0.0"
XL = 3'- 1.0"	XS = 3'- 1.0"	T = 2'- 5.0"	U = 3'- 0.0"		

QUANTITIES FOR WINGS ON ONE END

CONCRETE	5.76 CY
REINFORCING	599 LB
EXCAVATION	3 CY
BASE COURSE	2.54 CY

STEEL FOR WINGS

BAR	SIZE	SPAC
W-7	5	12.0"
W-8	4	12.0"
W-9	5	12.0"
W-10	4	12.0"

NOTE:
SEE PLAN VIEWS AND SECTIONS FOR PARAPET BARS, TURNDOWN BARS AND OTHER WING BARS.

PRELIMINARY

T3

PROJECT NUMBER
74-5(112)

C.N. 42832

STRUCTURE NUMBER
N/A

BRIDGE ENGINEER

TWIN SPAN
CONCRETE BOX CULVERT

COUNTY FILLMORE
HWY. NO. N-74
REF. POST. N/A
STA. 418+20

LOCATION STRANG SPUR EAST
SKEW 0°
ROADWAY N/A
DESIGN LIVE LOAD HL-93

DESIGNED BY NDOT
DETAILED BY JGH
CHECKED BY JWB
DATE APRIL 2024

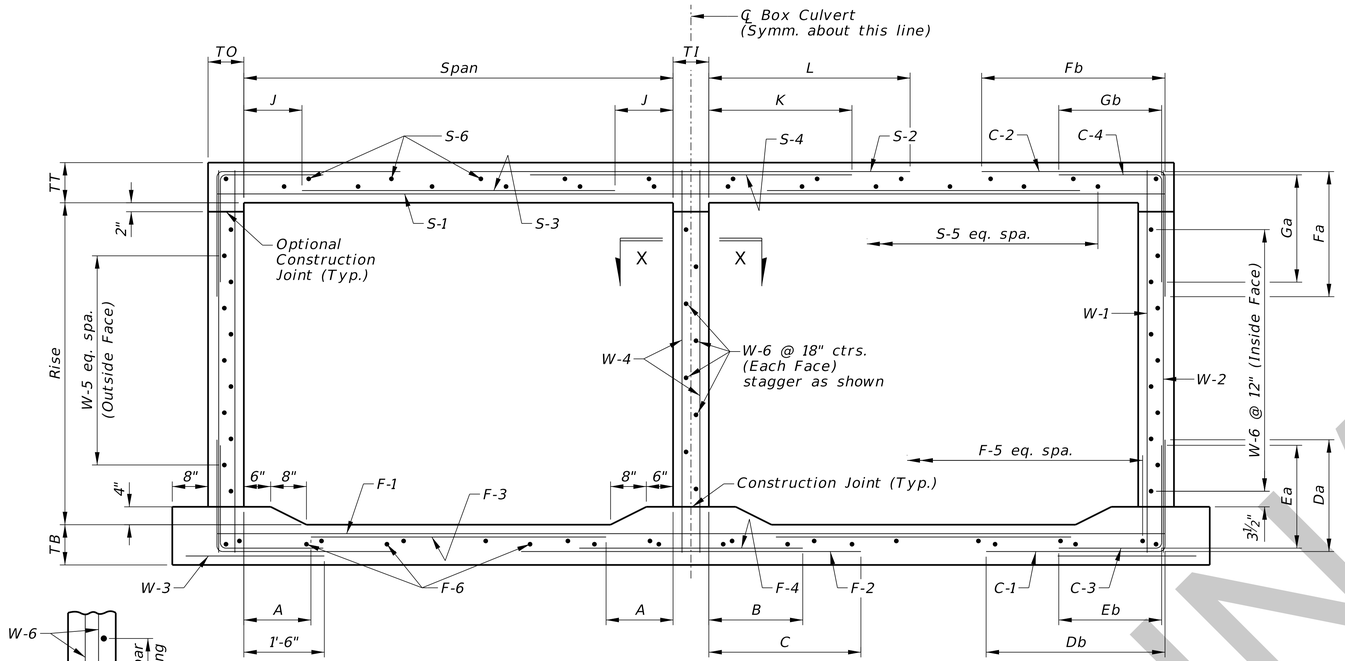
NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

SPECIAL PLAN NO. 2C

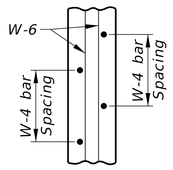
1 / 3

File: cn42832jgh02.dgn
Computer: BG04119M631
Date: 29-APR-2024 11:26

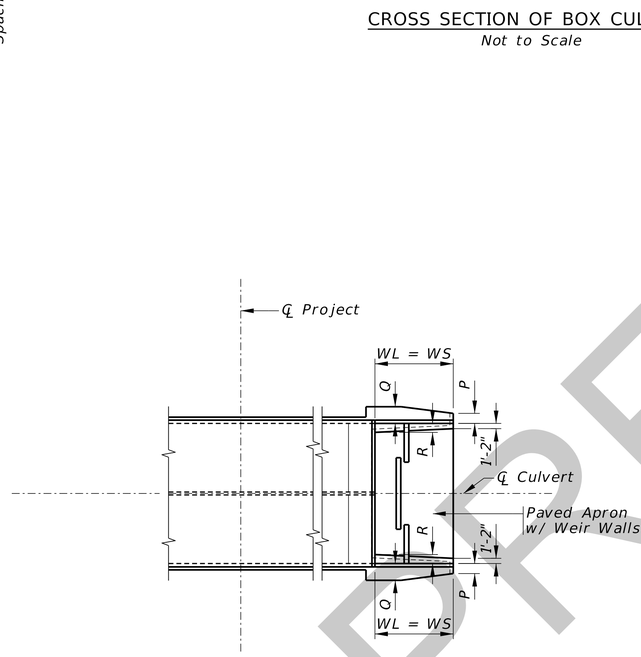


CROSS SECTION OF BOX CULVERT

Not to Scale

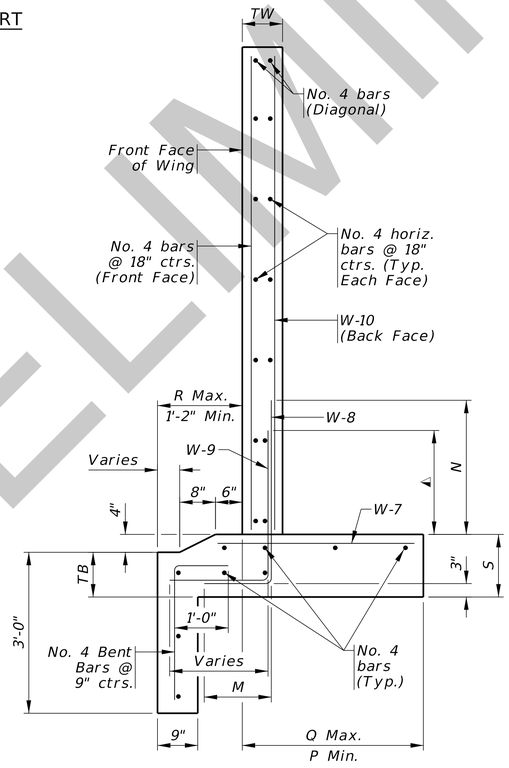


SECTION X-X



PLAN OF BOX CULVERT

Not to Scale



TYPICAL WING SECTION

Not to Scale

◭ *Length = 36 x diameter of bar*

NOTES

This structure is designed in accordance with the AASHTO LRFD Bridge Design Specifications, Ninth Edition, including subsequent revisions.

Fill is the depth of earth cover (including pavement) above top of culvert.

All concrete used shall be Class "47B", with a 28-day strength of 4,000 psi.

All reinforcing steel shall conform to the requirements of ASTM A615, Grade 60 steel.

The minimum clearance, measured from the face of the concrete to the surface of any reinforcing bar shall be 3" for bars near bottom of culvert floor and wing footings, and 2" for all other bars, except where otherwise noted.

Field bend and/or clip reinforcing bars to maintain minimum clearance.

Payment for reinforcing steel shall be based on quantities as shown in the Design Data. No allowance will be made for additional steel required for splices.

The minimum lap for spliced bars shall be 48 bar diameters.

Concrete and steel quantities per foot of barrel include concrete and steel in the floor, walls and slab for one-foot length of barrel as shown in cross section.

Concrete and steel quantities for ends include all concrete and steel beyond vertical planes passing through ends of barrel, plus all concrete and steel not included in the barrel cross section.

Excavation for ends consists of neat excavation for barrel turndowns, wing footings and footing turndowns, but only for the portions below flow line.

Transverse barrel bars shall be placed normal to ℄ Culvert. Bar lengths shall be adjusted to fit skewed barrel ends.

Place F-3 bars midway between F-1 bars, S-3 bars midway between S-1 bars, C-3 bars midway between C-1 bars, and C-4 bars midway between C-2 bars.

Spacing of F-5 bars equals (Span Length + 3½") divided by (# F-5 bars).

Spacing of S-5 bars equals (Span Length) divided by (# S-5 bars), with first bar being placed one-half space from inside face of wall.

For details not shown, See Special Plan "Box Culvert Standard Details".

DESIGN DATA

REINFORCED CONCRETE BOX CULVERT DESIGN — TWIN SPAN — AT STATION 418+20 RT

SPAN	RISE	FILL	BOX SKEW	DES LOAD	WINGS	WINGS ON	WING SLOPE
6 FT.	4 FT.	3 FT.	0 DEG.	HL-93	PARALLEL	ONE END	5 : 1

BARREL SLAB THICKNESSES:

BOTTOM	(TB) =	8.0"
SIDE	(TO) =	8.0"
TOP	(TT) =	8.0"
INTERIOR	(TI) =	8.0"

BARREL BAR DIMENSIONS

A	= 0'- 0.0"	B	= 0'- 0.0"	C	= 3'- 0.0"
Da	= 2'- 8.0"	Ea	= 0'- 0.0"	Fa	= 4'- 1.0"
Db	= 2'- 8.0"	Eb	= 0'- 0.0"	Fb	= 2'- 0.0"
J	= 0'- 7.0"	K	= 2'- 0.0"	L	= 3'- 6.0"

Ga = 1'-10.0"
Gb = 1'- 9.0"

BARREL REINFORCING STEEL

BAR	SIZE	SPAC	NO	LENGTH	BAR	SIZE	SPAC	NO	LENGTH	BAR	SIZE	SPAC	NO	LENGTH
C-1	4	12.0"		5'- 4.0"						C-2	4	18.0"		6'- 1.0"
C-3	0	0.0"		0'- 0.0"						C-4	4	18.0"		3'- 7.0"
F-1	4	12.0"		14'- 0.0"	W-1	4	12.0"		4'-11.0"	S-1	4	18.0"		13'- 8.0"
F-2	5	12.0"		6'- 8.0"	W-2	0	0.0"		0'- 0.0"	S-2	4	12.0"		7'- 8.0"
F-3	0	0.0"		0'- 0.0"	W-3	4	18.0"		2'- 8.0"	S-3	4	18.0"		4'-10.0"
F-4	0	0.0"		0'- 0.0"	W-4	4	12.0"		4'-11.0"	S-4	4	12.0"		4'- 8.0"
F-5	4		10		W-5	4		4		S-5	4		9	
F-6	4		9		W-6	4		14		S-6	4		10	

QUANTITIES (PER FOOT OF BARREL)

CONCRETE	1.078 CY
REINFORCING	103.6 LB
BASE COURSE	0.340 CY

PARAPET WIDTH = 8.0"

WING ANGLES AND DIMENSIONS

WALL THICKNESS (TW) = 8.0"

AL = 0.0 DEG	AS = 0.0 DEG	M = 1'- 0.0"	N = 2'- 0.0"		
WL =15'- 0.0"	WS =15'- 0.0"	P = 1'-11.0"	Q = 1'-11.0"		
FL = 5'- 0.0"	FS = 5'- 0.0"	R = 1'- 2.0"	S = 1'- 0.0"		
XL = 4'-10.0"	XS = 4'-10.0"	T = 1'- 3.0"	U = 4'- 2.0"		

QUANTITIES FOR WINGS ON ONE END

CONCRETE	9.87 CY
REINFORCING	989 LB
EXCAVATION	10 CY
BASE COURSE	6 CY

STEEL FOR WINGS

BAR	SIZE	SPAC
W-7	5	12.0"
W-8	4	12.0"
W-9	5	12.0"
W-10	4	12.0"

NOTE:
SEE PLAN VIEWS AND SECTIONS FOR PARAPET BARS, TURNDOWN BARS AND OTHER WING BARS.

PRELIMINARY

T4

PROJECT NUMBER
74-5(112)

C.N. 42832

STRUCTURE NUMBER
N/A

BRIDGE ENGINEER

TWIN SPAN
CONCRETE BOX CULVERT

COUNTY FILLMORE
HWY. NO. N-74
REF. POST. N/A
STA. 418+20

LOCATION STRANG SPUR EAST
SKEW 0°
ROADWAY N/A
DESIGN LIVE LOAD HL-93

DESIGNED BY NDOT
DETAILED BY JGH
CHECKED BY JWB
DATE APRIL 2024

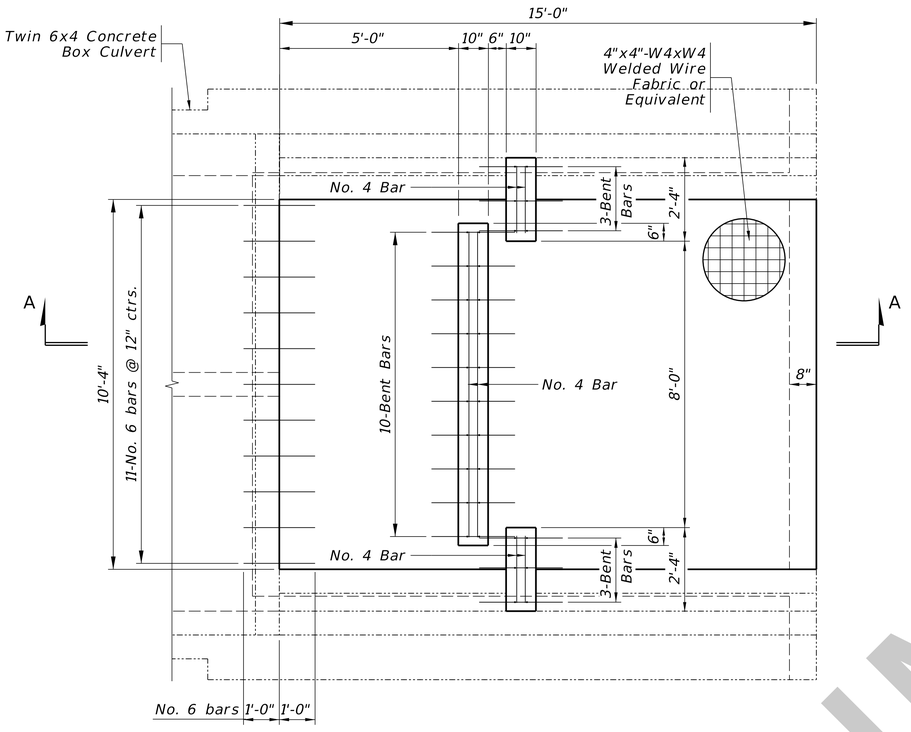
NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

SPECIAL PLAN NO. 2C

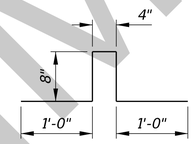
2 / 3

File: cn42832jgh02.dgn
Date: 29-APR-2024 11:26
Computer: BG04119M631

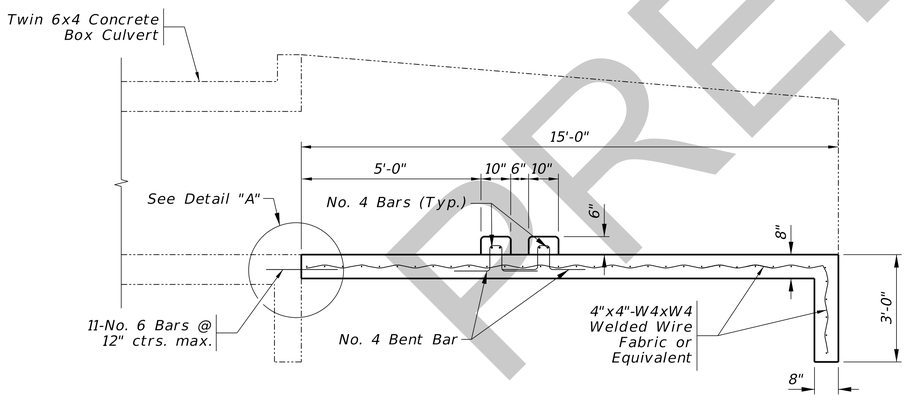


GENERAL PLAN

Not to Scale

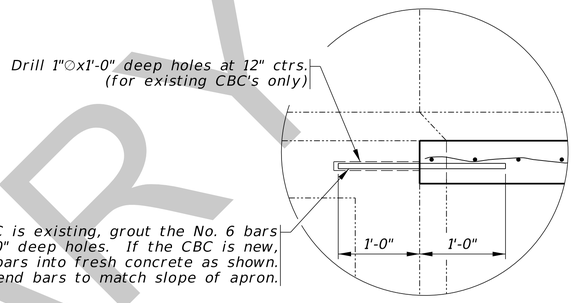


NO. 4 BENT BAR DETAIL



SECTION A-A

Not to Scale



DETAIL "A"

APRON NOTES

All concrete used shall be Class 47B, with a 28-day strength of 3,000, and shall be paid for under the item "CLASS 47B-3000 CONCRETE FOR BOX CULVERT".

All concrete surfaces to be in contact with the new work shall be thoroughly cleaned before placing new concrete.

All reinforcing steel used shall conform to the requirements of A.S.T.M. designation A615, Grade 60, and shall be paid for under the item "REINFORCING STEEL FOR BOX CULVERT".

The minimum covering, measured from the face of the concrete to the surface of any reinforcing bar, shall be 3", except as shown.

Field bend and/or clip reinforcing bars to maintain minimum covering.

The Welded Wire Fabric shall not be paid for directly, but shall be considered as subsidiary to the item "CLASS 47B-3000 CONCRETE FOR BOX CULVERT".

All materials, equipment, tools, labor, and other incidentals necessary to complete the work as shown on this plan, that are not paid for directly, shall be considered as subsidiary to the item "CLASS 47B-3000 CONCRETE FOR BOX CULVERT".

The quantities shown below include the paved apron and the energy dissipators.

QUANTITIES

CLASS 47B-3000 CONCRETE FOR BOX CULVERT	*4.6*	*CY*
REINFORCING STEEL FOR BOX CULVERT	*93*	*LB*

PRELIMINARY

T5

PROJECT NUMBER *74-5(112)*

C.N. *42832*

STRUCTURE NUMBER *N/A*

BRIDGE ENGINEER

TWIN SPAN CONCRETE BOX CULVERT

DATE *APRIL 2024*

CHECKED BY *JWB*

DETAILED BY *JGH*

DESIGNED BY *NDOT*

COUNTY *FILLMORE*

HWY. NO. *N-74*

REF. POST. *N/A*

STA. *418+20*

LOCATION *STRANG SPUR EAST*

SKEW *0°*

ROADWAY *N/A*

DESIGN LIVE LOAD *HL-93*

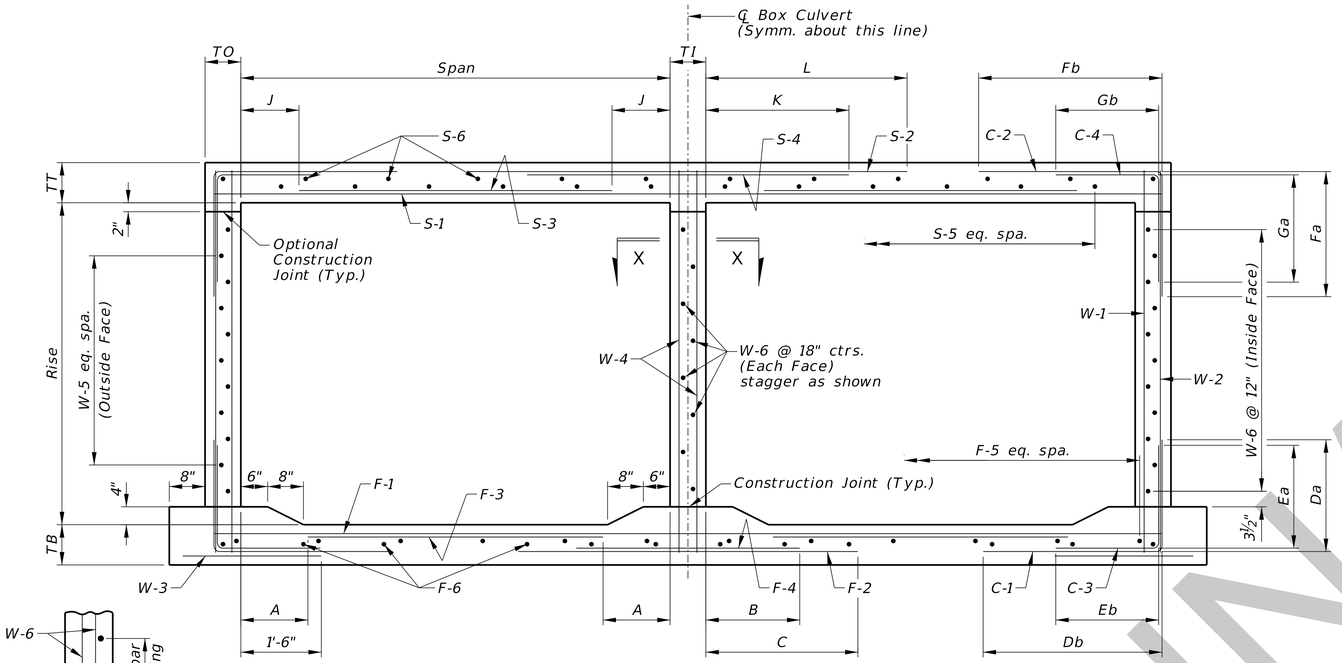
NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

SPECIAL PLAN NO. *2C*

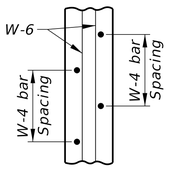
3 / *3*

Computer: BG04419M631
Date: 29-APR-2024 11:26
File: cn42832jgh02.dgn

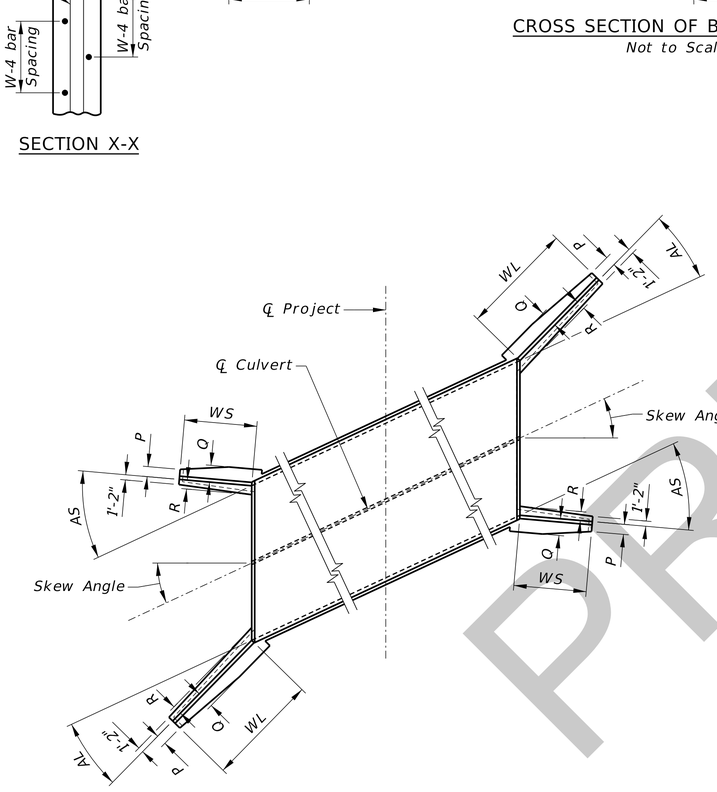


CROSS SECTION OF BOX CULVERT

Not to Scale

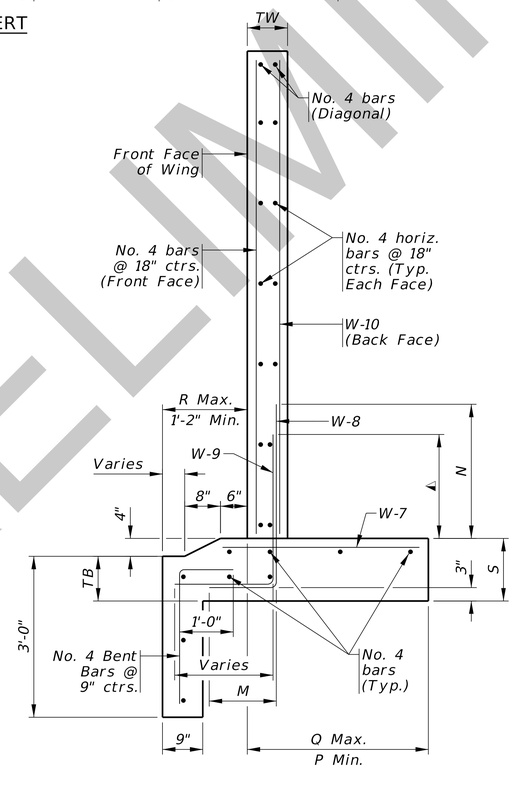


SECTION X-X



PLAN OF BOX CULVERT

Not to Scale



TYPICAL WING SECTION

Not to Scale

◭ *Length = 36 x diameter of bar*

NOTES

This structure is designed in accordance with the AASHTO LRFD Bridge Design Specifications, Ninth Edition, including subsequent revisions.

Fill is the depth of earth cover (including pavement) above top of culvert.

All concrete used shall be Class "47B", with a 28-day strength of 4,000 psi.

All reinforcing steel shall conform to the requirements of ASTM A615, Grade 60 steel.

The minimum clearance, measured from the face of the concrete to the surface of any reinforcing bar shall be 3" for bars near bottom of culvert floor and wing footings, and 2" for all other bars, except where otherwise noted.

Field bend and/or clip reinforcing bars to maintain minimum clearance.

Payment for reinforcing steel shall be based on quantities as shown in the Design Data. No allowance will be made for additional steel required for splices.

The minimum lap for spliced bars shall be 48 bar diameters.

Concrete and steel quantities per foot of barrel include concrete and steel in the floor, walls and slab for one-foot length of barrel as shown in cross section.

Concrete and steel quantities for ends include all concrete and steel beyond vertical planes passing through ends of barrel, plus all concrete and steel not included in the barrel cross section.

Excavation for ends consists of neat excavation for barrel turndowns, wing footings and footing turndowns, but only for the portions below flow line.

Transverse barrel bars shall be placed normal to ℄ Culvert. Bar lengths shall be adjusted to fit skewed barrel ends.

Place F-3 bars midway between F-1 bars, S-3 bars midway between S-1 bars, C-3 bars midway between C-1 bars, and C-4 bars midway between C-2 bars.

Spacing of F-5 bars equals (Span Length + 3½") divided by (# F-5 bars).

Spacing of S-5 bars equals (Span Length) divided by (# S-5 bars), with first bar being placed one-half space from inside face of wall.

For details not shown, See Special Plan "Box Culvert Standard Details".

DESIGN DATA

REINFORCED CONCRETE BOX CULVERT DESIGN — TWIN — SPAN — AT STATION 455+62

SPAN	RISE	FILL	BOX SKEW	DES LOAD	WINGS	WINGS ON	WING SLOPE
8 FT.	3 FT.	2 FT.	44 DEG.	HL-93	FLARED	TWO ENDS	3 : 1

BARREL SLAB THICKNESSES:

BOTTOM	(TB) =	8.0"
SIDE	(TO) =	8.0"
TOP	(TT) =	12.0"
INTERIOR	(TI) =	8.0"

BARREL BAR DIMENSIONS

A	= 0'- 0.0"	B	= 1'- 8.0"	C	= 2'-10.0"		
Da	= 2'- 8.0"	Ea	= 2'- 8.0"	Fa	= 3'- 5.0"	Ga	= 0'- 0.0"
Db	= 3'- 3.0"	Eb	= 1'- 9.0"	Fb	= 5'- 4.0"	Gb	= 0'- 0.0"
J	= 0'- 0.0"	K	= 2'- 8.0"	L	= 4'-10.0"		

BARREL REINFORCING STEEL

BAR	SIZE	SPAC	NO	LENGTH	BAR	SIZE	SPAC	NO	LENGTH	BAR	SIZE	SPAC	NO	LENGTH
C-1	4	12.0"		5'-11.0"						C-2	4	6.0"		8'- 9.0"
C-3	4	12.0"		4'- 5.0"						C-4	0	0.0"		0'- 0.0"
F-1	4	6.0"		18'- 0.0"	W-1	4	12.0"		4'- 3.0"	S-1	4	12.0"		17'- 8.0"
F-2	4	9.0"		6'- 4.0"	W-2	0	0.0"		0'- 0.0"	S-2	4	9.0"		10'- 4.0"
F-3	0	0.0"		0'- 0.0"	W-3	4	18.0"		2'- 8.0"	S-3	4	12.0"		8'- 0.0"
F-4	4	9.0"		4'- 0.0"	W-4	4	9.0"		4'- 3.0"	S-4	4	9.0"		6'- 0.0"
F-5	4		12		W-5	4		4		S-5	4		12	
F-6	4		11		W-6	4		10		S-6	4		12	

QUANTITIES (PER FOOT OF BARREL)

CONCRETE	1.424 CY
REINFORCING	163.9 LB
BASE COURSE	0.414 CY

PARAPET WIDTH = 8.0"

TOTAL OF SKEW BARS AT TWO ENDS

BAR	SIZE	NUMBER	LENGTH
F-8	4	4	25'- 0.0"
S-8	4	6	24'- 8.0"

QUANTITY OF SKEW BARS

REINFORCING	166 LB

WING ANGLES AND DIMENSIONS

WALL THICKNESS (TW) = 8.0"					
AL = 15.3 DEG	AS = 30.0 DEG	M = 1'- 0.0"	N = 2'- 0.0"		
WL =12'- 9.0"	WS = 6'- 9.0"	P = 1'-11.0"	Q = 1'-11.0"		
FL = 0'- 0.0"	FS = 0'- 0.0"	R = 1'- 2.0"	S = 1'- 0.0"		
XL = 4'- 7.0"	XS = 1'- 7.0"	T = 2'- 2.0"	U = 2'- 7.0"		

QUANTITIES FOR WINGS ON TWO ENDS

CONCRETE	14.28 CY
REINFORCING	1461 LB
EXCAVATION	9 CY
BASE COURSE	6.3 CY

STEEL FOR WINGS

BAR	SIZE	SPAC
W-7	5	12.0"
W-8	4	12.0"
W-9	5	12.0"
W-10	4	12.0"

NOTE:
SEE PLAN VIEWS AND SECTIONS FOR PARAPET BARS, TURNDOWN BARS AND OTHER WING BARS.

T6

PROJECT NUMBER
74-5(112)

C.N. 42832

STRUCTURE NUMBER
S074_07778

BRIDGE ENGINEER

TWIN SPAN
CONCRETE BOX CULVERT

COUNTY FILLMORE
HWY. NO. N-74
REF. POST. 77.78
STA. 455+62

LOCATION STRANG SPUR EAST
SKEW 44° LHB
ROADWAY N/A
DESIGN LIVE LOAD HL-93

DESIGNED BY NDOT
DETAILED BY JGH
CHECKED BY JWB
DATE APRIL 2024

NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

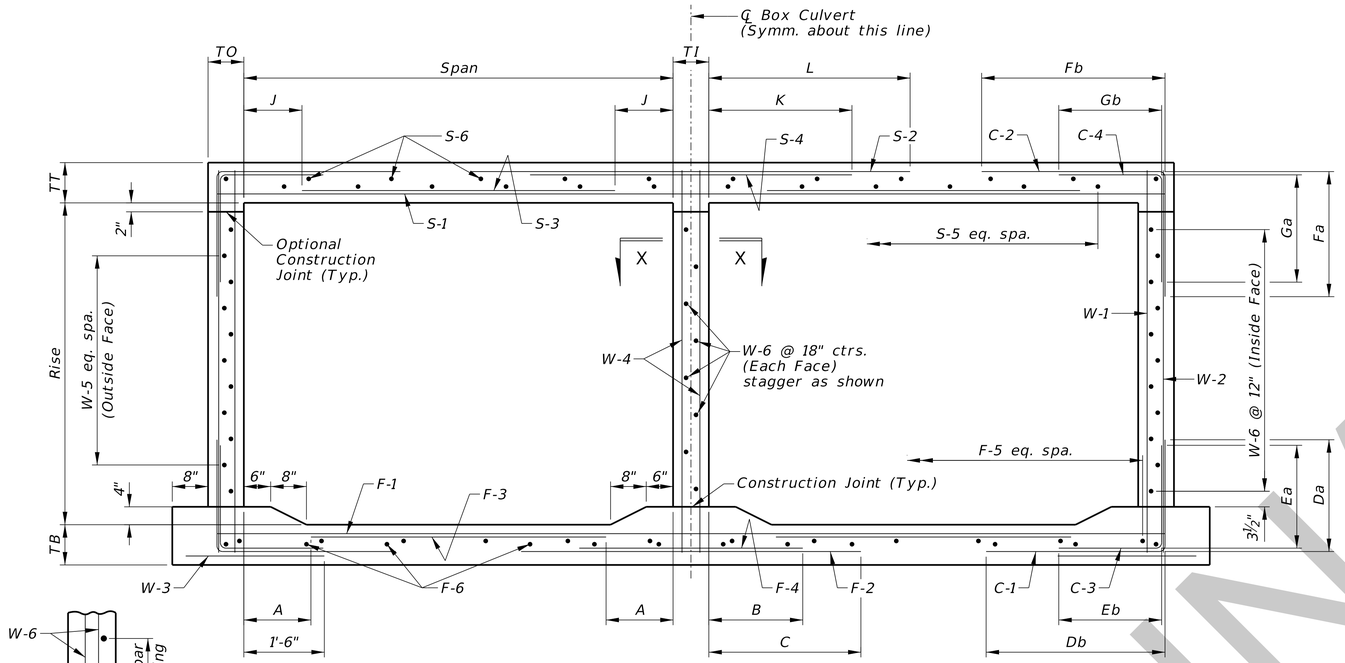
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

SPECIAL PLAN NO. 3C

1 / 1

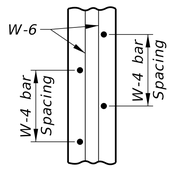
PRELIMINARY

File: cn42832jgh03.dgn Date: 29-APR-2024 11:26 Computer: BG04119M631



CROSS SECTION OF BOX CULVERT

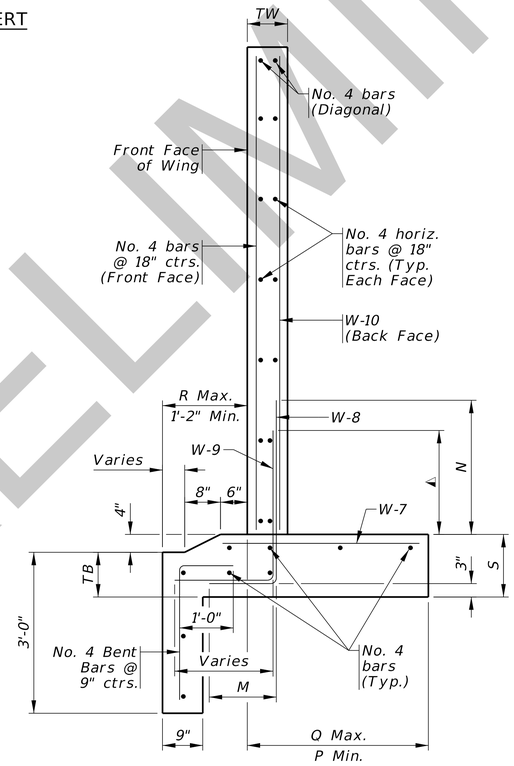
Not to Scale



SECTION X-X

PLAN OF BOX CULVERT

Not to Scale



TYPICAL WING SECTION

Not to Scale

◭ *Length = 36 x diameter of bar*

NOTES

This structure is designed in accordance with the AASHTO LRFD Bridge Design Specifications, Ninth Edition, including subsequent revisions.

Fill is the depth of earth cover (including pavement) above top of culvert.

All concrete used shall be Class "47B", with a 28-day strength of 4,000 psi.

All reinforcing steel shall conform to the requirements of ASTM A615, Grade 60 steel.

The minimum clearance, measured from the face of the concrete to the surface of any reinforcing bar shall be 3" for bars near bottom of culvert floor and wing footings, and 2" for all other bars, except where otherwise noted.

Field bend and/or clip reinforcing bars to maintain minimum clearance.

Payment for reinforcing steel shall be based on quantities as shown in the Design Data. No allowance will be made for additional steel required for splices.

The minimum lap for spliced bars shall be 48 bar diameters.

Concrete and steel quantities per foot of barrel include concrete and steel in the floor, walls and slab for one-foot length of barrel as shown in cross section.

Concrete and steel quantities for ends include all concrete and steel beyond vertical planes passing through ends of barrel, plus all concrete and steel not included in the barrel cross section.

Excavation for ends consists of neat excavation for barrel turndowns, wing footings and footing turndowns, but only for the portions below flow line.

Transverse barrel bars shall be placed normal to ℄ Culvert. Bar lengths shall be adjusted to fit skewed barrel ends.

Place F-3 bars midway between F-1 bars, S-3 bars midway between S-1 bars, C-3 bars midway between C-1 bars, and C-4 bars midway between C-2 bars.

Spacing of F-5 bars equals (Span Length + 3½") divided by (# F-5 bars).

Spacing of S-5 bars equals (Span Length) divided by (# S-5 bars), with first bar being placed one-half space from inside face of wall.

For details not shown, See Special Plan "Box Culvert Standard Details".

DESIGN DATA

REINFORCED CONCRETE BOX CULVERT DESIGN — TWIN SPAN — AT STATION 490+70 RT

SPAN	RISE	FILL	BOX SKEW	DES LOAD	WINGS	WINGS ON	WING SLOPE
5 FT.	6 FT.	5 FT.	0 DEG.	HL-93	FLARED	ONE END	15 : 1

BARREL SLAB THICKNESSES:

BOTTOM	(TB) =	8.0"
SIDE	(TO) =	8.0"
TOP	(TT) =	8.0"
INTERIOR	(TI) =	8.0"

BARREL BAR DIMENSIONS

A	= 0'- 0.0"	B	= 1'- 3.0"	C	= 2'- 6.0"
Da	= 1'-10.0"	Ea	= 1'- 8.0"	Fa	= 1'-10.0"
Db	= 3'- 6.0"	Eb	= 1'- 9.0"	Fb	= 3'- 0.0"
J	= 1'- 0.0"	K	= 1'- 8.0"	L	= 2'- 6.0"

Ga = 1'- 9.0"
Gb = 1'- 9.0"

BARREL REINFORCING STEEL

BAR	SIZE	SPAC	NO	LENGTH	BAR	SIZE	SPAC	NO	LENGTH	BAR	SIZE	SPAC	NO	LENGTH
C-1	4	18.0"		5'- 4.0"						C-2	4	18.0"		4'-10.0"
C-3	4	18.0"		3'- 5.0"						C-4	4	18.0"		3'- 6.0"
F-1	4	6.0"		12'- 0.0"	W-1	4	12.0"		6'-11.0"	S-1	4	18.0"		11'- 8.0"
F-2	4	12.0"		5'- 8.0"	W-2	4	12.0"		6'-11.0"	S-2	4	12.0"		5'- 8.0"
F-3	0	0.0"		0'- 0.0"	W-3	4	18.0"		2'- 8.0"	S-3	4	18.0"		3'- 0.0"
F-4	4	12.0"		3'- 2.0"	W-4	4	12.0"		6'-11.0"	S-4	4	12.0"		4'- 0.0"
F-5	4		8		W-5	4		6		S-5	4		8	
F-6	4		8		W-6	4		20		S-6	4		8	

QUANTITIES (PER FOOT OF BARREL)

CONCRETE	1.128 CY
REINFORCING	120.4 LB
BASE COURSE	0.302 CY

PARAPET WIDTH = 8.0"

WING ANGLES AND DIMENSIONS

WALL THICKNESS (TW) = 8.0"

AL = 30.0 DEG	AS = 30.0 DEG	M = 1'- 0.0"	N = 2'- 0.0"		
WL =17'- 4.0"	WS =17'- 4.0"	P = 1'-10.0"	Q = 2'- 6.0"		
FL = 5'-10.0"	FS = 5'-10.0"	R = 1'- 2.0"	S = 1'- 0.0"		
XL = 5'- 2.0"	XS = 5'- 2.0"	T = 1'- 0.0"	U = 6'- 5.0"		

QUANTITIES FOR WINGS ON ONE END

CONCRETE	13.37 CY
REINFORCING	1303 LB
EXCAVATION	13 CY
BASE COURSE	9.4 CY

STEEL FOR WINGS

BAR	SIZE	SPAC
W-7	5	12.0"
W-8	4	12.0"
W-9	5	12.0"
W-10	4	12.0"

NOTE:
SEE PLAN VIEWS AND SECTIONS FOR PARAPET BARS, TURNDOWN BARS AND OTHER WING BARS.

PRELIMINARY

T7

PROJECT NUMBER
74-5(112)

C.N. 42832

STRUCTURE NUMBER
N/A

BRIDGE ENGINEER

TWIN SPAN
CONCRETE BOX CULVERT

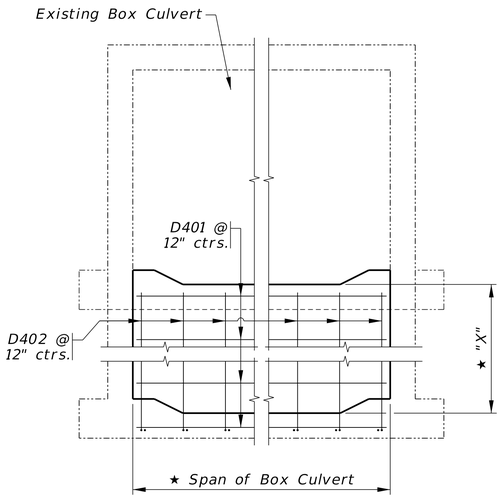
COUNTY FILLMORE — LOCATION STRANG SPUR EAST
HWY. NO. N-74 — SKEW 0° — ROADWAY N/A
REF. POST. N/A — STA. 490+70 RT — DESIGN LIVE LOAD HL-93
DESIGNED BY NDOT — DETAILED BY JGH — CHECKED BY JWB — DATE APRIL 2024

NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

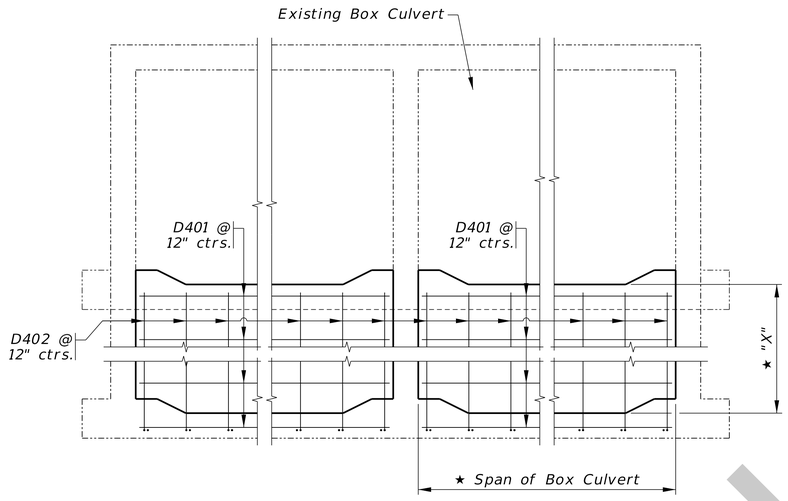
SPECIAL PLAN NO. 4C — 1/3

File: cn42832jgh04.dgn
Computer: BG04119M631
Date: 29-APR-2024 11:26



SECTION A-A

(For Single Barrel CBC's)
Not to Scale



SECTION A-A

(For Multiple Barrel CBC's)
Not to Scale

DROP WALL NOTES

All concrete shall be Class 47B-3000 and shall be paid for under the item "Class 47B-3000 Concrete for Box Culverts".

All reinforcing steel shall conform to the requirements of A.S.T.M. designation A615, Grade 60, and shall be paid for under the item "Reinforcing Steel for Box Culverts".

All concrete surfaces to be in contact with the new work shall be thoroughly cleaned before placing new concrete.

Before ordering any materials, the Contractor shall make a detailed field inspection of the existing structure, if any, verifying all dimensions and reporting to the Engineer any discrepancies between his measurements and those shown on the plans.

All materials removed shall become the property of the Contractor and shall be removed from the project.

The minimum covering, measured from the face of the concrete to the surface of any reinforcing bar, shall be 2", unless noted otherwise.

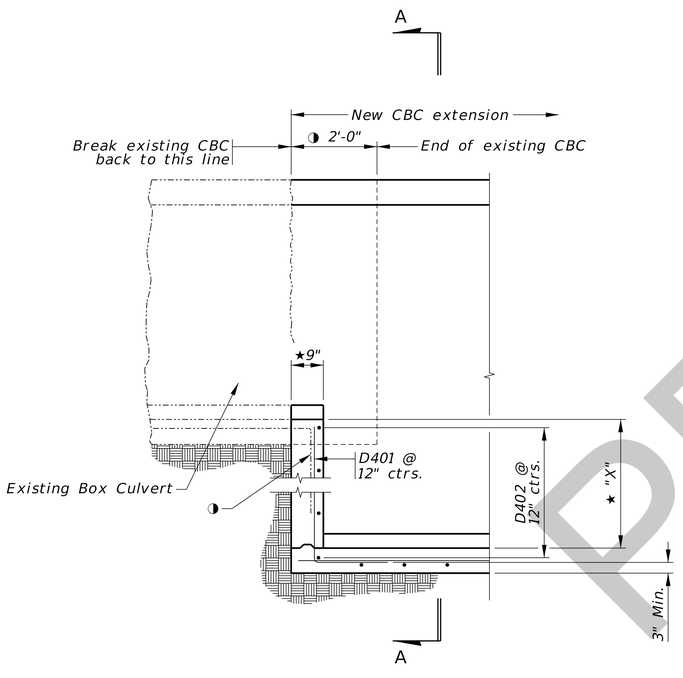
This plan is for a variety of box culvert sizes and a variable number of barrels. Do not scale from this plan.

Dropwall shall be placed perpendicular to the existing culvert centerline.

★ *Limits of Dropwall.*

Field bend and/or clip reinforcing steel to maintain minimum clearance.

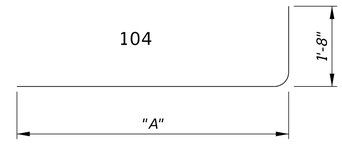
◑ *Break back the existing box culvert 2'-0". If existing box culvert is on a skew, box shall be broken back to a line perpendicular to the centerline of the existing box culvert. Clean, straighten, and incorporate all existing reinforcing steel encountered into the new work. Bend existing floor steel down into the new drop wall.*



SECTIONAL ELEVATION

Not to Scale

BILL OF BARS				BENDING DIAGRAMS
MARK	NO.	LENGTH	TYPE	ALL DIMENSIONS ARE OUT TO OUT NOT TO SCALE
D401	*"D"*	*"B"*	*104*	
D402	*"E"*	*"C"*	*STR.*	



Station	Number of Barrels	Span		"X"		"A"		"B"		"C"		"D"	"E"	Concrete (yd^3)	Reinforcing Steel (lb)
		Ft	In.	Ft	In.	Ft	In.	Ft	In.	Ft	In.				
490+70 RT	2	5	0	3	0	3	3	4	11	4	8	12	8	0.8	65

PRELIMINARY

T8

PROJECT NUMBER
74-5(112)

C.N. *42832*

STRUCTURE NUMBER
N/A

BRIDGE ENGINEER

TWIN SPAN CONCRETE BOX CULVERT

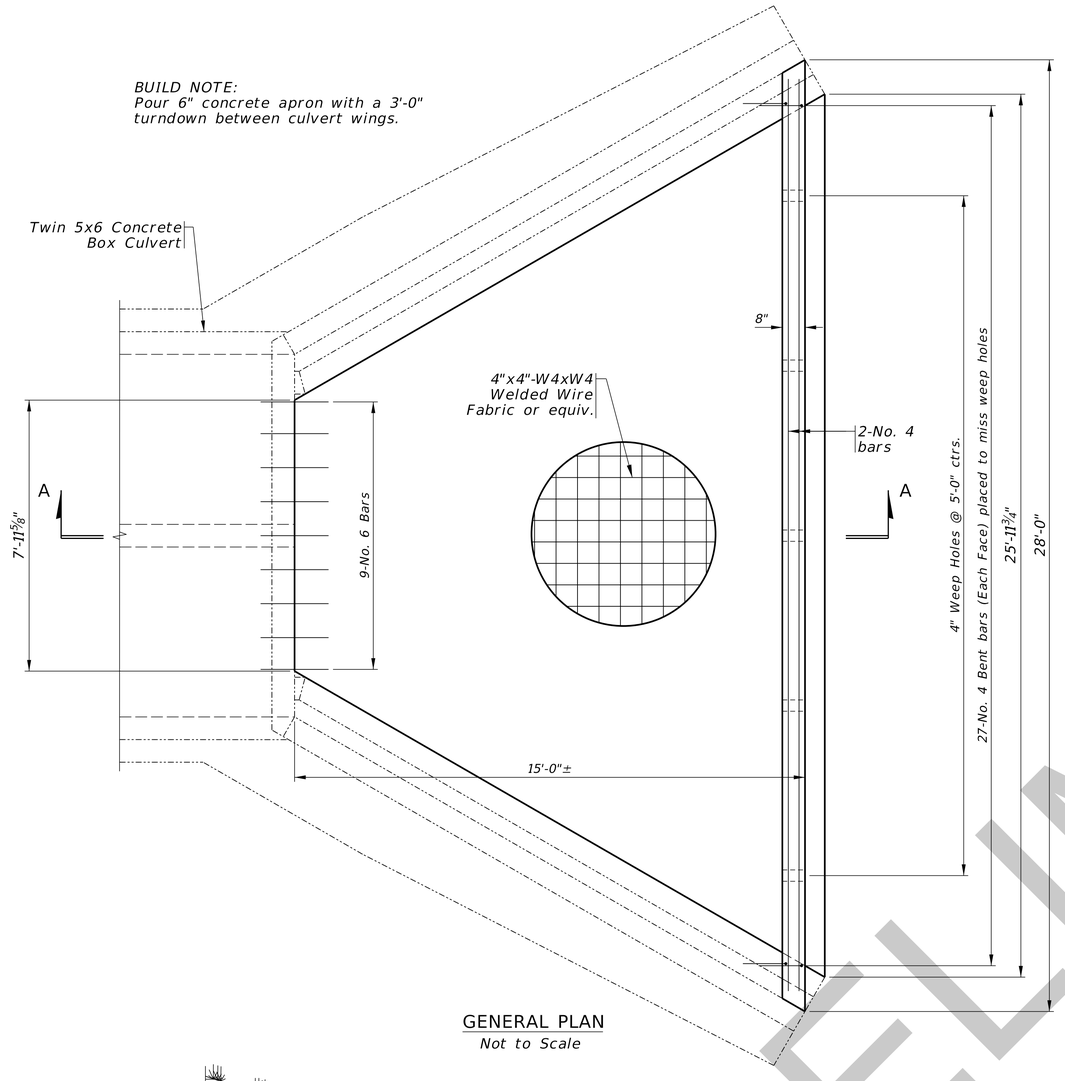
COUNTY *FILLMORE* LOCATION *STRANG SPUR EAST*
HWY. NO. *N-74* SKEW *0°*
REF. POST. *N/A* ROADWAY *N/A*
STA. *490+70 RT* DESIGN LIVE LOAD *HL-93*
DESIGNED BY *NDOT* DETAILED BY *JGH* CHECKED BY *JWB* DATE *APRIL 2024*

NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

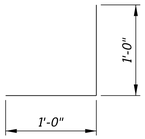
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

SPECIAL PLAN NO. *4C*

Computer: BG04190M631
Date: 29-APR-2024 11:26
File: cn42832jgh04.dgn



GENERAL PLAN
Not to Scale



BENT BAR

NOTES

All concrete used shall be Class 47B-3000.

All reinforcing steel used shall conform to the requirements of A.S.T.M. designation A615, Grade 60.

All concrete surfaces to be in contact with the new work shall be thoroughly cleaned before placing new concrete.

The minimum covering, measured from the face of the concrete to the surface of any reinforcing bar, shall be 2", except as shown.

Field bend and/or clip reinforcing bars to maintain minimum cover.

The Welded Wire Fabric and No. 6 bars shall not be paid for directly, but shall be considered as subsidiary to the item "Class 47B-3000 Concrete for Box Culvert".

All materials, equipment, tools, labor and other incidentals necessary to complete the work as shown on this plan, that are not paid for directly, shall be considered as subsidiary to the item "Class 47B-3000 Concrete for Box Culvert".

Before ordering any materials, the Contractor shall make a detailed field inspection of the existing structure, verifying dimensions and reporting to the Engineer any discrepancies between their measurements and those shown in these plans.

All materials removed shall become the property of the Contractor and shall be removed from the project site.

All grout used shall be an approved non-shrink type according to the Nebraska Standard Specifications.

If the Concrete Box Culvert is existing, 1"∅x1'-0" deep holes shall be drilled starting 1'-0" from the outside edges of the apron along the outside face of the existing concrete box culvert turndown at 12" centers.

If the Concrete Box Culvert is existing, all No. 6 bars shall be placed at the depth and grouted in as shown on the plans.

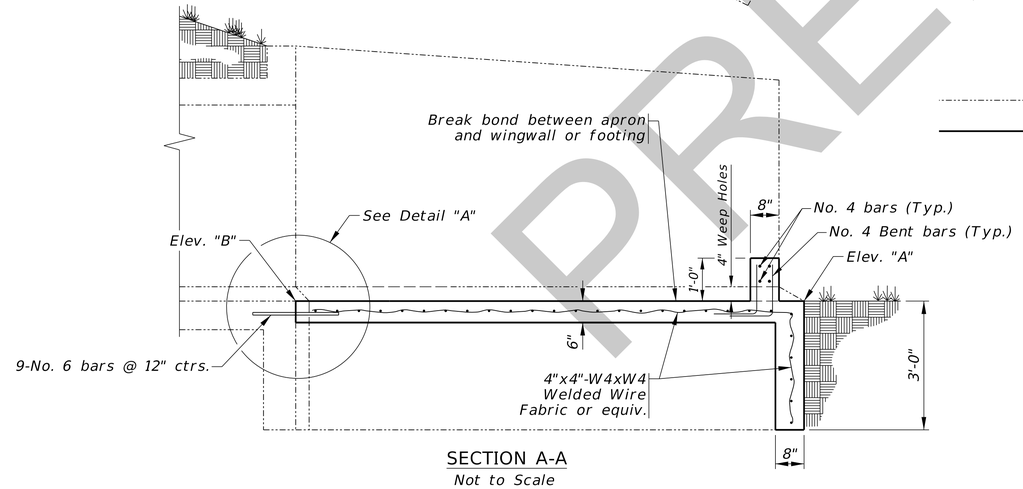
If the Concrete Box Culvert is new, all no. 6 bars shall be placed as shown on the plans.

Quantities shown include the turndown at end of apron.

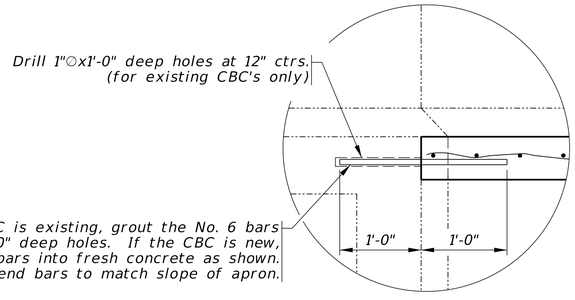
If no Elevations are shown, apron is assumed flat.

QUANTITIES

CLASS 47B-3000 CONCRETE FOR BOX CULVERT	*7.1*	*CY*
REINFORCING STEEL FOR BOX CULVERT	*173*	*LB*



SECTION A-A
Not to Scale



DETAIL "A"
Not to Scale

NOTE: THIS PLAN IS TO SHOW THE GENERAL PLACEMENT OF A CONCRETE APRON WITH A SILL WALL AT END. THE SIZE, SKEW, WING ANGLES, AND NUMBER OF BARRELS MAY VARY.

PRELIMINARY

T9

PROJECT NUMBER
74-5(112)

C.N. 42832

STRUCTURE NUMBER
N/A

BRIDGE ENGINEER

TWIN SPAN
CONCRETE BOX CULVERT

COUNTY FILLMORE LOCATION STRANG SPUR EAST
HWY. NO. N-74 SKEW 0° DATE APRIL 2024
REF. POST. N/A ROADWAY N/A
STA. 490+70 RT DESIGN LIVE LOAD HL-93
DESIGNED BY NDOT DETAILED BY JGH CHECKED BY JWB

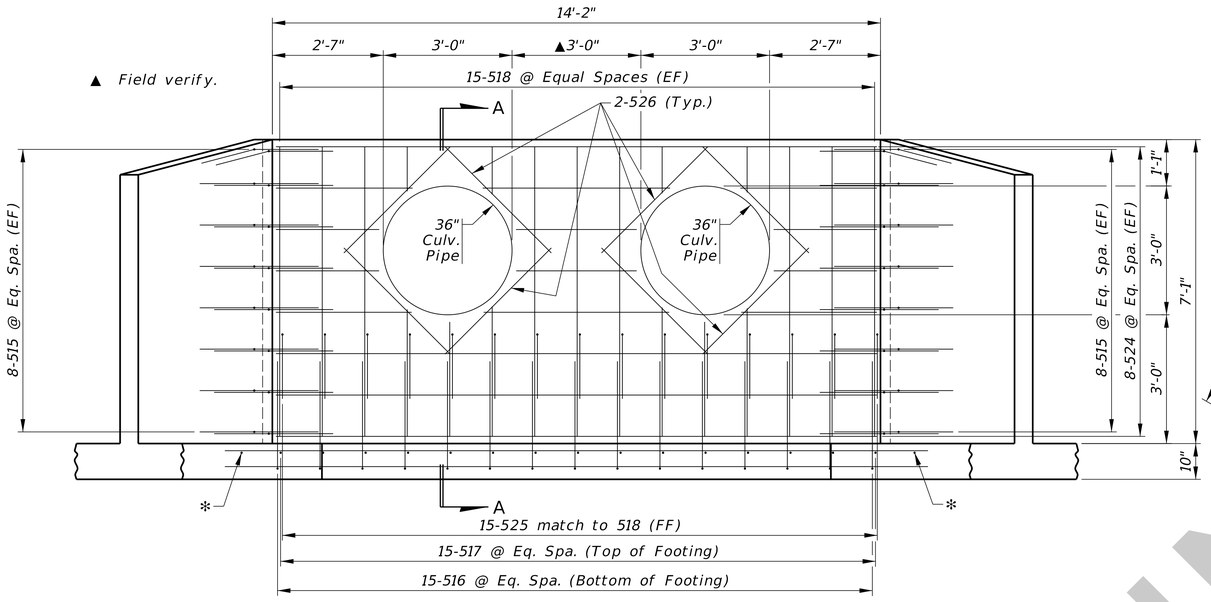
NEBRASKA DEPARTMENT OF TRANSPORTATION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

SPECIAL PLAN NO. 4C

3 / 3

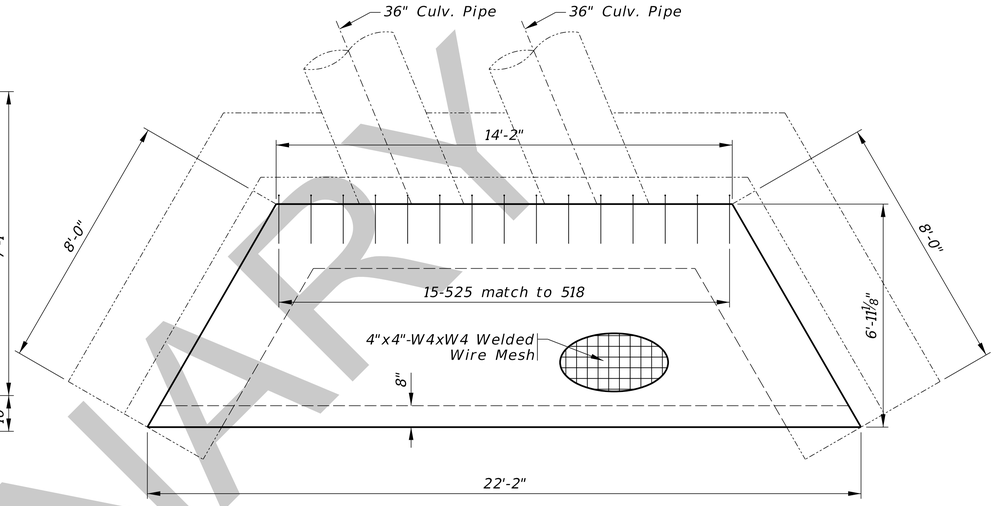
Computer: BG0419M631
Date: 29-APR-2024 11:26
File: cn42832igh04.dgn



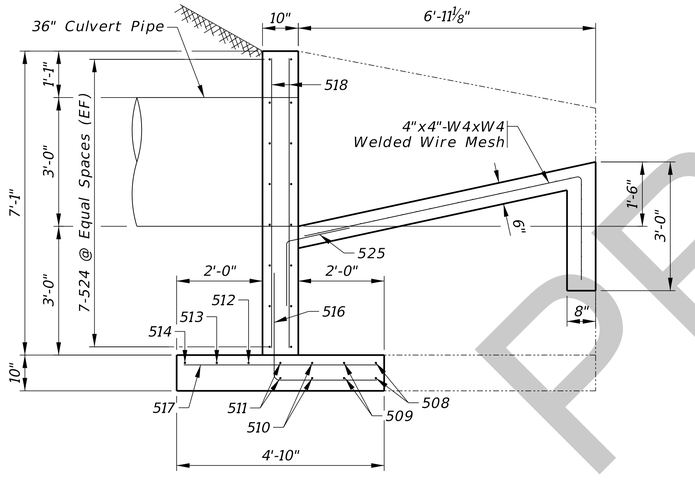
ELEVATION OF HEADWALL

(Wing details not shown for clarity)

✻ *See plan and section views for bar labels.*



PLAN OF PAVED APRON



SECTION A-A

BILL OF BARS

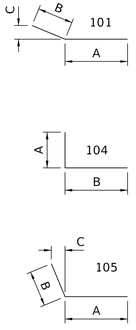
MARK	NUMBER OF BARS	LENGTH	TYPE	A	B	C
501	4	6'-10"	STR.			
502	4	7'-3"	STR.			
503	4	7'-8"	STR.			
504	4	8'-1"	STR.			
505	2	8'-6"	STR.			
506	2	8'-11"	STR.			
507	2	9'-4"	STR.			
508	2	12'-1"	STR.			
509	2	12'-11"	STR.			
510	2	13'-10"	STR.			
511	2	14'-8"	STR.			
512	1	15'-7"	STR.			
513	1	16'-5"	STR.			
514	1	17'-3"	STR.			
515	54	4'-0"	101	2'-0"	2'-0"	1'-8¾"
516	33	5'-0"	104	2'-6"	2'-6"	
517	37	4'-0"	STR.			
518	30	6'-8"	STR.			
519	36	6'-1" Avg.	STR.			
520	24	7'-8"	STR.			
521	4	5'-8"	STR.			
522	4	7'-9"	STR.			
524	16	14'-2"	STR.			
525	15	4'-0"	105	2'-0"	2'-0"	3½"
526	16	3'-6"	STR.			

BAR SETS

MARK	MAX. LENGTH	MIN. LENGTH	NO. OF SETS	BARS PER SET
519	6'-9"	5'-5"	4	9

BENDING DIAGRAMS

ALL DIMENSIONS ARE OUT TO OUT AND NOT TO SCALE



NOTES

All concrete used shall be Class 47B-3000.

Chamfer all exposed edges of concrete.

All reinforcing steel used shall conform to the requirements of A.S.T.M. A615/A6156M, Grade 60.

The minimum clearance, measured from the face of the concrete to the surface of any reinforcing bar, shall be 3" at bottom of footing, and 2" elsewhere, unless noted otherwise.

Field bend and/or clip reinforcing bars to maintain minimum clearance and to clear pipe opening.

The 4"x4"-W4xW4 Welded Wire Mesh shall not be paid for directly, but shall be considered as subsidiary to other items for which payment is made.

All materials, equipment, tools, labor, and incidentals necessary to to complete the work that is not paid for directly, shall be considered as subsidiary to other items for which payment is made.

No deduction has been made to reinforcement quantity for pipe openings.

QUANTITIES

CLASS 47B-3000 CONCRETE FOR HEADWALL	*14.3 CY*
REINFORCING STEEL FOR HEADWALL	*1935 LB*

PRELIMINARY

T10

PROJECT NUMBER
74-5(112)

C.N. *42832*

STRUCTURE NUMBER
N/A

BRIDGE ENGINEER

HEADWALL WITH WINGS AND PAVED APRON

DATE *MAY 2024*

COUNTY *FILLMORE* LOCATION *STRANG SPUR EAST*
HWY. NO. *N-74* SKEW *N/A*
REF. POST. *N/A* ROADWAY *N/A*
STA. *490+47 LT* DESIGN LIVE LOAD *N/A*
DESIGNED BY *NDOT* DETAILED BY *JGH* CHECKED BY *JWB*

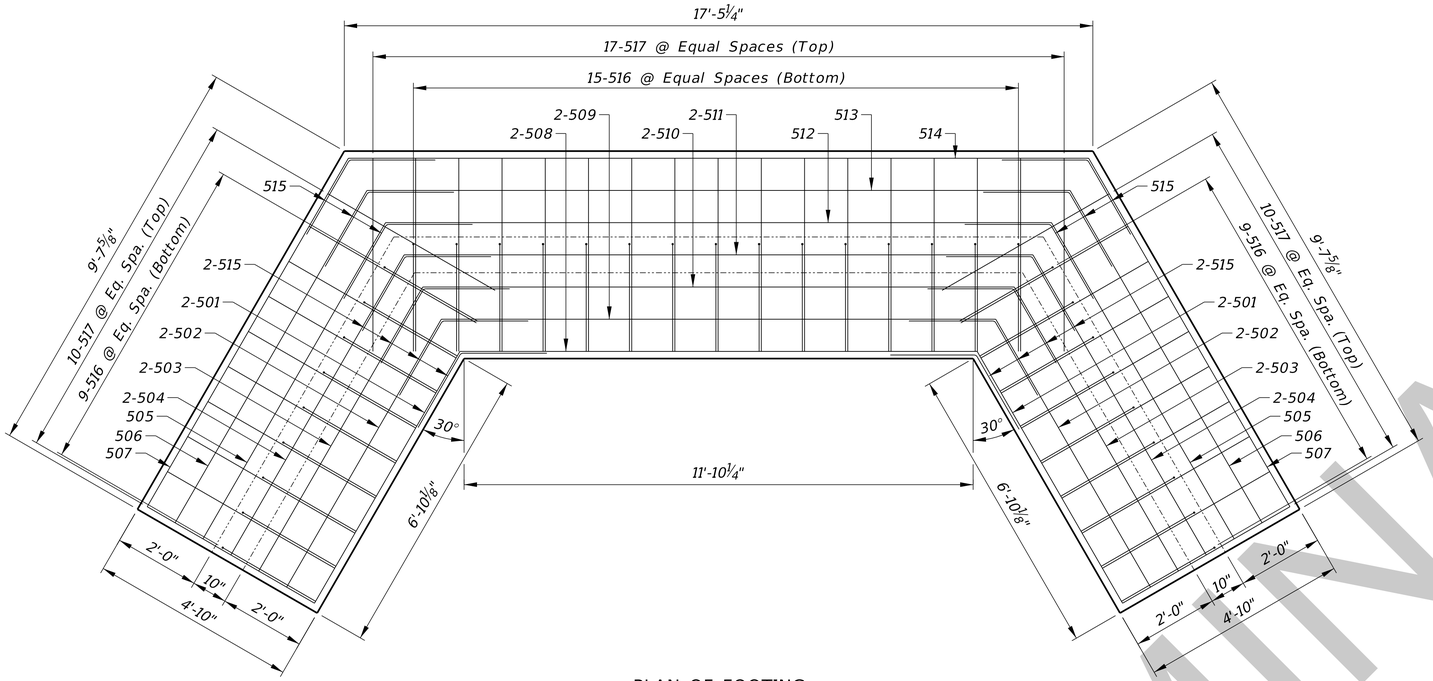
NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

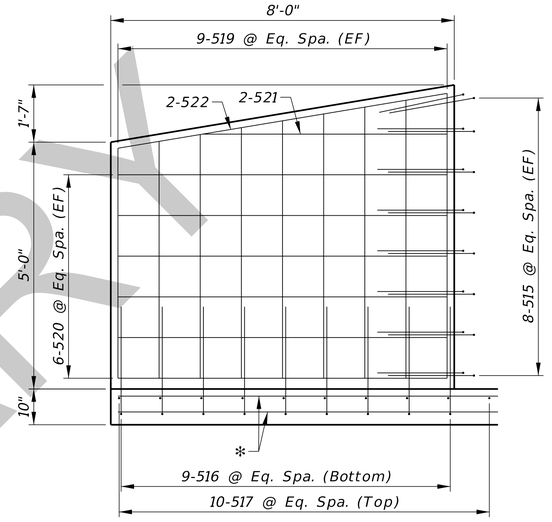
SPECIAL PLAN NO. *5C*

1 / *2*

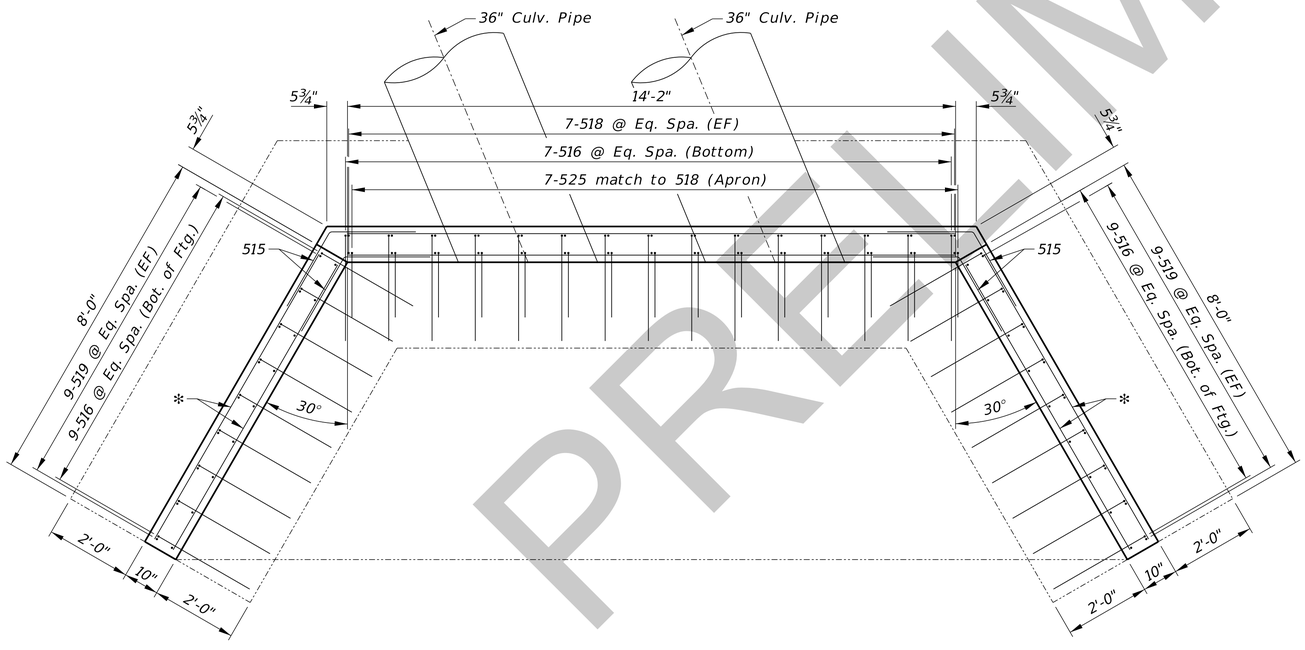
Computer: BG0419M631
Date: 29-APR-2024 11:26
File: cn42832jgh05.dgn



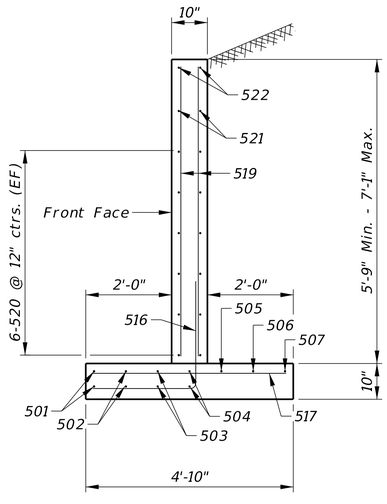
PLAN OF FOOTING



ELEVATION OF WING



PLAN OF HEADWALL AND WINGS



SECTION OF WING

PRELIMINARY

T11

PROJECT NUMBER 74-5(112)

C.N. 42832

STRUCTURE NUMBER N/A

BRIDGE ENGINEER

HEADWALL WITH WINGS AND PAVED APRON

DATE MAY 2024

COUNTY FILLMORE
HWY. NO. N-74
REF. POST. N/A
STA. 490+47 LT
DESIGNED BY NDOT

LOCATION STRANG SPUR EAST
SKEW N/A
ROADWAY N/A
DESIGN LIVE LOAD N/A
DETAILED BY JGH
CHECKED BY JWB

NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

SPECIAL PLAN NO. 5C

1 / 2

Computer: BG04190631
Date: 29-APR-2024 11:26
File: cn42832jgh05.dgn

BILL OF BARS

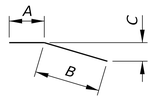
MARK	NO. OF BARS	LENGTH	TYPE	A	B	C	PIN ø	WEIGHT (LB)
401	26	8'- 10"	STR.					153
402	12	22'-9"	STR.					182
403	20	1'- 10"	STR.					25
404	20	2'-6"	STR.					33
405	16	3'- 10"	STR.					41
406	28	3'- 0"	104	1'- 0"	2'- 0"		2"	56
407	24	4'- 0"	104	2'- 0"	2'- 0"		2"	64
408	31	14'- 8"	STR.					304
409	32	1'- 7"	STR.					34
410	19	22'-9"	STR.					289
411	32	3'- 3"	104	1'- 0"	2'- 3"		2"	69
412	28	5'-7"	STR.					105
413	36	4'- 3" Avg.	STR.					102
414	12	14'- 8"	STR.					118
415	16	10'-8" Avg.	STR.					112
416	8	10'- 5"	101	2'- 0"	8'- 5"	2'- 8"	2"	56
417	26	3'- 4"	104	1'- 0"	2'- 4"		2"	58
418	25	4'- 2"	109	0'- 11"	4"	1'- 0"	2"	70
419	4	2'-0"	STR.					5
420	4	3'-6"	STR.					9
421	2	10'-3"	STR.					14
422	10	7'-5"	STR.					50
							TOTAL (LB) =	1949

BAR SETS

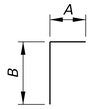
MARK	MAX. LENGTH	MIN. LENGTH	NO. OF SETS	BARS PER SET
413	5'- 6"	3'- 0"	4	9
415	14'-7"	6'-9"	4	4

BENDING DIAGRAMS

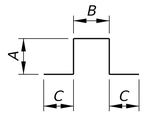
101

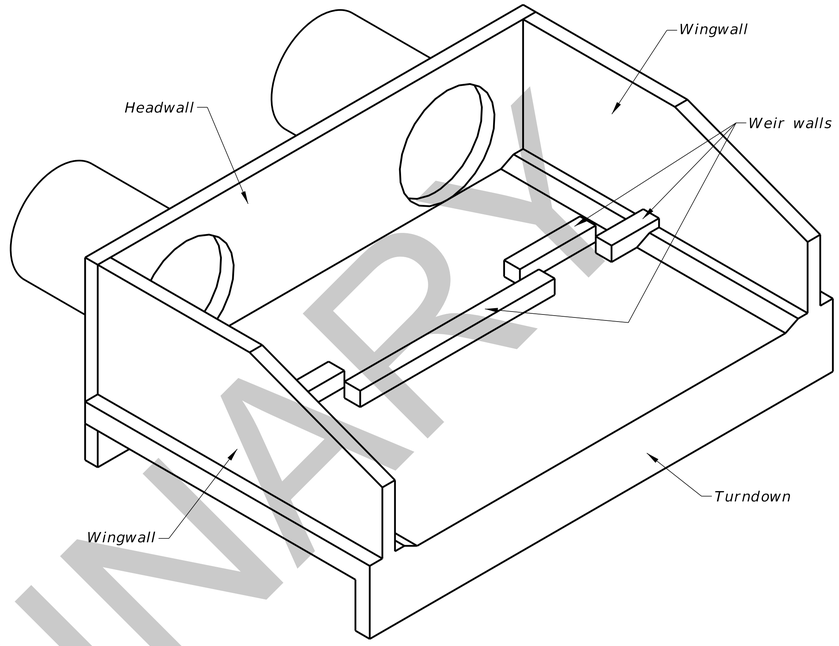


104



109





ISOMETRIC
Not to Scale

PRELIMINARY

GENERAL NOTES

All concrete used shall be Class 47B-3000.

Chamfer all exposed edges of concrete.

All reinforcing steel used shall conform to the requirements of A.S.T.M. designation A615/A615M, Grade 60.

The minimum clearance, measured from the face of the concrete to the surface of any reinforcing bar, shall be 3" from bottom and in weir walls, and 2" elsewhere, except as shown otherwise.

Field bend and/or clip reinforcing bars to maintain minimum clearance.

All materials, equipment, tools, labor, and incidentals necessary to complete the work, not paid for directly, shall be considered as subsidiary to other items for which payment is made.

GENERAL NOTES

CLASS 47B-3000 CONCRETE FOR HEADWALL _____ *20.2* *CY*

REINFORCING STEEL FOR HEADWALL _____ *1949* *LB*

T12

PROJECT NUMBER
74-5(112)

C.N. 42832

STRUCTURE NUMBER
N/A

BRIDGE ENGINEER

HEADWALL WITH ENERGY DISSIPATOR

DATE MAY 2024

CHECKED BY JWB

DESIGN LIVE LOAD N/A

ROADWAY N/A

SKEW N/A

LOCATION STRANG SPUR EAST

DETAILED BY JGH

COUNTY FILLMORE

HWY. NO. N-74

REF. POST. N/A

STA. 535+42 RT

DESIGNED BY NDOT

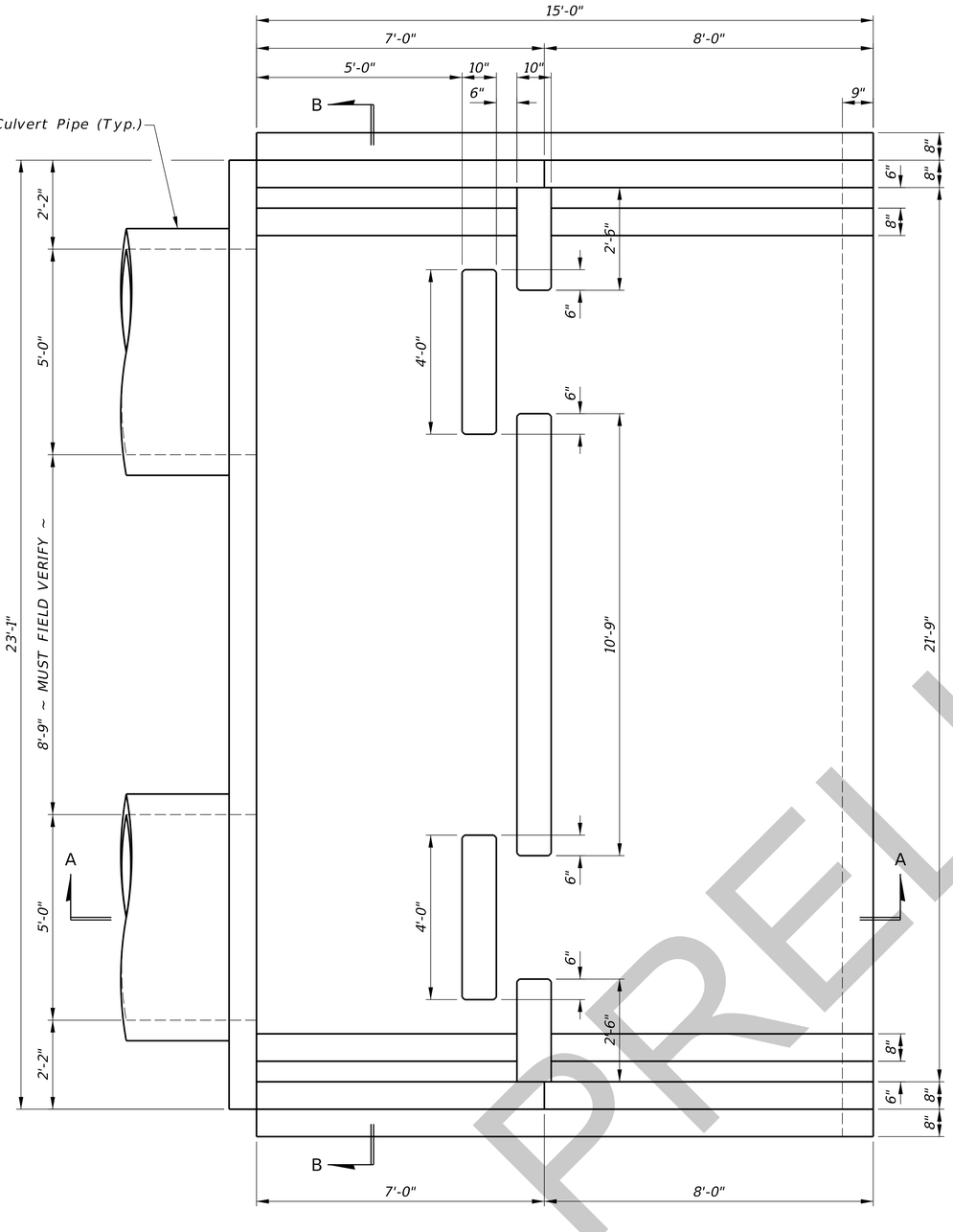
NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

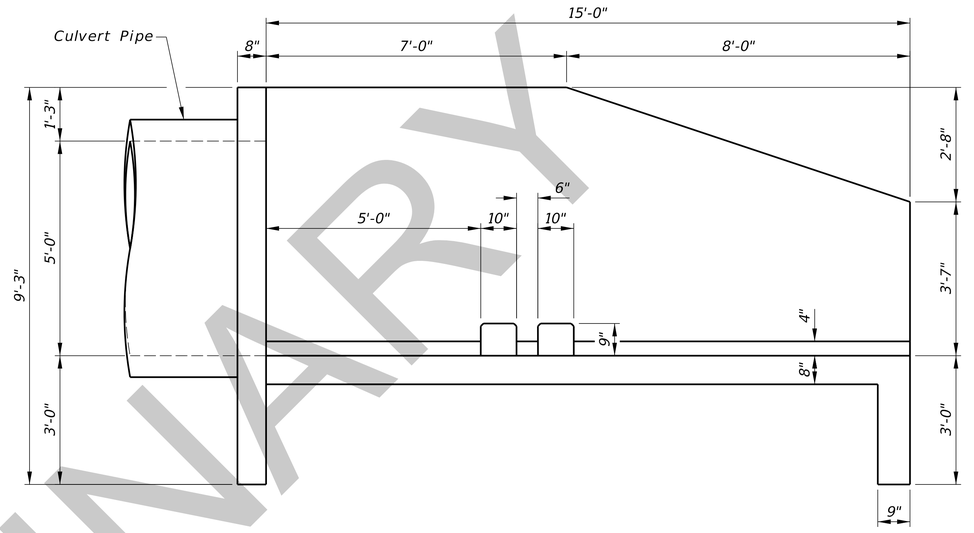
SPECIAL PLAN NO. 6C

1/4

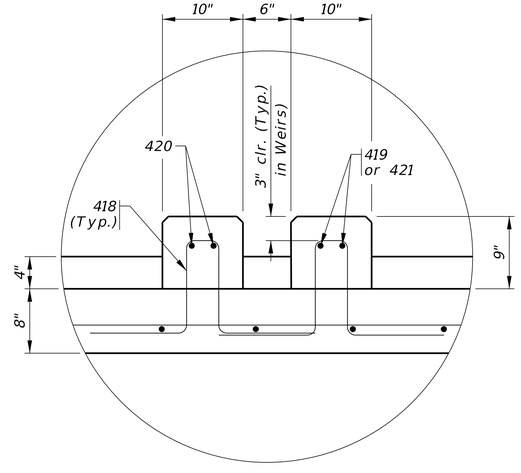
Computer: BG0419M631
Date: 29-APR-2024 11:26
File: cn42832jgh06.dgn



PLAN SHOWING DIMENSIONS



SECTION SHOWING DIMENSIONS



DETAIL 'A'

PRELIMINARY

T13

PROJECT NUMBER
74-5(112)

C.N. 42832

STRUCTURE NUMBER
N/A

BRIDGE ENGINEER

HEADWALL WITH ENERGY DISSIPATOR

COUNTY FILLMORE
HWY. NO. N-74
REF. POST. N/A
STA. 535+42 RT
DESIGNED BY NDOT

LOCATION STRANG SPUR EAST
SKEW N/A
ROADWAY N/A
DESIGN LIVE LOAD N/A
DETAILED BY JGH

DATE MAY 2024
CHECKED BY JWB

NEBRASKA DEPARTMENT OF TRANSPORTATION

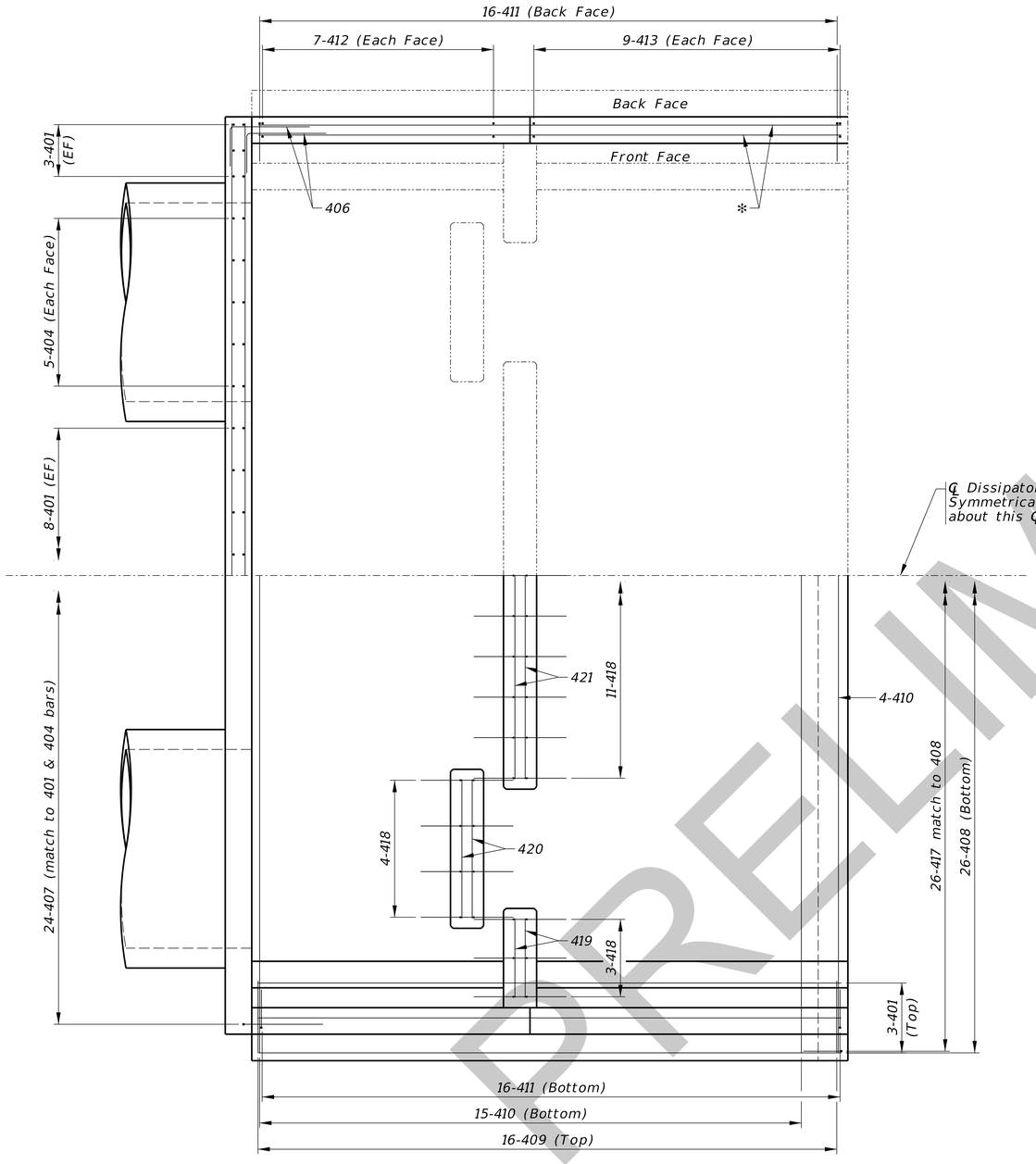
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

SPECIAL PLAN NO. 6C

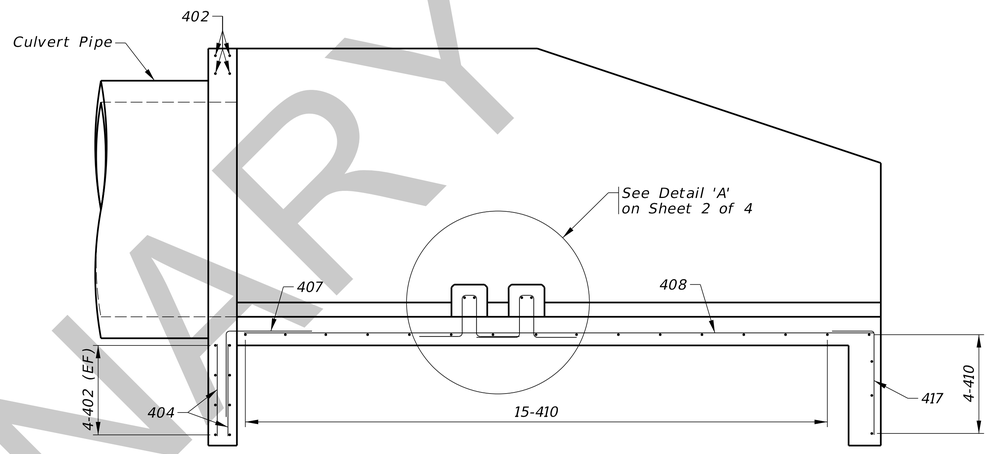
2 / 4

Computer: BG04190631
Date: 29-APR-2024 11:26
File: cn42832jgh06.dgn

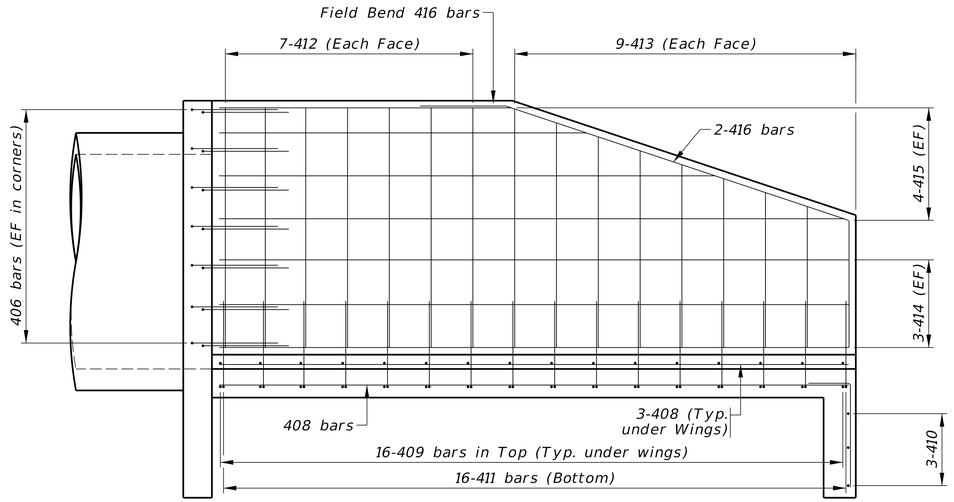
EF = Each Face



PLAN SHOWING REINFORCING



SECTION A-A



ELEVATION OF WING SHOWING REINFORCING

PRELIMINARY

T14

PROJECT NUMBER 74-5(112)

C.N. 42832

STRUCTURE NUMBER N/A

BRIDGE ENGINEER

HEADWALL WITH ENERGY DISSIPATOR

DATE MAY 2024

COUNTY FILLMORE
HWY. NO. N-74
REF. POST. N/A
STA. 535+42 RT

LOCATION STRANG SPUR EAST
SKEW N/A
ROADWAY N/A
DESIGN LIVE LOAD N/A

DESIGNED BY NDOT
DETAILED BY JGH
CHECKED BY JWB
DRAWN BY

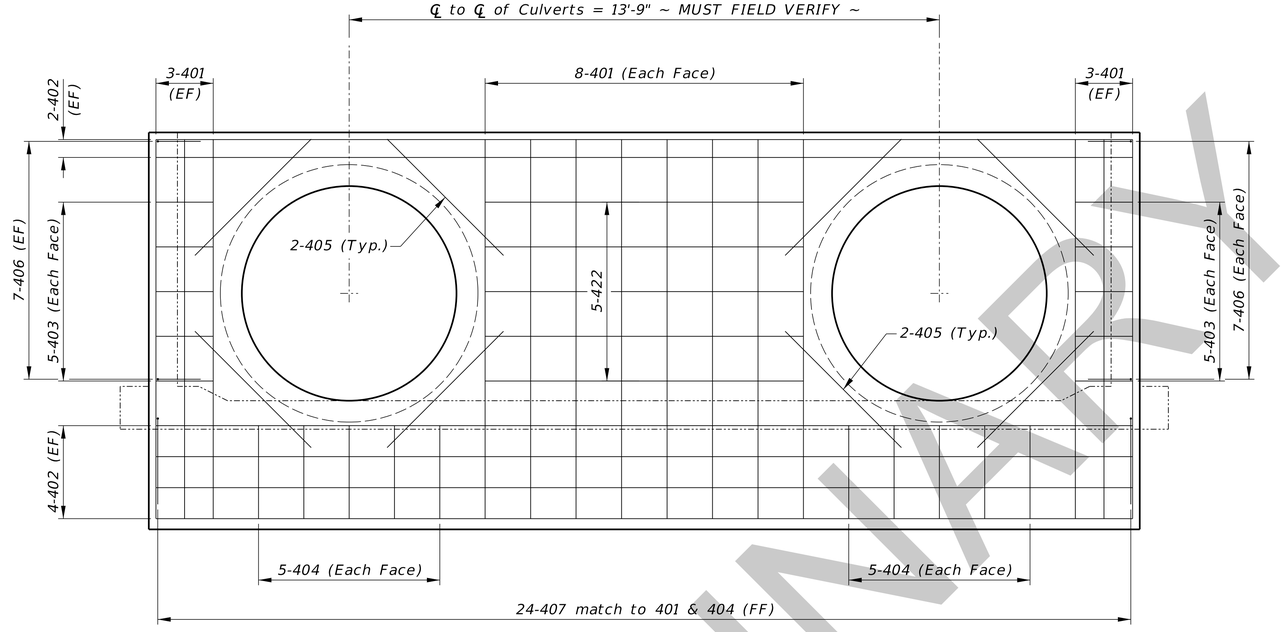
NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

SPECIAL PLAN NO. 6C

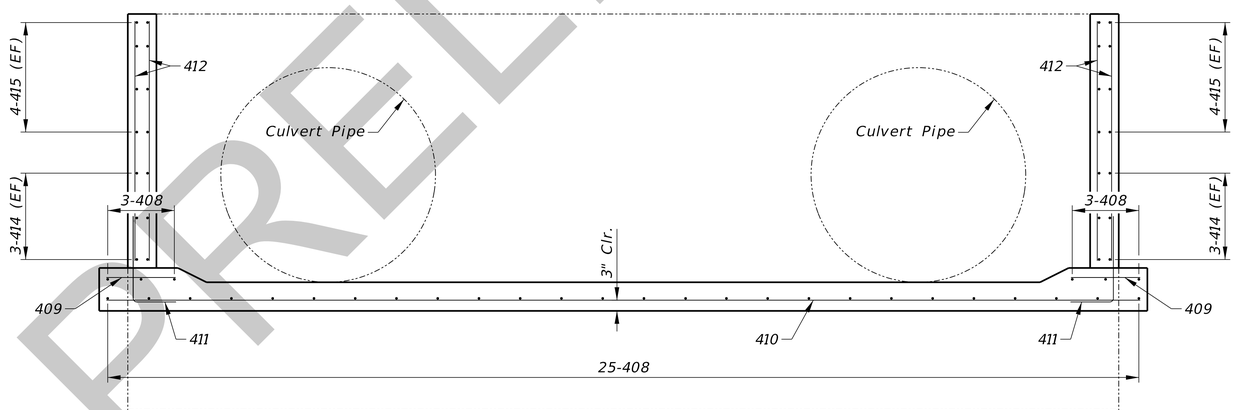
3/4

Computer: BG0419M631
Date: 29-APR-2024 11:26
File: cn42832jgh06.dgn



ELEVATION OF HEADWALL

EF = Each Face



SECTION B-B

PRELIMINARY

T15

PROJECT NUMBER 74-5(112)

C.N. 42832

STRUCTURE NUMBER N/A

BRIDGE ENGINEER

HEADWALL WITH ENERGY DISSIPATOR

COUNTY FILLMORE
HWY. NO. N-74
REF. POST. N/A
STA. 535+42 RT

LOCATION STRANG SPUR EAST
SKEW N/A
ROADWAY N/A
DESIGN LIVE LOAD N/A

DESIGNED BY NDOT
DETAILED BY JGH
CHECKED BY JWB
DATE MAY 2024

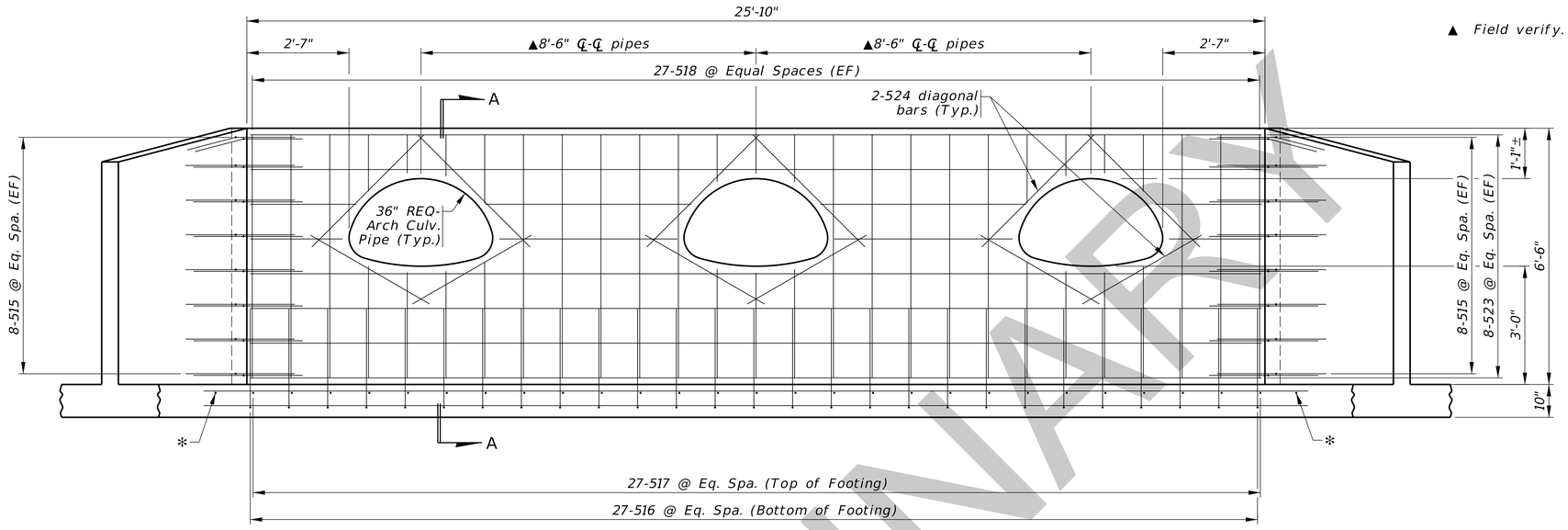
NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

SPECIAL PLAN NO. 6C

4 / 4

Computer: BG0419M631
Date: 29-APR-2024 11:26
File: cn42832jgh06.dgn

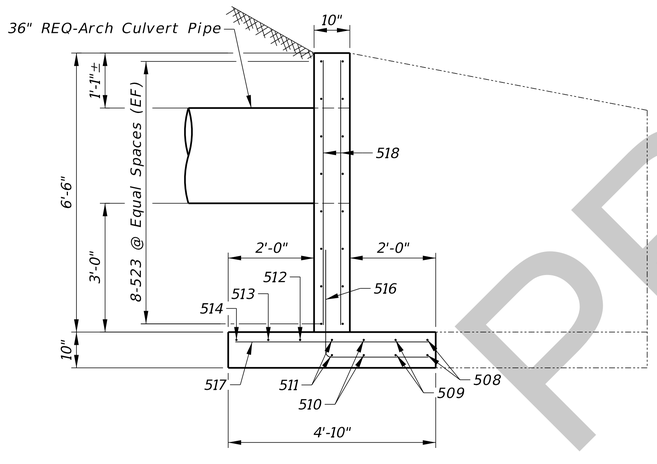


▲ *Field verify.*

ELEVATION OF HEADWALL

(Wing details not shown for clarity)

✻ *See plan and section views for bar labels.*



SECTION A-A

NOTES

All concrete used shall be Class 47B-3000.

Chamfer all exposed edges of concrete.

All reinforcing steel used shall conform to the requirements of A.S.T.M. A615/A6156M, Grade 60.

The minimum clearance, measured from the face of the concrete to the surface of any reinforcing bar, shall be 3" at bottom of footing, and 2" elsewhere, unless noted otherwise.

Field bend and/or clip reinforcing bars to maintain minimum clearance and to clear pipe openings.

All materials, equipment, tools, labor, and incidentals necessary to to complete the work that is not paid for directly, shall be considered as subsidiary to other items for which payment is made.

No deduction has been made to reinforcement quantity for pipe openings.

QUANTITIES

CLASS 47B-3000 CONCRETE FOR HEADWALL	*14.1 CY*
REINFORCING STEEL FOR HEADWALL	*2470 LB*

PRELIMINARY

T16

PROJECT NUMBER
74-5(112)

C.N. 42832

STRUCTURE NUMBER
N/A

BRIDGE ENGINEER

HEADWALL WITH WINGS

DATE MAY 2024

CHECKED BY JWB

DETAILED BY JGH

DESIGNED BY NDOT

COUNTY FILLMORE
HWY. NO. N-74
REF. POST. N/A
STA. 731+76

LOCATION STRANG SPUR EAST
SKEW N/A
ROADWAY N/A
DESIGN LIVE LOAD N/A

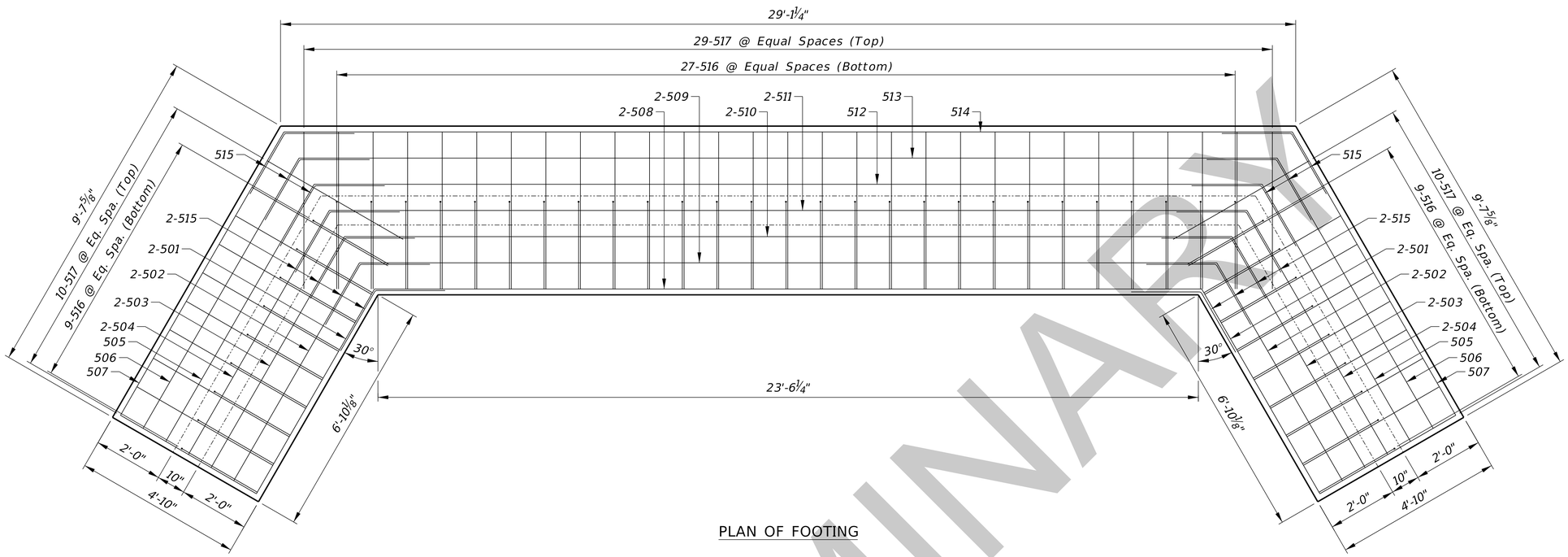
NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

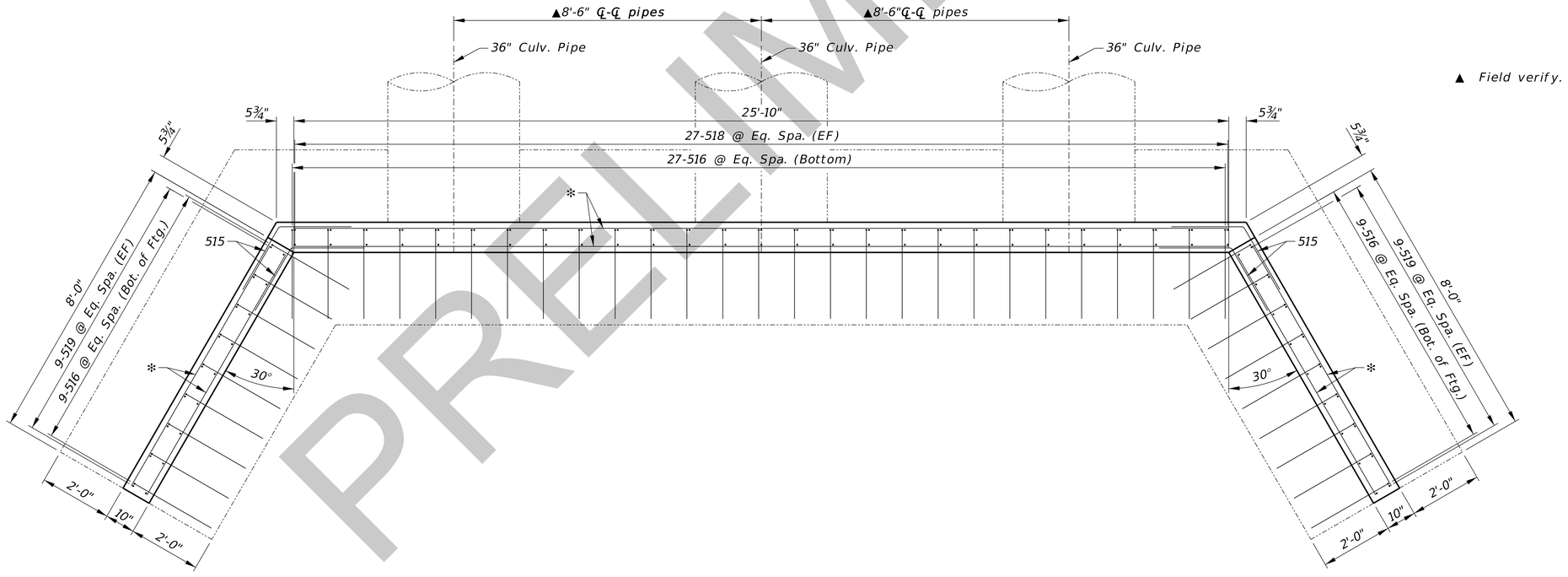
SPECIAL PLAN NO. 7C

1 / 3

Computer: BG0419M631
Date: 29-APR-2024 11:27
File: cn42832jgh07.dgn



PLAN OF FOOTING



PLAN OF HEADWALL AND WINGS

PRELIMINARY

T17

PROJECT NUMBER 74-5(112)

C.N. 42832

STRUCTURE NUMBER N/A

BRIDGE ENGINEER

HEADWALL WITH WINGS

DATE MAY 2024

NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

COUNTY FILLMORE
HWY. NO. N-74
REF. POST. N/A
STA. 731+76
DESIGNED BY NDOT
LOCATION STRANG SPUR EAST
SKEW N/A
ROADWAY N/A
DESIGN LIVE LOAD N/A
DETAILED BY JGH
CHECKED BY JWB

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

SPECIAL PLAN NO. 7C

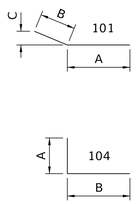
2/3

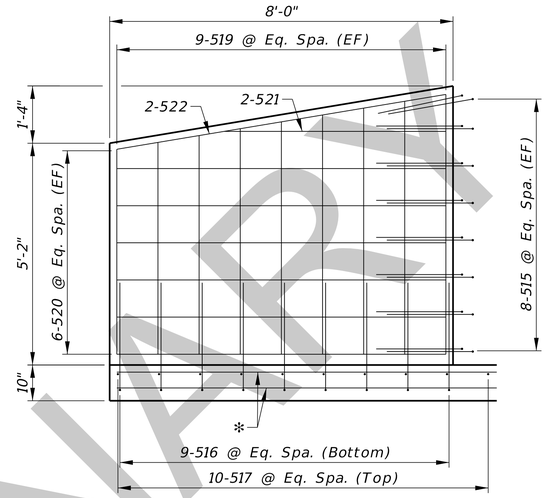
Computer: BG04190631
Date: 29-APR-2024 11:27
File: cn42832jgh07.dgn

BILL OF BARS							BAR SETS				
MARK	NUMBER OF BARS	LENGTH	TYPE	A	B	C	MARK	MAX. LENGTH	MIN. LENGTH	NO. OF SETS	BARS PER SET
501	4	6'-10"	STR.				519	6'-1"	4'-9"	4	9
502	4	7'-3"	STR.								
503	4	7'-8"	STR.								
504	4	8'-1"	STR.								
505	2	8'-6"	STR.								
506	2	8'-11"	STR.								
507	2	9'-4"	STR.								
508	2	23'-9"	STR.								
509	2	24'-7"	STR.								
510	2	25'-6"	STR.								
511	2	26'-4"	STR.								
512	1	27'-3"	STR.								
513	1	28'-1"	STR.								
514	1	28'-11"	STR.								
515	54	4'-0"	101	2'-0"	2'-0"	1'-8¾"					
516	45	5'-0"	104	2'-6"	2'-6"						
517	49	4'-0"	STR.								
518	54	6'-2"	STR.								
519	36	5'-5" Avg.	STR.								
520	24	7'-8"	STR.								
521	4	5'-2"	STR.								
522	4	7'-9"	STR.								
523	16	25'-10"	STR.								
524	24	4'-0"	STR.								

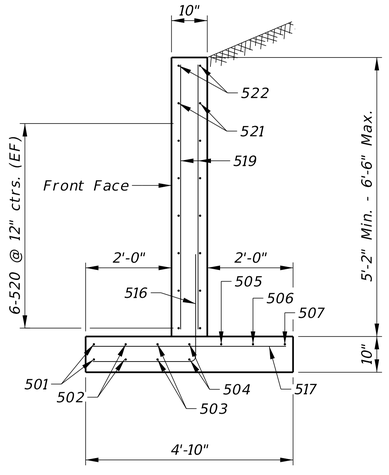
BENDING DIAGRAMS

ALL DIMENSIONS ARE OUT TO OUT AND NOT TO SCALE





ELEVATION OF WING



SECTION OF WING

PRELIMINARY

T18

PROJECT NUMBER 74-5(112)

C.N. 42832

STRUCTURE NUMBER N/A

BRIDGE ENGINEER

HEADWALL WITH WINGS

DATE MAY 2024

COUNTY FILLMORE
HWY. NO. N-74
REF. POST. N/A
STA. 731+76

LOCATION STRANG SPUR EAST
SKEW N/A
ROADWAY N/A
DESIGN LIVE LOAD N/A

DESIGNED BY NDOT
DETAILED BY JGH
CHECKED BY JWB

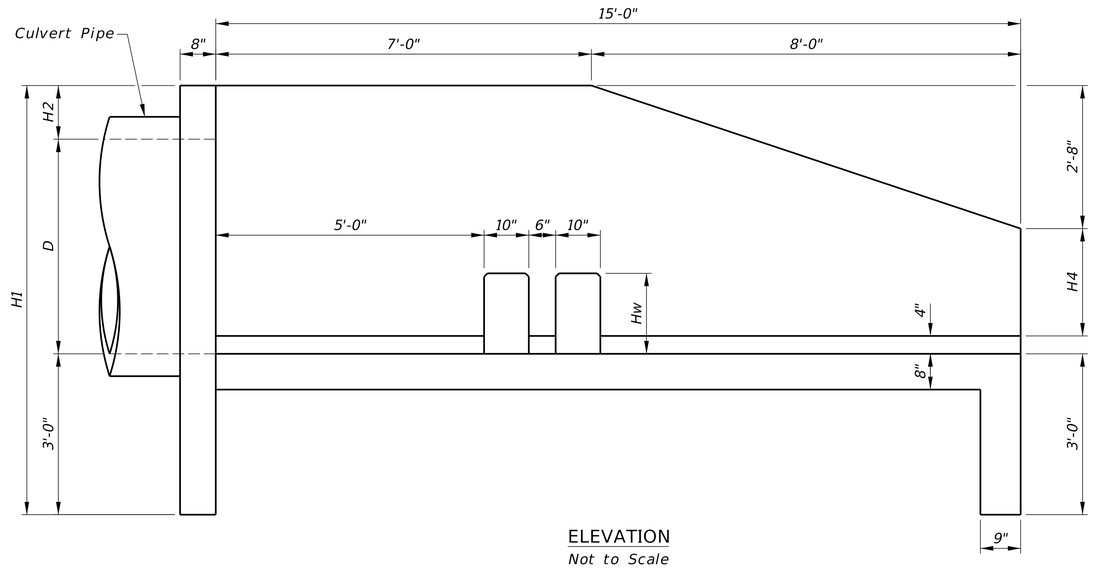
NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

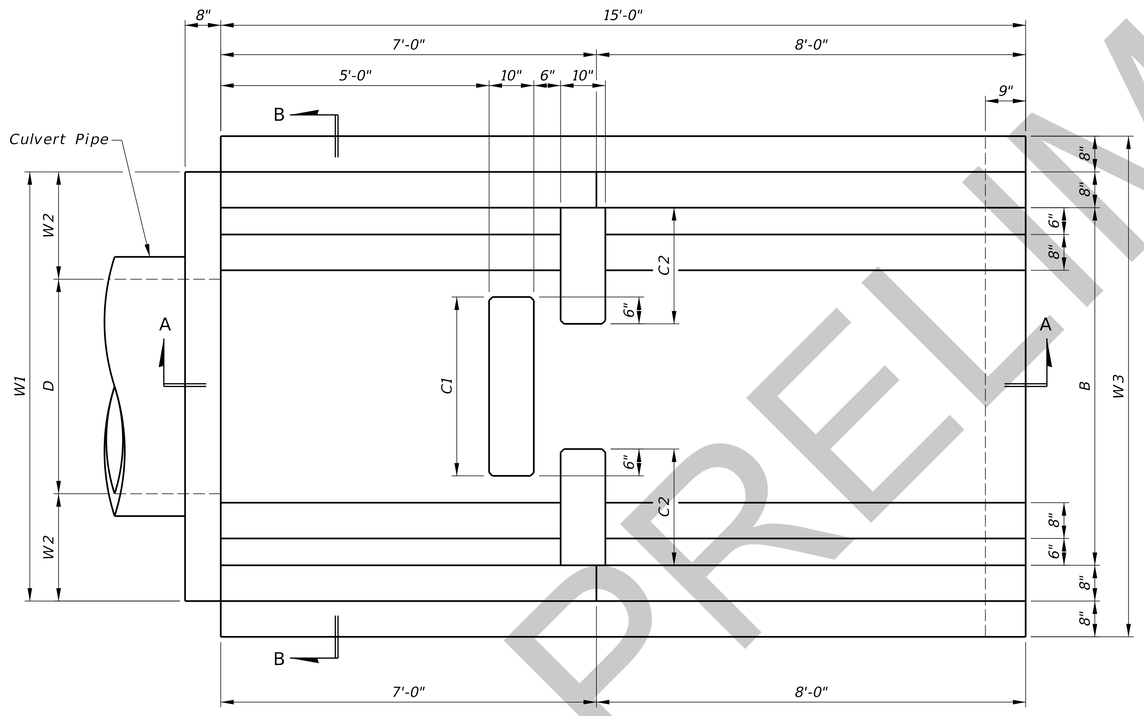
SPECIAL PLAN NO. 7C

3 / 3

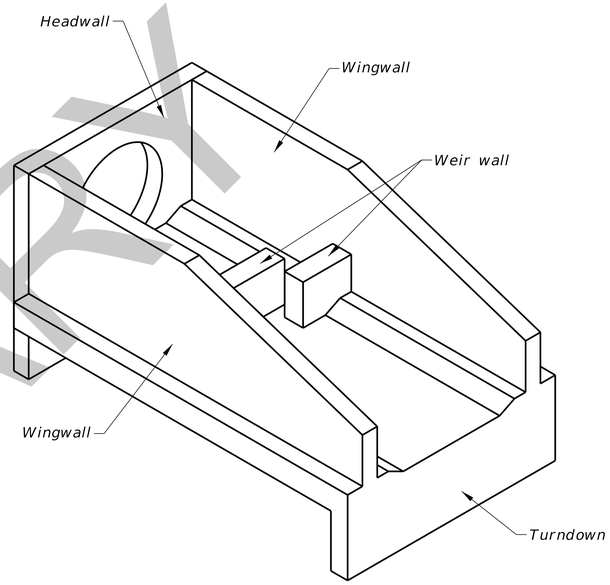
Computer: BG04190631
Date: 29-APR-2024 11:27
File: cn42832jgh07.dgn



ELEVATION
Not to Scale



PLAN
Not to Scale



ISOMETRIC
Not to Scale

GENERAL NOTES

All concrete used shall be Class 47B-3000.

Chamfer all exposed edges of concrete.

All reinforcing steel used shall conform to the requirements of A.S.T.M. designation A615/A615M, Grade 60.

The minimum clearance, measured from the face of the concrete to the surface of any reinforcing bar, shall be 3" from bottom and in weir walls, and 2" elsewhere, except as shown otherwise.

Field bend and/or clip reinforcing bars to maintain minimum clearance.

All materials, equipment, tools, labor, and incidentals necessary to complete the work, not paid for directly, shall be considered as subsidiary to other items for which payment is made.

PIPE DIAMETER	APRON SPAN	WEIR HEIGHT										QUANTITIES	
D	B	Hw	C1	C2	W1	W2	W3	H1	H2	H3	H4	CONCRETE (CY)	REINFORCING (LB)
48"	*7'- 0"*	*0'- 9"*	*3'- 6"*	*2'- 3"*	*8'- 4"*	*2'- 2"*	*9'- 8"*	*8'- 2"*	*1'- 2"*	*4'- 10"*	*2'- 2"*	*9.7*	*1174*

PRELIMINARY

T19

PROJECT NUMBER
74-5(112)

C.N. *42832*

STRUCTURE NUMBER
S074_07778

BRIDGE ENGINEER

HEADWALL WITH ENERGY DISSIPATOR

DATE *APRIL 2024*

COUNTY *FILLMORE*
HWY. NO. *N-74*
REF. POST. *N/A*
STA. *921+14*

LOCATION *STRANG SPUR EAST*
SKEW *N/A*
ROADWAY *N/A*
DESIGN LIVE LOAD *N/A*

DESIGNED BY *NDOT*
DETAILED BY *JGH*
CHECKED BY *JWB*
DRAWN BY *DMS*

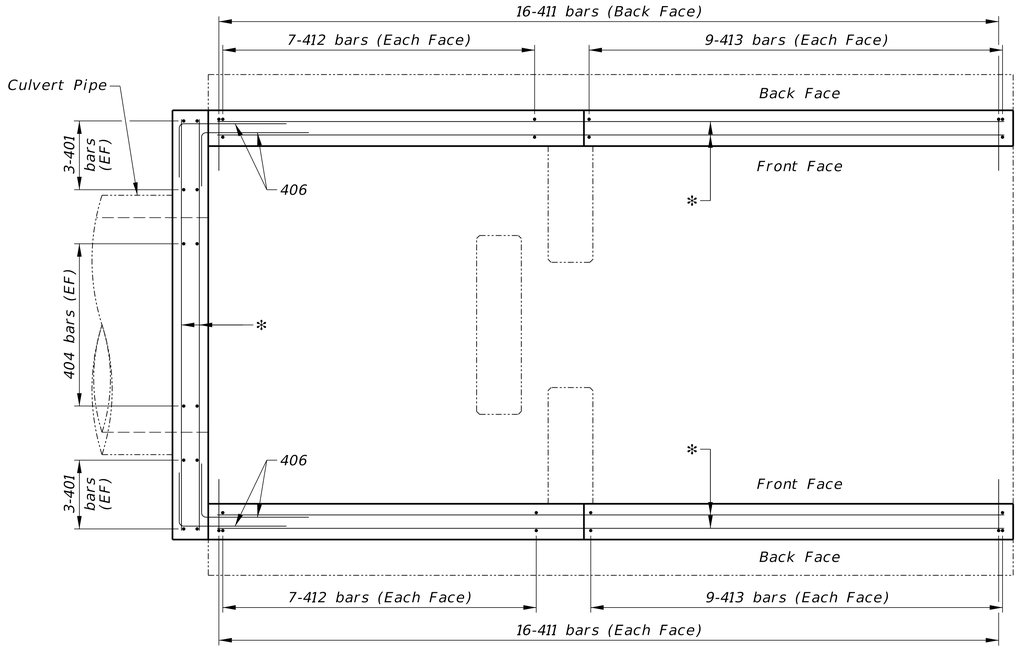
NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

SPECIAL PLAN NO. *8C*

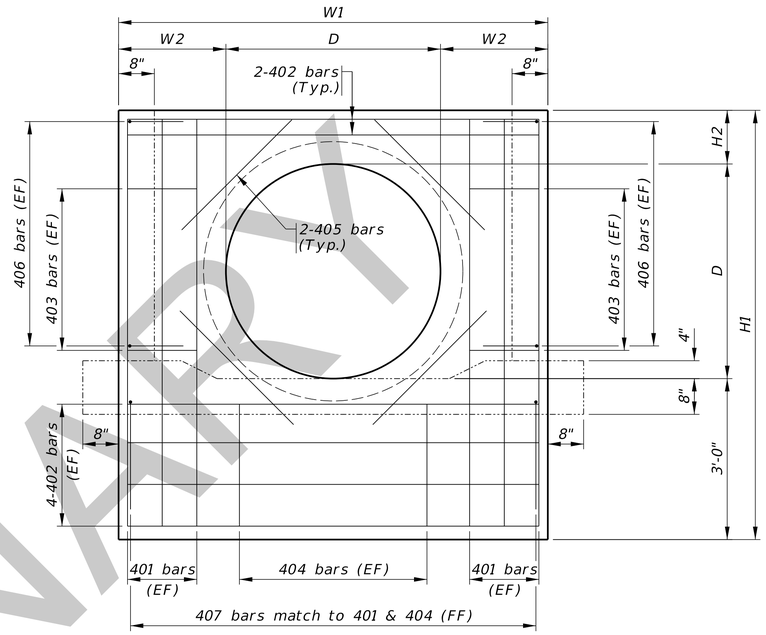
1 / *3*

Computer: BG0419M631
Date: 29-APR-2024 11:27
File: cn42832jgh08.dgn



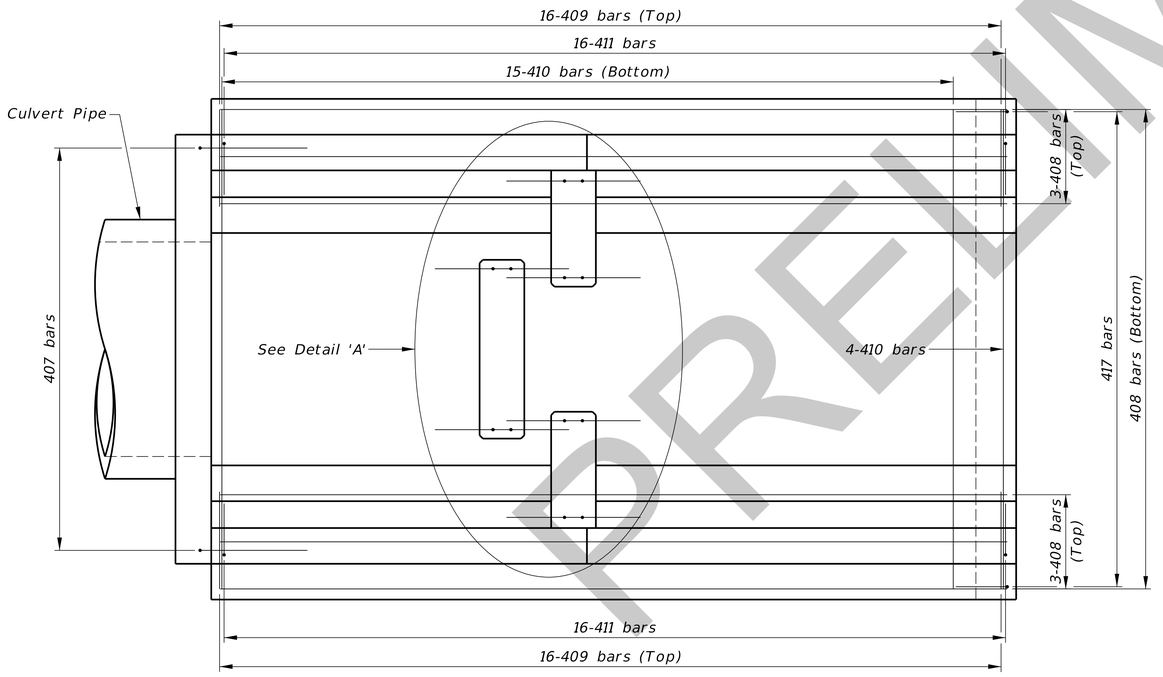
PLAN OF WALLS

(Showing reinforcement)
Not to Scale



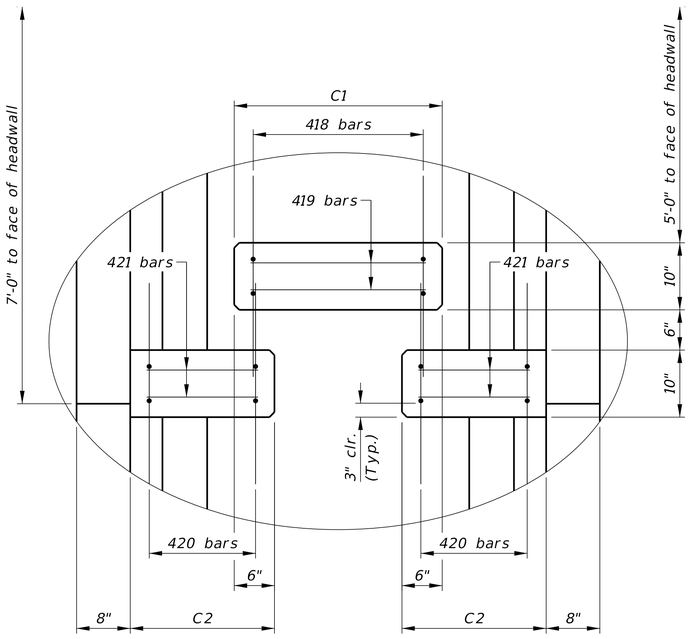
ELEVATION OF HEADWALL

(Showing reinforcement)
Not to Scale



PLAN OF FLOOR

(Showing reinforcement)
Not to Scale



PLAN OF FLOOR

Not to Scale

PRELIMINARY

T20

PROJECT NUMBER
74-5(112)

C.N. 42832

STRUCTURE NUMBER
S074_07778

BRIDGE ENGINEER

HEADWALL WITH ENERGY DISSIPATOR

DESIGNED BY NDOT | DETAILED BY JGH | CHECKED BY JWB | DATE APRIL 2024

COUNTY FILLMORE | LOCATION STRANG SPUR EAST
HWY. NO. N-74 | SKEW N/A
REF. POST. N/A | ROADWAY N/A
STA. 921+14 | DESIGN LIVE LOAD N/A

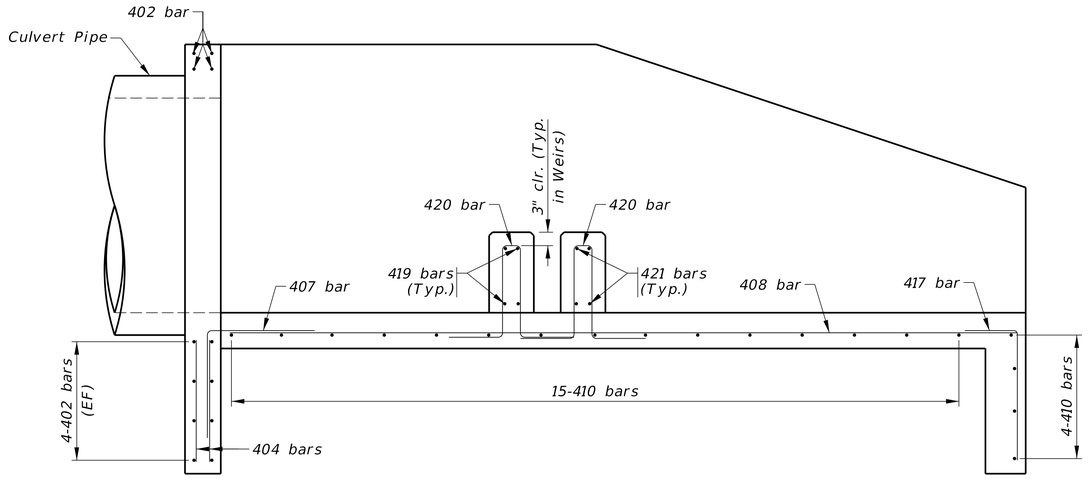
NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

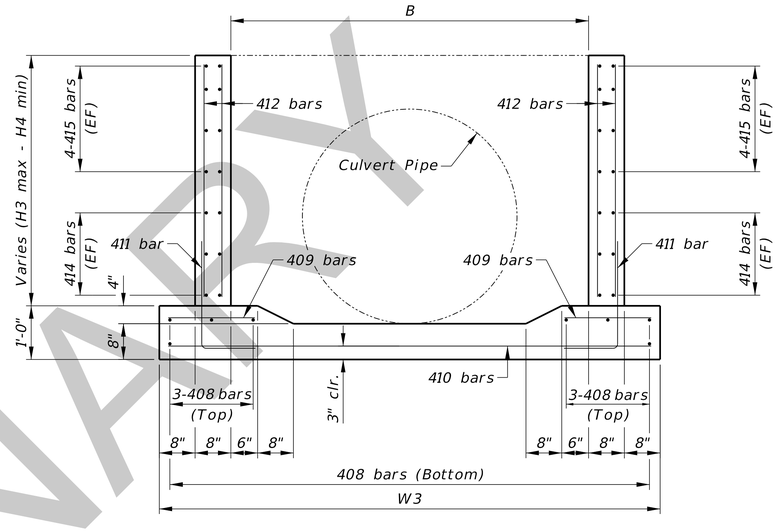
SPECIAL PLAN NO. 8C

2 / 3

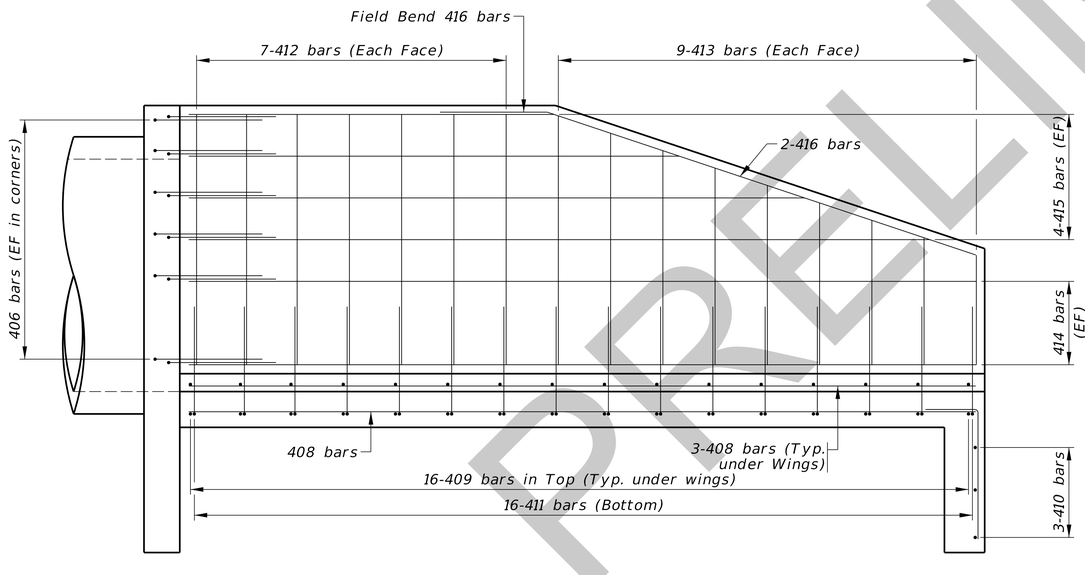
Computer: BG0419M631
Date: 29-APR-2024 11:27
File: cn42832jgh08.dgn



SECTION A-A
Not to Scale



SECTION B-B
Not to Scale



ELEVATION OF WING
Not to Scale

BILL OF BARS

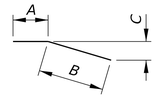
MARK	NO. OF BARS	LENGTH	TYPE	A	B	C	PIN ø	WEIGHT (LB)
401	12	7'- 9"	STR.					62
402	12	8'- 0"	STR.					64
403	16	1'- 10"	STR.					20
404	8	9'- 4"	STR.					50
405	8	3'- 4"	STR.					18
406	24	3'- 0"	104	1'- 0"	2'- 0"		2"	48
407	10	4'- 0"	104	2'- 0"	2'- 0"		2"	27
408	16	14'- 8"	STR.					157
409	32	1'- 7"	STR.					34
410	19	9'- 4"	STR.					118
411	32	3'- 3"	104	1'- 0"	2'- 3"		2"	69
412	28	4'- 7"	STR.					86
413	36	3'- 2" Avg.	STR.					76
414	12	14'- 8"	STR.					118
415	16	10'- 6" Avg.	STR.					112
416	8	10'- 5"	101	2'- 0"	8'- 5"	2'- 8"	2"	56
417	10	3'- 4"	104	1'- 0"	2'- 4"		2"	22
418	4	4'- 2"	109	0'- 11"	4"	1'- 0"	2"	11
419	2	3'- 0"	STR.					4
420	6	4'- 2"	109	0'- 11"	4"	1'- 0"	2"	17
421	4	1'- 9"	STR.					5
							TOTAL (LB) =	1174

BAR SETS

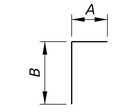
MARK	MAX. LENGTH	MIN. LENGTH	NO. OF SETS	BARS PER SET
413	4'- 5"	1'- 11"	4	9
415	14'- 0"	7'- 0"	4	4

BENDING DIAGRAMS

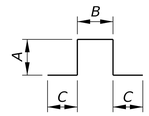
101



104



109



PRELIMINARY

T21

PROJECT NUMBER
74-5(112)

C.N. 42832

STRUCTURE NUMBER
S074_07778

BRIDGE ENGINEER

HEADWALL WITH ENERGY DISSIPATOR

DATE APRIL 2024

COUNTY FILLMORE
HWY. NO. N-74
REF. POST. N/A
STA. 921+14

LOCATION STRANG SPUR EAST
SKEW N/A
ROADWAY N/A
DESIGN LIVE LOAD N/A

DESIGNED BY NDOT
DETAILED BY JGH
CHECKED BY JWB

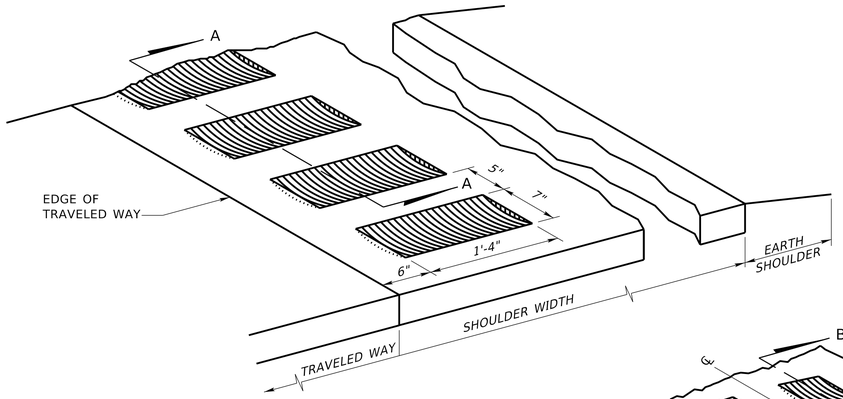
NEBRASKA DEPARTMENT OF TRANSPORTATION - BRIDGE DIVISION

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

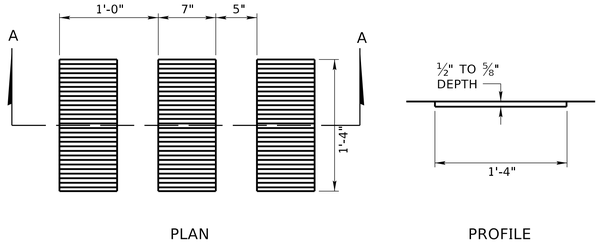
SPECIAL PLAN NO. 8C

3 / 3

Computer: BG0419M631
Date: 29-APR-2024 11:27
File: cn42832jgh08.dgn

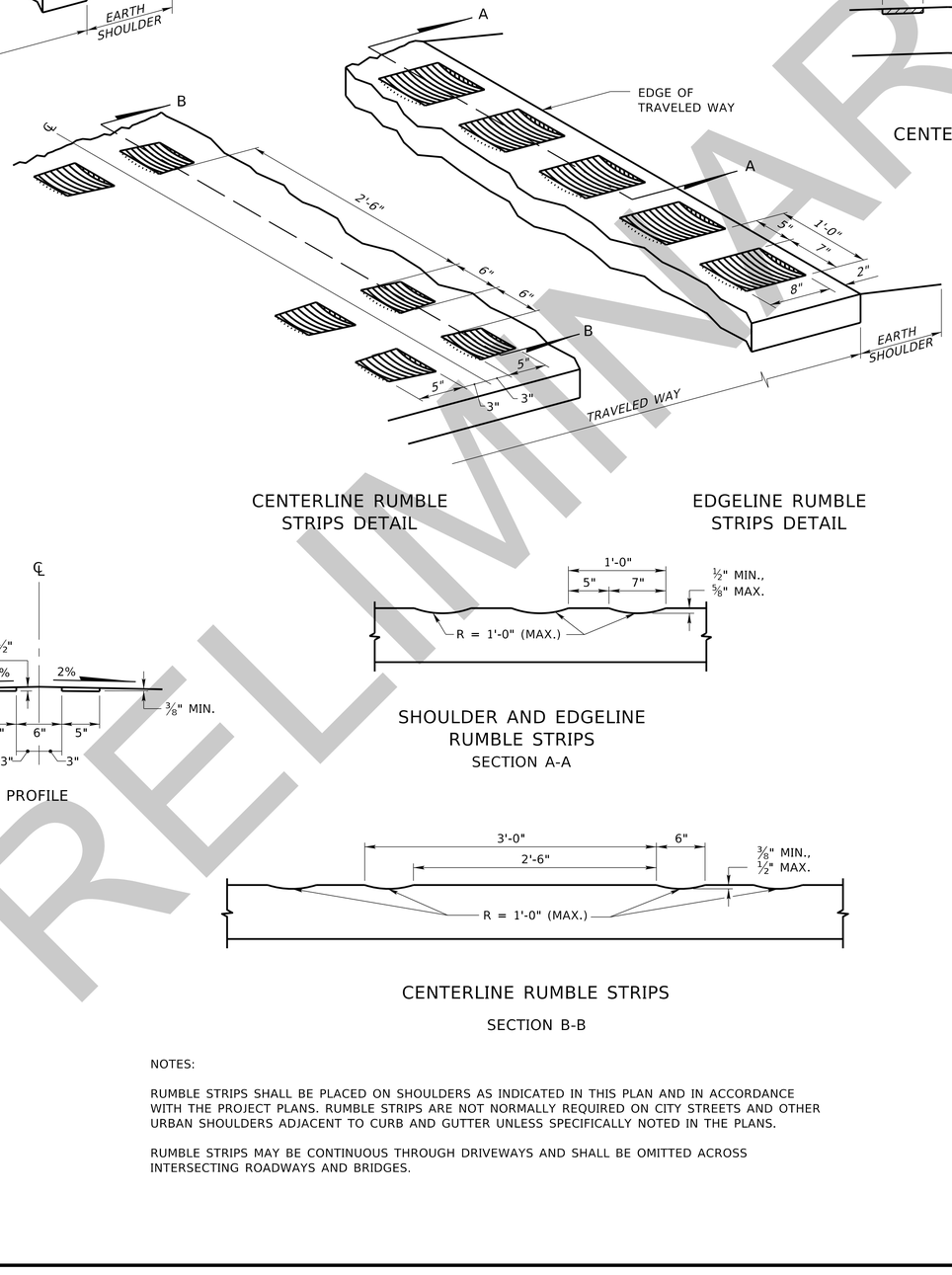


SHOULDER RUMBLE STRIPS DETAIL



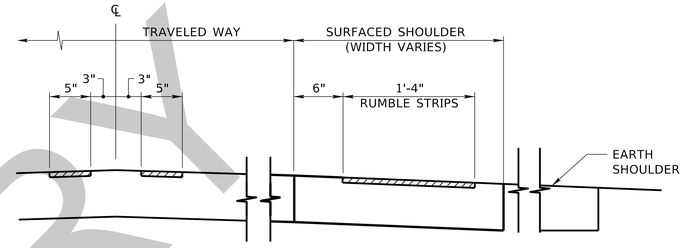
PLAN PROFILE

SHOULDER RUMBLE STRIPS SHAPE

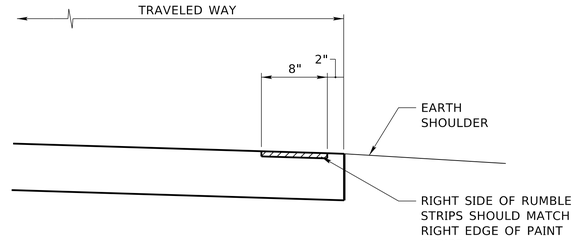


CENTERLINE RUMBLE STRIPS DETAIL

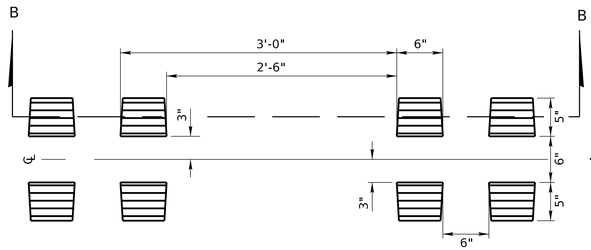
EDGELINE RUMBLE STRIPS DETAIL



CENTERLINE SHOULDER



EDGELINE ON 24 FEET ROADWAY



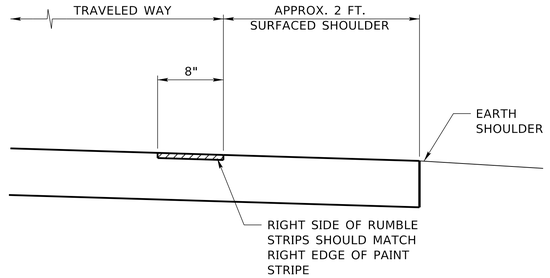
PLAN PROFILE

CENTERLINE RUMBLE STRIPS SHAPE

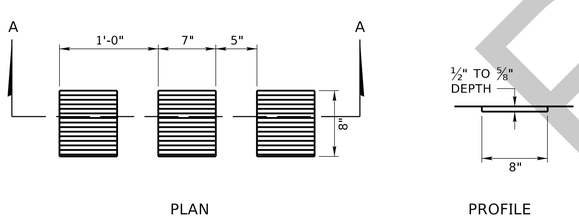
SHOULDER AND EDGELINE
RUMBLE STRIPS
SECTION A-A

CENTERLINE RUMBLE STRIPS

SECTION B-B



EDGELINE ON 28 FEET ROADWAY



PLAN PROFILE

EDGELINE RUMBLE STRIPS SHAPE

NOTES:

RUMBLE STRIPS SHALL BE PLACED ON SHOULDERS AS INDICATED IN THIS PLAN AND IN ACCORDANCE WITH THE PROJECT PLANS. RUMBLE STRIPS ARE NOT NORMALLY REQUIRED ON CITY STREETS AND OTHER URBAN SHOULDERS ADJACENT TO CURB AND GUTTER UNLESS SPECIFICALLY NOTED IN THE PLANS.

RUMBLE STRIPS MAY BE CONTINUOUS THROUGH DRIVEWAYS AND SHALL BE OMITTED ACROSS INTERSECTING ROADWAYS AND BRIDGES.

PRELIMINARY

U1

Project Number
74-5(112)

C.N. 42832

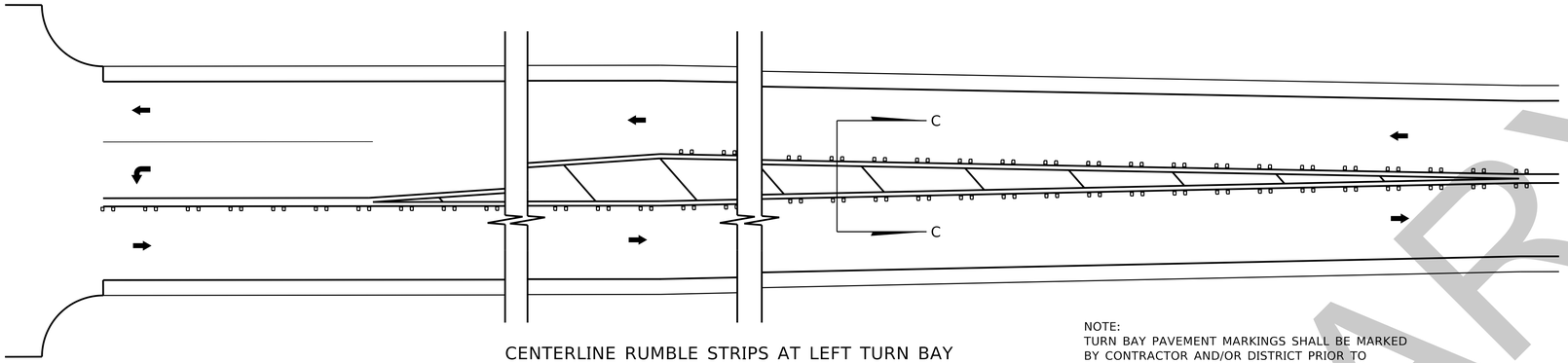
SPECIAL PLAN 9C
1 OF 2
MILLED RUMBLE STRIPS

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway
Design
Division

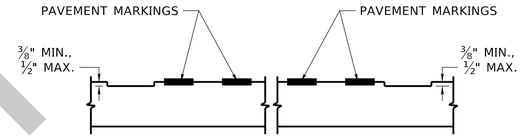
PROFESSIONAL CIVIL ENGINEER
AUSTIN PAUL WHITE
E-17979
May 23, 2024
STATE OF NEBRASKA

COMPUTER: BG0419M674
DATE: 9-MAY-2024 10:04
FILE: 42832 Sheets Specials.dgn
1 OF 2 3200 1 R1



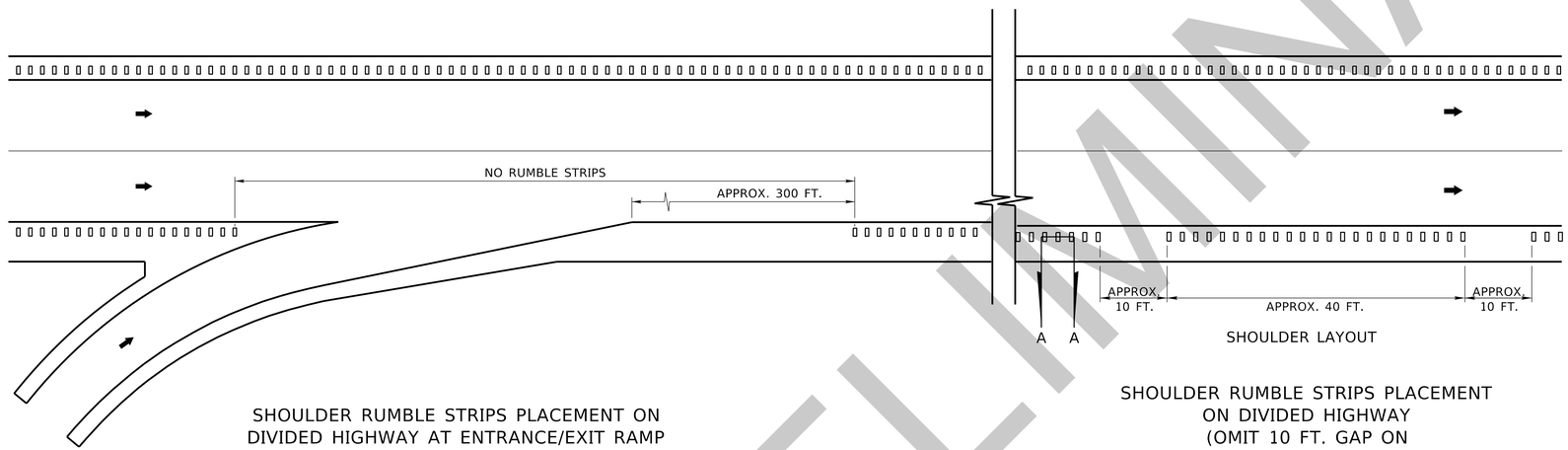
CENTERLINE RUMBLE STRIPS AT LEFT TURN BAY

NOTE:
TURN BAY PAVEMENT MARKINGS SHALL BE MARKED BY CONTRACTOR AND/OR DISTRICT PRIOR TO CONSTRUCTION OF RUMBLE STRIPS.



CENTERLINE RUMBLE STRIPS
AT LEFT TURN BAY

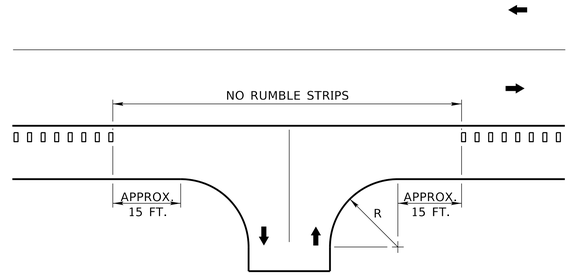
SECTION C-C



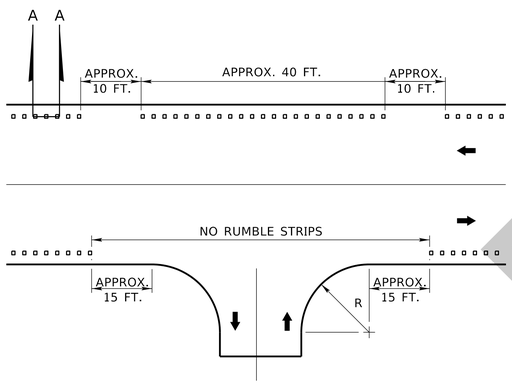
SHOULDER RUMBLE STRIPS PLACEMENT ON
DIVIDED HIGHWAY AT ENTRANCE/EXIT RAMP

SHOULDER LAYOUT

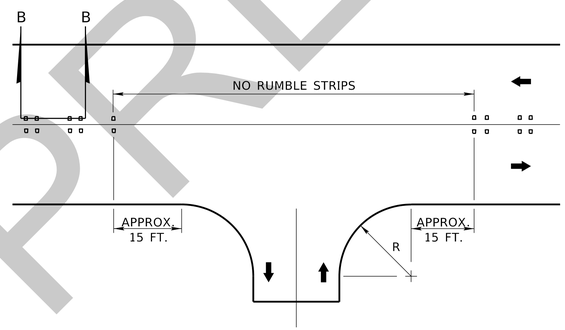
SHOULDER RUMBLE STRIPS PLACEMENT
ON DIVIDED HIGHWAY
(OMIT 10 FT. GAP ON
INTERSTATE AND FREEWAYS)



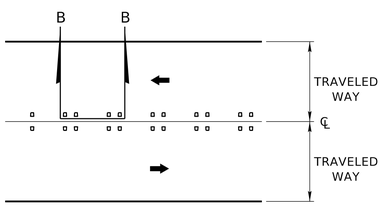
SHOULDER RUMBLE STRIPS PLACEMENT
ON 2-LANE HIGHWAY AT INTERSECTION



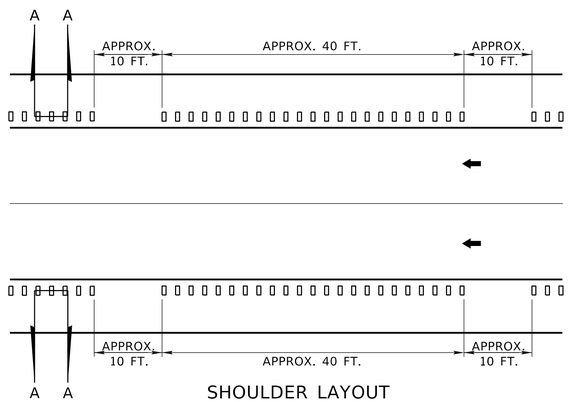
EDGELINE RUMBLE STRIPS
PLACEMENT AT INTERSECTION



CENTERLINE RUMBLE STRIPS
PLACEMENT AT INTERSECTION



CENTERLINE LAYOUT



SHOULDER LAYOUT

PRELIMINARY

U2

Project Number
74-5(112)

C.N. 42832

SPECIAL PLAN 9C
2 OF 2
MILLED RUMBLE STRIPS

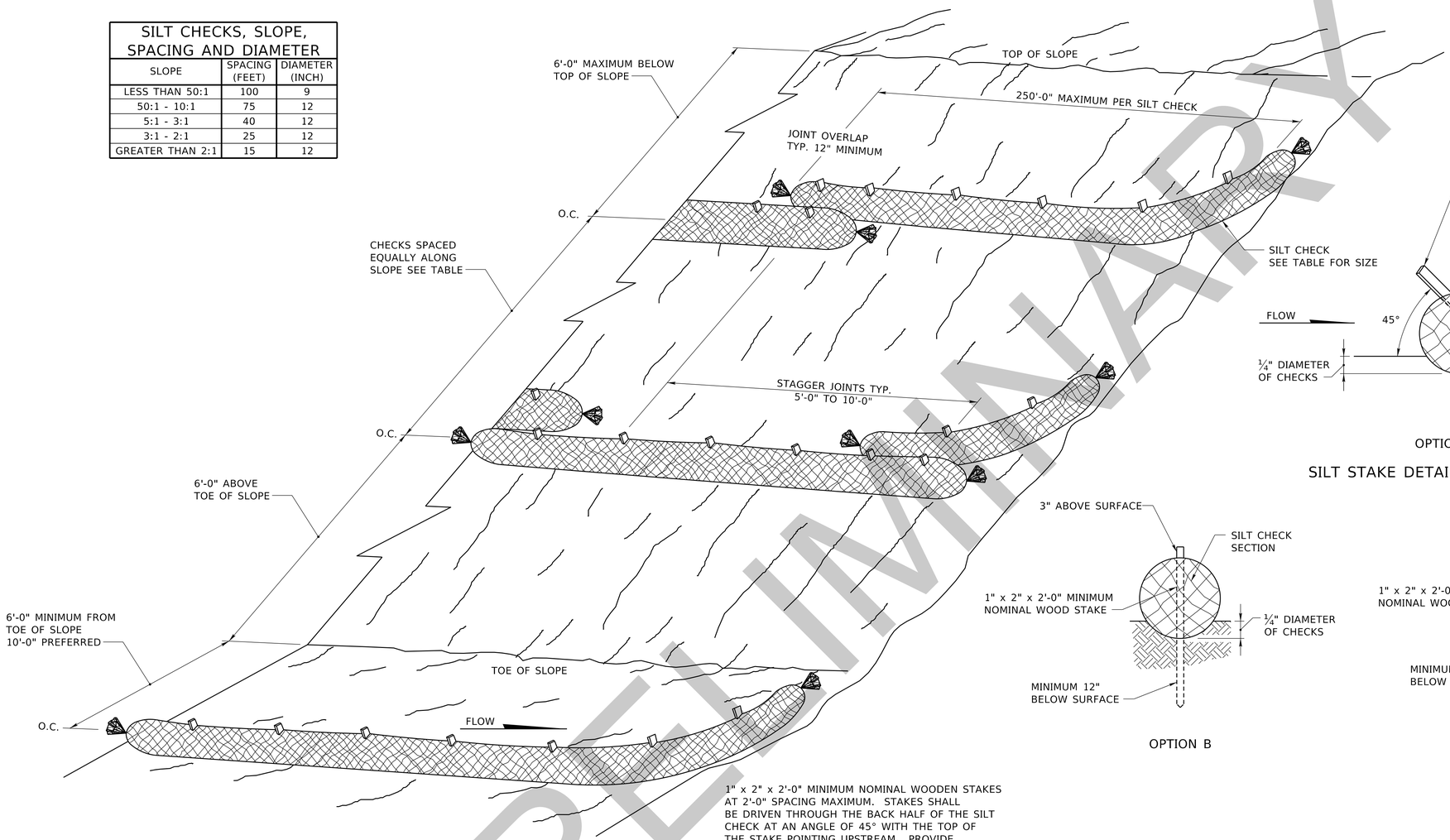
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division

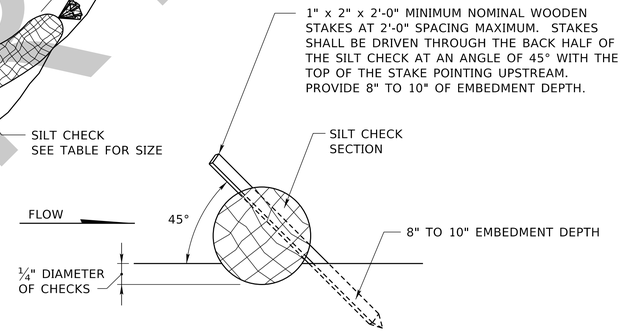
PROFESSIONAL CIVIL ENGINEER
AUSTIN PAUL WHITE
E-17979
May 23, 2024
STATE OF NEBRASKA

COMPUTER: BG0419W674
DATE: 9-MAY-2024 10:04
FILE: 42832 Sheets Specials.dgn

SILT CHECKS, SLOPE, SPACING AND DIAMETER		
SLOPE	SPACING (FEET)	DIAMETER (INCH)
LESS THAN 50:1	100	9
50:1 - 10:1	75	12
5:1 - 3:1	40	12
3:1 - 2:1	25	12
GREATER THAN 2:1	15	12



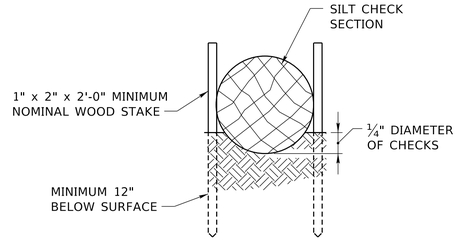
SLOPE APPLICATION
PERSPECTIVE VIEW



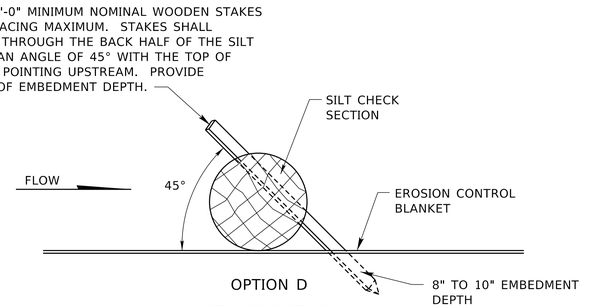
OPTION A

SILT STAKE DETAIL (WITH TRENCH)

OPTION B



OPTION C



OPTION D

STAKE DETAIL
(NO TRENCH)

NOTE:

TRENCHING IS OPTIONAL FOR CHECKS ON BACKSLOPES & FORESLOPES

PRELIMINARY

U3

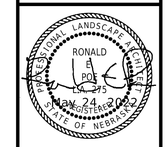
Project Number
74-5(112)

C.N. 42832

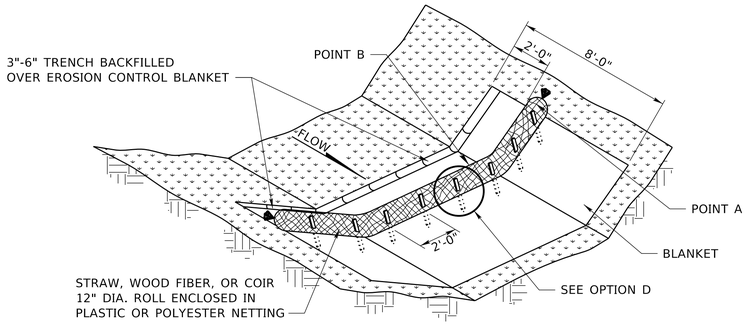
SPECIAL PLAN 10C
1 OF 4
SILT CHECKS ALL TYPES

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

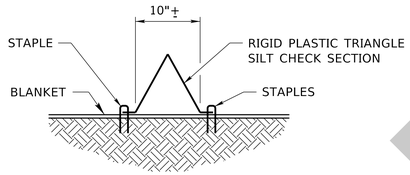
Roadway Design Division



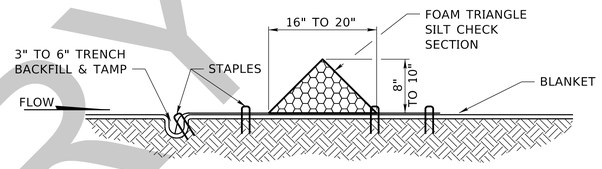
COMPUTER: BG0419M674
DATE: 9-MAY-2024 10:04
FILE: 42832 Sheets Specials.dgn



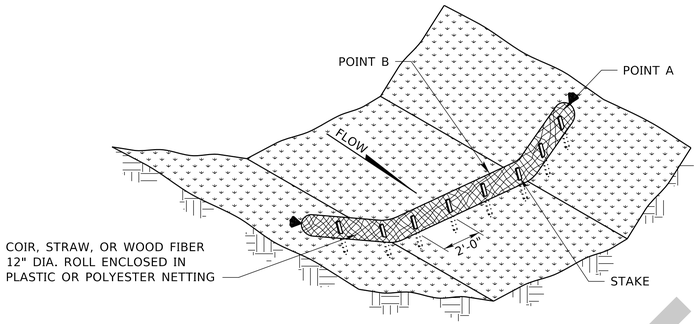
TYPE 2 & 3: HIGH & LOW
WITH EROSION CONTROL



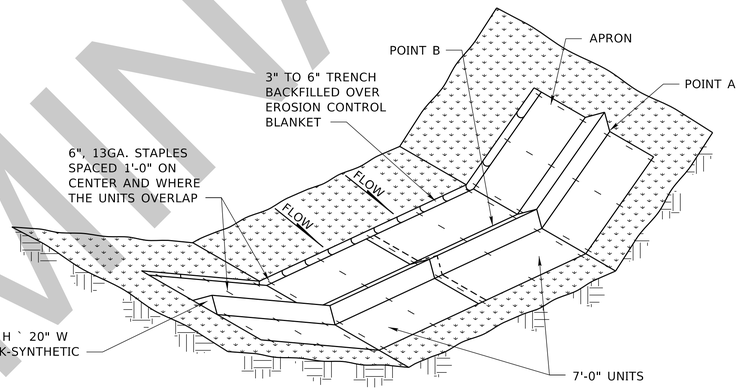
TYPE 4 SECTION



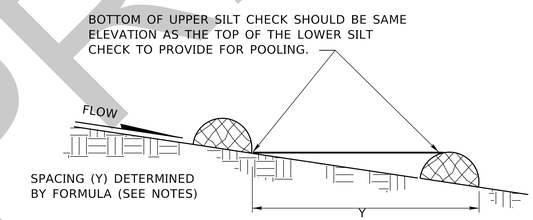
TYPE 4 SECTION



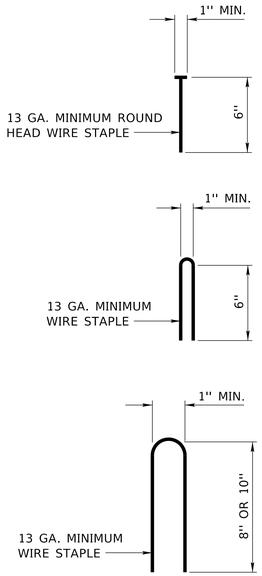
TYPE 1, 2 & 3: HIGH & LOW
USE ON ROUGH GRADED & BARE SOIL AREAS



SILT CHECK: TYPE 4



SILT CHECK SPACING-DITCH



WIRE STAPLE DETAIL

NOTES:

APPROXIMATE SPACING BETWEEN EACH DITCH CHECK SHOULD BE DETERMINED FROM THE FOLLOWING SPACING FORMULA:

APPROXIMATE SPACING OF DITCH CHECKS (FT.) = $Y = \frac{\text{SILT CHECK HEIGHT (FT.)}}{\text{\% CHANNEL SLOPE}} \times 100$

POINT A MUST BE A MINIMUM OF 6" HIGHER THAN POINT B TO ENSURE THAT WATER FLOWS OVER THE CHECK AND NOT AROUND THE ENDS.

PERMANENT ROCK CHECKS PLACED WITHIN THE CLEAR ZONE WILL NEED TO BE 18" OR LESS IN HEIGHT. A 10:1 APPROACH AND DEPARTURE SLOPE SHALL BE PROVIDED.

THE TRENCH ON THE UPSTREAM SIDE OF THE SILT CHECK IS NOT REQUIRED IF THE EROSION CONTROL BLANKET CONTINUES IN THE ENTIRE LENGTH OF THE DITCH.

THE MANUFACTURERS RECOMMENDED INSTALLATION DETAILS SHALL GOVERN OVER THE PLANS.

SEE STAKING DETAIL SHEET 1 OF 4

PRELIMINARY

U4

Project Number
74-5(112)

C.N. 42832

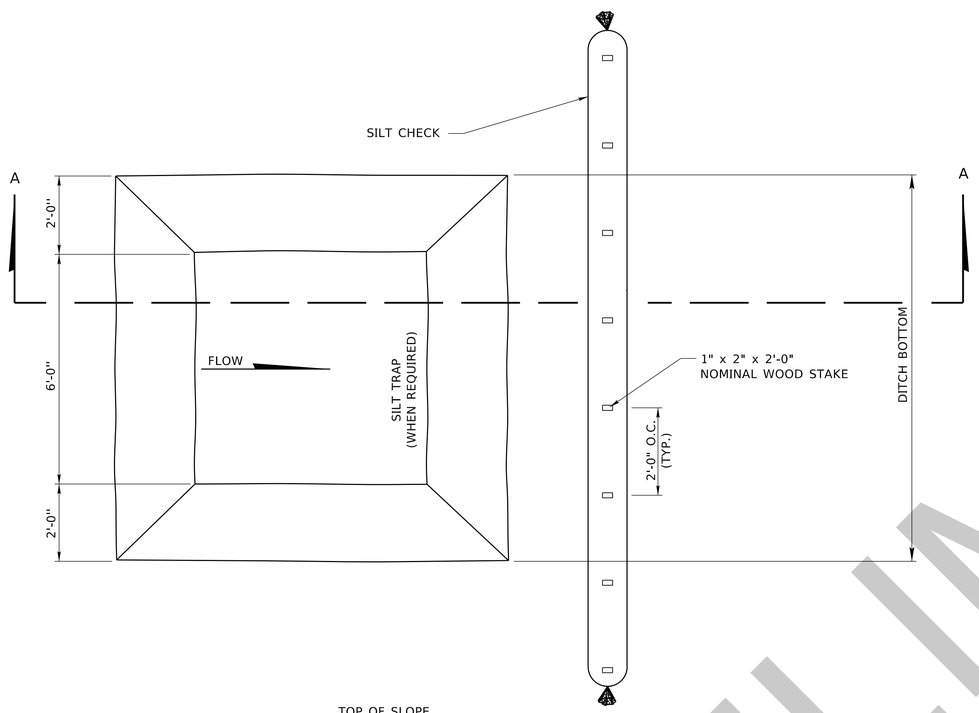
SPECIAL PLAN 10C
2 OF 4
SILT CHECKS ALL TYPES

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway
Design
Division

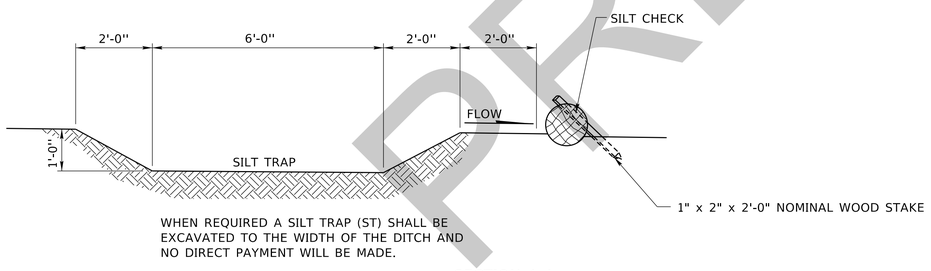
PROFESSIONAL LANDSCAPE ARCHITECT
RONALD B. POTS
LA-215
REGISTERED
STATE OF NEBRASKA
May 24, 2022

COMPUTER$$$$
DATE$$$$$$$$$$$$$$
DGNSPEC$$$$$$$$$$$$



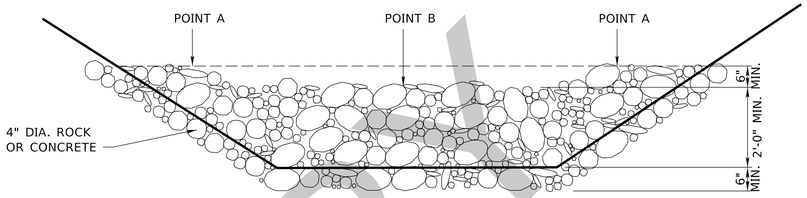
PLAN VIEW

FOR FLAT BOTTOM DITCH

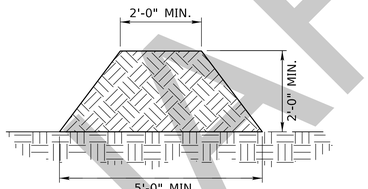


WHEN REQUIRED A SILT TRAP (ST) SHALL BE EXCAVATED TO THE WIDTH OF THE DITCH AND NO DIRECT PAYMENT WILL BE MADE.

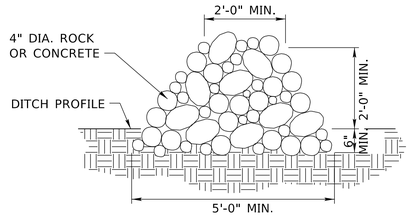
SECTION A-A



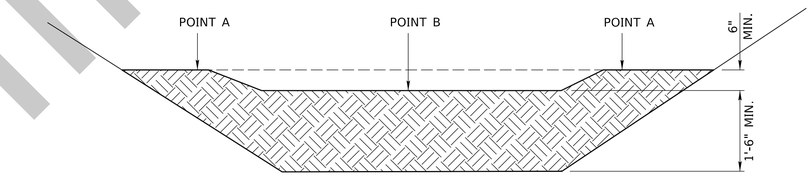
ROCK CHECK
ELEVATION VIEW



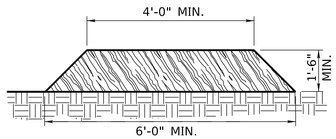
EARTH-SLASH MULCH PERIMETER BERM
CROSS SECTION



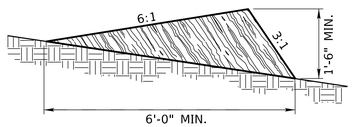
ROCK CHECK
CROSS SECTION



EARTH-SLASH MULCH CHECK
ELEVATION VIEW



CROSS SECTION
SILT CHECK-SLASH MULCH
OPTION A



CROSS SECTION
SILT CHECK-SLASH MULCH
OPTION B

SEE STAKING DETAIL SHEET 1 OF 4

PRELIMINARY

U5

Project Number
74-5(112)

C.N. 42832

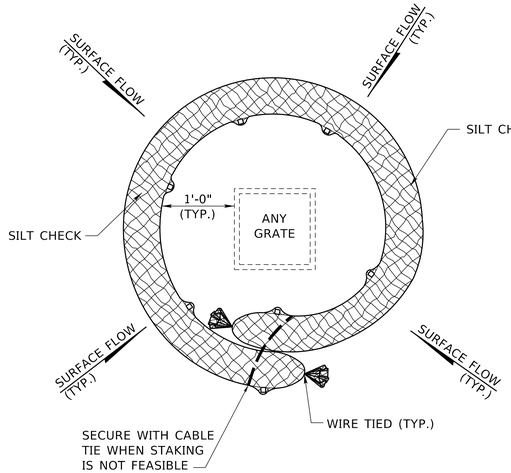
SPECIAL PLAN 10C
3 OF 4
SILT CHECKS ALL TYPES

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

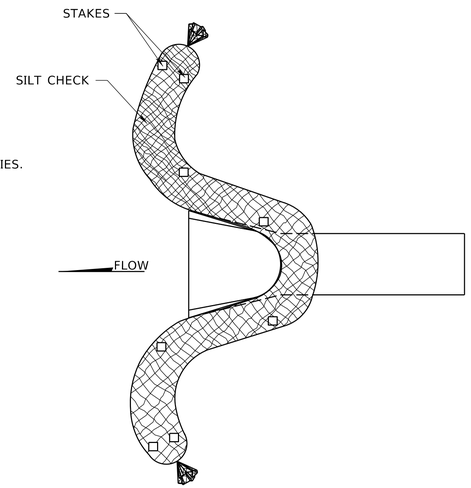
Roadway
Design
Division

PROFESSIONAL LANDSCAPE ARCHITECT
RONALD E POE
LA-275
MAY 24, 2024
STATE OF NEBRASKA

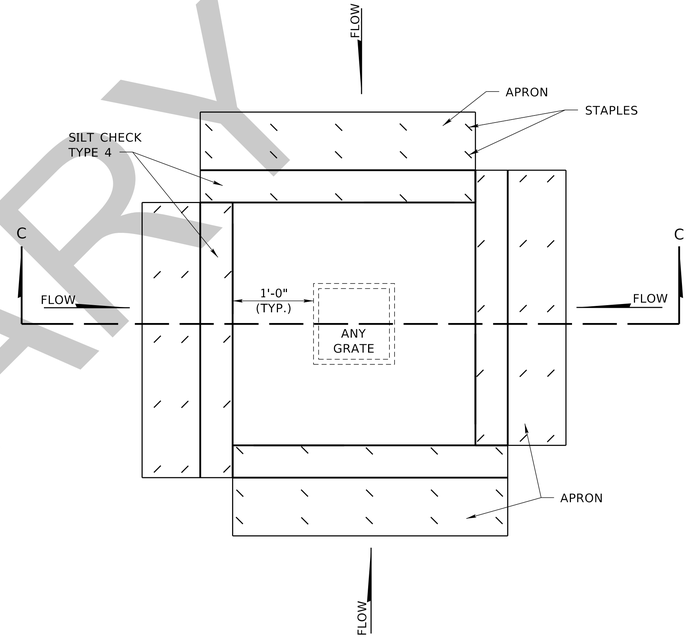
COMPUTER: BG0419M674
DATE: 9-MAY-2024 10:04
FILE: 42832 Sheets Specials.dgn



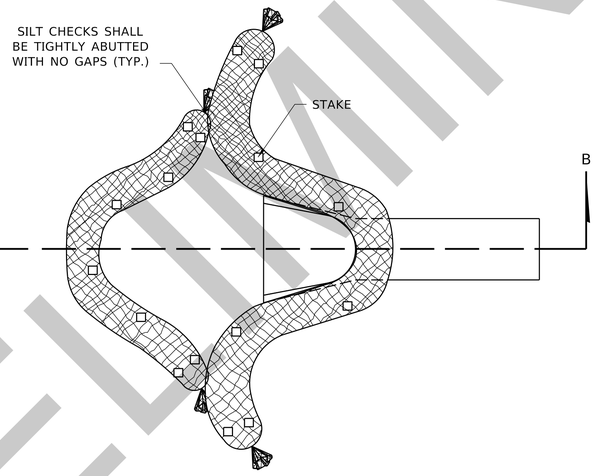
PLAN VIEW



SILT CHECK OUTLET PROTECTION

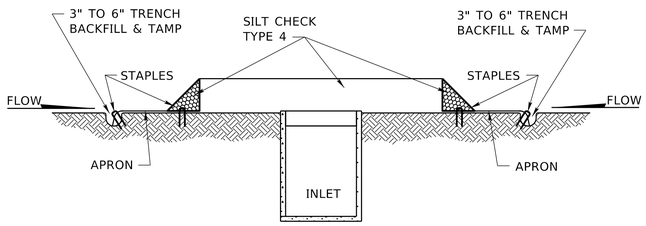


PLAN VIEW



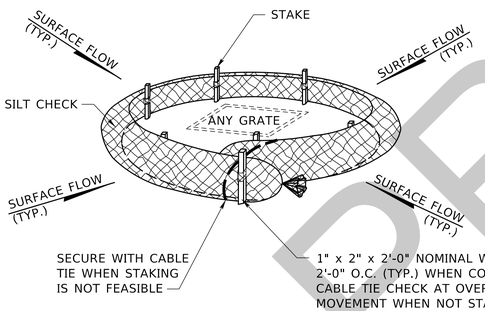
PLAN VIEW

SILT CHECK INLET PROTECTION



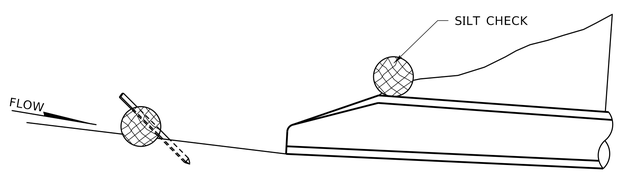
SECTION C-C

SILT CHECK TYPE 4 AT INLET



1" x 2" x 2'-0" NOMINAL WOOD STAKES 2'-0" O.C. (TYP.) WHEN CONDITIONS ALLOW. CABLE TIE CHECK AT OVERLAP TO PREVENT MOVEMENT WHEN NOT STAKED (PAVEMENT APPLICATION). SEE CHECK STAKING DETAIL.

SILT CHECK INLET FILTER
PERSPECTIVE VIEW



SECTION B-B

SEE STAKING DETAIL SHEET 1 OF 4

PRELIMINARY

U6

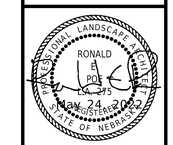
Project Number
74-5(112)

C.N. 42832

SPECIAL PLAN 10C
4 OF 4
SILT CHECKS ALL TYPES

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Roadway Design Division



JAN 24, 20

COMPUTER: BG0419M674
DATE: 9-MAY-2024 10:04
FILE: 42832 Sheets Specials.dgn

470 475 480 485 490 495

N

0 50' 100' 200'
SCALE

Sec. 4-T5N-R2W

Sec. Line

U.S. Hwy. 74

Sec. Line

1/4 Sec. Line

469+46.70
-59.58' ℄

469+46.21
60.37' ℄

CO. RD. 15

487+01.73
59.63' ℄

490+01.64
39.39' ℄

490+35.00
65.00' ℄

490+95.00
65.00' ℄

490+95.00
39.56' ℄

494+01.44
-61.50' ℄

494+26.35
40.16' ℄

494+26.31
58.66' ℄

497+28.12
-59.96' ℄

497+26.62
60.03' ℄

Tract 1
Larry D. Messman
NW4 of Sec. 9-T5N-R2W of the 6th P.M.,
Fillmore County, Nebraska

Sec. 9-T5N-R2W

PRELIMINARY

LEGEND

- NEW CONTROLLED ACCESS
- PREVIOUS CONTROLLED ACCESS
- LIMITS OF CONSTRUCTION
- PREVIOUS R.O.W.
- EXISTING PERMANENT EASEMENT
- EXISTING RAILROAD EASEMENT
- NEW R.O.W.
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- EXCESS TAKING
- NEW RAILROAD PERMANENT EASEMENT
- NEW RAILROAD TEMPORARY EASEMENT

Previous ROW Purchased Under Projects: S-857(5) S-857(13)

DOCUMENT VERSION DATED:

W1

Project Number
74-5(112)

C.N. 42832

Location: Strang Spur East

ROW Project No: 74-5(112)

ROW Control No: 42832

County: Fillmore

Right of Way Plans

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Right-of-Way Division

Computer: BG0419M622
Date: 19-APR-2024 12:57
File: 42832_ROW_Design.dgn

920 925 930 935 940 945

0 50' 100' 200'
SCALE

Sec. 2-T5N-R1W

Tract 2
DL Rohr LLC, a Nebraska limited liability company
SE4 of Sec. 2-T5N-R1W of the 6th P.M., Fillmore County, Nebraska

TE1
Erosion Control Purposes

1/4 Sec. Line

917+65.91 ℄ -64.51'

931+27.15 ℄ -61.04'

932+10.00 ℄ -77.70'

932+30.00 ℄ -81.72'

932+10.00 ℄ -150.00'

932+30.00 ℄ -115.00'

932+94.21 ℄ -94.62'

932+98.00 ℄ -115.00'

933+18.00 ℄ -150.00'

932+98.00 ℄ -94.50'

933+18.00 ℄ -93.85'

942+41.06 ℄ -64.84'

943+62.52 ℄ -400.12'

Sec. Line

OP OP OP OP OP OP OP OP OP

Sec. Line U.S. Hwy. 74

SURVEY SPIKE

RP

917+67.62 ℄ 69.37'

930+81.97 ℄ 70.12'

932+30.00 ℄ 70.28'

932+30.00 ℄ 82.00'

932+97.00 ℄ 82.00'

932+97.00 ℄ 70.36'

943+64.21 ℄ 70.01'

Tract 3
Regina Schafer
E2NE4 of Sec. 11-T5N-R1W of the 6th P.M.,
Fillmore County, Nebraska

CO. RD. 24

Sec. 11-T5N-R1W

PRELIMINARY

LEGEND

- NEW CONTROLLED ACCESS
- PREVIOUS CONTROLLED ACCESS
- LIMITS OF CONSTRUCTION
- PREVIOUS R.O.W.
- EXISTING PERMANENT EASEMENT
- EXISTING RAILROAD EASEMENT
- NEW R.O.W.
- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- EXCESS TAKING
- NEW RAILROAD PERMANENT EASEMENT
- NEW RAILROAD TEMPORARY EASEMENT

Previous ROW Purchased Under Projects: S-857(5) S-857(13)

DOCUMENT VERSION DATED:

W2

Project Number
74-5(112)

C.N. 42832

Location: Strang Spur East

ROW Control No: 42832

ROW Project No: 74-5(112)

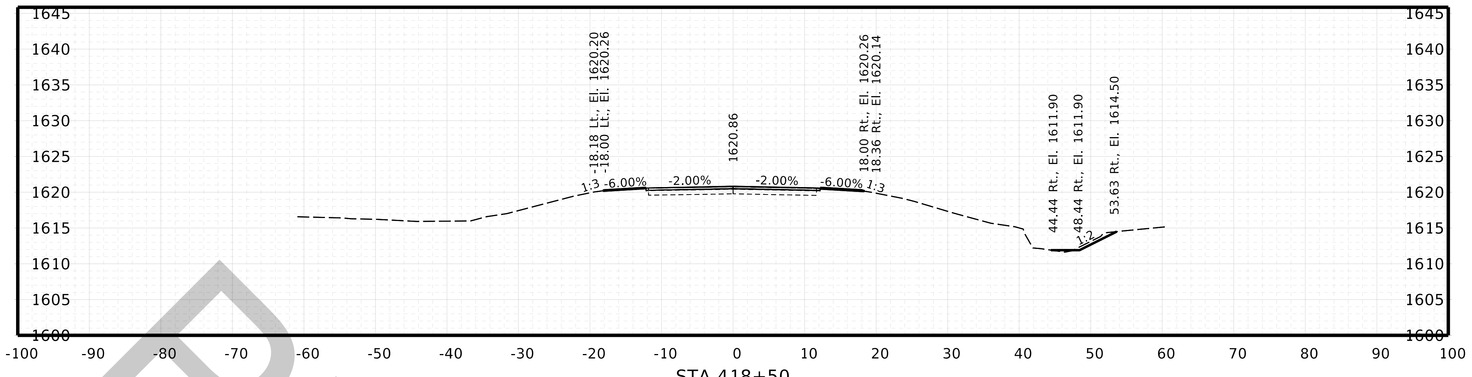
County: Fillmore

Right of Way Plans

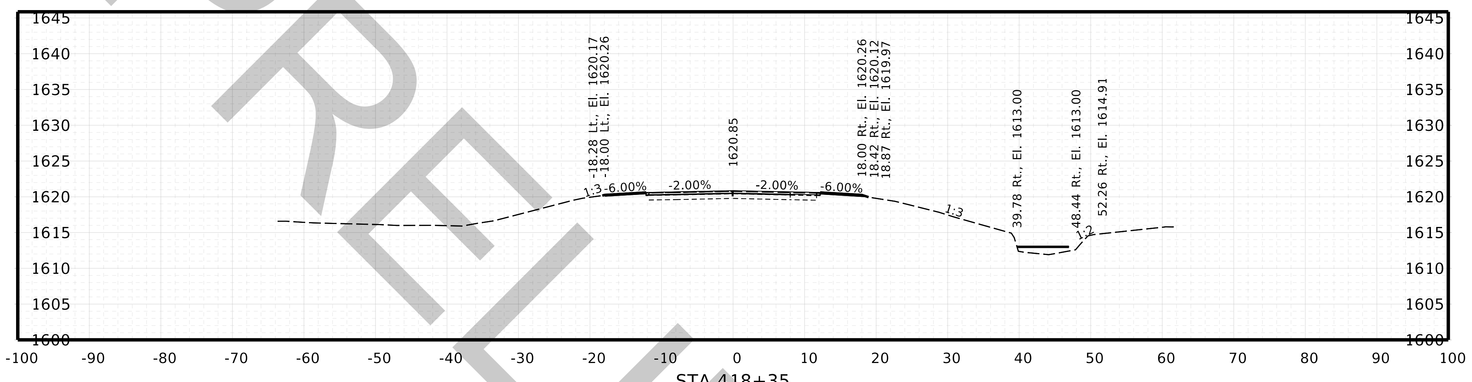
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Right-of-Way Division

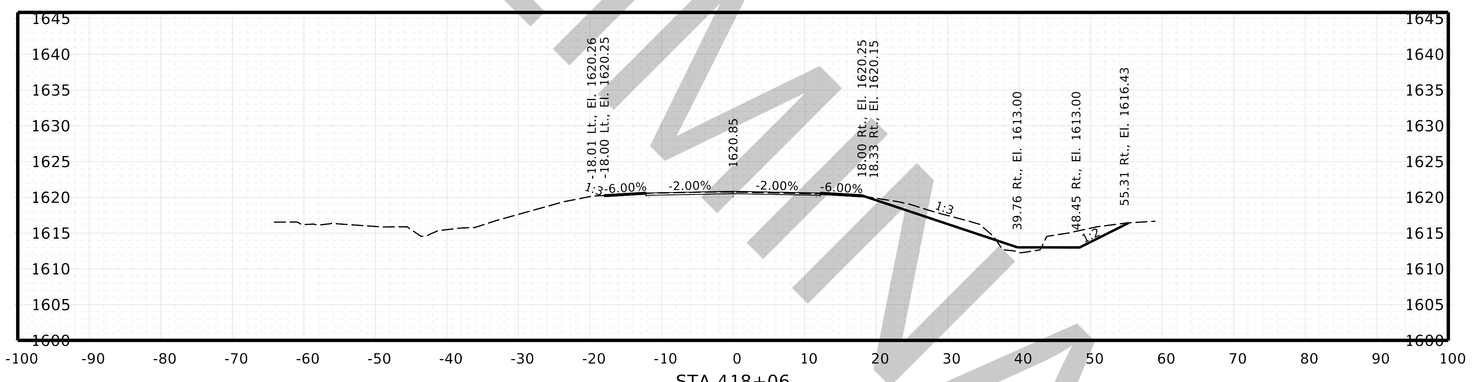
Computer: BG04119M622
Date: 19-APR-2024 12:59
File: 42832_ROW_Design.dgn



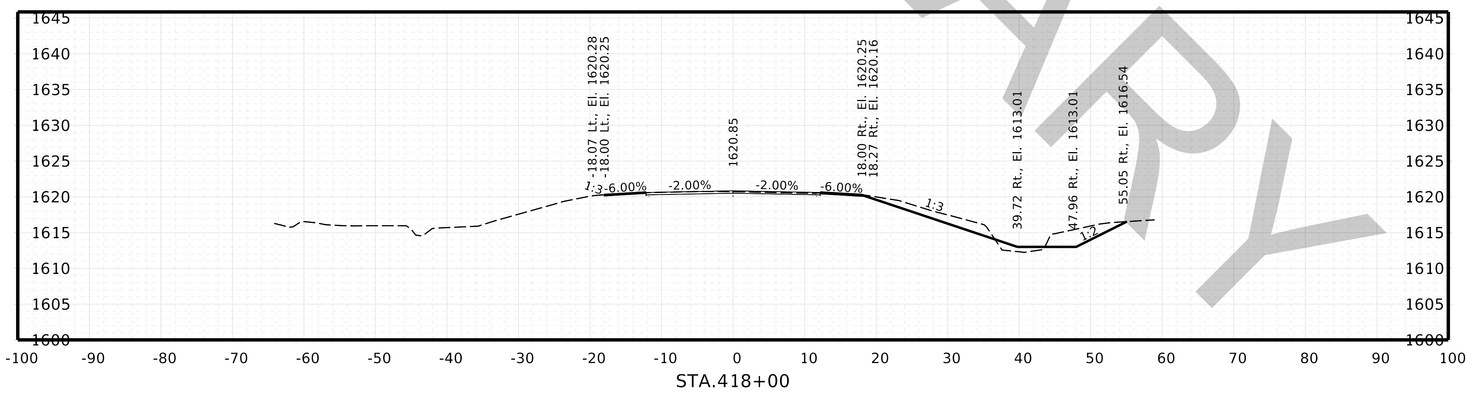
STA.418+50



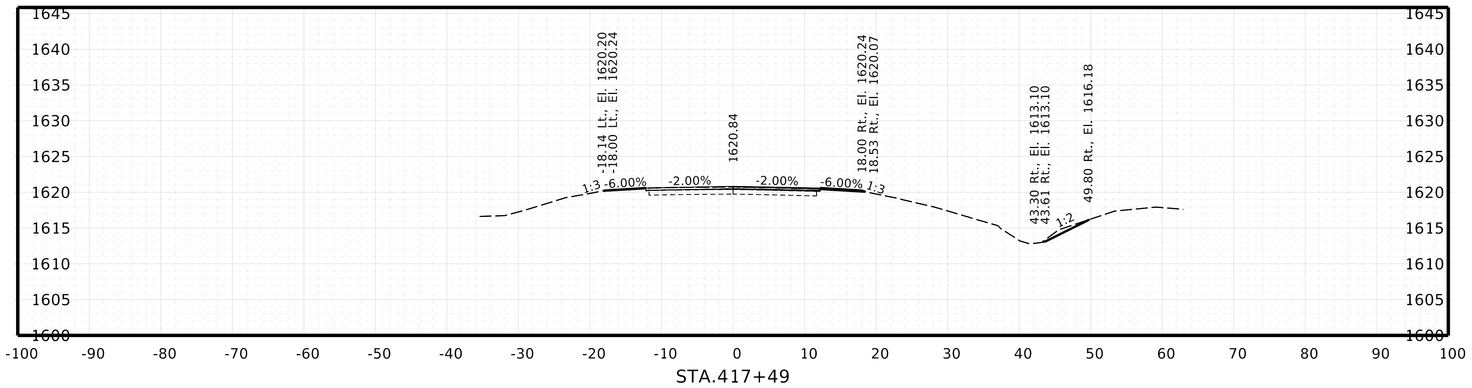
STA.418+35



STA.418+06



STA.418+00



STA.417+49

PRELIMINARY

Roadway Design Division

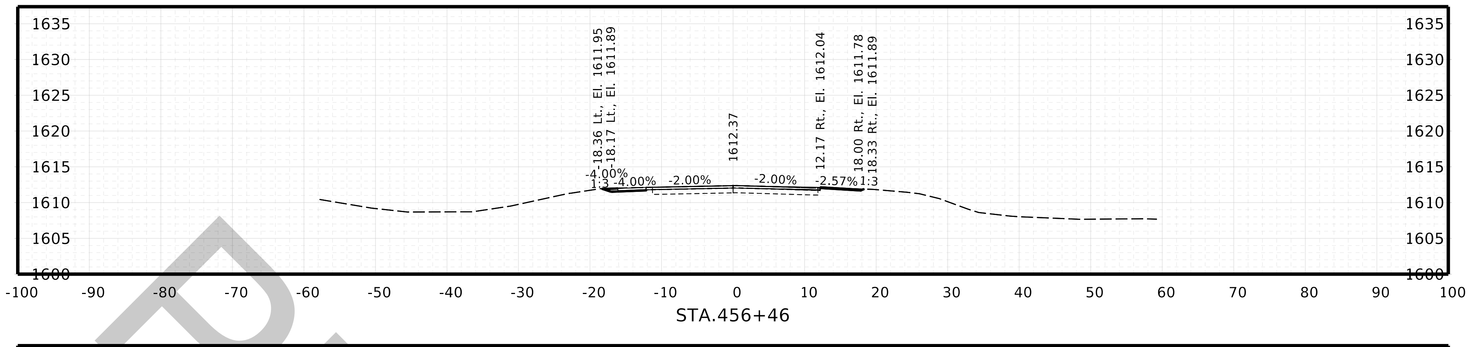
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

ROADWAY CROSS SECTIONS

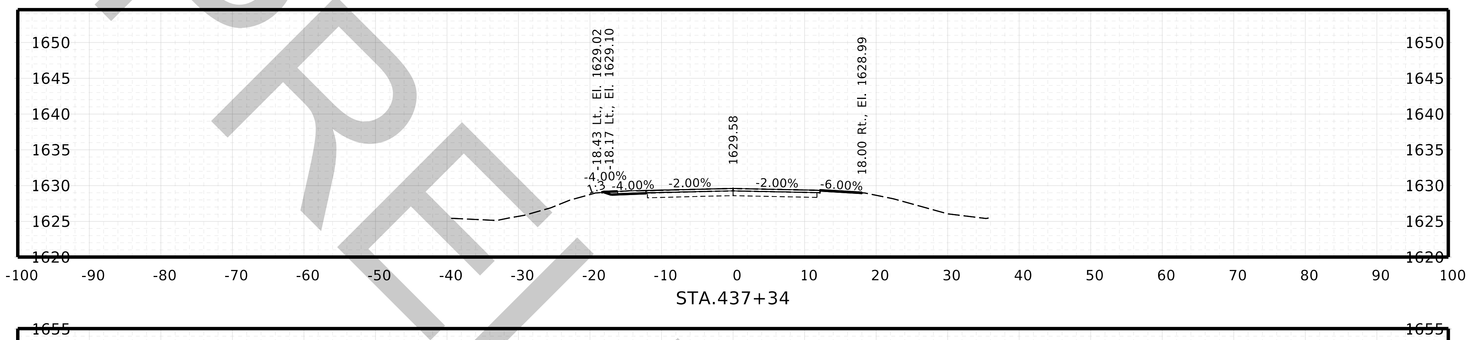
C.N. 42832

Project Number 74-5(112)

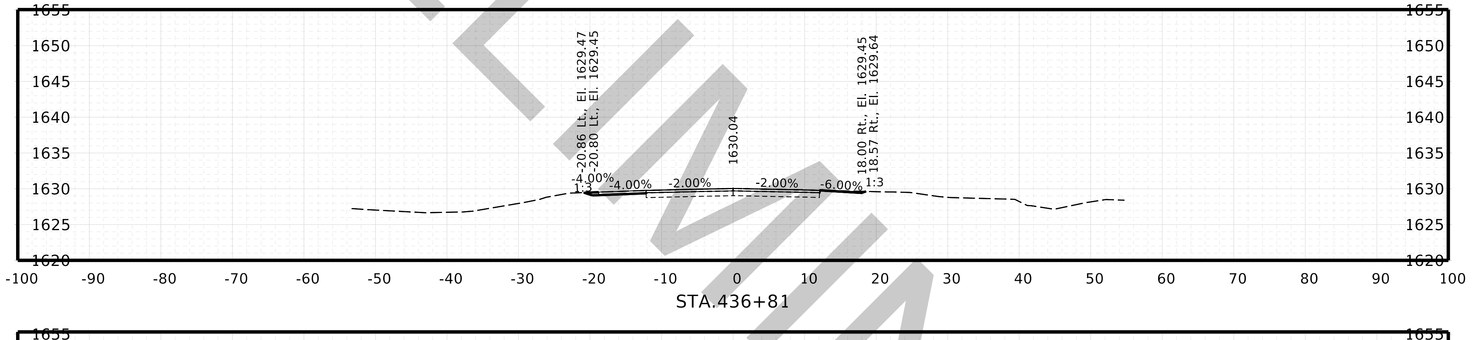
X1



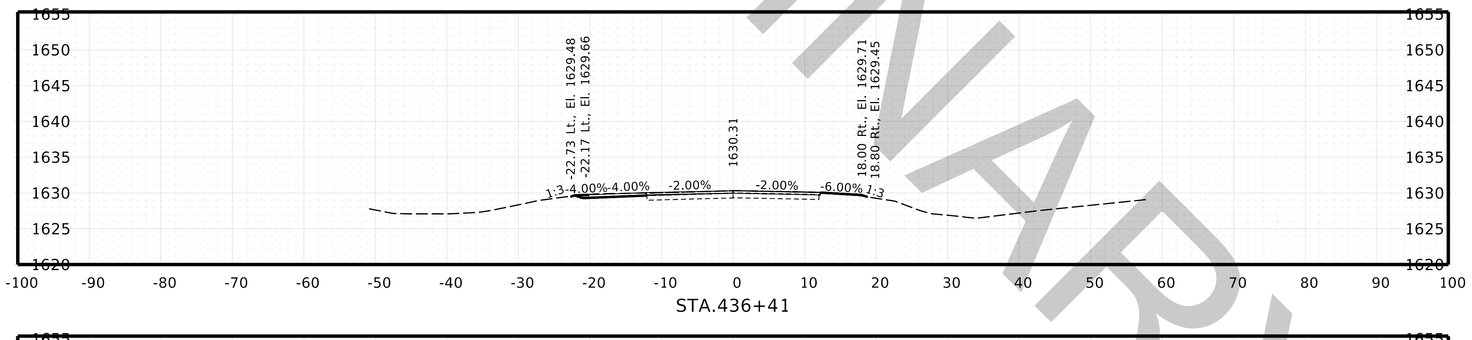
STA.456+46



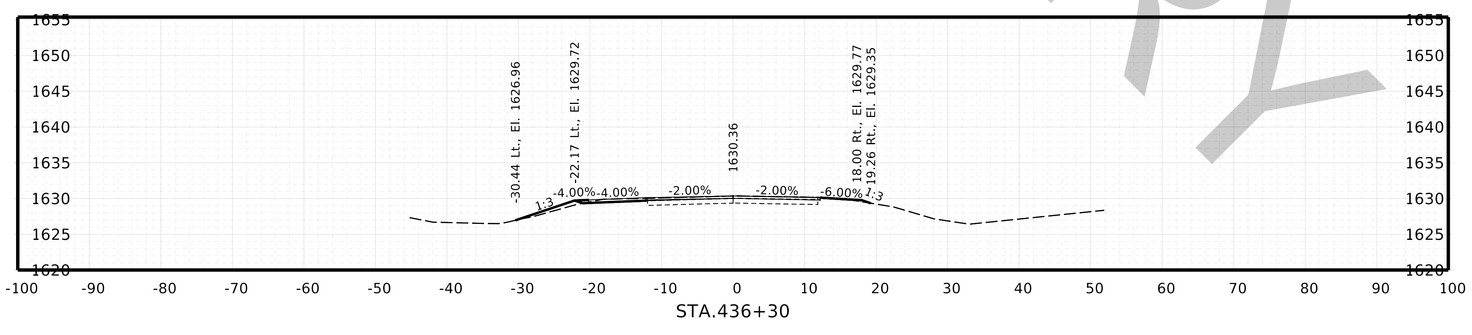
STA.437+34



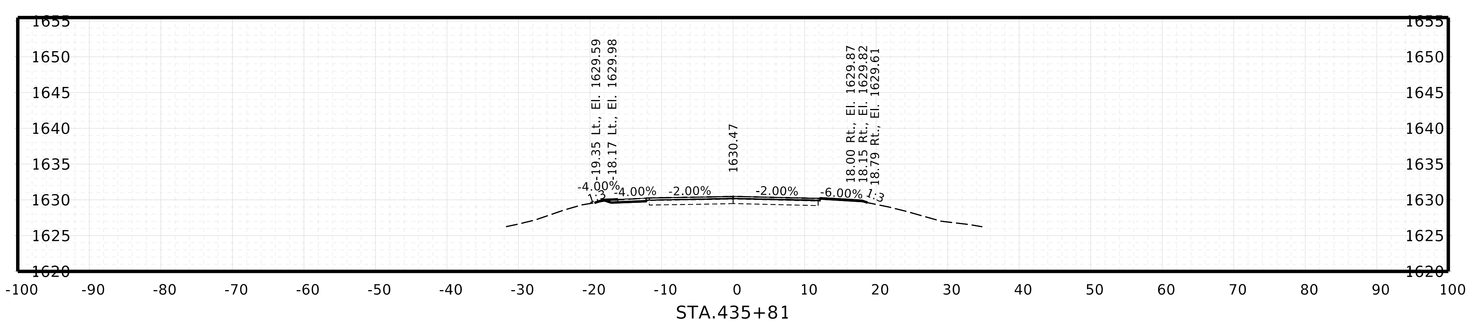
STA.436+81



STA.436+41



STA.436+30



STA.435+81

PRELIMINARY

Roadway Design Division

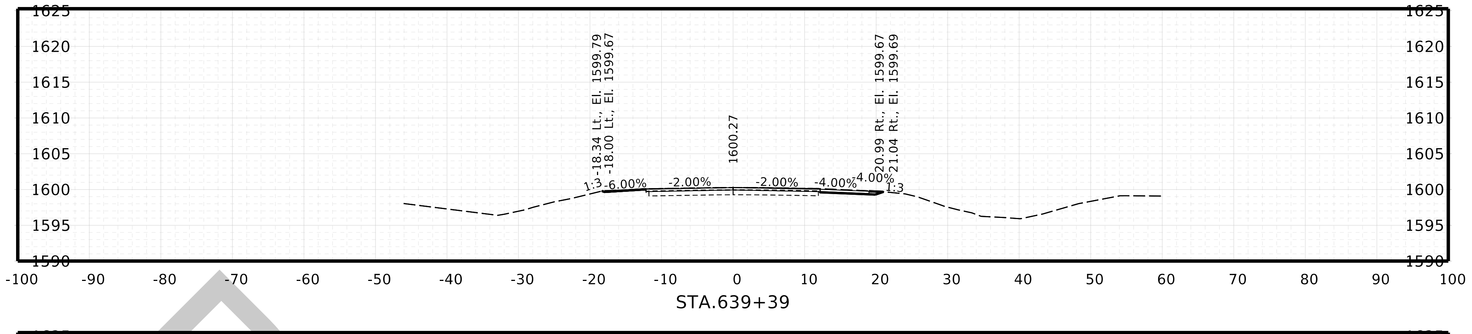
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

ROADWAY CROSS SECTIONS

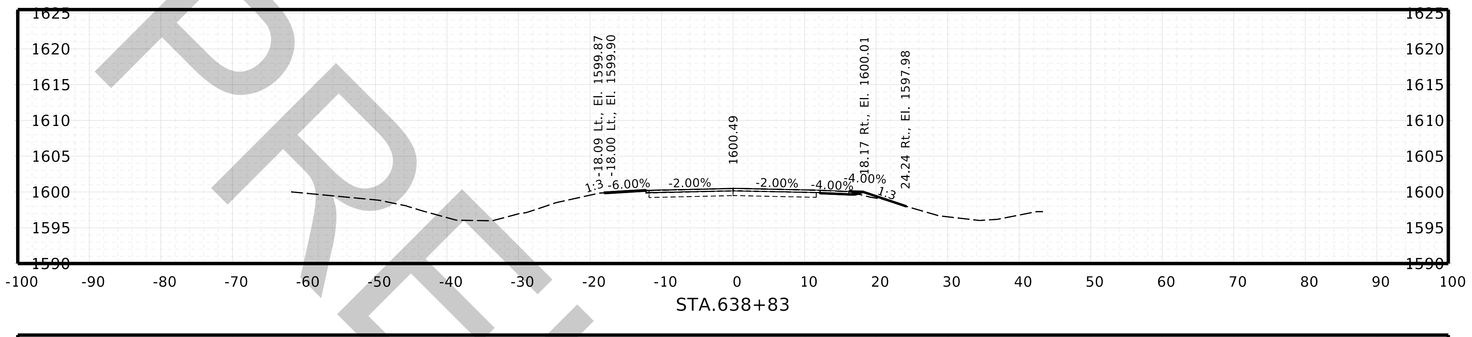
C.N. 42832

Project Number 74-5(112)

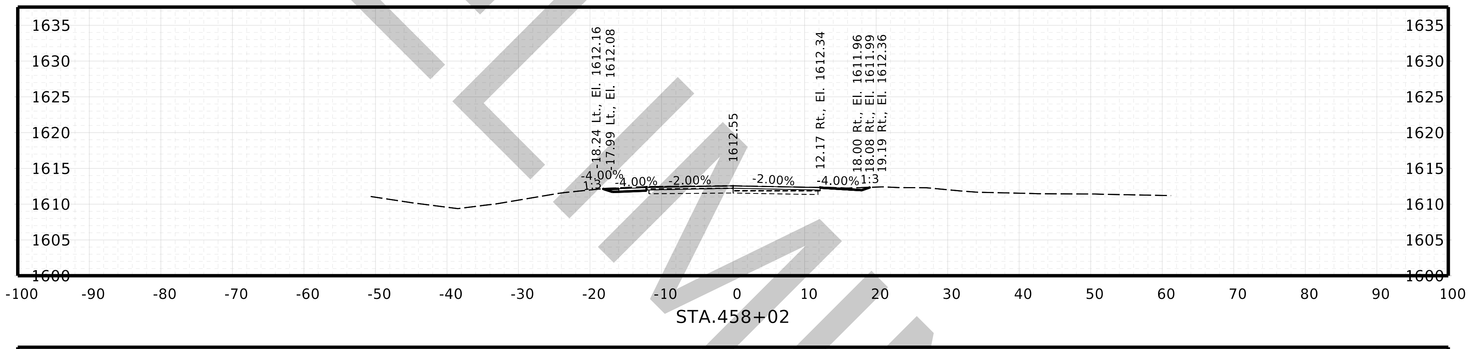
X2



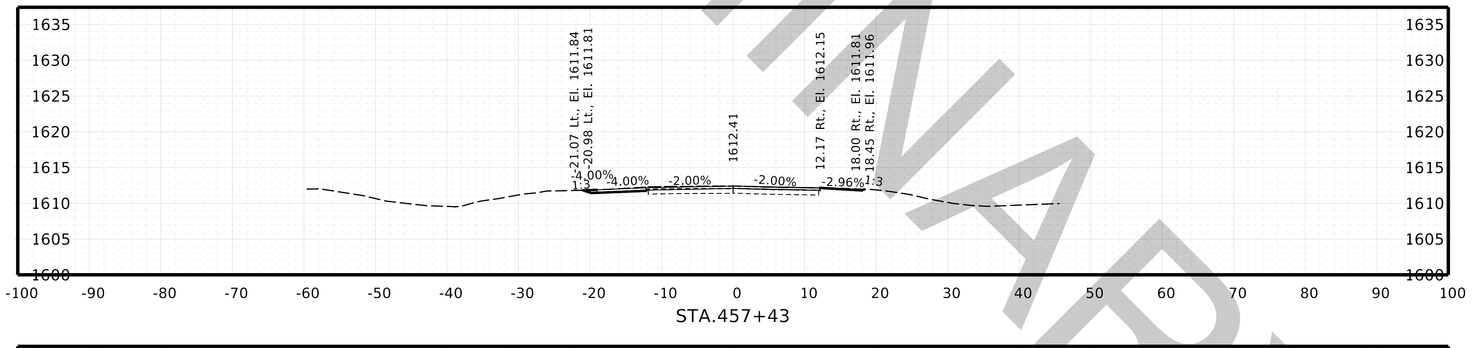
STA.639+39



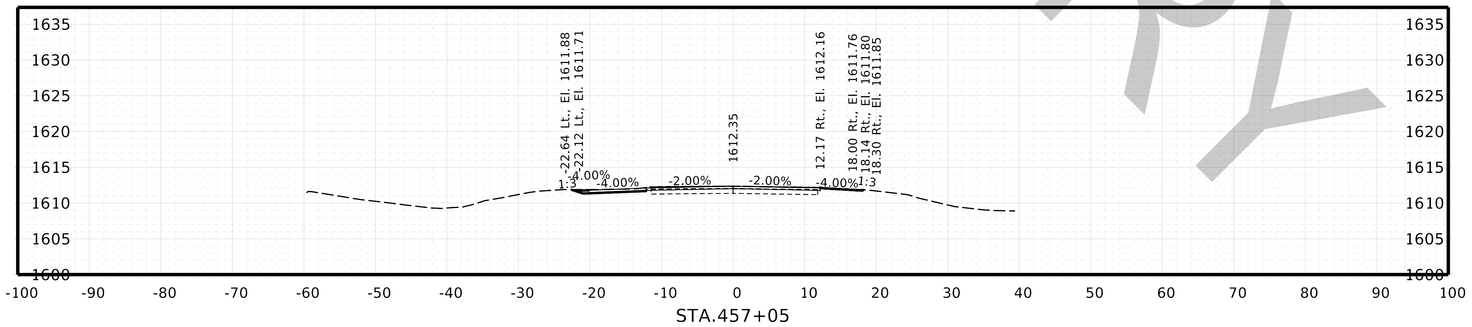
STA.638+83



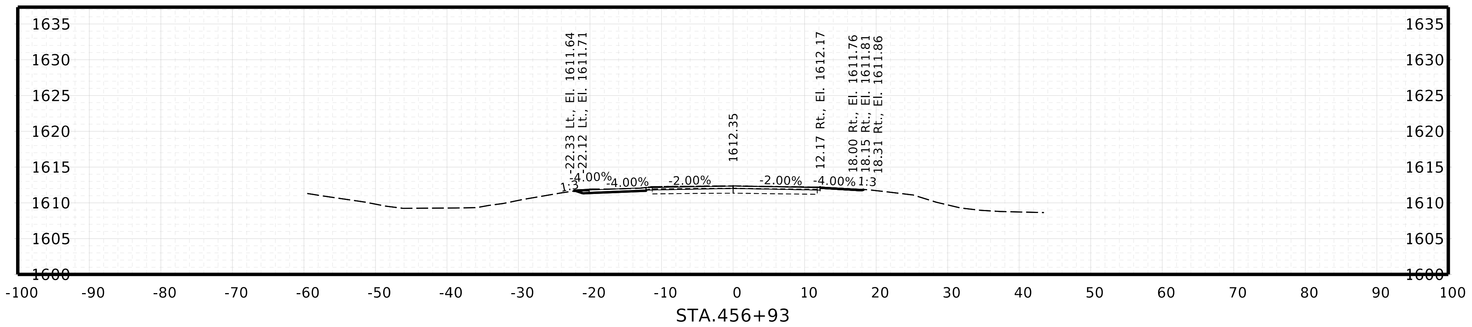
STA.458+02



STA.457+43



STA.457+05



STA.456+93

PRELIMINARY

Roadway Design Division

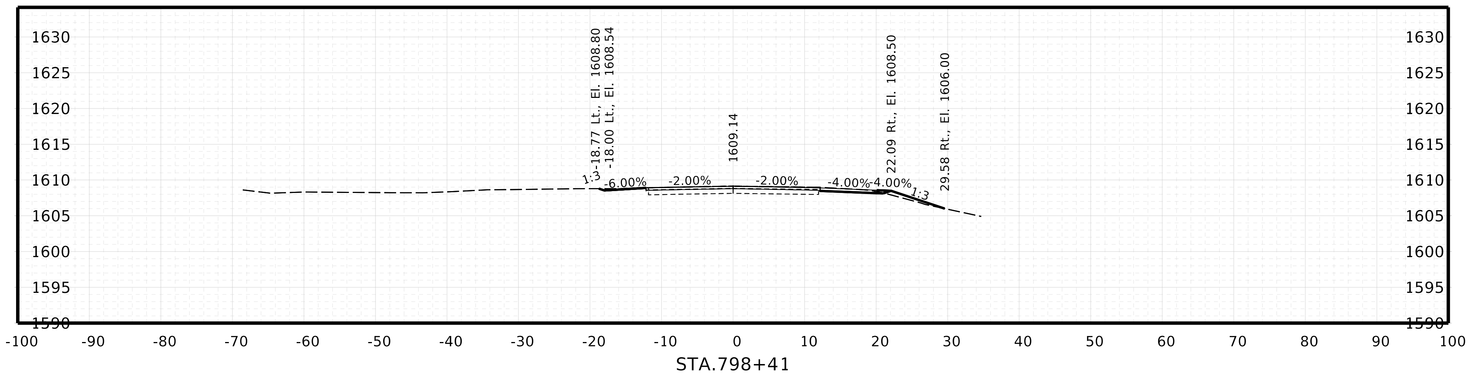
NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

ROADWAY CROSS SECTIONS

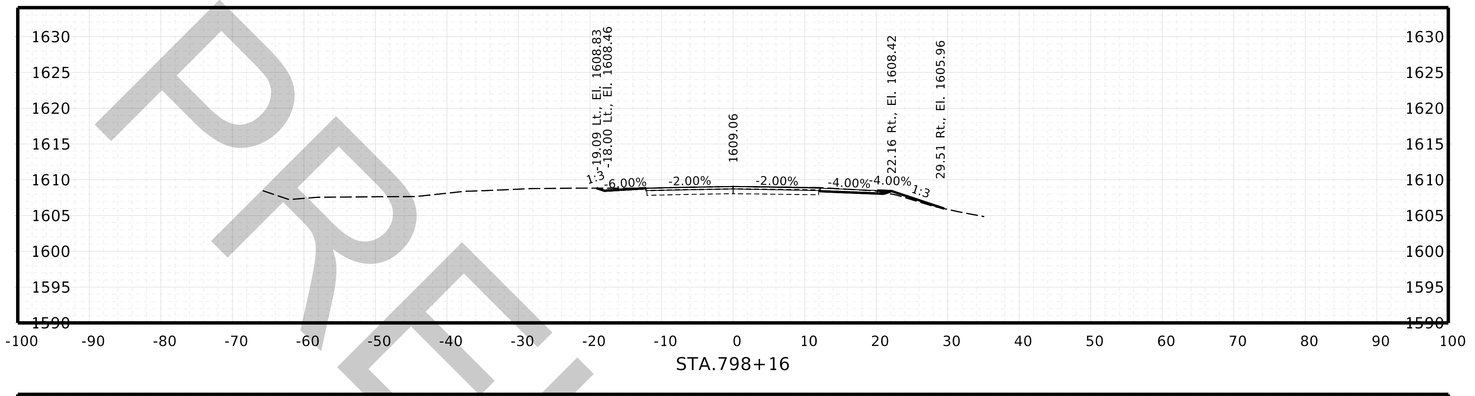
C.N. 42832

Project Number 74-5(112)

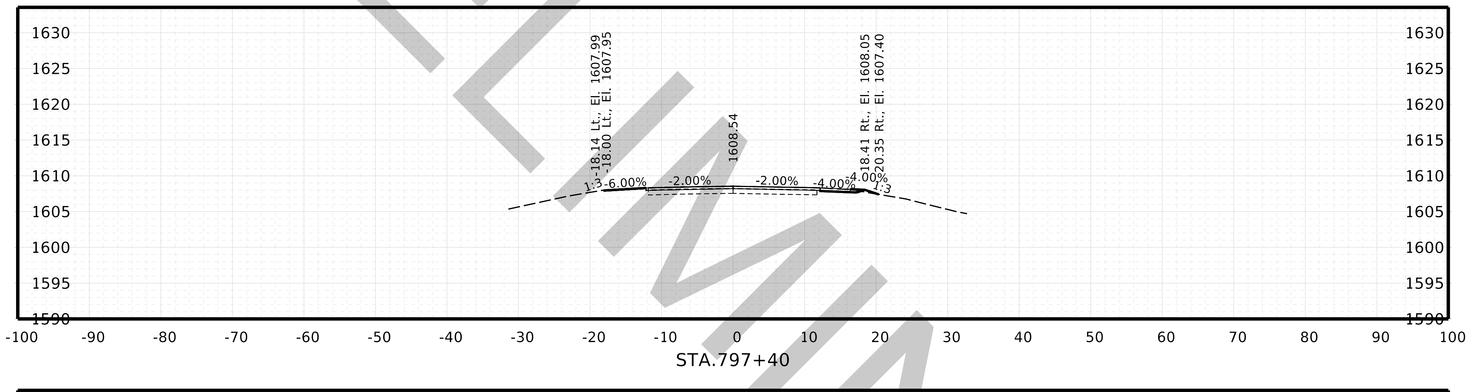
X3



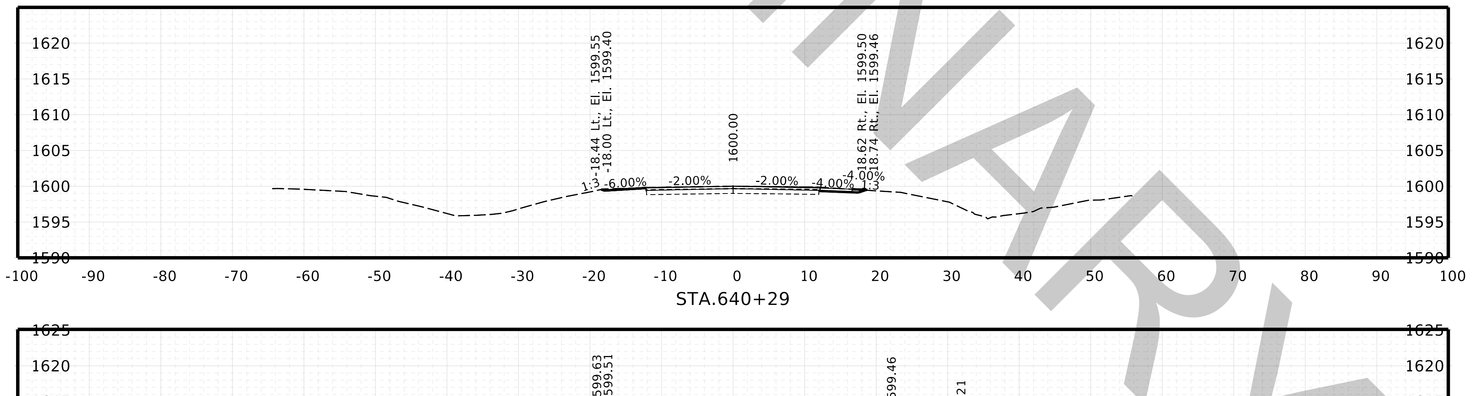
STA.798+41



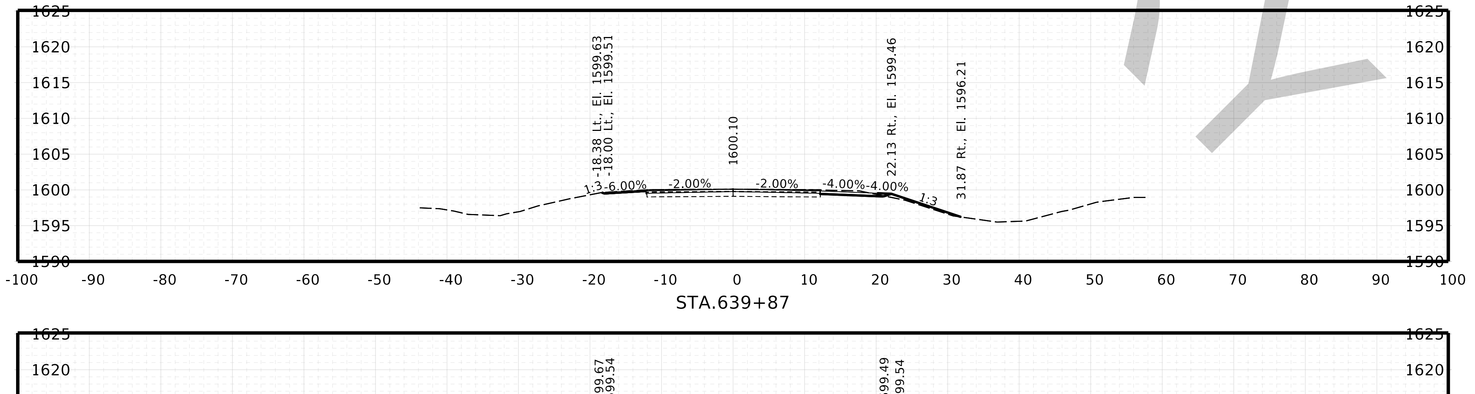
STA.798+16



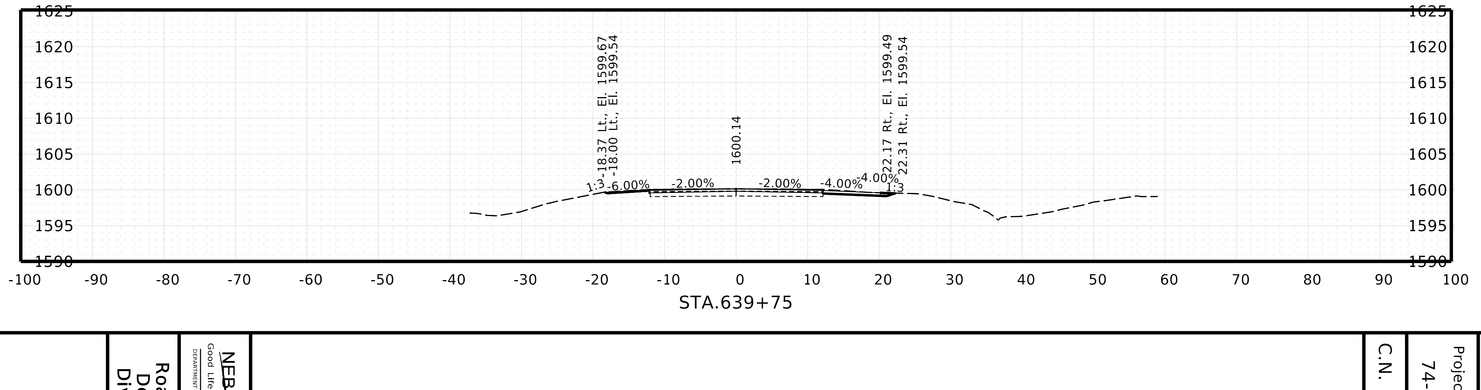
STA.797+40



STA.640+29



STA.639+87



STA.639+75

PRELIMINARY

Roadway Design Division

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

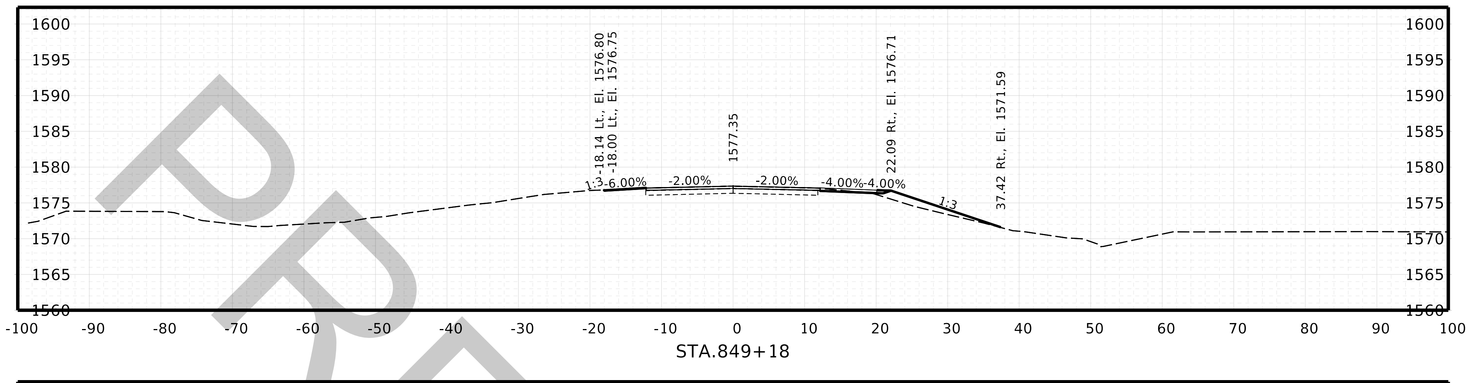
ROADWAY CROSS SECTIONS

C.N. 42832

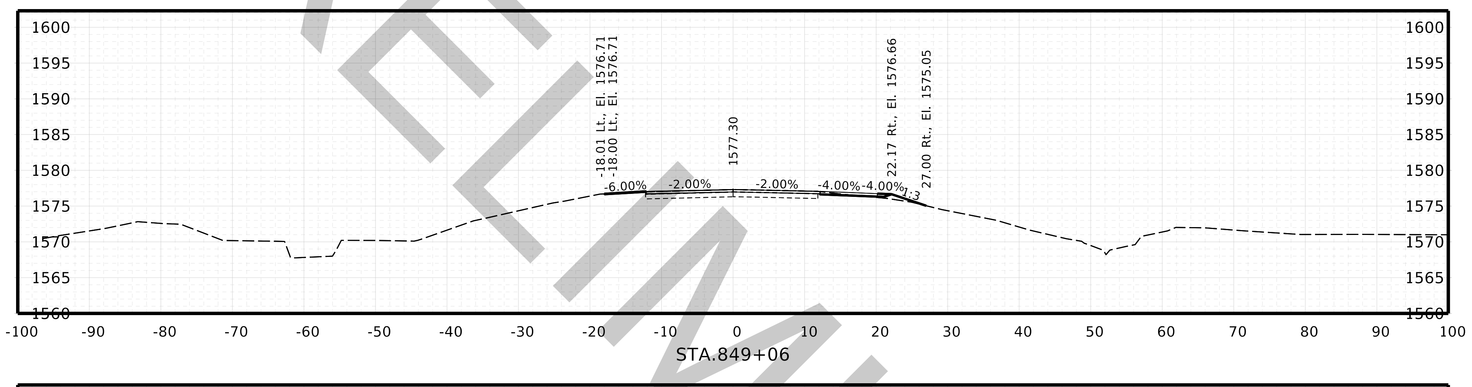
Project Number 74-5(112)

X4

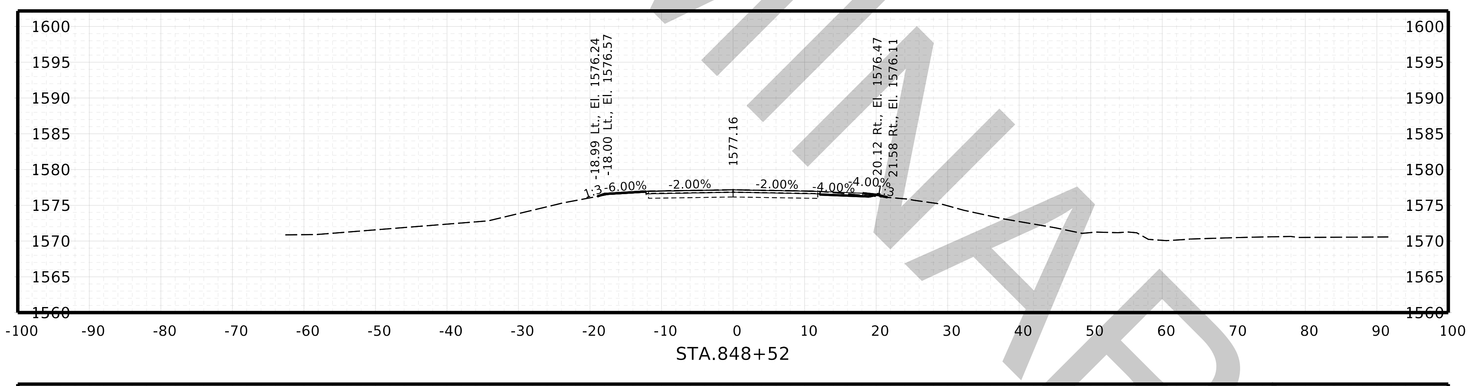
PRELIMINARY



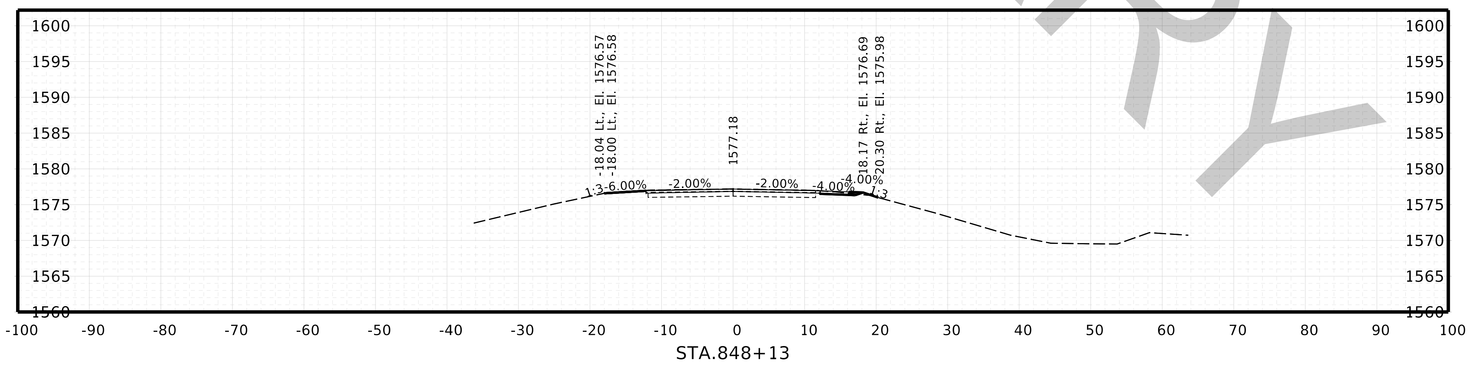
STA.849+18



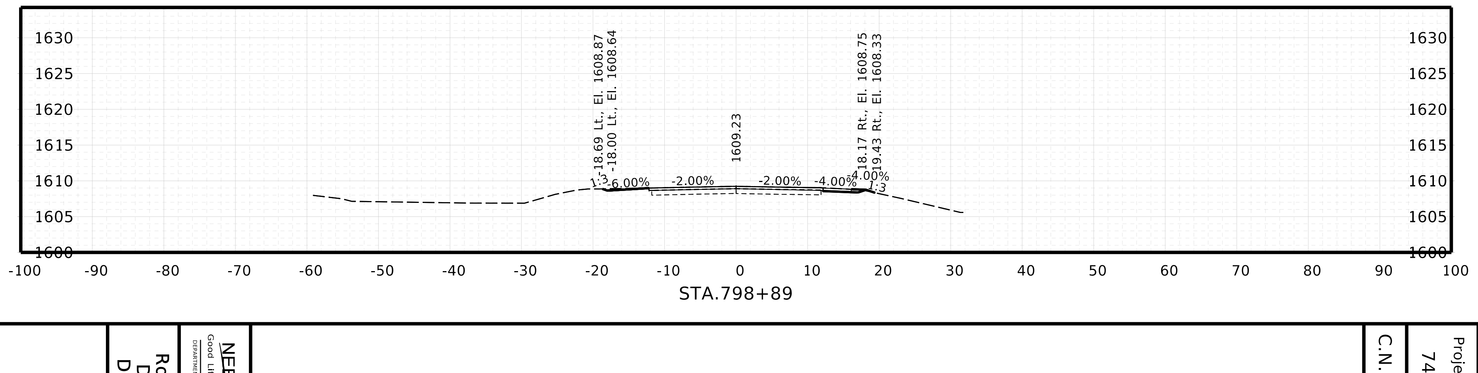
STA.849+06



STA.848+52



STA.848+13



STA.798+89

Roadway Design Division

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

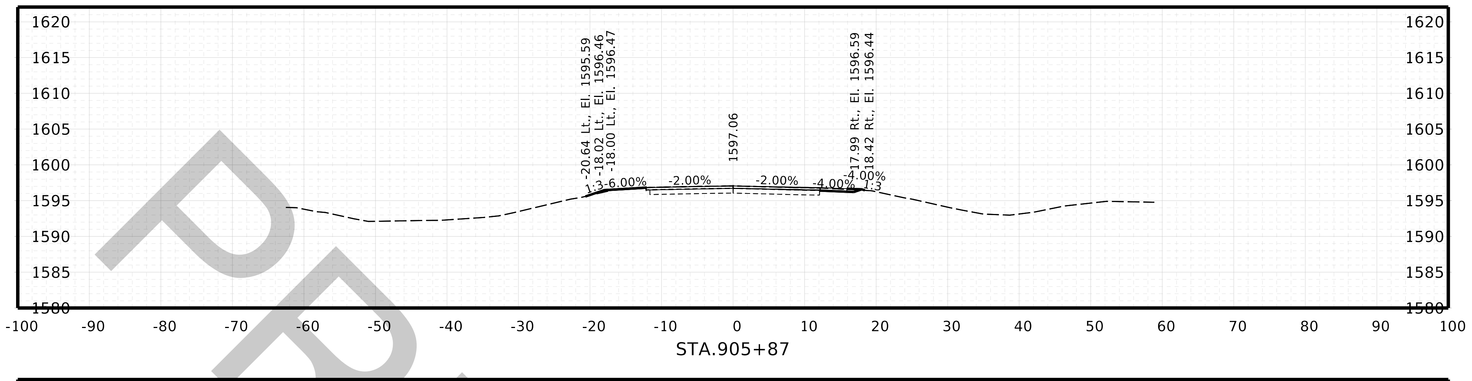
ROADWAY CROSS SECTIONS

C.N. 42832

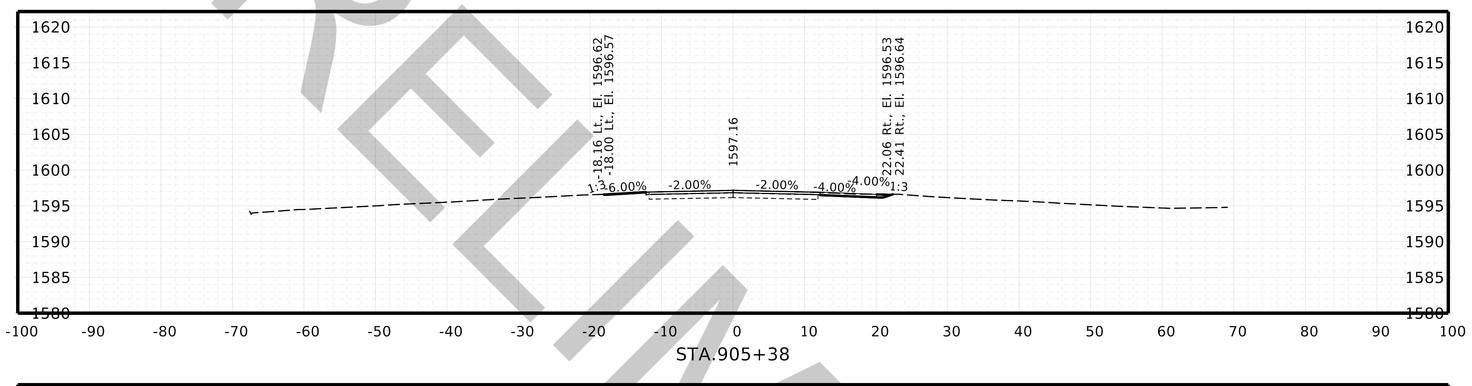
Project Number 74-5(112)

X5

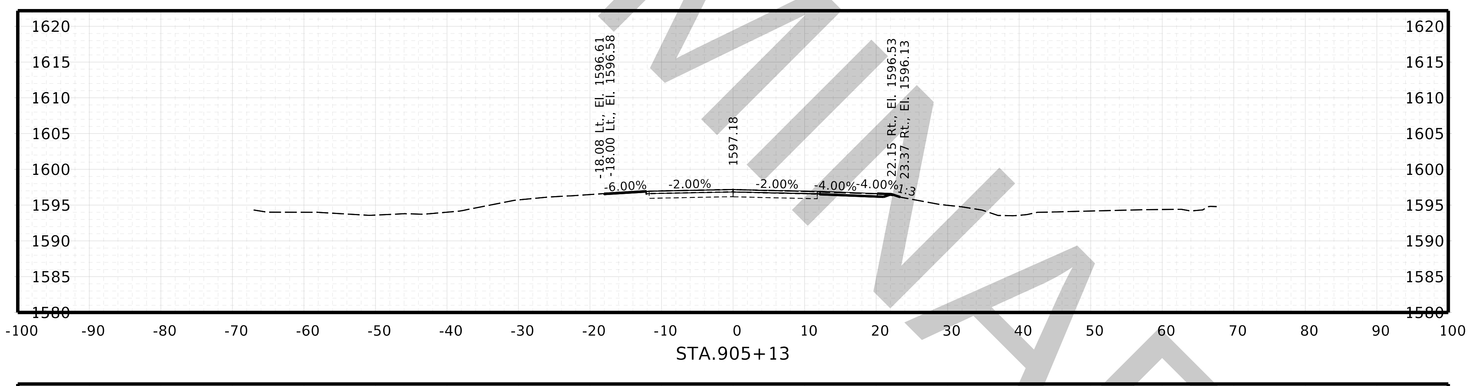
PRELIMINARY



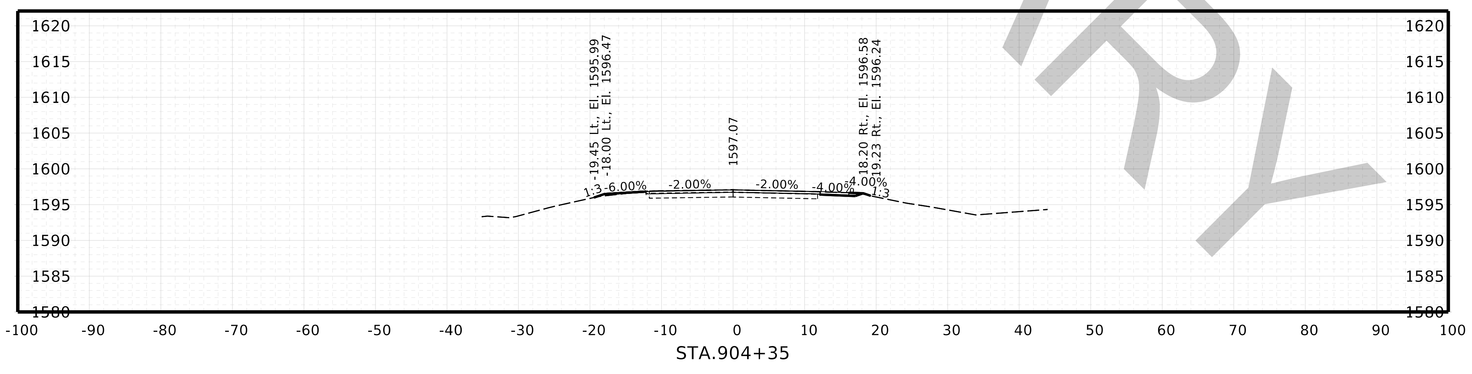
STA.905+87



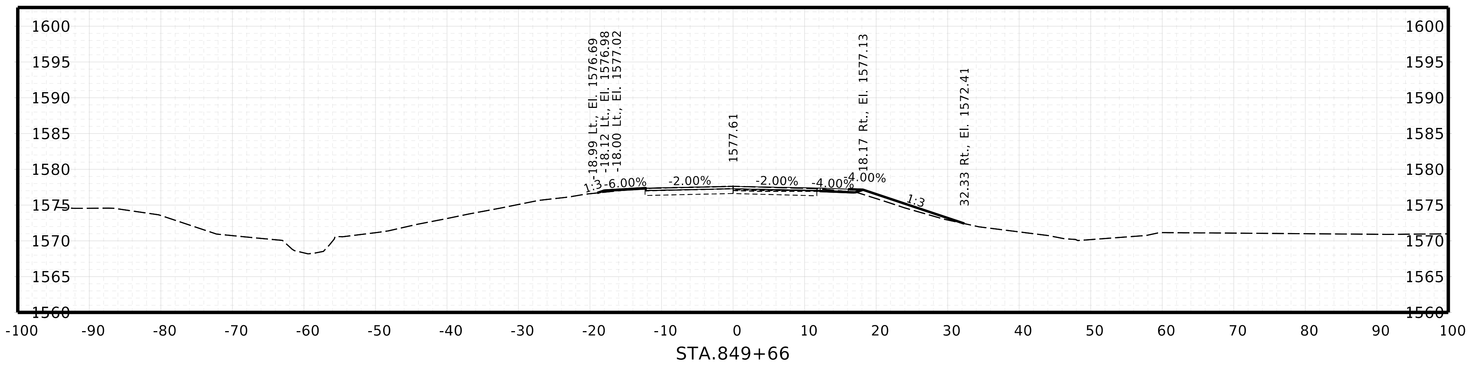
STA.905+38



STA.905+13



STA.904+35



STA.849+66

Roadway Design Division

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

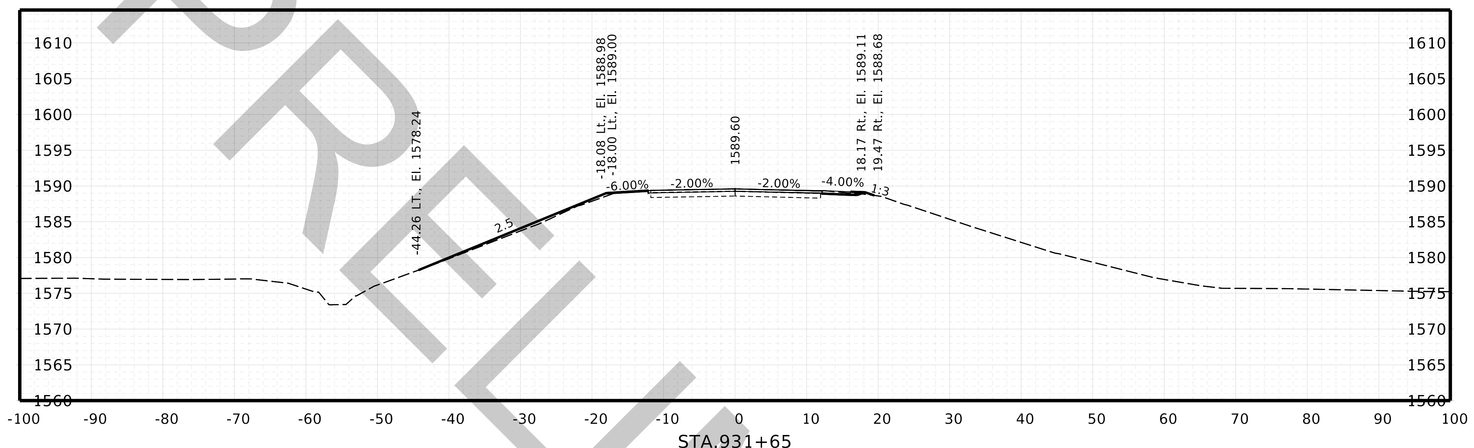
ROADWAY CROSS SECTIONS

C.N. 42832

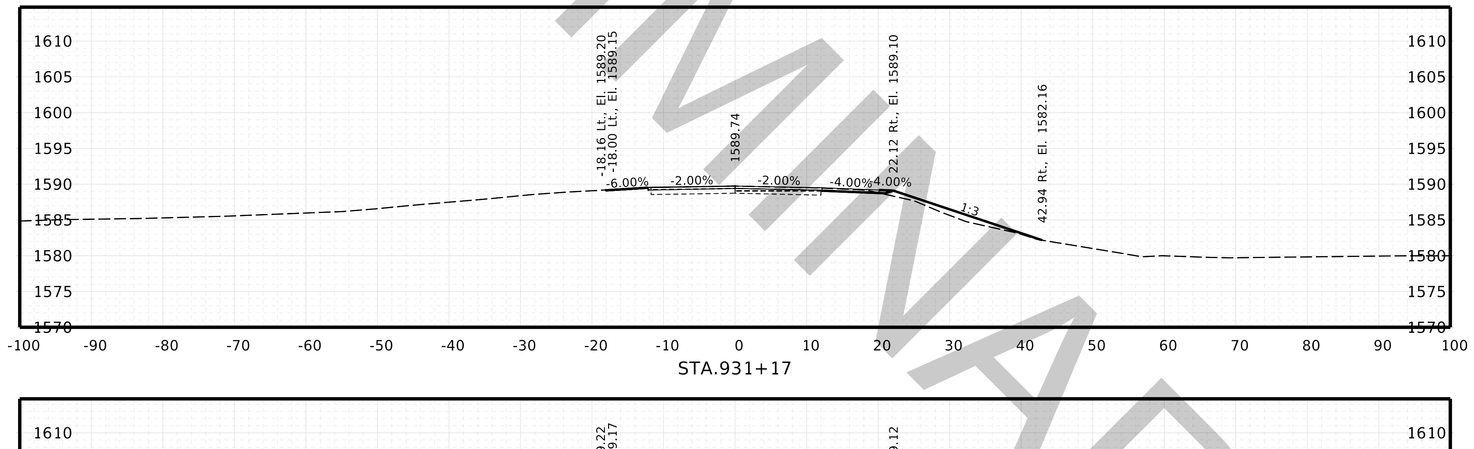
Project Number 74-5(112)

X6

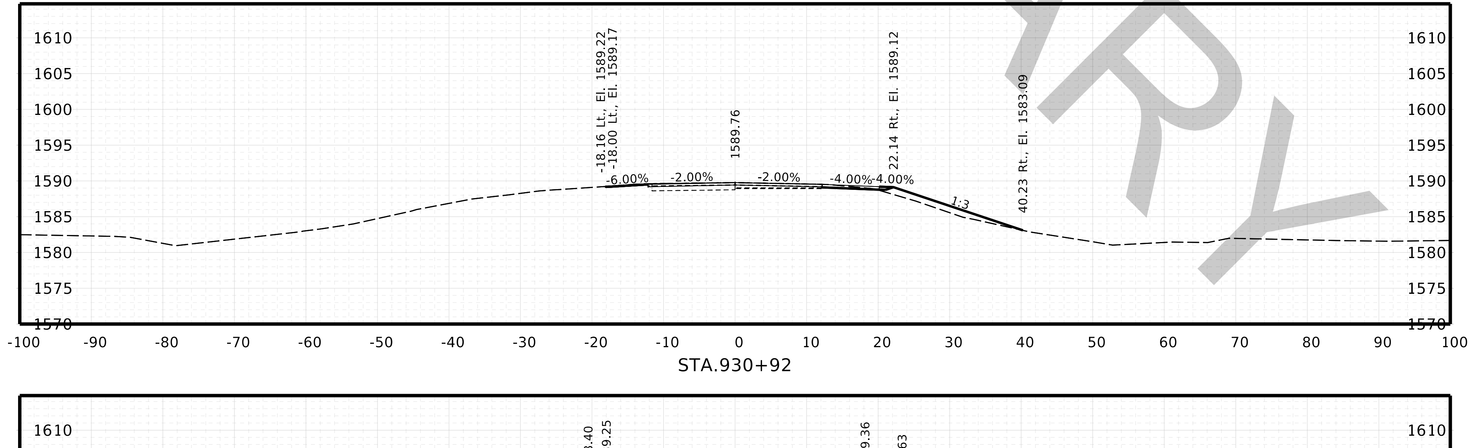
PRELIMINARY



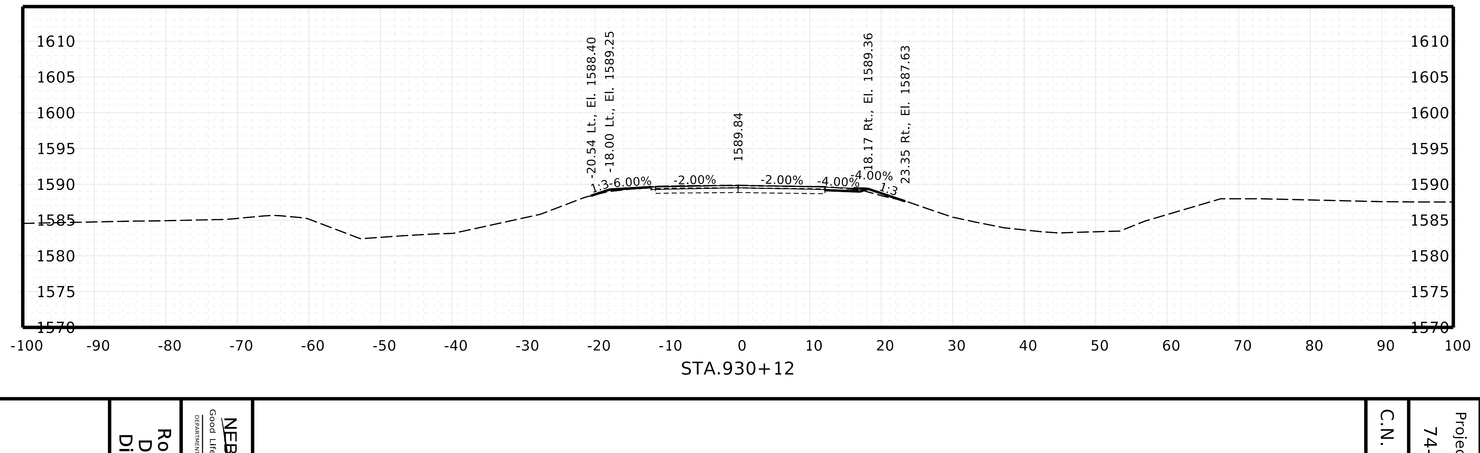
STA.931+65



STA.931+17



STA.930+92



STA.930+12

Roadway Design Division

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

ROADWAY CROSS SECTIONS

C.N. 42832

Project Number 74-5(112)

X7