Item #	P&P Sh #	Cross Section Sht #	Approx. Sta. From		Approx. Sta. To	Approx. Qty	Location	Comments	Utility	Type of Facility	1 State, 2 Utility	Offset	Not/Reimbursable
DRT1	1	8	319+50.	to	321+50.	200	In Right of way	Conflict with new box culvert unless lines are bored at less 10 feet below grade	Dickey Rural Telephone Cooperative	(2) Fiber Optic Lines	2	Left	Not reimbursable

Contact information for Utility Facilities with or without Conflicts	Contact Name	Phone Number	Email
Dickey Rural Telephone Cooperative, P.O. Box 69, 9628 Hwy 281, Ellendale, ND 58436-0069	Kent Schimke	701-344-5000	kschimke@drtel.com
Dickey Rural Telephone Cooperative, P.O. Box 69, 9628 Hwy 281, Ellendale, ND 58436-0069	Lorri Kingzett	701-344-5000	lkingzett@drtel.com

DESIGN DATA				
Traffic	Average Daily			Max. Hr.
Current 2012	Pass: 525	Trucks: 245	Total: 770	80
Forecast 2032	Pass: 680	Trucks: 320	Total: 1000	100
Clear Zone Distance:		Design Speed: 65		
Minimum Sight Dist. for Stopping:		Bridges: HL-93		
Sight Dist. for No Passing Zone:				
Pavement Design Life (years)				
Design Accumulated One-way ESALs:				

STATE	PROJECT NO.	PCN	SECTION NO.	SHEET NO.
ND	SS-8-032(033)006	19853	1	1

JOB #16
NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION

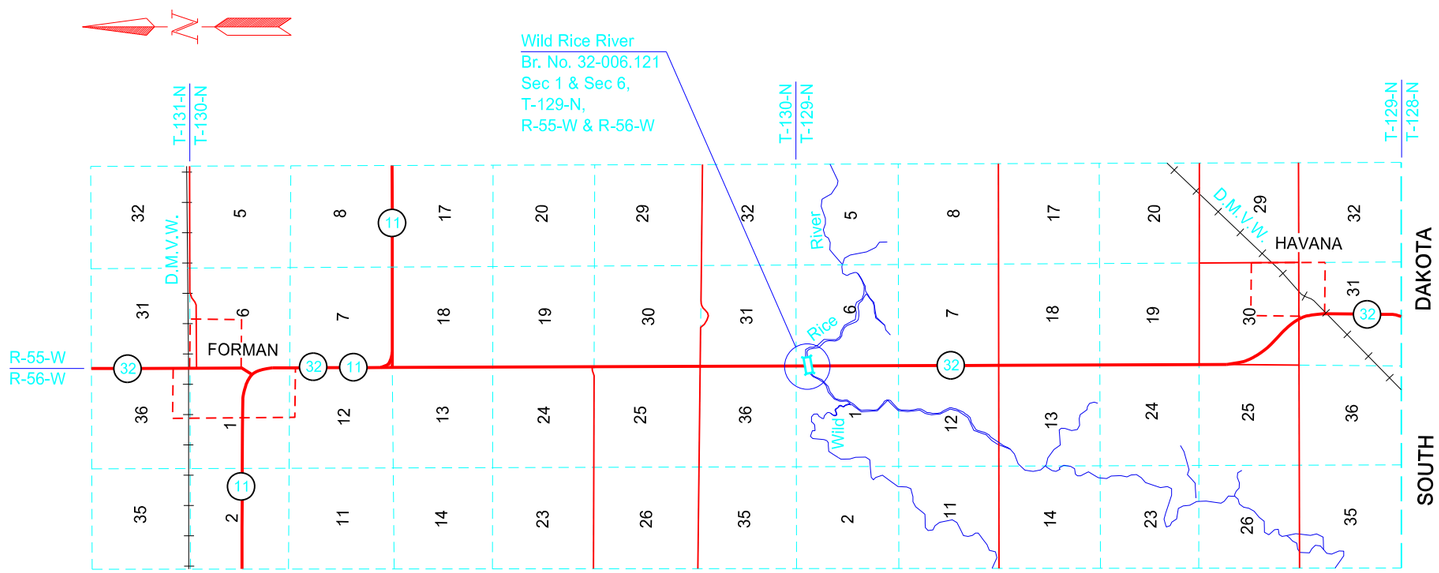
SS-8-032(033)006

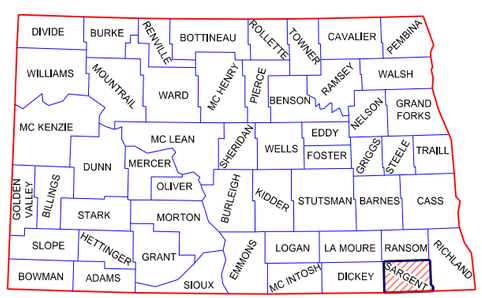
Sargent County
Wild Rice River ~ 4 Miles South of ND 11 East

Structural, Surfacing & Incidentals

GOVERNING SPECIFICATIONS:
2014 Standard Specifications adopted by the North Dakota Department of Transportation and the Supplemental Specifications effective on the date the project is advertised.

PROJECT NUMBER \ DESCRIPTION	NET MILES	GROSS MILES
SS-8-032(033)006	0.045	0.045





STATE COUNTY MAP

I hereby certify that the attached plans were prepared by me or under my direct supervision and that I am a duly registered professional engineer under the laws of the state of ND.

APPROVED DATE _____

_____
NDDOT DIV-DIST OR CONSULTANT FIRM

This document is preliminary and not for construction or implementation purposes.

PRELIMINARY

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SS-8-032(033)006	NA	1

Utility Conflict Legend Sheet

Conflict with Buried electric line, utility company to relocate or adjust at own expense

Conflict with Buried electric line, utility company to relocate or adjust billable to NDDOT

Conflict with Utility Pole, utility company to relocate or adjust at own expense

Conflict with Fiber optic line, utility company to relocate or adjust at own expense

Conflict with Fiber optic line, utility company to relocate or adjust billable to NDDOT

Conflict with Utility Pole anchor, utility company to relocate or adjust at own expense

Conflict with Buried telephone, utility company to relocate or adjust at own expense

Conflict with Buried telephone, utility company to relocate or adjust billable to NDDOT

Conflict with Utility Pole, utility company to relocate or adjust billable to NDDOT

Conflict with Gas line, utility company to relocate or adjust at own expense

Conflict with Gas line, utility company to relocate or adjust billable to NDDOT

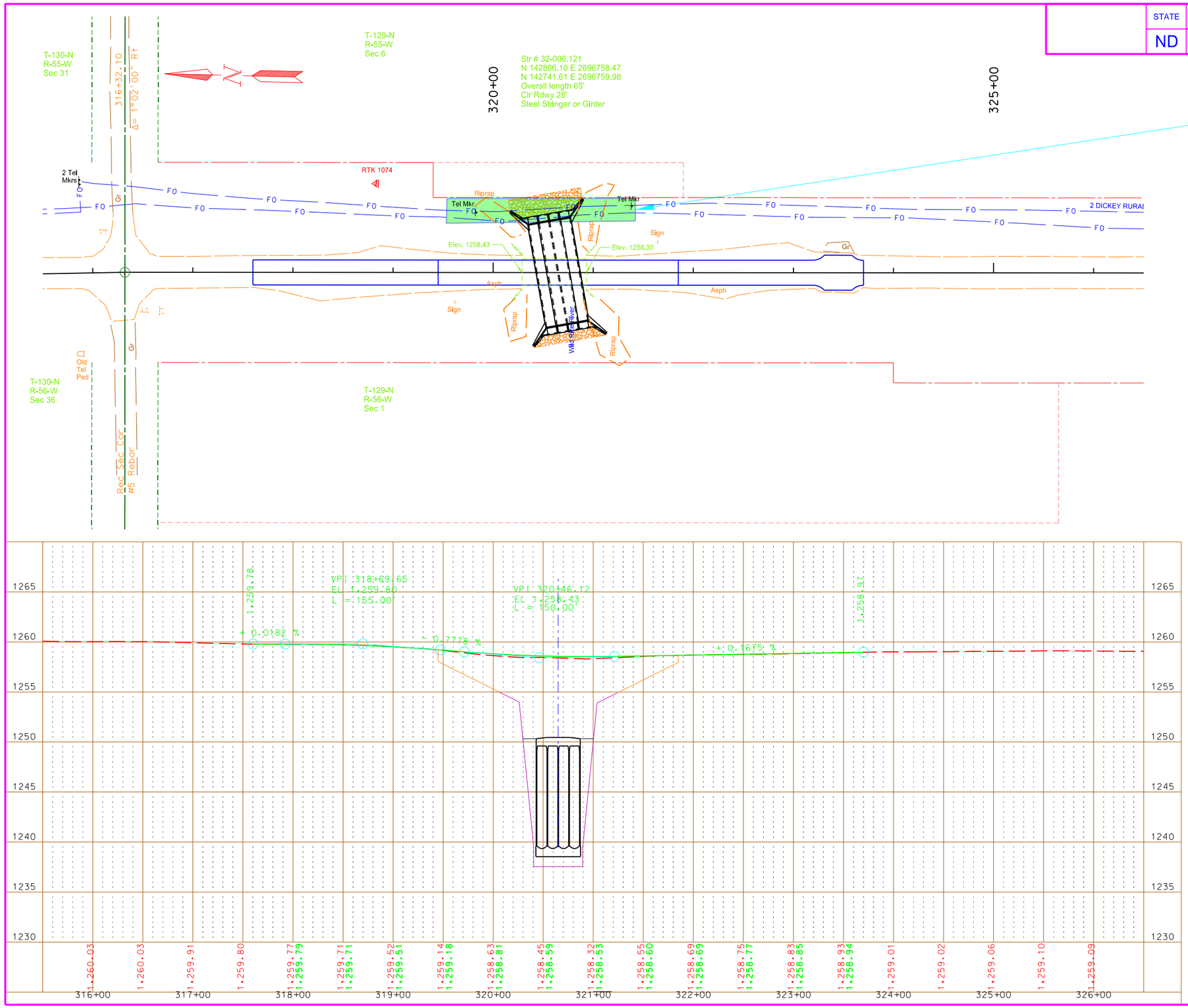
Conflict with Utility Pole anchor, utility company to relocate or adjust billable to NDDOT

Conflict with Cable/TV facality, utility company to relocate or adjust at own expense

Conflict with Cable/TV facality, utility company to relocate or adjust billable to NDDOT

No Conflict NDDOT contractor to leave existing earth around pole

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SS-8-032(033)006	60	3



Conflict with Fiber optic line, utility company to relocate or adjust at own expense

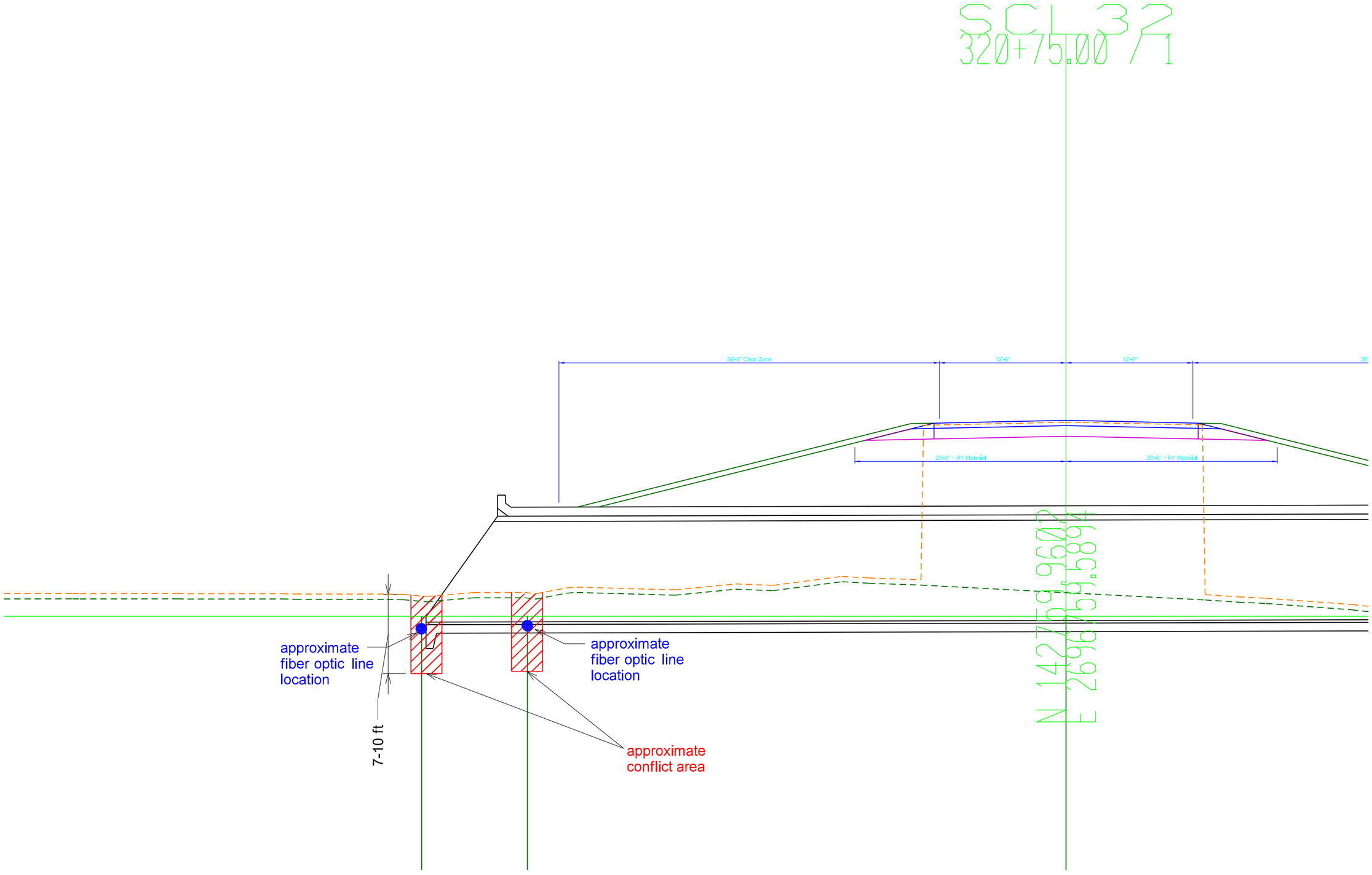
This document is preliminary and not for construction or implementation purposes.

PRELIMINARY

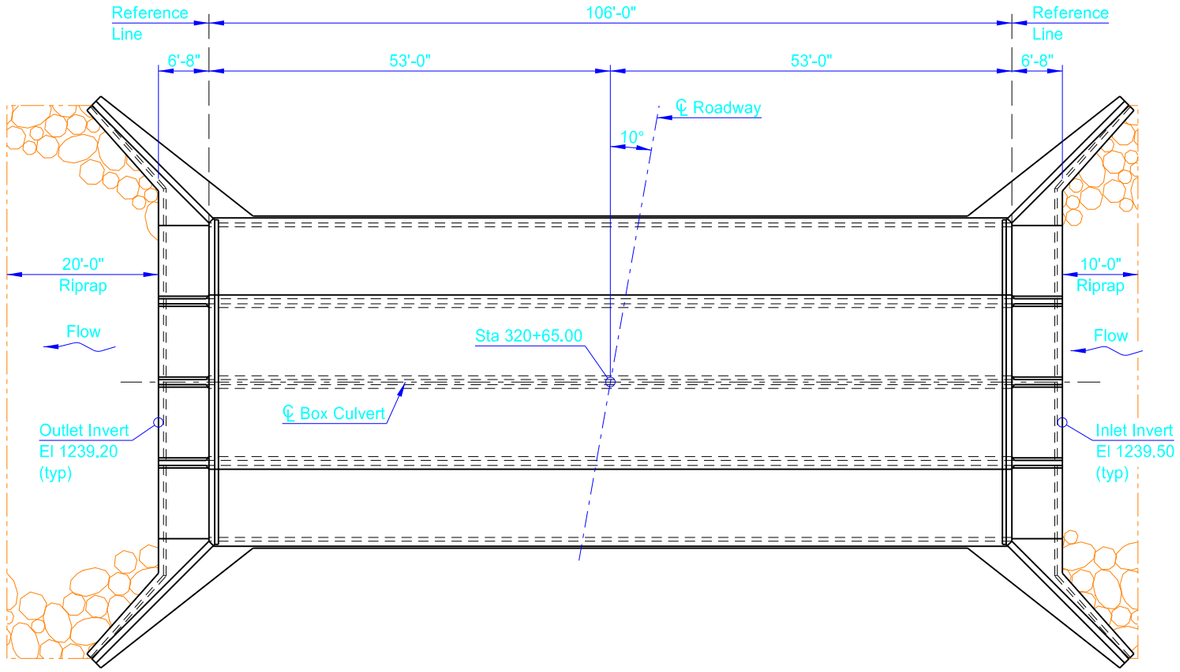
ND Highway 32

Plan & Profile

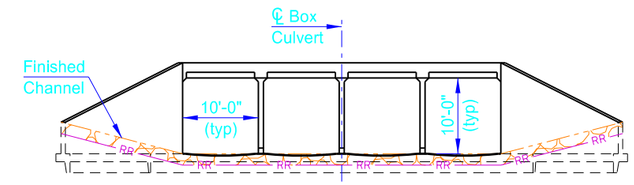
12/11/2014 4:08:24 PM mdockter R:\project\80032006.033\utilities\060PP_003_Utility Conflict Plan.dgn


SCL 32
320+75.00 / 1
36'-0" Clear Zone
12'-0"
12'-0"
36'
20'-0" ~ R1 Material
20'-0" ~ R1 Material
N 142759.9602
E 2696759.5894
approximate
fiber optic line
location
approximate
fiber optic line
location
7-10 ft
approximate
conflict area

STATE	PROJECT NUMBER	SECTION NO.	SHEET NO.
ND	SS-8-032(033)006	170	1



PLAN



END VIEW

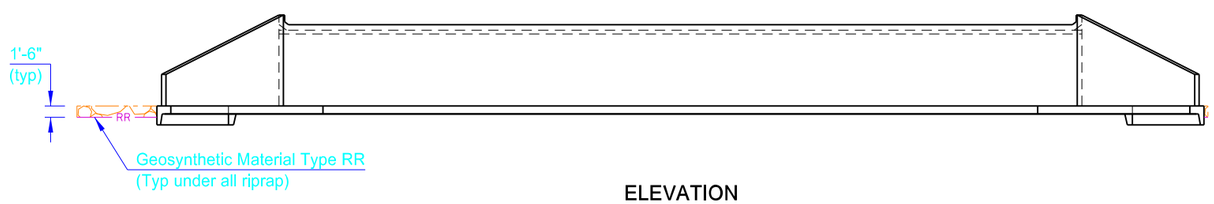
DESIGN STRENGTHS:

f'c = 3,000 psi ~ Class AE-3 Concrete
fy = 60,000 psi ~ Reinforcing Steel

Load & Resistance Factor Design

This drawing is preliminary and not for construction or implementation purposes.

PRELIMINARY



ELEVATION

HYDRAULIC DATA:

Drainage Area	260.56	sq mi
Stream Gradient	0.0006	ft/ft
Design Frequency	50	yr
Design Discharge	3065.8	cfs
Design Headwater Stage	1250.99	ft
Design Tailwater Stage	1249.62	ft
Velocity Through Culvert	8.52	fps
100-Year Frequency Discharge	4113.8	cfs
100-Year Frequency Headwater	1253.13	ft
Overtopping Stage	1258.35	ft
Overtopping Discharge	6539.3	cfs

BOX CULVERT BID ITEMS

SPEC	CODE	ITEM DESCRIPTION	UNIT	QUANTITY
202	0105	REMOVAL OF STRUCTURE	L SUM	1
210	0050	BOX CULVERT EXCAVATION	EA	1
210	0210	FOUNDATION FILL	CY	1,130
210	0405	FOUNDATION PREPARATION-BOX CULVERT	EA	1
256	0200	RIPRAP GRADE II	CY	115
602	1131	CLASS AE-3 CONCRETE-BOX CULVERT	CY	505.3
612	0114	REINFORCING STEEL-GRADE 60-BOX CULVERT	LBS	67,618
709	0151	GEOSYNTHETIC MATERIAL TYPE R1	SY	590
709	0155	GEOSYNTHETIC MATERIAL TYPE RR	SY	230

SPECIAL PROVISIONS	
SP 4(14)	MIGRATORY BIRD TREATY ACT

HL-93 DESIGN LOADING

NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION
WILD RICE RIVER
4 MILES SOUTH OF ND 11 EAST

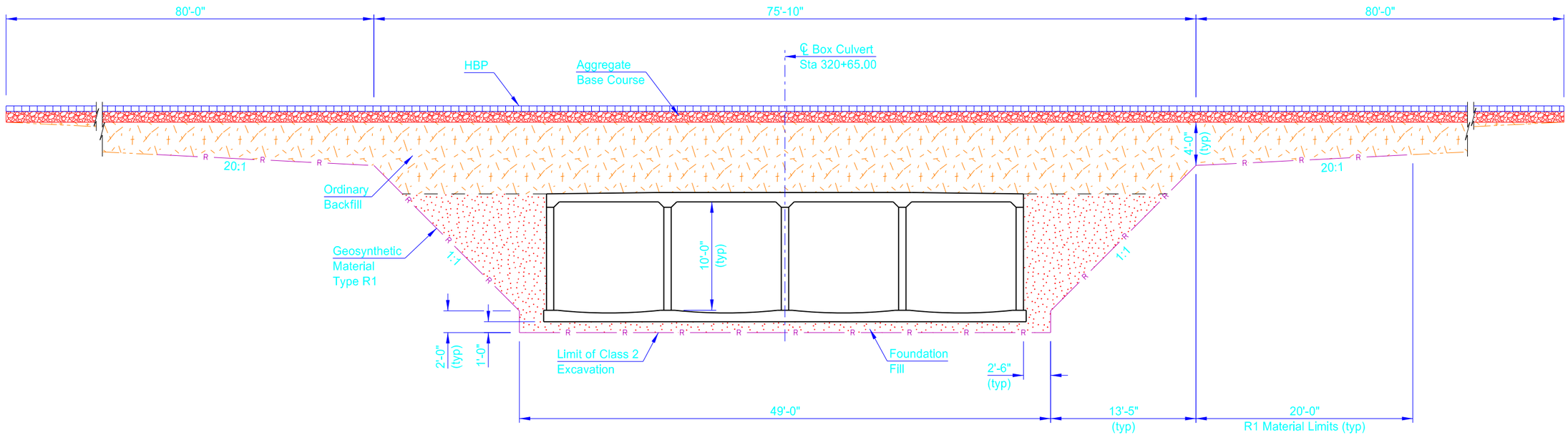
REINFORCED CONCRETE
QUADRUPLE BOX CULVERT LAYOUT

CLEAR SPAN 4 x 10' CLEAR HEIGHT 10'
MAXIMUM FILL 10'

PROJECT: SS-8-032(033)006
STATION: 320+65.00
SARGENT COUNTY

DATE BRIDGE ENGINEER

STATE	PROJECT NUMBER	SECTION NO.	SHEET NO.
ND	SS-8-032(033)006	170	3



(SHOWING SECTION ALONG ℄ ROADWAY)

R1 MATERIAL PLACEMENT AND FOUNDATION FILL
THROUGH EXISTING EMBANKMENT

NOTES:

The R1 Material shall extend 20'-0" Lt & Rt of ℄ Roadway.

The minimum depth of foundation fill under the box shall be 1'-0". All unsound material under the box shall be removed. The depth required shall be determined by the Engineer.

The foundation fill shall run to the end of the apron.

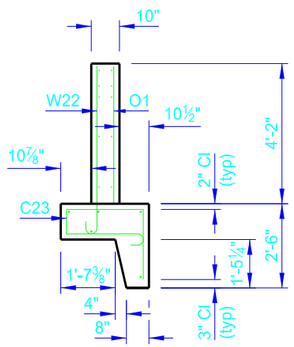
This drawing is preliminary and not for construction or implementation purposes.

PRELIMINARY

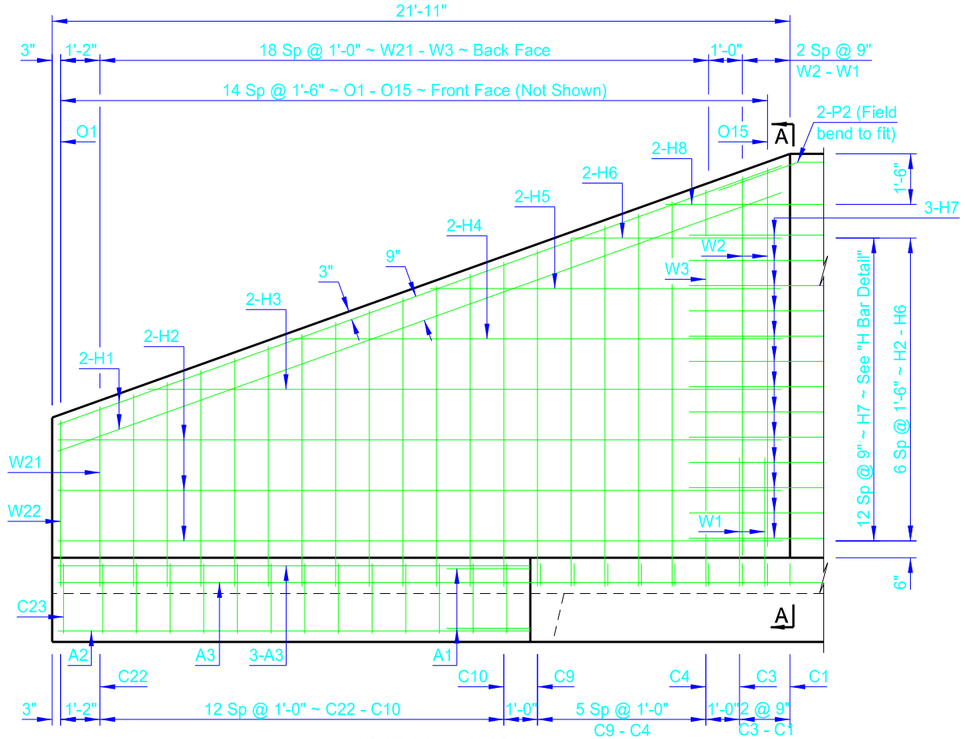
WILD RICE RIVER
4 MILES SOUTH OF ND 11 EAST

EXCAVATION & FOUNDATION
FILL DETAIL

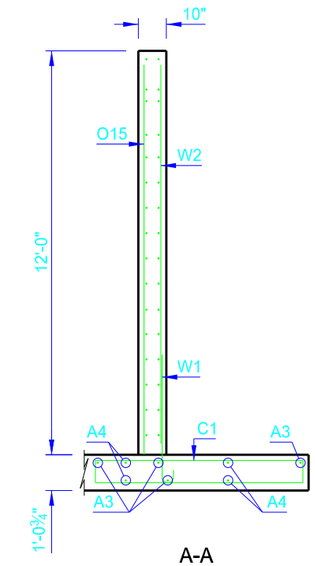
STATE	PROJECT NUMBER	SECTION NO.	SHEET NO.
ND	SS-8-032(033)006	170	4



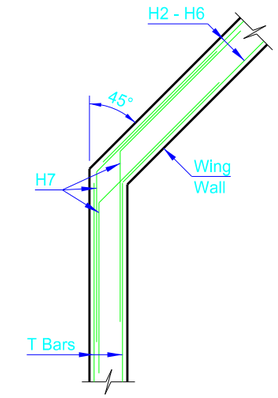
END VIEW



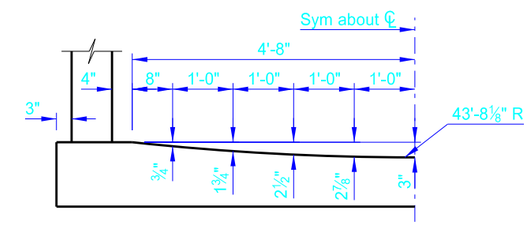
WING ELEVATION



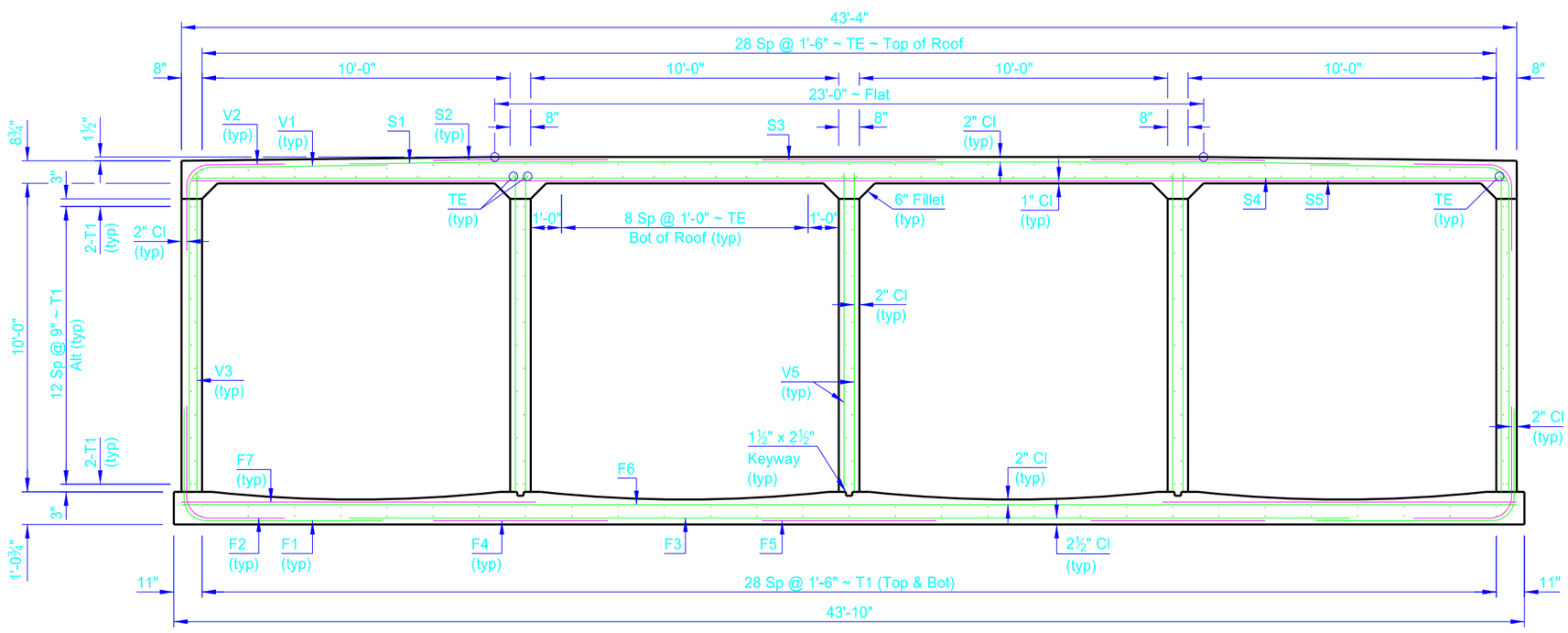
A-A



H BAR DETAIL



CURVED FLOOR OFFSETS



SECTION OF BARREL

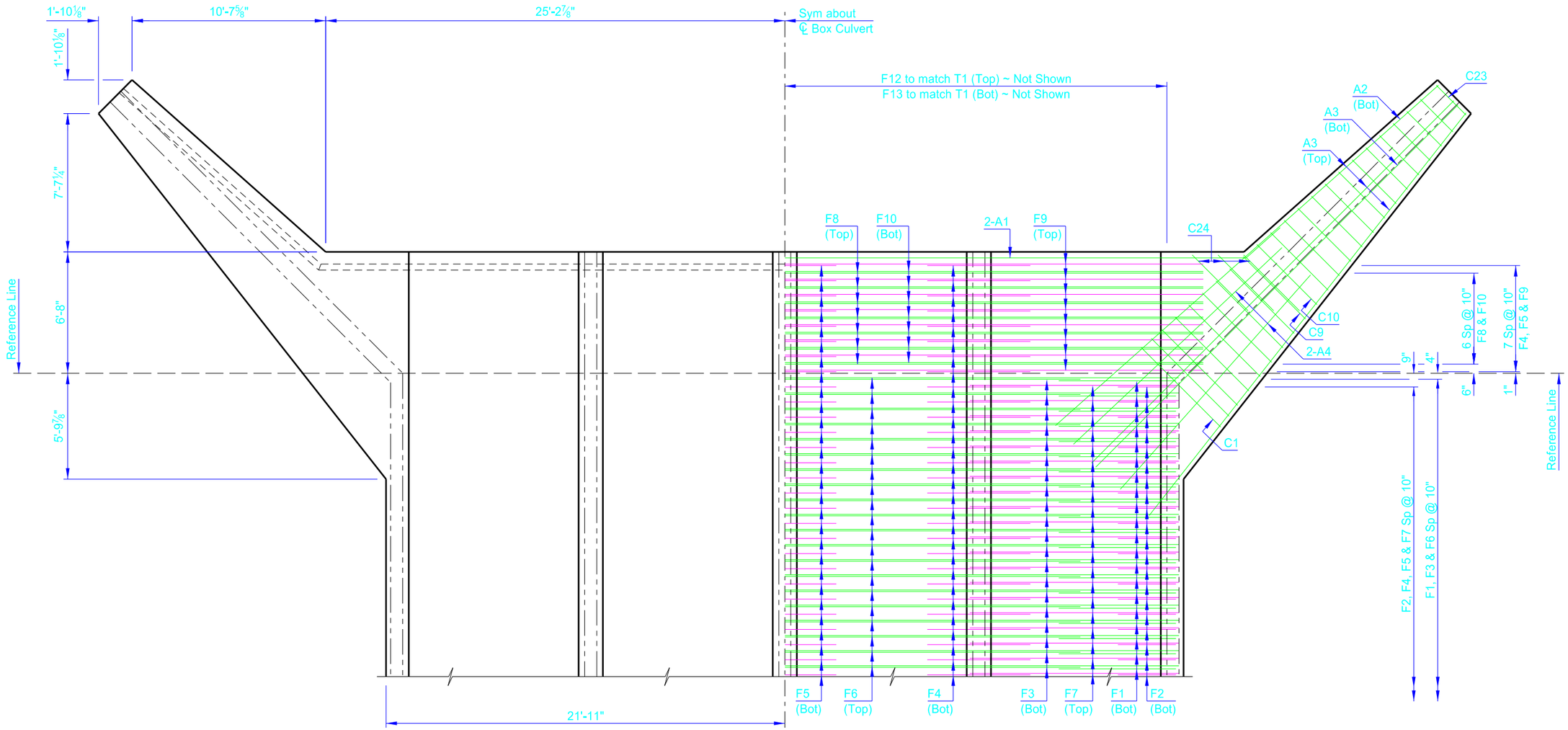
This drawing is preliminary and not for construction or implementation purposes.

PRELIMINARY

WILD RICE RIVER
4 MILES SOUTH OF ND 11 EAST

BARREL SECTION & WING DETAILS

STATE	PROJECT NUMBER	SECTION NO.	SHEET NO.
ND	SS-8-032(033)006	170	5



(SHOWING DIMENSIONS)

(SHOWING REINFORCING)

FLOOR PLAN

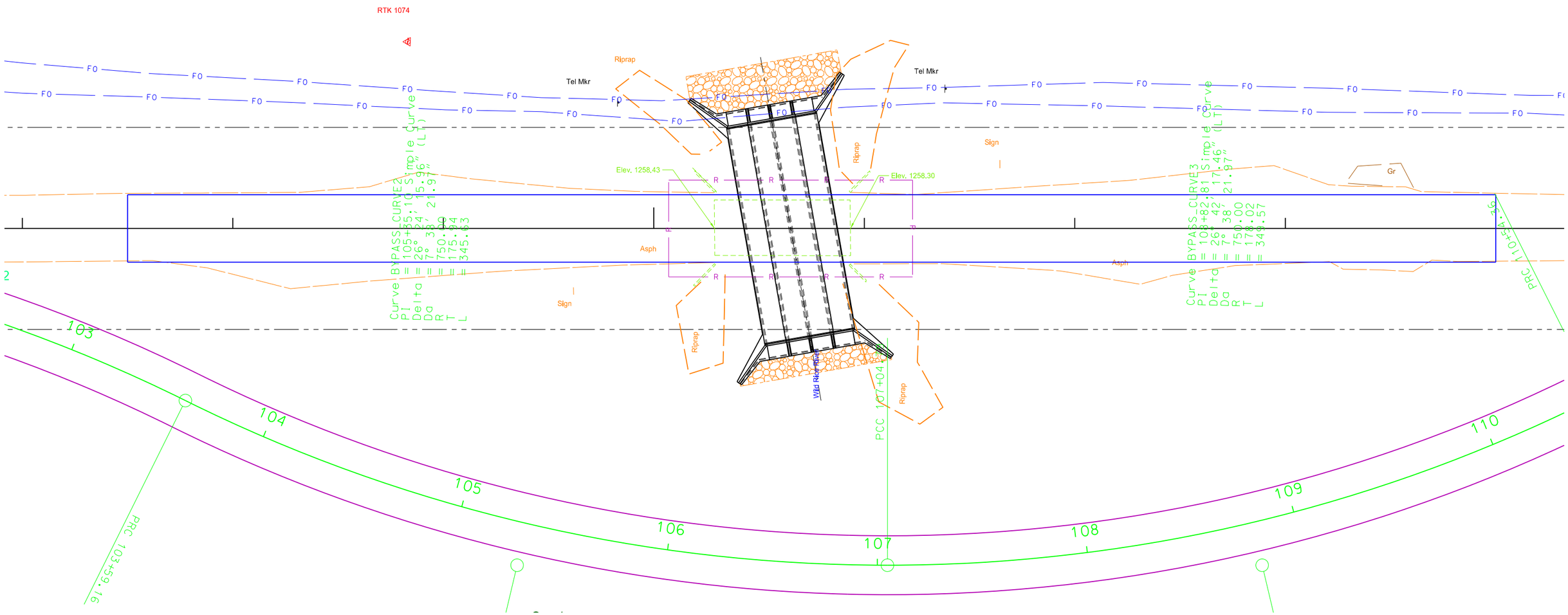
This drawing is preliminary and not for construction or implementation purposes.

PRELIMINARY

WILD RICE RIVER
4 MILES SOUTH OF ND 11 EAST

FLOOR DETAIL

T-129-N
R-55-W

320+00

N 142806.10 E 2696758.47
N 142741.61 E 2696759.98
Overall length 65'
Clr Rdwy 28'
Steel Stringer or Girder