

CORRESPONDENCE/MEMORANDUM _____ State of Wisconsin

Date: April 13, 2016

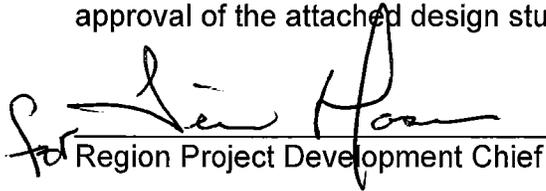
To: Beth Canestra, PE
Director, Bureau of Project Development
Attn: Don Greuel, PE, Project Services Chief

From: Jerald Mentzel, PE
Northwest Region

Subject: ABBREVIATED DESIGN STUDY REPORT
Project I.D. 1050-01-31
Chippewa Falls - Cadott
Stillson Creek to 320th Street (WB)
STH 29
Chippewa County

Project I.D. 1052-01-32
Chippewa Falls - Cadott
Stillson Creek to 320th Street (EB)
STH 29
Chippewa County

Having considered the economic and social effects of this project, its impact on the environment, and its consistency with the goals of community planning, we request your approval of the attached design study report.



Region Project Development Chief

4/14/16

Date

Concur:

Bureau of Project Development,
Project Services Chief

Date

ABBREVIATED DESIGN STUDY REPORT

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Stillson Creek to 320th Street (EB)
STH 29
Chippewa County



May 3, 2016

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ABBREVIATED DESIGN STUDY REPORT

1.0 PROJECT DESCRIPTION AND NEED

1.1. Federal Oversight Project (Yes or No): No

1.2. Project Length & Termini

Project Length: Approximately 15-miles along eastbound STH 29 and along westbound STH 29

Termini/Limits:

The project is located on STH 29 from Stillson Creek to 320th Street in Chippewa County. The project also includes the interchange ramps and crossroads between ramp terminals at the CTH X, STH 27, and CTH D interchanges. See **Attachment 1** for a location map and project overview.

1.3. Functional Classification/Access Control

Roadway Name	Functional Class (Arterial, Collector or Local)	Rural, Urban or Transitional	Corridors 2030 or Backbone (No or State which)	NHS Route (Yes or No)	Long Truck Route (No or state Federal or State)	Access Control Tier	On Ped Trans. Plan (Yes or No)	On Bike Trans. Plan (Yes or No)
STH 29	Arterial	Rural	2030 Backbone Route	Yes	Federal and State	1	No	No**
CTH X (thru interchange)	Collector	Rural	No	No	No	N/A	No	No
STH 27 (thru interchange)	Arterial	Rural	No	No	Yes/State	3	No	No*
CTH D (thru interchange)	Collector	Rural	No	No	No	N/A	No	No*

Comments:

*STH 27 is indicated as moderate conditions for bicycling and CTH D is indicated as best conditions for bicycling according to the Chippewa County Comprehensive Plan.

**STH 29 is indicated as high volume undesirable conditions for bicycling east of STH 27 Wisconsin Bicycle Map. STH 29 is designated a freeway per Wisconsin State Statute 84.295, but is built to express way standards with some at-grade intersections and some grade separation overpasses east of STH 27. Pedestrian and bikes are not prohibited on STH 29 from STH 27 to the east project limits.

STH 29 and STH 27 north of the interchange with STH 29 are OSOW routes and south on STH 27 is a known use OSOW route. See **Attachment 12** for the controlling OSOW vehicle turning movements used to develop the proposed improvements.

1.4. Need For Project

The purpose of the project is improve the deteriorating pavement and adjacent shoulders, address shoulder widths that do not meet freeway standards, upgrade beam guard, minor culvert improvements, and improve deteriorating pavement marking and signing. This project will consist of approximately 15-miles of pavement and roadside repairs along eastbound and westbound STH 29. The deteriorating pavement on the interchange ramps and crossroads between the ramp terminals at CTH X, STH 27, and CTH D will also be improvements. The improvements are needed to extend the service life of the existing pavement and to maintain safe and efficient traffic operations along this important STH 29 route.

The existing STH 27 interchange does not adequately accommodate OSOW vehicles to and from STH 29. STH 27 north of STH 29 is an OSOW route and STH 27 south of STH 29 is known to be used by OSOW vehicles. Large trucks commonly use this interchange to move their goods. Minor improvements to median island noses have been recently constructed to improve truck movements, but more extensive modifications are needed to properly accommodate single and multiple trip OSOW vehicles through the interchange.

2.0 PRESENT FACILITY

2.1. Posted Speed

Roadway or Roadway Segment	Posted Speed	Advisory Speed
STH 29	65-70	None
CTH X	55*	None
STH 27	45	None
CTH D	55	None

Comments:

* Speed not posted; assumed 55 mph per statute.

2.2. Geometrics

2.2.3 * Vertical Clearance Outside of Desirable or Minimum Design Standards.

Location (Stationing, Overpass Structures, etc.)	* Vertical Clearance
B-09-036 (Station 235'EB'+16, 195 th Street over STH 29)	16'-8" Over STH 29 EB (16'-9" desirable and 16'-4" minimum)
B-09-037 (Station 286'EB'+31, CTH K over STH 29)	16'-3" Over STH 29 EB (16'-9" desirable and 16'-4" minimum)
B-09-039 (Station 380'WB'+75, 220 th Street over STH 29)	16'-5" Over STH 29 EB (16'-9" desirable and 16'-4" minimum)
B-09-019 (Station 423'WB'+54, CTH X Interchange over STH 29)	16'-4" Over STH 29 EB and WB (16'-9" desirable and 16'-4" minimum)
B-09-176 (Station 452'EB'+39, CTH XX over STH 29)	16'-2" Over STH 29 WB (16'-9" desirable and 16'-4" minimum)
B-09-179 (Station 610'WB'+85, STH 27 Interchange over STH 29)	16'-3" Over STH 29 WB (16'-9" desirable and 16'-4" minimum)
B-09-022 (Station 901'EB'+52, CTH X over STH 29)	16'-4" Over STH 29 WB (16'-9" desirable and 16'-4" minimum)
B-09-189 (Station 911'EB'+40, CTH D Interchange over STH 29)	16'-6" Over STH 29 WB (16'-9" desirable and 16'-4" minimum)

*Controlling Criteria

Comments:

The minimum/desirable ranges provided in the table are for new construction. Per FDM 11-35 Attachment 1.9; for bridges that are to remain in place, the minimum required clearances are as follows:

- 195th Street, 130th Avenue, 220th Street, CTH X, CTH XX, STH 27, CTH X, and CTH D bridges over STH 29 – 16'-0" min

While all of the existing bridges do not meet the desirable and minimum standards for new construction, they do meet the minimum existing requirements to remain in place.

2.4 Cross Section – See **Attachment 2** for existing typical sections.

STH 29
Number of roadways: 2
Number of lanes: 2 on each roadway / 4 total lanes

Median width: 60' Normal
* Lane width: 12'
* Shoulder width (Total and Paved or Curb & Gutter): 10' outside (8' paved) (Station 611'EB' = 8' to face of guardrail at STH 27); 6' median side (3' paved)
Bicycle Facility Type: STH 29 is designated freeway per Wisconsin State Statute 84.295, but is built to express way standards with some at-grade intersections and some grade separation overpasses east of STH 27. Pedestrian and bikes are allowed on STH 29 from STH 27 to the east project limits. East of STH 27 bicycles use the existing 8' paved shoulder.
Sidewalk and curb ramps: N/A; designated freeway
* Cross slope: 2%
* Super-elevation: RC to 4.6% max (per as-built data)
* Horizontal clearance: Outside: 12' without guard rail, 10' with guardrail (Station 611'EB' = 8' to face of guardrail at STH 27) Inside median: 8' without guardrail, 6' with guardrail
Clear Zone: 30' except from Station 644'EB'+00 to end of project the clear zone is 24'
* Vertical clearance: 16' or greater over STH 29 (see section 2.2.3)
Side-slopes and Ditch sections: 4:1 fill slopes/6:1 to 4:1 ditch section

*Controlling Criteria

CTH X
Number of roadways: 1
Number of lanes: 2
Median width: N/A
* Lane width: 12'
* Shoulder width (Total and Paved or Curb & Gutter): Varies between ramp terminals; 3' across bridge (3' paved)
Bicycle Facility Type: Paved shoulder
Sidewalk and curb ramps: N/A; rural roadway
* Cross slope: 2%
* Super-elevation: N/A
* Horizontal clearance: 3' to face of rail
Clear Zone: 18' (note; guardrail is present throughout paving limits)
* Vertical clearance: N/A; no structures over CTH X
Side-slopes and Ditch sections: 4:1 to 2.5:1 fill slopes behind guardrail

*Controlling Criteria

STH 27
Number of roadways: 1
Number of lanes: 2
Median width: 26'
* Lane width: 12'
* Shoulder width (Total and Paved or Curb & Gutter): 8' across bridge (8' paved); some sections of curb and gutter present
Bicycle Facility Type: Paved shoulder

Sidewalk and curb ramps: N/A; rural roadway
* Cross slope: 2%
* Super-elevation: N/A
* Horizontal clearance: 10'
Clear Zone: 24'
* Vertical clearance: N/A; no structures over STH 27
Side-slopes and Ditch sections: 4:1 fill slopes/4:1 to 6:1 to 4:1 ditch section
*Controlling Criteria

CTH D
Number of roadways: 1
Number of lanes: 2
Median width: N/A
* Lane width: 12'
* Shoulder width (Total and Paved or Curb & Gutter): 8' (8' paved with curb and gutter between ramps)
Bicycle Facility Type: Paved shoulder
Sidewalk and curb ramps: N/A; rural roadway
* Cross slope: 2%
* Super-elevation: N/A
* Horizontal clearance: 10'
Clear Zone: 30'
* Vertical clearance: N/A; no structures over CTH D
Side-slopes and Ditch sections: 4:1 fill slopes/4:1 to 6:1 to 4:1 ditch section
*Controlling Criteria

Ramps
Number of roadways: 1
Number of lanes: 1
Median width: N/A; one lane roadway
* Lane width: 16'
* Shoulder width (Total and Paved or Curb & Gutter): 8' outside (5' paved); 4' inside (3' paved); 4' outside shoulder width to face of barrier at EB exit and WB entrance ramp at CTH D
Bicycle Facility Type: STH 29 is a designated freeway per Wisconsin State Statute 84.295, but is built to express way standards with some at-grade intersections and some grade separation overpasses east of STH 27. Pedestrian and bikes are allowed on STH 29 from STH 27 to the east project limits. The ramps at CTH D and on the east side of STH 27 provide bicycle's with a 5' paved shoulder.
Sidewalk and curb ramps: N/A; designated freeway
* Cross slope: 2%
* Super-elevation: RC to 5.15% max (per as-built data)
* Horizontal clearance: 10' outside, 6' inside
Clear Zone: 18'
* Vertical clearance: N/A; no structures over ramps

*Controlling Criteria

2.5 Pavement Structure/Condition

Roadway	Pavement Types & Thicknesses	Physical Description
STH 29	(Stillson Creek to STH 27) 10" concrete non-reinforced dowelled pavement (STH 27 to 320 th Street) 11" concrete non-reinforced dowelled pavement (the 11" concrete pavement from Station 974'EB'+85 to the end of the project is overlaid with 2" asphaltic pavement)	Corner breaking, linear cracking, spalled joints, punch-outs, and faulting in concrete areas; cracking and rutting in asphaltic areas
Crossroad (CTH X)	Variable depth asphaltic pavement	
Crossroad (STH 27)	4.5-inch asphaltic pavement	
Crossroad (CTH D)	5.5-inch asphaltic pavement	
Ramps (CTH X and STH 27)	10" concrete non-reinforced dowelled pavement in tapers 4.5" asphaltic pavement on ramps	
Ramps (CTH D)	11" concrete non-reinforced dowelled pavement in tapers 6.5" asphaltic pavement on ramps	

2.7 Structures

Existing Structure I.D. #	Feature Crossed	Structure Type	Sufficiency Rating	* Clear Roadway Width	Railing Type	* Structurally Deficient or Functionally Obsolete	* Inventory Load Rating
B-09-171	Stillson Creek (STH 29 EB)	Concrete Girder Bridge	93.5	40'	Sloped Face Parapet Type B	No	HS22
B-09-031	Stillson Creek (STH 29 WB)	Concrete Girder Bridge	93.5	43'	Sloped Face Parapet Type B	No	HS29
B-09-174	190 th Street (STH 29 EB)	Slab Span Bridge	91.8	40'	Sloped Face Parapet Type B	No	HS20
B-09-035	190 th Street (STH 29 WB)	Slab Span Bridge	73.7	43'	Sloped Face Parapet Type B	No	HS13

Existing Structure I.D. #	Feature Crossed	Structure Type	Sufficiency Rating	* Clear Roadway Width	Railing Type	* Structurally Deficient or Functionally Obsolete	* Inventory Load Rating
B-09-036	195 th Street over STH 29	Concrete Girder Bridge	80.5	27'	Sloped Face Parapet Type B	No	HS13
B-09-037	CTH K over STH 29	Concrete Girder Bridge	98.7	30'	Vertical Face Parapet Type AS	No	HS20
B-09-038	Paint Creek (STH 29 WB)	Slab Span Bridge	92.9	43'	Sloped Face Parapet Type B	No	HS23
B-09-175	Paint Creek (STH 29 EB)	Slab Span Bridge	92.9	40'	Sloped Face Parapet Type B	No	HS22
B-09-039	220 th Street over STH 29	Steel Girder Bridge	79.8	27'	Vertical Face Parapet Type A	No	HS11
B-09-019	CTH X interchange over STH 29	Steel Girder Bridge	93.1	30'	Vertical Face Parapet Type A with Class A Rail	No	HS20
B-09-176	CTH XX over STH 29	Concrete Girder Bridge	94.7	36'	Sloped Face Parapet Type B	No	HS24
B-09-177	CTH X (STH 29 WB)	Steel Girder Bridge	96.2	40'	Sloped Face Parapet Type B	No	HS29
B-09-020	CTH X (STH 29 EB)	Steel Girder Bridge	87	40'	Sloped Face Parapet Type B	No	HS21
C-09-031	Unnamed Creek	Box Culvert	N/A	68'	Flexible Beam – Steel	No	HS20
B-09-179	STH 27 interchange over STH 29	Concrete Girder Bridge	98.8	66'	Sloped Face Parapet Type B	No	HS24

Existing Structure I.D. #	Feature Crossed	Structure Type	Sufficiency Rating	* Clear Roadway Width	Railing Type	* Structurally Deficient or Functionally Obsolete	* Inventory Load Rating
C-09-006	Turner Creek	Box Culvert	N/A	68'	N/A	No	HS20
B-09-022	CTH X over STH 29	Steel Girder Bridge	83.4	30'	Sloped Face Parapet Type B	No	HS13
B-09-189	CTH D interchange over STH 29	Concrete Girder Bridge	99.0	40'	Sloped Face Parapet Type B	No	HS21
B-09-29	Hay Creek	Box Culvert	N/A	222'	N/A	No	HS20

*Controlling Criteria

Comments:

No bridge improvements are planned.

2.8 Utilities

Utility Name	Type of Utility	General Location	Underground/ Overhead/ Both
AT&T Wisconsin	Communication Line	Buried fiber near the north right of way line from Stillson Creek (Station 155'WB') to near Station 369'WB' where it crosses WB and EB STH 29 Buried copper cable crossing of STH 29 east of 190 th Street (near Station 211'EB') Aerial copper cable and buried fiber optic crossing of STH 29 east of 195 th Street (near Station 236'EB') Buried copper cable crossing of STH 29 east of 210 th Street (near Station 312'EB') Buried copper cable crossing of STH 29 west of 220 th Street (near Station 379'EB')	Both
Boyd Mun Water and Sewer Utility	Sewer	8-inch sewer crossing of STH 29 east of CTH D (Station 922'EB')	Underground
Boyd Mun Water and Sewer Utility	Water	2-inch water line crossing of STH 29 east of CTH D (Station 912'EB')	Underground
CenturyLink - CenturyTel of Midwest-Wisconsin	Communication Line	Buried facilities along westbound CTH X entrance ramp and eastbound CTH X exit ramp, crossing STH 29 at Station 416'EB', crossing STH 29 at Station 450'EB', crossing STH 29 near Station 507'EB', crossing STH 29 near Station 561'EB', along the south side of the STH 27 eastbound exit ramp, along the north side of the STH 27 westbound entrance ramp, and crossing STH 29 near Station	Underground

		602'EB'	
Charter Communications	Communication Line	Aerial coaxial cable crossing of STH 29 west of STH 27 (Station 610'EB')	Overhead
Dairyland Power Cooperative	Electric Transmission	Crossing of STH 29 east of CTH XX (Station 454'EB')	Overhead
Eau Claire Energy Cooperative	Electric	Overhead crossing of STH 29 east of 210 th Street (Station 312'EB'), west of CTH X (Station 415'EB'), west of 240 th Street (Station 507'EB'), and east of 240 th Street (Station 518'EB')	Overhead
Magellan Pipeline	Gas/ Petroleum	Crossing of STH 29 east of 190 th Street (Station 221'EB') Crossing of STH 29 west of CTH X (Station 415'EB')	Underground
CenturyLink Communications f/k/a QWEST	Communication Line	Buried fiber near the south right of way line from CTH XX (Station 453'EB') to near Station 561'EB' where it crosses EB and WB STH 29 Buried fiber near the south right of way line from STH 27 (Station 606'EB') to east of the end project limits (Station 990'EB') Crossing of STH 29 east of Church Road (Station 665'EB')	
We Energies	Gas/ Petroleum	Crossing of STH 29 west of 220 th Street (Station 559'EB') Crossing of STH 29 west of STH 27 (Station 603'EB') Crossing of STH 29 east of STH 27 (Station 618'EB')	Underground
Xcel Energy	Electric Transmission	Two crossings of STH 29 west of 220 th Street (Station 370'EB'); east of the CTH D interchange (Station 927'EB')	Overhead
Xcel Energy	Electric Distribution	Crossing of STH 29 at the following locations: east of 190 th Street (Station 211'EB'), east of 195 th Street (Station 236'EB'), east of CTH K (Station 287'EB'), west of 270 th Street (Station 663'EB'), west of 290 th Street (Station 766'EB'), west of CTH X (Station 900'EB'), east of the CTH D interchange (Station 927'EB')	Overhead

2.9 Railroad Crossings

Location (Sta.)	Railroad Name	No. of Tracks	Function	Crossing Type
There are no railroad crossings present within the project limits.				

2.11 Unique Project Features

Wisconsin Central Ltd runs parallel to the project. The project is within 50' of the RR right-of-way. STSP 107-026 will be included in the Special Provisions and RPLI will be required.
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3.0 TRAFFIC

3.1 Traffic Volumes/Conditions

3.1.1 See attached Traffic Forecast Report – See Attachment 3.

3.1.2 Highway Capacity Analysis

Location (Roadway Segment or Intersection)	Existing Level of Service	Construction Year Level of Service	Construction Year + 10 Level of Service
STH 29 Project I.D. 1050-01-31	A	A	A/B *
STH 29 Project I.D. 1052-01-32	A	A	A/B *

Comments:

*LOS is A except on the east end of the project (PDP 105T017 to 109T000).

Data was provided from WisDOT's meta manager.

3.2 CRASH ANALYSIS

3.2.1 Project Crash Information

Roadway	Crash Rate ⁽¹⁾ (Year.)	Statewide Crash Rate ⁽¹⁾ (Year)*	Number & Severity of Crashes (2009 – 2013)			
			Fatal	Injury	Property Damage	Total No. Crashes
STH 29 EB	20 (2010-2014)	34 (2009 – 2013)*	1	21	63	85
STH 29 WB	16 (2010-2014)	34 (2009-2013)*	0	13	54	67

⁽¹⁾ Crash rate based on 100 million vehicles miles traveled (100 MVMT)

Comments:

* 2010 to 2014 crash rates are not available at the time of the preparation of this DSR.

The above crash analysis is for the overall STH 29 corridor on eastbound and westbound STH 29. The crash rates are similar to the statewide crash rate for each direction. One fatality occurred near CTH D on eastbound STH 29 in 2010. The collision was a same direction sideswipe with another vehicle.

Crash data was also analyzed for the interchanges at STH 29 with CTH X, STH 27, and CTH D. No intersections have crashes occurring outside of normal rates.

Location or Pattern	Year (crash rate = Million Entering Vehicles)					Average Crash Rate (MEV)
	2010	2011	2012	2013	2014	2010-2014
CTH X EB Ramp	1	--	--	--	--	0.16
CTH X WB Ramp	--	2	--	--	--	0.31
STH 27 SB Ramp	2	--	--	--	1	0.24
STH 27 NB Ramp	--	2	1	--	--	0.24
CTH D EB Ramp	--	--	--	--	--	--
CTH D WB Ramp	--	--	--	--	--	--

MEV = Million Entering Vehicles

4.0 PROPOSED DESIGN CRITERIA

4.3 Design Criteria Outside Desirable Standards

A review of controlling criteria is shown in **Attachment 5**.

Existing vertical clearances are less than the desirable of 16'-9" but greater than the required 3R standard minimum of 16'-0". See Section 2.2.3. All vertical clearances will not be reduced and pavements will be

repaired and not overlaid under all overpass structures.

The existing paved shoulders along STH 29 do not meet freeway standards. The outside existing 8' paved shoulder will be improved to a paved width of 10'. The inside existing 3' paved shoulder will be improved to a paved width of 4'.

There are six curves with superelevations over 65 mph but less than 70 mph. Minor corrections will be made to increase all superelevations to a desirable 70 mph.

There are three locations where the shoulder width is less than desirable standards.

- Station 610EB, RT = 8' existing due to guardrail, 10' desirable; on STH 29; this location will be improved to 10'
- Station 900WB, LT = 4' existing due to barrier, 8' desirable; on CTH D entrance ramp
- Station 902EB, RT = 4' existing due to barrier, 8' desirable; on CTH D exit ramp

4.4 Exceptions To Standards

The proposed improvements meet 3R design standards except for the two locations of reduced horizontal clearance noted in Section 4.3. There are no improvement flags in these areas. The improvement flags (4 along eastbound and 2 along westbound STH 29) were removed via a Safety Screening Analysis (SSA). See **Attachment 4** for the SSAs.

4.4.1 Safety Screening Analysis (SSA) and Programmatic Exception to Standards per FDM 11-1-4 (3R projects and Preventive Maintenance (PM) Group I and Group II pavement strategy projects)

See attached Safety Screening worksheets (**Attachment 4**) for locations and details of Crash Flags, Improvement Flags, and Programmatic Exceptions to Standards within the project limits. There are two flags on eastbound STH 29 but there are no substandard features near these flags. There are substandard features at the locations noted in the following tables but there are no flags at these locations.

****National Highway System (NHS) Roadway- Substandard Geometric Features Covered by a Programmatic Exception to Standards (3R & PM projects)***

NHS roadway name: STH 29

Location				Feature Type	Magnitude of variance
Sta.	to Sta.	RP	to RP		
899'WB'	900'WB'	On CTH D entrance ramp		Shoulder width & horizontal clearance at barrier on ramp	4' existing; 8' desirable on ramp Exceeds desirable 10' to STH 29 travel lane
901'EB'	902'EB'	On CTH D exit ramp		Shoulder width & horizontal clearance at barrier on ramp	4' existing; 8' desirable on ramp; Exceeds desirable 10' to STH 29 travel lane

* This documentation is required only for 3R projects on the National Highway System.

These substandard features are located on highway segments containing no flags or only Crash Type Flags. These features do not contribute significantly to the crash situation on these segments of highway so these highway segments are covered by the Programmatic Exception to Standards.

Substandard Geometric Features NOT Covered by a Programmatic Exception to Standards and NOT corrected as part of PM project (PM Group I and Group II pavement strategy projects)

Not applicable.

5.0 PROPOSED DESIGN IMPROVEMENT

5.1 Improvement Type

The project is programmed as a Resurfacing project under WisDOT's Legislative Subprogram 303-State Highway Rehabilitation. The project will be funded with Backbone funds.

The proposed improvements include concrete pavement repairs, asphaltic overlay of the travel lanes and shoulders, paving shoulder widths to freeway standards, median crossover upgrades to improve slopes and match pavement overlay, guardrail replacements to meet current standards, minor culvert improvements, and replacement of signing and pavement marking. The interchange ramps and crossroads between the ramp terminals at CTH X, STH 27, and CTH D are also proposed to be resurfaced. The intersections at the STH 27 interchange will be widened along with median and splitter island reconstruction to accommodate OSOW turning movements at the ramp terminals.

See **Attachment 6** for preliminary plan sheets and **Attachment 12** for the controlling OSOW turning movements at the STH 27 interchange.

5.5 Cross Section/Pavement Structure - See Attachment 7 for proposed typical sections.

Match all existing typical section criteria except as noted below. See Section 2.4 for existing typical section data.

STH 29
* Shoulder width (Total & Paved or Curb & Gutter): 10' outside (10' paved); 6' median (4' paved)
Pavement Structure: Concrete pavement repair non doveled special and 3.75-inch HMA/SMA overlay; concrete pavement repairs only under overpass sections to avoid reduced vertical clearance
* Horizontal clearance: Outside: 12' without guardrail, 10' with guardrail (Station +/- 611'EB' = increased to 10' to face of guardrail under STH 27); Inside median: 8' without guardrail, 6' with guardrail

CTH X
Pavement Structure: 2-inch mill and 2-inch HMA overlay

STH 27
Pavement Structure: 2-inch mill and 2-inch HMA overlay
OSOW Widening Pavement Structure: Concrete pavement 12-inch colored red over 12-inches of base aggregate dense 1 ¼-inch, the curb and gutter will be type T with mountable curb head

CTH D
Pavement Structure: 2-inch mill and 2-inch HMA overlay

Ramps
Pavement Structure: 2-inch mill and 2-inch HMA overlay
STH 27 Ramps OSOW Widening Pavement Structure: Concrete pavement 12-inch colored red over 12-inches of base aggregate dense 1 ¼-inch, the curb and gutter will be type T with mountable curb head

* Controlling Criteria

5.6 Street Lighting

Location	Type	Break-away Requirements
The existing light poles at the CTH D interchange intersections at Station 97'S'+90 RT and Station 102'S'+90 LT are located in the vicinity of the existing and proposed guardrail terminals. The existing breakaway light poles are outside of the lateral clearance but in the area of the NB and SB guardrail terminal. Relocation of the light poles was evaluated. Due to the type of existing direct bury wiring, re-wiring of nearly the entire interchange lighting system would be required to relocate the two poles. The poles will remain and are		

documented in the Roadside Hazard Review (**Attachment 11**).

5.7 Structures

5.7.1 Bridge Structures

No bridge structure improvements are proposed. All existing structures will remain in place.

5.7.2 Box Culverts and Multiple Pipe Structures

No box culverts or multiple pipe structures improvements are proposed. All existing structures will remain in place.

5.7.3 Retaining Walls and Noise Barrier Structures

No retaining walls or noise barriers are present within project limits.

5.7.4 Sign Bridge Structures

No sign bridges are present within project limits.

5.7.5 Tunnel Structures

No tunnel structures are present within project limits.

5.8 Permanent Traffic Control

Will permanent signs be installed (Yes or No)? Yes

Are non-standard sign layout details needed (Yes or no)? No

5.9 Transportation Management Plan

See the Transportation Management Plan in **Attachment 8**.

5.10 Safety Enhancements/Mitigation Measures

No safety enhancements beyond typical resurfacing improvements are proposed.

Comments:

The existing 72" corrugated metal cattle pass with concrete masonry endwalls located at Station 818"WB'+35 (48' LT) will remain. The vertical end of cattle pass was originally built to a 24-foot clear zone and is located within a section with a current clear zone of 30-feet on westbound STH 29 (based on as-builts). The clear zone on eastbound STH 29 is 24-feet. On eastbound STH 29, the cattle pass is at 58-feet right which is beyond the clear zone in the eastbound direction. The property owner was contacted and it was determined that the cattle pass is still being used.

Shielding the cattle pass in the westbound direction would require a short radius terminal due to the proximity of the 300th street intersection. A short radius terminal would not adequately shield the cattle pass for traffic in this segment which is posted at 65 mph. Extending the cattle pass would require right of way which is beyond the scope of this project. Installing guardrail to adequately protect the culvert would be difficult in this location due to the proximity of the intersection.

Since the clear zone ranges through this section (24 to 30-feet) and the culvert meets a 24-foot clear zone (on westbound), no changes are proposed at this location. The cattle pass is documented in the road side hazard documentation in **Attachment 11**.

5.12 Utilities

Is Project Trans 220 Utility Project (Yes or No)? Yes

Describe any special design features to accommodate utilities:

None required.

Major Utility Agreements:

None required.

5.13 Railroads

Describe improvements to Railroad Facilities:

Wisconsin Central Ltd runs parallel to the project. The project is within 50' of the RR right-of-way. STSP 107-026 will be included in the Special Provisions and RPLI will be required.

Railroad Agreements:

None required.

5.14 Financing And Scheduling

Construction I.D.	Cost Estimate	Type of Funding			Proposed Timeframe For Construction	Ties to Other Work or Projects	Incentive/ Disincentive Clauses (Yes or No)
		% Fed.	% State	% Local			
1050-01-31	\$15M	80	20	0	Spring to fall 2019, advanceable to 2017	None	No
1052-01-32	\$15M	80	20	0	Spring to fall 2019, advanceable to 2017	None	No

Describe Incentive/Disincentive Clauses:

None anticipated.

Non-participating Work:

None anticipated.

Deferred Construction Work (Preventative Maintenance projects)

No work deferred, this resurfacing project is consistent with typical roadway life cycle construction.

5.15 Unique Or Non-standard Features

5.15.1 Hazardous Waste

None identified.

5.15.2 Environmental Commitments

See **Attachment 9** for environmental commitments and agency coordination letters. Commitments included on this project are:

- General Economics/Business/Agricultural/Residential/Community – maintenance of traffic during construction. The WisDOT construction engineer will ensure fulfillment of this commitment
- Wetlands and Streams – permit and mitigate impacts to wetlands at any grading areas. The WisDOT project manager will ensure fulfillment of this commitment.
- Erosion Control - An Erosion Control Implementation Plan (ECIP) will be prepared for approval by WDNR and WisDOT prior to construction. If any wetlands are affected on the roadway approaches, biodegradable non-netted erosion mat will be used. Equipment coming in contact with waterways will require decontamination of equipment in accordance with WDNR provisions for invasive species. The ECIP will address protection of stockpiles and dewatering, if required. The WisDOT construction engineer will ensure fulfillment of this commitment.
- Threatened and Endangered Species: No tree cutting of suitable habitat for the Northern Long Eared Bat (NLEB) is anticipated. If suitable NLEB habitat is removed it will occur between October 1 and April 1 to avoid impacts to NLEB. Updated coordination is ongoing with USFWS.

5.15.3 Community Sensitive Design/Public Involvement

Public outreach will occur prior to and during construction to notify travelers of the work area via WisDOT website, STOC, 511, local newspapers, and local newscasts by the contractor, field staff, and Region Communications Manager. All businesses directly at the interchanges have been notified as well as local officials. Public involvement meetings are not planned at this time.

6.0 SYNOPSIS

	Completion/Approval Dates	Status of Coordination or Other Information as Needed
Concept Definition Report	12/1/2014	Complete
Scoping Document	12/24/2014	Complete
Public Involvement Plan	3/17/2015	PIP updates will be made throughout the project design process
Environmental Document (Type: PCE)	12/9/2015	Coordination will continue through the design process as needed.
Public Information Meetings	Ongoing	Due to nature of project, coordination letters were sent to businesses adjacent to any interchanges and local officials were notified. A PIM will be scheduled if deemed necessary.
SHPO Involvement	9/15/2008	Screening list for archaeological and historic; coordination complete
DNR Involvement	Initial comments received 5/1/2015	Coordination will continue through design and construction to obtain 401 WQC and approval of the ECIP
Transportation Management Plan (Type: 2)	ADD 60% DATE	The TMP will be updated at 90% with any final details.
Permits Required (Types:401 and 404)	Ongoing	Permits will be acquired prior to project LET. Coordination ongoing with DNR and COE.
Local Project Agreements	N/A	N/A
Status of Statutory Actions	N/A	N/A
Trans 75 Checklist	9/25/2015	See Attachment 10 (Trans 75 is no longer required, however it was signed to ensure review of pedestrian/bicycle accommodations was completed)

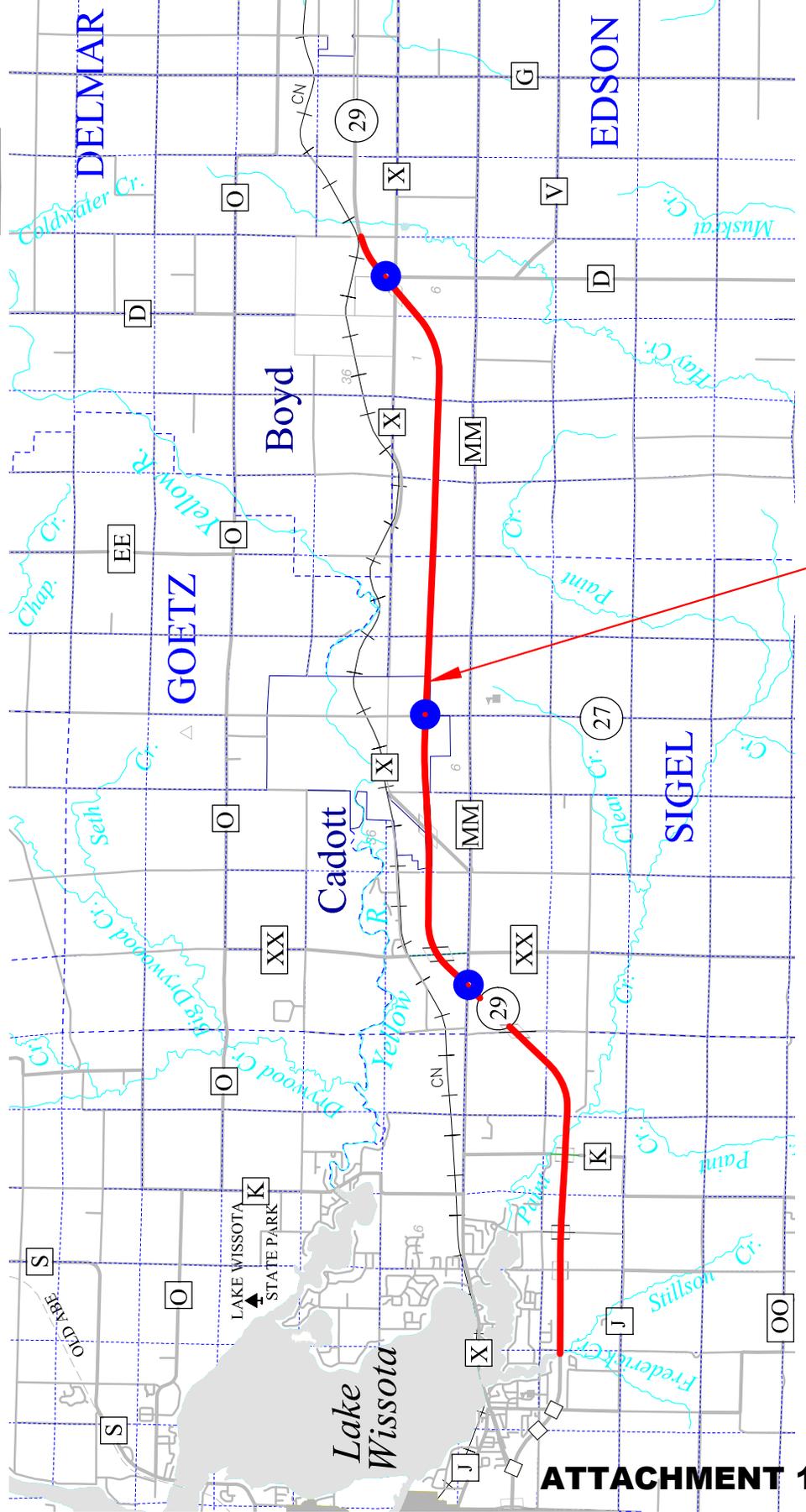
7.0 ATTACHMENTS

1. Project Location Map and Project Overview
2. Existing Typical Sections
3. Traffic Forecast Report
4. Safety Screening Analysis for EB and WB
5. Controlling Criteria Review
6. Preliminary Plan Sheets
7. Proposed Typical Sections
8. Transportation Management Plan (60% approval)
9. Environmental Information
 - Signed PCE Cover Sheet
 - Environmental Commitments Sheet
 - BOA Correspondence
 - COE Correspondence
 - DNR Correspondence
 - USFWS Correspondence
 - Native American Correspondence
 - Local Agency Correspondence
 - Screening List
10. TRANS 75 Checklist
11. Roadside Hazard Analysis
12. Controlling OSOW Turning Movements at the STH 29/STH 27 Interchange

PROJECT LOCATION MAP

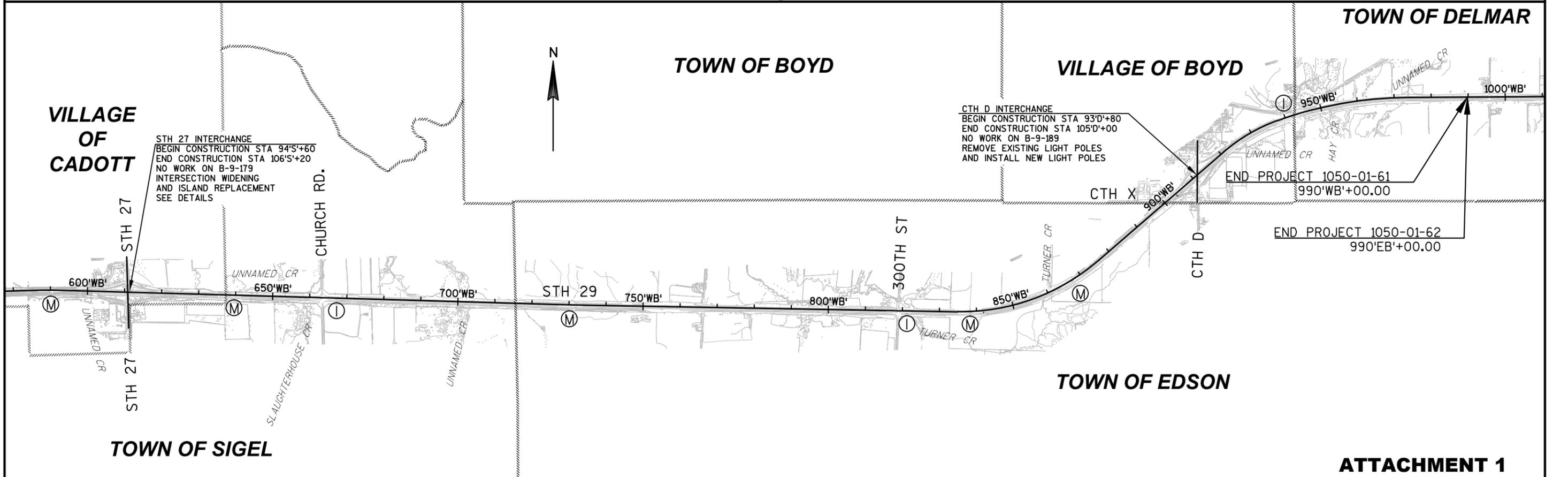
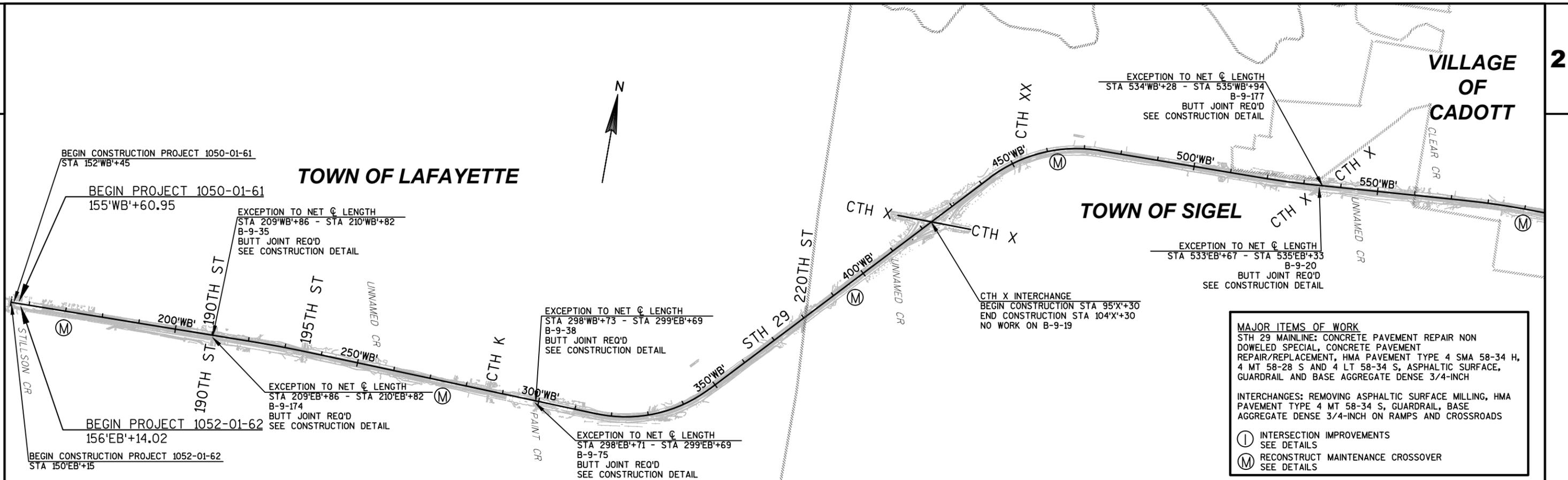
PROJECT ID 1050-01-61
CHIPPEWA FALLS - CADOTT
STILLSON CREEK TO 320TH STREET (WB)
STH 29
CHIPPEWA COUNTY

PROJECT ID 1052-01-62
CHIPPEWA FALLS - CADOTT
STILLSON CREEK TO 320TH STREET (EB)
STH 29
CHIPPEWA COUNTY



PROJECT LOCATION

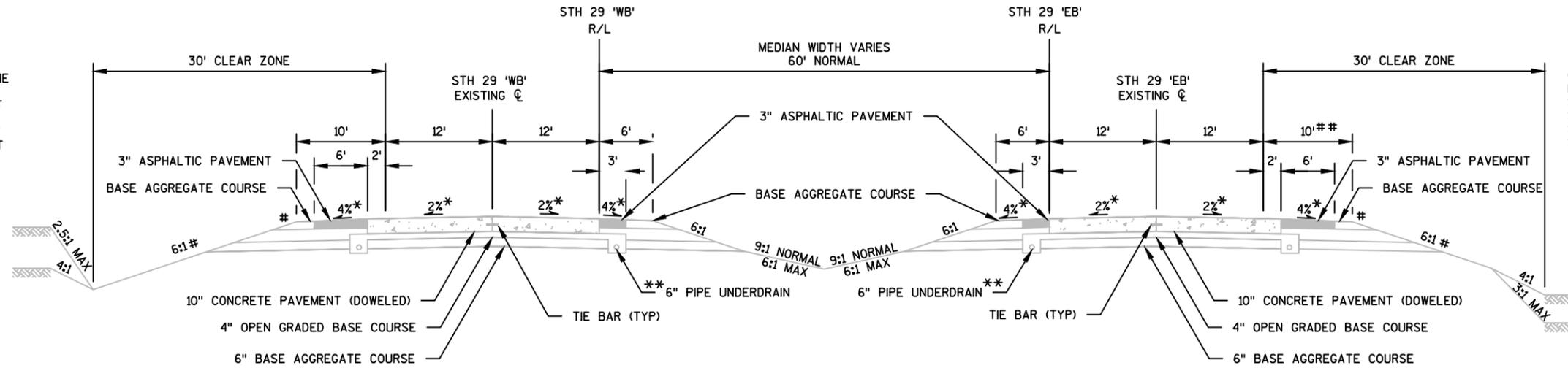
● PAVE INTERCHANGE RAMPS AND BETWEEN RAMP TERMINALS



ATTACHMENT 1

PROJECT NO: 1050-01-61/1052-01-62	HWY: STH 29	COUNTY: CHIPPEWA	PROJECT OVERVIEW	SHEET	E
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CONCRETE BARRIER IS PRESENT AT THE FOLLOWING LOCATIONS:
 STA 234'WB'+78 - STA 235'WB'+48, LT
 STA 286'WB'+05 - STA 286'WB'+61, LT
 STA 380'WB'+31 - STA 380'WB'+94, LT
 STA 422'WB'+38 - STA 423'WB'+05, LT

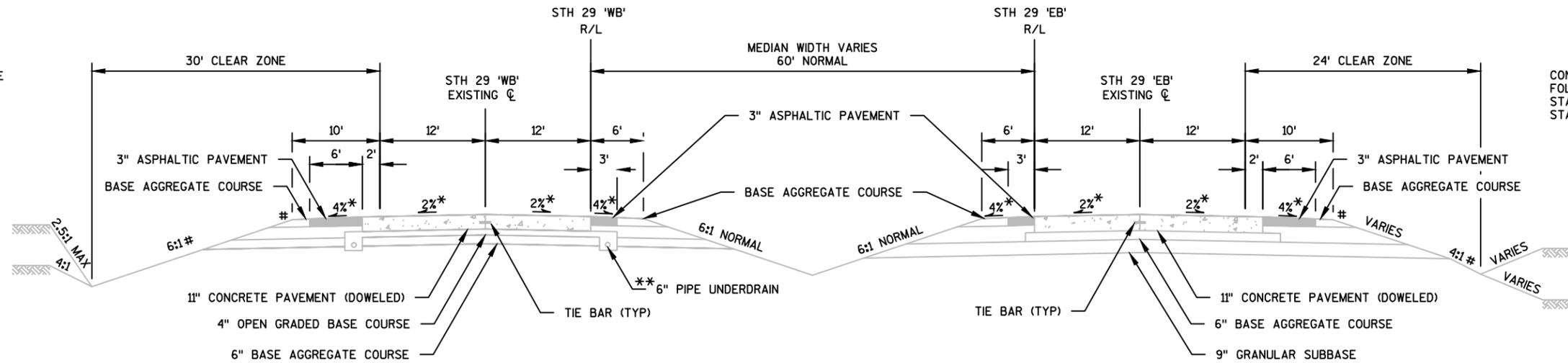


CONCRETE BARRIER IS PRESENT AT THE FOLLOWING LOCATIONS:
 STA 234'EB'+90 - STA 235'EB'+43, RT
 STA 286'EB'+05 - STA 286'EB'+60, RT
 STA 379'EB'+50 - STA 380'EB'+13, RT
 STA 423'EB'+92 - STA 425'EB'+21, RT

**TYPICAL EXISTING SECTION
 STH 29**

STA 155'WB'+60.95 - STA 654'WB'+00
 STA 156'EB'+14.02 - STA 644'EB'+00

CONCRETE BARRIER IS PRESENT AT THE FOLLOWING LOCATIONS:
 STA 911'WB'+11 - STA 911'WB'+71, RT
 STA 911'WB'+47 - STA 912'WB'+17, LT



CONCRETE BARRIER IS PRESENT AT THE FOLLOWING LOCATIONS:
 STA 910'EB'+71 - STA 911'EB'+41, RT
 STA 911'EB'+18 - STA 911'EB'+78, LT

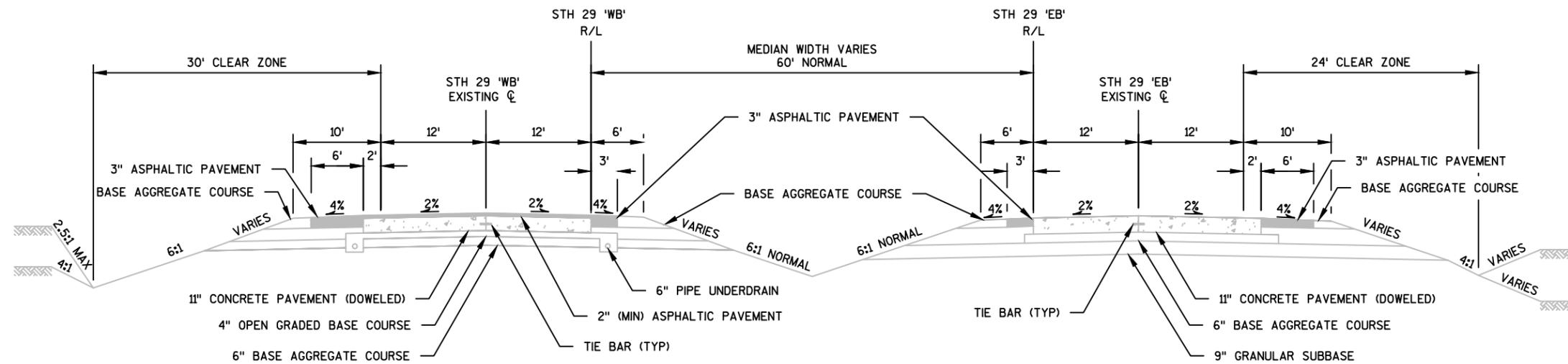
**TYPICAL EXISTING SECTION
 STH 29**

STA 654'WB'+00 - STA 974'WB'+85
 STA 644'EB'+00 - STA 974'EB'+85

NOTES

- * CROSS SLOPE VARIES DUE TO SUPERELEVATION. SHOULDER CROSS SLOPE VARIES AT LOCATIONS WITH EXISTING CONCRETE BARRIER (2%-4%).
- ** PIPE UNDERDRAIN IS ONLY LOCATED ON THE LOW SIDE OF STH 29 IN SUPERELEVATED SECTIONS.
- # SLOPES VARY IN GUARDRAIL SECTIONS. SEE PLAN SHEETS FOR GUARDRAIL LOCATIONS.
- ** TOTAL SHOULDER WIDTH AT STA 607+95 - STA 611+99 IS 8' DUE TO EXISTING GUARDRAIL LOCATION.

ATTACHMENT 2

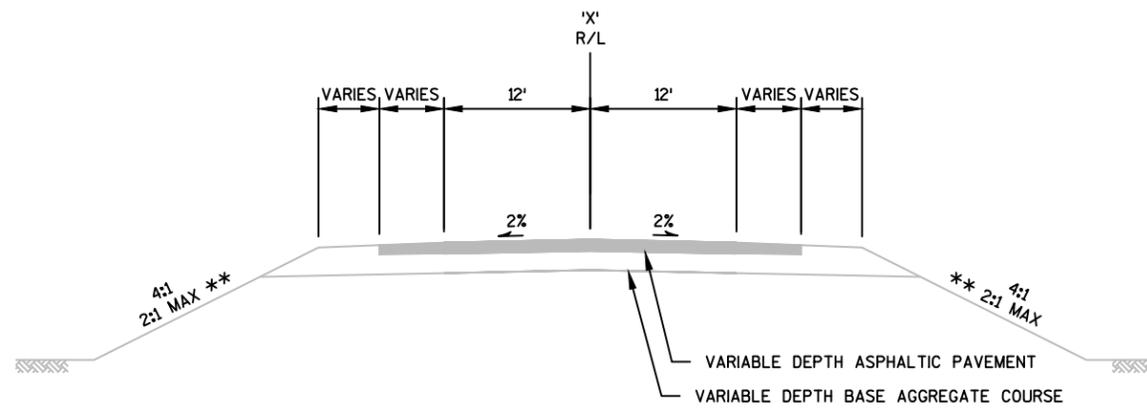


TYPICAL EXISTING SECTION
STH 29
 STA 974'WB'+85 - STA 990'WB'+00
 STA 974'EB'+85 - STA 990'EB'+00

ATTACHMENT 2

PRELIMINARY DESIGN NOTES

NO AS-BUILTS PROVIDED WITH TYPICAL SECTION FOR CTH X.
EXISTING CLEAR ZONE IS NOT APPLICABLE SINCE LIMITS OF PAVING ALL HAVE GUARDRAIL.



TYPICAL EXISTING SECTION
CTH X

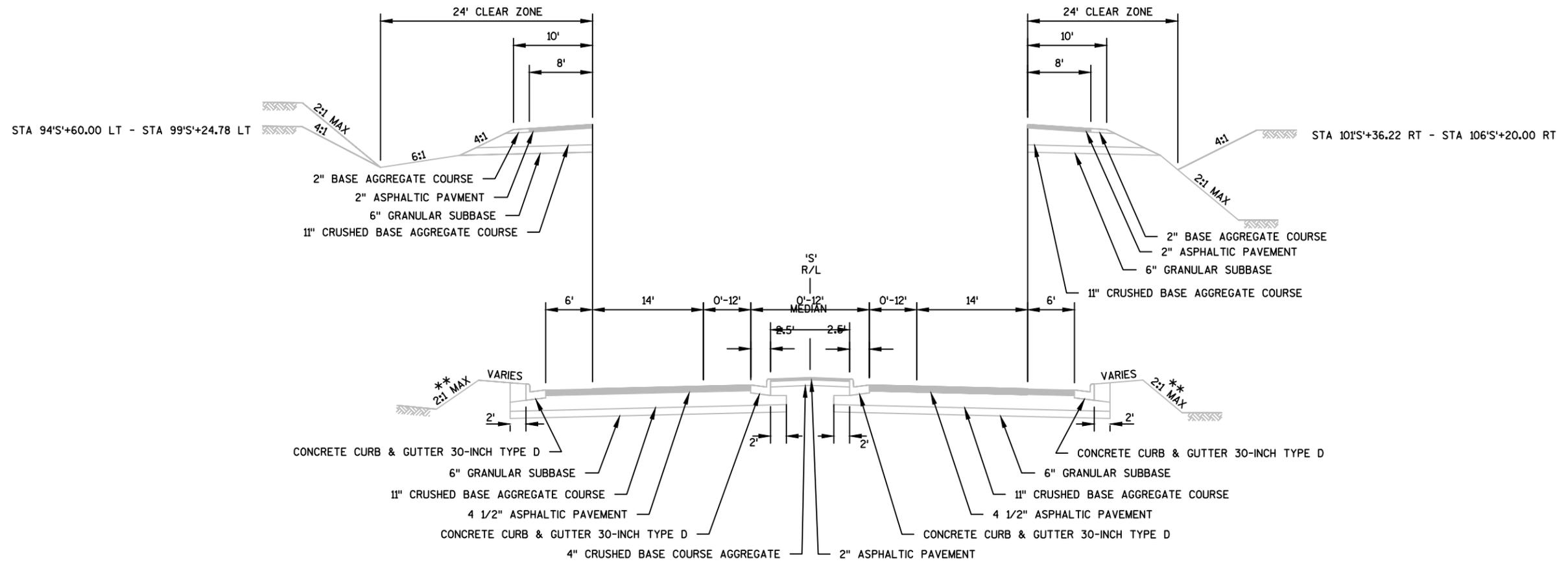
STA 95'X'+30 - STA 98'X'+26.25
STA 100'X'+94.96 - STA 104'X'+30

NOTES

SEE PLAN SHEETS FOR ADDITIONAL TURN LANE AND VARIABLE WIDTH PAVEMENT LOCATIONS.

** 2:1 MAX SLOPE ONLY OCCURS IN SECTIONS WITH GUARDRAIL.

ATTACHMENT 2



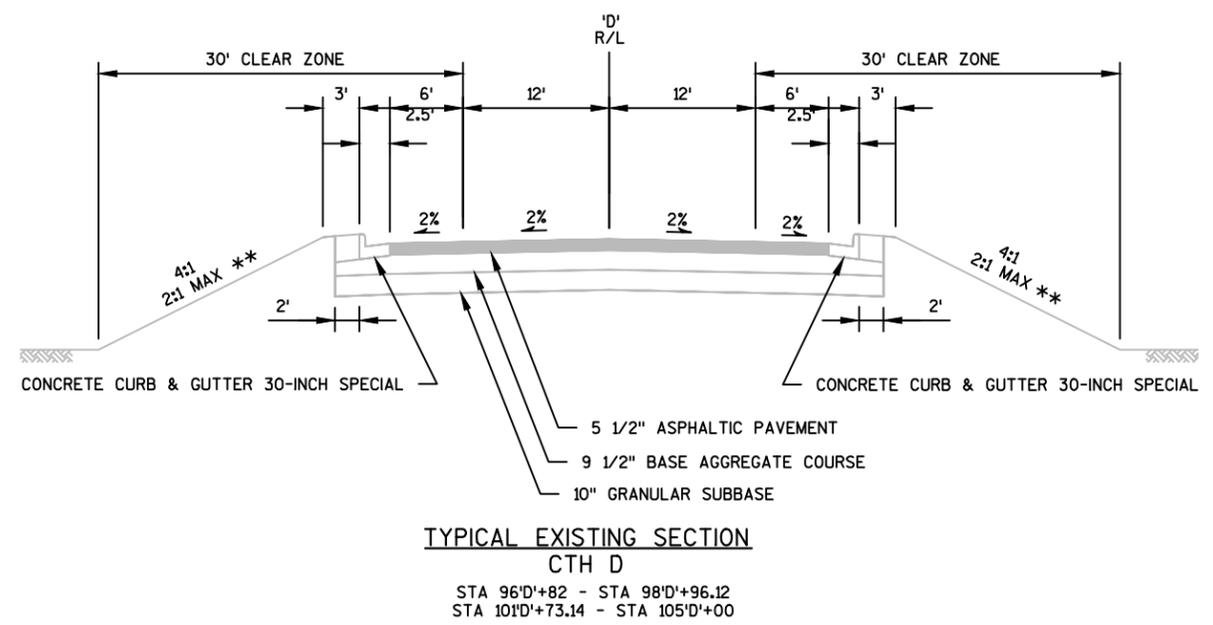
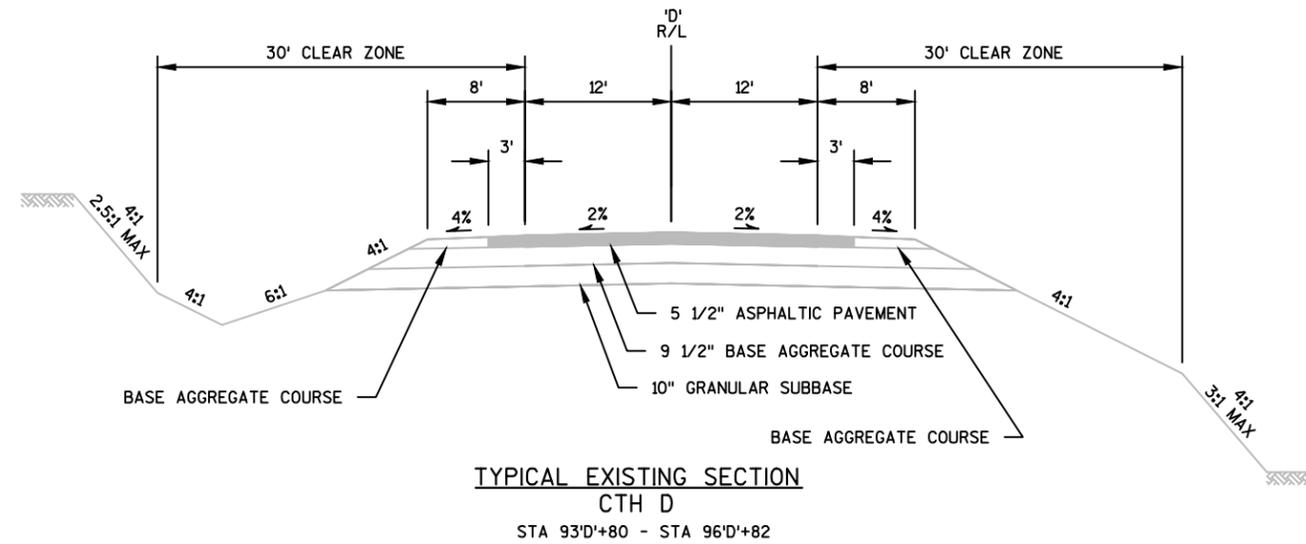
TYPICAL EXISTING SECTION
 STH 27
 STA 94'S+60 - STA 99'S+24.78
 STA 101'S+36.22 - STA 106'S+20

NOTES

SEE PLAN SHEETS FOR ADDITIONAL TURN LANE AND VARIABLE WIDTH PAVEMENT LOCATIONS.

** 2:1 MAX SLOPE ONLY OCCURS IN SECTIONS WITH GUARDRAIL.

ATTACHMENT 2



NOTES

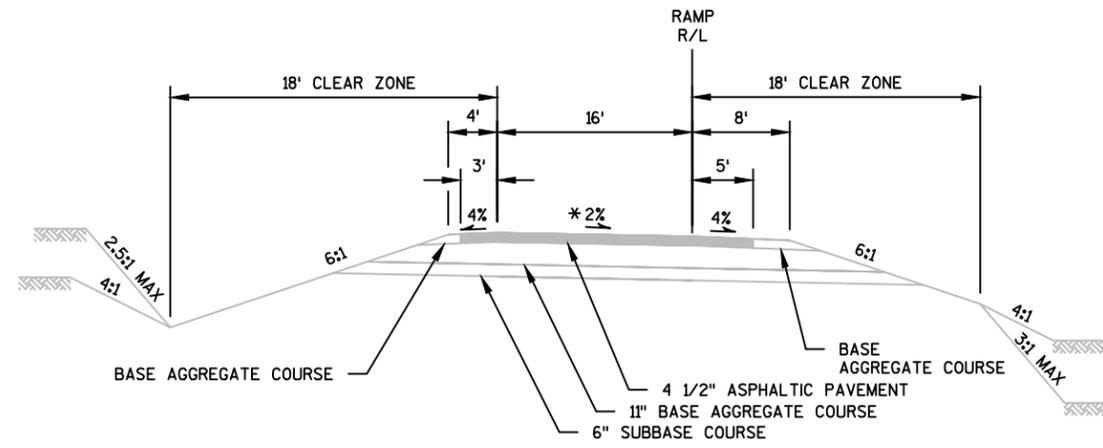
SEE PLAN SHEETS FOR ADDITIONAL TURN LANE AND VARIABLE WIDTH PAVEMENT LOCATIONS.

** 2:1 MAX SLOPE ONLY OCCURS IN SECTIONS WITH GUARDRAIL.

ATTACHMENT 2

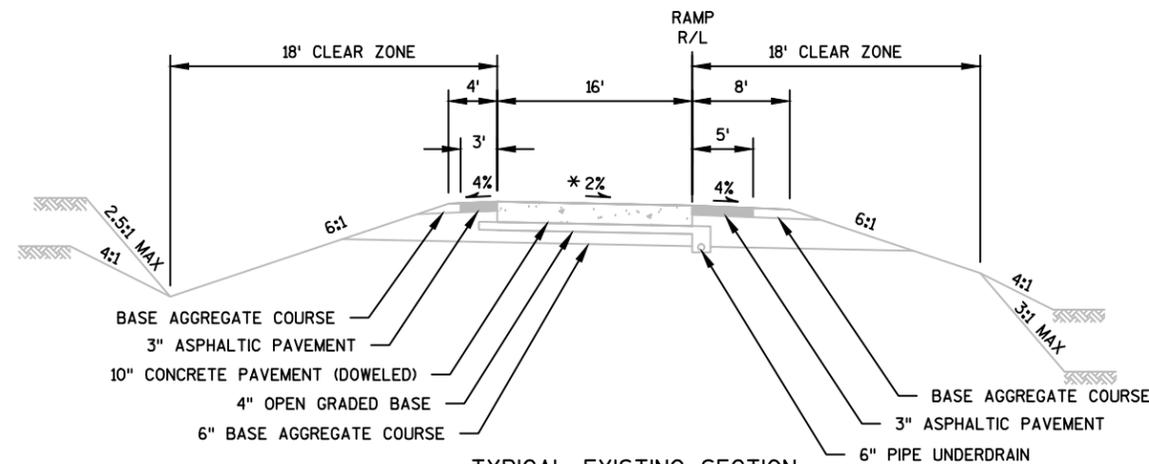
PRELIMINARY DESIGN NOTE

CLEAR ZONE WIDTH NOT FOUND IN AS-BUILTS.
CLEAR ZONE WAS ASSUMED BASED ON
TYPICAL SECTION GRADING IN AS-BUILTS.



TYPICAL EXISTING SECTION
STH 29 EXIT AND ENTRANCE RAMP
CTH X STH 27

STA 416'XA'+35 - STA 422'XA'+17	STA 604'SA'+15 - STA 610'SA'+74
STA 422'XB'+17 - STA 430'XB'+76	STA 610'SB'+74 - STA 619'SB'+33
## STA 426'XC'+41 - STA 427'XC'+50	## STA 611'SC'+23 - STA 618'SC'+27
## STA 417'XD'+91 - STA 426'XD'+41	## STA 602'SD'+96 - STA 611'SD'+23



TYPICAL EXISTING SECTION
STH 29 EXIT AND ENTRANCE RAMP
CTH X STH 27

STA 403'XA'+96 - STA 416'XA'+35	STA 590'SA'+29 - STA 604'SA'+15
STA 430'XB'+76 - STA 436'XB'+39	STA 619'SB'+33 - STA 625'SB'+02
## STA 427'XC'+50 - STA 444'XC'+91	## STA 618'SC'+27 - STA 631'SC'+09
## STA 412'XD'+33 - STA 417'XD'+91	## STA 597'SD'+10 - STA 602'SD'+96

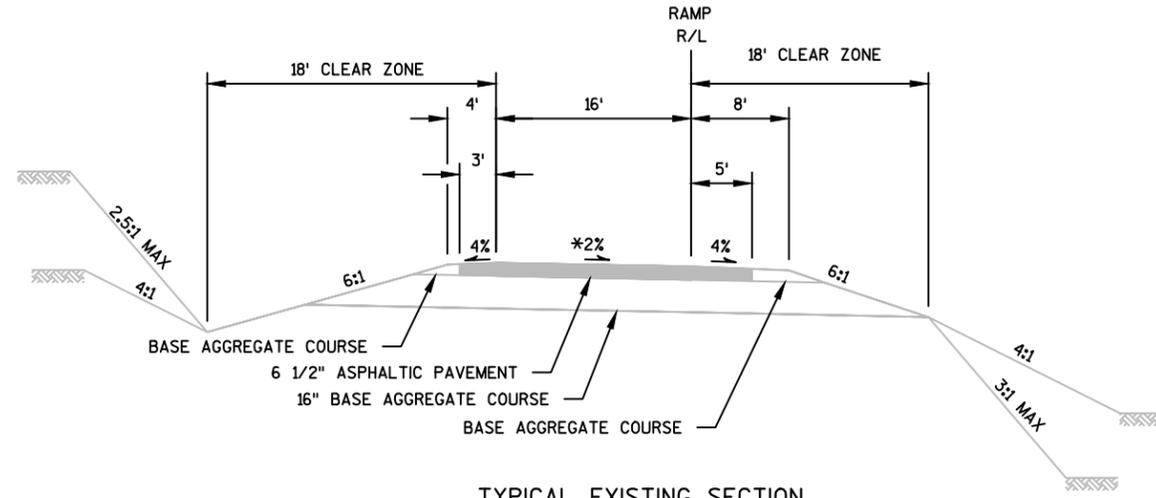
NOTES

* CROSS SLOPE VARIES DUE TO SUPERELEVATION.

PAVEMENT WIDTH VARIES AT TURN LANES AND RAMP TERMINALS.

DETAIL SHOWN IS FOR ALIGNMENT 'XC' AND 'XD', MIRROR TYPICAL FOR 'XA' AND 'XB' ALIGNMENTS.

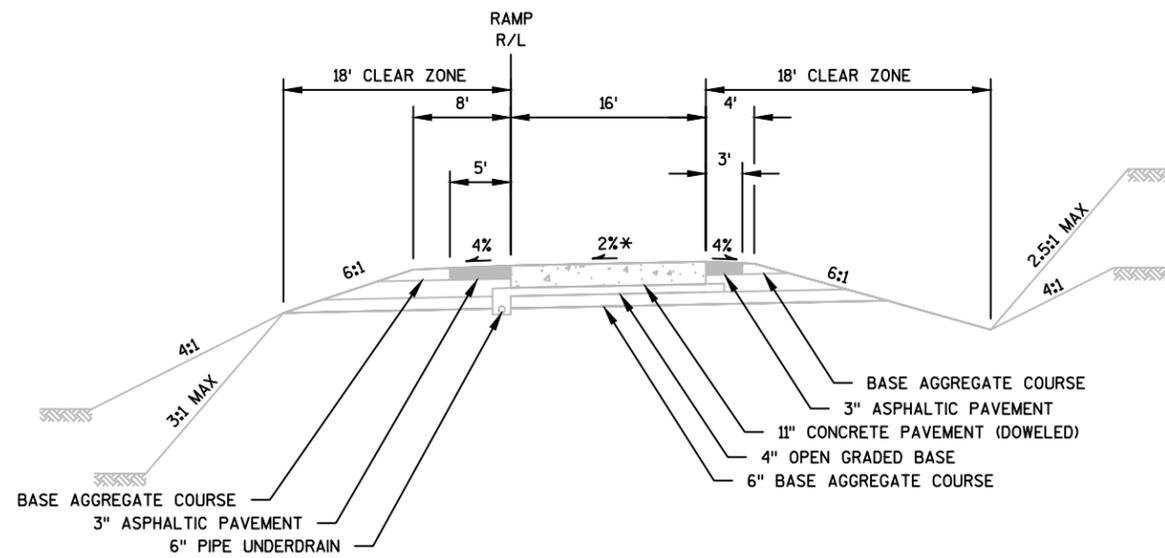
ATTACHMENT 2



TYPICAL EXISTING SECTION
 STH 29 EXIT AND ENTRANCE RAMPS

CTH D

STA 906'DA'+42 - STA 913'DA'+87
 STA 913'DB'+87 - STA 922'DB'+10
 ## STA 909'DC'+50 - STA 916'DC'+69
 ## STA 905'DD'+40 - STA 909'DD'+50



TYPICAL EXISTING SECTION
 STH 29 EXIT AND ENTRANCE RAMPS

CTH D

STA 894'DA'+55 - STA 906'DA'+42
 STA 922'DB'+10 - STA 927'DB'+85

NOTES

- * CROSS SLOPE VARIES DUE TO SUPERELEVATION.
- PAVEMENT WIDTH VARIES AT TURN LANES AND RAMP TERMINALS.
- ## DETAILS SHOWN IS FOR ALIGNMENT 'DC' AND 'DD', MIRROR TYPICAL FOR 'DA' AND 'DB' ALIGNMENT.

ATTACHMENT 2

WisDOT TRAFFIC FORECAST REPORT

PROJECT ID(S): 1052-01-31/61; 1052-01-32/62

ROUTE(S): STH 29

Region/COUNTY(IES): Chippewa

LOCATION: CTH J to STH 27

COMPLETED: 2/12/2015

Developed by: Vu Dang

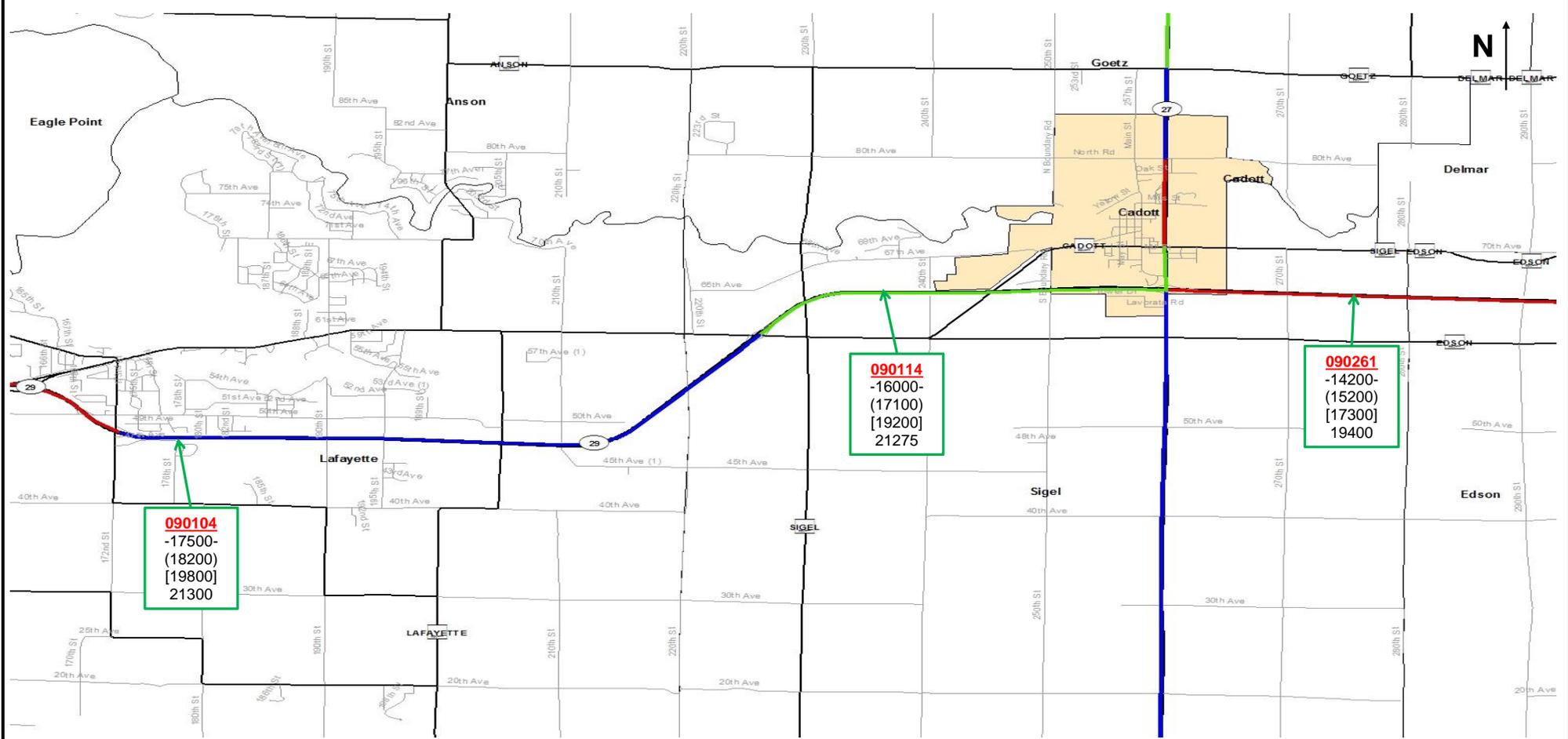
Phone: (608) 266-2571

FAX #: (608) 267-0294

E-Mail: vu.dang@dot.wi.gov



Traffic Forecasting Section; Bureau of Planning and Economic Development; Division of Transportation Investment Management



090104
-17500-
(18200)
[19800]
21300

090114
-16000-
(17100)
[19200]
21275

090261
-14200-
(15200)
[17300]
19400

Design Values (%)	
Site(s)	090104
Route(s)	STH 29
Volume(s)	21290
Site Growth %	0.88%
K250	9.2
K100	9.7
K30	10.3
P	11.6
D(Dsgn. Hr.)	60/40
T(DHV)	6.8
T(PHV)	3.6

-000- 2014 Count		(000) 2019 AADT	
		[000] 2029 AADT	
		000 2039 AADT	
SITE IDs are bolded, colored, and underlined			
Trucks	090104		
AADTT	1410		
2D	2.0		
3AX	1.3		
2S1+2S2	1.2		
3-S2	3.3		
DBL-BTM	0.2		
Total %	8.1%		

NOTES ON THE FORECAST:

- This projection assumes that no major new traffic generators will be added to the development already included in the 2010/2045 Eau Claire-Chippewa Falls Travel Demand Model.
- Truck classification percentages were taken from a table representative of similar facilities and locations throughout the state of Wisconsin.

MORE NOTES ON THE FORECAST:

- STH 29 is a Factor Group IV (Rural-Other) roadway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as a Rural Principal Arterial (2) for count purposes.
- The 2010/2045 Eau Claire-Chippewa Falls Travel Demand Model was used to complete this forecast. Traffic Analysis Forecasting Information System output was used as a comparison tool to check against the model output. Adjustments were made as needed.

ATTACHMENT 3

Date: April 25, 2016

To: NW Region Scoping Files

From: Matthew Reddy, P.E. 
Traffic Engineer
WisDOT, DTSD-NW Region, Eau Claire office

Subject: Safety Screening Analysis (SSA)
Project ID: 1050-01-31, 61
Chippewa Falls – Cadott
Stillson Creek – 320th St.
Chippewa County
STH 29 (WB)

This report summarizes the Safety Screening Analysis (SSA), per Facilities Development Manual 11-1-4, for the subject project. The SSA process will include a review of the metamanager data for investigation flags, review of a crash history for the entire project, and determination as to whether any improvements should be considered.

Project Limits

Western limits: Stillson Creek Bridge
Eastern limits: 320th St.
Length: 14.48 miles

Metamanager / PDP Segments

MM data: April 2015, 2010 – 2014 crashes
WB 29: 15 segments; 5901 – 5915

SSA Step 1: Analyze project roadway using the Metamanager (MM) safety module.

The following PDP segments have investigation flags.

WB STH 29

There are no PDP segments with investigation flags within the project limits.

SSA Step 2: Manually review crash summaries.

Crash data was obtained for years 2010 – 2014. There were 67 crashes identified within the limits of this project. Review of the summary crash data did not reveal any additional segments that should have investigation flags added. There are no additional concentrations of spot type crashes or any other additional unusual concentration of crashes along any particular segment. No additional “investigation” flag segments were identified.

SSA Step 3: Evaluate PDP segments investigation flags.

There are no PDP segments with investigation flags.

There are no substandard controlling criteria in the project limits.

Attachments:

Project Limits Map

STN Log listing

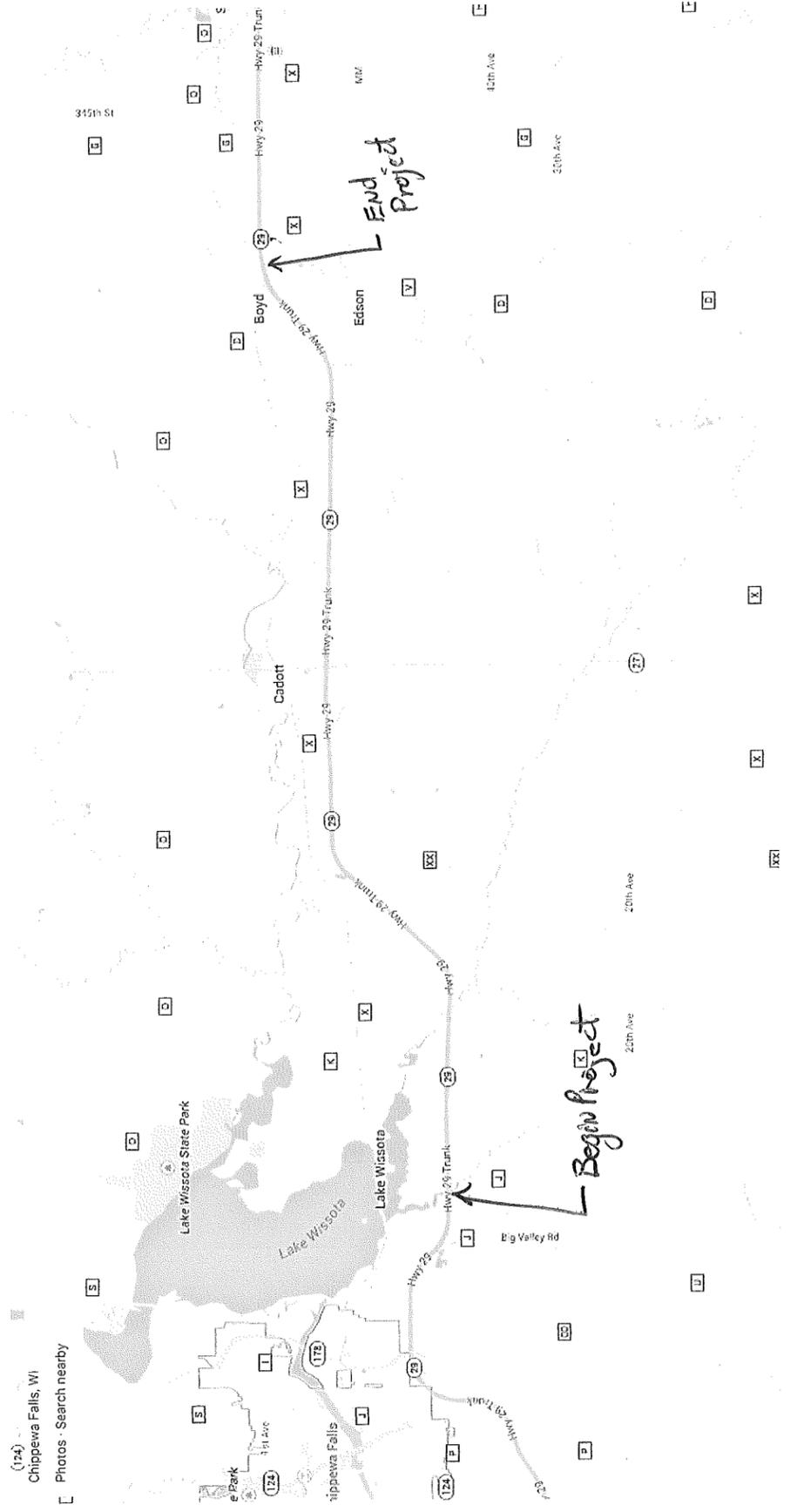
Metamanager listing

Crash Database Spreadsheet

SSA Log Sheets, FDM 11-1-4

State 5 Year Average Crash Rates

Segment Crash Rate Worksheet



STH 29
 Stillson Creek — 380th St.

Map data ©2014 Google 1 mi

<https://www.google.com/maps/place/Chippewa+Falls,+WI/@44.9264328,-91.1724821,12z/data=!4m2!3m1!1s0x87f8a63f78bf...> 12/18/2014

1050-01-31 29WB

COUN	29W HWY RP	PLUS	CUM MILES	FEATURE T	F	D	LEFT		LEFT				MEDIAN		PAVEMENT				RIGHT				RIGHT		R	A	U	S	rp2	highway2
							SHOULDER WIDTH	PVD	TOT	1	1	2	2	TY	WID	T	YEAR	WID	L	1	1	2	2	WIDTH							CH	ME	C	R	S
107D	0.00	35.25	>> T OF DELMAR	U	D	003	008	00	00	02	060	8	1994	024	2	00	00	008	012	RU	2	107D	029W	CHIP	029W107D					
	0.00	35.25	>> V OF BOYD																			107D	029W	CHIP	029W107D					
	0.00	35.25	320TH ST	L																		107D	029W	CHIP	029W107D					
	0.28	35.53		U	D	003	008	00	00	02	060	8	1994	024	2	19	07	00	005	008	RU	2	107D	029W	CHIP	029W107D				
	0.32	35.57		U	D	003	008	00	00	02	060	8	1994	024	2	19	14	00	005	008	RU	2	107D	029W	CHIP	029W107D				
	0.38	35.63	OFF RAMP TO CTH D	R	U	D	003	008	00	00	02	060	8	1994	024	2	00	00	008	012	RU	2	107D	029W	CHIP	029W107D				
106K	0.00	35.84	B-09-0189 BRIDGE																			106K	029W	CHIP	029W106K					
	0.00	35.84	CTH D OVER																			106K	029W	CHIP	029W106K					
	0.08	35.92	MILEPOST 097																			106K	029W	CHIP	029W106K					
	0.10	35.94		U	D	003	008	00	00	02	060	8	1994	024	2	00	00	008	012	RU	2	106K	029W	CHIP	029W106K					
	0.11	35.95	ON RAMP FROM CTH D	R	U	D	003	008	00	00	02	060	8	1994	024	2	18	15	00	005	008	RU	2	106K	029W	CHIP	029W106K			
	0.21	36.05	>> V OF BOYD	R	D	003	008	00	00	02	060	8	1994	024	2	18	15	00	005	008	RU	2	106K	029W	CHIP	029W106K				
	0.21	36.05	>> T OF EDSON																			106K	029W	CHIP	029W106K					
105T	0.00	36.06	B-09-0022 BRIDGE																			105T	029W	CHIP	029W105T					
	0.00	36.06	CTH X OVER																			105T	029W	CHIP	029W105T					
	0.04	36.10		R	D	003	008	00	00	02	060	8	1994	024	2	00	00	005	008	RU	2	105T	029W	CHIP	029W105T					
	0.12	36.18		R	D	003	008	00	00	02	060	8	1994	024	2	00	00	008	012	RU	2	105T	029W	CHIP	029W105T					
	0.81	36.87	MILEPOST 096																			105T	029W	CHIP	029W105T					
104M	0.00	37.60	300TH ST	X																		104M	029W	CHIP	029W104M					
	0.25	37.85	MILEPOST 095																			104M	029W	CHIP	029W104M					
	1.25	38.85	MILEPOST 094																			104M	029W	CHIP	029W104M					
	2.25	39.85	MILEPOST 093																			104M	029W	CHIP	029W104M					
102G	0.00	40.56	270TH ST	X	R	D	003	008	00	00	02	060	8	1994	024	2	00	00	008	012	RU	2	102G	029W	CHIP	029W102G				
	0.26	40.82	MILEPOST 092																			102G	029W	CHIP	029W102G					
	0.70	41.26		R	D	003	008	00	00	02	060	8	1994	024	2	00	00	005	008	RU	2	102G	029W	CHIP	029W102G					
	0.72	41.28		R	D	003	008	00	00	02	060	8	1994	024	2	19	15	00	005	008	RU	2	102G	029W	CHIP	029W102G				
	0.79	41.35	OFF RAMP TO STH 27	R	R	D	003	008	00	00	02	060	8	1994	024	2	00	00	008	011	RU	2	102G	029W	CHIP	029W102G				
	0.82	41.38	>> T OF EDSON	R	D	003	008	00	00	02	060	4	1967	024	2	00	00	008	011	RU	2	102G	029W	CHIP	029W102G					
	0.82	41.38	>> T OF SIGEL																			102G	029W	CHIP	029W102G					
	0.95	41.51		R	D	003	008	00	00	02	060	4	1967	024	2	00	00	008	008	RU	2	102G	029W	CHIP	029W102G					
101D	0.00	41.56	B-09-0179 BRIDGE	R	D	003	008	00	00	02	060	4	1967	024	2	00	00	008	008	RU	1	101D	029W	CHIP	029W101D					
	0.00	41.56	STH 27 OVER																			101D	029W	CHIP	029W101D					
	0.03	41.59		R	D	003	008	00	00	02	060	4	1967	024	2	00	00	008	011	RU	1	101D	029W	CHIP	029W101D					
	0.10	41.66	ON RAMP FROM STH 27	R	R	D	003	008	00	00	02	060	4	1967	024	2	18	15	00	005	008	RU	1	101D	029W	CHIP	029W101D			
	0.13	41.69		R	D	003	008	00	00	000	4	1967	024	2	18	15	00	005	008	RU	1	101D	029W	CHIP	029W101D					
	0.18	41.74	>> T OF SIGEL	U	D	003	008	00	00	000	4	1967	024	2	18	15	00	005	008	RU	1	101D	029W	CHIP	029W101D					
	0.18	41.74	>> V OF CADOTT																			101D	029W	CHIP	029W101D					
	0.32	41.88		U	D	003	008	00	00	000	4	1967	024	2	00	00	005	008	RU	1	101D	029W	CHIP	029W101D						
	0.37	41.93		U	D	003	008	00	00	000	4	1967	024	2	00	00	008	011	RU	1	101D	029W	CHIP	029W101D						
	0.39	41.95	MILEPOST 091																			101D	029W	CHIP	029W101D					

	0.38	49.02		R	D 003 008	00	00	000	4	1967	024	2	00	00	008	008	RU	1	093K	029W	CHIP	029W093K	
	0.41	49.05		R	D 008 008	00	00	000	4	1967	024	2	00	00	008	008	RU	1	093K	029W	CHIP	029W093K	
	0.43	49.07		R	D 008 008	00	00	000	4	1967	024	2	00	00	010	010	RU	1	093K	029W	CHIP	029W093K	
092D	0.00	49.12	EAU CLAIRE UAB	X	R	D 003 008	00	00	000	4	1967	024	2	00	00	010	010	RU	1	092D	029W	CHIP	029W092D
	0.00	49.12	B-09-0035 BRIDGE																	092D	029W	CHIP	029W092D
	0.00	49.12	190TH ST. UNDER																	092D	029W	CHIP	029W092D
	0.05	49.17			R	D 003 008	00	00	000	4	1967	024	2	00	00	008	011	RU	1	092D	029W	CHIP	029W092D
	0.72	49.84	MILEPOST 083																	092D	029W	CHIP	029W092D
092D	0.75	49.87	MAINTENANCE CROSSOV L																	092D	029W	CHIP	029W092D
	0.97	50.09			R	D 008 008	00	00	000	4	1967	024	2	00	00	008	011	RU	1	092D	029W	CHIP	029W092D
	0.99	50.11			R	D 008 008	00	00	000	4	1967	024	2	00	00	010	010	RU	1	092D	029W	CHIP	029W092D
091G	0.00	50.17	B-09-0031 BRIDGE		R	D 003 008	00	00	000	4	1967	024	2	00	00	010	010	RU	1	091G	029W	CHIP	029W091G
	0.00	50.17	STILLSON CREEK UNDER																	091G	029W	CHIP	029W091G

PDP ID	ISEQNO	TRAF SEG ID	RECKEY	FOS PROJ ID	PDP FRM	PDP TO	PDP MILE	ACSI INTS NM	DIVUND	HWY&DIR	PPROJ GRP DESC	RATE	RATEFLAG	CRASHES	CRASHYR5-2014	CRASHYR4-2013	CRASHYR3-2012	CRASHYR2-2011	CRASHYR1-2010	CPM	AKNO	AKPROP	AKFLAG	RORPROP	RORFLAG	INTPROP	INTFLAG	CRSHSPOT	SEVINDX	SIREJUC	LOP	IMPFLAG	SFTY TRVL CLS CD	HSTL AADI 5 YR	MMGR WTHR CRSH TOT	MMGR FATAL CRSH TOT			
29 EB																																							
5502	34670	3212	50902935	10520162	029E091G000	029E092D000	1.05		D	029E	CHIPPEWA FALLS - CADOTT	19.129	0.00	0.6	0	3	0	0	0	0.6	0.0	0.0%	0.00	100.0%	0.00	0.0%	0.00	0	3				130	16368	3	0			
5503	34680	3212	50902935	10520162	029E092D000	029E094T000	1.45	EAU CLAIRE U	D	029E	CHIPPEWA FALLS - CADOTT	64.644	1.11	2.8	6	2	2	2	2	1.9	0.0	0.0%	0.00	71.4%	0.00	0.0%	0.00	1	28	7	21	YES	130	16368	6	0			
5504	34690	3212	50902935	10520162	029E094T000	029E096K000	1.77		D	029E	CHIPPEWA FALLS - CADOTT	26.479	0.00	1.4	2	1	1	1	2	0.8	0.2	14.3%	0.00	42.9%	0.00	0.0%	0.00	1	17	2			130	16368	1	0			
5505	34700	3212	50902935	10520162	029E096K000	029E096T000	0.84		D	029E	CHIPPEWA FALLS - CADOTT	31.882	0.00	0.8	2	1	1	0	0	1.0	0.0	0.0%	0.00	25.0%	0.00	25.0%	0.00	0	8				130	16368	1	0			
5506	34700	1487	50902940	10520162	029E096T000	029E097D000	0.52		D	029E	CHIPPEWA FALLS - CADOTT	41.114	0.00	0.6	1	0	0	0	2	1.2	0.0	0.0%	0.00	66.7%	0.00	0.0%	0.00	0	3				130	15378	3	0			
5507	34710	1487	50902940	10520162	029E097D000	029E099T000	1.53		D	029E	CHIPPEWA FALLS - CADOTT	46.577	0.00	2.0	6	0	1	2	1	1.3	0.0	0.0%	0.00	60.0%	0.00	0.0%	0.00	1	11				130	15378	8	0			
5508	34720	1487	50902940	10520162	029E099T000	029E101D000	1.46		D	029E	CHIPPEWA FALLS - CADOTT	53.692	0.00	2.2	0	2	3	2	4	1.5	0.0	0.0%	0.00	54.5%	0.00	0.0%	0.00	2	17				130	15378	3	0			
5510	34730	10	50902945	10520162	029E101D000	029E102G000	1.01		D	029E	CHIPPEWA FALLS - CADOTT	62.874	0.00	1.6	0	2	0	3	3	1.6	0.2	12.5%	0.00	75.0%	1.01	12.5%	0.00	0	19	9	12	YES	210	13806	3	0			
5511	34740	10	50902945	10520162	029E102G000	029E102G100	1.00	MAPLE DR	D	029E	CHIPPEWA FALLS - CADOTT	39.689	0.00	1.0	0	3	2	0	0	1.0	0.0	0.0%	0.00	40.0%	0.00	0.0%	0.00	0	5				210	13806	2	0			
5512	34750	10	50902945	10520162	029E102G100	029E102G196	0.96		D	029E	CHIPPEWA FALLS - CADOTT	49.611	0.00	1.2	3	1	2	0	0	1.3	0.0	0.0%	0.00	50.0%	0.00	0.0%	0.00	0	7				210	13806	1	0			
5513	34760	10	50902945	10520162	029E102G196	029E104M000	1.00		D	029E	CHIPPEWA FALLS - CADOTT	55.564	0.00	1.4	3	2	0	1	1	1.4	0.0	0.0%	0.00	57.1%	0.00	0.0%	0.00	1	9	2			210	13806	3	0			
5514	34770	10	50902945	10520162	029E104M000	029E104M112	1.12	10TH AVE	D	029E	CHIPPEWA FALLS - CADOTT	0.000	0.00	0.0	0	0	0	0	0	0.0	0.0	0.0%	0.00	0.0%	0.00	0.0%	0.00	0	0				210	13806	0	0			
5515	34780	10	50902945	10520162	029E104M112	029E105T017	0.62		D	029E	CHIPPEWA FALLS - CADOTT	64.014	0.00	1.0	1	1	1	0	2	1.6	0.2	20.0%	0.00	60.0%	0.00	20.0%	0.00	0	14				210	13806	4	1			
5516	34780	2772	50902950	10520162	029E105T017	029E107D000	0.62		D	029E	CHIPPEWA FALLS - CADOTT	26.338	0.00	0.4	0	0	0	1	1	0.6	0.0	0.0%	0.00	50.0%	0.00	0.0%	0.00	0	2				210	13422	2	0			
															24	18	13	12	18	85															43	1			
Re-reviewed on April 25, 2016																																							
PDP ID	ISEQNO	TRAF SEG ID	RECKEY	FOS PROJ ID	PDP FRM	PDP TO	PDP MILE	ACSI INTS NM	DIVUND	HWY&DIR	PPROJ GRP DESC	RATE	RATEFLAG	CRASHES	CRASHYR5-2014	CRASHYR4-2013	CRASHYR3-2012	CRASHYR2-2011	CRASHYR1-2010	CPM	AKNO	AKPROP	AKFLAG	RORPROP	RORFLAG	INTPROP	INTFLAG	CRSHSPOT	SEVINDX	SIREJUC	LOP	IMPFLAG	SFTY TRVL CLS CD	HSTL AADI 5 YR	MMGR WTHR CRSH TOT	MMGR FATAL CRSH TOT			
29 WB																																							
5901	36690	2772	50902950	10500161	029W107D000	029W108K001	0.60	320TH ST	D	029W	CHIPPEWA FALLS - CADOTT	54.433	0.00	0.8	0	2	1	0	1	1.3	0.0	0.0%	0.00	75.0%	0.00	0.0%	0.00	0	5					210	13422	3	0		
5902	36690	10	50902945	10500161	029W108K001	029W105T042	0.63		D	029W	CHIPPEWA FALLS - CADOTT	25.199	0.00	0.4	0	1	0	0	1	0.6	0.0	0.0%	0.00	100.0%	0.00	0.0%	0.00	0	3					210	13806	2	0		
5903	36680	10	50902945	10500161	029W105T042	029W104M000	1.12		D	029W	CHIPPEWA FALLS - CADOTT	28.349	0.00	0.8	0	2	0	1	1	0.7	0.0	0.0%	0.00	100.0%	0.00	0.0%	0.00	0	8					210	13806	4	0		
5904	36650	10	50902945	10500161	029W104M000	029W104M100	1.00	300TH ST	D	029W	CHIPPEWA FALLS - CADOTT	47.627	0.00	1.2	2	1	0	0	3	1.2	0.0	0.0%	0.00	66.7%	0.00	0.0%	0.00	0	6					210	13806	3	0		
5905	36660	10	50902945	10500161	029W104M100	029W104M195	0.95		D	029W	CHIPPEWA FALLS - CADOTT	8.356	0.00	0.2	0	1	0	0	0	0.2	0.0	0.0%	0.00	0.0%	0.00	0.0%	0.00	0	1					210	13806	0	0		
5906	36670	10	50902945	10500161	029W104M195	029W102G000	1.01		D	029W	CHIPPEWA FALLS - CADOTT	31.437	0.00	0.8	1	0	0	1	2	0.8	0.2	25.0%	0.00	100.0%	0.00	0.0%	0.00	0	11					210	13806	2	0		
5907	36640	10	50902945	10500161	029W102G000	029W102G095	0.95	270TH ST	D	029W	CHIPPEWA FALLS - CADOTT	66.844	0.00	1.6	1	2	2	1	2	1.7	0.0	0.0%	0.00	87.5%	0.00	0.0%	0.00	0	8					210	13806	6	0		
5908	36640	10	50902945	10500161	029W102G095	029W101D000	0.05		D	029W	CHIPPEWA FALLS - CADOTT	0.000	0.00	0.0	0	0	0	0	0	0.0	0.0	0.0%	0.00	0.0%	0.00	0.0%	0.00	0	0					210	13806	0	0		
5909	36630	1487	50902940	10500161	029W101D000	029W099T000	1.43		D	029W	CHIPPEWA FALLS - CADOTT	24.917	0.00	1.0	0	3	0	1	1	0.7	0.0	0.0%	0.00	40.0%	0.00	0.0%	0.00	0	5					130	15378	1	0		
5910	36620	1487	50902940	10500161	029W099T000	029W097D000	1.55		D	029W	CHIPPEWA FALLS - CADOTT	45.976	0.00	2.0	0	2	2	4	2	1.3	0.0	0.0%	0.00	50.0%	0.00	10.0%	0.00	0	15					130	15378	5	0		
5911	36610	1487	50902940	10500161	029W097D000	029W096T000	0.55		D	029W	CHIPPEWA FALLS - CADOTT	25.914	0.00	0.4	0	1	0	0	1	0.7	0.0	0.0%	0.00	50.0%	0.00	0.0%	0.00	0	2					130	15378	1	0		
5912	36610	3212	50902935	10500161	029W096T000	029W096K000	0.81		D	029W	CHIPPEWA FALLS - CADOTT	24.797	0.00	0.6	0	0	0	1	2	0.7	0.0	0.0%	0.00	66.7%	0.00	0.0%	0.00	0	7					130	16368	2	0		
5913	36600	3212	50902935	10500161	029W096K000	029W094T000	1.77		D	029W	CHIPPEWA FALLS - CADOTT	30.261	0.00	1.6	1	0	3	2	2	0.9	0.0	0.0%	0.00	50.0%	0.00	12.5%	0.00	1	12	2				130	16368	2	0		
5914	36590	3212	50902935	10500161	029W094T000	029W092D000	1.45		D	029W	CHIPPEWA FALLS - CADOTT	23.087	0.00	1.0	0	1	1	2	1	0.7	0.0	0.0%	0.00	100.0%	0.00	0.0%	0.00	0	5					130	16368	3	0		
5915	36580	3212	50902935	10500161	029W092D000	029W091G000	1.05	EAU CLAIRE U	D	029W	CHIPPEWA FALLS - CADOTT	31.882	0.00	1.0	1	2	1	1	0	1.0	0.0	0.0%	0.00	100.0%	0.00	0.0%	0.00	0	8					130	16368	3	0		
															6	18	10	14	19	67																			
Re-reviewed on April 25, 2016																																							

Crash Report Analysis

1. Project segments with above normal amounts of crashes.

NONE

- NO INVESTIGATION FLAGS

a. Segments with Metamanager level of Improvement indicators.

From RP _____ + _____ to RP _____ + _____
 From RP _____ + _____ to RP _____ + _____

b. Segments identified from crash listing.

From RP _____ + _____ to RP _____ + _____
 From RP _____ + _____ to RP _____ + _____

2. Project segments which are exempt from investigation for improvement.

a. Segments with no substandard highway elements (lane width, shoulder width, pavement cross slope, superelevation, vertical curves, horizontal curves, grades, bridge width, vertical clearance, horizontal clearance and bridge structural capacity).

From RP _____ + _____ to RP _____ + _____
 From RP _____ + _____ to RP _____ + _____

b. Segments where substandard geometrics are not the crash cause.

(1) From RP _____ + _____ to RP _____ + _____

- Substandard elements

<u>Type</u>	<u>Actual Value</u>	<u>Standard</u>
-------------	---------------------	-----------------

- * Type(s) of crashes that identified this segment

- Crash rate
- Fatality/serious injury
- Run off the road
- Intersection
- Non-intersection spots
- Other

(2) From RP _____ + _____ to RP _____ + _____

- Substandard elements

<u>Type</u>	<u>Actual Value</u>	<u>Standard</u>
-------------	---------------------	-----------------

* Type(s) of crashes that identified this segment

- Crash rate
- Fatality/serious injury
- Run off the road
- Intersection
- Non-intersection spots
- Other

c. Segments where the crash incidence is below the threshold level for improvement (1.5 crashes per million entering vehicles for intersections, _____ crashes per million vehicle-miles for linear facilities, or _____ crashes per million vehicles for non-intersection spot locations).

(1) From RP _____ + _____ to RP _____ + _____

- Types of crashes _____
- Threshold rate _____
- Actual rate _____

(2) From RP _____ + _____ to RP _____ + _____

- Types of crashes _____
- Threshold rate _____
- Actual rate _____

3. Project segments from #1 that are not exempt by #2 thus are not covered by the Programmatic Exceptions to Standards Report and for which a detailed analysis of substandard geometric elements is required. Any substandard features within these segments must either be upgraded by this project or an individual project exception to standards report is required.

From RP _____ + _____ to RP _____ + _____
 From RP _____ + _____ to RP _____ + _____

Suggested Step 3 Process

Potential "Improvement Flag" Removal - Safety Segments

1. Evaluate the 13 Controlling Design Criteria for all safety segments flagged with an "Improvement Flag" for conformance to the minimum design standards for the following: *NO IMPROVEMENT FLAGS in Project Limits*

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Design Speed | <input checked="" type="checkbox"/> Lane Width | <input checked="" type="checkbox"/> Vertical Alignment |
| <input checked="" type="checkbox"/> Horizontal Clearance | <input checked="" type="checkbox"/> Shoulder Width | <input checked="" type="checkbox"/> Stopping Sight Distance |
| <input checked="" type="checkbox"/> Vertical Clearance | <input checked="" type="checkbox"/> Bridge Width | <input checked="" type="checkbox"/> Grades |
| <input checked="" type="checkbox"/> Horizontal Alignment | <input checked="" type="checkbox"/> Superelevation | <input checked="" type="checkbox"/> Pavement Cross Slope |
| <input checked="" type="checkbox"/> Structural Capacity | | |

2. If substandard geometrics **do not exist** (on a safety segment basis), enter "No" in the (Substandard Geometrics) column - Step 3 on Screening Worksheet.

a. A safety segment is exempt from the regular safety/geometric design process and can proceed under the accelerated design process

3. If substandard geometrics **exist** (on a safety segment basis), enter "Yes" in the (Substandard Geometrics) column - Step 3 on Screening Worksheet and consider their effect on crashes as follows:

a. Do substandard geometrics contribute to the cause of crashes?

(1) Enter "Yes" or "No" in the "Contributing Cause" column.

(a) If "Yes" - Follow the regular safety/geometric design process to correct substandard geometrics.

(b) If "No" - Safety segment is exempt from the regular safety/geometric design process and can proceed under the accelerated design process.



**Division of Transportation
System Development**
Bureau of Traffic Operations
4802 Sheboygan Ave, Room 501
PO Box 7986
Madison, WI 53707-7986

**Scott Walker, Governor
Mark Gottlieb, Secretary**
Internet: www.dot.wisconsin.gov

Date: February 19, 2015

To: Region Directors
Attn: Regional System Planning and Operations Sections

From: Brian Porter, PE, PTOE
State Traffic Safety Engineer

Subject: 2013 Statewide Average Crash Rates

The following tables show the Wisconsin statewide average crash rates for the five year period from 2009-2013. Crashes involving deer are not included in the crash rates. The Division of Motor Vehicles (DMV) provided the crash data from the original Motor Vehicle Accident Report (MV4000) forms. The Division of Transportation Investment Management (DTIM) provided the vehicle miles of travel (VMT) and the crash rates for the State Trunk Highway (STH) system. The University of Wisconsin-Madison Traffic Operations and Safety Laboratory (UW TOPS Lab) provided the crash rates for the local system.

Crash rates are generated using the following equation:

$$\frac{\text{Total Crashes} * 100,000,000}{5\text{-year AADT} * \text{Length of segment} * \# \text{ of years of crash data} * 365} = \frac{\text{Crashes}}{100 \text{ Million Vehicle Miles Traveled (HMVMT)}}$$

where: Total Crashes = total number of crashes (excluding deer crashes) from 2009-2013
5-year AADT = historical average annual daily traffic volume for the 5-year period
Length of segment = length of segment in question measured in miles

Table 1 includes the statewide average crash rates for the State Trunk Highway (STH) system broken out by Meta-Manager Peer Group. The Meta-Manager Peer Groups are intended to represent a group of similar highway segments throughout the state. Slight modifications are made to the peer groups each year so these crash rates should not be compared to previous statewide average crash rates.

Table 2 includes the statewide average crash rates for the local system which are broken into Urban Streets and Rural County Trunk Highways. The Urban Streets category includes urban city streets, rural city streets, and urban County Trunk Highways.

The state and local crash rates are reported differently based on recommendations from the safety engineering community. This format is intended to better accommodate the end users of the data and aligns with current WisDOT business practices.

Crashes are broken out according to the definitions in the Law Enforcement Officer's Instruction Manual for Completing the Wisconsin Motor Vehicle Accident Report Form (MV4000):

- **Fatal (K)**- Any injury received in a traffic accident which results in death within 30 days of the accident.
- **Type A = Incapacitating Injury** - Any injury other than a fatal injury, which prevents the injured person from walking, driving, or from performing other activities, which he/she performed before the accident.
- **Type B = Non-incapacitating Injury** - Any injury, other than fatal or incapacitating, which is evident at the scene. Evidence of injury may include known symptoms of an injury, which are not directly observable.
- **Type C = Possible Injury** - Any injury which is not observable or evident at the scene but is claimed by the individual or suspected by the law enforcement officer.
- **PDO = Property Damage Only** - The definition of a reportable crash is based on reporting thresholds of \$1000 for property damage to any one person's property, \$1000 for government-owned vehicles, or \$200 for any other government-owned property, such as traffic control devices or guardrail. Any crash that meets these criteria is categorized as Property Damage Only (PDO).

Comparing Roadway Segments to the Statewide Average Crash Rates

The statewide average crash rates are provided for use in screening roadway segments that might warrant further analysis. More detailed crash analysis is needed to identify the extent of the roadway safety problem.

Crashes that occurred at intersections are included in the total crashes used to calculate the statewide average crash rates, so intersection-related crashes should not be removed from the comparison dataset.

Crashes that occurred on ramps at service interchanges are not included in the crashes used to calculate the statewide average crash rates.

Crashes that occurred on ramps at system interchanges (i.e. freeway to freeway) are included in the crashes used to calculate the corresponding freeway peer group average crash rate.

Table 1

**State Trunk Highway Crash Rates
5-Year Average (2009-2013)
(Crashes per 100 million vehicle miles traveled)**

	Meta-manager Peer Group	Total	Fatal (K)	Total Injury (A+B+C)	A	B	C	PDO
1	Rural and Small Urban ¹ Freeways	34	0.3	9.0	1.4	4.0	3.6	24.7
2	Rural and Small Urban ¹ Expressways	51	0.6	16.1	2.5	6.8	6.9	34.4
3	Rural STN with 3500 to 8700 ADT	68	1.2	25.1	4.5	10.4	10.2	42.1
4	Rural STN with 2000 to 3500 ADT	75	1.4	27.7	5.6	12.0	10.1	46.4
5	Rural STN with 750 to 2000 ADT	97	1.6	36.0	6.9	16.2	12.9	59.0
6	Rural STN with less than 750 ADT	153	2.8	63.0	12.7	30.3	19.9	86.9
7	Large Urban ² Freeways	72	0.3	19.3	1.4	6.0	11.9	52.3
8	Large Urban ² Divided Highways	291	0.7	98.0	6.1	28.6	63.3	192.7
9	Large Urban ² Undivided Highways ³	435	1.3	141.4	9.7	45.4	86.3	292.7
10	Small Urban ¹ STN ³	222	0.8	66.6	5.9	24.0	36.7	154.5
11	Rural STN with greater than 8700 ADT	87	1.2	31.5	4.7	12.3	14.5	54.4
12	STN in community of less than 5000 population	156	0.8	42.2	5.4	16.0	20.7	113.2

Notes:

1. Small Urban = 5,000 to 25,000 population
2. Large Urban = 25,000 or greater population
3. A portion of Large Urban Undivided Highways (Peer Group 9) and Small Urban STN (Peer Group 10) were reclassified as Rural STN (Peer Groups 3 and 11) to more accurately represent their operating characteristics. The current crash rates should not be compared to the Statewide Average Crash Rates for these peer groups provided prior to 2012.

Table 2

Local Road Crash Rates
(Crashes per 100 million vehicle miles traveled)

Urban Streets ¹							
Year	Total	Fatal (K)	Total Injury (A+B+C)	A	B	C	PDO
2009	281	0.5	81	5.9	27	48	200
2010	286	0.6	84	5.9	29	49	202
2011	317	0.6	88	5.8	31	52	228
2012	333	0.7	95	6.3	35	54	237
2013	368	0.7	96	6.2	33	57	272

Rural County Trunk Highways ²							
Year	Total	Fatal (K)	Total Injury (A+B+C)	A	B	C	PDO
2009	142	1.6	53	8.4	23	21	88
2010	101	1.3	37	6.6	16	15	62
2011	100	1.5	36	6.0	16	15	62
2012	96	1.2	37	6.0	17	13	59
2013	102	1.2	35	5.4	16	14	67

Notes:

1. Includes urban city streets, rural city streets, and urban County Trunk Highways. Prior to 2009, the “Urban Streets” category also included Urban State Trunk Highways so the current crash rates should not be compared to the “Urban Streets” crash rates provided prior to 2009.
2. Includes all rural County Trunk Highways

Segment Crash Rate Worksheet

5/2/2016

Segment Crash Rate Worksheet

Project ID: 1050-01-31

County: Chippewa

City of:

Village of:

Township of: Lafayette/Sigel

Highway: STH 29

Location: Stillson Creek to CTH XX

Limits: 029W107D050 to 029W091G055

Crash Data (Year - Year): 2010 thru available 2014

Number of Years (n):	→	5	
Total Number of Crashes:	→	67	
Total Number of FAT Crashes:	0	0.0%	
Total Number of INJ A Crashes:	1	1.5%	
Total Number of INJ B Crashes:	5	7.5%	
Total Number of INJ C Crashes:	7	10.4%	
Total Number of PD Crashes:	54	80.6%	
Average Daily Traffic (ADT):	→	15378	
Segment Length (Miles):	→	15	
Average Yearly Total Crash Rate:	→	15.916	
<small>(total crashes/n) * 100000000 / (adt * 365 * length)</small>			
Average Yearly Fatal Crash Rate:	→	0.000	
<small>(FAT crashes/n) * 100000000 / (adt * 365 * length)</small>			
Average Yearly Type A Crash Rate:	→	0.238	
<small>(INJ A crashes/n) * 100000000 / (adt * 365 * length)</small>			
Average Yearly Type B Crash Rate:	→	1.188	
<small>(INJ B crashes/n) * 100000000 / (adt * 365 * length)</small>			
Average Yearly Type C Crash Rate:	→	1.663	
<small>(INJ C crashes/n) * 100000000 / (adt * 365 * length)</small>			
Average Yearly PD Crash Rate:	→	12.827	
<small>(PD crashes/n) * 100000000 / (adt * 365 * length)</small>			

Rate unit is # of crashes/100 million vehicle miles

Date: April 25, 2016

To: NW Region Scoping Files

From: Matthew Reddy, P.E. 
Traffic Engineer
WisDOT, DTSD-NW Region, Eau Claire office

Subject: Safety Screening Analysis (SSA)
Project ID: 1052-01-32, 62
Chippewa Falls – Cadott
Stillson Creek – 320th St.
Chippewa County
STH 29 (EB)

This report summarizes the Safety Screening Analysis (SSA), per Facilities Development Manual 11-1-4, for the subject project. The SSA process will include a review of the metamanager data for improvement flags, review of a crash history for the entire project, and determination as to whether any improvements should be considered.

Project Limits

Western limits: Stillson Creek Bridge
Eastern limits: 320th St.
Length: 14.48 miles

Metamanager / PDP Segments

MM data: April 2015, 2010 – 2014 crashes
EB 29: 14 segments; 5502 – 5516

SSA Step 1: Analyze project roadway using the Metamanager (MM) safety module.

The following PDP segments have investigation flags.

EB STH 29

PDP ID 5503	RP 092D+000 – 94T+000	LOP 21	1.45 miles
PDP ID 5510	RP 101D+000 – 101G+000	LOP 12	1.01 miles

SSA Step 2: Manually review crash summaries.

Crash data was obtained for years 2010 – 2014. There were 85 crashes identified within the limits of this project. Review of the summary crash data did not reveal any additional segments that should have investigation flags added. There are no additional concentrations of spot type crashes or any other

additional unusual concentration of crashes along any particular segment. No additional “investigation” flag segments were identified.

SSA Step 3: Evaluate PDP segments investigation flags.

PDP ID 5503 RP 092D+000 – 94T+000 LOP 21 1.45 miles

Substandard criteria: None

This PDP segment includes a crash rate flag and a KAB crash rate flag. Metamanager identified 14 crashes in this segment, of which 3 were type B injury (non-incapacitating), 5 were type C (possible injury) and 6 were property damage only crashes. One of the type B injury accidents occurred from a vehicle sliding off of the road during icy conditions. Another was the result of alcohol and inattentive driving according to the accident report. The other type B did not have an accident report in the database. Three of the type C crashes were attributed to snow and ice conditions causing vehicles to lose control and run off the road. The other two were caused by inattentive driving where one driver was tuning the radio and ran off the road and in the other the driver rear ended a semi-truck trailer. The PD crashes include accidents related to weather conditions, following too close, and inattentive driving. The crash reports did not indicate any reason to believe roadway features were the cause of these accidents.

There are no substandard controlling criteria in this PDP segment. Low cost safety treatments and countermeasures have been considered during evaluation of the crash details. However, no safety treatments or countermeasures were determined to be feasible.

PDP ID 5510 RP 101D+000 – 101G+000 LOP 12 1.01 miles

Substandard criteria: None

This PDP segment included a KAB injury rate flag. Metamanager identified 8 crashes in this segment, of which one was a type A injury (incapacitating), one was a type B injury (non-incapacitating), one was a type C (possible injury) and 5 were property damage only crashes. The type A injury accident occurred when the driver swerved to avoid a deer, lost control, drove down an embankment and then overturned the vehicle. The type B injury accident occurred when the driver lost control in snowy road conditions and drove into the ditch. The type C accident occurred in a construction zone when the driver hit a construction barrel and then lost control of the vehicle and crossed the median and WB STH 29 before coming to a stop in the ditch. The PD crashes include accidents related to weather conditions, a vehicle fire, failure to yield in a construction zone, and a medical condition which disabled a driver and caused loss of control. The crash reports did not indicate any reason to believe roadway features were the cause of these accidents.

There are no substandard controlling criteria in this PDP segment. Low cost safety treatments and countermeasures have been considered during evaluation of the crash details. However, no safety treatments or countermeasures were determined to be feasible.

Attachments:

Project Limits Map

STN Log listing

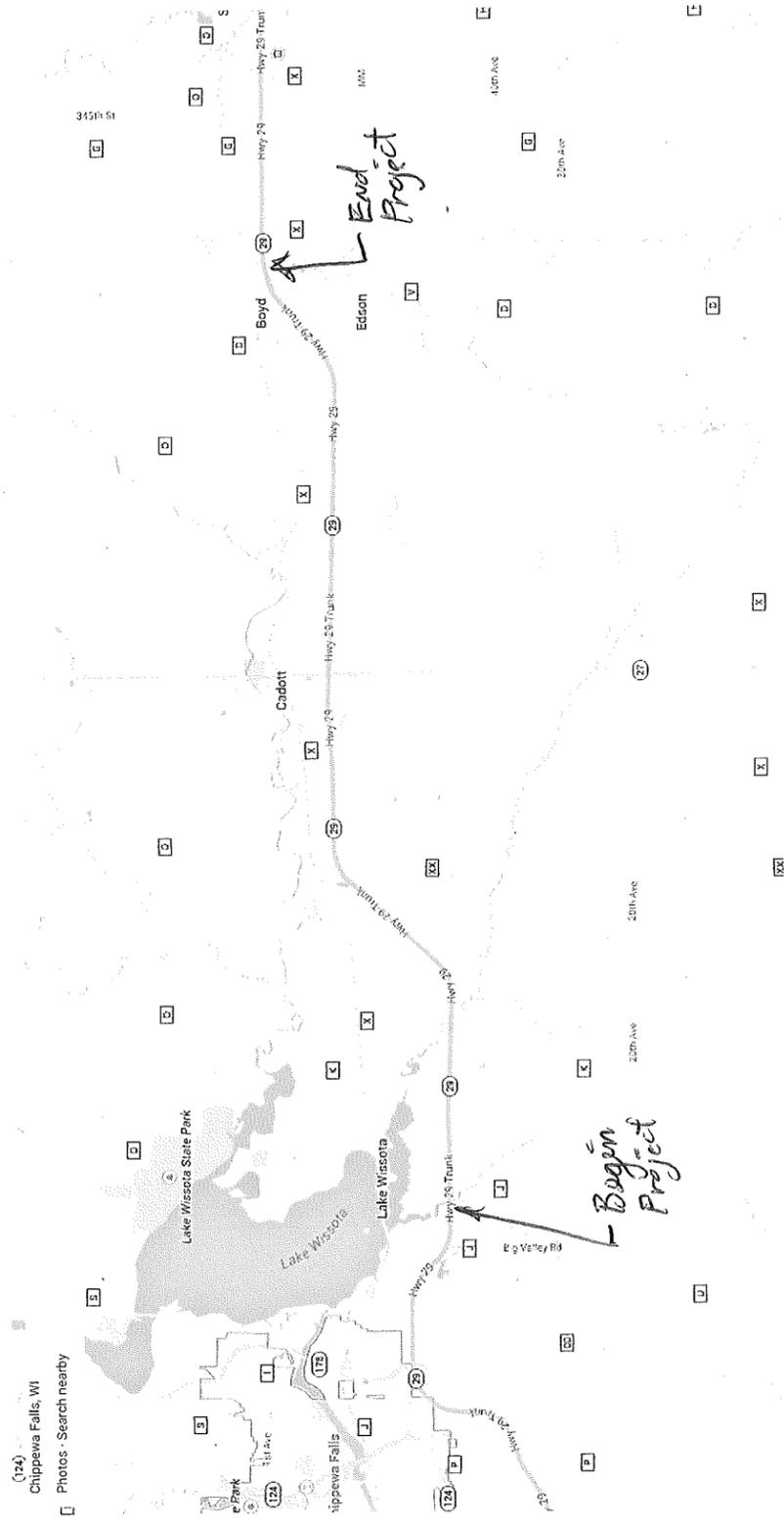
Metamanager listing

Crash Database Spreadsheet

SSA Log Sheets, FDM 11-1-4

State 5 Year Average Crash Rates

Segment Crash Rate Worksheet



STH 29
 Stillson Creek - 320th St.

Map data ©2014 Google 1 mi

<https://www.google.com/maps/place/Chippewa+Falls,+WI/@44.9264328,-91.1724821,12z/data=!4m2!3m1!1s0x87f8a63f78bf...> 12/18/2014

		0.82	87.63			R	D	003	007		00		00	02	060	8	1993	024	2		00		00	010	010	RU	1		00	096K	029E	CHIP	029E096K				
	096T	0.00	87.65	B-09-0019	BRIDGE																																
		0.00	87.65	CTH X OVER																																	
		0.02	87.67			R	D	003	007		00		00	02	060	8	1993	024	2		00		00	008	011	RU	1		00	096T	029E	CHIP	029E096T				
		0.17	87.82	ON RAMP FROM CTH X		R	R	D	003	007	00		00	02	060	8	1993	024	2	18	14		00	006	010	RU	1		00	096T	029E	CHIP	029E096T				
		0.32	87.97			R	D	003	007		00		00	02	060	8	1993	024	2		00		00	006	010	RU	1		00	096T	029E	CHIP	029E096T				
		0.37	88.02	MILEPOST 088																																	
		0.41	88.06			R	D	003	007		00		00	02	060	8	1993	024	2		00		00	008	011	RU	1		00	096T	029E	CHIP	029E096T				
		0.47	88.12			R	D	003	007		00		00	02	060	8	1993	024	2		00		00	010	010	RU	1		00	096T	029E	CHIP	029E096T				
	097D	0.00	88.17	B-09-0176	BRIDGE																																
		0.00	88.17	CTH XX OVER																																	
		0.03	88.20			R	D	003	007		00		00	02	060	8	1993	024	2		00		00	008	011	RU	1		00	097D	029E	CHIP	029E097D				
		0.19	88.36	CROSSOVER		L																															
		0.53	88.70			R	D	006	006		00		00	02	060	8	1993	024	2		00		00	008	011	RU	1		00	097D	029E	CHIP	029E097D				
		0.58	88.75			R	D	003	007		00		00	02	060	8	1993	024	2		00		00	008	011	RU	1		00	097D	029E	CHIP	029E097D				
		0.68	88.85	MILEPOST 089																																	
		1.50	89.67			R	D	003	007		00		00	02	060	8	1993	024	2		00		00	010	010	RU	1		00	097D	029E	CHIP	029E097D				
	099T	0.00	89.70	B-09-0020	BRIDGE																																
		0.00	89.70	CTH X UNDER																																	
		0.14	89.84			R	D	003	007		00		00	02	060	8	1993	024	2		00		00	008	011	RU	1		00	099T	029E	CHIP	029E099T				
		0.15	89.85	MILEPOST 090																																	
		0.50	90.20	>> T OF SIGEL		U	D	003	007		00		00	02	060	8	1993	024	2		00		00	008	011	RU	1		00	099T	029E	CHIP	029E099T				
		0.50	90.20	>> V OF CADOTT																																	
		1.08	90.78	CROSSOVER		L																															
		1.15	90.85	MILEPOST 091																																	
		1.22	90.92			U	D	003	007		00		00	02	060	8	1993	024	2		00		00	005	008	RU	1		00	099T	029E	CHIP	029E099T				
		1.24	90.94			U	D	003	007		00		00	02	060	8	1993	024	2	02	15		00	005	008	RU	1		00	099T	029E	CHIP	029E099T				
		1.29	90.99			U	D	003	007		00		00	02	060	8	1993	024	2	02	15		00	005	008	ME	1		00	099T	029E	CHIP	029E099T				
		1.30	91.00			U	D	003	007		00		00	02	060	8	1993	024	2		00		00	008	011	ME	1		00	099T	029E	CHIP	029E099T				
		1.32	91.02	OFF RAMP TO STH 27		R																															
	101D	0.00	91.16	B-09-0179	BRIDGE		U	D	003	007		00		00	02	060	8	1993	024	2		00		00	008	008	ME	2		00	101D	029E	CHIP	029E101D			
		0.00	91.16	STH 27 OVER																																	
		0.03	91.19			U	D	003	007		00		00	02	060	8	1993	024	2		00		00	008	011	ME	2		00	101D	029E	CHIP	029E101D				
		0.19	91.35	ON RAMP FROM STH 27		R	U	D	003	007		00		00	02	060	8	1993	024	2	18	15		00	005	010	ME	2		00	101D	029E	CHIP	029E101D			
		0.35	91.51			U	D	003	007		00		00	02	060	8	1993	024	2		00		00	005	010	ME	2		00	101D	029E	CHIP	029E101D				
		0.43	91.59			U	D	003	007		00		00	02	060	8	1993	024	2		00		00	008	012	ME	2		00	101D	029E	CHIP	029E101D				
		0.51	91.67	>> V OF CADOTT		R	D	003	007		00		00	02	060	8	1993	024	2		00		00	008	012	RU	2		00	101D	029E	CHIP	029E101D				
		0.51	91.67	>> T OF SIGEL																																	
		0.54	91.70	CROSSOVER		L																															
		0.63	91.79			R	D	003	007		00		00	02	060	8	1994	024	2		00		00	008	012	RU	2		00	101D	029E	CHIP	029E101D				
		0.73	91.89	MILEPOST 092																																	
	102G	0.00	92.17	MAPLE DR		X	R	D	003	008		00		00	02	060	8	1994	024	2		00		00	008	012	RU	2		00	102G	029E	CHIP	029E102G			
		0.00	92.17	270TH ST		X																															
		0.61	92.78	MILEPOST 093																																	
		1.01	93.18	>> T OF SIGEL		R	D	003	008		00		00	02	060	8	1994	024	2		00		00	008	012	RU	2		00	102G	029E	CHIP	029E102G				
		1.01	93.18	>> T OF EDSON																																	
		1.61	93.78	MILEPOST 094																																	

PDP ID	ISEQNO	TRAF SEG ID	RECKEY	FOS PROJ ID	PDP FRM	PDP TO	PDP MILE	ACSI INTS NM	DIVUND	HWY&DIR	PPROJ GRP DESC	RATE	RATEFLAG	CRASHES	CRASHYR5-2014	CRASHYR4-2013	CRASHYR3-2012	CRASHYR2-2011	CRASHYR1-2010	CPM	AKNO	AKPROP	AKFLAG	RORPROP	RORFLAG	INTPROP	INTFLAG	CRSHSPOT	SEVINDX	SIREduc	LOP	IMPFLAG	SFTY TRVL CLS CD	HSTL AADT 5 YR	MMGR WTHR CRSH TOT	MMGR FATAL CRSH TOT	
29 EB																																					
5502	34670	3212	50902935	10520162	029E091G000	029E092D000	1.05		D	029E	CHIPPEWA FALLS - CADOTT	19.129	0.00	0.6	0	3	0	0	0	0.6	0.0	0.0%	0.00	100.0%	0.00	0.0%	0.00	0	3				130	16368	3	0	
5503	34680	3212	50902935	10520162	029E092D000	029E094T000	1.45	EAU CLAIRE U	D	029E	CHIPPEWA FALLS - CADOTT	64.644	1.11	2.8	6	2	2	2	2	1.9	0.0	0.0%	0.00	71.4%	0.00	0.0%	0.00	1	28	7	21	YES	130	16368	6	0	
5504	34690	3212	50902935	10520162	029E094T000	029E096K000	1.77		D	029E	CHIPPEWA FALLS - CADOTT	26.479	0.00	1.4	2	1	1	1	2	0.8	0.2	14.3%	0.00	42.9%	0.00	0.0%	0.00	1	17	2			130	16368	1	0	
5505	34700	3212	50902935	10520162	029E096K000	029E096T000	0.84		D	029E	CHIPPEWA FALLS - CADOTT	31.882	0.00	0.8	2	1	1	0	0	1.0	0.0	0.0%	0.00	25.0%	0.00	25.0%	0.00	0	8				130	16368	1	0	
5506	34700	1487	50902940	10520162	029E096T000	029E097D000	0.52		D	029E	CHIPPEWA FALLS - CADOTT	41.114	0.00	0.6	1	0	0	0	2	1.2	0.0	0.0%	0.00	66.7%	0.00	0.0%	0.00	0	3				130	15378	3	0	
5507	34710	1487	50902940	10520162	029E097D000	029E099T000	1.53		D	029E	CHIPPEWA FALLS - CADOTT	46.577	0.00	2.0	6	0	1	2	1	1.3	0.0	0.0%	0.00	60.0%	0.00	0.0%	0.00	1	11				130	15378	8	0	
5508	34720	1487	50902940	10520162	029E099T000	029E101D000	1.46		D	029E	CHIPPEWA FALLS - CADOTT	53.692	0.00	2.2	0	2	3	2	4	1.5	0.0	0.0%	0.00	54.5%	0.00	0.0%	0.00	2	17				130	15378	3	0	
5510	34730	10	50902945	10520162	029E101D000	029E102G000	1.01		D	029E	CHIPPEWA FALLS - CADOTT	62.874	0.00	1.6	0	2	0	3	3	1.6	0.2	12.5%	0.00	75.0%	1.01	12.5%	0.00	0	19	9	12	YES	210	13806	3	0	
5511	34740	10	50902945	10520162	029E102G000	029E102G100	1.00	MAPLE DR	D	029E	CHIPPEWA FALLS - CADOTT	39.689	0.00	1.0	0	3	2	0	0	1.0	0.0	0.0%	0.00	40.0%	0.00	0.0%	0.00	0	5				210	13806	2	0	
5512	34750	10	50902945	10520162	029E102G100	029E102G196	0.96		D	029E	CHIPPEWA FALLS - CADOTT	49.611	0.00	1.2	3	1	2	0	0	1.3	0.0	0.0%	0.00	50.0%	0.00	0.0%	0.00	0	7				210	13806	1	0	
5513	34760	10	50902945	10520162	029E102G196	029E104M000	1.00		D	029E	CHIPPEWA FALLS - CADOTT	55.564	0.00	1.4	3	2	0	1	1	1.4	0.0	0.0%	0.00	57.1%	0.00	0.0%	0.00	1	9	2			210	13806	3	0	
5514	34770	10	50902945	10520162	029E104M000	029E104M112	1.12	10TH AVE	D	029E	CHIPPEWA FALLS - CADOTT	0.000	0.00	0.0	0	0	0	0	0	0.0	0.0	0.0%	0.00	0.0%	0.00	0.0%	0.00	0	0				210	13806	0	0	
5515	34780	10	50902945	10520162	029E104M112	029E105T017	0.62		D	029E	CHIPPEWA FALLS - CADOTT	64.014	0.00	1.0	1	1	1	0	2	1.6	0.2	20.0%	0.00	60.0%	0.00	20.0%	0.00	0	14				210	13806	4	1	
5516	34780	2772	50902950	10520162	029E105T017	029E107D000	0.62		D	029E	CHIPPEWA FALLS - CADOTT	26.338	0.00	0.4	0	0	0	1	1	0.6	0.0	0.0%	0.00	50.0%	0.00	0.0%	0.00	0	2				210	13422	2	0	
															24	18	13	12	18	85															43	1	
Re-reviewed on April 25, 2016																																					
PDP ID	ISEQNO	TRAF SEG ID	RECKEY	FOS PROJ ID	PDP FRM	PDP TO	PDP MILE	ACSI INTS NM	DIVUND	HWY&DIR	PPROJ GRP DESC	RATE	RATEFLAG	CRASHES	CRASHYR5-2014	CRASHYR4-2013	CRASHYR3-2012	CRASHYR2-2011	CRASHYR1-2010	CPM	AKNO	AKPROP	AKFLAG	RORPROP	RORFLAG	INTPROP	INTFLAG	CRSHSPOT	SEVINDX	SIREduc	LOP	IMPFLAG	SFTY TRVL CLS CD	HSTL AADT 5 YR	MMGR WTHR CRSH TOT	MMGR FATAL CRSH TOT	
29 WB																																					
5901	36690	2772	50902950	10500161	029W107D000	029W108K001	0.60	320TH ST	D	029W	CHIPPEWA FALLS - CADOTT	54.433	0.00	0.8	0	2	1	0	1	1.3	0.0	0.0%	0.00	75.0%	0.00	0.0%	0.00	0	5					210	13422	3	0
5902	36690	10	50902945	10500161	029W108K001	029W105T042	0.63		D	029W	CHIPPEWA FALLS - CADOTT	25.199	0.00	0.4	0	1	0	0	1	0.6	0.0	0.0%	0.00	100.0%	0.00	0.0%	0.00	0	3					210	13806	2	0
5903	36680	10	50902945	10500161	029W105T042	029W104M000	1.12		D	029W	CHIPPEWA FALLS - CADOTT	28.349	0.00	0.8	0	2	0	1	1	0.7	0.0	0.0%	0.00	100.0%	0.00	0.0%	0.00	0	8					210	13806	4	0
5904	36650	10	50902945	10500161	029W104M000	029W104M100	1.00	300TH ST	D	029W	CHIPPEWA FALLS - CADOTT	47.627	0.00	1.2	2	1	0	0	3	1.2	0.0	0.0%	0.00	66.7%	0.00	0.0%	0.00	0	6					210	13806	3	0
5905	36660	10	50902945	10500161	029W104M100	029W104M195	0.95		D	029W	CHIPPEWA FALLS - CADOTT	8.356	0.00	0.2	0	1	0	0	0	0.2	0.0	0.0%	0.00	0.0%	0.00	0.0%	0.00	0	1					210	13806	0	0
5906	36670	10	50902945	10500161	029W104M195	029W102G000	1.01		D	029W	CHIPPEWA FALLS - CADOTT	31.437	0.00	0.8	1	0	0	1	2	0.8	0.2	25.0%	0.00	100.0%	0.00	0.0%	0.00	0	11					210	13806	2	0
5907	36640	10	50902945	10500161	029W102G000	029W102G095	0.95	270TH ST	D	029W	CHIPPEWA FALLS - CADOTT	66.844	0.00	1.6	1	2	2	1	2	1.7	0.0	0.0%	0.00	87.5%	0.00	0.0%	0.00	0	8					210	13806	6	0
5908	36640	10	50902945	10500161	029W102G095	029W101D000	0.05		D	029W	CHIPPEWA FALLS - CADOTT	0.000	0.00	0.0	0	0	0	0	0	0.0	0.0	0.0%	0.00	0.0%	0.00	0.0%	0.00	0	0					210	13806	0	0
5909	36630	1487	50902940	10500161	029W101D000	029W099T000	1.43		D	029W	CHIPPEWA FALLS - CADOTT	24.917	0.00	1.0	0	3	0	1	1	0.7	0.0	0.0%	0.00	40.0%	0.00	0.0%	0.00	0	5					130	15378	1	0
5910	36620	1487	50902940	10500161	029W099T000	029W097D000	1.55		D	029W	CHIPPEWA FALLS - CADOTT	45.976	0.00	2.0	0	2	2	4	2	1.3	0.0	0.0%	0.00	50.0%	0.00	10.0%	0.00	0	15					130	15378	5	0
5911	36610	1487	50902940	10500161	029W097D000	029W096T000	0.55		D	029W	CHIPPEWA FALLS - CADOTT	25.914	0.00	0.4	0	1	0	0	1	0.7	0.0	0.0%	0.00	50.0%	0.00	0.0%	0.00	0	2					130	15378	1	0
5912	36610	3212	50902935	10500161	029W096T000	029W096K000	0.81		D	029W	CHIPPEWA FALLS - CADOTT	24.797	0.00	0.6	0	0	0	1	2	0.7	0.0	0.0%	0.00	66.7%	0.00	0.0%	0.00	0	7					130	16368	2	0
5913	36600	3212	50902935	10500161	029W096K000	029W094T000	1.77		D	029W	CHIPPEWA FALLS - CADOTT	30.261	0.00	1.6	1	0	3	2	2	0.9	0.0	0.0%	0.00	50.0%	0.00	12.5%	0.00	1	12	2				130	16368	2	0
5914	36590	3212	50902935	10500161	029W094T000	029W092D000	1.45		D	029W	CHIPPEWA FALLS - CADOTT	23.087	0.00	1.0	0	1	1	2	1	0.7	0.0	0.0%	0.00	100.0%	0.00	0.0%	0.00	0	5					130	16368	3	0
5915	36580	3212	50902935	10500161	029W092D000	029W091G000	1.05	EAU CLAIRE U	D	029W	CHIPPEWA FALLS - CADOTT	31.882	0.00	1.0	1	2	1	1	0	1.0	0.0	0.0%	0.00	100.0%	0.00	0.0%	0.00	0	8					130	16368	3	0
															6	18	10	14	19	67																	
Re-reviewed on April 25, 2016																																					

Crash Report Analysis

1. Project segments with above normal amounts of crashes.

a. Segments with Metamanager level of Improvement indicators.

From RP 92D + 000 to RP 94T + 000
 From RP 101D + 000 to RP 101G + 000

b. Segments identified from crash listing.

From RP _____ + _____ to RP _____ + _____
 From RP _____ + _____ to RP _____ + _____

2. Project segments which are exempt from investigation for improvement.

a. Segments with no substandard highway elements (lane width, shoulder width, pavement cross slope, superelevation, vertical curves, horizontal curves, grades, bridge width, vertical clearance, horizontal clearance and bridge structural capacity).

From RP 92D + 000 to RP 94T + 000
 From RP 101D + 000 to RP 101G + 000

b. Segments where substandard geometrics are not the crash cause.

(1) From RP _____ + _____ to RP _____ + _____

- Substandard elements

<u>Type</u>	<u>Actual Value</u>	<u>Standard</u>
-------------	---------------------	-----------------

- * Type(s) of crashes that identified this segment

- Crash rate
- Fatality/serious injury
- Run off the road
- Intersection
- Non-intersection spots
- Other

(2) From RP _____ + _____ to RP _____ + _____

- Substandard elements

<u>Type</u>	<u>Actual Value</u>	<u>Standard</u>
-------------	---------------------	-----------------

- * Type(s) of crashes that identified this segment

- Crash rate
- Fatality/serious injury
- Run off the road
- Intersection
- Non-intersection spots
- Other

c. Segments where the crash incidence is below the threshold level for improvement (1.5 crashes per million entering vehicles for intersections, _____ crashes per million vehicle-miles for linear facilities, or _____ crashes per million vehicles for non-intersection spot locations).

(1) From RP _____ + _____ to RP _____ + _____

- Types of crashes _____
- Threshold rate _____
- Actual rate _____

(2) From RP _____ + _____ to RP _____ + _____

- Types of crashes _____
- Threshold rate _____
- Actual rate _____

3. Project segments from #1 that are not exempt by #2 thus are not covered by the Programmatic Exceptions to Standards Report and for which a detailed analysis of substandard geometric elements is required. Any substandard features within these segments must either be upgraded by this project or an individual project exception to standards report is required.

From RP _____ + _____ to RP _____ + _____

From RP _____ + _____ to RP _____ + _____

Suggested Step 3 Process

Potential "Improvement Flag" Removal - Safety Segments

1. Evaluate the 13 Controlling Design Criteria for all safety segments flagged with an "Improvement Flag" for conformance to the minimum design standards for the following:

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Design Speed | <input checked="" type="checkbox"/> Lane Width | <input checked="" type="checkbox"/> Vertical Alignment |
| <input checked="" type="checkbox"/> Horizontal Clearance | <input checked="" type="checkbox"/> Shoulder Width | <input checked="" type="checkbox"/> Stopping Sight Distance |
| <input checked="" type="checkbox"/> Vertical Clearance | <input checked="" type="checkbox"/> Bridge Width | <input checked="" type="checkbox"/> Grades |
| <input checked="" type="checkbox"/> Horizontal Alignment | <input checked="" type="checkbox"/> Superelevation | <input checked="" type="checkbox"/> Pavement Cross Slope |
| <input checked="" type="checkbox"/> Structural Capacity | | |

2. If substandard geometrics **do not exist** (on a safety segment basis), enter "No" in the (Substandard Geometrics) column - Step 3 on Screening Worksheet. ✓

- ✓ a. A safety segment is exempt from the regular safety/geometric design process and can proceed under the accelerated design process

3. If substandard geometrics **exist** (on a safety segment basis), enter "Yes" in the (Substandard Geometrics) column - Step 3 on Screening Worksheet and consider their effect on crashes as follows:

- a. Do substandard geometrics contribute to the cause of crashes?

- (1) Enter "Yes" or "No" in the "Contributing Cause" column.

- (a) If "Yes" - Follow the regular safety/geometric design process to correct substandard geometrics.

- (b) If "No" - Safety segment is exempt from the regular safety/geometric design process and can proceed under the accelerated design process.



**Division of Transportation
System Development**
Bureau of Traffic Operations
4802 Sheboygan Ave, Room 501
PO Box 7986
Madison, WI 53707-7986

**Scott Walker, Governor
Mark Gottlieb, Secretary**
Internet: www.dot.wisconsin.gov

Date: February 19, 2015

To: Region Directors
Attn: Regional System Planning and Operations Sections

From: Brian Porter, PE, PTOE
State Traffic Safety Engineer

Subject: 2013 Statewide Average Crash Rates

The following tables show the Wisconsin statewide average crash rates for the five year period from 2009-2013. Crashes involving deer are not included in the crash rates. The Division of Motor Vehicles (DMV) provided the crash data from the original Motor Vehicle Accident Report (MV4000) forms. The Division of Transportation Investment Management (DTIM) provided the vehicle miles of travel (VMT) and the crash rates for the State Trunk Highway (STH) system. The University of Wisconsin-Madison Traffic Operations and Safety Laboratory (UW TOPS Lab) provided the crash rates for the local system.

Crash rates are generated using the following equation:

$$\frac{\text{Total Crashes} * 100,000,000}{5\text{-year AADT} * \text{Length of segment} * \# \text{ of years of crash data} * 365} = \frac{\text{Crashes}}{100 \text{ Million Vehicle Miles Traveled (HMVMT)}}$$

where: Total Crashes = total number of crashes (excluding deer crashes) from 2009-2013
5-year AADT = historical average annual daily traffic volume for the 5-year period
Length of segment = length of segment in question measured in miles

Table 1 includes the statewide average crash rates for the State Trunk Highway (STH) system broken out by Meta-Manager Peer Group. The Meta-Manager Peer Groups are intended to represent a group of similar highway segments throughout the state. Slight modifications are made to the peer groups each year so these crash rates should not be compared to previous statewide average crash rates.

Table 2 includes the statewide average crash rates for the local system which are broken into Urban Streets and Rural County Trunk Highways. The Urban Streets category includes urban city streets, rural city streets, and urban County Trunk Highways.

The state and local crash rates are reported differently based on recommendations from the safety engineering community. This format is intended to better accommodate the end users of the data and aligns with current WisDOT business practices.

Crashes are broken out according to the definitions in the Law Enforcement Officer's Instruction Manual for Completing the Wisconsin Motor Vehicle Accident Report Form (MV4000):

- **Fatal (K)**- Any injury received in a traffic accident which results in death within 30 days of the accident.
- **Type A = Incapacitating Injury** - Any injury other than a fatal injury, which prevents the injured person from walking, driving, or from performing other activities, which he/she performed before the accident.
- **Type B = Non-incapacitating Injury** - Any injury, other than fatal or incapacitating, which is evident at the scene. Evidence of injury may include known symptoms of an injury, which are not directly observable.
- **Type C = Possible Injury** - Any injury which is not observable or evident at the scene but is claimed by the individual or suspected by the law enforcement officer.
- **PDO = Property Damage Only** - The definition of a reportable crash is based on reporting thresholds of \$1000 for property damage to any one person's property, \$1000 for government-owned vehicles, or \$200 for any other government-owned property, such as traffic control devices or guardrail. Any crash that meets these criteria is categorized as Property Damage Only (PDO).

Comparing Roadway Segments to the Statewide Average Crash Rates

The statewide average crash rates are provided for use in screening roadway segments that might warrant further analysis. More detailed crash analysis is needed to identify the extent of the roadway safety problem.

Crashes that occurred at intersections are included in the total crashes used to calculate the statewide average crash rates, so intersection-related crashes should not be removed from the comparison dataset.

Crashes that occurred on ramps at service interchanges are not included in the crashes used to calculate the statewide average crash rates.

Crashes that occurred on ramps at system interchanges (i.e. freeway to freeway) are included in the crashes used to calculate the corresponding freeway peer group average crash rate.

Table 1

**State Trunk Highway Crash Rates
5-Year Average (2009-2013)
(Crashes per 100 million vehicle miles traveled)**

	Meta-manager Peer Group	Total	Fatal (K)	Total Injury (A+B+C)	A	B	C	PDO
1	Rural and Small Urban ¹ Freeways	34	0.3	9.0	1.4	4.0	3.6	24.7
2	Rural and Small Urban ¹ Expressways	51	0.6	16.1	2.5	6.8	6.9	34.4
3	Rural STN with 3500 to 8700 ADT	68	1.2	25.1	4.5	10.4	10.2	42.1
4	Rural STN with 2000 to 3500 ADT	75	1.4	27.7	5.6	12.0	10.1	46.4
5	Rural STN with 750 to 2000 ADT	97	1.6	36.0	6.9	16.2	12.9	59.0
6	Rural STN with less than 750 ADT	153	2.8	63.0	12.7	30.3	19.9	86.9
7	Large Urban ² Freeways	72	0.3	19.3	1.4	6.0	11.9	52.3
8	Large Urban ² Divided Highways	291	0.7	98.0	6.1	28.6	63.3	192.7
9	Large Urban ² Undivided Highways ³	435	1.3	141.4	9.7	45.4	86.3	292.7
10	Small Urban ¹ STN ³	222	0.8	66.6	5.9	24.0	36.7	154.5
11	Rural STN with greater than 8700 ADT	87	1.2	31.5	4.7	12.3	14.5	54.4
12	STN in community of less than 5000 population	156	0.8	42.2	5.4	16.0	20.7	113.2

Notes:

1. Small Urban = 5,000 to 25,000 population
2. Large Urban = 25,000 or greater population
3. A portion of Large Urban Undivided Highways (Peer Group 9) and Small Urban STN (Peer Group 10) were reclassified as Rural STN (Peer Groups 3 and 11) to more accurately represent their operating characteristics. The current crash rates should not be compared to the Statewide Average Crash Rates for these peer groups provided prior to 2012.

Table 2

Local Road Crash Rates
(Crashes per 100 million vehicle miles traveled)

Urban Streets ¹							
Year	Total	Fatal (K)	Total Injury (A+B+C)	A	B	C	PDO
2009	281	0.5	81	5.9	27	48	200
2010	286	0.6	84	5.9	29	49	202
2011	317	0.6	88	5.8	31	52	228
2012	333	0.7	95	6.3	35	54	237
2013	368	0.7	96	6.2	33	57	272

Rural County Trunk Highways ²							
Year	Total	Fatal (K)	Total Injury (A+B+C)	A	B	C	PDO
2009	142	1.6	53	8.4	23	21	88
2010	101	1.3	37	6.6	16	15	62
2011	100	1.5	36	6.0	16	15	62
2012	96	1.2	37	6.0	17	13	59
2013	102	1.2	35	5.4	16	14	67

Notes:

1. Includes urban city streets, rural city streets, and urban County Trunk Highways. Prior to 2009, the “Urban Streets” category also included Urban State Trunk Highways so the current crash rates should not be compared to the “Urban Streets” crash rates provided prior to 2009.
2. Includes all rural County Trunk Highways

Segment Crash Rate Worksheet

5/2/2016

Segment Crash Rate Worksheet

Project ID: 1052-01-32

County: Chippewa

City of:

Village of:

Township of: Lafayette/Sigel

Highway: STH 29E

Location: Stillson Creek to STH 27

Limits: 029E091G000 to 029E107D000

Crash Data (Year - Year): 2010 thru available 2014

Number of Years (n):	→	5
Total Number of Crashes:	→	85
Total Number of FAT Crashes:	1	1.2%
Total Number of INJ A Crashes:	2	2.4%
Total Number of INJ B Crashes:	8	9.4%
Total Number of INJ C Crashes:	11	12.9%
Total Number of PD Crashes:	63	74.1%
 Average Daily Traffic (ADT):	 →	 15378
 Segment Length (Miles):	 →	 15
 Average Yearly Total Crash Rate:	 →	 20.191
<small>(total crashes/n) * 100000000 / (adt * 365 * length)</small>		
 Average Yearly Fatal Crash Rate:	 →	 0.238
<small>(FAT crashes/n) * 100000000 / (adt * 365 * length)</small>		
 Average Yearly Type A Crash Rate:	 →	 0.475
<small>(INJ A crashes/n) * 100000000 / (adt * 365 * length)</small>		
 Average Yearly Type B Crash Rate:	 →	 1.900
<small>(INJ B crashes/n) * 100000000 / (adt * 365 * length)</small>		
 Average Yearly Type C Crash Rate:	 →	 2.613
<small>(INJ C crashes/n) * 100000000 / (adt * 365 * length)</small>		
 Average Yearly PD Crash Rate:	 →	 14.965
<small>(PD crashes/n) * 100000000 / (adt * 365 * length)</small>		

Rate unit is # of crashes/100 million vehicle miles



WISDOT ID: 1050-01-31/61 & 1052-01-3/62

EMCS Project No: 4896 & 4897

Controlling Design Criteria Summary					
STH 29					
Controlling Criteria (Per FDM 11-1 Table 2.1) No.	Criteria	New Construction Design Criteria Met (70 mph)	3R Design Criteria Met (65 mph minimum)	Proposed Conditions Meet 3R Standards	Notes
		Existing Y/N	Existing Y/N		
1	Design Speed	Yes	Yes	Yes	All curves rated for 70 mph
2	Lane Width	Yes	Yes	Yes	12' lanes - FDM 11-20 section 1.5
3	Shoulder Width	No	No	No	Existing 10' total, 8' paved - RT; 10' paved required for Freeway; 10' proposed Existing 6' total, 3' paved - LT; 4' paved required for Freeway; 4' proposed See #12 for three locations with less than desirable shoulder width
4	Bridge Width	Yes	Yes	Yes	Used 11-15, Section 1.10.3; all bridges meet requirements
5	Horizontal Alignment	No	Yes	Yes	Horizontal alignment does not meet 70 mph due to SE (see #6)/meets 3R standards for 65 mph
6	Superelevation	No	Yes	Yes	SE are rated for 65 mph or greater/6 curves less than 70 mph; improve SE to 70 mph with HMA overlay
7	Vertical Alignment	Yes	Yes	Yes	Vertical alignment - Lengths meet 70 mph or greater
8	Grades	Yes	Yes	Yes	Grades are 3% or less which meets a 70 mph design speed
9	Stopping Sight Distance	Yes	Yes	Yes	SSD - 70 mph or greater
10	Pavement Cross Slope	Yes	Yes	Yes	2% in tangent sections
11	Vertical Clearance	Yes	Yes	Yes	All structures over STH 29 have a min 16'-0" clear per FDM 11-35 for bridges to remain; see DSR for detailed listing of vertical clearances
12	Horizontal Clearance	No	No	No	See summary; two locations of less than desirable shoulder width on CTH D ramps (shoulder width=horizontal clearance at these locations due to barrier)
13	Structural Capacity	Yes	Yes	Yes	All existing structures have adequate capacity and they do no warrant replacement

3. Shoulder Width

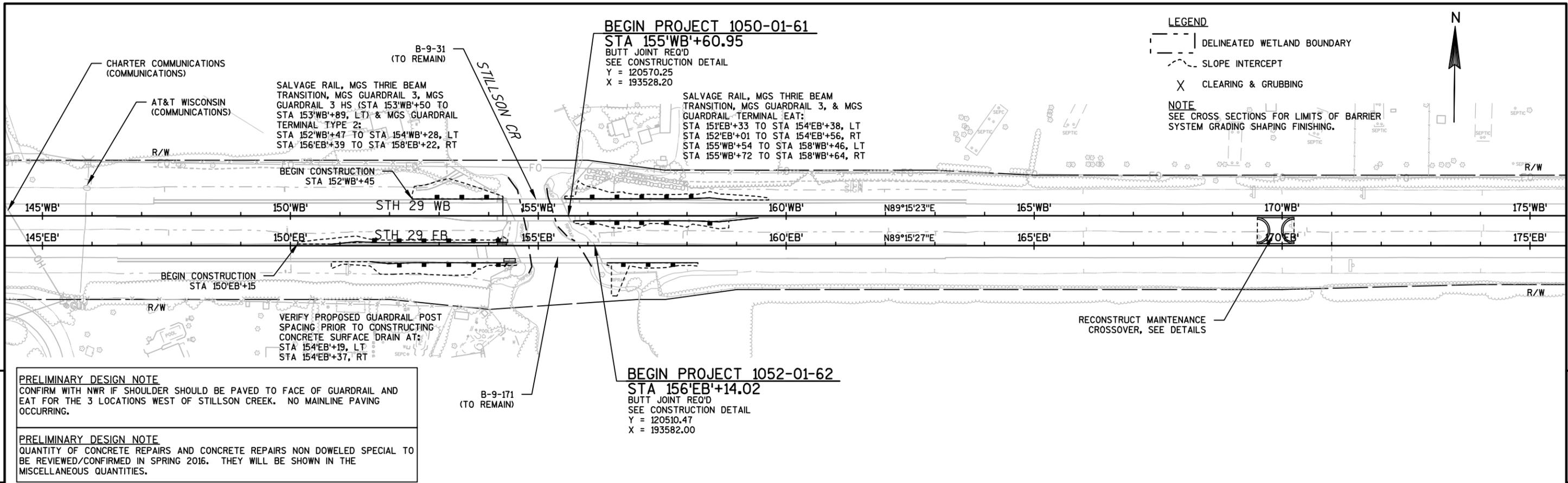
STH 29 is a designated freeway. According to FDM 11-15 Attachment 1.5 4-lane freeways require 10 ft paved shoulder RT and 4 ft paved shoulder LT. Existing shoulders are 8' paved outside and 3' paved inside, this meets expressway standards but not freeway standards.

6. Superelevation

Location (Sta)	Existing Radius	Existing Super (As-Built)	70 MPH				Note
			Required Radius	65 MPH Required Radius	65 MPH Meet requirements	70 MPH Meet requirements	
STH 29 EB (222+72.02 - 233+76.97)	22858.31	NC	14100.00	12600.00	y	y	Existing: 70 MPH, Proposed: 70 MPH
STH 29 WB (222+72.02 - 222+25.55)	22918.31	NC	14100.00	12600.00	y	y	Existing: 70 MPH, Proposed: 70 MPH
STH 29 EB (316+00.75 - 348+62.72)	3819.72	4.30%	3770.00	3220.00	y	n	Existing: 65 MPH, Proposed: 70 MPH
STH 29 WB (316+00.75 - 348+11.48)	3759.72	4.60%	3770.00	3220.00	y	n	Existing: 65 MPH, Proposed: 70 MPH
STH 29 EB (443+33.03 - 474+36.84)	3830.36	4.60%	3770.00	3220.00	y	y	Existing: 70 MPH, Proposed: 70 MPH
STH 29 WB (443+33.03 - 474+85.46)	3890.36	4.50%	3770.00	3220.00	y	y	Existing: 70 MPH, Proposed: 70 MPH
STH 29 EB (519+91.46 - 530+83.28)	17188.73	RC	10300.00	9130.00	y	y	Existing: 70 MPH, Proposed: 70 MPH
STH 29 WB (519+91.46 - 530+79.47)	17128.73	RC	10300.00	9130.00	y	y	Existing: 70 MPH, Proposed: 70 MPH
STH 29 EB (572+83.59 - 595+92.31)	22918.31	NC	14100.00	12600.00	y	y	Existing: 70 MPH, Proposed: 70 MPH
STH 29 WB (572+83.59 - 595+98.35)	22978.31	NC	14100.00	12600.00	y	y	Existing: 70 MPH, Proposed: 70 MPH
STH 29 EB (834+89.49 - 876+62.20)	5716.87	3.20%	6010.00	5280.00	y	n	Existing: 65 MPH, Proposed: 70 MPH
STH 29 WB (834+89.49 - 876+18.40)	5656.87	3.20%	6010.00	5280.00	y	n	Existing: 65 MPH, Proposed: 70 MPH
STH 29 EB (921+26.65 - 938+16.01)	4583.75	3.90%	4700.00	4100.00	y	n	Existing: 65 MPH, Proposed: 70 MPH
STH 29 WB (921+26.65 - 938+38.13)	4643.75	3.90%	4700.00	4100.00	y	n	Existing: 65 MPH, Proposed: 70 MPH
STH 29 EB (938+16.01 - 973+53.35)	104070.4	3.90%	4700.00	4100.00	y	y	Existing: 70 MPH, Proposed: 70 MPH
STH 29 WB (938+16.01 - 973+73.62)	10530.35	3.90%	4700.00	4100.00	y	y	Existing: 70 MPH, Proposed: 70 MPH

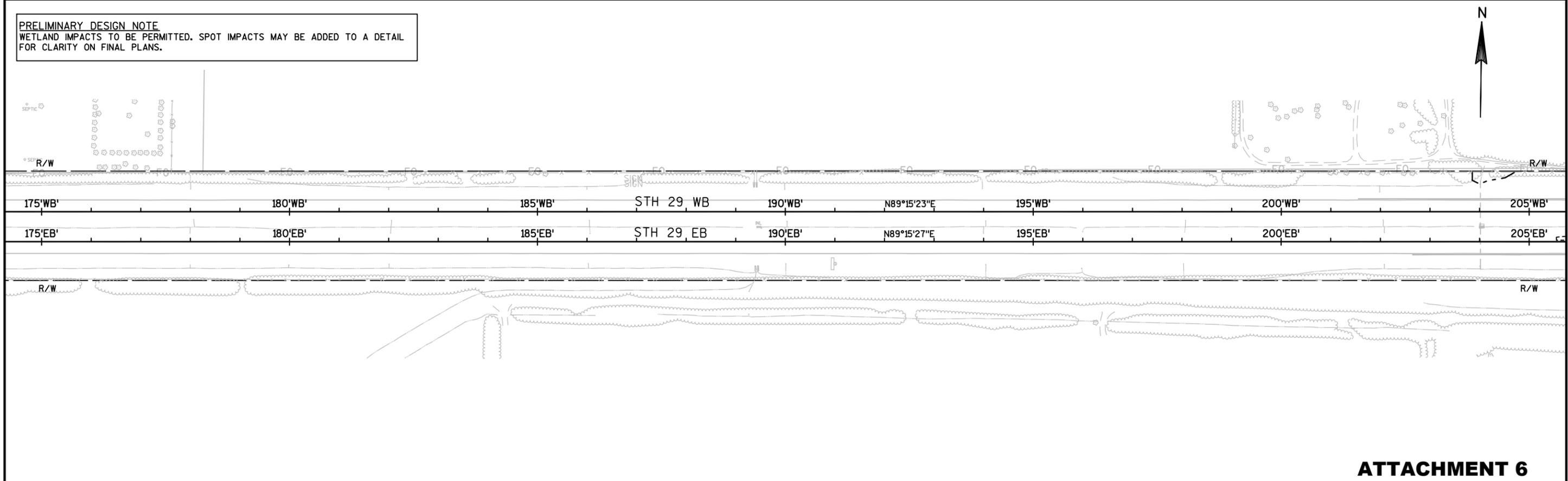
12. Horizontal Clearance

Location (Sta)	LT/RT	Distance	Notes
610EB	RT	8'	Per FDM 11-15 Table 1.1 minimum is 10' (finished shoulder width). Guradrail under STH 27 on STH 29 will be moved out to 10'.
900WB	LT	4'	Per FDM 11-15 Table 1.1 minimum is 4'. This barrier is under structure and is 4' off ramp lane; 16' off STH 29 travel lane.
902EB	RT	4'	Per FDM 11-15 Table 1.1 minimum is 4'. This barrier is under structure and is 4' off ramp lane; 16' off STH 29 travel lane.



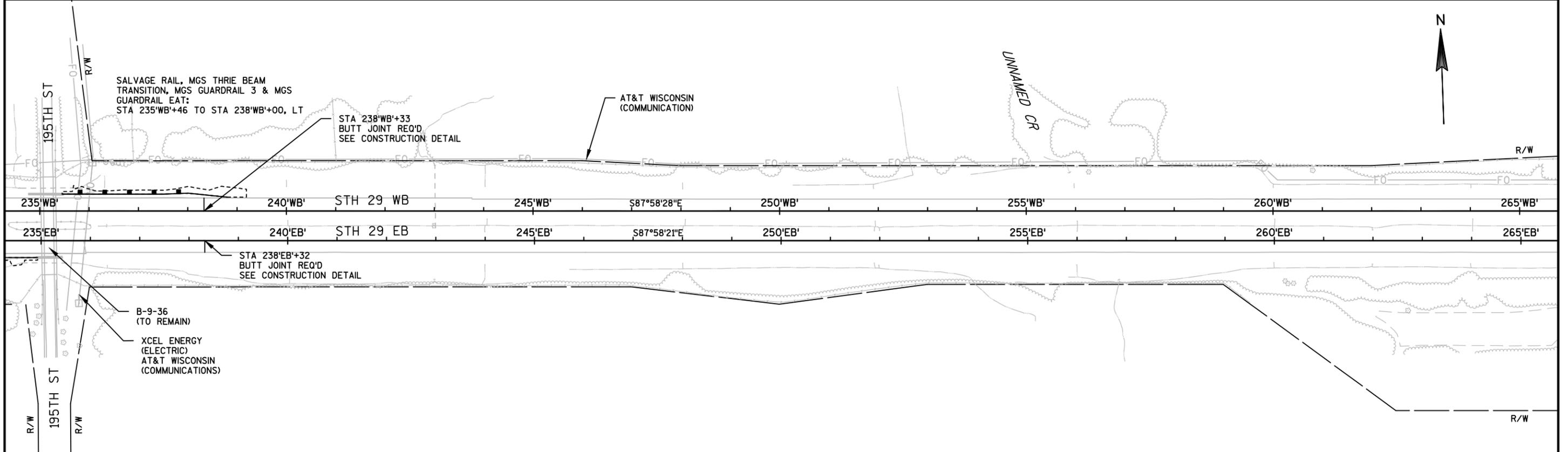
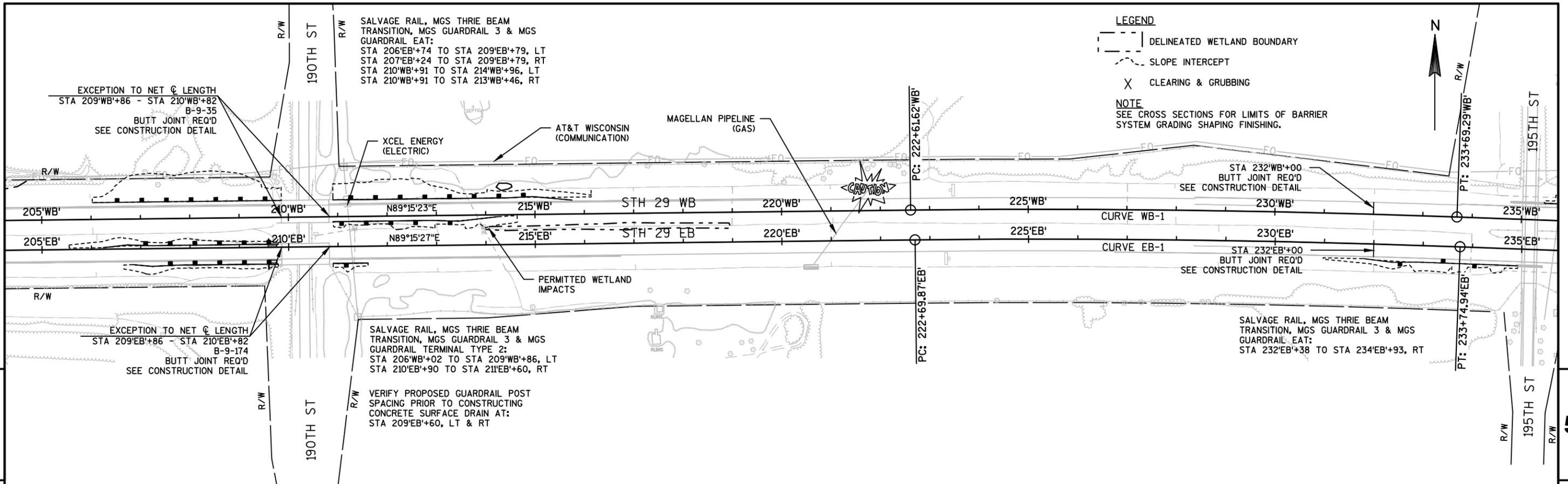
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ATTACHMENT 6

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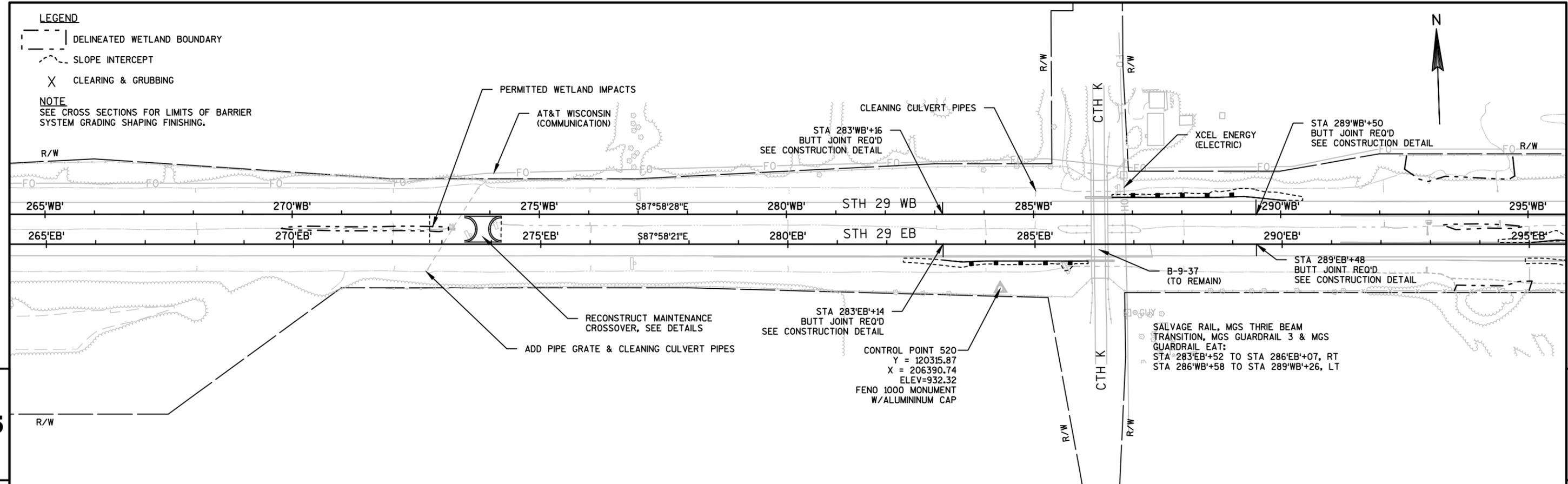
ATTACHMENT 6

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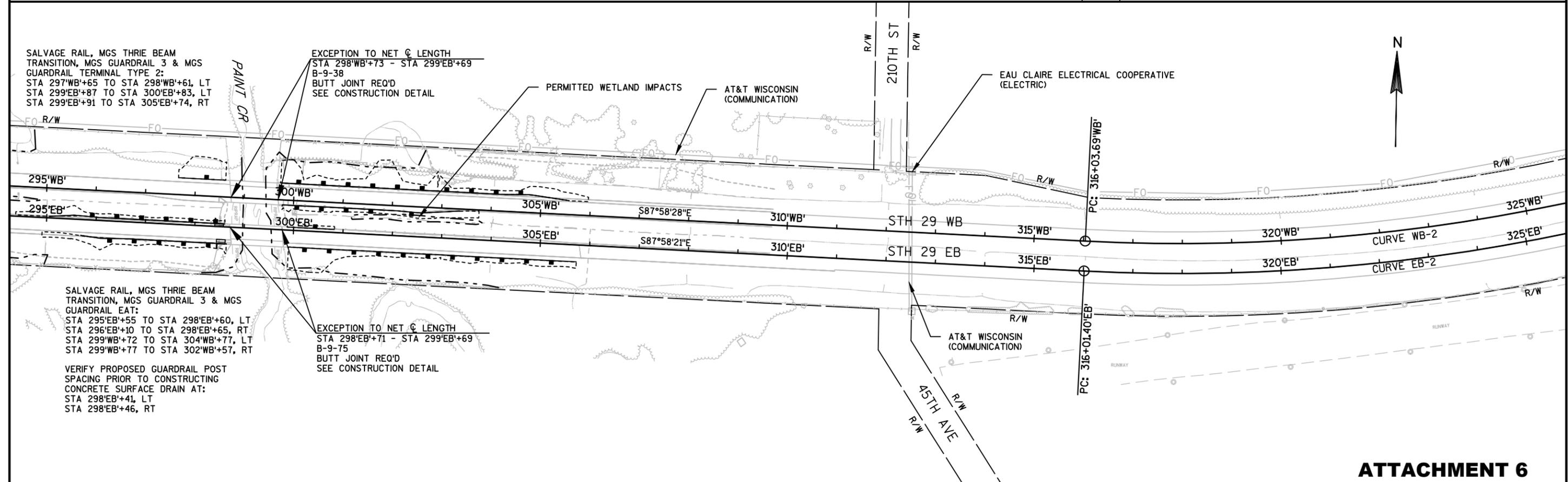
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- SLOPE INTERCEPT
- CLEARING & GRUBBING

NOTE
SEE CROSS SECTIONS FOR LIMITS OF BARRIER SYSTEM GRADING SHAPING FINISHING.



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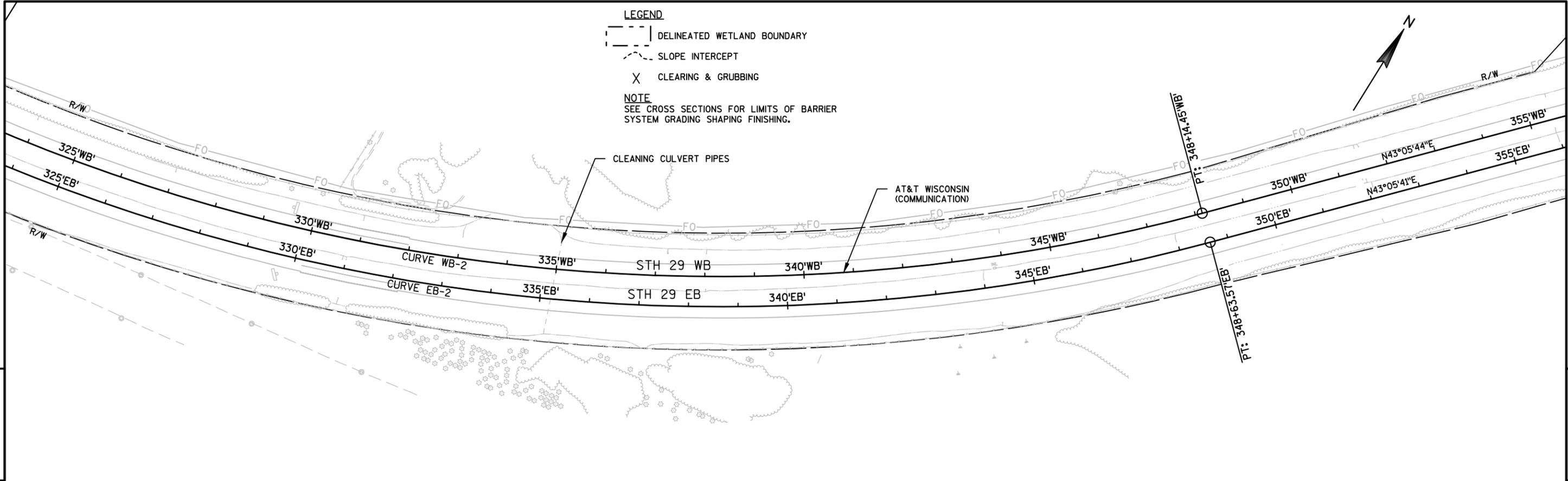
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ATTACHMENT 6

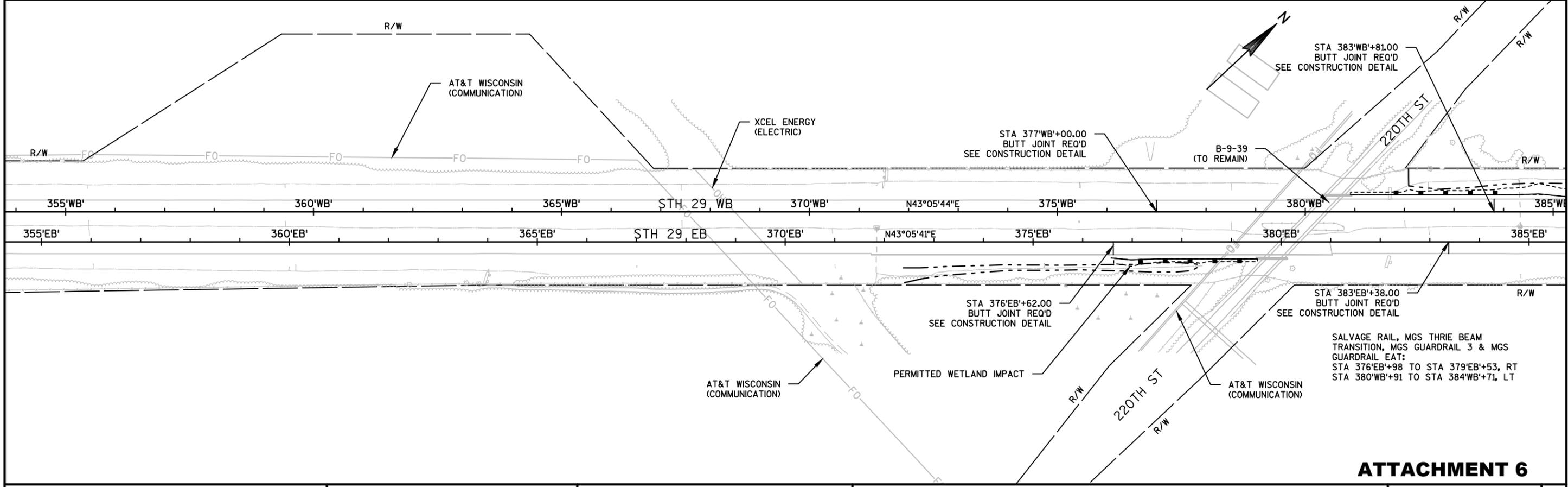
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 X CLEARING & GRUBBING
NOTE
 SEE CROSS SECTIONS FOR LIMITS OF BARRIER SYSTEM GRADING SHAPING FINISHING.

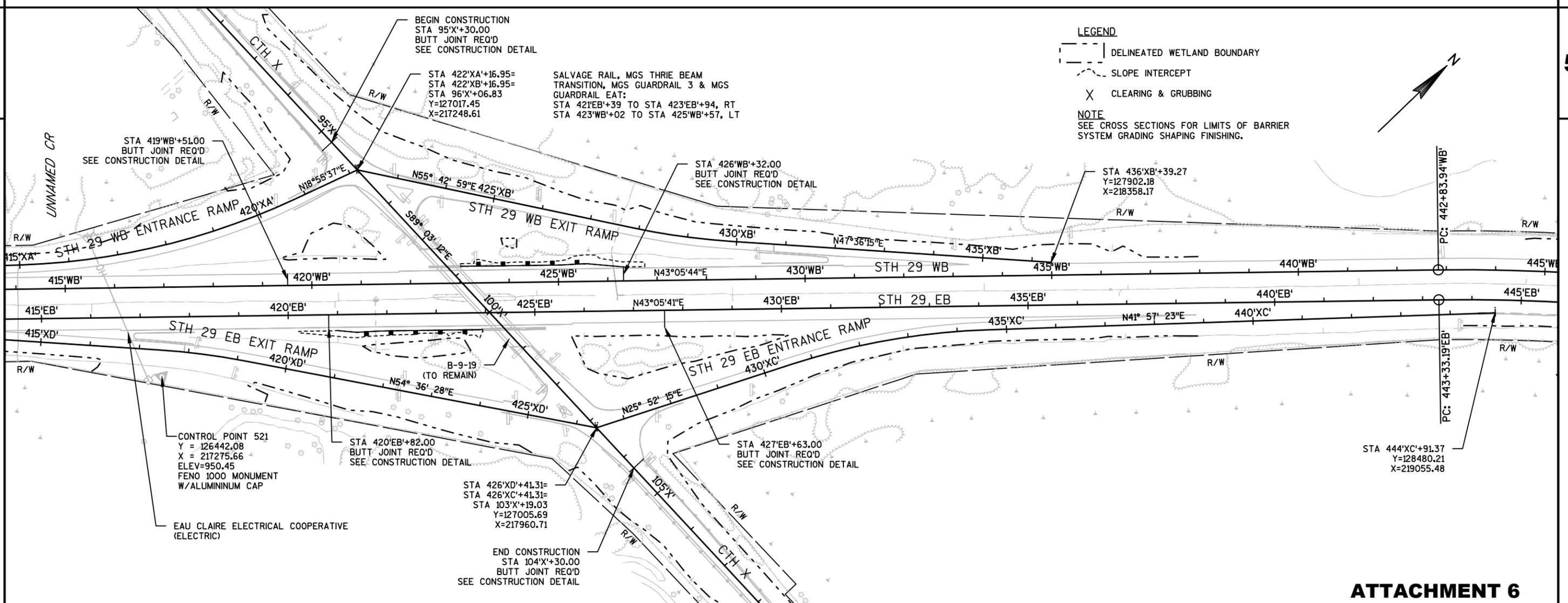
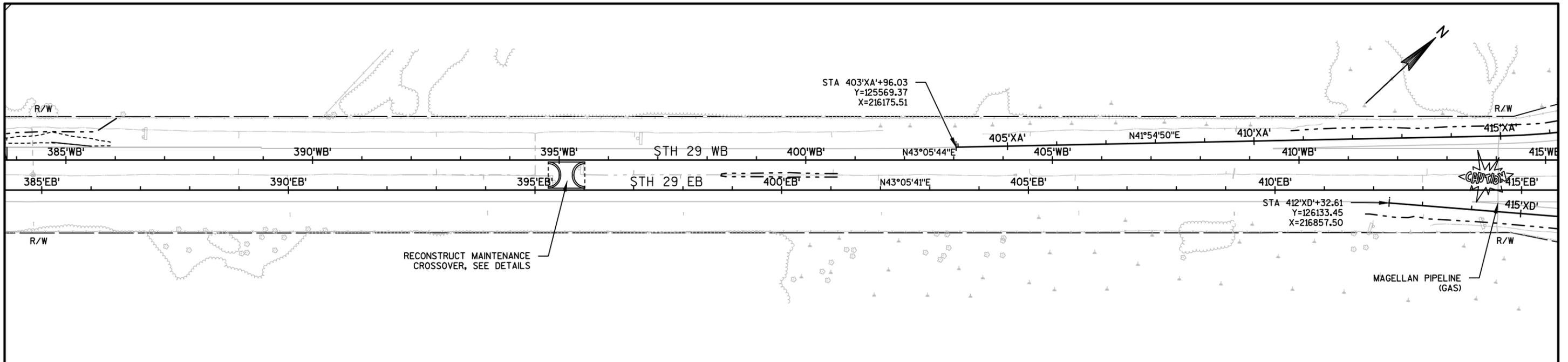


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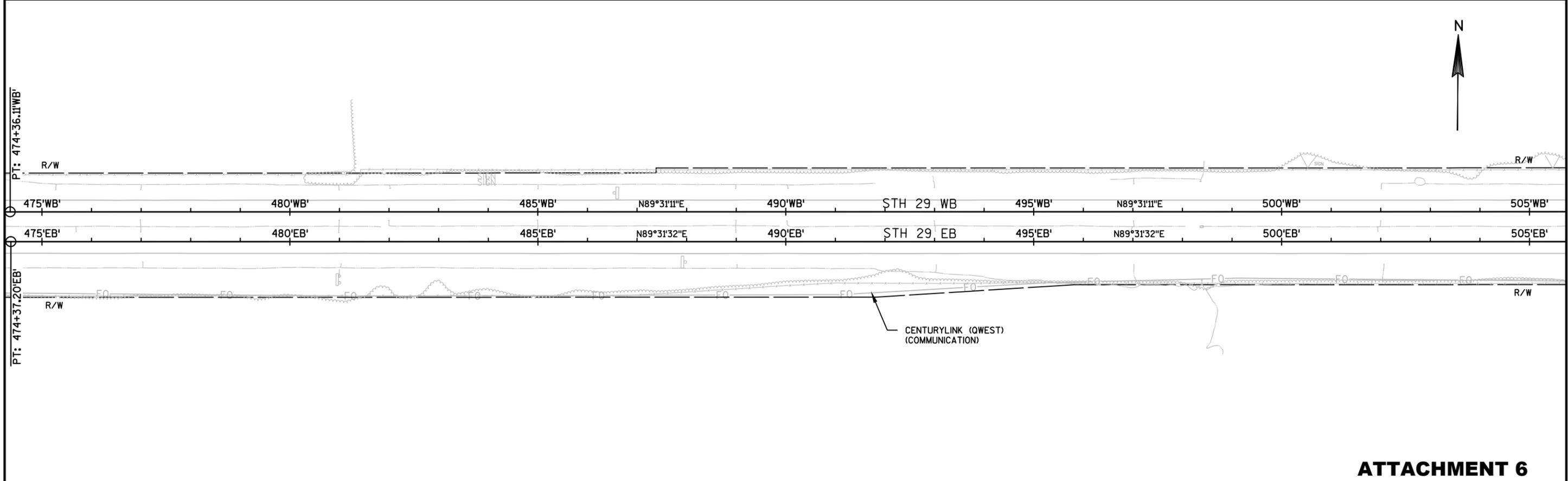
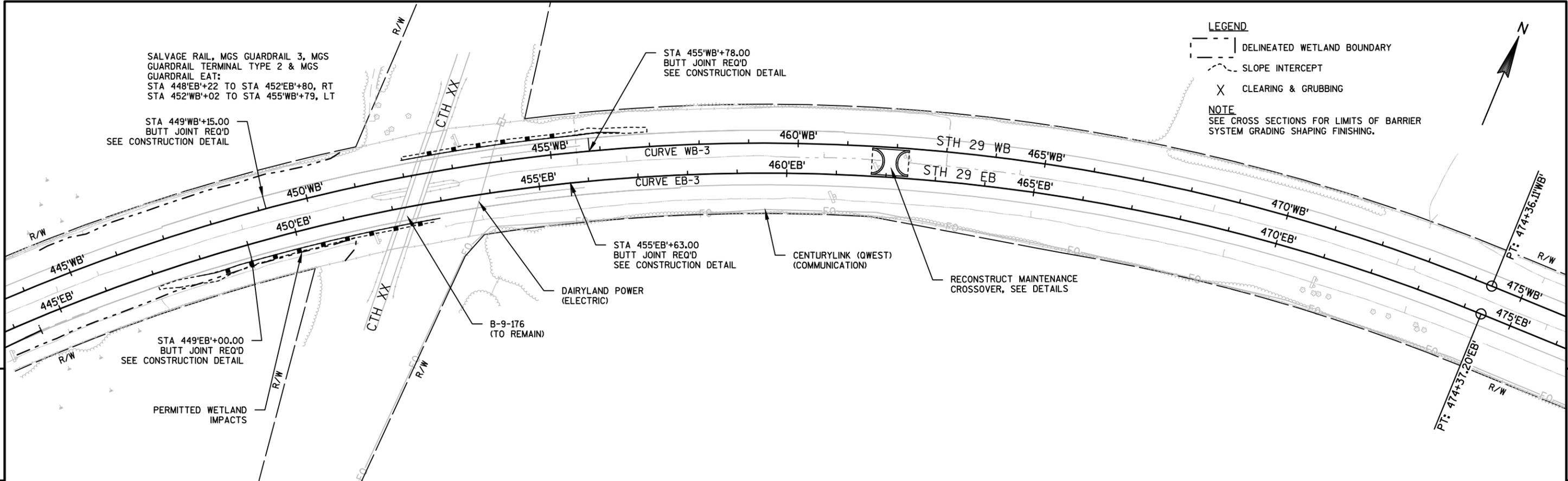


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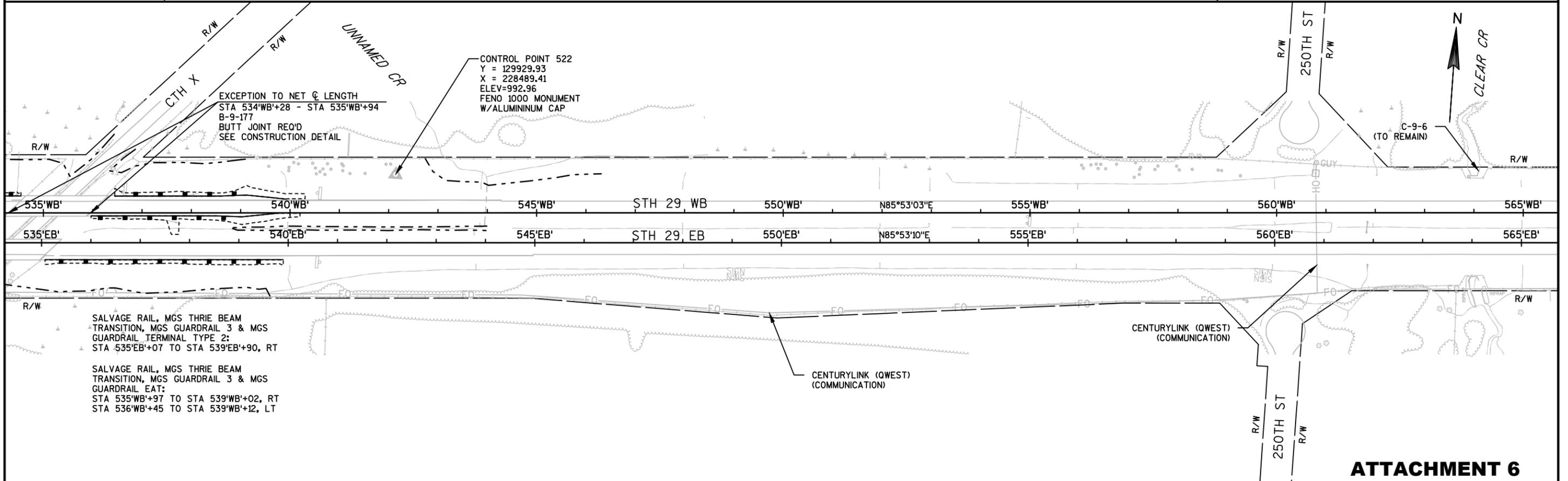
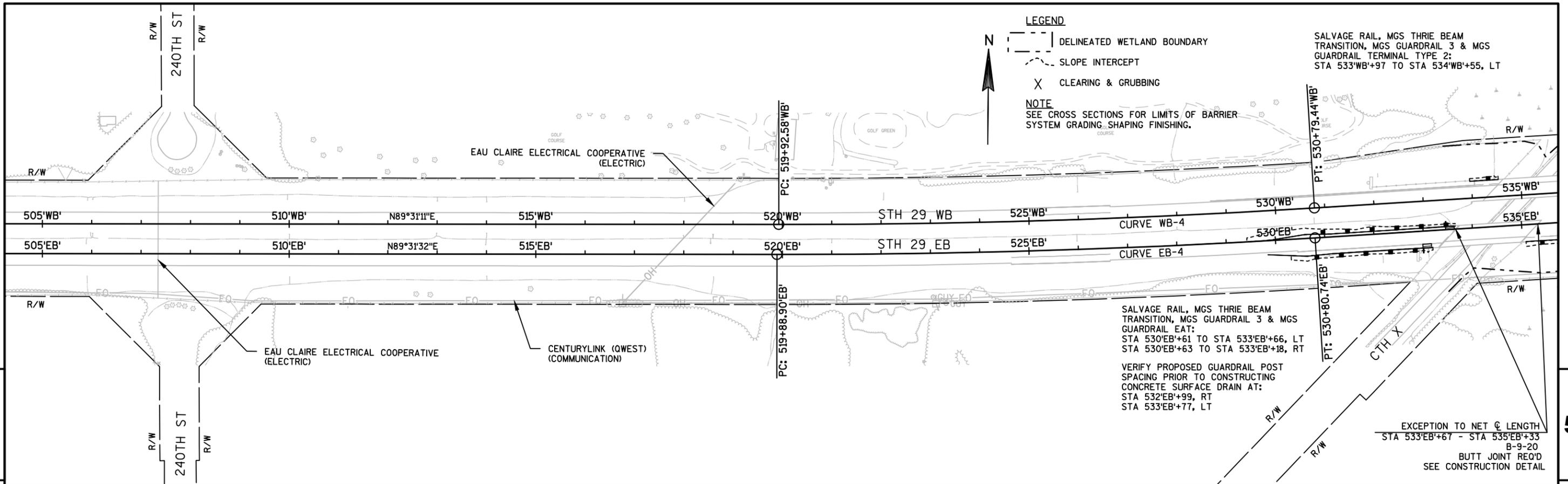
ATTACHMENT 6

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ATTACHMENT 6

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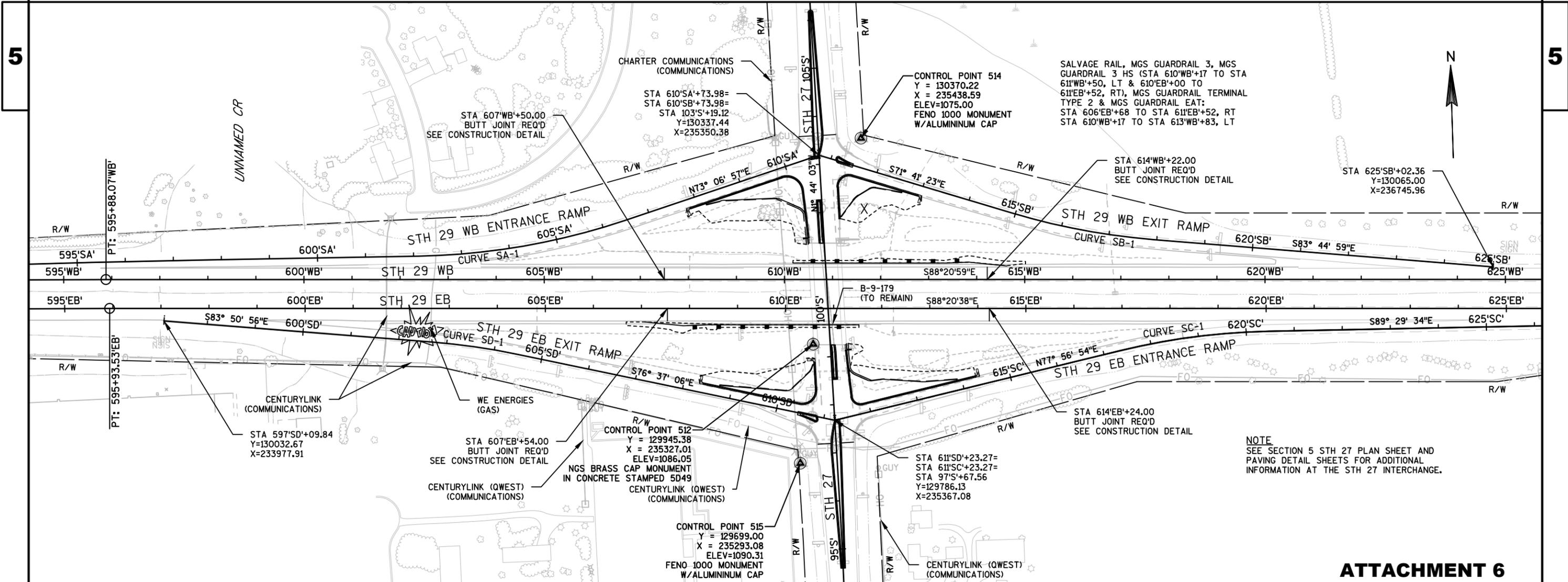
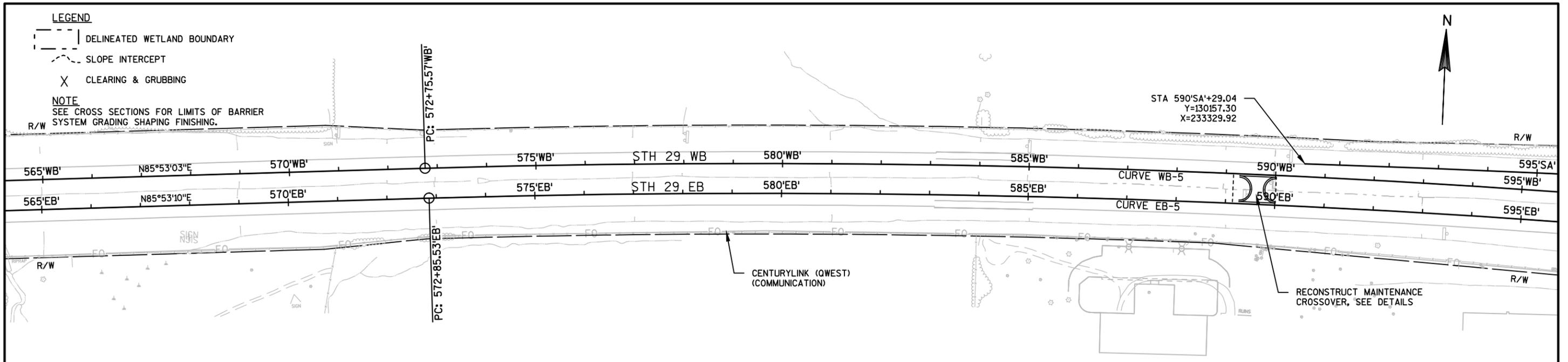
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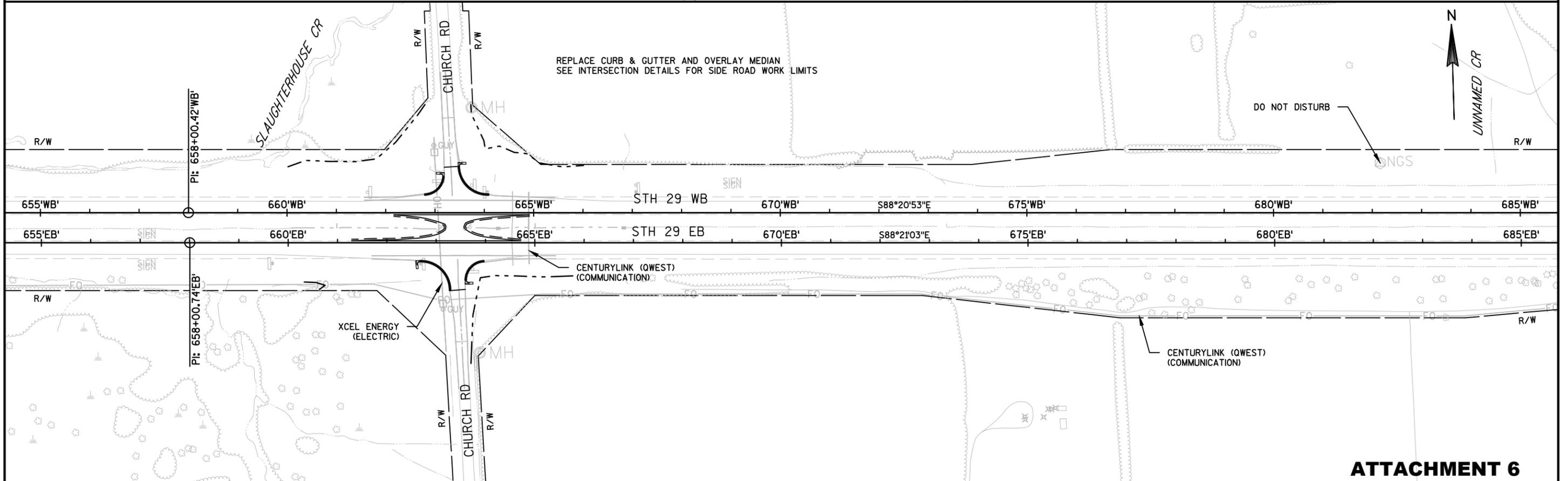
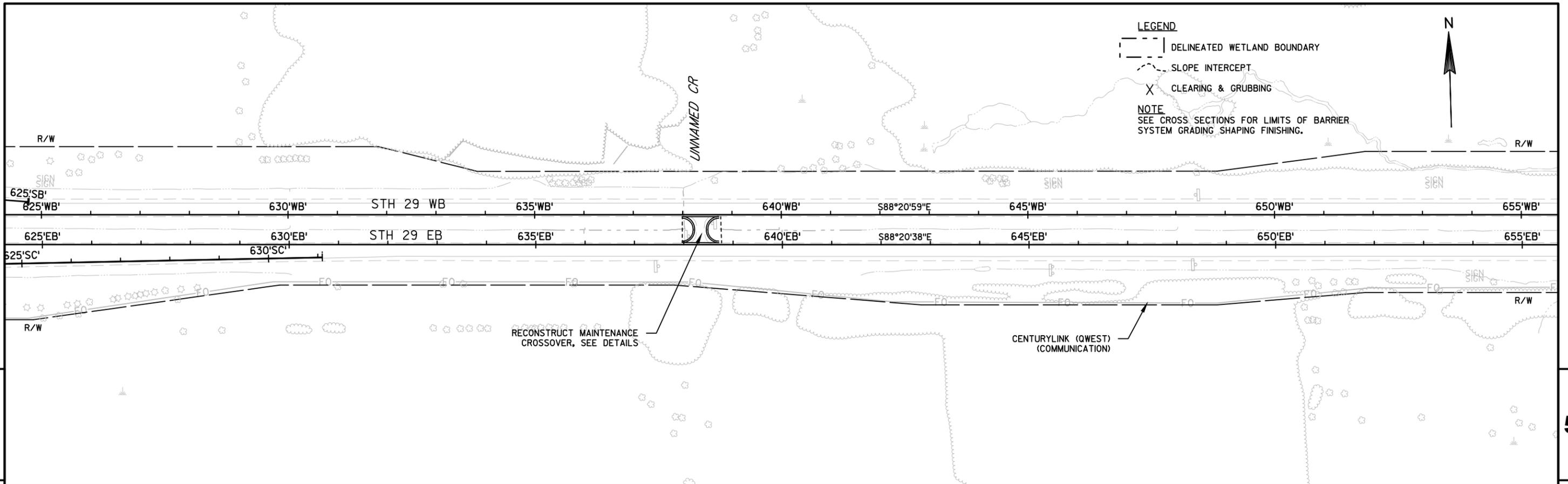
- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- CLEARING & GRUBBING

NOTE
SEE CROSS SECTIONS FOR LIMITS OF BARRIER SYSTEM GRADING SHAPING FINISHING.

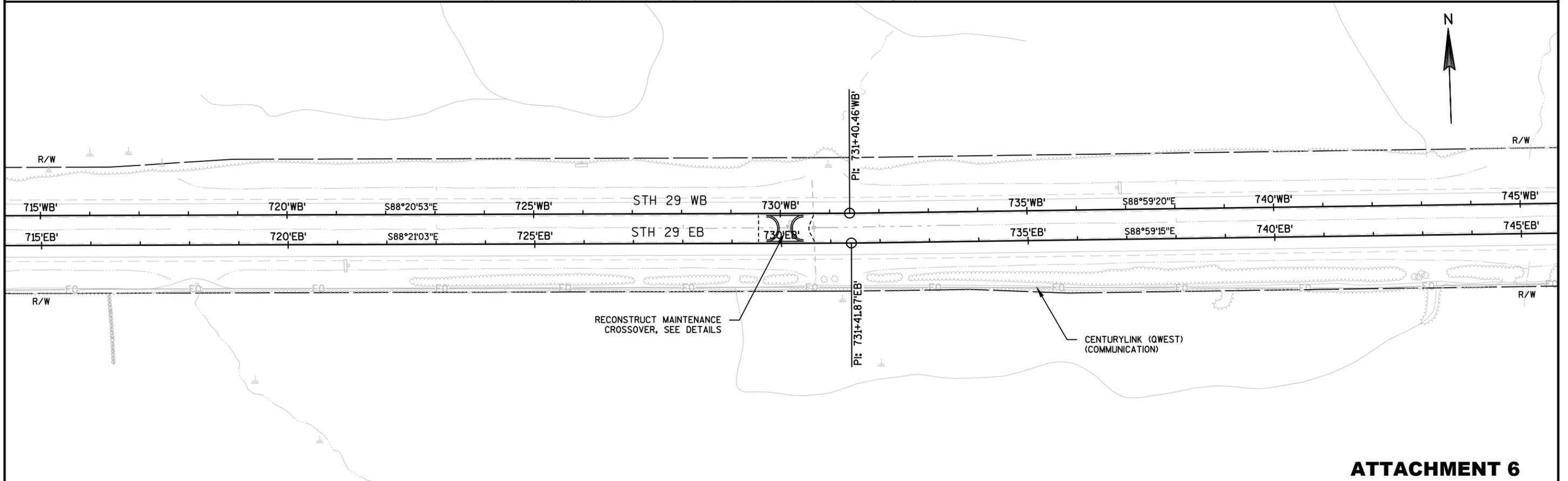
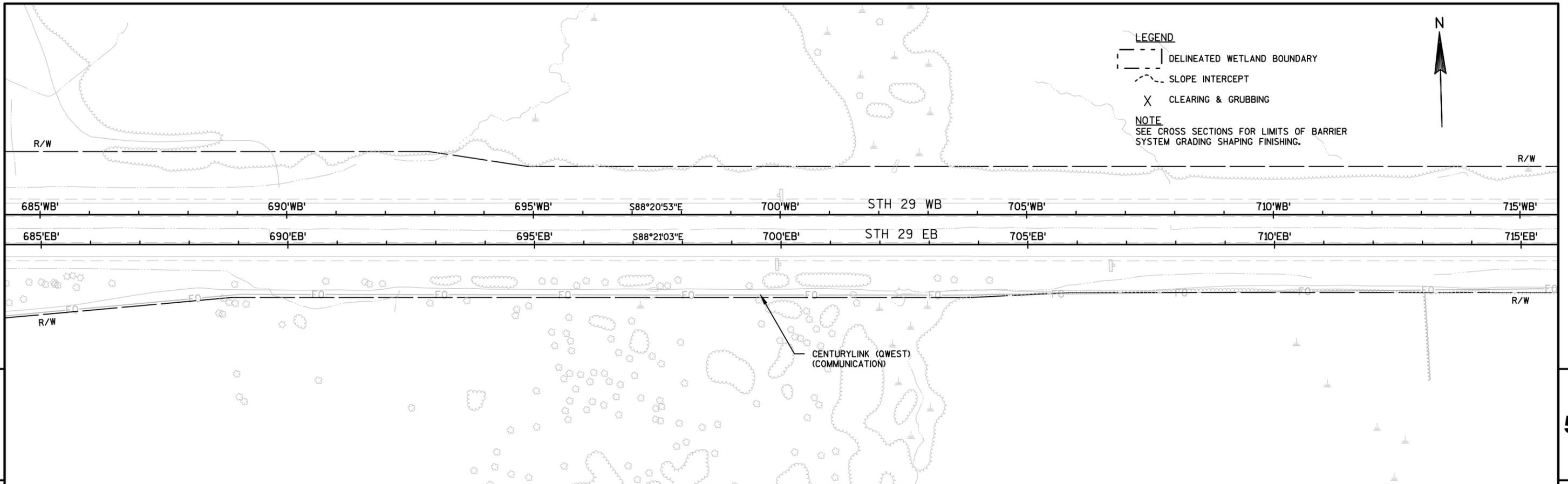


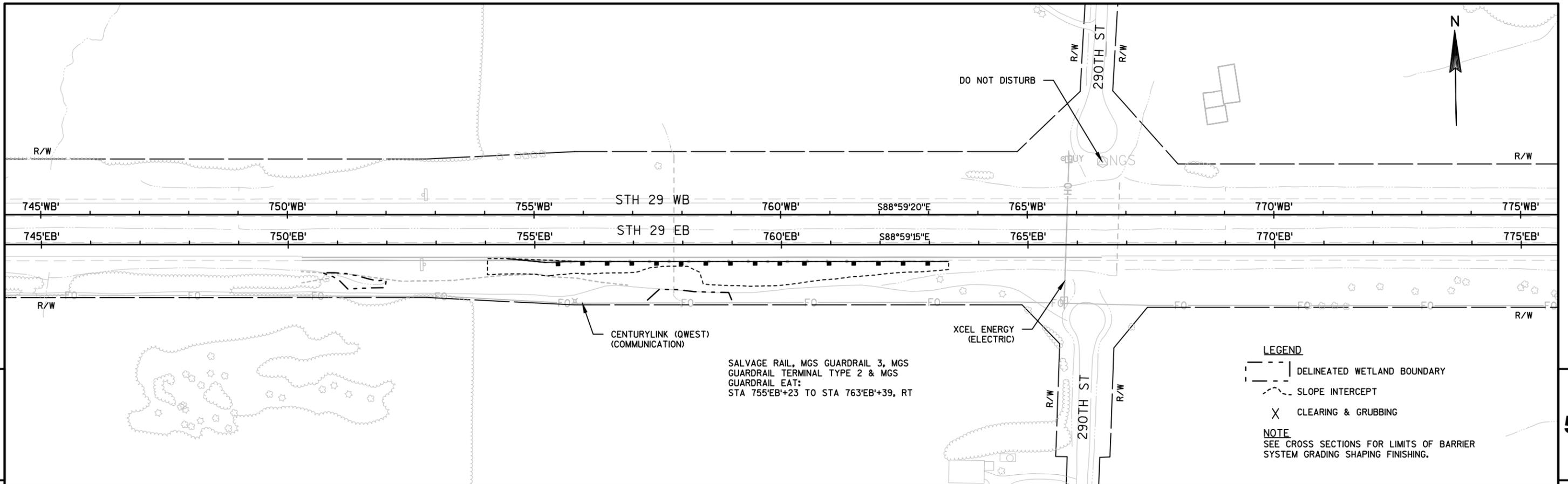
NOTE
SEE SECTION 5 STH 27 PLAN SHEET AND PAVING DETAIL SHEETS FOR ADDITIONAL INFORMATION AT THE STH 27 INTERCHANGE.

ATTACHMENT 6



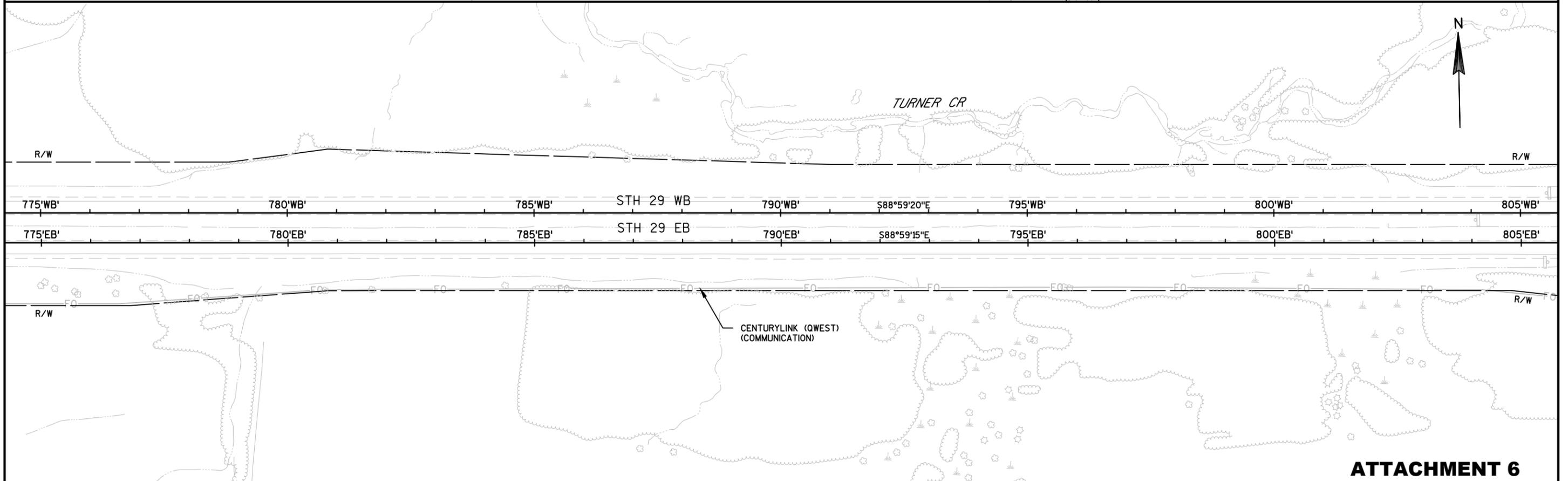
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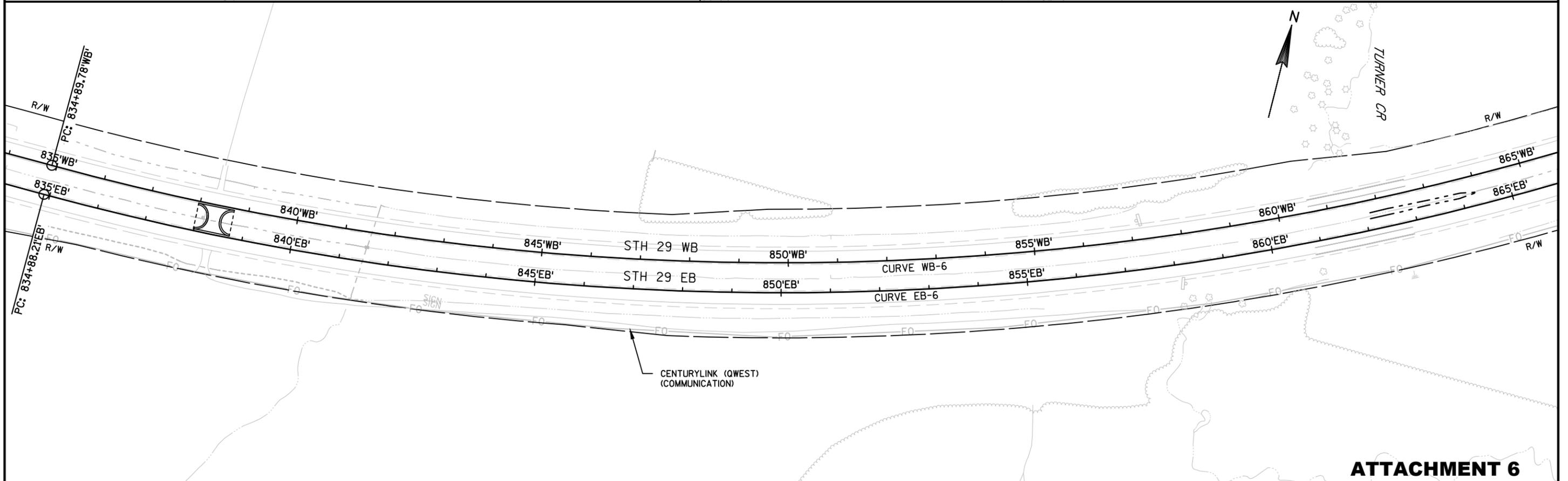
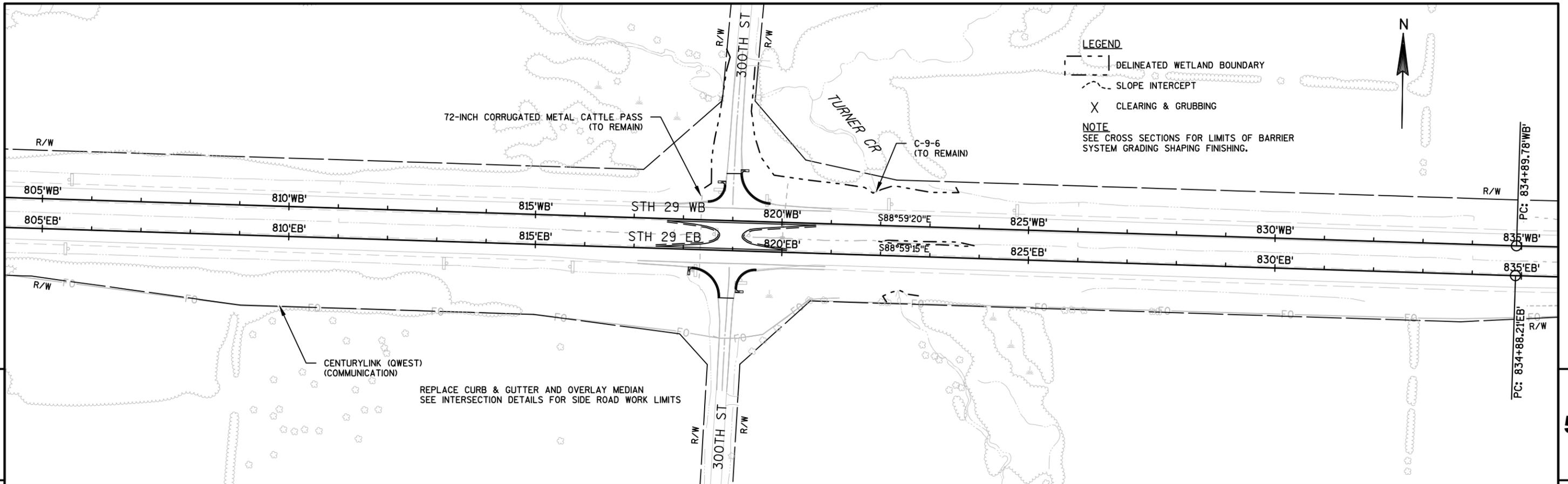
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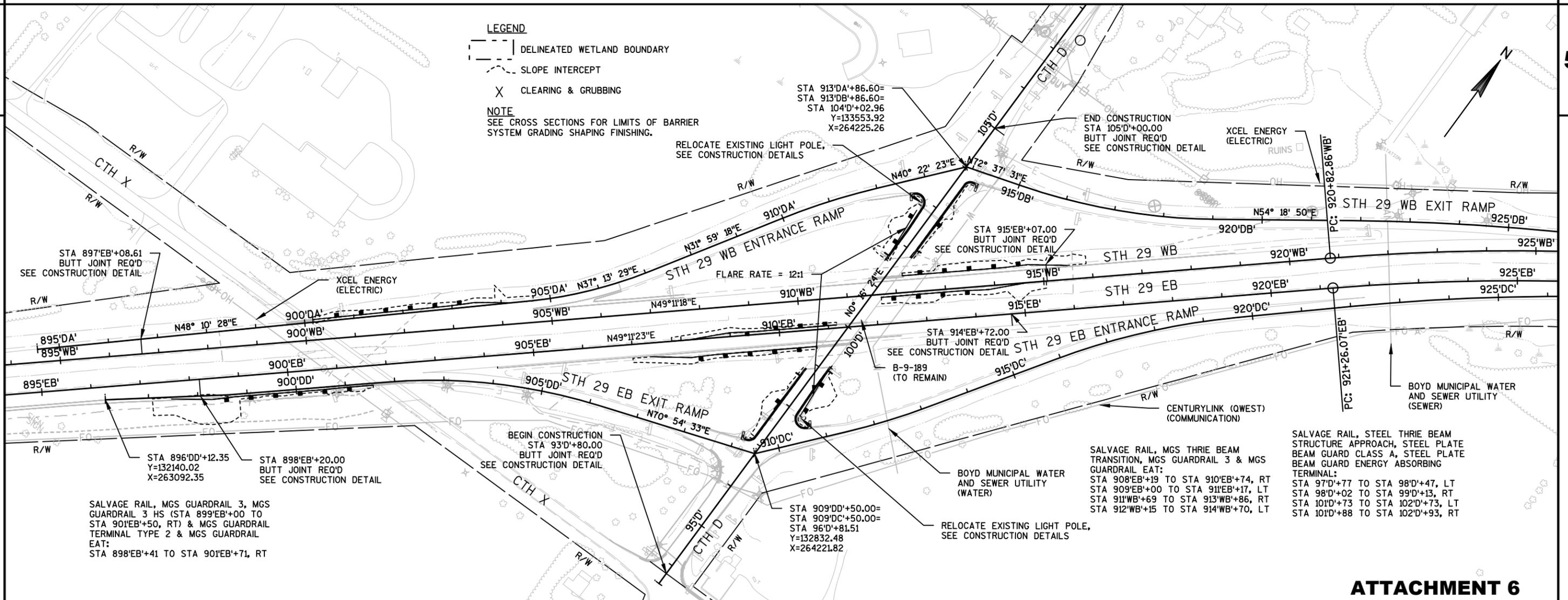
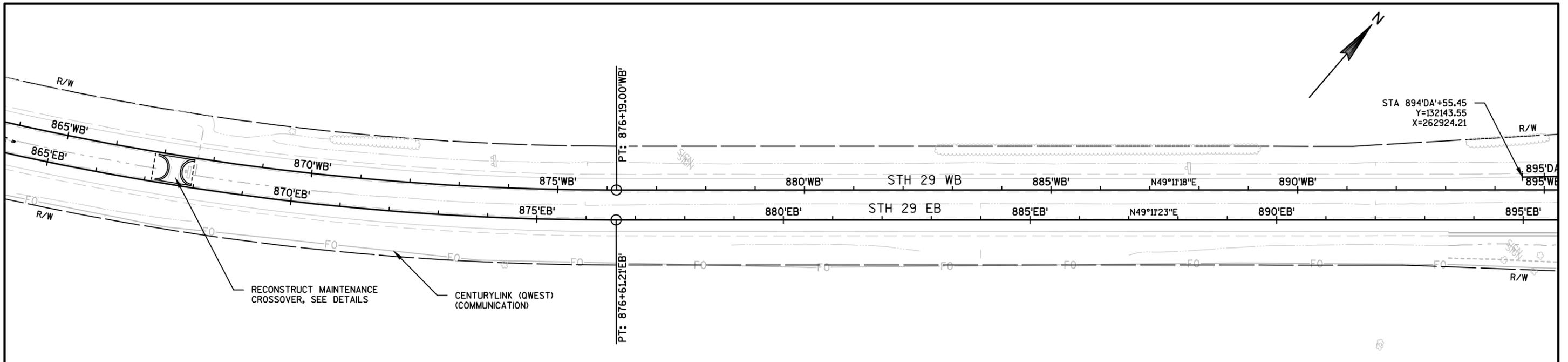


ATTACHMENT 6

PROJECT NO: 1050-01-61/1052-01-62	HWY: STH 29	COUNTY: CHIPPEWA	PLAN	SHEET	E
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ATTACHMENT 6



ATTACHMENT 6

PROJECT NO: 1050-01-61/1052-01-62	HWY: STH 29	COUNTY: CHIPPEWA	PLAN	SHEET	E
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LEGEND

— DELINEATED WETLAND BOUNDARY

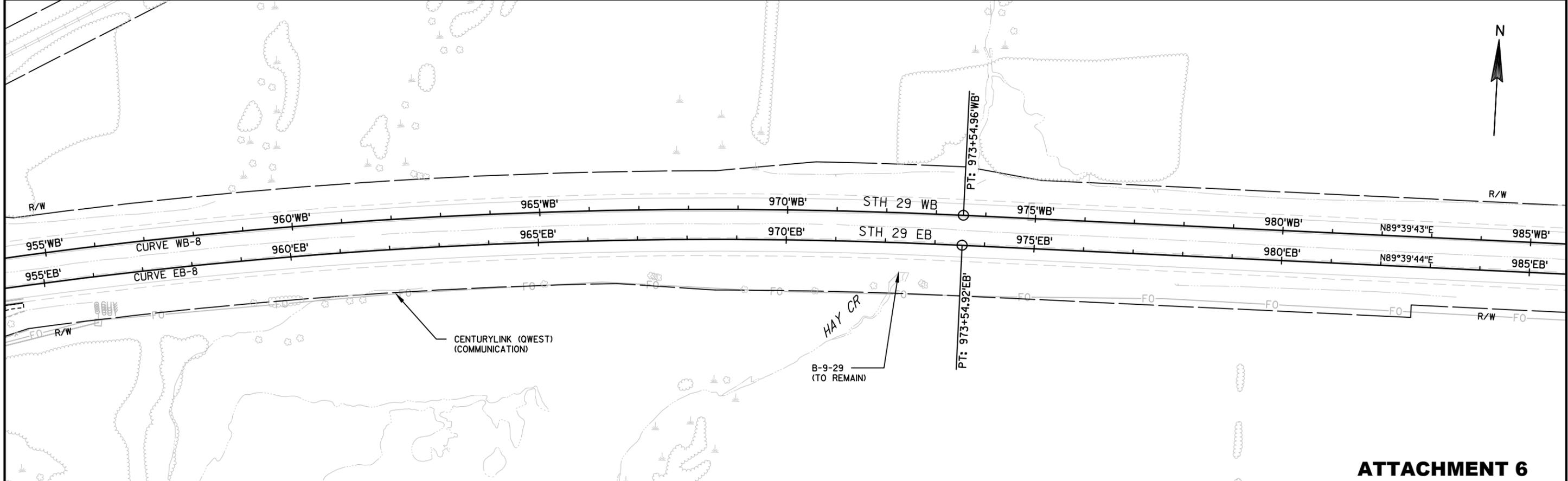
- - - SLOPE INTERCEPT

X CLEARING & GRUBBING

NOTE
SEE CROSS SECTIONS FOR LIMITS OF BARRIER SYSTEM GRADING SHAPING FINISHING.

5

5



ATTACHMENT 6

PROJECT NO: 1050-01-61/1052-01-62	HWY: STH 29	COUNTY: CHIPPEWA	PLAN	SHEET	E
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LEGEND
 [Symbol] DELINEATED WETLAND BOUNDARY
 [Symbol] SLOPE INTERCEPT
 [Symbol] CLEARING & GRUBBING
NOTE
 SEE CROSS SECTIONS FOR LIMITS OF BARRIER SYSTEM GRADING SHAPING FINISHING.



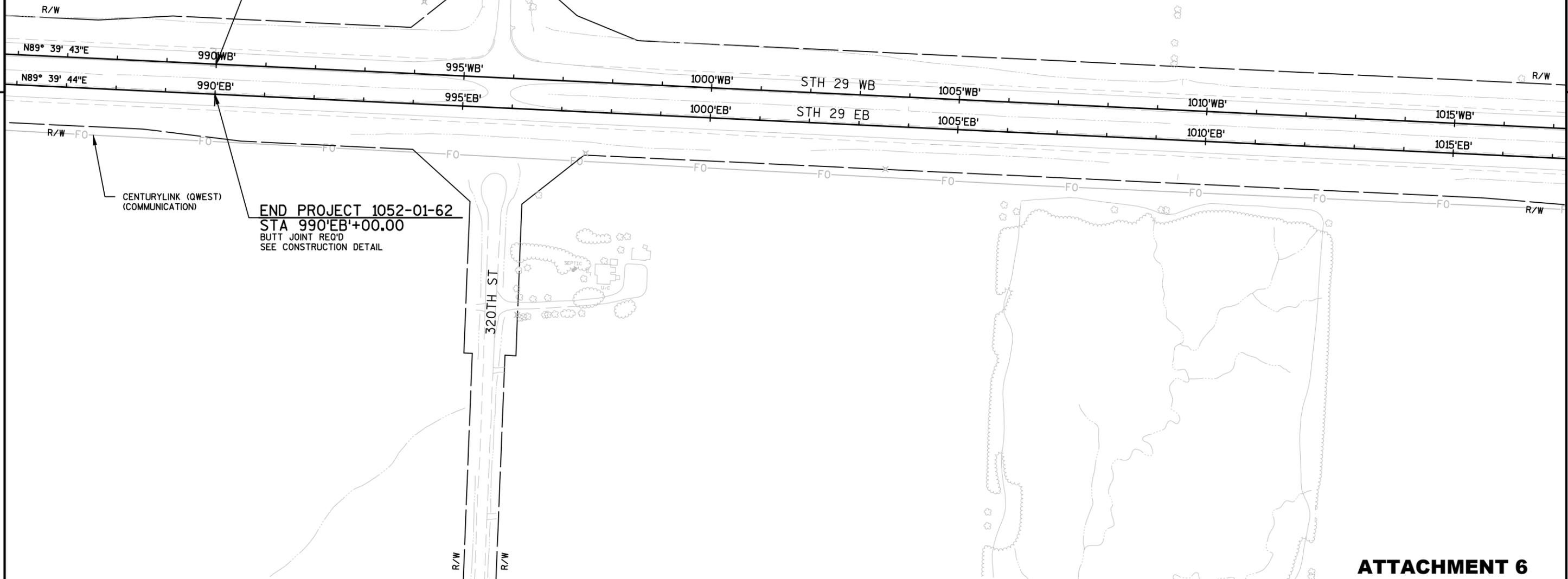
END PROJECT 1050-01-61
 STA 990'WB'+00.00
 BUTT JOINT REQ'D
 SEE CONSTRUCTION DETAIL

END PROJECT 1052-01-62
 STA 990'EB'+00.00
 BUTT JOINT REQ'D
 SEE CONSTRUCTION DETAIL

CENTURYLINK (QWEST)
 (COMMUNICATION)

320TH ST

320TH ST



5

5

ATTACHMENT 6

PROJECT NO: 1050-01-61/1052-01-62	HWY: STH 29	COUNTY: CHIPPEWA	PLAN	SHEET	E
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LEGEND

- DELINEATED WETLAND BOUNDARY
- SLOPE INTERCEPT
- CLEARING & GRUBBING

NOTES

FOR ADDITIONAL REMOVAL AND PROPOSED WORK INFORMATION, SEE PAVING DETAILS.

SEE SECTION 5 PLAN SHEETS FOR ADDITIONAL INFORMATION FOR WORK ON STH 29.

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CENTURYLINK (COMMUNICATIONS)

CENTURYLINK (QWEST) (COMMUNICATIONS)

CONTROL POINT 515
 Y = 129699.00
 X = 235293.08
 ELEV=1090.31
 FENO 1000 MONUMENT
 W/ALUMINUM CAP

FILLER CAPS

WISDOT (SIGNALS)

END MILL & OVERLAY
 STA 97'S+20
 BUTT JOINT REQ'D
 SEE CONSTRUCTION DETAIL

CONTROL POINT 512
 Y = 129945.38
 X = 235327.01
 ELEV=1086.05
 NGS BRASS CAP MONUMENT
 IN CONCRETE STAMPED 5D49

SALVAGE EXISTING GUARDRAIL

CHARTER COMMUNICATIONS (COMMUNICATIONS)

END MILL & OVERLAY
 STA 104'S+10
 BUTT JOINT REQ'D
 SEE CONSTRUCTION DETAIL

STH 27

N0° 54' 19"W

STH 27

BEGIN CONSTRUCTION
 STA 94'S+60

STA 61'SD+23.27=
 STA 61'SC+23.27=
 STA 97'S+67.56
 Y=129786.13
 X=235367.08

STA 610'SA+73.98=
 STA 610'SB+73.98=
 STA 103'S+19.12
 Y=130337.44
 X=235350.38

WISDOT (SIGNALS)

CONTROL POINT 514
 Y = 130370.22
 X = 235438.59
 ELEV=1075.00
 FENO 1000 MONUMENT
 W/ALUMINUM CAP

CENTURYLINK (QWEST) (COMMUNICATIONS)

B-19-179 (TO REMAIN)

SALVAGE EXISTING GUARDRAIL

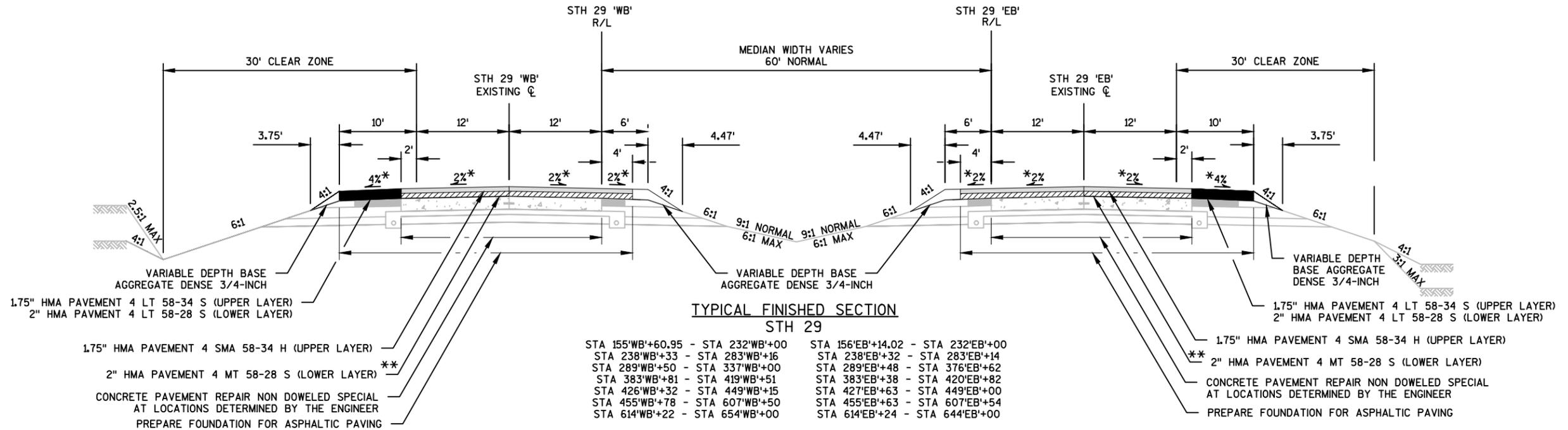
SALVAGE RAIL, STEEL THRIE BEAM STRUCTURE APPROACH, STEEL PLATE BEAM GUARD CLASS A, STEEL PLATE BEAM GUARD SHORT RADIUS AND STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL:
 STA 98'S+48 TO STA 99'S+25, RT
 STA 101'S+36 TO STA 102'S+25, LT

VERIFY PROPOSED GUARDRAIL POST SPACING PRIOR TO CONSTRUCTING CONCRETE SURFACE DRAIN AT:
 STA 99'S+13, RT
 STA 101'S+48, LT

CENTURYLINK (COMMUNICATIONS)

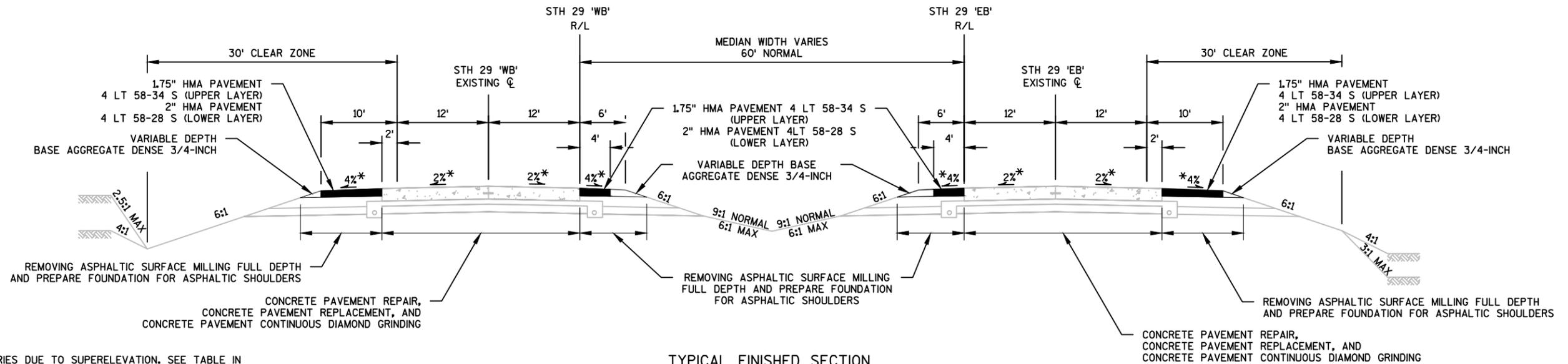
PRELIMINARY DESIGN NOTE
 CONFIRM WITH NWR IF PULL BOXES SHOULD BE REPLACED OR REMOVED AND IF EXISTING CONDUIT STUBS SHOULD BE EXTENDED.

ATTACHMENT 6



TYPICAL FINISHED SECTION
STH 29

1.75" HMA PAVEMENT 4 LT 58-34 S (UPPER LAYER) 2" HMA PAVEMENT 4 LT 58-28 S (LOWER LAYER) 1.75" HMA PAVEMENT 4 SMA 58-34 H (UPPER LAYER) 2" HMA PAVEMENT 4 MT 58-28 S (LOWER LAYER) ** CONCRETE PAVEMENT REPAIR NON DOWELED SPECIAL AT LOCATIONS DETERMINED BY THE ENGINEER PREPARE FOUNDATION FOR ASPHALTIC PAVING	STA 155'WB'+60.95 - STA 232'WB'+00 STA 238'WB'+33 - STA 283'WB'+16 STA 289'WB'+50 - STA 337'WB'+00 STA 383'WB'+81 - STA 419'WB'+51 STA 426'WB'+32 - STA 449'WB'+15 STA 455'WB'+78 - STA 607'WB'+50 STA 614'WB'+22 - STA 654'WB'+00	STA 156'EB'+14.02 - STA 232'EB'+00 STA 238'EB'+32 - STA 283'EB'+14 STA 289'EB'+48 - STA 376'EB'+62 STA 383'EB'+38 - STA 420'EB'+82 STA 427'EB'+63 - STA 449'EB'+00 STA 455'EB'+63 - STA 607'EB'+54 STA 614'EB'+24 - STA 644'EB'+00	1.75" HMA PAVEMENT 4 LT 58-34 S (UPPER LAYER) 2" HMA PAVEMENT 4 LT 58-28 S (LOWER LAYER) 1.75" HMA PAVEMENT 4 SMA 58-34 H (UPPER LAYER) 2" HMA PAVEMENT 4 MT 58-28 S (LOWER LAYER) ** CONCRETE PAVEMENT REPAIR NON DOWELED SPECIAL AT LOCATIONS DETERMINED BY THE ENGINEER PREPARE FOUNDATION FOR ASPHALTIC PAVING
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TYPICAL FINISHED SECTION
STH 29

1.75" HMA PAVEMENT 4 LT 58-34 S (UPPER LAYER) 2" HMA PAVEMENT 4 LT 58-28 S (LOWER LAYER) VARIABLE DEPTH BASE AGGREGATE DENSE 3/4-INCH REMOVING ASPHALTIC SURFACE MILLING FULL DEPTH AND PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS CONCRETE PAVEMENT REPAIR, CONCRETE PAVEMENT REPLACEMENT, AND CONCRETE PAVEMENT CONTINUOUS DIAMOND GRINDING	STA 232'WB'+00 - STA 238'WB'+33 STA 283'WB'+16 - STA 289'WB'+50 STA 337'WB'+00 - STA 383'WB'+81 STA 419'WB'+51 - STA 426'WB'+32 STA 449'WB'+15 - STA 455'WB'+78 STA 607'WB'+50 - STA 614'WB'+22	STA 232'EB'+00 - STA 238'EB'+32 STA 283'EB'+14 - STA 289'EB'+48 STA 376'EB'+62 - STA 383'EB'+38 STA 420'EB'+82 - STA 427'EB'+63 STA 449'EB'+00 - STA 455'EB'+63 STA 607'EB'+54 - STA 614'EB'+24	1.75" HMA PAVEMENT 4 LT 58-34 S (UPPER LAYER) 2" HMA PAVEMENT 4 LT 58-28 S (LOWER LAYER) VARIABLE DEPTH BASE AGGREGATE DENSE 3/4-INCH REMOVING ASPHALTIC SURFACE MILLING FULL DEPTH AND PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS CONCRETE PAVEMENT REPAIR, CONCRETE PAVEMENT REPLACEMENT, AND CONCRETE PAVEMENT CONTINUOUS DIAMOND GRINDING
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NOTES

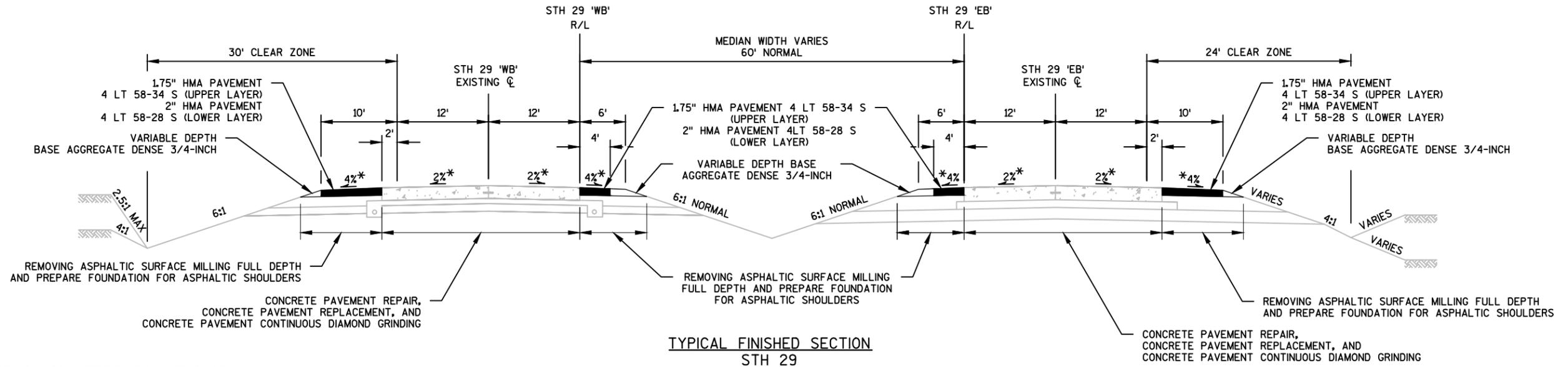
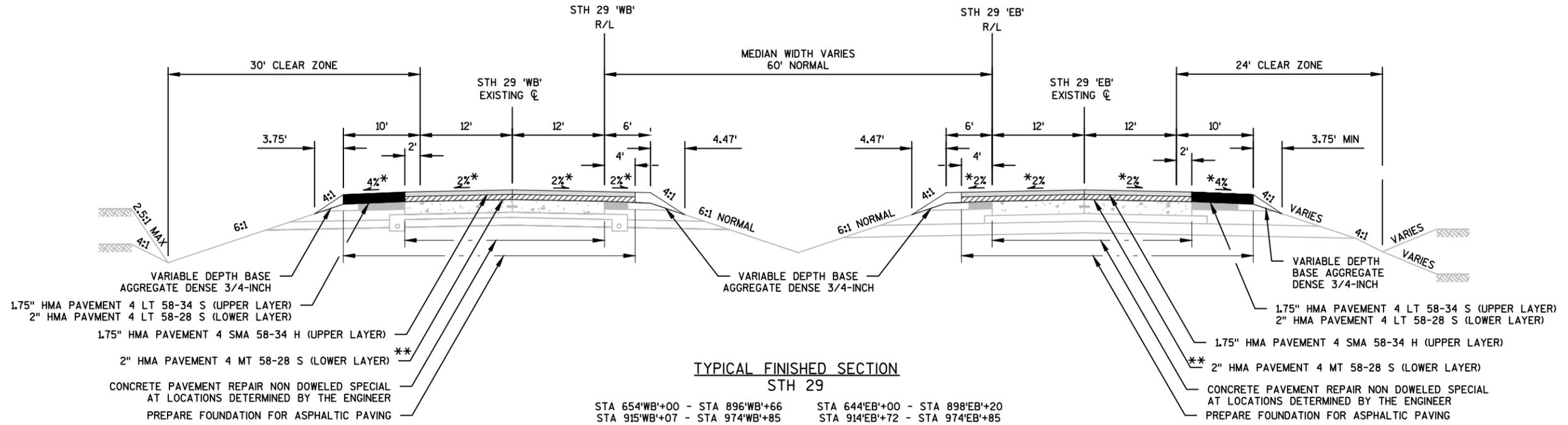
* CROSS SLOPE VARIES DUE TO SUPERELEVATION. SEE TABLE IN TYPICAL FINISHED SECTION SHEETS FOR EXISTING AND PROPOSED SUPERELEVATIONS. SHOULDER CROSS SLOPE VARIES AT LOCATIONS WITH EXISTING CONCRETE BARRIER.

** HMA PAVEMENT 4 MT 58-28 S THICKNESS VARIES FROM 2" TO 3" ON THE INSIDE SHOULDER.

PLACE ADDITIONAL BASE AGGREGATE DENSE 3/4-INCH AS NEED ON SHOULDERS IN TANGENT AND SUPERELEVATED SECTIONS.

FOR AREAS OF GUARDRAIL AND CROSSOVER GRADING SEE CONSTRUCTION DETAILS, SECTION 5 PLAN SHEETS, MISCELLANEOUS QUANTITIES, AND CROSS SECTIONS.

COMPLETE PASSING LANE AND PASSING LANE SHOULDER PAVING DURING THE SAME OPERATION FOR EACH LAYER.



NOTES

- * CROSS SLOPE VARIES DUE TO SUPERELEVATION. SEE TABLE IN TYPICAL FINISHED SECTION SHEETS FOR EXISTING AND PROPOSED SUPERELEVATIONS. SHOULDER CROSS SLOPE VARIES AT LOCATIONS WITH EXISTING CONCRETE BARRIER.
- ** HMA PAVEMENT 4 MT 58-28 S THICKNESS VARIES FROM 2" TO 3" ON THE INSIDE SHOULDER.
- PLACE ADDITIONAL BASE AGGREGATE DENSE 3/4-INCH AS NEED ON SHOULDERS IN TANGENT AND SUPERELEVATED SECTIONS.
- FOR AREAS OF GUARDRAIL AND CROSSOVER GRADING SEE CONSTRUCTION DETAILS, SECTION 5 PLAN SHEETS, MISCELLANEOUS QUANTITIES, AND CROSS SECTIONS.
- COMPLETE PASSING LANE AND PASSING LANE SHOULDER PAVING DURING THE SAME OPERATION FOR EACH LAYER.

ATTACHMENT 7

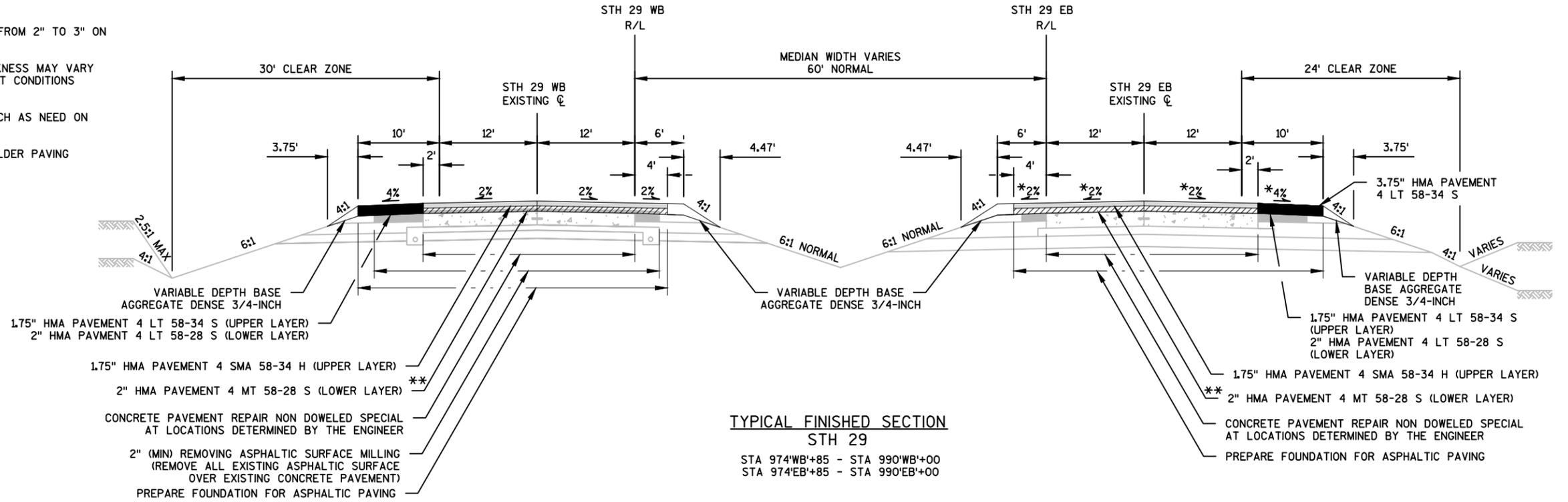
NOTES

** HMA PAVEMENT 4 MT 58-28 S THICKNESS VARIES FROM 2" TO 3" ON THE INSIDE SHOULDER.

TRAVEL LANE HMA PAVEMENT 4 MT 58-28 S THICKNESS MAY VARY TO GREATER THAN 2" PENDING CONCRETE PAVEMENT CONDITIONS UNDER EXISTING ASPHALTIC OVERLAY.

PLACE ADDITIONAL BASE AGGREGATE DENSE 3/4-INCH AS NEED ON SHOULDERS.

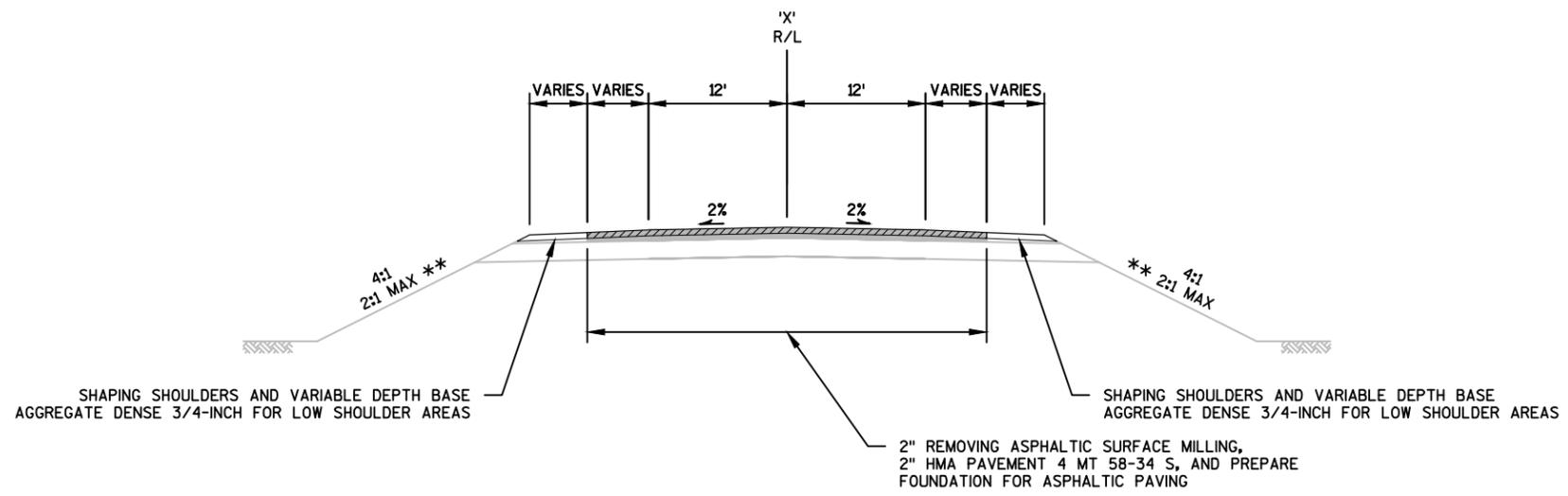
COMPLETE PASSING LANE AND PASSING LANE SHOULDER PAVING DURING THE SAME OPERATION FOR EACH LAYER.



PI STATION	CURVE	RADIUS (FT)	EXISTING SUPERELEVATION	PROPOSED SUPERELEVATION	NOTES	PRELIMINARY DESIGN NOTES: (THESE WILL BE REMOVED FROM FINAL PLANS)
228'WB'+15.56	CURVE WB-1	22,918.31	NC	NC	TO REMAIN	
333'WB'+14.32	CURVE WB-2	3,759.72	4.6%	4.7%	ADJUST SUPERELEVATION AROUND OUTSIDE EDGE LINE	
459'WB'+52.31	CURVE WB-3	3,890.36	4.5%	4.5%	TO REMAIN	
525'WB'+36.19	CURVE WB-4	17,128.73	RC	RC	TO REMAIN	70+ MPH DESIGN SPEED, REVERSE CROWN WILL NOT BE CORRECTED TO NC PER CURRENT STANDARDS
584'WB'+32.80	CURVE WB-5	22,978.31	NC	NC	TO REMAIN	
856'WB'+51.23	CURVE WB-6	5,656.87	3.2%	3.4%	ADJUST SUPERELEVATION AROUND OUTSIDE EDGE LINE	
929'WB'+47.35	CURVE WB-7	4,643.75	3.9%	4.0%	ADJUST SUPERELEVATION AROUND INSIDE EDGE LINE	
955'WB'+90.80	CURVE WB-8	10,530.35	2.1%	2.1%	TO REMAIN	70+ MPH DESIGN SPEED, 2.1% CROSS SLOPE WILL NOT BE CORRECTED TO RC PER CURRENT STANDARDS
228'EB'+22.51	CURVE EB-1	22,858.31	NC	NC	TO REMAIN	
333'EB'+39.43	CURVE EB-2	3,819.72	4.3%	4.6%	ADJUST SUPERELEVATION AROUND INSIDE EDGE LINE	
459'EB'+76.10	CURVE EB-3	3,830.36	4.6%	4.6%	TO REMAIN	
525'EB'+35.00	CURVE EB-4	17,188.73	RC	RC	TO REMAIN	70+ MPH DESIGN SPEED, REVERSE CROWN WILL NOT BE CORRECTED TO NC PER CURRENT STANDARDS
584'EB'+40.51	CURVE EB-5	22,918.31	NC	NC	TO REMAIN	
856'EB'+72.57	CURVE EB-6	5,716.87	3.2%	3.4%	ADJUST SUPERELEVATION AROUND INSIDE EDGE LINE	
929'EB'+79.50	CURVE EB-7	4,583.75	3.9%	4.0%	ADJUST SUPERELEVATION AROUND OUTSIDE EDGE LINE	
956'EB'+01.34	CURVE EB-8	10,470.35	RC	RC	TO REMAIN	

NOTES:
 ADDITIONAL CURVE DATA IS SHOWN ON SECTION 5 PLAN SHEETS.
 ADJUST SUPERELEVATIONS WITH VARIABLE DEPTH HMA PAVEMENT 4 MT 58-28 S LAYER.

ATTACHMENT 7



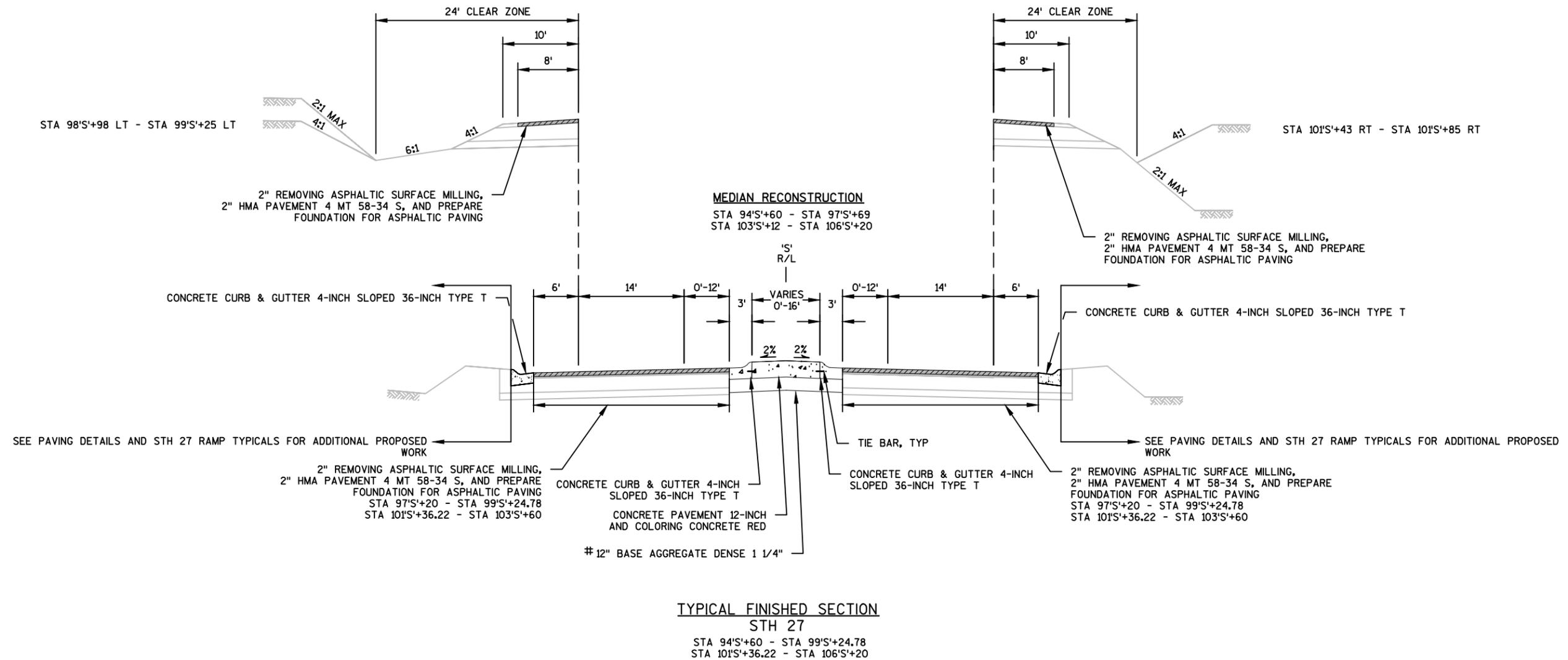
TYPICAL FINISHED SECTION
 CTH X
 STA 95'X'+30 - STA 98'X'+26.25
 STA 100'X'+94.96 - STA 104'X'+30

NOTES

SEE PLAN SHEETS FOR ADDITIONAL TURN LANE AND VARIABLE WIDTH PAVEMENT LOCATIONS.

** 2:1 MAX SLOPE ONLY OCCURS IN SECTIONS WITH GUARDRAIL.

ATTACHMENT 7



NOTES

SEE PLAN SHEETS FOR ADDITIONAL TURN LANE AND VARIABLE WIDTH PAVEMENT LOCATIONS.

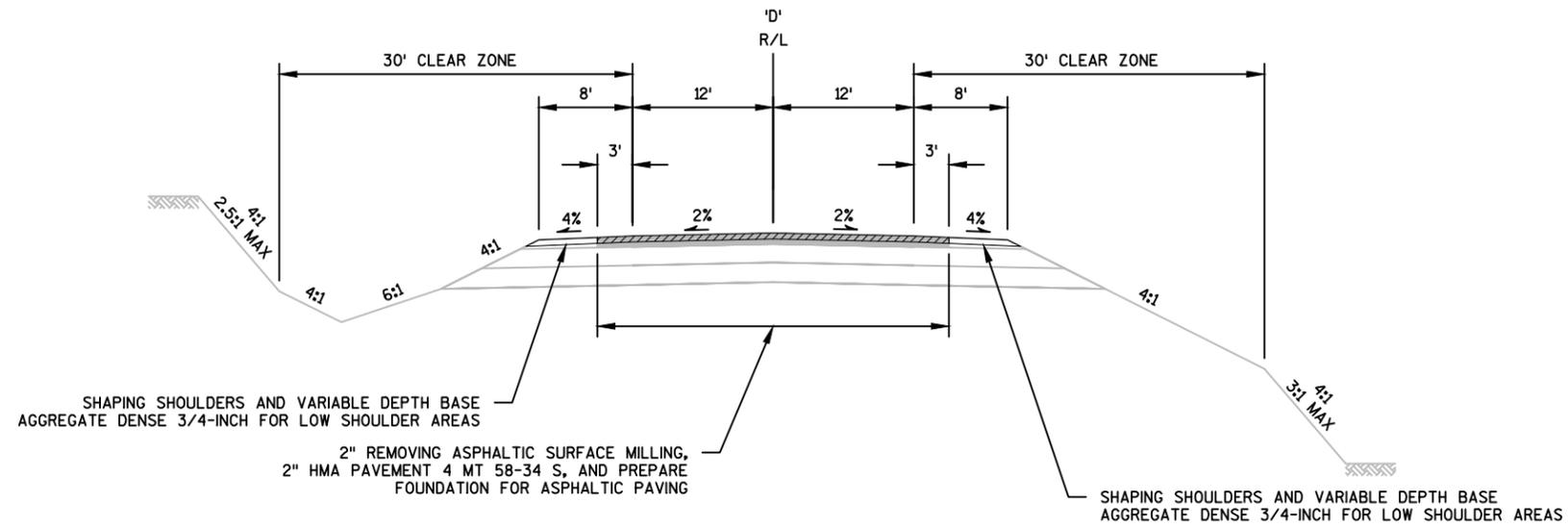
TIE BARS INCIDENTAL TO CONCRETE PAVEMENT.

SEE SECTION 5 PLAN SHEETS FOR PROPOSED CURB & GUTTER LOCATIONS AND TYPES.

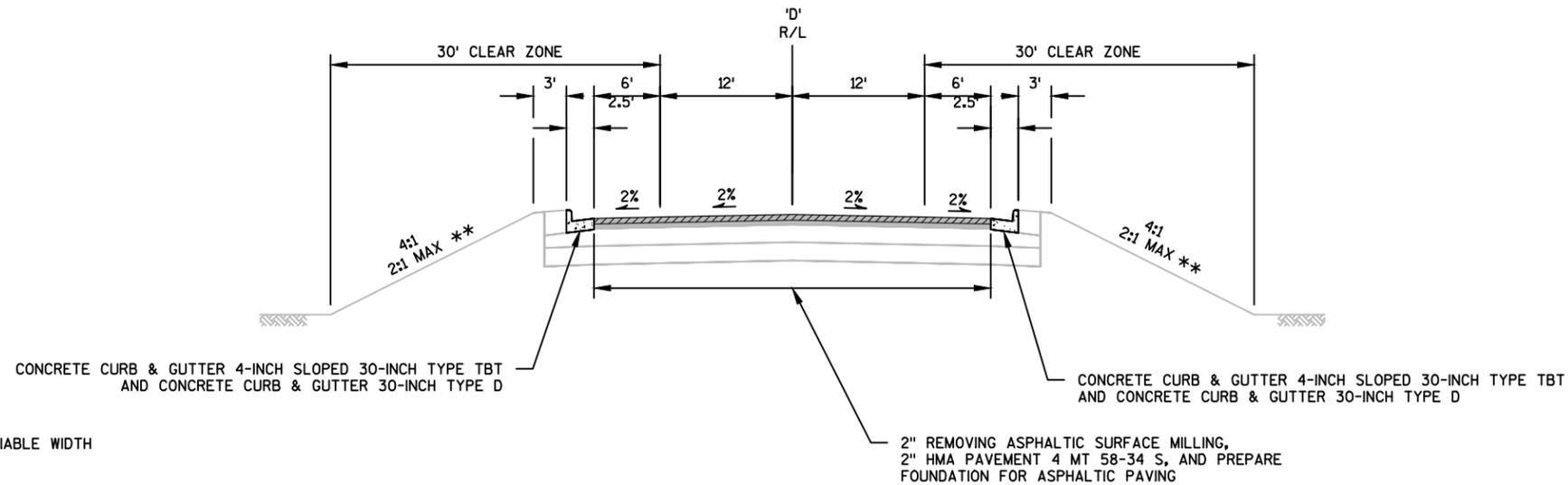
PROPOSED SUBGRADE SHOULD MATCH OR BE CONSTRUCTED BELOW EXISTING SUBGRADE.

SEE CONSTRUCTION DETAILS FOR REQUIREMENTS IN CURB & GUTTER REMOVAL/REPLACEMENT AREAS.

ATTACHMENT 7



TYPICAL FINISHED SECTION
 CTH D
 STA 93'D+80 - STA 96'D+82



TYPICAL FINISHED SECTION
 CTH D
 STA 96'D+82 - STA 98'D+96.12
 STA 101'D+73.14 - STA 105'D+00

NOTES

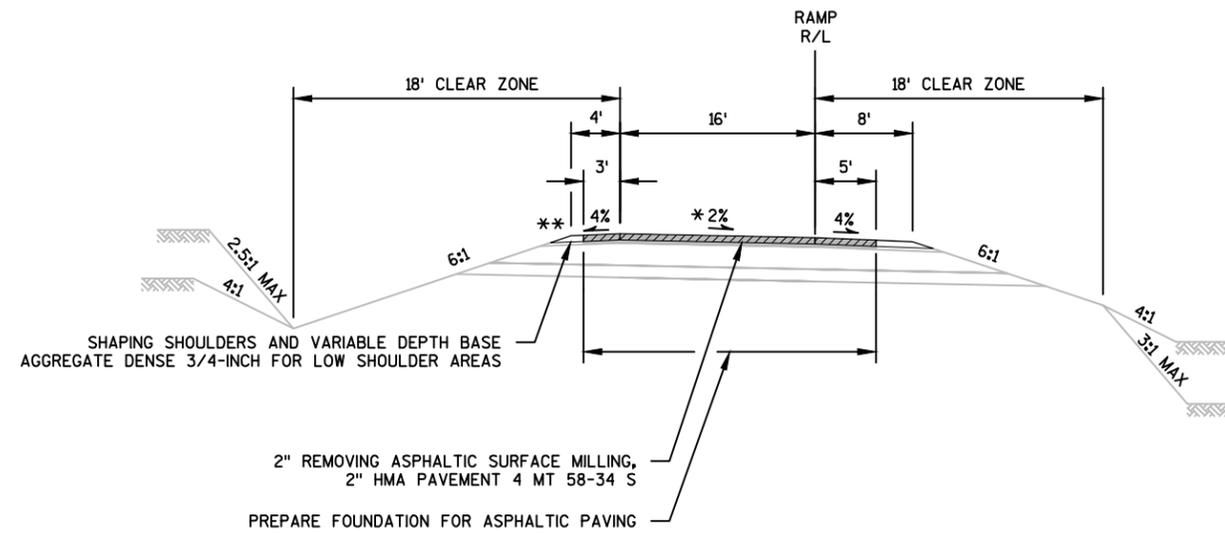
SEE PLAN SHEETS FOR ADDITIONAL TURN LANE AND VARIABLE WIDTH PAVEMENT LOCATIONS.

** 2:1 MAX SLOPE ONLY OCCURS IN SECTIONS WITH GUARDRAIL.

SEE SECTION 5 PLAN SHEETS FOR PROPOSED CURB & GUTTER LOCATIONS AND TYPES.

SEE CONSTRUCTION DETAILS FOR REQUIREMENTS IN CURB & GUTTER REMOVAL/REPLACEMENT AREAS.

ATTACHMENT 7

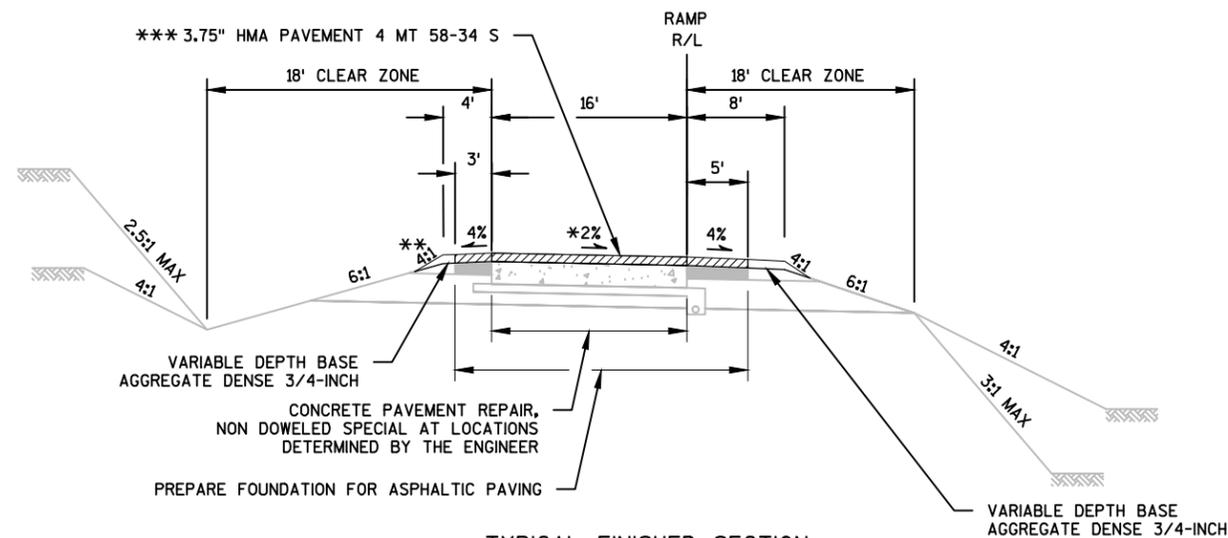


TYPICAL FINISHED SECTION
 STH 29 EXIT AND ENTRANCE RAMP

CTH X

STA 416'XA'+35 - STA 422'XA'+17
 STA 422'XB'+17 - STA 430'XB'+76
 ## STA 426'XC'+41 - STA 427'XC'+50
 ## STA 417'XD'+91 - STA 426'XD'+41

2" REMOVING ASPHALTIC SURFACE MILLING,
 2" HMA PAVEMENT 4 MT 58-34 S
 PREPARE FOUNDATION FOR ASPHALTIC PAVING



TYPICAL FINISHED SECTION
 STH 29 EXIT AND ENTRANCE RAMP

CTH X

STH 27

STA 403'XA'+96 - STA 416'XA'+35
 STA 430'XB'+76 - STA 436'XB'+39
 ## STA 427'XC'+50 - STA 444'XC'+91
 ## STA 412'XD'+33 - STA 417'XD'+91
 STA 590'SA'+29 - STA 604'SA'+15
 STA 619'SB'+33 - STA 625'SB'+02
 ## STA 618'SC'+27 - STA 631'SC'+09
 ## STA 597'SD'+10 - STA 602'SD'+96

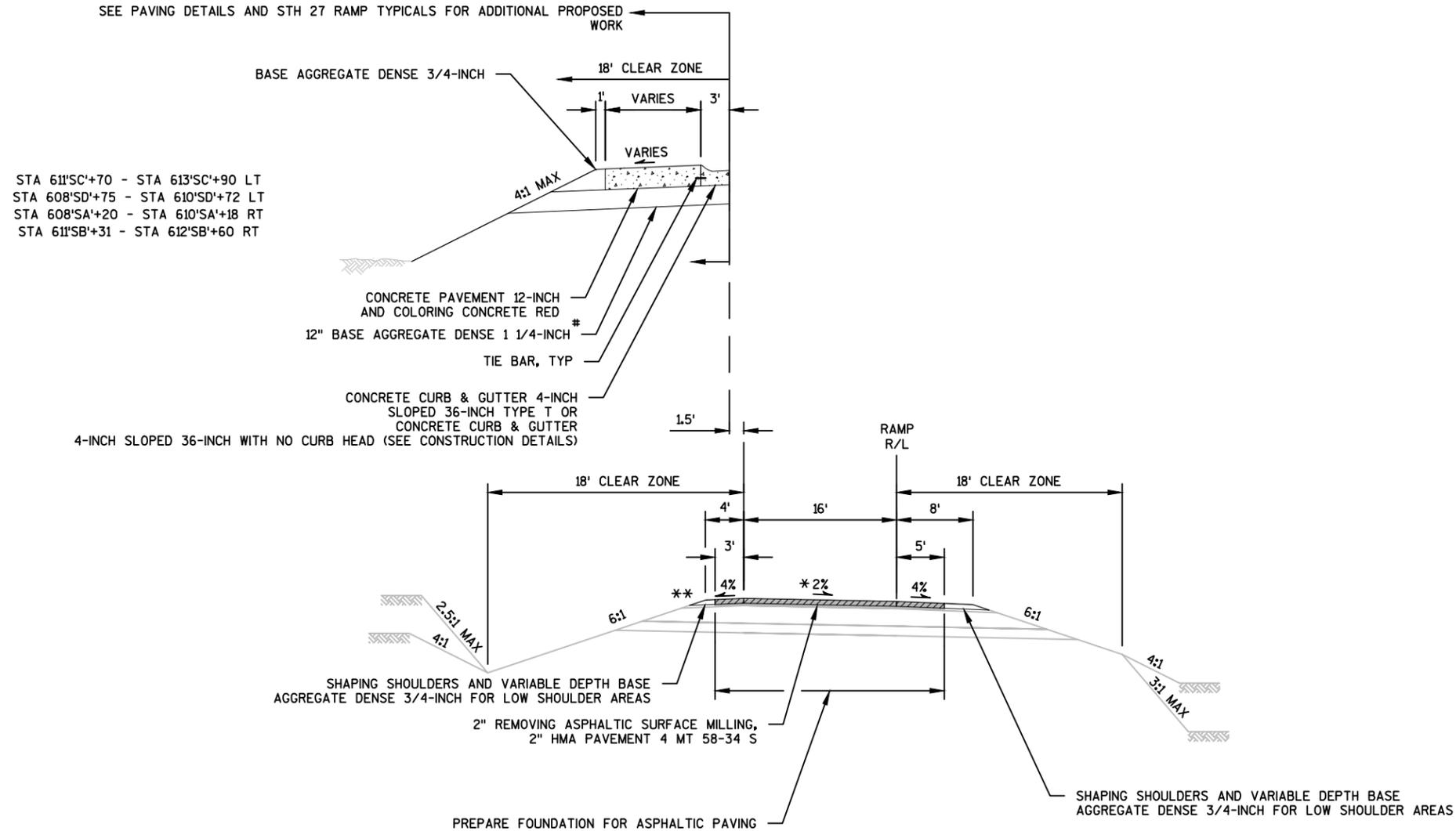
VARIABLE DEPTH BASE
 AGGREGATE DENSE 3/4-INCH
 CONCRETE PAVEMENT REPAIR,
 NON DOWELED SPECIAL AT LOCATIONS
 DETERMINED BY THE ENGINEER
 PREPARE FOUNDATION FOR ASPHALTIC PAVING

VARIABLE DEPTH BASE
 AGGREGATE DENSE 3/4-INCH

NOTES

- * PAVEMENT CROSS SLOPE VARIES DUE TO SUPER ELEVATION
 SEE ALIGNMENT DATA SHEETS FOR SUPER ELEVATION DATA.
- PAVEMENT WIDTH VARIES AT TURN LANES AND RAMP TERMINALS.
- *** HMA THICKNESS VARIES, SEE CONSTRUCTION DETAILS.
- ** PAVEMENT SAFETY EDGE REQUIRED, SEE SDD "SAFETY EDGE".
- ## DETAIL SHOW IS FOR ALIGNMENTS 'XC' AND 'XD', MIRROR TYPICAL FOR
 'XA' AND 'XB' ALIGNMENTS.

ATTACHMENT 7



STA 611'SC'+70 - STA 613'SC'+90 LT
 STA 608'SD'+75 - STA 610'SD'+72 LT
 STA 608'SA'+20 - STA 610'SA'+18 RT
 STA 611'SB'+31 - STA 612'SB'+60 RT

TYPICAL FINISHED SECTION
 STH 29 EXIT AND ENTRANCE RAMP
 STH 27

STA 604'SA'+15 - STA 610'SA'+74
 STA 610'SB'+74 - STA 619'SB'+33
 ## STA 611'SC'+23 - STA 618'SC'+27
 ## STA 602'SD'+96 - STA 611'SD'+23

NOTES

SEE SECTION 5 PLAN SHEETS FOR RAMP SHOULDER MILL AND OVERLAY LIMITS.

PROPOSED SUBGRADE SHOULD MATCH OR BE CONSTRUCTED BELOW EXISTING SUBGRADE.

* * PAVEMENT SAFETY EDGE REQUIRED, SEE SDD "SAFETY EDGE".

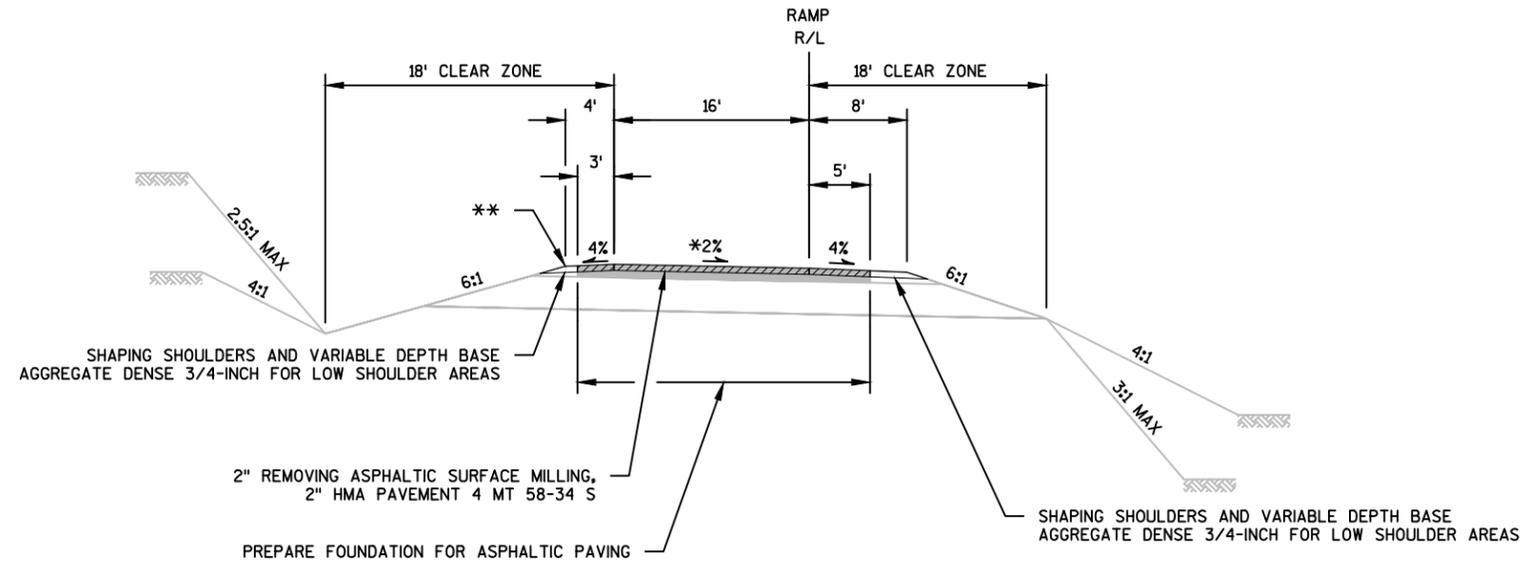
* PAVEMENT CROSS SLOPE VARIES DUE TO SUPER ELEVATION
 SEE ALIGNMENT DATA SHEETS FOR SUPER ELEVATION DATA.

DETAIL SHOWN IS ALIGNMENT 'SC' AND 'SD', MIRROR TYPICAL FOR 'SA' AND 'SB' ALIGNMENTS.

TIE BARS INCIDENTAL TO CONCRETE PAVEMENT.

SEE CONSTRUCTION DETAILS FOR REQUIREMENTS IN CURB & GUTTER REMOVAL/REPLACEMENT AREAS.

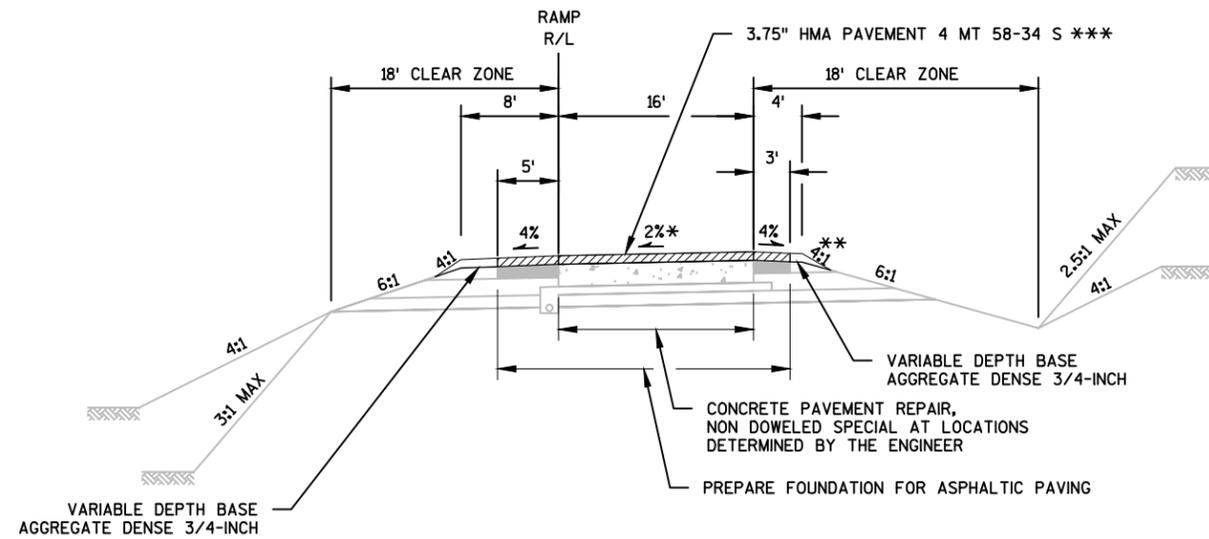
ATTACHMENT 7



TYPICAL FINISHED SECTION
STH 29 EXIT AND ENTRANCE RAMP

CTH D

STA 906'DA'+42 - STA 913'DA'+87
 STA 913'DB'+87 - STA 922'DB'+10
 ## STA 909'DC'+50 - STA 916'DC'+69
 ## STA 905'DD'+40 - STA 909'DD'+50



TYPICAL FINISHED SECTION
STH 29 EXIT AND ENTRANCE RAMP

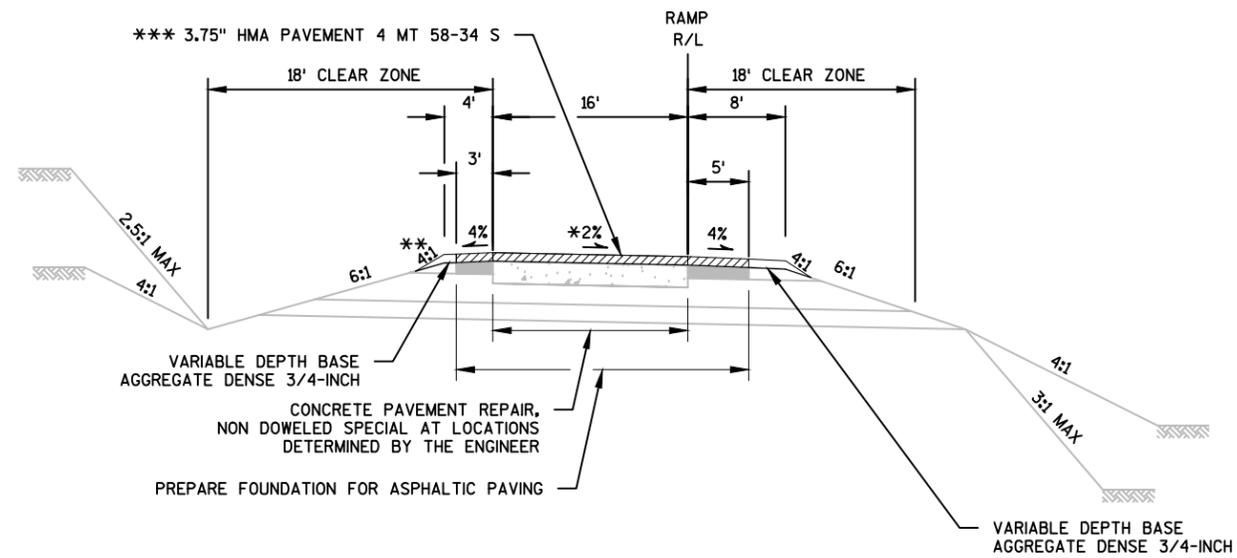
CTH D

STA 894'DA'+55 - STA 906'DA'+42
 STA 922'DB'+10 - STA 927'DB'+85

NOTES

- * PAVEMENT CROSS SLOPE VARIES DUE TO SUPER ELEVATION
SEE ALIGNMENT DATA SHEETS FOR SUPER ELEVATION DATA.
- PAVEMENT WIDTH VARIES AT TURN LANES AND RAMP TERMINALS.
- *** HMA THICKNESS VARIES, SEE CONSTRUCTION DETAILS.
- ** PAVEMENT SAFETY EDGE REQUIRED, SEE SDD "SAFETY EDGE".
- ## DETAIL SHOWN IS ALIGNMENT 'DC' AND 'DD', MIRROR TYPICAL FOR 'DA'
AND DB ALIGNMENTS.

ATTACHMENT 7



TYPICAL FINISHED SECTION
 STH 29 EXIT AND ENTRANCE RAMPS
 CTH D
 STA 916'DC'+69 - STA 928'DC'+65
 STA 896'DD'+08 - STA 905'DD'+40

NOTES

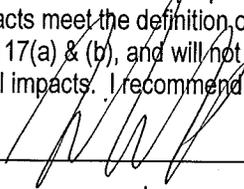
- * PAVEMENT CROSS SLOPE VARIES DUE TO SUPER ELEVATION
SEE ALIGNMENT DATA SHEETS FOR SUPER ELEVATION DATA.
- PAVEMENT WIDTH VARIES AT TURN LANES AND RAMP TERMINALS.
- *** HMA THICKNESS VARIES, SEE CONSTRUCTION DETAILS.
- ** PAVEMENT SAFETY EDGE REQUIRED, SEE SDD "SAFETY EDGE".

PROGRAMMATIC CATEGORICAL EXCLUSION
FOR STATE AND FEDERALLY FUNDED ACTIONS
 Wisconsin Department of Transportation
 Revised July 2015

WisDOT Design and Construction IDs 1050-01-31 / 1052-01-32 (design) 1050-01-61 / 1052-01-62 (construction)		Federal Project IDs (if available) --	Legal Description (Township, Range, Section) Section 13 and 14, T28N, R8W; Section 9, 16, 17, and 18, T28N, R7W in the Town of Lafayette, Section 1, 2, 3, and 10, T28N, R7W; Section 4 and 5, T28N, R6W in the Town of Sigel, Section 5 and 6, T28N, R6W in the Village of Cadott, Section 1, 2, and 3, T28N, R6W; Section 6, T28N, R5W in the Town of Edson, Section 31, T29N, R5W in the Village of Boyd, and Section 32, T29N, R5W in the Town of Delmar	County Chippewa
Project Name Chippewa Falls - Cadott		Project Termini/ Location Stillson Creek to 320th Street (WB) / Stillson Creek to 320th Street (EB)		
Name of Route or Facility to be Improved STH 29		Facility Classification Principal Arterial	Improvement Type Resurfacing	
Estimated Project Cost in Year of Expenditure \$ (include R/W Cost) \$30M (2019 YOY, no R/W)		Funding Source(s) (check all that apply) <input checked="" type="checkbox"/> State <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Local		
23 CFR 771.117(d) Project Type Number and Text (see Table 1 below) (26) Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (including parking, weaving, turning, and climbing lanes)				
Section 4(f) <input checked="" type="checkbox"/> None <input type="checkbox"/> De Minimis <input type="checkbox"/> Bikeway/ Walkway <input type="checkbox"/> Minor Park/ Rec <input type="checkbox"/> Minor Historic <input type="checkbox"/> Net Benefit <input type="checkbox"/> Exception				
Right of Way Acquisition 0 Total Acres 0 Fee Simple Acres 0 Permanent Easement Acres 0 Temporary Easement Acres				
Number of Buildings Acquired <input checked="" type="checkbox"/> None Vacant Buildings Occupied Buildings				
Name of Individual/ Firm Preparing this Form Stephanie G. Christensen, PE/EMCS, Inc.		CE Preparation Date 12/2/2015	Project Start Date 12/3/2014	

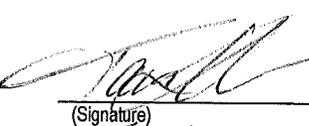
WisDOT Region Environmental Coordinator or Local Program Management Consultant

I certify that I meet the requirements for staff who review and recommend approval of Categorical Exclusion (CE) actions, specified in the FHWA – WisDOT CE Agreement. I further certify that I have reviewed this document, and agree with the determination that the proposed project and resultant impacts meet the definition of a CE as described in 23 CFR 771.117(a) & (b), and will not result in significant environmental impacts. I recommend this CE for approval.

(Signature) 
 (Print Name) Nick Schaff
 (Date) 12/9/15

WisDOT Region, Central Office, or Local Program Project Manager

I certify that I am familiar with this proposed project and its impacts and that the information contained in this document is accurate and can be relied upon for documentation decisions. I further certify that the mitigation measures and commitments proposed herein will be incorporated into the project plans and contract documents. I approve this CE.

(Signature) 
 (Print Name) TARA WEISS
 (Date) 12/9/15

Section Five: Environmental Commitments

List any environmental mitigation measures or commitments that will be incorporated into the project. Any items listed below must be incorporated into the project plans and contract documents. *Attach a copy of this page to the design study report (DSR) and the plans, specifications, and estimate (PS&E) submittal package.*

Environmental Factor	Commitment (If none, include 'No special or supplemental commitments required.')
General Economics	<p>Commitments Made</p> <p>WisDOT will develop contract requirements to maintain through, local, and emergency traffic through the project area during construction in order to maintain access and minimize delays. The WisDOT construction engineer will ensure fulfillment of this commitment.</p>
Business	<p>Commitments Made</p> <p>WisDOT will develop contract requirements to maintain through, local, and emergency traffic through the project area during construction in order to maintain access to regional and local business traffic and minimize delays. The WisDOT construction engineer will ensure fulfillment of this commitment.</p>
Agriculture	<p>Commitments Made</p> <p>WisDOT will develop contract requirements to maintain through, local, and emergency traffic through the project area during construction in order to maintain access to regional and local agricultural related traffic and minimize delays. The WisDOT construction engineer will ensure fulfillment of this commitment.</p>
Community or Residential	<p>Commitments Made</p> <p>WisDOT will develop contract requirements to maintain through, local, and emergency traffic through the project area during construction in order to maintain access to residents and community facilities while minimizing delays. The WisDOT construction engineer will ensure fulfillment of this commitment.</p>
Indirect Effects	No special or supplemental commitments required.
Cumulative Effects	No special or supplemental commitments required.
Environmental Justice	No special or supplemental commitments required.
Historic Resources	No special or supplemental commitments required.
Archaeological/Burial Sites	No special or supplemental commitments required.
Tribal Coordination/Consultation	No special or supplemental commitments required.
Section 4(f) and 6(f) or Other Unique Areas	No special or supplemental commitments required.
Aesthetics	No special or supplemental commitments required.
Wetlands	<p>Commitments Made</p> <p>Unavoidable wetland losses will be required guardrail and crossover grading. The impacts will be permitted through the Army Corps of Engineers (Section 404 Permit) and will be compensated for at an operating WisDOT Wetland Bank Site in accordance with the WisDOT/WDNR Cooperative Agreement and in coordination with WDNR and USACE. WisDOT's Regional Environmental Coordinator and WisDOT's project manager will ensure fulfillment of this commitment.</p>

Rivers, Streams and Floodplains	No waterway or floodplain impacts will occur within the streams and floodplains present along the project. No special or supplemental commitments required.
Lakes or other Open Water	No special or supplemental commitments required.
Groundwater, Wells and Springs	No special or supplemental commitments required.
Upland Wildlife and Habitat	No special or supplemental commitments required.
Coastal Zones	No special or supplemental commitments required.
Threatened and Endangered Species	No special or supplemental commitments required. No tree cutting or removal of suitable habitat for the Northern Long Eared Bat (NLEB) is anticipated. If tree cutting is determined to be necessary at any point during the project design, additional coordination may be required with USFWS for the NLEB and tree cutting will be scheduled between October 1 and April 1 to avoid impacts to the NLEB.
Air Quality	No special or supplemental commitments required.
Construction Stage Sound Quality	No special or supplemental commitments required.
Traffic Noise	No special or supplemental commitments required.
Hazardous Substances or Contamination	No special or supplemental commitments required.
Storm Water	No special or supplemental commitments required.
Erosion Control	<p>Commitments Made</p> <p>Proper erosion control measures will be used to minimize impacts per Cooperative Agreement between WisDOT and WDNR and Trans 401 of Wisconsin's Administrative Code. An Erosion Control Implementation Plan (ECIP) will be prepared for review by the WDNR prior to construction. Determination of detailed erosion control measures will be determined during final design. The contractor will specify their construction methods in the ECIP and restore disturbed areas as soon as feasible. Stockpiles will be stored in upland areas and protected with erosion control measures. Erosion control will be monitored during construction. The contractor's ECIP will address any water withdrawals from area waterways and dewatering, if required. Non-netted erosion mat will be used near any waterways, if required, to ensure animals are not entrapped in the erosion mat. The WisDOT construction engineer will ensure fulfillment of this commitment.</p>
Other	No special or supplemental commitments required.

From: Hetland, Justin - DOT <Justin.Hetland@dot.wi.gov>
Sent: Tuesday, May 05, 2015 10:32 AM
To: Stephanie Christensen
Subject: Project ID 1051-01-61 and 1052-01-62

Ms. Christensen,

I've reviewed Project IDs 1051-01-61 and 1052-01-62 in Chippewa County and do not have any issues at this time with these projects from a Bureau of Aeronautics standpoint. The projects do not come close to any public use airports. They do however come close to 2 private use airfields, Crane Field and the Wissota private landing strip. If you'd like, it would be a nice gesture to notify the owners of these airports as a heads up about these projects. The last contact information for Crane Field is David Crane (715)723-1662 and Wissota is Robert Stumm or Mary Bauer (715)289-4440.

Sorry for the lateness of this response, I've been covering for a co-worker on medical leave so I've been out of the office quite a bit flying the last couple months.

Let me know if you have any questions!

Justin M Hetland

Airspace Safety Manager/Assistant Chief Flight Instructor

Department of Transportation/DTIM/Aeronautics

4802 Sheboygan Ave Room 701

Madison, WI 53707

608-267-5018 | justin.hetland@dot.wi.gov



March 19, 2015

Dan Munson
U.S. Army Corps of Engineers
St. Paul District - Regulatory
180 5th St. East, Suite 700
St. Paul MN 55101

Subject: **Initial Project Notification**

Project ID 1050-01-61
Chippewa Falls - Cadott
Stillson Creek to 320th Street (WB)
STH 29
Chippewa County

Project ID 1052-01-62
Chippewa Falls - Cadott
Stillson Creek to 320th Street (EB)
STH 29
Chippewa County

EMCS, Inc. has been retained by the Wisconsin Department of Transportation to provide design services for the design of the resurfacing of STH 29 from Stillson Creek to 320th Street in Chippewa County. The project is located in the towns of Lafayette, Sigel, Delmar, and Edson and the villages of Cadott and Boyd. See the enclosed project location map.

This project will consist of approximately 15-miles of pavement and roadside repairs required to address deteriorating pavement. The improvements are needed to extend the service life of the existing pavement and to maintain safe and efficient traffic operations along STH 29. The proposed improvements include concrete pavement repairs, asphaltic overlay of the travel lanes and shoulders, median crossover upgrades where required, guardrail replacements to improve safety, and replacement of signing and pavement marking. The interchange ramps and crossroads between the ramp terminals at CTH X, STH 27, and CTH D are also proposed to be resurfaced.

During construction, motorists can expect periodic single lane and shoulder closures on STH 29 with possible reduction in travel lane widths on STH 29 and at the interchange ramps. All work is anticipated to occur within the existing right of way. Construction is currently scheduled for 2019 but could be advanced to 2017.

As project plans become available, we will have further correspondence with your office. Environmental studies will be undertaken by the design team including wetland delineations and an environmental document will be prepared.

Please review the project location to determine if there are any environmental issues we should be aware of, including any required permits. We would appreciate any initial comments you may have by **May 1, 2015**. If you would like additional information, please contact me at (715) 845-1081 or via email at schristensen@emcsinc.com.

Sincerely,



Stephanie G. Christensen, P.E.
EMCS Project Manager

cc: Tara Weiss, WisDOT Northwest Region

Enclosure



May 1, 2015

Stephanie G. Christensen, P.E.
EMCS Project Manager
500 North 17th Ave.
Wausau, WI 54401

Subject: DNR Initial Project Review
Project I.D. 1050-01-31/61
STH 29 (WB) – Chippewa Falls to Cadott
Stillson Creek to 320th Steet
Chippewa County
Section 14, and 13/T28N/R8W – Town of Lafayette
Section 18, 17, 16, and 9/T28N/R7W – Town of Lafayette
Section 10, 3, 2, and 1/T28N/R7W – Town of Sigel
Section 6 and 5/T28N/R6W – Village of Cadott
Section 5 and 4/T28N/R6W – Town of Sigel
Section 3, 2, and 1/T28N/R6W – Town of Edson
Section 6/T28N/R5W – Town of Edson
Section 31/T29N/R5W – Town of Boyd
Section 32/T29N/R5W – Town of Delmar

Dear Ms. Christensen:

The Wisconsin Department of Natural Resources (DNR) has received the information you provided for the proposed above-referenced project on 03/30/2015. According to your proposal, the purpose of this project is to resurface approximately 15-miles of pavement and roadside repairs required to address deteriorating pavement. Proposed improvements include concrete pavement repairs, asphaltic overlay of the travel lanes and shoulders, median crossover upgrades where required, guardrail replacements to improve safety, and replacement of signing and pavement marking. The interchange ramps and crossroads between the ramp terminals at CTH X, STH 27, and CTH D are also proposed to be resurfaced..

Preliminary information has been reviewed by DNR staff for the project under the DNR/DOT (Wisconsin Department of Transportation) Cooperative Agreement. Initial comments on the project as proposed are included below, and assume that additional information will be provided that addresses all resource concerns identified. In addition to the project specific resource concerns highlighted below, it is DNR's expectation that the full range of DOT roadway standards will be applied throughout the design process.

A. Project-Specific Resource Concerns

Wetlands:

There is potential for wetland impacts to occur as a result of this project. Wetland impacts must be avoided and/or minimized to the greatest extent practicable. Unavoidable wetland losses must be compensated for in accordance with the DNR/DOT Cooperative Agreement and the DOT Wetland Mitigation Banking Technical Guideline. Per the Cooperative Agreement, mitigation banking is the preferred compensation option, however DOT and DNR agree that other practicable and ecologically valuable project specific opportunities may be pursued on a case-by-case basis. DNR requests information regarding the amount and type of unavoidable wetland impacts.

Endangered Resources:

Based upon a review of the Natural Heritage Inventory (NHI) and other DNR records dated 04/28/2015, no Endangered Resources or suitable habitat that could be impacted by this project are known or likely to occur in the project area or its vicinity.

Floodplains:

Portions of the project lie within mapped/zoned floodplain, along Stillson Creek and Paint Creek. Floodplain impacts should be assessed and/or quantified and appropriate coordination must be carried out in accordance with the DOT/DNR Cooperative Agreement. Coordination must also occur with the Chippewa County Zoning Program.

B. Project Specific Construction Site Considerations

The following issues should be addressed in the Special Provisions, and the contractor will be required to outline their construction methods in the Erosion Control Implementation Plan (ECIP). An adequate ECIP for the project must be developed by the contractor and submitted to this office for review at least 14 days prior to the preconstruction conference. Erosion control and stormwater measures must adhere to the DNR/DOT Cooperative Agreement, Trans 401, and applicable federal laws.

Erosion Control and Storm Water Management:

- Erosion control devices should be specified on the construction plans. All disturbed bank areas should be adequately protected and restored as soon as feasible.
- If erosion mat is used along stream banks, DNR recommends that biodegradable non-netted mat be used (e.g. Class I Type A Urban, Class I Type B Urban, or Class II Type C). Long-term netted mats may cause animals to become entrapped while moving in and out of the stream. Avoid the use of fine mesh matting that is tied or bonded at the mesh intersection such that the openings in the mesh are fixed in size.
- If dewatering is required for any reason, the water must be pumped into a properly selected and sized dewatering basin before the clean/filtered water is allowed to enter any waterway or wetland. The basin must remove suspended solids and contaminants to the maximum extent practicable. A properly designed and constructed dewatering basin must take into consideration maximum pumping volume (gpm or cfs) and the sedimentation rate for soils to be encountered. Do not house any dewatering technique in a wetland.
- The contractor should restrict the removal of vegetative cover and exposure of bare ground to the minimum amounts necessary to complete construction. Restoration of disturbed soils should take place as

soon as conditions permit. If sufficient vegetative cover will not be achieved because of late season construction, the site must be properly winterized.

- All temporary stock piles must be in an upland location and protected with erosion control measures (e.g. silt fence, rock filter-bag berm, etc.). Do not stockpile materials in wetlands, waterways, or floodplains.

This project may require a permit from the U.S. Army Corps of Engineers (ACOE). For further details you will need to contact Sam Woboril of the ACOE located in the Stevens Point office, at (651)290-5878. All local, state, and federal permits and/or approvals must be obtained prior to commencing construction activities.

The above comments represent the DNR's initial concerns for the proposed project and do not constitute final concurrence. Final concurrence will be granted after further review of refined project plans, and additional consultation if necessary. If any of the concerns or information provided in this letter requires further clarification, please contact this office at (715)839-1609, or email at christopherj.willger@wi.gov.

Sincerely,



Chris Willger
Environmental Analysis & Review Specialist

cc: Nick Schaff, WisDOT
Tara Weiss, WisDOT



May 1, 2015

Stephanie G. Christensen, P.E.
EMCS Project Manager
500 North 17th Ave.
Wausau, WI 54401

Subject: DNR Initial Project Review
Project I.D. 1050-01-32/62
STH 29 (EB) – Chippewa Falls to Cadott
Stillson Creek to 320th Steet
Chippewa County
Section 14, and 13/T28N/R8W – Town of Lafayette
Section 18, 17, 16, and 9/T28N/R7W – Town of Lafayette
Section 10, 3, 2, and 1/T28N/R7W – Town of Sigel
Section 6 and 5/T28N/R6W – Village of Cadott
Section 5 and 4/T28N/R6W – Town of Sigel
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Section 6/T28N/R5W – Town of Edson
Section 31/T29N/R5W – Town of Boyd
Section 32/T29N/R5W – Town of Delmar

Dear Ms. Christensen:

The Wisconsin Department of Natural Resources (DNR) has received the information you provided for the proposed above-referenced project on 03/30/2015. According to your proposal, the purpose of this project is to resurface approximately 15-miles of pavement and roadside repairs required to address deteriorating pavement. Proposed improvements include concrete pavement repairs, asphaltic overlay of the travel lanes and shoulders, median crossover upgrades where required, guardrail replacements to improve safety, and replacement of signing and pavement marking. The interchange ramps and crossroads between the ramp terminals at CTH X, STH 27, and CTH D are also proposed to be resurfaced..

Preliminary information has been reviewed by DNR staff for the project under the DNR/DOT (Wisconsin Department of Transportation) Cooperative Agreement. Initial comments on the project as proposed are included below, and assume that additional information will be provided that addresses all resource concerns identified. In addition to the project specific resource concerns highlighted below, it is DNR's expectation that the full range of DOT roadway standards will be applied throughout the design process.

A. Project-Specific Resource Concerns

Wetlands:

There is potential for wetland impacts to occur as a result of this project. Wetland impacts must be avoided and/or minimized to the greatest extent practicable. Unavoidable wetland losses must be compensated for in accordance with the DNR/DOT Cooperative Agreement and the DOT Wetland Mitigation Banking Technical Guideline. Per the Cooperative Agreement, mitigation banking is the preferred compensation option, however DOT and DNR agree that other practicable and ecologically valuable project specific opportunities may be pursued on a case-by-case basis. DNR requests information regarding the amount and type of unavoidable wetland impacts.

Endangered Resources:

Based upon a review of the Natural Heritage Inventory (NHI) and other DNR records dated 04/28/2015, no Endangered Resources or suitable habitat that could be impacted by this project are known or likely to occur in the project area or its vicinity.

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Portions of the project lie within mapped/zoned floodplain, along Stillson Creek and Paint Creek. Floodplain impacts should be assessed and/or quantified and appropriate coordination must be carried out in accordance with the DOT/DNR Cooperative Agreement. Coordination must also occur with the Chippewa County Zoning Program.

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- All temporary stock piles must be in an upland location and protected with erosion control measures (e.g. silt fence, rock filter-bag berm, etc.). Do not stockpile materials in wetlands, waterways, or floodplains.

This project may require a permit from the U.S. Army Corps of Engineers (ACOE). For further details you will need to contact Sam Woboril of the ACOE located in the Stevens Point office, at (651)290-5878. All local, state, and federal permits and/or approvals must be obtained prior to commencing construction activities.

The above comments represent the DNR's initial concerns for the proposed project and do not constitute final concurrence. Final concurrence will be granted after further review of refined project plans, and additional consultation if necessary. If any of the concerns or information provided in this letter requires further clarification, please contact this office at (715)839-1609, or email at christopherj.willger@wi.gov.

Sincerely,



Chris Willger
Environmental Analysis & Review Specialist

cc: Nick Schaff, WisDOT
Tara Weiss, WisDOT

March 19, 2015

U.S. Fish and Wildlife Service
Division of Ecological Services
2661 Scott Tower Drive
New Franken, WI 54229-9565

Subject: **Initial Project Notification**
Project ID 1050-01-361
Chippewa Falls - Cadott
Stillson Creek to 320th Street (WB)
STH 29
Chippewa County

Project ID 1052-01-62
Chippewa Falls - Cadott
Stillson Creek to 320th Street (EB)
STH 29
Chippewa County

EMCS, Inc. has been retained by the Wisconsin Department of Transportation to provide design services for the design of the resurfacing of STH 29 from Stillson Creek to 320th Street in Chippewa County. The project is located in the towns of Lafayette, Sigel, Delmar, and Edson and the villages of Cadott and Boyd. See the enclosed project location map.

This project will consist of approximately 15-miles of pavement and roadside repairs required to address deteriorating pavement. The improvements are needed to extend the service life of the existing pavement and to maintain safe and efficient traffic operations along STH 29. The proposed improvements include concrete pavement repairs, asphaltic overlay of the travel lanes and shoulders, median crossover upgrades where required, guardrail replacements to improve safety, and replacement of signing and pavement marking. The interchange ramps and crossroads between the ramp terminals at CTH X, STH 27, and CTH D are also proposed to be resurfaced.

During construction, motorists can expect periodic single lane and shoulder closures on STH 29 with possible reduction in travel lane widths on STH 29 and at the interchange ramps. All work is anticipated to occur within the existing right of way. Construction is currently scheduled for 2019 but could be advanced to 2017.

As project plans become available, we will have further correspondence with your office. Environmental studies will be undertaken by the design team including wetland delineations and an environmental document will be prepared.

Please review the project location to determine if there are any environmental issues we should be aware of, including threatened or endangered resources, wetland, and water quality issues. We would appreciate any initial comments you may have by **May 1, 2015**. If you have any questions or would like to coordinate a site visit, please contact me at (715) 845-1081 or at schristensen@emcsinc.com.

Sincerely,



Stephanie G. Christensen, P.E.
EMCS Project Manager

cc: Tara Weiss, WisDOT Northwest Region

Enclosure

Online Section 7 Review

Chippewa	Gray wolf <i>Canis lupus</i>	Endangered	Northern forested areas
	Northern long-eared bat <i>Myotis septentrionalis</i>	Threatened	Hibernates in caves and mines - swarming in surrounding wooded areas in autumn. During summer, roosts and forages in upland forests.
	Spectaclecase (<i>Cumberlandia monodonta</i>)	Endangered	St. Croix River
	Karner blue butterfly <i>Lycaeides melissa samuelis</i>	Endangered	Prairie, oak savanna, and jack pine areas with wild lupine

Gray wolf – no impacts to forests

Northern long-eared bat – **no effect determination; no clearing of habitat and no structure removal or rehabilitation; see Federal Highway Administration (FHWA) and Federal Railroad Administration (FRA) Range-wide Programmatic Informal Consultation for Indiana Bat and Northern Long-eared Bat for a no effect determination)**

Spectaclecase – resource not present

Karner Blue butterfly – known habitat is not present within work area and grading areas

An official species list is also attached:

Consultation Code: 03E17000-2016-SLI-0166

November 29, 2015

Event Code: 03E17000-2016-E-00168

Project Name: STH 29, Stillson Creek to 320th Street, Chippewa County

Clams – no in-water work will occur, all resources near any grading will be protected with BMPs

Karner Blue butterfly – known habitat is not present within work area and grading areas

Gray wolf – no impacts to forests

Endangered Northern long-eared Bat - **no effect determination; no clearing of habitat and no structure removal or rehabilitation; see Federal Highway Administration (FHWA) and Federal Railroad Administration (FRA) Range-wide Programmatic Informal Consultation for Indiana Bat and Northern Long-eared Bat for a no effect determination**



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Green Bay Ecological Services Field Office
2661 SCOTT TOWER DRIVE
NEW FRANKEN, WI 54229
PHONE: (920)866-1717 FAX: (920)866-1710

Consultation Code: 03E17000-2016-SLI-0166

November 29, 2015

Event Code: 03E17000-2016-E-00168

Project Name: STH 29, Stillson Creek to 320th Street, Chippewa County

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project "may affect" listed species or critical habitat.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website <http://ecos.fws.gov/ipac/> at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - <http://www.fws.gov/midwest/endangered/section7/s7process/index.html>. This website contains step-by-step instructions which will help you determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height (e.g., communication towers)**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*) and Migratory Bird Treaty Act (16 U.S.C. 703 *et seq.*), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at <http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html> to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: STH 29, Stillson Creek to 320th Street, Chippewa County

Official Species List

Provided by:

Green Bay Ecological Services Field Office
2661 SCOTT TOWER DRIVE
NEW FRANKEN, WI 54229
(920) 866-1717

Consultation Code: 03E17000-2016-SLI-0166

Event Code: 03E17000-2016-E-00168

Project Type: TRANSPORTATION

Project Name: STH 29, Stillson Creek to 320th Street, Chippewa County

Project Description: The project consists of the resurfacing of STH 29 from Stillson Creek to 320th Street in Chippewa County. The project is located in the towns of Lafayette, Sigel, Delmar, and Edson and the villages of Cadott and Boyd. This project will consist of approximately 15-miles of pavement and roadside repairs required to address deteriorating pavement. The improvements are needed to extend the service life of the existing pavement and to maintain safe and efficient traffic operations. Planned for 2019.

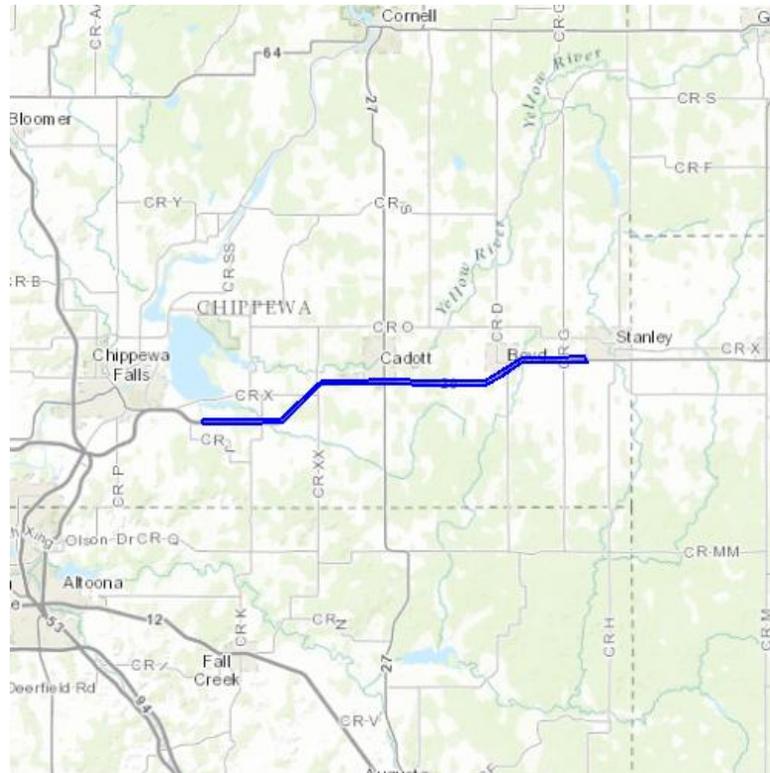
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: STH 29, Stillson Creek to 320th Street, Chippewa County

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-91.31149291992188 44.91060231943465, -91.23870849609375 44.91108860604821, -91.2030029296875 44.935640729718365, -91.1432647705078 44.935883767592586, -91.0550308227539 44.935397690815556, -91.03958129882812 44.940987325341624, -91.0220718383789 44.950221181527546, -90.96233367919922 44.94997820434147, -90.96473693847656 44.95386571588532, -91.0213851928711 44.95265089681472, -91.05537414550781 44.937828033556215, -91.14669799804688 44.939043166353606, -91.20403289794922 44.93807106217293, -91.2411117553711 44.91327684489316, -91.31080627441406 44.91279057679458, -91.31149291992188 44.91060231943465)))

Project Counties: Chippewa, WI



United States Department of Interior
Fish and Wildlife Service

Project name: STH 29, Stillson Creek to 320th Street, Chippewa County

Endangered Species Act Species List

There are a total of 4 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Clams	Status	Has Critical Habitat	Condition(s)
Spectaclecase (mussel) <i>(Cumberlandia monodonta)</i>	Endangered		
Insects			
Karner Blue butterfly (<i>Lycaeides melissa samuelis</i>) Population: Entire	Endangered		
Mammals			
Gray wolf (<i>Canis lupus</i>) Population: U.S.A.: All of AL, AR, CA, CO, CT, DE, FL, GA, IA, IN, IL, KS, KY, LA, MA, MD, ME, MI, MO, MS, NC, ND, NE, NH, NJ, NV, NY, OH, OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, and WV; and portions of AZ, NM, OR, UT, and WA. Mexico.	Endangered		
Northern long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened		



United States Department of Interior
Fish and Wildlife Service

Project name: STH 29, Stillson Creek to 320th Street, Chippewa County

Critical habitats that lie within your project area

There are no critical habitats within your project area.

**Federal Highway Administration (FHWA) and Federal Railroad Administration (FRA)
Range-wide Programmatic Informal Consultation for
Indiana Bat and Northern Long-eared Bat**

Project Submittal Form for FHWA, FRA, and Transportation Agencies
Updated June 23, 2015

In order to use the programmatic informal consultation to fulfill Endangered Species Act consultation requirements, transportation agencies must use this form to submit project-level information for all may affect, not likely to adversely affect (NLAA) determinations to the appropriate U.S. Fish and Wildlife Service (Service) field office prior to project commencement. For more information, see the Standard Operating Procedure for Site Specific Project(s) Submission in the User's Guide.

In submitting this form, the transportation agency ensures that the proposed project(s) adhere to the criteria of the range-wide programmatic informal BA. Upon submittal of this form, the appropriate Service field office may review the site-specific information provided and request additional information. If the applying transportation agency is not notified within 14 calendar days of emailing the Project Submittal Form to the Service field office, it may proceed under the range-wide programmatic informal consultation.

Further instructions on completing the form can be found by hovering your cursor over each text box.

1. Date:

2. Lead Agency:

This refers to the Federal governmental lead action agency initiating consultation; select FHWA or FRA as appropriate

3. Requesting Agency:

a. Name:

b. Title:

c. Phone:

d. Email:

4. Consultation Code¹:

5. Project Name(s):

¹ Available through IPaC System Official Species List: <https://ecos.fws.gov/ipac/>

6. Project Description:

Please attach additional documentation or explanatory text if necessary

7. Other species from Official Species List:

No effect – project(s) are inside the range, but no suitable habitat – see additional information attached

May Affect – see additional information provided for those species (either attached or forthcoming)

8. For Ibat/NLEB, if Applicable, Explain Your No Effect Determination

No effect – project(s) are outside the species' range (*form complete*)

No effect – project(s) are inside the range, but no suitable summer habitat (*form complete*)

No effect from maintenance, alteration, or demolition of bridge(s)/structure(s) – results of inspection surveys indicate no signs of bats. (*form complete*)

No effect – other (*see Section 2.2 of the User's Guide – form complete*)

Otherwise, please continue below.

9. Affected Resource/Habitat Type

Trees

Bridge

Other Non-Tree Roosting Structure (e.g., building)

Other (please explain):

10. For Tree Removal Projects:

- a. Please verify that no documented roosts or foraging habitat will be impacted and that project is within 100 feet of existing road surface:
- b. Please verify that all tree removal will occur during the inactive season²:
- c. Timing of clearing:
- d. Amount of clearing:

11. For Bridge/Structure Work Projects:

- a. Proposed work:
- b. Timing of work:
- c. Evidence of bat activity on bridge/structure:
- d. If applicable, verify that superstructure work will not bother roosting bats in any way:
- e. If applicable, verify that bridge/structure work will occur only in the winter months:

² Coordinate with local Service field office for appropriate dates.

12. Please confirm the following:

Proposed project(s) adhere to the criteria of the range-wide programmatic informal BA (see Section 2.0).

All applicable AMMs will be implemented, including³:

Tree Removal AMM 1:

Dust Control AMM 1:

Tree Removal AMM 2:

Water Control AMM 1:

Tree Removal AMM 3:

Water Control AMM 2:

Tree Removal AMM 4:

Water Control AMM 3:

Bridge AMM 1:

Water Control AMM 4:

Bridge AMM 2:

Water Control AMM 5:

Bridge AMM 3:

Water Control AMM 6:

Bridge AMM 4:

Wetland/Stream Protection AMM 1:

Structure AMM 1:

Wetland/Stream Protection AMM 2:

Structure AMM 2:

Wetland/Stream Protection AMM 3:

Structure AMM 3:

Wetland/Stream Protection AMM 4:

Structure AMM 4:

Wetland/Stream Protection AMM 5:

Lighting AMM 1:

Wetland/Stream Protection AMM 6:

Lighting AMM 2:

³ See AMMs Fact Sheet (Appendix B) for more information on the following AMMs.



Division of Transportation Systems Development
Northwest Region

718 W. Clairemont Ave.
Eau Claire, WI 54701

1701 N. 4th St.
Superior, WI 54880

Scott Walker, Governor
Mark Gottlieb, P.E., Secretary
Internet: www.dot.wisconsin.gov

Eau Claire: (715) 836-2891 FAX: (715) 836-2807
Superior: (715) 392-7925 FAX: (715) 392-7863

March 19, 2015

Subject: Federal Highway Administration requests for comments concerning Historic Properties and Notification of project undertaking

Project ID 1050-01-61

Chippewa Falls - Cadott

Stillson Creek to 320th Street (WB)

WIS 29

Chippewa County

Project ID 1052-01-62

Chippewa Falls - Cadott

Stillson Creek to 320th Street (EB)

WIS 29

Chippewa County

The Wisconsin Department of Transportation (WisDOT) is in the process of developing plans for the resurfacing of WIS 29 from Stillson Creek to 320th Street in Chippewa County. The project is located in the towns of Lafayette, Sigel, Delmar, and Edson and the villages of Cadott and Boyd. See the enclosed project location map.

This project will consist of approximately 15-miles of pavement and roadside repairs required to address deteriorating pavement. The improvements are needed to extend the service life of the existing pavement and to maintain safe and efficient traffic operations along WIS 29. The proposed improvements include concrete pavement repairs, asphaltic overlay of the travel lanes and shoulders, median crossover upgrades where required, guardrail replacements to improve safety, and replacement of signing and pavement marking. The interchange ramps and crossroads between the ramp terminals at County X, WIS 27, and County D are also proposed to be resurfaced.

During construction, motorists can expect periodic single lane and shoulder closures on WIS 29 with possible reduction in travel lane widths on WIS 29 and at the interchange ramps. All work is anticipated to occur within the existing right of way. Construction is currently scheduled for 2019 but could be advanced to 2017.

Public involvement meetings are not planned at this time but if scheduled, a notification will be sent to you. In the near future, cultural resource investigation studies will be conducted for the above project. These investigations will enable WisDOT to determine whether historical properties as defined in 36 CFR 800 are located in the project area. Other environmental studies will also be conducted and include; endangered species survey, contaminated material investigations, soil testing and right-of-way surveys. Information obtained from these studies will assist the engineers in the design to avoid, minimize or mitigate the proposed project's effect upon cultural and natural resources.

WisDOT would be pleased to receive any comments regarding this project or any information you wish to share pertaining to cultural resources located in the area. If your tribe wishes to become a consulting party under Section 106 of the National Historic Preservation Act or would like to receive additional information regarding this proposed project, please contact me at (715) 836-2283 or via mail at the Northwest Region – Eau Claire Office, 718 W Clairemont Avenue, Eau Claire, WI 54701.

Sincerely,

Tara Weiss

Tara Weiss, PE
WisDOT Project Manager

CC: Bureau of Equity and Environmental Services

Enclosure: Project location map

COMPANY	COMPANY2	FIRST	LAST	TITLE	ADDRESS1	ADDRESS2	CITY	STATE	ZIP
Bad River Band of Lake Superior	Chippewa Indians of Wisconsin	Edith	Leoso	THPO		P.O. Box 39	Odanah	WI	54861
Forest County Potawatomi Community of Wisconsin		Melissa	Cook	THPO	Tribal Office	P.O. Box 340	Crandon	WI	54520
Fond du Lac Band of Lake Superior Chippewa		LeRoy	Defoe	THPO		1720 Big Lake Road	Cloquet	MN	55720
Ho-Chunk Nation		Quackenbush	William	THPO	Executive Offices	P.O. Box 667	Black River Falls	WI	54615
Iowa Tribe of Oklahoma					Cultural Preservation Office	RR1, Box 721	Perkins	OK	74059
Lac Courte Oreilles Band of Lake Superior	Chippewa Indians of Wisconsin	Jerry	Smith	THPO	Tribal Office	13394 W. Trepania Road	Hayward	WI	54843
Lac du Flambeau Band of Lake Superior	Chippewa Indians of Wisconsin	Melinda	Young	THPO	Tribal Historic Preservation Office	P.O. Box 67	Lac du Flambeau	WI	54538
Lac Vieux Desert Band of Lake Superior	Chippewa Indians	giwegizhigookway	Martin	THPO	Ketegitigaaning Ojibwe Nation	P.O. Box 249	Watersmeet	MI	49969
Menominee Indian Tribe of Wisconsin		David	Grignon	THPO	P.O. Box 910		Keshena	WI	54135
Prairie Band Potawatomi Nation		Hattie	Mitchell		16281 Q Road		Mayetta	KS	66509
Prairie Island Indian Community		Marc	Mogan		Minnesota Midewakanton Sioux		Welch	MN	55089
Red Cliff Band of Lake Superior	Chippewa Indians of Wisconsin	Larry	Balber	THPO	Red Cliff Band of Lake Superior Chippewa Indians	5636 Sturgeon Lake Road	Bayfield	WI	54814
Sac and Fox Nation of Missouri in Kansas and Nebraska		Edmore	Green		305 North Main		Reserve	KS	66434
Sac & Fox Nation of Oklahoma		Sandra	Massey	NAGPRA Representative	RR 2, Box 246		Stroud	OK	74079
Sac & Fox Nation of Mississippi in Iowa		Jonathan	Buffalo	NAGPRA Representative	349 Meskwaki Road		Tama	IA	52339
Sokaogon Chippewa Community Mole Lake Band				Cultural Resource Director	3051 Sand Lake Road		Crandon	WI	54520
St. Croix Band	Chippewa Indians of Wisconsin	Wanda	McFagggen	THPO	Tribal Historic Preservation Office	24663 Angeline Ave.	Webster	WI	54893



Lac du Flambeau Band of Lake Superior Chippewa Indians
Tribal Historic Preservation Office

March 24, 2015

Tara Weiss
WisDOT Project Manager
Northwest Region – Eau Claire
718 W. Clairemont Ave.
Eau Claire, WI 54701

**SUBJECT: Project ID: 1050-01-61; Chippewa Falls - Cadott; Stillson Creek to 320th Street (WB); WIS 29; Chippewa County, WI
Project ID: 1052-01-62; Chippewa Falls - Cadott; Stillson Creek to 320th Street (EB); WIS 29; Chippewa County, WI**

Dear Ms. Weiss:

In response to your letter dated **March 19, 2015**, the Lac du Flambeau Band of Lake Superior Chippewa Indians would like to express concerns with any impacts to historic and cultural properties located within the project area of potential effect for the project mentioned above. This project is located within areas that have previously been occupied by the Northern Ojibwe Bands.

Please forward all results of an archival review and archaeological reports. Should there be an impact or effect to historic properties as a result of this project, we will request consultation pursuant to Section 106 of the National Historic Preservation Act, as amended,

However, if a review has not yet been completed, the Lac du Flambeau Tribal Historic Preservation Office is available to assist in the identification of cultural resources, or an archaeological/historical assessment or archival review for a fee.

Please contact us if you have any questions or concerns at (715) 588-2139. You may send the results of the archival review and archaeological report to:

Tribal Historic Preservation Office
P.O. Box 67
Lac du Flambeau, WI 54538

Or in digital format to: ldfthpo@ldftribe.com Thank you.

Sincerely,

Melinda J. Young
Tribal Historic Preservation Officer

P.O. Box 67
Lac du Flambeau, WI 54538

Phone: (715) 588-2139 or (715) 588-2270
Fax: (715) 588-2419
Email: ldfthpo@ldftribe.com



Division of Transportation Systems Development
Northwest Region

718 W. Clairemont Ave.
Eau Claire, WI 54701

1701 N. 4th St.
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Scott Walker, Governor
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Eau Claire: (715) 836-2891 FAX: (715) 836-2807
Superior: (715) 392-7925 FAX: (715) 392-7863

March 19, 2015

Subject: **Initial Project Notification**

Project ID 1050-01-61

Chippewa Falls - Cadott

Stillson Creek to 320th Street (WB)

WIS 29

Chippewa County

Project ID 1052-01-62

Chippewa Falls - Cadott

Stillson Creek to 320th Street (EB)

WIS 29

Chippewa County

The Wisconsin Department of Transportation (WisDOT) is in the process of developing plans for the resurfacing of WIS 29 from Stillson Creek to 320th Street in Chippewa County. The project is located in the towns of Lafayette, Sigel, Delmar, and Edson and the villages of Cadott and Boyd. See the enclosed project location map.

This project will consist of approximately 15-miles of pavement and roadside repairs required to address deteriorating pavement. The improvements are needed to extend the service life of the existing pavement and to maintain safe and efficient traffic operations along WIS 29. The proposed improvements include concrete pavement repairs, asphaltic overlay of the travel lanes and shoulders, median crossover upgrades where required, guardrail replacements to improve safety, and replacement of signing and pavement marking. The interchange ramps and crossroads between the ramp terminals at County X, WIS 27, and County D are also proposed to be resurfaced.

During construction, motorists can expect single lane and shoulder closures on WIS 29 with possible reduction in travel lane widths on WIS 29 and at the interchange ramps. All work is anticipated to occur within the existing right of way. Construction is currently scheduled for 2019 but could be advanced to 2017.

Knowledge of any community events, area improvement projects, and other factors that may affect the schedule or scope of the proposed improvements would be beneficial to us. We would appreciate any initial comments you may have by **May 1, 2015**. You will be notified of any future local or public meetings when scheduled.

If you have any questions, comments or suggestions that may assist in the development of this project, they may be sent to the following:

Tara Weiss
Wisconsin Department of Transportation
Northwest Region – Eau Claire Office
718 W Clairemont Avenue, Eau Claire, WI 54701
Tara.Weiss@dot.wi.gov
(715) 836-2283

Stephanie Christensen
EMCS, Inc. (project designer)
500 North 17th Avenue
Wausau, WI 54401
schristensen@emcsinc.com
(715) 845-1081

Sincerely,

Tara Weiss

Tara Weiss, PE
WisDOT Project Manager
Enclosure: Project location map

Name	Title	Municipality	Address	City, State, Zip	Phone
Sandi Frion	Clerk	Chippewa County	711 N Bridge St., Room 109	Chippewa Falls, WI 54729	(715) 726-7980
Doug Clary	Director	Chippewa County Planning & Zoning	711 N Bridge St., Room 009	Chippewa Falls, WI 54729	(715) 726-7940
Dan Masterpole	County Conservationist	Chippewa County Land Conservation and Forest Management	711 N Bridge St., Room 011	Chippewa Falls, WI 54729	(715) 726-7920
Bruce G. Stelzner	Highway Commissioner	Chippewa County Highway Department	801 East Grand Ave.	Chippewa Falls, WI 54729	(715) 726-7914
James L. Kowalczyk	Sheriff	Chippewa County Sheriff's Department	32 E Spruce St.	Chippewa Falls, WI 54729	(715) 726-7701
Charlie Walker	President	Chippewa County Economic Development Corporation	770 Scheidler Rd., Suite 3	Chippewa Falls, WI 54729	(715) 723-7150
Dennis Brown	Director	Chippewa County Emergency Management	32 E Spruce St.	Chippewa Falls, WI 54729	(715) 726-7728
Lynn Nelson	Executive Director	West Central Wisconsin Regional Planning Commission	800 Wisconsin St., Building D2, Room 401, Mail Box 9	Eau Claire, WI 54703	(715) 836-2918
Sandra Harvey	Clerk	Town of Lafayette	5765 197th St.	Chippewa Falls, WI 54729	(715) 723-7692
Dave Staber	Chairman	Town of Lafayette	5894 192nd St.	Chippewa Falls, WI 54729	(715) 726-1144
Sharon McIlquham	Supervisor	Town of Lafayette	5794 197th St.	Chippewa Falls, WI 54729	(715) 720-1233
David Hunt	Supervisor	Town of Lafayette	5731 184th St.	Chippewa Falls, WI 54729	(715) 723-6001
Gary Frederick	Supervisor	Town of Lafayette	19216 52nd Ave.	Chippewa Falls, WI 54729	(715) 723-2104
Bruno Rahn	Supervisor	Town of Lafayette	18813 65th Ave.	Chippewa Falls, WI 54729	(715) 723-8102
Paula Krouse	Clerk	Town of Sigel	25619 50th Ave.	Cadott, WI 54727	(715) 289-3429
Lennis Ramseier	Chairman	Town of Sigel	27824 30th Ave.	Cadott, WI 54727	(715) 289-4884
Steven Evjen	Supervisor	Town of Sigel	23555 45th Ave.	Cadott, WI 54727	(715) 289-4142
Timothy Woodford	Supervisor	Town of Sigel	3556 250th St.	Cadott, WI 54727	(715) 289-4094
Anson Albarado	President	Village of Cadott	PO Box 186	Cadott, WI 54727	(715) 289-4511
Sandra Buetow	Clerk	Village of Cadott	PO Box 40	Cadott, WI 54727	(715) 289-4282
Marie Wilbur	Clerk	Town of Edson	2376 County Highway G	Boyd, WI 54726	(715) 644-2597
Donald Schesel	Chairman	Town of Edson	4668 County Highway G	Stanley, WI 54768	(715) 644-4943
George Wellner	Supervisor	Town of Edson	30876 30th Ave.	Boyd, WI 54726	(715) 667-3295
Michael Sande	Supervisor	Town of Edson	3444 295th St.	Cadott, WI 54727	(715) 667-5303
Sandra Isaacs	Clerk	Village of Boyd	PO Box 8	Boyd, WI 54726	(715) 667-3420
Randy Setzer	President	Village of Boyd	733 E. Supple St.	Boyd, WI 54726	(715) 667-5104
Karen Milas	Clerk	Town of Delmar	9763 315th St.	Boyd, WI 54726	(715) 667-5374
Dave Peterson	Chairman	Town of Delmar	32786 County Highway X	Boyd, WI 54726	(715) 667-3314
Ray Seichter	Supervisor	Town of Delmar	8512 320th St.	Boyd, WI 54726	(715) 667-3068
John Shakal	Supervisor	Town of Delmar	29968 County Highway X	Boyd, WI 54726	(715) 667-3531
Tim Troyer		Stanley - Boyd School District	507 E. 1st Avenue	Stanley, WI 54768	(715) 644-5534
John Stanek	Transportation Supervisor	School District of Cadott Community	426 Myrtle Street	Cadott, WI 54727	(715) 289-3795
Chad Trowbridge	Business Manager	Chippewa Falls Area Unified School District	1130 Miles Street	Chippewa Falls, WI 54729	(715) 726-2417

Pursuant to 36 CFR 800.3 (a)(1) WisDOT (Cultural Resources) has determined the proposed actions for these undertakings (projects) will have no potential to cause effects to historic properties. No further section 106 obligations are required. However, if the proposed actions for an undertaking (project) should change in any way that would involve ground disturbing activities, additional section 106 coordination is required for that undertaking (project).

County	Main ID	Notification Date	Project Put on Screening List for	Route	Title	Bridge ID
Buffalo	7730-00-30	09/27/2013	Archaeology Only	STH 88	Czechville-Mondovi STH 35 to STH 37	b060002
Buffalo	7730-00-32	09/15/2011	History Only	STH 88	Czechville- Cream STH 35 to S Junction	
Buffalo	7730-01-30	01/16/2014	Both Archaeology and History	STH 88	Czechville - Mondovi CTH E to CTH U	
Buffalo	7730-01-31	09/18/2013	Both Archaeology and History	STH 88	Cream - Mondovi CTH U to STH 121	
Buffalo	7730-02-31	05/24/2012	Both Archaeology and History	STH 88	Cream - Mondovi STH 121 to STH 37	
Buffalo	7730-05-31	01/23/2007	Both Archaeology and History	STH 88	Czechville - Gilmanton Rd Block Rd - CT	B0600400
Buffalo	7730-05-32	05/17/2009	History Only	STH 88	Czechville-Cream STH 35 to East Juncti	
Buffalo	7730-06-02	10/31/2007	Both Archaeology and History	STH 88	Buffalo County Box Cluvert Replacment	
Buffalo	7730-06-03	06/04/2012	History Only	STH 88	Czechville - Gilmanton STH 35 to CTH E	
Buffalo	7735-00-03	05/02/2013	Both Archaeology and History	STH 121	Gilmanton- Independence S Fork Elk Cr	b0600500
Buffalo	7735-00-30	09/17/2010	History Only	STH 121	Gilmanton-Independence STH 88 to Eas	
Burnett	8010-01-05	11/22/2011	History Only	STH 35	STH 70 (Construct a roundabout)	
Burnett	8010-04-31	09/16/2008	Both Archaeology and History	STH 35	V Siren, 2nd Ave Bacon St to Park St	
Burnett	8040-01-31	01/03/2008	Both Archaeology and History	STH 70	ST Croix Rvr - Siren Rd St Croix Rvr-CT	B0700310
Burnett	8040-01-31	01/03/2008	Both Archaeology and History	STH 70	ST Croix Rvr - Siren Rd St Croix Rvr-CT	B0700200
Burnett	8040-01-31	01/03/2008	Both Archaeology and History	STH 70	ST Croix Rvr - Siren Rd St Croix Rvr-CT	b0700460
Burnett	8040-01-32	01/03/2008	Both Archaeology and History	STh 70	St Croix Rvr - Siren Rd CTH M - STH 35	B0700200
Burnett	8040-01-32	01/03/2008	Both Archaeology and History	STh 70	St Croix Rvr - Siren Rd CTH M - STH 35	b0700460
Burnett	8040-01-32	01/03/2008	Both Archaeology and History	STh 70	St Croix Rvr - Siren Rd CTH M - STH 35	b0700310
Burnett	8050-04-01	02/08/2013	History Only	STH 70	Siren-Spooner STH 35 to Viola Lake Ro	
Burnett	8050-10-00	12/02/2008	Both Archaeology and History	STH 70	Viola Lake - ECL	
Burnett	8364-03-01	11/14/2006	Both Archaeology and History	Robert St	STH 70 to Madison Ave	
Burnett	8845-01-02	11/13/2007	Both Archaeology and History	STH 48	STH 87 - STH 70	
Burnett	8845-15-00	02/24/2010	Both Archaeology & History	STH 48	CTH Z - ECL	
Chippewa	0490-70-72	06/04/2009	Both Archaeology and History	FRIP Glacier State Dis	Warehouse	
Chippewa	0709-44-56	05/04/2007	Both Archaeology and History	Chippewa Valley Reg A	terminal Expansion and Renovation	
Chippewa	1000-08-57	01/24/2013	History Only	HRRR(High Risk Rural	County Wide	CTH T
Chippewa	1000-08-57	01/24/2014	History Only	HRRR(High Risk Rural	County Wide	CTH G
Chippewa	1000-08-57	01/24/2013	History Only	HRRR(High Risk Rural	County Wide	CTH A
Chippewa	1000-08-57	01/24/2013	History Only	HRRR(High Risk Rural	County Wide	CTH SS
Chippewa	1000-08-57	01/24/2013	History Only	HRRR(High Risk Rural	County Wide	CTH K
Chippewa	1000-08-57	01/24/2013	History Only	HRRR(High Risk Rural	County Wide	CTH N
Chippewa	1000-08-57	01/24/2013	History Only	HRRR(High Risk Rural	County Wide	CTH M (CT
Chippewa	1000-08-57	01/24/2013	History Only	HRRR(High Risk Rural	County Wide	CTH W
Chippewa	1000-08-57	01/24/2013	History Only	HRRR(High Risk Rural	County Wide	CTH H
Chippewa	1000-08-57	01/24/2013	History Only	HRRR(High Risk Rural	County Wide	CTH E
Chippewa	1000-08-57	01/24/2013	History Only	HRRR(High Risk Rural	County Wide	CTH S
Chippewa	1000-08-57	01/24/2013	History Only	HRRR(High Risk Rural	County Wide	CTH M (ST
Chippewa	1000-08-57	01/24/2013	History Only	HRRR(High Risk Rural	County Wide	CTH X
Chippewa	1050-01-31	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0900380
Chippewa	1050-01-31	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0900360
Chippewa	1050-01-31	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0900350
Chippewa	1050-01-31	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0900370

Pursuant to 36 CFR 800.3 (a)(1) WisDOT (Cultural Resources) has determined the proposed actions for these undertakings (projects) will have no potential to cause effects to historic properties. No further section 106 obligations are required. However, if the proposed actions for an undertaking (project) should change in any way that would involve ground disturbing activities, additional section 106 coordination is required for that undertaking (project).

<i>County</i>	<i>Main ID</i>	<i>Notification Date</i>	<i>Project Put on Screening List for</i>	<i>Route</i>	<i>Title</i>	<i>Bridge ID</i>
Chippewa	1050-01-31	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0900390
Chippewa	1050-01-31	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0900310
Chippewa	1050-01-31	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0900190
Chippewa	1050-01-31	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0901760
Chippewa	1050-01-33	11/24/2009	Both Archaeology and History	STH 29	Chippewa Falls-Cadott Stillson Creek- C	
Chippewa	1050-01-34	11/24/2009	Both Archaeology and History	STH 29	Chippewa Falls-Cadott Stillson Creek to	b0900360
Chippewa	1050-01-34	11/24/2009	Both Archaeology and History	STH 29	Chippewa Falls-Cadott Stillson Creek to	
Chippewa	1050-01-34	11/24/2009	Both Archaeology and History	STH 29	Chippewa Falls-Cadott Stillson Creek to	b0900190
Chippewa	1050-01-34	11/24/2009	Both Archaeology and History	STH 29	Chippewa Falls-Cadott Stillson Creek to	b0900200
Chippewa	1050-01-34	11/24/2009	Both Archaeology and History	STH 29	Chippewa Falls-Cadott Stillson Creek to	b0901760
Chippewa	1050-01-34	11/24/2009	Both Archaeology and History	STH 29	Chippewa Falls-Cadott Stillson Creek to	b0900370
Chippewa	1050-01-34	11/24/2009	Both Archaeology and History	STH 29	Chippewa Falls-Cadott Stillson Creek to	b0900390
Chippewa	1050-01-34	11/24/2009	Both Archaeology and History	STH 29	Chippewa Falls- Cadott Stillson Creek to	b0901710
Chippewa	1050-01-34	11/24/2009	Both Archaeology and History	STH 29	Chippewa Falls-Cadott Stillson Creek to	b091750
Chippewa	1050-01-34	11/24/2009	Both Archaeology and History	STH 29	Chippewa Falls-Cadott Stillson Creek to	b0901740
Chippewa	1050-03-03	08/12/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott rd CTH J Bridg	B0900340
Chippewa	1050-03-04	08/22/2007	History Only	STH 124	STH 124-Bridge St: Bus 29 over STH 12	B0900110
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b1001450
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b0001490
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	B0900220
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b0900290
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b1001690
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b1001770
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b1001780
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b1001460
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b1001790
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b1000290
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b0901890
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b1000230
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b1000220
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b0901910
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b1000190
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b1000200
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b1000170
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b0901790
Chippewa	1050-04-32	08/19/2008	Both Archaeology and History	STH 29	Cadott - Abbotsford STH 27 - STH 13 (	b1001530
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B1000220
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B0901790
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B0900390
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B1000230
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B0901890
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B0901910
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B1000190

Pursuant to 36 CFR 800.3 (a)(1) WisDOT (Cultural Resources) has determined the proposed actions for these undertakings (projects) will have no potential to cause effects to historic properties. No further section 106 obligations are required. However, if the proposed actions for an undertaking (project) should change in any way that would involve ground disturbing activities, additional section 106 coordination is required for that undertaking (project).

<i>County</i>	<i>Main ID</i>	<i>Notification Date</i>	<i>Project Put on Screening List for</i>	<i>Route</i>	<i>Title</i>	<i>Bridge ID</i>
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B0901760
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B1001450
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B1000200
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B1001790
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B0901710
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B1000290
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B1001490
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B1001460
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B0900360
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B1001770
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B0900370
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B0901750
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B0900290
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B1001780
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B0901740
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B0900220
Chippewa	1052-01-31	01/24/2007	Both Archaeology and History	STH 29	Chippewa Falls - Abbotsford Rd Stillson	B1001690
Chippewa	1052-01-32	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0901710
Chippewa	1052-01-32	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0901790
Chippewa	1052-01-32	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0900390
Chippewa	1052-01-32	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0901740
Chippewa	1052-01-32	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0901760
Chippewa	1052-01-32	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0900370
Chippewa	1052-01-32	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0900200
Chippewa	1052-01-32	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0900360
Chippewa	1052-01-32	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0900190
Chippewa	1052-01-32	09/15/2008	Both Archaeology and History	STH 29	Chippewa Falls - Cadott Stillson Creek-	b0901750
Chippewa	1190-00-03	10/07/2008	Both Archaeology and History	V Lake Hallie	Bus 53 South Village Limits to STH 124	b0902270
Chippewa	1190-00-03	10/07/2008	Both Archaeology and History	V Lake Hallie	Bus 53 South Village Limits to STH 124	b0902620
Chippewa	1190-00-07	12/22/2006	Both Archaeology and History	Hastings Way/Busines	STH 312 to N Melby Rd	
Chippewa	1190-02-33	02/13/2014	Both Archaeology and History	USH 53	Eau claire - Chippewa Falls	b090046
Chippewa	1190-03-32	03/03/2014	Both Archaeology and History	USH 53	Eau Claire - Chippewa Falls STH 29 Inte	
Chippewa	1190-05-05	02/29/2012	Both Archaeology and History	USH 53	Chippewa Falls - New Auburn, CTH B -	
Chippewa	1190-05-07	07/09/2013	Both Archaeology and History	USH 53	Chippewa Falls - New Auburn	b090066
Chippewa	1190-09-35	02/13/2014	Both Archaeology and History	USH 53	Chippewa Falls - New Auburn	b090052
Chippewa	1190-09-36	07/09/2013	Both Archaeology and History	USH 53	Chippewa Falls - New Auburn	B09-0054
Chippewa	1192-06-33	09/23/2013	Both Archaeology and History	USH 53	Chippewa Falls-new Auburn Brpnt/CTH	B090059
Chippewa	1192-06-33	09/23/2013	Both Archaeology and History	USH 53	Chippewa Falls-new Auburn Brpnt/CTH	B09006
Chippewa	7255-00-05	12/21/2010	Both Archaeology and History	STH 124	Commercial Blvd (Village Lake Hallie)	
Chippewa	7255-05-02	03/08/2013	Both Archaeology and History	STH 124 (S Bridge St)	Chippewa River - River St	
Chippewa	7861-01-02	04/06/2009	Both Archaeology and History	CTH X	70th Ave to 290th St	p-09-0017
Chippewa	7861-01-03	04/06/2009	Both Archaeology and History	CTH X	CTH D to 325th St	p-09-0018
Chippewa	7864-00-03	10/19/2009	History Only	CTH J (Village of Lake	STH 124 to 300th Ave	

TRANS 75 COMPLETE STREETS COMPLIANCE CHECK SHEET

Project ID WB: 1050-01-31/61 EB: 1052-01-32/62	Highway/Roadway STH 29	Limits/Termini Stillson Creek - 320 th Street (WB) Stillson Creek - 320 th Street (EB)	
County Chippewa	Unit of Government Town of Lafayette, Sigel, Edson, Delmar, Vil of Cadott and Boyd	Existing AADT (year) (2014) 14,200 - 17,500	Design Year AADT (year) 21,300 (2039) 19,400 -
List of local land use plans reviewed /considered. Town of Lafayette, Delmar, Edson, and Sigel Comp Plan Village of Cadott and Boyd Comp Plan	List of regional land use plans reviewed /considered. Chippewa County Comp Plan Long-Range Transportation Plan, 2010-2030	List of local transportation and/or bicycle/pedestrian plans reviewed /considered. Town of Lafayette, Delmar, Edson, and Sigel Comp Plan Village of Cadott and Boyd Comp Plan	List of regional transportation and/or bicycle/pedestrian plans reviewed /considered. Chippewa County Comp Plan Long-Range Transportation Plan, 2010-2030
Existing Facility Number of Lanes: 4 Lane Width: 12-feet Cross Section Shoulder Type: <input checked="" type="checkbox"/> Rural Shoulder width (paved): 6-feet total, 3-feet (paved inside); 10-feet total, 8-feet (paved outside) <input type="checkbox"/> Urban Sidewalk: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other: Bike/Ped Accommodation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other:		Proposed Improvement Number of Lanes: 4 Lane Width: 12-feet Cross Section Shoulder Type: <input checked="" type="checkbox"/> Rural Shoulder width (paved): 6-feet total, 4-feet (paved inside); 10-feet total, 10-feet (paved outside) <input type="checkbox"/> Urban Sidewalk: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other: Bike/Ped Accommodation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other:	

Section 1 Project Type (check all that apply) (Trans 75 and FDM 11-46-1)

This project is: <input type="checkbox"/> New Construction – Trans 75 applies. <input type="checkbox"/> Reconstruction – Trans 75 applies. <input type="checkbox"/> Pavement Replacement – Trans 75 applies. <input type="checkbox"/> New Bridge – Trans 75 applies. <input type="checkbox"/> Bridge Replacement – Trans 75 applies.	<input type="checkbox"/> Bridge Redecking – Trans 75 applies. <input type="checkbox"/> Bridge Elimination – Depending on project scope, Trans 75 may apply. <input type="checkbox"/> Other – Explain: Go to Section 2 <input checked="" type="checkbox"/> None of the above – Improve bike/ped accommodations as appropriate, Trans 75 does not apply, go to Section 4.
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Section 2 Pedestrian Accommodations (check all that apply) (FDM 11-46-5)

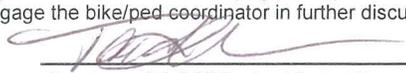
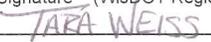
<input type="checkbox"/> Pedestrian accommodations <u>are</u> being provided by: <input type="checkbox"/> Bridge overpass/underpass, accommodations addressed. <input type="checkbox"/> Sidewalk on both sides of the highway. * <input type="checkbox"/> Sidewalk: <input type="checkbox"/> On one side of the highway <input type="checkbox"/> Sidewalk along a portion of the highway <input type="checkbox"/> A shared use path is provided *An exception is required. Explain mitigation efforts as part of the appropriate completed exception documentation.	<input type="checkbox"/> Pedestrian accommodations <u>are NOT</u> being fully provided because the following exceptions apply: <input type="checkbox"/> Prohibition of Bicycles and Pedestrians - Attach Exception 1 Worksheet. <input type="checkbox"/> Excessively disproportionate cost - Attach Exception 2 Worksheet. <input type="checkbox"/> Constrained environment – Attach Exception 3 Worksheet. <input type="checkbox"/> Absence of need – Attach Exception 4 Worksheet. <input type="checkbox"/> Refusal to maintain – Attach Exception 5 Worksheet.
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Section 3 Bicycle Accommodations (check all that apply) (FDM 11-46-15)

<input type="checkbox"/> Bicycle accommodations <u>are</u> being provided by: <input type="checkbox"/> Bike Lanes. <input type="checkbox"/> Bike lane/parking lane combination. <input type="checkbox"/> Bike lane full time. <input type="checkbox"/> Short term parking restriction. Explain <input type="checkbox"/> Wide curb lane or wide parking lane where parking is allowed. <input type="checkbox"/> Paved shoulders. Paved shoulder width is _____ feet. <input type="checkbox"/> Other – Explain: <input type="checkbox"/> Bike accommodations: <input type="checkbox"/> On a portion of the highway <input type="checkbox"/> A shared use path instead of on-street accommodations.** ** Requires approval from the Project Services Section Chief- attach shared use path worksheet. Exception is required. Explain mitigation efforts as part of the appropriate completed exception documentation.	<input type="checkbox"/> Bicycle accommodations <u>are NOT</u> being fully provided because the following exceptions apply: <input type="checkbox"/> Prohibition of Bicycles and Pedestrians - Attach Exception 1 Worksheet. <input type="checkbox"/> Excessive cost - Attach Exception 2 Worksheet. <input type="checkbox"/> Constrained environment – Attach Exception 3 Worksheet. <input type="checkbox"/> Parking restrictions create only partial absence Explain: <input type="checkbox"/> Absence of need – Attach Exception 4 Worksheet.
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Section 4 Concurrence – Attach any supporting documents or reports

We concur that pedestrian and bicycle accommodations are being provided in compliance with Trans 75 or that the project satisfies one of the exceptions stipulated in Trans 75. If the project scope changes after the bike/ped coordinator signature date the project manager will re-evaluate the accommodations and engage the bike/ped coordinator in further discussions.

 Signature (WisDOT Regional Project Manager)  Printed Name (WisDOT Regional Project Manager) Date: 9/18/15	 Signature (WisDOT Regional Bicycle/Pedestrian Coordinator)  Printed Name (WisDOT Regional Bicycle/Pedestrian Coordinator) Date: 9.25.15
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ATTACHMENT 10

Scoping/Preliminary Roadside Hazard Design Review List:

Project ID: 1050-01-31/61 & 1052-01-32/62

Limits: Chippewa Falls - Cadott, Stillson Creek to 320th Street (WB) / Stillson Creek to 320th Street (EB)

Roadway: STH 29

County: Chippewa

Structures and Large Drainage Features:

If an answer to any of the following questions is yes, Contact Bureau of Structures or Bureau of Project Development prior to proceeding with scoping the project:

1. Parapet built prior to 1964?

No, Structure B-09-020 and B-09-022 originally built in 1962, but reconstructed in 1993.

2. Non-Standard Parapet on structure (See LRFD Bridge Manual (http://on.dot.wi.gov/dtid_bos/extranet/structures/LRFD/LRFDManualIndex.htm) for standard parapets designs)?

Yes – B-09-019 on CTH X over STH 29 has Type A Parapet with Class A beam guard attached. Other Styles used are Vertical Face Parapet Type A and Slope Faced Type B.

3. Parapet has snag points?

B-09-019 on CTH X over STH 29 has Type A Parapet with Class A beam guard attached; curb near toe of railing may be a snag point

4. Parapet damaged or has missing components?

No

5. Barrier system is on top of retaining wall?

No

6. Is there brush or safety curb present?

No

7. Box culvert has beam guard attached to or installed on top of structure?

No

8. Are there structures that may need structural protection?

No

9. Are there unprotected blunt ends of the parapets?

No, all blunt ends of the existing parapets are protected with guardrail.

If the answer to the following question is yes, additional review prior to proceeding with scoping the project:

1. Are there intersecting roadways or driveways within 125 feet of the structure or large drainage feature?

No

Barrier Systems:

If the answer to any of the following questions is yes, conduct additional review prior to proceeding with scoping the project:

1. Is the barrier system 15 years or older?

Existing: Yes, All barrier exceeds 15 years (structure). Guardrail was replaced along roadway at various locations in 2012 within the median areas to protect piers and meets current standards.

Proposed: Guardrail upgrades are proposed.

2. Does the barrier system have non-EAT end treatments that can be hit head on?

Existing: Yes, CTH D over STH 29 has Type 2 end treatments.

Proposed: Guardrail upgrades are proposed.

3. Is a transition from semi-rigid barrier to rigid barrier being used?

Existing: Yes

Proposed: Yes

4. Are there non-standard barrier systems being used?

Existing: No

Proposed: No

5. Is there sufficient grading for the barrier system and end treatments?

Existing: Yes

Proposed: Yes

6. Is there rigid barrier with a height less than 32 inches on the project?

Existing: Yes, B-09-019 (CTH X interchange), Vertical Face Type A parapet with Type G Tubular rail mounted on top with Type A beam guard attached to face of parapet. Height is 29-inches.

Proposed: None proposed.

7. Is there a significant amount of barrier on the project or proposed to be on the project?

Existing: No

Proposed: No

Grading:

If the answer to any of the following questions is yes, conduct additional review prior to proceeding with scoping the project:

1. Are there slopes steeper than 4:1?

No on STH 29. Yes on CTH X and STH 27 overpasses.

2. Are ditches traversable?

Yes

3. Are slopes perpendicular to the direction of travel traversable?

Yes

Other Hazards:

If the answer to any of the following questions is yes, conduct additional review prior to proceeding with scoping the project:

1. Are there drainage features that are hazards?

Yes, cattle pass at milepost 95.7 (300th Street) has 7' wide endwall 24' from the westbound travel lane without a traversable grate.

2. Are there poles that are hazards?

Light poles are located along CTH D Ramps and between terminals but are located near terminals which could impact performance of the terminal. Poles are breakaway and located outside of the lateral clearance. Relocation to be evaluated.

3. Is there a vertical drop of 8 feet or more?

Yes, located at structures where STH 29 is over various features. Barrier protection is in place and proposed for upgrades.

4. Is there water 2 feet deep?

Yes, Stillson Creek, Alder Creek, Paint Creek, and an unnamed creek west of STH 27 interchange fluctuate from less than 2 feet deep to greater than 2 feet deep throughout the year.

Other Issues:

If the answer to any of the following questions is yes, conduct additional review prior to proceeding with scoping the project:

1. Are there segments with Metamanager ROR flags?

No, see SSAs.

2. Are there areas that violate driver expectations?

No

3. Are there locations with high pedestrian concentrations?

No, rural roadway

4. Are there locations with severe consequence of collision?

No

5. Is the service life of the project 15 years or greater?

Yes

Roadside Hazard Analysis

Project I.D. 1050-01-31/61 & 1052-01-32/62

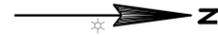
Entered by: EGL
Checked by: SGC

Roadway= STH 29
Speed (MPH) = 65 MPH (posted)
AADT = 14,200 – 17,500 (2014)
Alignment = No Designator

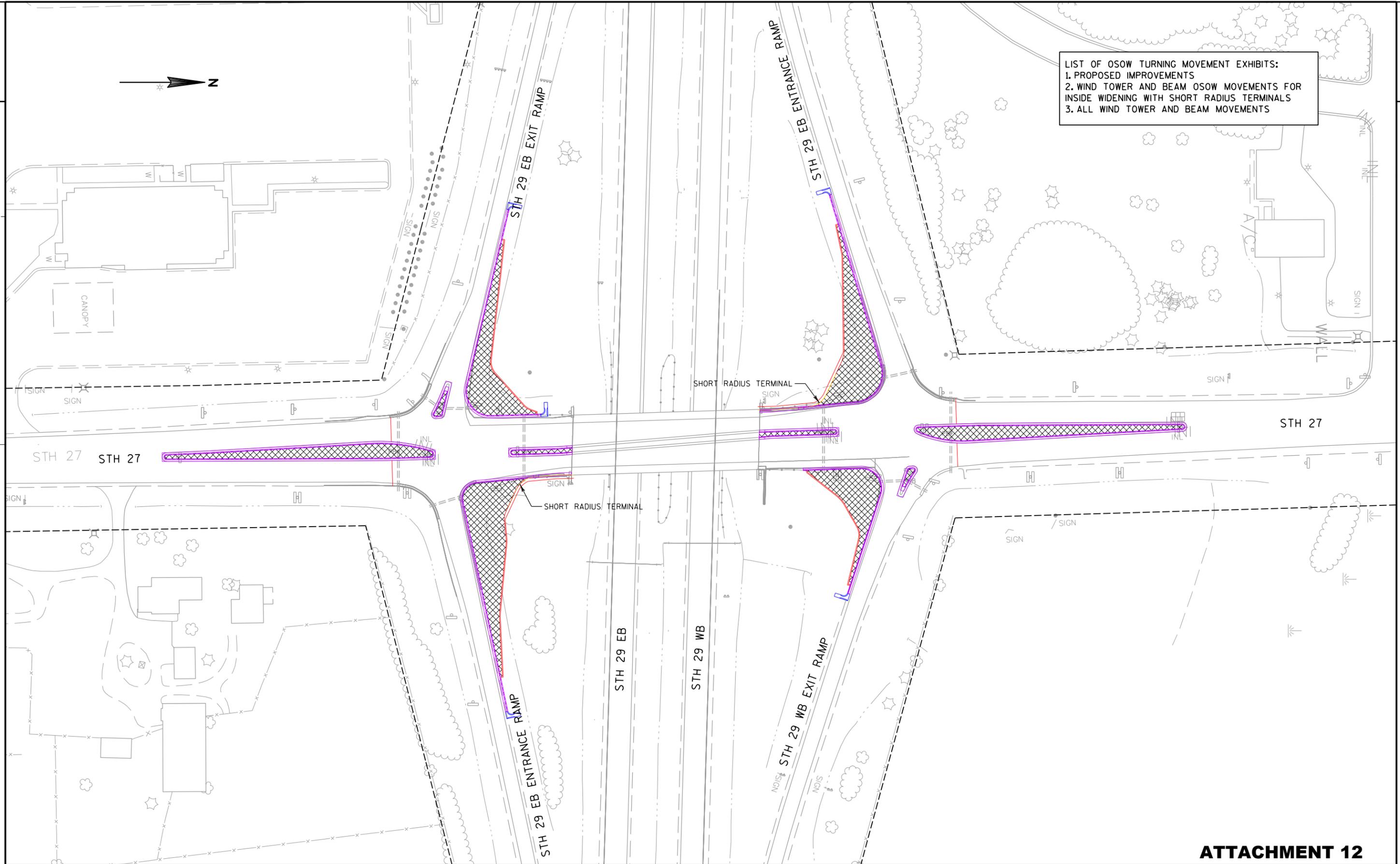
Hazard ID	Station or Stations	Offset (ft)	L/ R	Total length of hazard (ft)	Description	Action	Discussion
1	STH 29 608'EB'+00 to 612'EB'+00	8'	RT	400	Beam Guard offset is less than minimum per FDM 11-15, Table 1.1	Move Beam Guard away from shoulder 2', or install concrete barrier	Meets desirable standards in proposed conditions
2	CTH D Interchange EB Exit Ramp and between terminals	4' to 12'	LT & RT	Light Poles	Luminaires with breakaway bases	None	<p>Poles are in areas of terminal grading but are breakaway and are located beyond the lateral clearance; while removal of the poles are desirable in the area of the EAT, relocation was fully vetted. Due to the type of existing direct bury wiring, re-wiring of nearly the entire interchange lighting system would be required to relocate the poles. This is beyond the scope of the resurfacing project and relocation of the lighting may require additional utility impacts as well as potentially additional light poles to maintain similar lighting conditions.</p> <p>The two light poles will remain, decision is documented in DSR; no crash history and extent of lighting improvement outside of scope of project type.</p>

Roadside Hazard Analysis

Hazard ID	Station or Stations	Offset (ft)	L/R	Total length of hazard (ft)	Description	Action	Discussion
3	CTH X (B-09-019) Bridge over STH 29	15'	LT & RT	270	Type A Parapet with Class A beam guard attached and Type G tubular rail mounted on top. Total height is below 29"	None	Bridge railing replacement is beyond scope of project on CTH X (non-NHS)
4	STH 29 818'EB'+35	48'	LT	10	72" corrugated metal cattle pass with concrete masonry endwalls. Vertical end of cattle pass within clear zone of 30 feet on westbound STH 29. Clear zone on eastbound is 24 feet and the cattle pass is at 58 feet right which is beyond the clear zone.	None	The cattle pass will remain, decision is documented in DSR; no crash history and improvement outside of scope of project type.
5	STH 29 273'EB'+05	51'	RT	3.5	Vertical endwall of the horizontal elliptical culvert (27"x42") is within the clear zone of 30 feet	Install traversable grate on endwall	Installing a traversable grate will eliminate hazard



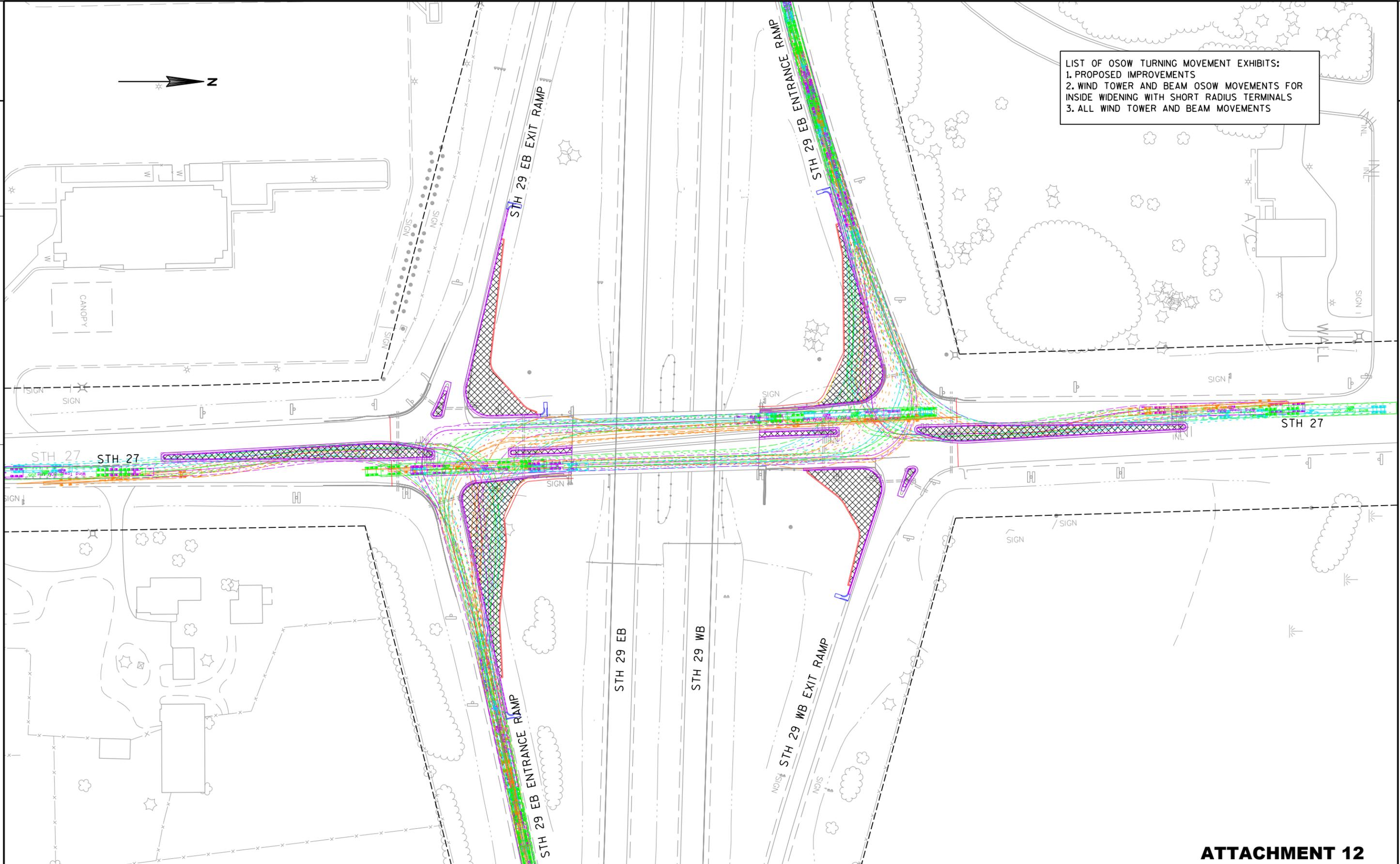
LIST OF OSOW TURNING MOVEMENT EXHIBITS:
 1. PROPOSED IMPROVEMENTS
 2. WIND TOWER AND BEAM OSOW MOVEMENTS FOR INSIDE WIDENING WITH SHORT RADIUS TERMINALS
 3. ALL WIND TOWER AND BEAM MOVEMENTS



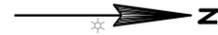
ATTACHMENT 12



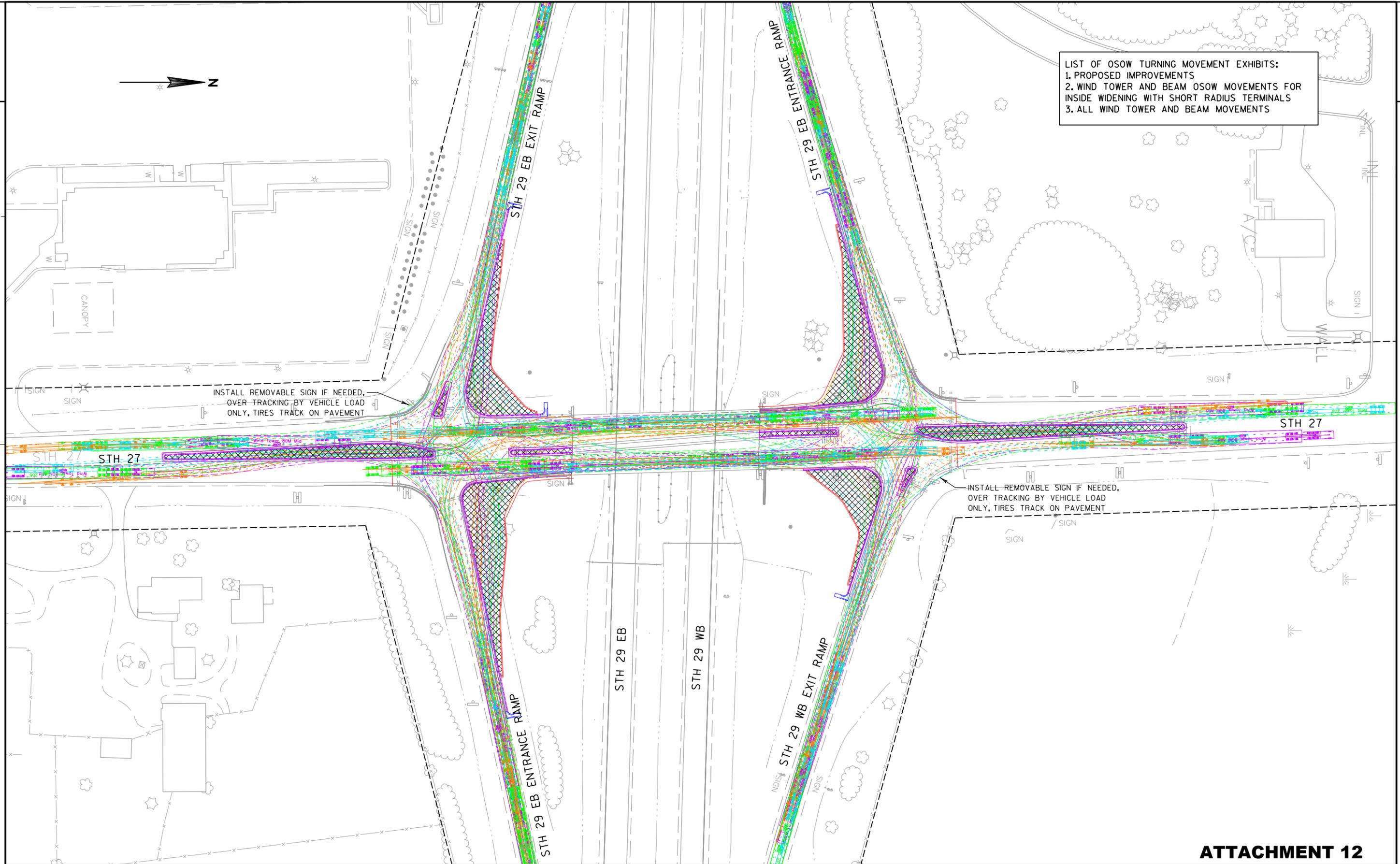
LIST OF OSOW TURNING MOVEMENT EXHIBITS:
 1. PROPOSED IMPROVEMENTS
 2. WIND TOWER AND BEAM OSOW MOVEMENTS FOR INSIDE WIDENING WITH SHORT RADIUS TERMINALS
 3. ALL WIND TOWER AND BEAM MOVEMENTS



ATTACHMENT 12



- LIST OF OSOW TURNING MOVEMENT EXHIBITS:
1. PROPOSED IMPROVEMENTS
 2. WIND TOWER AND BEAM OSOW MOVEMENTS FOR INSIDE WIDENING WITH SHORT RADIUS TERMINALS
 3. ALL WIND TOWER AND BEAM MOVEMENTS



ATTACHMENT 12