Interstate Access Justification Report
Project ID 1130-44-00
Appleton – Green Bay
CTH J – Orange Lane
USH 41 (FUTURE IH 41)
Safety Weight & Enforcement Facility #34

OUTAGAMIE COUNTY, WISCONSIN

November 2014

PREPARED FOR AND BY:
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Approval by WisDOT NE Region Project Development

Tom Buchholz — Name

12/4/2014 — Date

Approval by WisDOT Bureau of Project Development

Donald J. Lynch — Name

04/20/2015 — Date

Approval by FHWA

Name

Date

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Table of Contents

List of Tables

Appendices

Project Background

Project Location:

The Wisconsin Department of Transportation (WisDOT) is proposing to replace the existing Safety and Weight Enforcement Facility #34 (SWEF #34) located along northbound USH 41 (Future IH 41) (near mile marker 153) south of the CTH U interchange near Freedom/Wrightstown in Outagamie County. The proposed SWEF #34 is located at the existing location and includes updates to buildings, ramps, and scales.

An exhibit of the existing SWEF #34 site is shown below.

Truck Scale Picture 1

Existing SWEF Description:

The existing SWEF site has a small operations building, a single deck static scale, and a small parking lot. There are no buildings for conducting indoor commercial vehicle safety inspections so all inspections are conducted in the parking lot. There is a shared restroom and one vending machine in the operations building that truckers have access to, but no other amenities. The existing operations building has limited storage and there is no meeting spaces for the State Patrol staff who patrol this area. The lack of Weigh-In- Motion (WIM) technology increases the time it takes to process each truck and reduces the number of trucks that can be monitored each day. The existing SWEF site has not implemented WIM technology because of a deficient length of the exit ramp to the site. The existing SWEF (building, parking lot, exit ramp, and entrance ramp) will be removed as part of the proposed SWEF project.

Proposed SWEF Description:
The proposed SWEF site will include an operations/inspection building, a mainline Weigh-In-Motion (WIM), Pre-Pass system (automatic vehicle identification), a ramp WIM, virtual weigh station along USH 41, a triple platform static scale, and parking for 21 trucks. The operations/inspection building will provide dual truck inspection bays, public and employee restrooms, driver contact and waiting area, sergeant's office, trooper office, multi-purpose room, mechanical room, and a telecommunications room. This project will require the purchase of right-of-way for construction.

The proposed design will construct a single exit ramp into the site and a single entrance ramp from the site onto the northbound direction of USH 41. The proposed SWEF site exit and entrance ramps will replace the existing SWEF site exit and entrance ramps. The SWEF exit ramp gore will be located 1,056 feet south of its current location and the exit will use a parallel ramp design. The entrance ramp gore will be located 300 feet south of its current location and the ramp will run 1,814 feet as an auxiliary lane to the County U exit ramp.

The proposed design will modify the spacing between adjacent access locations along northbound USH 41. The proposed spacing between adjacent access locations will be:

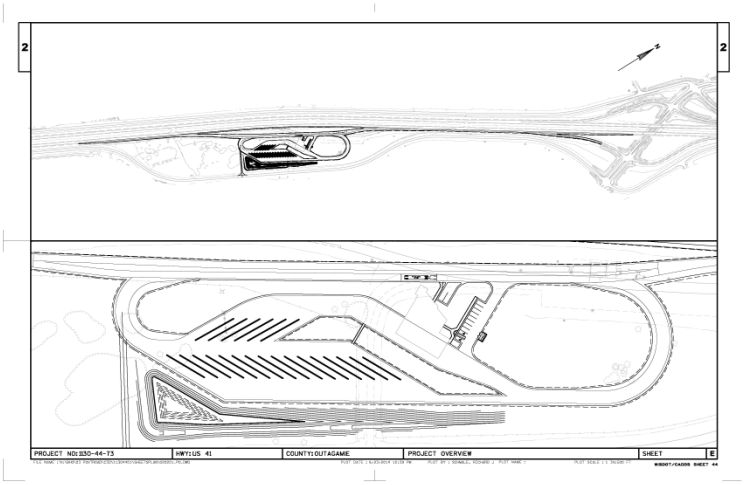
Existing Conditions

Feature	Sta	Notes
SWEF Exit Ramp	1367+88 – NB	End of painted gore
SWEF Facility		1,528 ft SWEF gore to SWEF gore
SWEF Entrance Ramp	1383+16 – NB	End of painted gore
Ramps only		1,541 ft SWEF gore to CTH U gore
CTH U Exit Ramp	1398+57 – NB	End of painted gore

Proposed Conditions

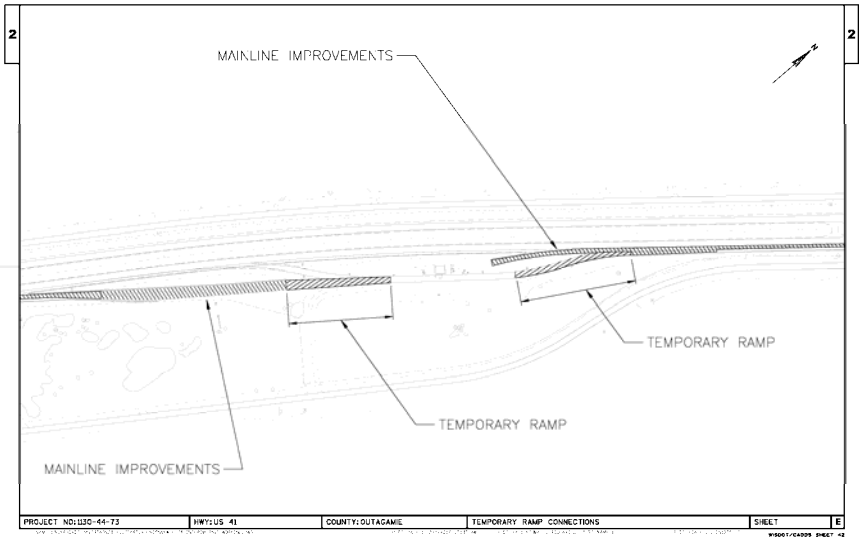
Feature	Sta	Notes
SWEF Exit Ramp	1357+32 – NB	End of painted gore
SWEF Facility		2,284 ft SWEF gore to SWEF gore
SWEF Entrance Ramp	1380+16 – NB	End of painted gore
Aux Lane		1,814 ft SWEF gore to CTH U gore
CTH U Exit Ramp	1398+57 – NB	End of painted gore

An exhibit of the proposed SWEF #34 site is shown below. Roadway plans are provided in Appendix A. Additional site details are provided in Appendix D.

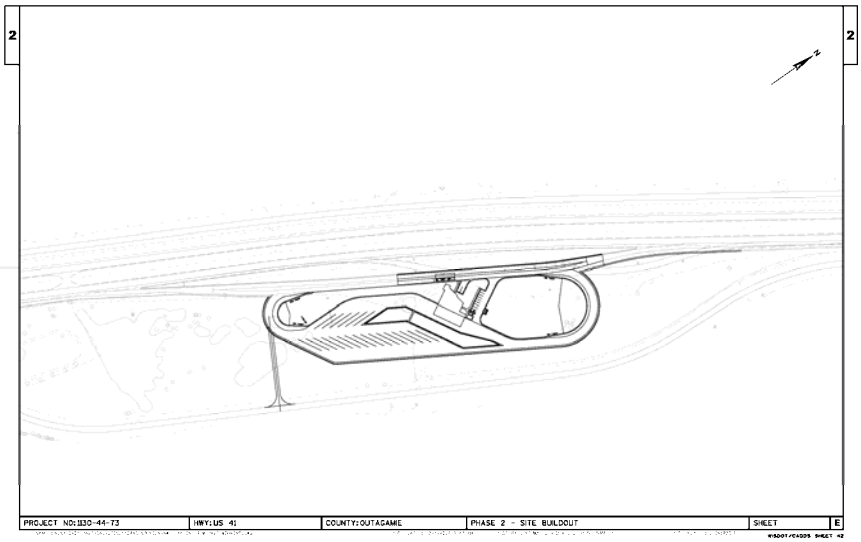


Construction Schedule:
Due to funding limitations, access ramps to the proposed Wrightstown SWEF #34 will be constructed in 2017 as part of the mainline US 41 improvement project. Construction of the SWEF building, scale and parking areas will be scheduled 2-5 years later, with the schedule dependent on available project funding. To keep the SWEF operating until the new SWEF is constructed, a set of temporary ramps would connect the new exit and entrance ramps to the existing SWEF. During a second phase, the new SWEF could be built with limited shoulder closures on the entrance ramp, eliminating any significant impacts to mainline operations.

Phase 1 – Temporary Ramps



Phase 2 – Site build out



The need being addressed by the request cannot be adequately satisfied by existing interchanges to the Interstate, and/or local roads and streets in the corridor can neither provide the desired access, nor can they be reasonably improved (such as access control along surface streets, improving traffic control, modifying ramp terminals and intersections, adding turn bays or lengthening storage) to satisfactorily accommodate the design-year traffic demands.

General Discussion:
As discussed in the Project Background, the primary purpose of this project is to construct a new Safety and Weight Enforcement Facility near mile marker 153 for northbound USH 41 at the same location as the existing SWEF. An environmental report, which considered several alternatives, was completed and concluded that this was the preferred location for the new SWEF. That report is included in Appendix E. The proposed project relocates the SWEF exit and entrance ramps, shifting the locations south, and adds an auxiliary lane between the SWEF entrance ramp and the County U exit ramp. Shifting the site further south is constrained by an existing cemetery located next to the proposed exit ramp.

USH 41 Mainline:
USH 41 is a four-lane divided freeway with a posted speed limit of 65 mph. USH 41 is classified as a freeway (future interstate highway) and designated as a backbone highway in the Wisconsin DOT Corridors 2030 plan. The facility will be located on the east side of the freeway and access will be from the northbound lanes only.

A Highway Safety Manual Freeway Operations Analysis for the existing freeway segment is summarized below.

Table 1 – Existing (2010) Design Hour Mainline Freeway Operations

Location	Analysis Year	Design Hour Freeway Volume (vph)	Density (pc/mi/ln)	LOS
USH 41 – south of SWEF	2010	2712	20.0	C

See Appendix B for existing and future traffic volume data. See Appendix C for traffic analysis output data.

Conclusion:
This facility is proposed to replace an existing facility at the same location that cannot accommodate the current weigh-in motion technology planned for this facility. This facility includes updated access points to mainline USH 41 at this location. USH 41 currently operates at LOS C during the K30 design hour so no operational concerns exist today. Future traffic volumes and freeway operations are discussed in FHWA Policy Point 3.

FHWA POLICY POINT 2

The need being addressed by the request cannot be adequately satisfied by reasonable transportation system management (such as ramp metering, mass transit, and HOV facilities), geometric design, and alternative improvements to the Interstate without the proposed change in access.

Alternatives Considered:
The SWEF alternatives considered were developed to provide mainline weigh-in-motion technology, adequate room to build an indoor truck inspection building and limiting impacts to adjacent properties. The need for site compatibility with existing and proposed land uses, and minimizing environmental impacts results in a limited number of possible SWEF sites.

Alternative 1 – expand the existing Wrightstown SWEF site to the south and east. This alternative would require new right-of-way (2 properties) including impacts to agricultural farmland. No existing buildings or homes would be impacted by this alternative, but 4.6 acres of right-of-way will be acquired to expand the SWEF.

Alternative 2 – construct a new SWEF on north bound USH 41. Constructing a new weigh station will require a section of undeveloped land that covers at least 2,500 ft in length adjacent to USH 41 to allow room for exit and entrance ramps and the weigh station facility. The USH 41 corridor from Oshkosh to Green Bay was reviewed to identify undeveloped lands that met this minimum length. The only section that could be considered for this criterion is in a rural section in Winnebago County, north of State 76.

The site footprint of the proposed weigh station in Winnebago County is approximately 22 acres, so the agricultural impact of relocating the weigh station in Winnebago County is about 17.4 acres more than rebuilding the weigh station at its present site in Outagamie County. Due to the farmland impacts, cost of additional real estate and related development costs, this alternative has been eliminated from further consideration

At the conclusion of this alternative evaluation, Alternative 1 was identified as the recommended site. This site would minimize the amount of new right-of-way to be purchased and also minimize farmland and environmental impacts since the majority of the site would be constructed on DOT owned land.

Conclusions:
The key reasons for selecting Alternative 1 as the preferred site include a willing seller for the most impacted property and there is no residential development immediately

adjacent to the site. This location also had limited farmland and environmental impacts because it minimized right-of-way needed to complete the project.

FHWA POLICY POINT 3

An operational and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility (which includes mainline lanes, existing, new, or modified ramps, ramp intersections with crossroad) or on the local street network based on both the current and the planned future traffic projections. The analysis shall, particularly in urbanized areas, include at least the first adjacent existing or proposed interchange on either side of the proposed change in access. The crossroads and the local street network, to at least the first major intersection on the either side of the proposed change in access, shall be included in this analysis to the extent necessary to fully evaluate the safety improvements may have on the local street network. Requests for a proposed change in access must include a description and assessment of the impacts and ability of the proposed changes to safely and efficiently collect, distribute and accommodate traffic on the Interstate facility, ramps, intersection of ramps with crossroad, and local street network. Each request must also include a conceptual plan of the type and location of the signs proposed to support each design alternative.

Safety Analysis:

USH 41 – CTH J to Orange Lane (Entire Project -10.24 Mi)

The crash data collected for the resurfacing project that includes the SWEF runs from 2007 through 2011 and covers the area on USH 41 from CTH J in Outagamie County, extending in a northerly direction for 10.24 miles. During this period, a total of 338 crashes occurred of which 4 were fatal, 105 were injury related and 229 were property damage.

Table 2 – Study Area Crash Summary

	TOTAL	**FATAL**	**INJURY**	**PDO**	ANGLE	REAR-END	HEAD-ON	SIDESWIPE-SAME DIR	RUN OFF ROAD	OTHER/ UNKNOWN
USH 41 mainline CTH J to Orange Lane (Entire Project)	338	4	105	229	8	77	2	44	180	27
USH 41 NB Wrightstown Rd to CTH U (SWEF Area)	10	0	4	6	0	4	0	0	6	0

The 5-year average total crash rate for the project corridor is 42, which is 21% lower than the statewide rate of 53. Four fatalities occurred within the project limits during the study period. All of the fatal crashes were southbound vehicles.

USH 41 NB – Wrightstown Rd to CTH U (SWEF Area)

The crash data collected 2007 through 2011 and covers the area on NB USH 41 from

Wrightstown Road to CTH U in Outagamie County. During this period, a total of 10 crashes occurred of which 4 were injury related and 6 were property damage.

One crash involved a CMV, which occurred on the NB mainline and resulted in a rear end crash. One crash involved an exiting vehicle at CTH U that resulted in a run-off road crash. There were no crashed related to CMV's exiting or entering USH 41. No fatal crashed occurred in the area around the SWEF.

Safety Improvements to Proposed Design:

The proposed access ramps will be designed to meet or exceed current interstate standards for federal-aid projects on the interstate system. They will be accessed only by trucks, employees, and other enforcement personnel. In addition to lengthening the exit ramp for the SWEF, a 2,200 ft auxiliary lane will be added from the entrance ramp to USH 41 from the SWEF to the exit ramp to CTH U.

Mainline Operational Analysis:

The Highway Capacity Software (HCS 2010) freeway analysis results in acceptable levels of service (LOS) for the projected design hour (K30) 2037 traffic volumes obtained from the WisDOT Traffic Forecasting Section. Mainline USH 41 is anticipated to operate at LOS C in 2017 and LOS D in 2037. The 2017 and 2037 projected conditions of the northbound freeway segment adjacent to the proposed facility are shown in Table 3 below.

Table 3 – Projected Design Hour Freeway Operations

Location	Analysis Year	Design Hour Freeway Volume (vph)	Density (pc/mi/ln)	LOS
USH 41 – south of SWEF	2017	2988	22.3	C
USH 41 – south of SWEF	2037	3786	30.5	D
USH 41 – south of SWEF (with added lane)	2037	3786	18.5	C

The USH 41 ramps with the proposed facility have a 60 mph design speed. Based on existing counts at similar facilities, a maximum of 120 trucks can be serviced per hour. This figure is used in the subsequent analysis. Ramp diverge is expected to operate at LOS C in 2017 and LOS D in 2037, though with added capacity it is expected to operate at LOS C. The weaving area at the SWEF merge and nearby existing exit is expected to operate at LOS B in 2017 and LOS C in 2037, though with added capacity it is expected

to operate at LOS B. The year 2017 diverge and weaving operations during the K30 design hour are given in Table 4 and the 2037 results are in Table 5.

Table 4 – Year 2017 Projected SWEF Diverge and Weaving Operations (K30)

Location	Analysis Year	Design Hour Ramp Volume (vph)	Design Hour Mainline Volume (vph)	Density (pc/mi/ln)	LOS
USH 41 – SWEF Diverge	2017	120	2898	19.4	B
Weave from SWEF to CTH U	2017	120	2898	16.0	B

Table 5 – Year 2037 Projected SWEF Diverge and Weaving Operations (K30)

Location	Analysis Year	Design Hour Ramp Volume (vph)	Design Hour Mainline Volume (vph)	Density (pc/mi/ln)	LOS
USH 41 – SWEF Diverge	2037	120	3704	26.5	C
USH 41 – SWEF Diverge (with added lane)	2037	120	3704	16.1	B
Weave from SWEF to CTH U	2037	120	3704	20.7	C
Weave from SWEF to CTH U (with added lane)	2037	120	3704	15.2	B

See Appendix B for existing and future traffic volume data. See Appendix C for traffic analysis output data.

<u>Adjacent USH 41 Interchanges:</u>

A diamond interchange for County U is located north of the SWEF, with 1,814 feet proposed from the SWEF to County U (ramp gore to ramp gore). The off-ramp from USH 41 to the proposed facility will be relocated 1,056 feet south of its existing location, and the exit will use a parallel ramp design to allow trucks to reduce speed after they are out of the mainline traffic. The entrance ramp from the SWEF on to USH 41 will be relocated 300 feet south of its current location, and a new 1,814 foot auxiliary lane will

be added between the entrance ramp and the County U exit ramp (ramp gore to ramp gore).

Conceptual Signing Description:

New advanced guide signs will be placed prior to the site along the northbound USH 41 direction, in accordance with the MUTCD and Wisconsin Supplement. All sign messages and locations will be reviewed and approved by the WisDOT NE Region. See Appendix D for a conceptual signing plan.

Conclusion:

The crash history in this segment is not a result of geometrics. In addition to inattentive driving, weather was a contributing factor in most of the crashes. The level of service (LOS) on USH 41 is expected to be C in 2017 and D in 2037 with the current lane configuration. In the future, it is anticipated that USH 41 will be expanded to three lanes in each direction. The timeline for this expansion has not been established, but this expansion is expected to be at least 10 years in the future (2025 or beyond). With 3 lanes NB, the freeway is projected to operate at LOS C adjacent to the SWEF. The crash history and high level of service in this segment indicates that this is an acceptable location for the SWEF.

FHWA POLICY POINT 4

The proposed access connects to a public road only and will provide for all traffic movements. Less than "full interchanges" may be considered on a case-by-case basis for applications requiring special access for managed lanes (e.g. transit, HOVs, HOT lanes) or park and ride lots. The proposed access will be designed to meet or exceed current standards.

Background:
Currently there is an interchange located north of the SWEF. The proposal is to replace an existing weigh station with a new facility that includes indoor truck inspection facilities and parking for truck that have been removed from service due to mechanical deficiencies. As part of this upgraded facility NB 41 exit (deceleration lane) and NB 41 entrance (acceleration lane) will be improved to meet geometric standards.

Conclusion:
The proposed design will directly provide access to and from northbound USH 41 to the proposed SWEF. Access is proposed to be provided via a single off-ramp and a single on-ramp.

The proposed exit ramp will be located 0.78 miles south of CTH U. The proposed entrance ramp will be located 0.35 miles south of CTH U. Both access points will connect to this facility only. Approximately 10 percent of the trucks using northbound USH 41 will bypass the facility, when the facility is open, approximately 15 percent will enter the facility for a period of time to be statically weighed, inspected or for overnight rest; and the remaining 75 percent will exit into the facility, weigh on the static scale and proceed immediately back to the mainline.

The proposed ramps will be designed to meet or exceed current interstate standards for federal-aid projects on the interstate system since USH 41 is designated to become an interstate in the future.

FHWA POLICY POINT 5

The proposal considers and is consistent with local and regional land use and transportation plans. Prior to final approval, all request for new or revised access must be included in an adopted Metropolitan Transportation Plan, in the adopted Statewide or Metropolitan Transportation Improvement Program (STIP or TIP), and the Congestion Management Process within transportation management areas, as appropriate, and as specified in 23 CFR part 450 and the transportation conformity requirements of 40 CFR parts 51 and 93.

Conclusion:

An Environmental Report (ER) for Project 1130-44-00 was approved on September 29, 2014. The project is 10.24 miles long on USH 41 and extends from CTH J to Orange Lane in Outagamie and Brown Counties respectively. There are no other projects anticipated for this stretch of USH 41 for the next 6-15 years.

The Wisconsin DOT's STIP includes the proposed rebuild to Safety Weight & Enforcement Facility #34. Currently ramp construction is scheduled for bid letting in 2017, as part of the US 41 improvement project. Construction of the new building and parking facilities is contingent on available funding, and could be delayed 2-5 years.

FHWA POLICY POINT 6

In corridors where the potential exists for future multiple interchange additions, a comprehensive corridor or network study must accompany all requests for new or revised access with recommendations that address all of the proposed and desired access changes within the context of a longer-range system or network plan.

Conclusion:

The nearest crossroads with interchanges are approximately 2.5 miles to the south (CTH J) and 0.4 miles to the north (CTH U) of the respective ramps to the proposed SWEF facility. No additional interchanges or accesses are planned between CTH J and CTH U along USH 41.

FHWA POLICY POINT 7

When a new or revised access point is due to a new, expanded, or substantial change in current or planned future development or land use, requests must demonstrate appropriate coordination has occurred between the development and any proposed transportation system improvements. The request must describe the commitments agreed upon to assure adequate collection and dispersion of the traffic resulting from the development with the adjoining local street network and Interstate access point

Conclusion:

The proposed SWEF construction is not due to a new, expanded or substantial change in current or planned future development or land use and no new access will be provided with the improvements.

FHWA POLICY POINT 8

The proposal can be expected to be included as an alternative in the required environmental evaluation, review and processing. The proposal should include supporting information and current status of the environmental process.

Conclusion:
An Environmental Report (ER) for Project 1130-44-00 was approved on September 29, 2014. The project is 10.24 miles long on USH 41 and extends from CTH J to Orange Lane in Outagamie and Brown Counties. The purpose of the ER included determining improvements to the existing roadside facilities (SWEF #34) to meet WisDOT standards and serve the traveling public and commercial trucking industry.

The alternatives evaluated include improving existing facilities, and developing facilities at new locations.

The analysis and findings of the ER indicated a need to replace the existing SWEF and construct a new SWEF at the same site.

The ER is included in Appendix E.

CONCLUSION

This report formally requests final approval for the construction of the SWEF #34 along northbound USH 41. This proposed roadside facility improvement is recommended in the approved Environmental Report. WisDOT's proposed improvements for this SWEF address the need for CMV weighing and inspections.

With the proposed SWEF facility and the traffic projected for the design year 2037, mainline USH 41 is anticipated to operate at level of service D during the design hour (K30), while the ramp merge and diverge operation is anticipated to operate at level of service C.

Based on the likely need for future capacity expansion (2025 or beyond), an analysis of an additional lane was included as an alternative in the traffic modeling. If the new lane is added to US 41 in each direction, NB mainline USH 41 is anticipated to operate at level of service C during the design hour (K30), while the ramp merge and diverge operation is anticipated to operate at level of service B.

The proposed project will provide improved safety by allowing truck deceleration on the ramp rather than on US 41 mainline as trucks exit. The project will also improve safety by providing a longer acceleration lane for trucks entering the highway. The improvements provide a longer weave section between the SWEF entrance and the County U exit, but given the increased traffic volumes the weave LOS decreases from level B in 2017 to level C in 2037.

APPENDIX A

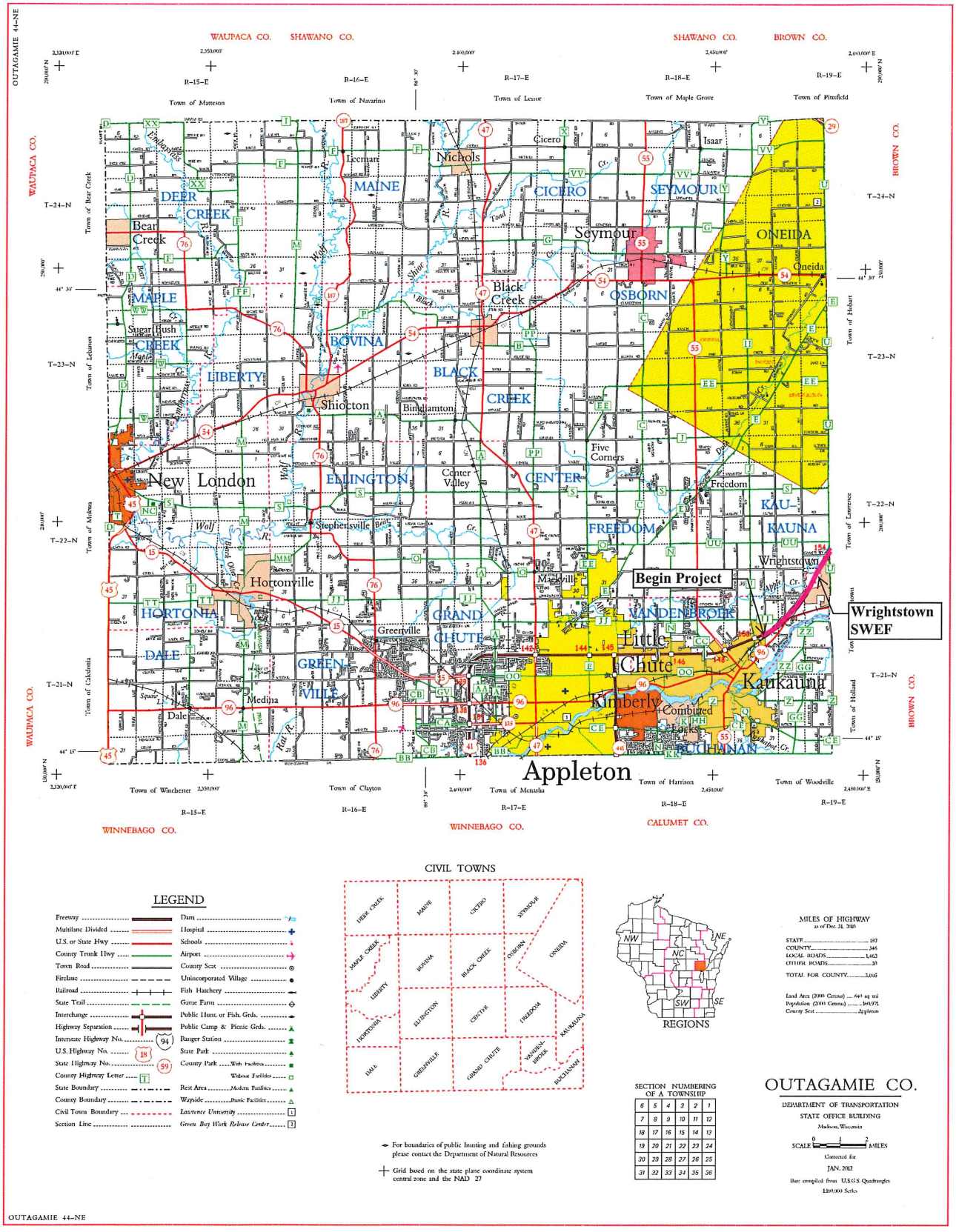
PROJECT LOCATION MAPS

PROPOSED TYPICAL SECTIONS

PROPOSED PLAN AND PROFILE

PROPOSED SIGNING

ATTACHMENT A - PROJECT LOCATION MAP



LEGEND

- Freeway
- Multilane Divided
- U.S. or State Hwy
- County Trunk Hwy
- Town Road
- Firelane
- Railroad
- State Trail
- Interchange
- Highway Separation
- Interstate Highway No.
- U.S. Highway No.
- State Highway No.
- County Highway Letter
- State Boundary
- County Boundary
- Civil Town Boundary
- Section Line
- Dam
- Hospital
- Schools
- Airport
- County Seat
- Unincorporated Village
- Fish Hatchery
- Game Farm
- Public Hunt. or Fish. Grds.
- Public Camp & Picnic Grds.
- Ranger Station
- State Park
- County Park ...With Facilities / Without Facilities
- Rest Area ...Modern Facilities
- Wayside ...Basic Facilities
- *Lawrence University*
- *Green Bay Work Release Center*

CIVIL TOWNS

DEER CREEK, MAINE, CICERO, SEYMOUR, MAPLE CREEK, BOVINA, BLACK CREEK, OSBORN, ONEIDA, LIBERTY, HORTONIA, ELLINGTON, CENTER, FREEDOM, KAUKAUNA, DALE, GREENVILLE, GRAND CHUTE, VANDENBROEK, BUCHANAN

REGIONS: NW, NE, NC, SW, SE

SECTION NUMBERING OF A TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

For boundaries of public hunting and fishing grounds please contact the Department of Natural Resources

Grid based on the state plane coordinate system central zone and the NAD 27

MILES OF HIGHWAY as of Dec 31, 2003

STATE	187
COUNTY	346
LOCAL ROADS	1,463
OTHER ROADS	39
TOTAL FOR COUNTY	2,035

Land Area (2000 Census) ... 640 sq mi
Population (2010 Census) ... 160,971
County Seat ... Appleton

OUTAGAMIE CO.

DEPARTMENT OF TRANSPORTATION
STATE OFFICE BUILDING
Madison, Wisconsin

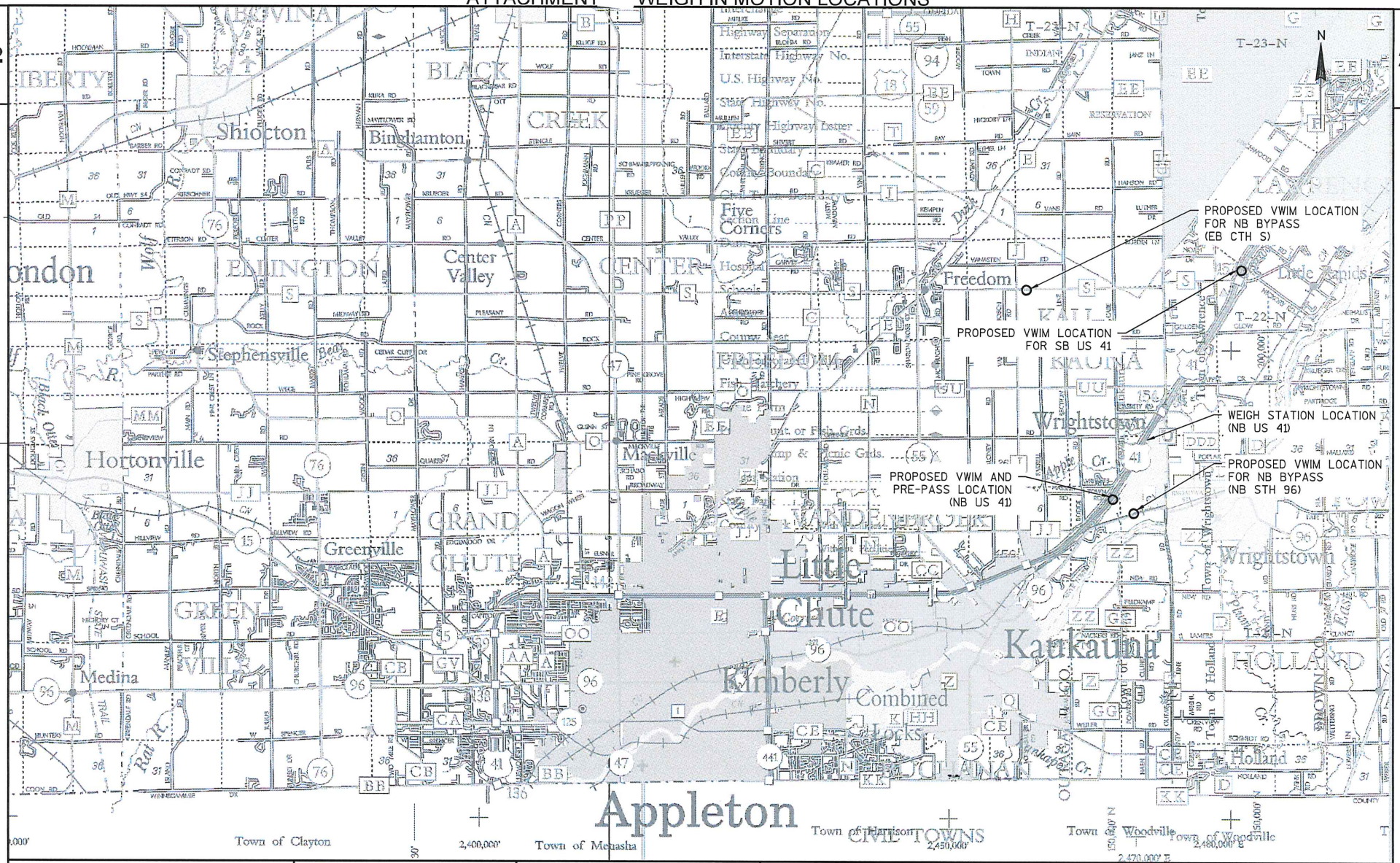
SCALE 0 1 2 MILES

Corrected for JAN. 2012

Base compiled from U.S.G.S. Quadrangles 1:100,000 Series

OUTAGAMIE 44-NE

ATTACHMENT WEIGH IN MOTION LOCATIONS



PROJECT NO: 1130-44-73	HWY: OUTAGAMIE	COUNTY: XXX	VIRTUAL WEIGH IN MOTION LOCATION MAP	SHEET	E

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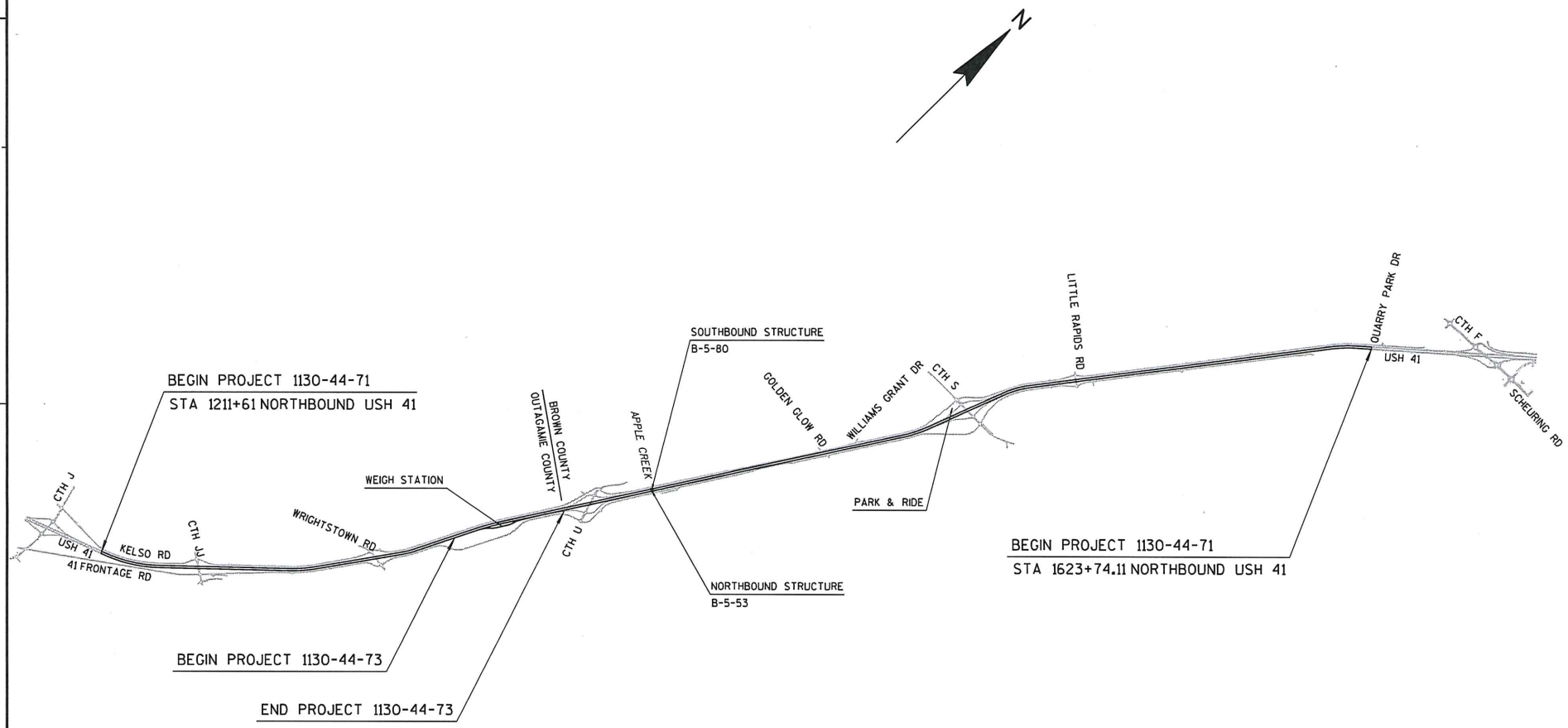
WISDOT/CADDS SHEET 42

ATTACHMENT A - PROJECT LOCATION MAP



PROJECT NO: 1130-44-71 & 1130-44-73	HWY: USH 41	COUNTY: BROWN & OUTAGAMIE	PROJECT OVERVIEW	SHEET	E

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WISDOT/CADDS SHEET 42

ATTACHMENT · WEIGH IN MOTION LOCATIONS

PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PLAN: SB US 41 VWIM	SHEET	E

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WISDOT/CADDS SHEET 42

ATTACHMENT WEIGH IN MOTION LOCATIONS

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WISDOT/CADDS SHEET 42

ATTACHMENT - WEIGH IN MOTION LOCATIONS

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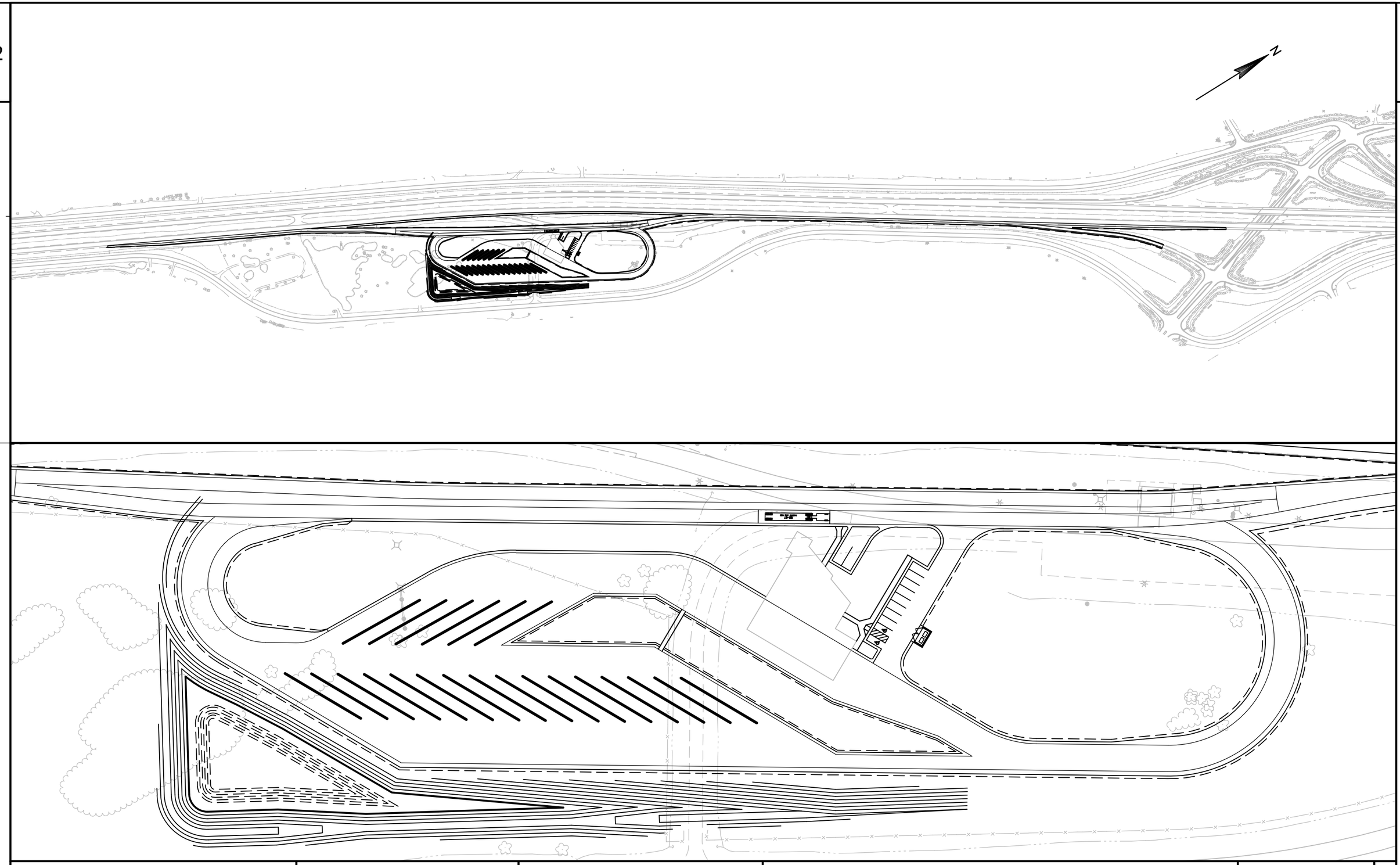
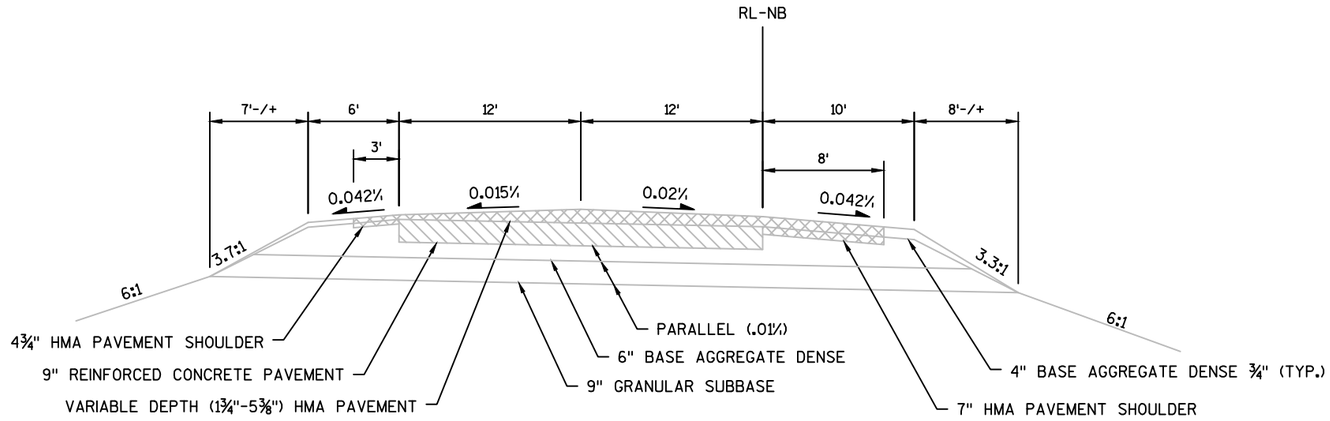
WISDOT/CADDS SHEET 42

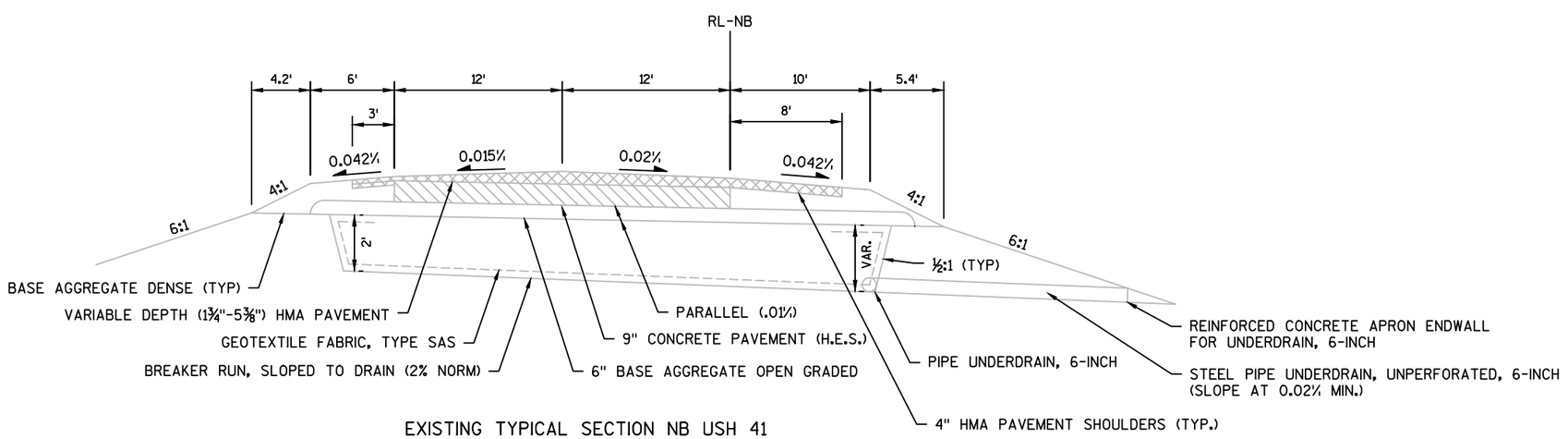


PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PROJECT OVERVIEW	SHEET	E



EXISTING TYPICAL SECTION NB USH 41

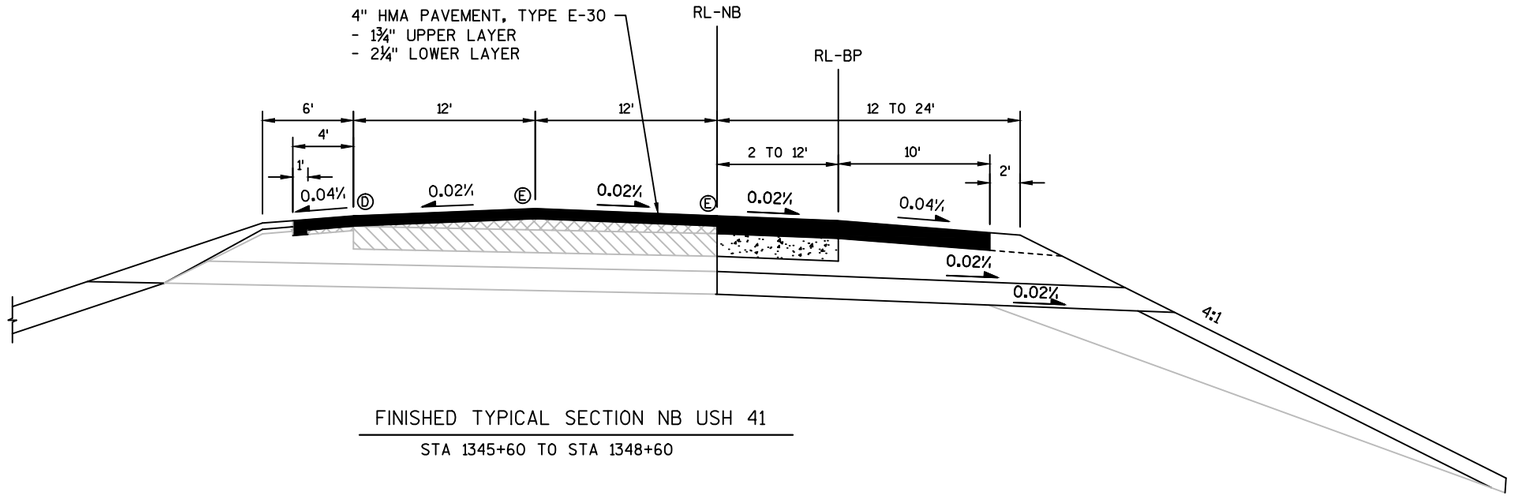
STA 1363+06 NB TO STA 1405+18 NB
STA 1417+00 NB TO STA 1420+29 NB
STA 1310+81 NB TO STA 1349+43 NB
STA 1354+83 NB TO STA 1488+20 NB



EXISTING TYPICAL SECTION NB USH 41

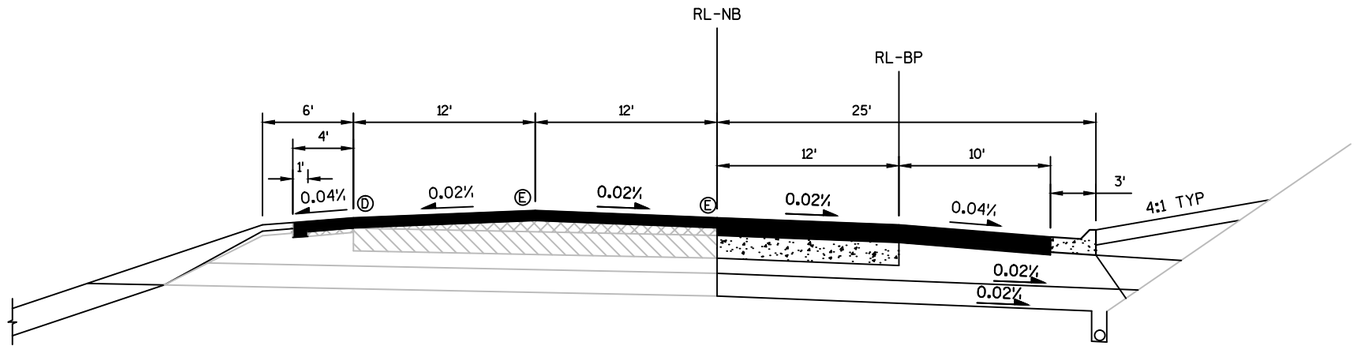
STA 1349+43 NB TO STA 1354+83 NB

PROJECT NO: 1130-44-73	HWY: USH 41	COUNTY: OUTAGAMIE	PLAN: TYPICAL SECTIONS	SHEET	E



FINISHED TYPICAL SECTION NB USH 41

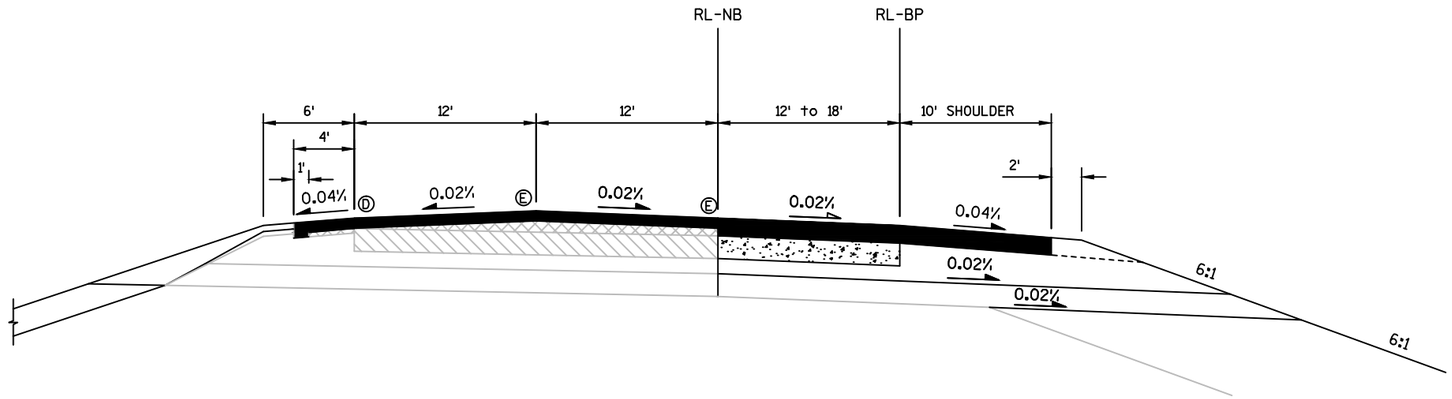
STA 1345+60 TO STA 1348+60



FINISHED TYPICAL SECTION NB USH 41

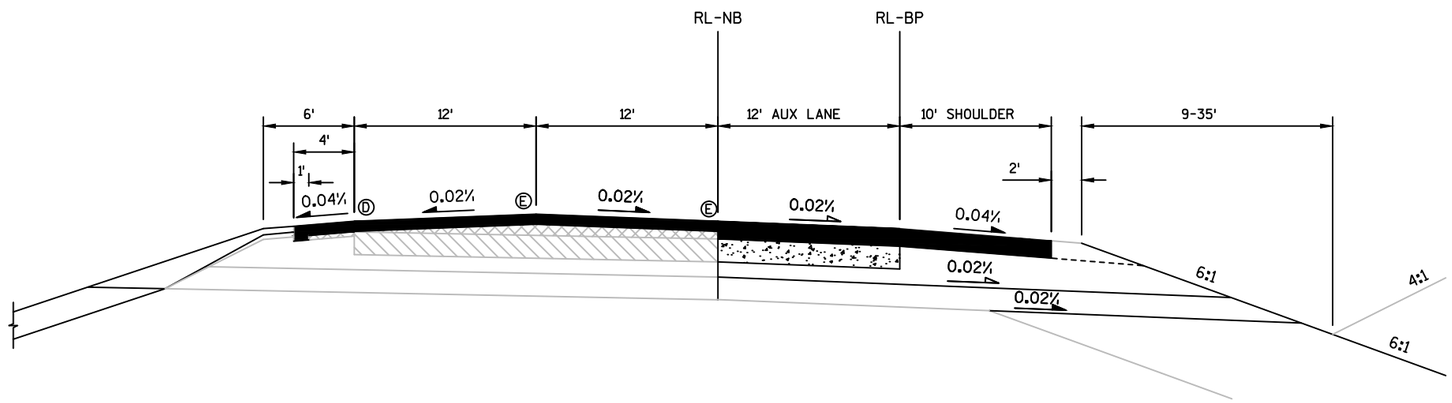
STA 1348+60 to STA 1356+60

PROJECT NO: 1130-44-73	HWY: USH 41	COUNTY: OUTAGAMIE	PLAN: TYPICAL SECTIONS	SHEET	E



FINISHED TYPICAL SECTION NB USH 41

STA 1380+16 NB TO STA 1383+16 NB

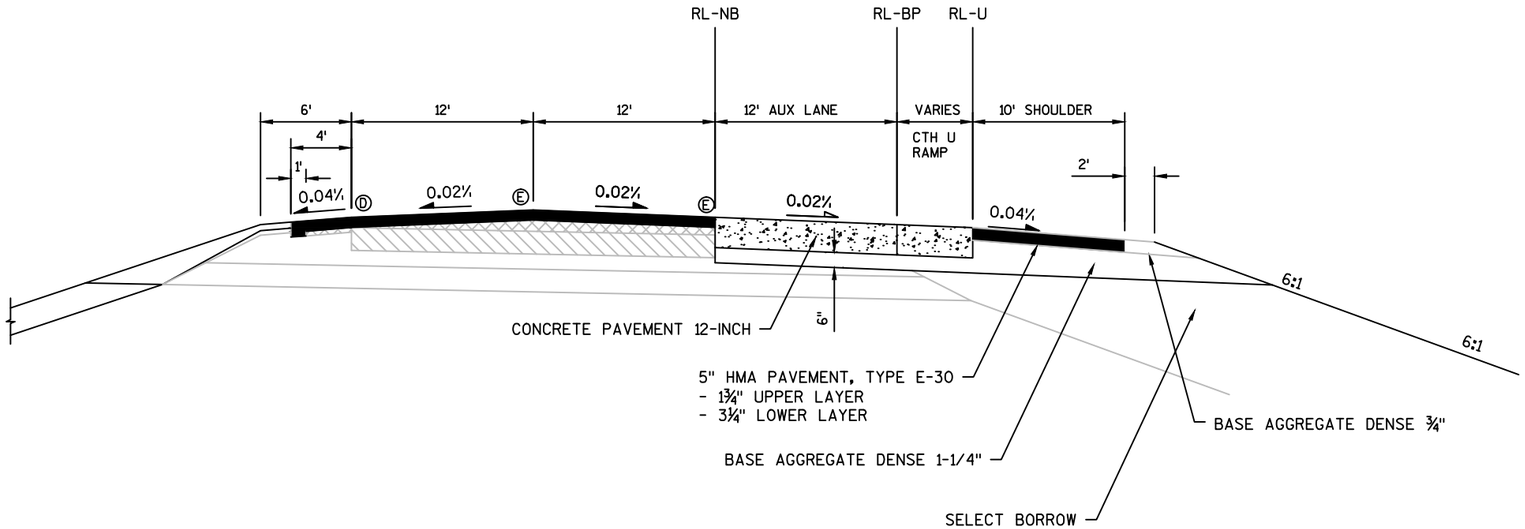


FINISHED TYPICAL SECTION NB USH 41

STA 1383+16 NB TO STA 1396+44 NB

PROJECT NO: 1130-44-73	HWY: USH 41	COUNTY: OUTAGAMIE	PLAN: TYPICAL SECTIONS	SHEET	E

2

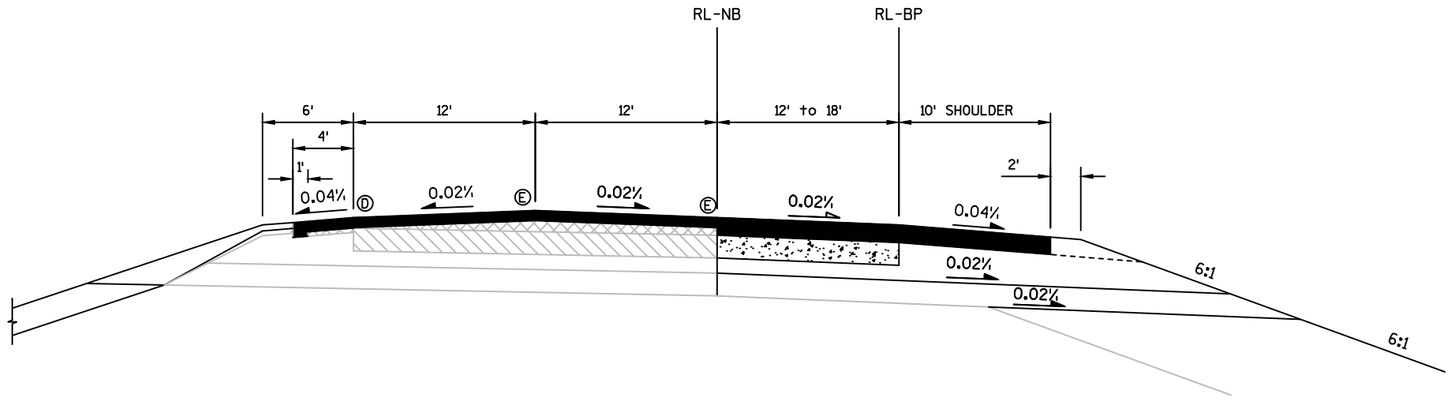


FINISHED TYPICAL SECTION NB USH 41

STA 1396+44 NB TO STA 1398+57 NB

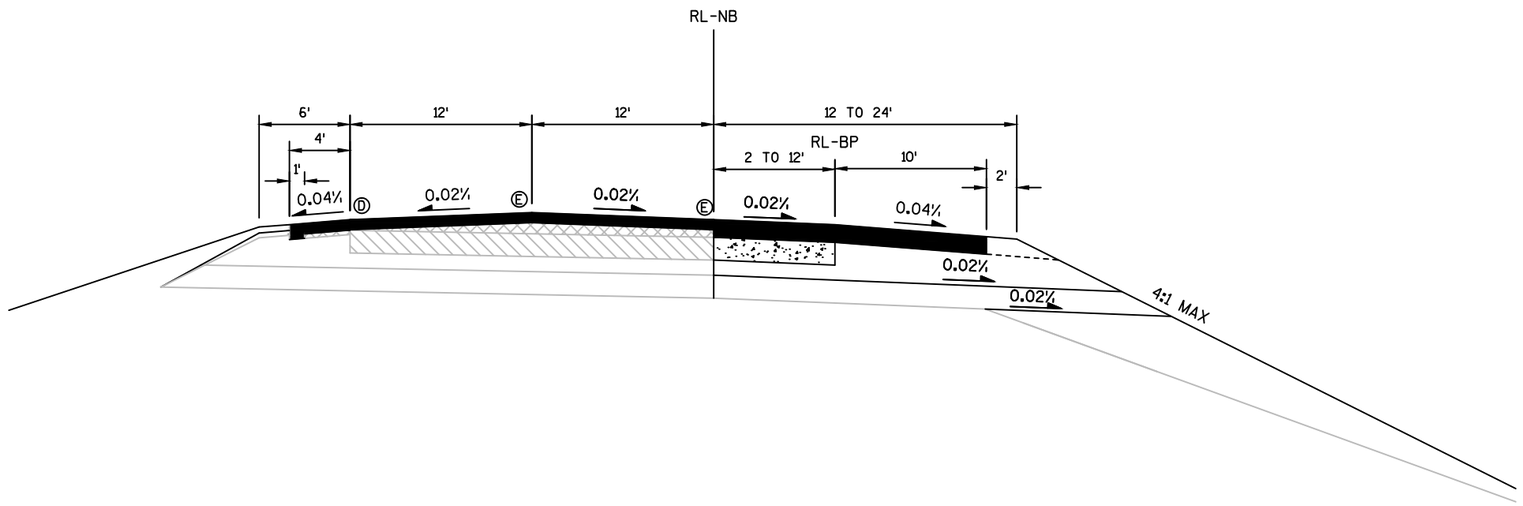
PROJECT NO: 1130-44-73	HWY: USH 41	COUNTY: OUTAGAMIE	PLAN: TYPICAL SECTIONS	SHEET	E

FILE NAME : N:\BHO\03 PAVTROAD\C3D\11304401\SHEETSPLAN\020301-TS.DWG PLOT DATE : 11/21/2014 8:28 AM PLOT BY : SCHMALE, RICHARD J PLOT NAME : PLOT SCALE : 1 IN:10 FT



FINISHED TYPICAL SECTION NB USH 41

STA 1398+57 NB TO STA 1405+71 NB

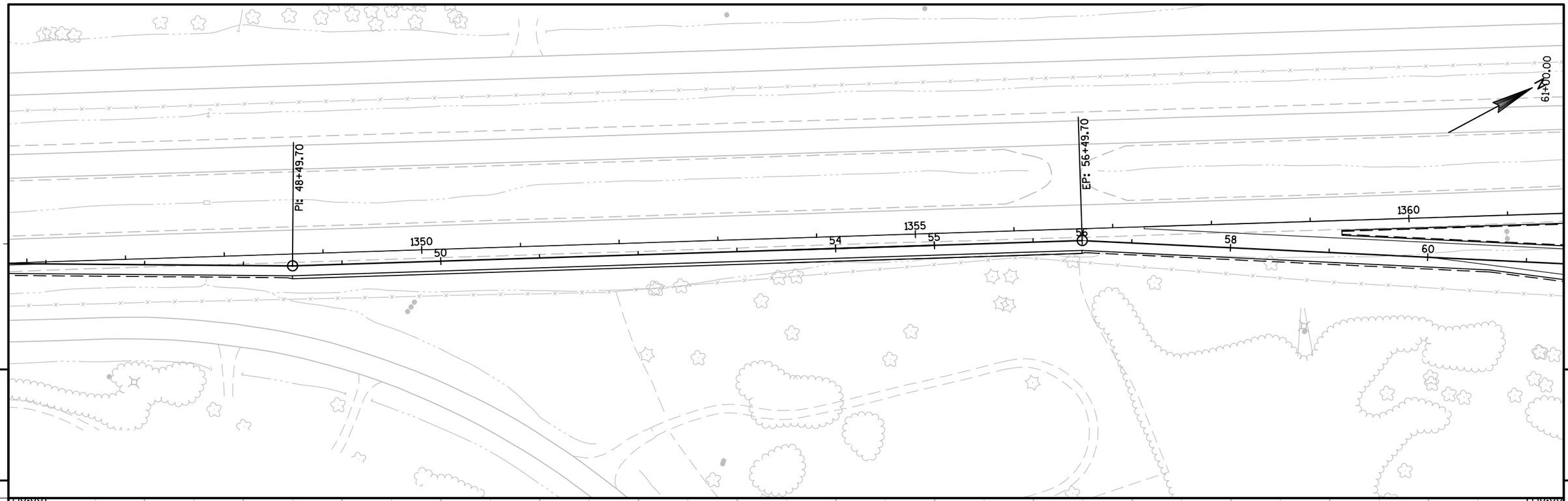


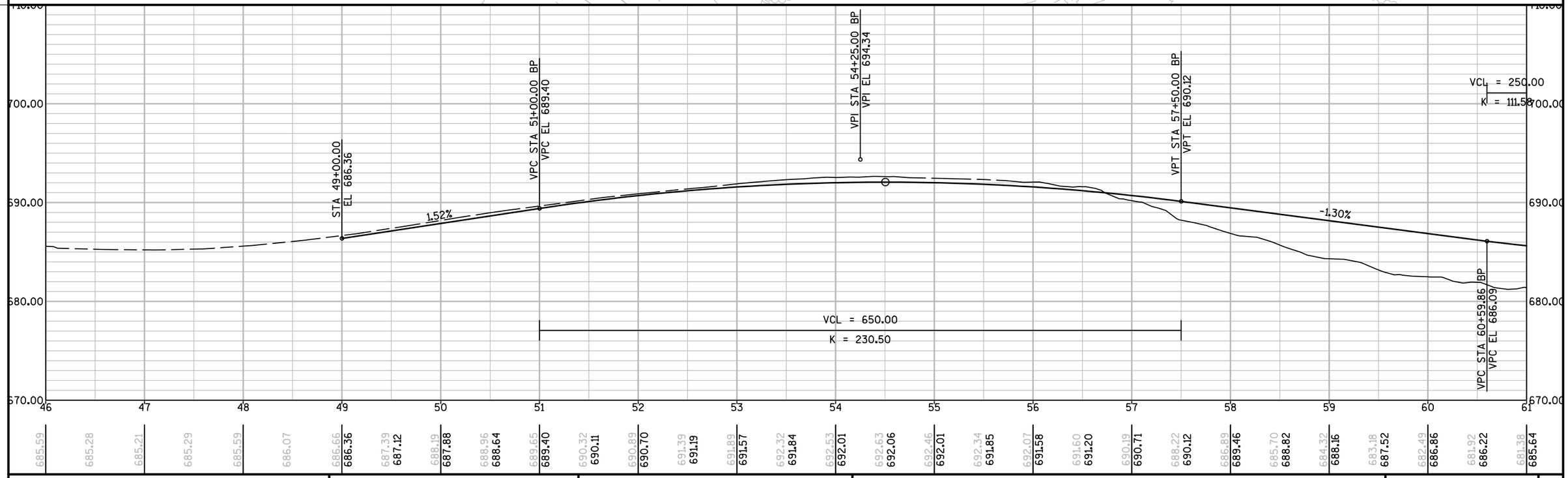
FINISHED TYPICAL SECTION NB USH 41

STA 1405+71 NB TO STA 1409+31 NB

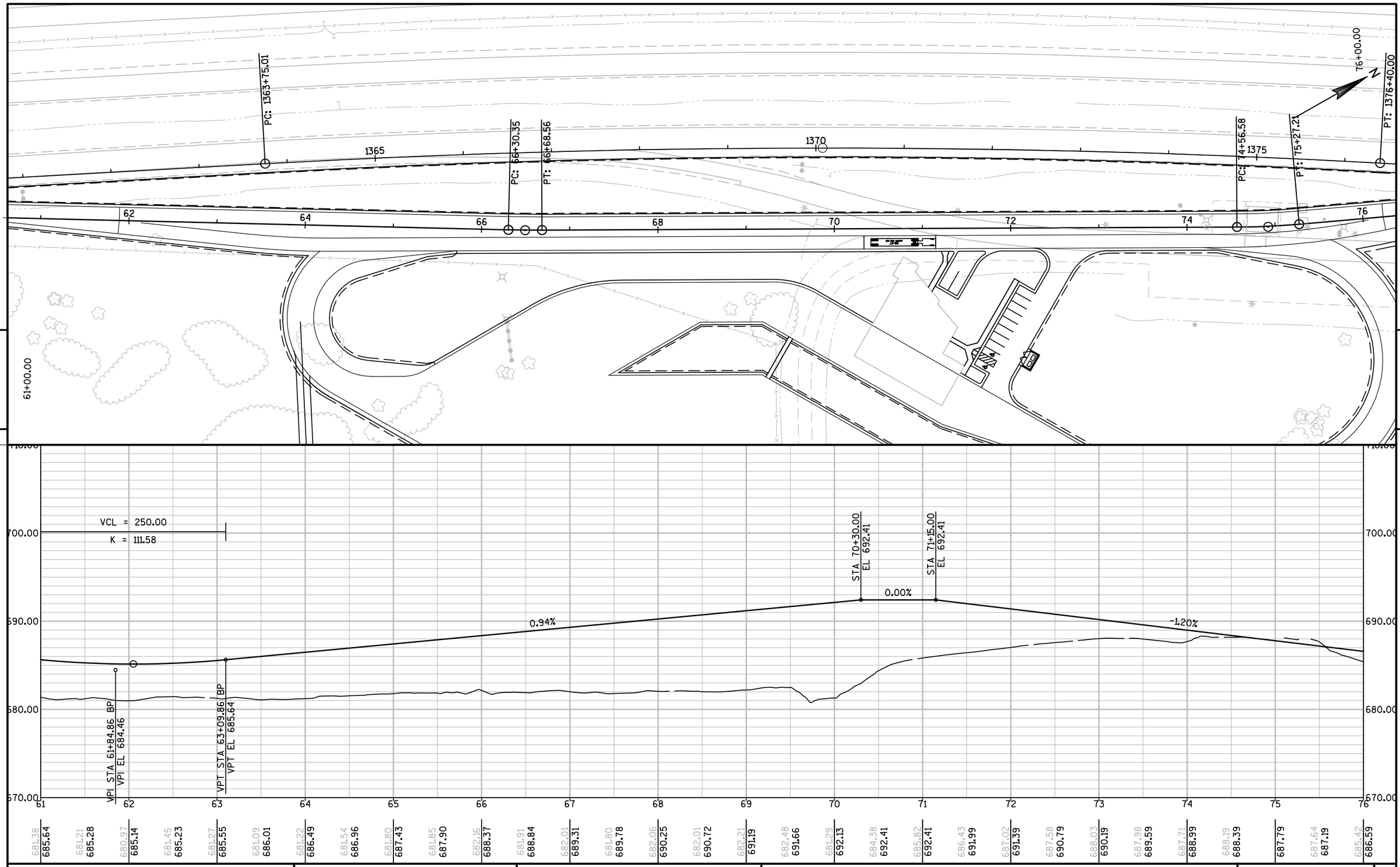
PROJECT NO: 1130-44-73	HWY: USH 41	COUNTY: OUTAGAMIE	PLAN: TYPICAL SECTIONS	SHEET	E

FILE NAME : N:\BHO\03 PAVTROAD\C3D\11304401\SHEETSPLAN\020301-TS.DWG PLOT DATE : 11/21/2014 8:28 AM PLOT BY : SCHMALE, RICHARD J PLOT NAME : PLOT SCALE : 1 IN:10 FT





PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: SWEF 34 - RAMP BP	SHEET	E



PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: SWEF 34 - RAMP BP	SHEET	E

FILE NAME : N:\BHO\03 PAVTROAD\C3D\11304401\SHEETSPLAN\050101_PP.DWG PLOT DATE : 7/14/2014 9:36 AM PLOT BY : SCHMALE, RICHARD J PLOT NAME : PLOT SCALE : 1:100_XREF

PT: 1376+40.00

PC: 78+28.74

PT: 79+96.49

PI: 82+95.14

91+00.00

1380 1385 1390

76 78 80 82 84 86 88 90

5

5

76+00.00

VCL = 200.00

K = 554.54

VCL = 700.00

K = 518.51

690.00 680.00 670.00 660.00

-0.84% -0.67% -0.51% -2.80% -0.73% -0.77% 0.50% -0.50% 0.49% -0.40% 0.80% -0.50% 0.50%

VPC STA 76+75.26 BP
VPC EL 685.69

VPI STA 77+75.26 BP
VPI EL 684.49

STA 78+28.00
EL 679.88

VPT STA 78+75.26 BP
VPT EL 683.65

STA 80+00.00
EL 678.43

STA 79+96.49
EL 682.63

STA 81+56.16
EL 681.82

STA 82+00.00
EL 673.18

STA 82+95.14
EL 680.81

STA 83+75.00
EL 674.00

VPC STA 84+97.79 BP
VPC EL 679.25

STA 85+00.00
EL 673.38

STA 85+75.00
EL 673.75

STA 86+50.00
EL 673.45

STA 87+00.00
EL 673.85

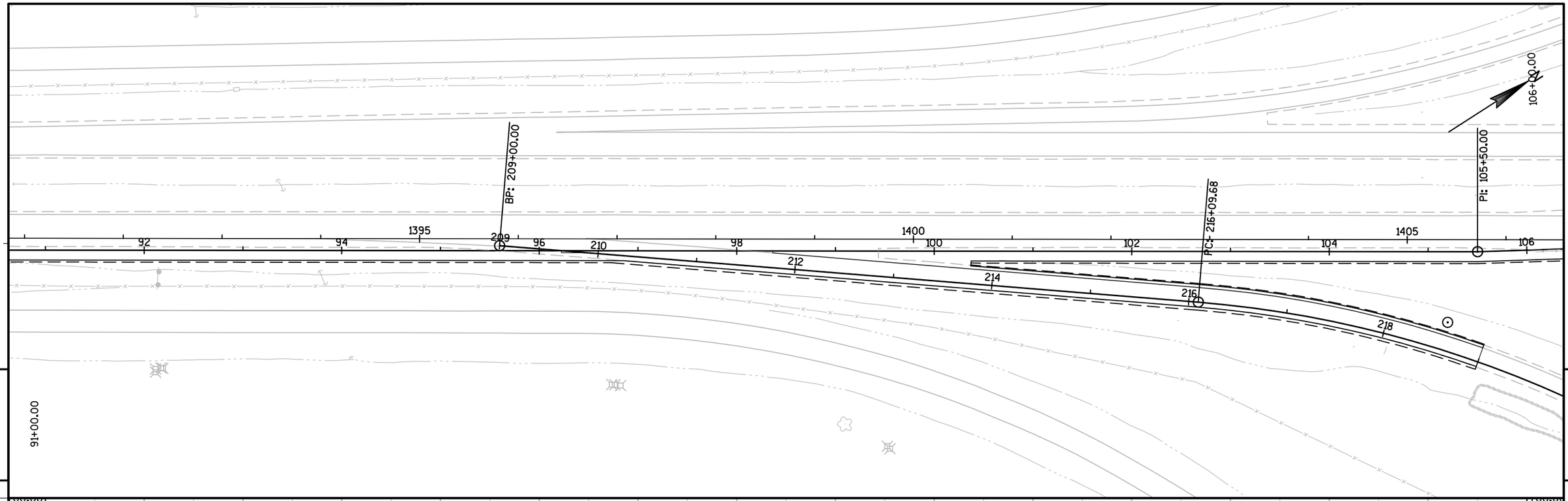
VPI STA 88+47.79 BP
VPI EL 676.56

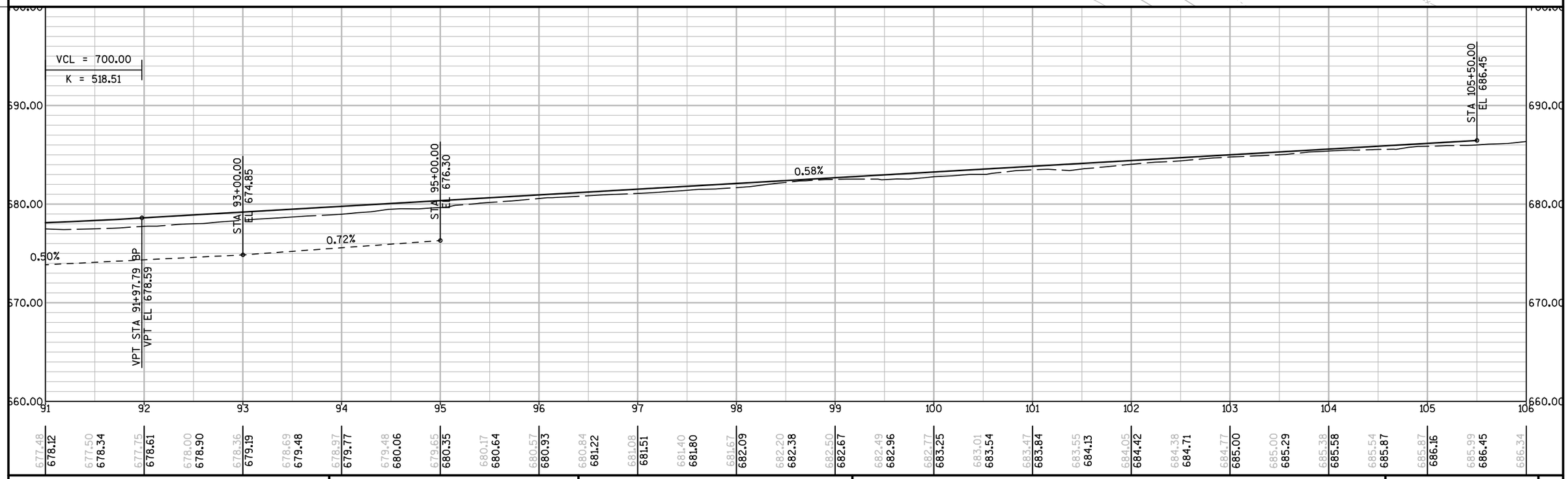
STA 89+00.00
EL 672.85

76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91

685.42 686.59 | 684.23 685.99 | 682.82 685.40 | 681.56 684.84 | 680.44 684.33 | 679.88 683.87 | 680.44 683.44 | 681.24 683.02 | 682.00 682.61 | 682.47 682.36 | 682.23 682.10 | 681.75 681.85 | 681.31 681.50 | 680.91 681.14 | 680.60 680.77 | 680.21 680.39 | 679.89 680.00 | 679.58 679.62 | 679.26 679.23 | 678.93 678.88 | 678.63 678.57 | 678.31 678.30 | 677.96 678.09 | 677.70 677.93 | 677.43 677.81 | 677.27 677.74 | 677.13 677.72 | 677.19 677.75 | 677.18 677.82 | 677.40 677.95 | 677.48 678.12

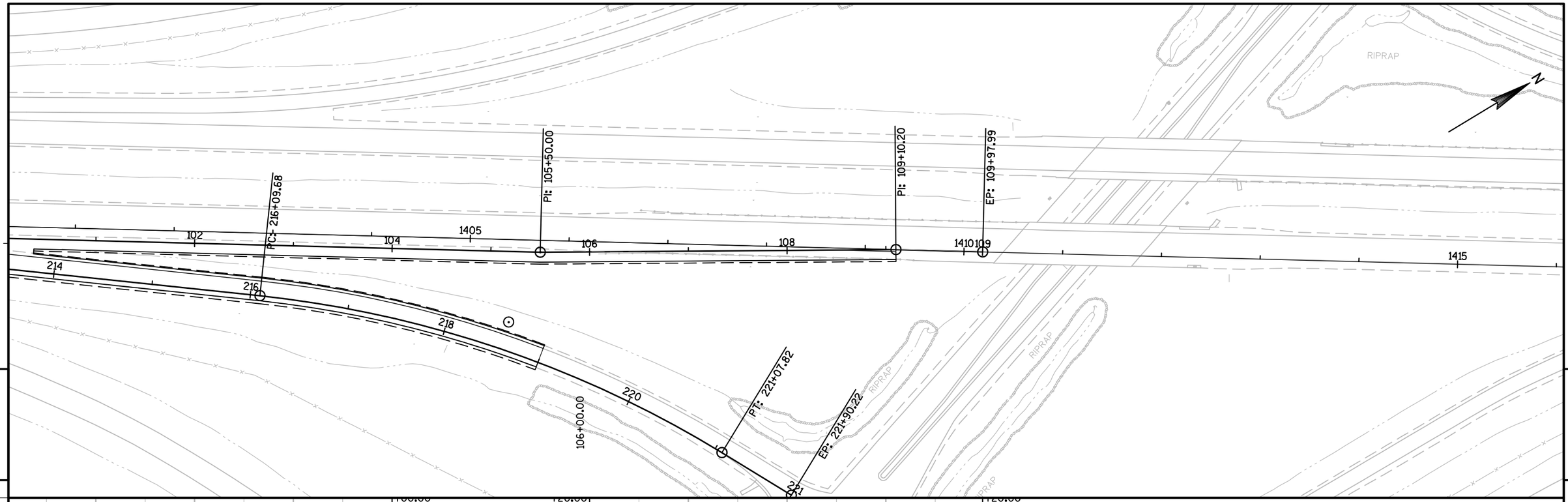
PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: SWEF 34 - RAMP BP	SHEET	E





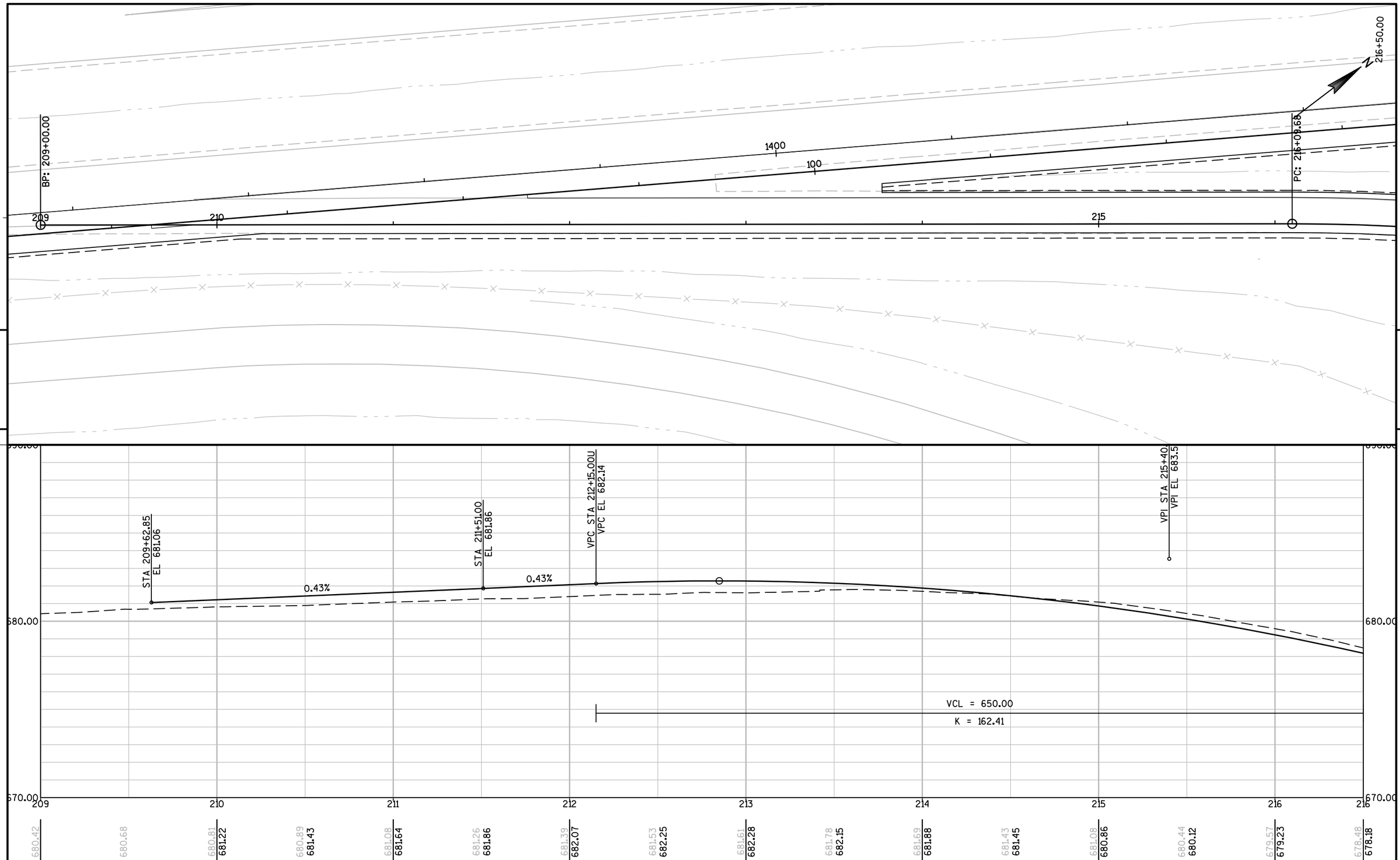
PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: SWEF 34 - RAMP BP	SHEET	E

FILE NAME : N:\BHO\03 PAVTROAD\C3D\11304401\SHEETSPLAN\050101_PP.DWG PLOT DATE : 7/14/2014 9:39 AM PLOT BY : SCHMALE, RICHARD J PLOT NAME : PLOT SCALE : 1:100_XREF



PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: SWEF 34 - RAMP BP	SHEET	E

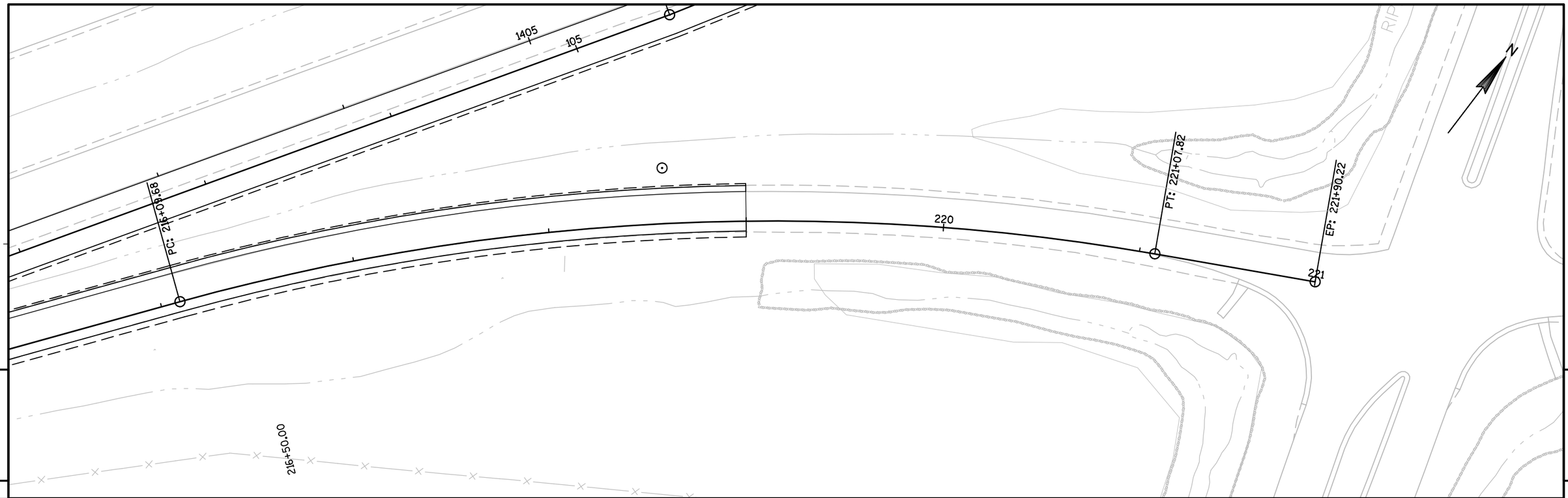
FILE NAME : N:\BHO\03 PAVTROAD\C3D\11304401\SHEETSPLAN\050101_PP.DWG PLOT DATE : 7/14/2014 9:39 AM PLOT BY : SCHMALE, RICHARD J PLOT NAME : PLOT SCALE : 1:100_XREF

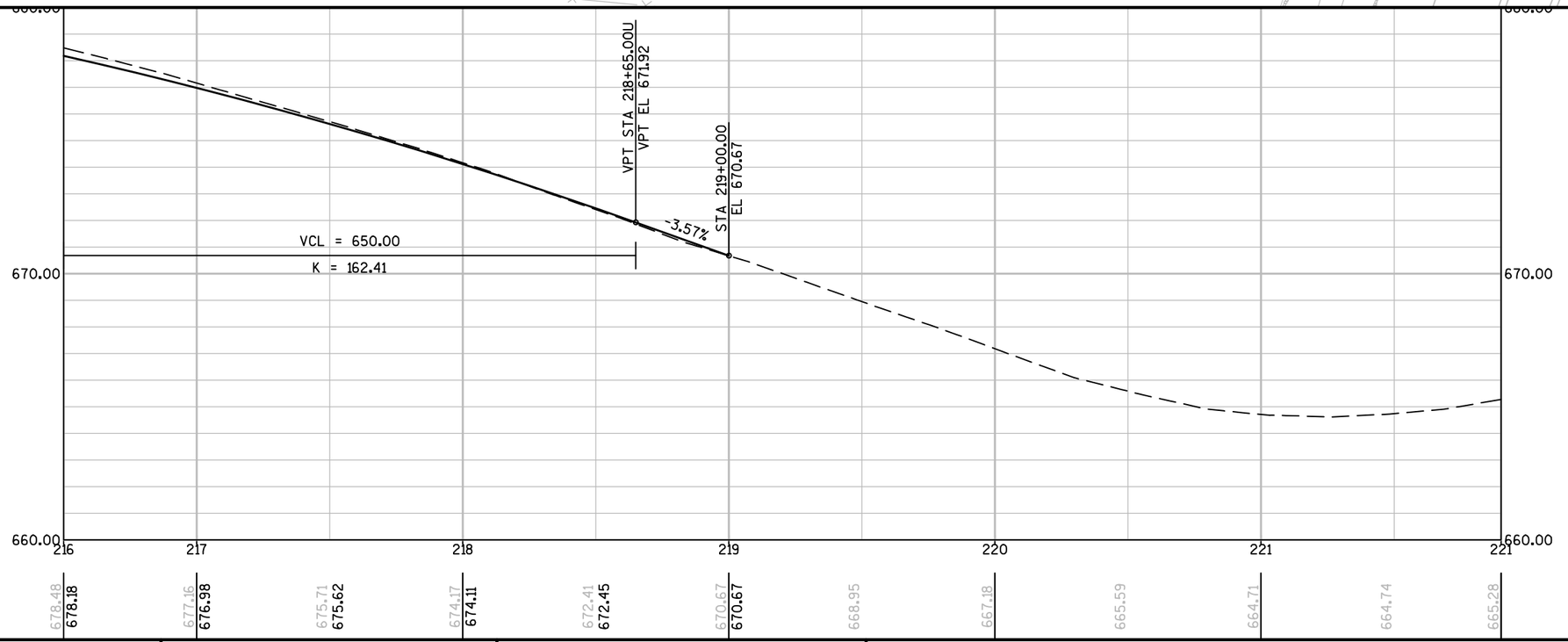


PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: CTH U	SHEET	E

FILE NAME : N:\BHO\03 PAVTROAD\C3D\11304401\SHEETSPLAN\050161_PP.DWG PLOT DATE : 6/11/2014 10:02 AM PLOT BY : SCHMALE, RICHARD J PLOT NAME : PLOT SCALE : 1:50_XREF

WISDOT/CADDS SHEET 44



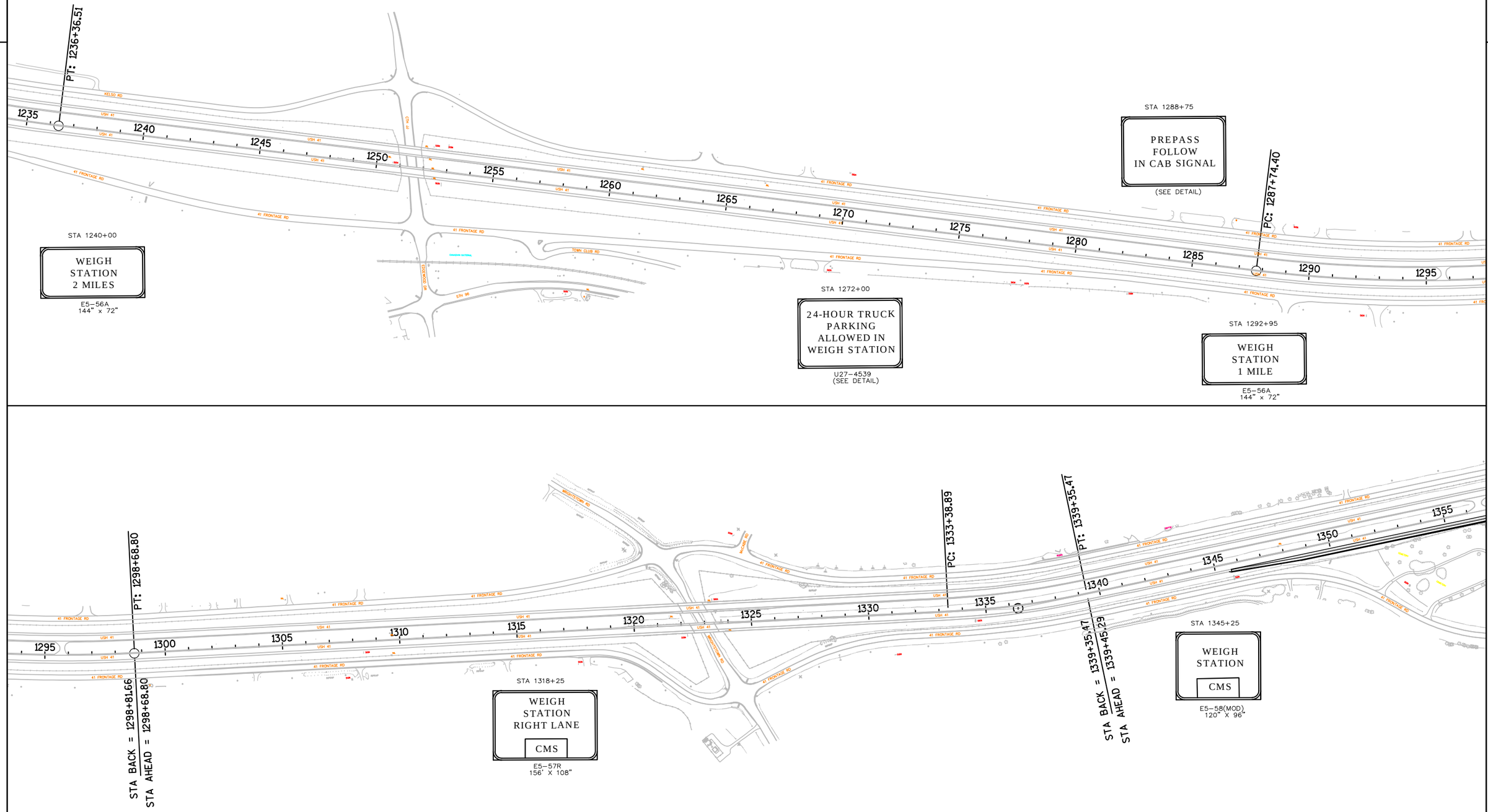


PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PLAN AND PROFILE: CTH U	SHEET	E

FILE NAME : N:\BHO\03 PAVTROAD\C3D\11304401\SHEETSPLAN\050161_PP.DWG PLOT DATE : 6/11/2014 10:01 AM PLOT BY : SCHMALE, RICHARD J PLOT NAME : PLOT SCALE : 1:50_XREF

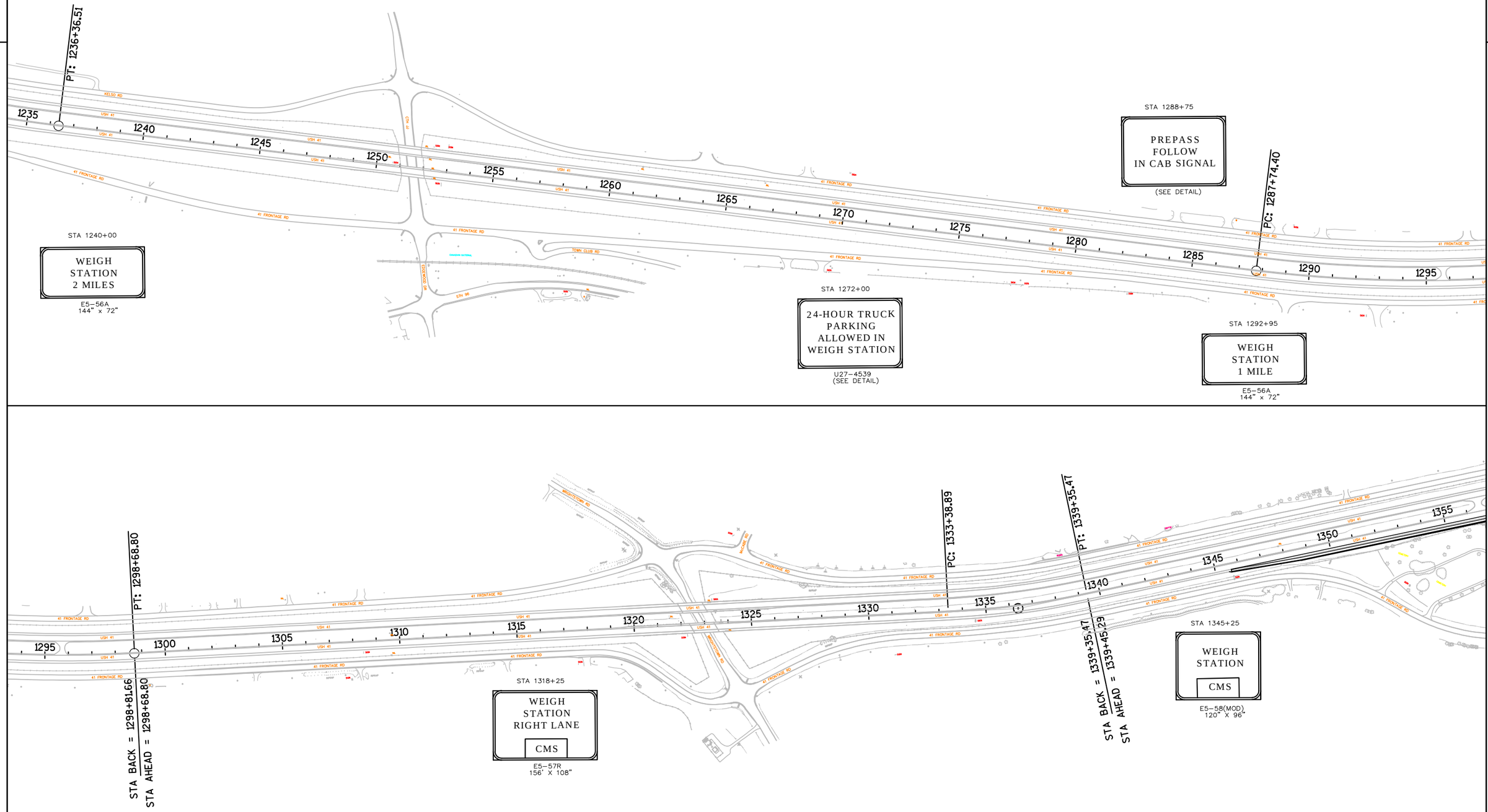
WISDOT/CADDS SHEET 44

2



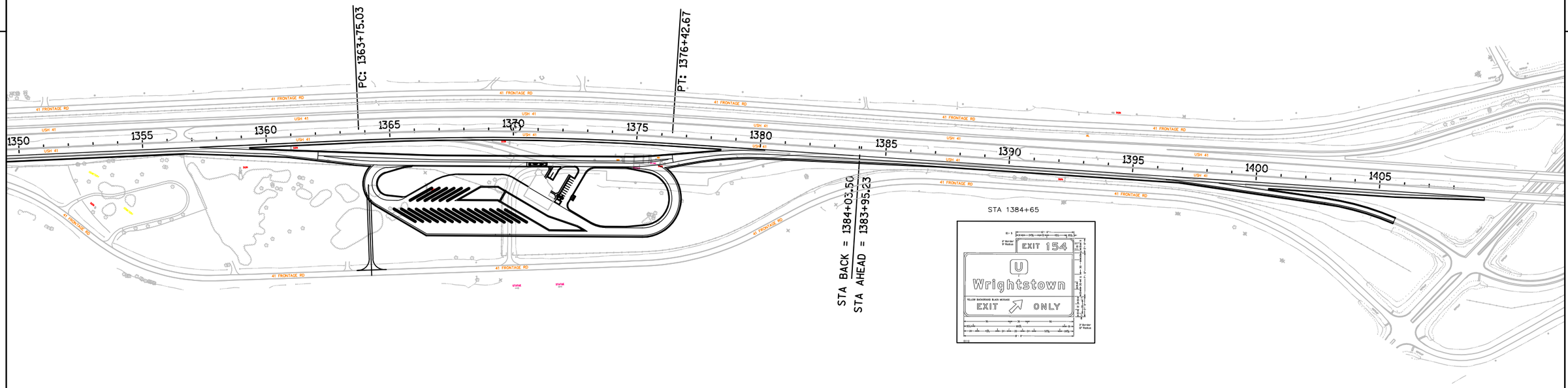
PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PERMANENT SIGNING PLAN	SHEET _____	E

2



PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PERMANENT SIGNING PLAN	SHEET _____	E

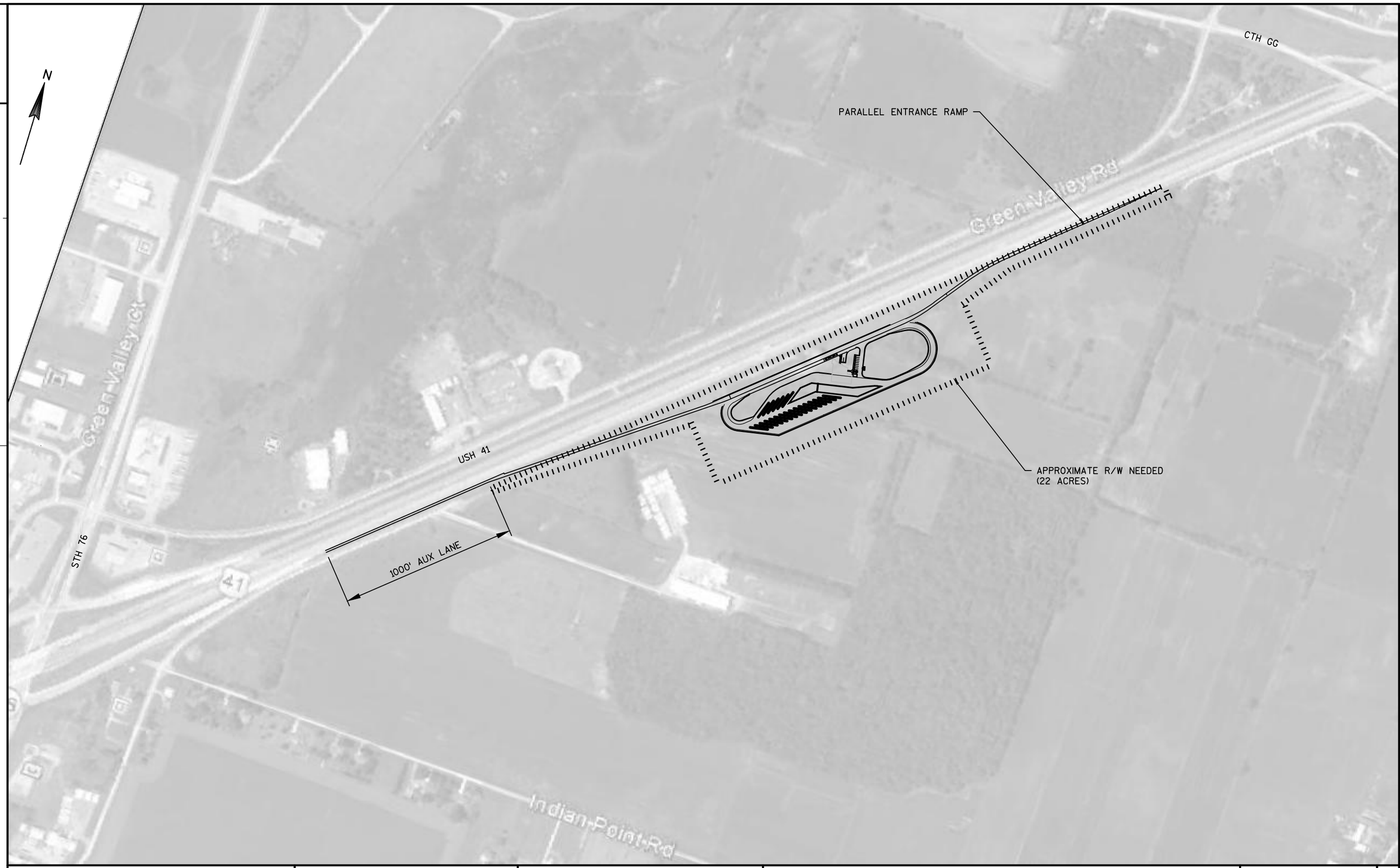
2



PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PERMANENT SIGNING PLAN	SHEET _____	E

FILE NAME : N:\BHO\03 PAVTROAD\C3D\11304401\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - ****

PLOT DATE : 11/20/2014 10:56 AM PLOT BY : SCHMALE, RICHARD J PLOT NAME : ---------- PLOT SCALE : **********



2

PROJECT NO: 1130-44-01	HWY: US 41	COUNTY: WINNEBAGO	ALTERNATE SWEF SITE	SHEET	E

FILE NAME : W:\03 PAVTROAD\SWEF-PROJECTS\SWEF-34_WRIGHTSTOWN\REPORTS\IAJR\ALT_SWEF_SITE\US41_AT_STH 76.DWG PLOT DATE : 8/4/2014 12:50 PM PLOT BY : SCHMALE, RICHARD J PLOT NAME : PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

APPENDIX B
Traffic Volume Data

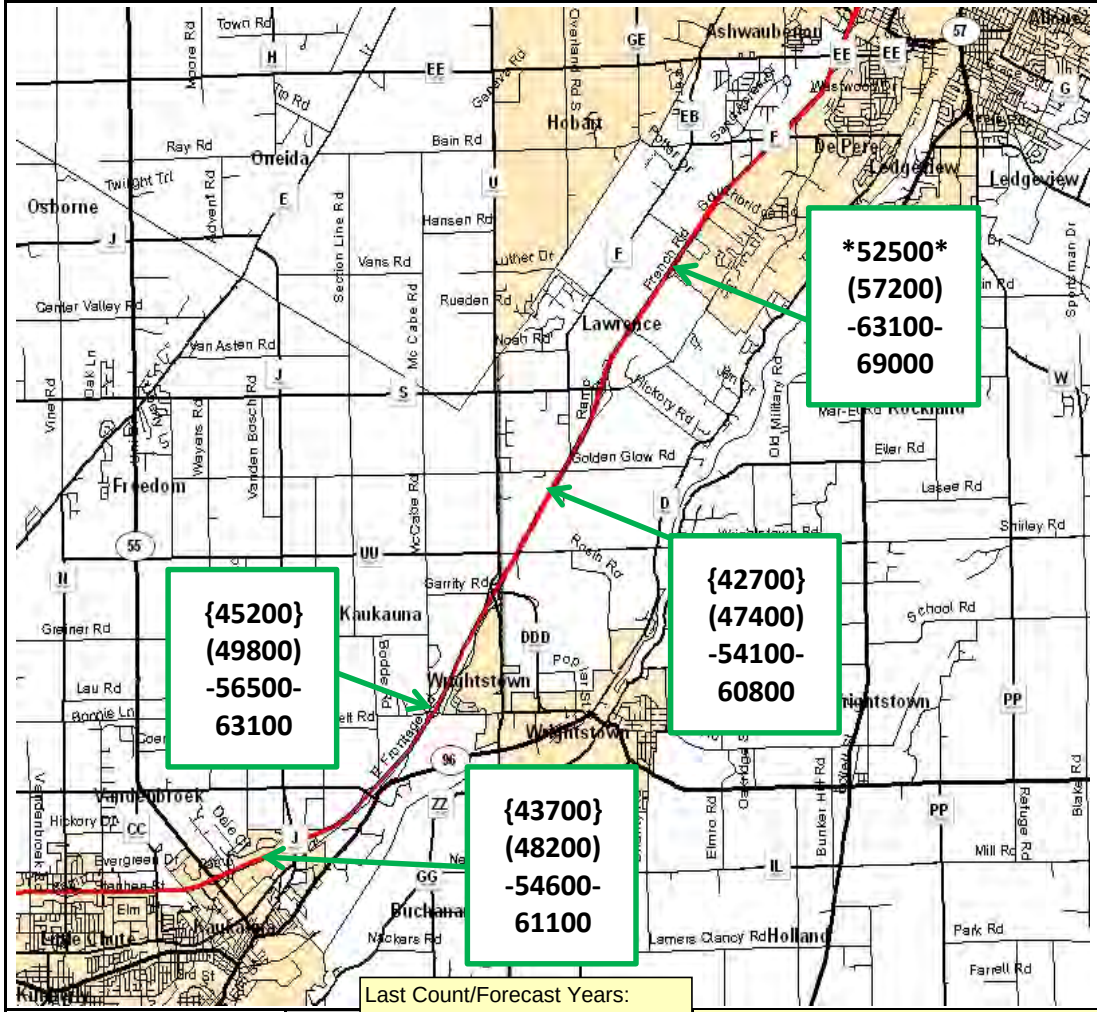
TRAFFIC FORECAST REPORT

PROJECT ID(S): 1130-44-71
ROUTE(S): USH 41

Region/COUNTY(IES): NE / Outagamie / Brown
LOCATION: Appleton to Green Bay
COMPLETED: 5/10/2012

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

Developed by: Mike Sillence
Phone : (608) 266-3322
FAX #: (608) 267-1856
E-Mail ID:mike.sillence@dot.wi.gov



Last Count/Forecast Years:

000	2009	Count
{000}	2010	Count
(000)	2017	AADT
-000-	2027	AADT
000	2037	AADT

Design Values (%)			
Routes →	USH 41		
Design Volume(s):	69000	--	--
K250	8.5	--	--
K100	9.3	--	--
K30	10.1	--	--
T(DHV)	5.2	--	--
D(Dsgn. Hr.)	60/40	--	--
K8(ADT)	--	--	--
T(A8HV)	--	--	--

Truck Class %'s			
Class	Seg. 1	Seg. 2	Seg. 3
2D	2.1	--	--
3AX	1.0	--	--
2S1+2S2	1.7	--	--
3-S2	4.3	--	--
DBL-BTM	0.3	--	--
TOTAL	9.4%	--	--

NOTES ON THE FORECAST:

1. This projection assumes that no major new traffic generators will be added to the development already included in the travel demand model.

2. Truck classification percentages were taken from a table representative of similar facilities and locations throughout the state of Wisconsin.

MORE NOTES ON THE FORECAST:

3. USH 41 is a factor group IV (rural-other) highway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as a rural principal arterial (2) for count purposes.

4. The Northeast Regional Travel Demand Model was used to complete this forecast. The Traffic Analysis Forecasting Information System output was used as a comparison tool to check against the model output. Adjustments were made as needed.

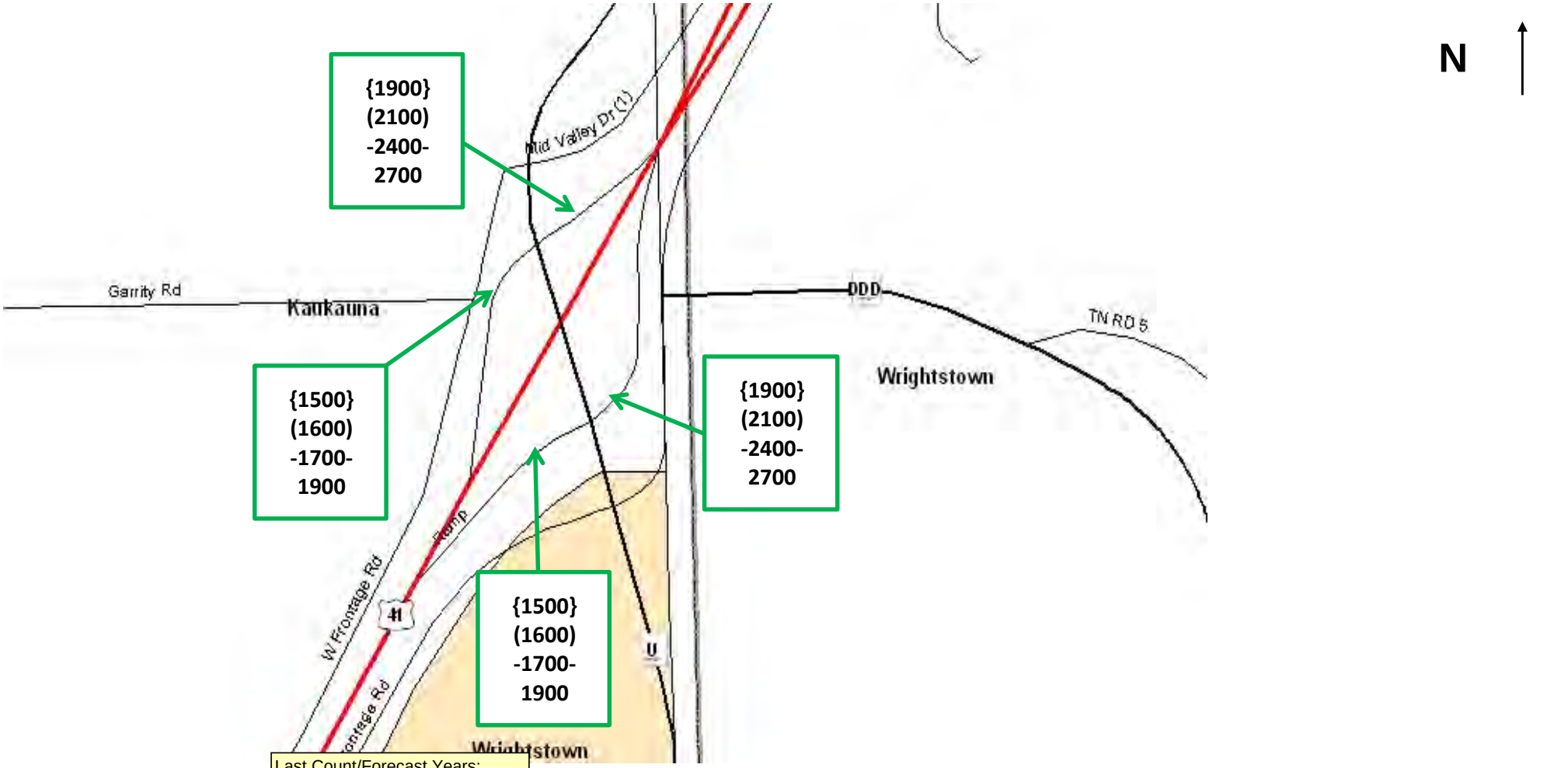
TRAFFIC FORECAST REPORT

PROJECT ID(S): 1130-44-71
ROUTE(S): USH 41

Region/COUNTY(IES): NE / Outagamie / Brown
LOCATION: Appleton to Green Bay
COMPLETED: 5/10/2012

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

Developed by: Mike Sillence
Phone : (608) 266-3322
FAX #: (608) 267-1856
E-Mail ID:mike.sillence@dot.wi.gov



Last Count/Forecast Years:

000	2009	Count
{000}	2010	Count
(000)	2017	AADT
-000-	2027	AADT
000	2037	AADT

Design Values (%)			
Routes →	USH 41		
Design Volume(s):	69000	--	--
K250	8.5	--	--
K100	9.3	--	--
K30	10.1	--	--
T(DHV)	5.2	--	--
D(Dsgn. Hr.)	60/40	--	--
K8(ADT)	--	--	--
T(A8HV)	--	--	--

Truck Class %'s			
Class	Seg. 1	Seg. 2	Seg. 3
2D	2.1	--	--
3AX	1.0	--	--
2S1+2S2	1.7	--	--
3-S2	4.3	--	--
DBL-BTM	0.3	--	--
TOTAL	9.4%	--	--

NOTES ON THE FORECAST:

1. This projection assumes that no major new traffic generators will be added to the development already included in the travel demand model.

2. Truck classification percentages were taken from a table representative of similar facilities and locations throughout the state of Wisconsin.

MORE NOTES ON THE FORECAST:

3. USH 41 is a factor group IV (rural-other) highway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as a rural principal arterial (2) for count purposes.

4. The Northeast Regional Travel Demand Model was used to complete this forecast. The Traffic Analysis Forecasting Information System output was used as a comparison tool to check against the model output. Adjustments were made as needed.

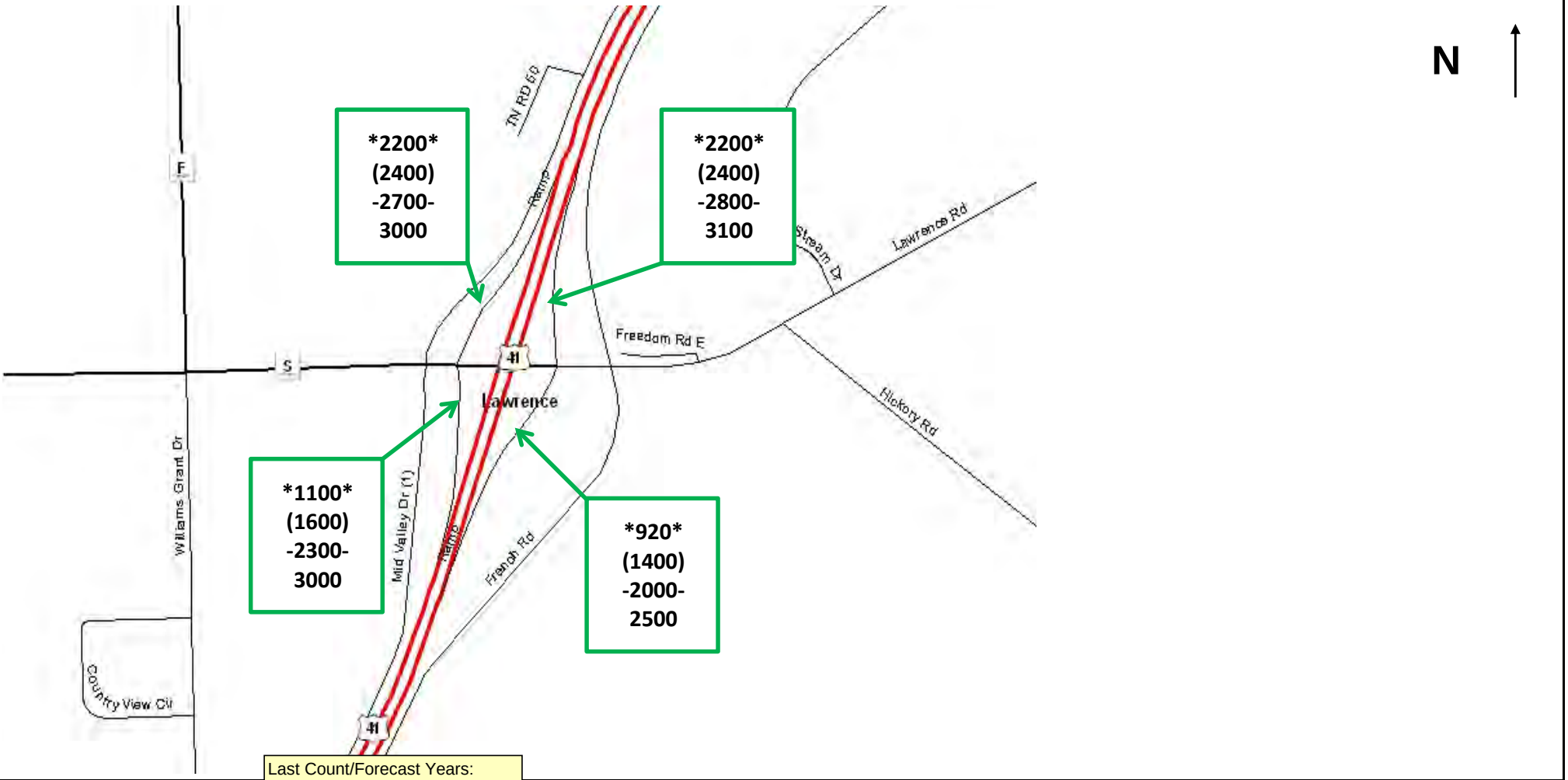
TRAFFIC FORECAST REPORT

PROJECT ID(S): 1130-44-71
ROUTE(S): USH 41

Region/COUNTY(IES): NE / Outagamie / Brown
LOCATION: Appleton to Green Bay
COMPLETED: 5/10/2012

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

Developed by: Mike Sillence
Phone : (608) 266-3322
FAX #: (608) 267-1856
E-Mail ID:mike.sillence@dot.wi.gov



Design Values (%)			
Routes →	**USH 41**		
Design Volume(s):	69000	--	--
K250	8.5	--	--
K100	9.3	--	--
K30	10.1	--	--
T(DHV)	5.2	--	--
D(Dsgn. Hr.)	60/40	--	--
K8(ADT)	--	--	--
T(A8HV)	--	--	--

Last Count/Forecast Years:

000	2009	Count
{000}	2010	Count
(000)	2017	AADT
-000-	2027	AADT
000	2037	AADT

Truck Class %'s			
Class	**Seg. 1**	**Seg. 2**	**Seg. 3**
2D	2.1	--	--
3AX	1.0	--	--
2S1+2S2	1.7	--	--
3-S2	4.3	--	--
DBL-BTM	0.3	--	--
TOTAL	9.4%	--	--

NOTES ON THE FORECAST:

1. This projection assumes that no major new traffic generators will be added to the development already included in the travel demand model.

2. Truck classification percentages were taken from a table representative of similar facilities and locations throughout the state of Wisconsin.

MORE NOTES ON THE FORECAST:

3. USH 41 is a factor group IV (rural-other) highway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as a rural principal arterial (2) for count purposes.

4. The Northeast Regional Travel Demand Model was used to complete this forecast. The Traffic Analysis Forecasting Information System output was used as a comparison tool to check against the model output. Adjustments were made as needed.

APPENDIX C
HCM Traffic Analysis Outputs

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	BMR	Freeway/Dir of Travel	NB
Agency or Company	BTO	Junction	US 41 SWEF
Date Performed	7/30/2014	Jurisdiction	WisDOT
Analysis Time Period	Design Hour	Analysis Year	2017

Project Description Diverge Operations at SWEF

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 2	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 1100	V_D = veh/h
	Freeway Volume, V_F: 2898	
	Ramp Volume, V_R: 120	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 60.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	2898	1.00	Level	1	0	0.995	1.00	2912
Ramp	120	1.00	Level	100	0	0.667	1.00	180
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 using Equation (Exhibit 13-7)

V_{12} = 2912 pc/h

V_3 or V_{av34} 0 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	2912	Exhibit 13-8	4800	No
$V_{FO} = V_F - V_R$	2732	Exhibit 13-8	4800	No
V_R	180	Exhibit 13-10	2200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2912	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 19.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.119 (Exhibit 13-12)

S_R = 66.7 mph (Exhibit 13-12)

S_0 = N/A mph (Exhibit 13-12)

S = 66.7 mph (Exhibit 13-13)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	BMR	Freeway/Dir of Travel	NB
Agency or Company	BTO	Junction	US 41 SWEF
Date Performed	7/30/2014	Jurisdiction	WisDOT
Analysis Time Period	Design Hour	Analysis Year	2037

Project Description Diverge Operations at SWEF

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	2	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☑ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	1100	L_{down} =	ft
V_u =	veh/h	Freeway Volume, V_F	3704	V_D =	veh/h
		Ramp Volume, V_R	120		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	60.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3704	1.00	Level	2	0	0.990	1.00	3741
Ramp	120	1.00	Level	100	0	0.667	1.00	180
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 1.000 using Equation (Exhibit 13-7)

V_{12} = 3741 pc/h

V_3 or V_{av34} 0 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	3741	Exhibit 13-8	4800	No
$V_{FO} = V_F - V_R$	3561	Exhibit 13-8	4800	No
V_R	180	Exhibit 13-10	2200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3741	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 26.5 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

D_s = 0.119 (Exhibit 13-12)

S_R = 66.7 mph (Exhibit 13-12)

S_0 = N/A mph (Exhibit 13-12)

S = 66.7 mph (Exhibit 13-13)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	BMR	Freeway/Dir of Travel	NB
Agency or Company	BTO	Junction	US 41 SWEF
Date Performed	7/30/2014	Jurisdiction	WisDOT
Analysis Time Period	Design Hour	Analysis Year	2037

Project Description: Diverge Operations at SWEF

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = ft
V_u = veh/h	Deceleration Lane Length L_D: 1100	V_D = veh/h
	Freeway Volume, V_F: 3704	
	Ramp Volume, V_R: 120	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 60.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3704	1.00	Level	2	0	0.990	1.00	3741
Ramp	120	1.00	Level	100	0	0.667	1.00	180
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.658 using Equation (Exhibit 13-7)

V_{12} = 2524 pc/h

V_3 or V_{av34} 1217 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	3741	Exhibit 13-8	7200	No
$V_{FO} = V_F - V_R$	3561	Exhibit 13-8	7200	No
V_R	180	Exhibit 13-10	2200	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2524	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 16.1 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.119 (Exhibit 13-12)

S_R = 66.7 mph (Exhibit 13-12)

S_0 = 75.9 mph (Exhibit 13-12)

S = 69.4 mph (Exhibit 13-13)

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*BMR*
Agency or Company	*BTO*
Date Performed	*7/29/2014*
Analysis Time Period	*Design Hour*

Site Information

Highway/Direction of Travel	*NB*
From/To	*US 41*
Jurisdiction	*WisDOT*
Analysis Year	*2037*

Project Description *Freeway Operations South of Reconstructed SWEF*

☑ Oper.(LOS) ☐ Des.(N) ☑ Planning Data

Flow Inputs

Volume, V	*3786*	veh/h	Peak-Hour Factor, PHF	*1.00*
AADT	*63100*	veh/day	%Trucks and Buses, P_T	*5*
Peak-Hr Prop. of AADT, K	*0.10*		%RVs, P_R	*0*
Peak-Hr Direction Prop, D	*60*		General Terrain:	*Level*
DDHV = AADT x K x D	*3786*	veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.976*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*2*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*72.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*72.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1940*	pc/h/ln
S	*63.6*	mph
D = v_p / S	*30.5*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*BMR*
Agency or Company	*BTO*
Date Performed	*7/29/2014*
Analysis Time Period	*Design Hour*

Site Information

Highway/Direction of Travel	*NB*
From/To	*US 41*
Jurisdiction	*WisDOT*
Analysis Year	*2037*

Project Description *Freeway Operations South of Reconstructed SWEF*

☑ Oper.(LOS) ☐ Des.(N) ☑ Planning Data

Flow Inputs

Volume, V	*3786*	veh/h	Peak-Hour Factor, PHF	*1.00*
AADT	*63100*	veh/day	%Trucks and Buses, P_T	*5*
Peak-Hr Prop. of AADT, K	*0.10*		%RVs, P_R	*0*
Peak-Hr Direction Prop, D	*60*		General Terrain:	*Level*
DDHV = AADT x K x D	*3786*	veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.976*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*72.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*72.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1294*	pc/h/ln
S	*69.9*	mph
D = v_p / S	*18.5*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*BMR*
Agency or Company	*BTO*
Date Performed	*7/29/2014*
Analysis Time Period	*Design Hour*

Site Information

Highway/Direction of Travel	*NB*
From/To	*US 41*
Jurisdiction	*WisDOT*
Analysis Year	*2010*

Project Description *Freeway Operations South of Reconstructed SWEF*

☑ Oper.(LOS) ☐ Des.(N) ☑ Planning Data

Flow Inputs

Volume, V	*2712*	veh/h	Peak-Hour Factor, PHF	*1.00*
AADT	*45200*	veh/day	%Trucks and Buses, P_T	*5*
Peak-Hr Prop. of AADT, K	*0.10*		%RVs, P_R	*0*
Peak-Hr Direction Prop, D	*60*		General Terrain:	*Level*
DDHV = AADT x K x D	*2712*	veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.976*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*2*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*72.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*72.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1390*	pc/h/ln
S	*69.6*	mph
D = v_p / S	*20.0*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*BMR*
Agency or Company	*BTO*
Date Performed	*7/29/2014*
Analysis Time Period	*Design Hour*

Site Information

Highway/Direction of Travel	*NB*
From/To	*US 41*
Jurisdiction	*WisDOT*
Analysis Year	*2017*

Project Description *Freeway Operations South of Reconstructed SWEF*

☑ Oper.(LOS) ☐ Des.(N) ☑ Planning Data

Flow Inputs

Volume, V	*2988*	veh/h	Peak-Hour Factor, PHF	*1.00*
AADT	*49800*	veh/day	%Trucks and Buses, P_T	*5*
Peak-Hr Prop. of AADT, K	*0.10*		%RVs, P_R	*0*
Peak-Hr Direction Prop, D	*60*		General Terrain:	*Level*
DDHV = AADT x K x D	*2988*	veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.976*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*2*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*72.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*72.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1531*	pc/h/ln
S	*68.7*	mph
D = v_p / S	*22.3*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

FREEWAY WEAVING WORKSHEET

General Information

Analyst	BMR
Agency/Company	BTO
Date Performed	7/30/2014
Analysis Time Period	Design Hour

Site Information

Freeway/Dir of Travel	US 41 NB
Weaving Segment Location	SWEF
Analysis Year	2017

Project Description Weaving at SWEF

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	3	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2400
Freeway free-flow speed, FFS	72 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	2742	1.00	1	0	1.5	1.2	0.995	1.00	2756
V_{RF}	114	1.00	100	0	1.5	1.2	0.667	1.00	171
V_{FR}	156	1.00	1	0	1.5	1.2	0.995	1.00	157
V_{RR}	6	1.00	100	0	1.5	1.2	0.667	1.00	9
V_{NW}	2765							V =	3078
V_W	328								
VR	0.106								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	328 lc/h
Interchange density, ID	0.7 int/mi	Weaving lane changes, LC_W	549 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	1076 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	1625 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	387

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	3078 veh/h	Weaving intensity factor, W	0.192
Weaving segment capacity, c_w	6800 veh/h	Weaving segment speed, S	64.5 mph
Weaving segment v/c ratio	0.453	Average weaving speed, S_W	62.8 mph
Weaving segment density, D	16.0 pc/mi/ln	Average non-weaving speed, S_{NW}	64.7 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	3598 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

FREEWAY WEAVING WORKSHEET

General Information

Analyst	BMR
Agency/Company	BTO
Date Performed	7/30/2014
Analysis Time Period	Design Hour

Site Information

Freeway/Dir of Travel	US 41 NB
Weaving Segment Location	SWEF
Analysis Year	2037

Project Description Weaving at SWEF

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	3	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2400
Freeway free-flow speed, FFS	72 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3518	1.00	2	0	1.5	1.2	0.990	1.00	3553
V_{RF}	114	1.00	100	0	1.5	1.2	0.667	1.00	171
V_{FR}	186	1.00	2	0	1.5	1.2	0.990	1.00	188
V_{RR}	6	1.00	100	0	1.5	1.2	0.667	1.00	9
V_{NW}	3562							V =	3883
V_W	359								
VR	0.092								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	359 lc/h
Interchange density, ID	0.7 int/mi	Weaving lane changes, LC_W	580 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	1240 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	1820 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	499

Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	3883 veh/h	Weaving intensity factor, W	0.210
Weaving segment capacity, c_w	6796 veh/h	Weaving segment speed, S	63.0 mph
Weaving segment v/c ratio	0.571	Average weaving speed, S_W	62.1 mph
Weaving segment density, D	20.7 pc/mi/ln	Average non-weaving speed, S_{NW}	63.1 mph
Level of Service, LOS	C	Maximum weaving length, L_{MAX}	3458 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

FREEWAY WEAVING WORKSHEET

General Information

Analyst	BMR
Agency/Company	BTO
Date Performed	7/30/2014
Analysis Time Period	Design Hour

Site Information

Freeway/Dir of Travel	US 41 NB
Weaving Segment Location	SWEF
Analysis Year	2037

Project Description Weaving at SWEF

Inputs

Weaving configuration	One-Sided	Segment type	Freeway
Weaving number of lanes, N	4	Freeway minimum speed, S_{MIN}	15
Weaving segment length, L_S	2000ft	Freeway maximum capacity, C_{IFL}	2400
Freeway free-flow speed, FFS	72 mph	Terrain type	Level

Conversions to pc/h Under Base Conditions

	V (veh/h)	PHF	Truck (%)	RV (%)	E_T	E_R	f_{HV}	f_p	v (pc/h)
V_{FF}	3518	1.00	2	0	1.5	1.2	0.990	1.00	3553
V_{RF}	114	1.00	100	0	1.5	1.2	0.667	1.00	171
V_{FR}	186	1.00	2	0	1.5	1.2	0.990	1.00	188
V_{RR}	6	1.00	100	0	1.5	1.2	0.667	1.00	9
V_{NW}	3562							V =	3883
V_W	359								
VR	0.092								

Configuration Characteristics

Minimum maneuver lanes, N_{WL}	2 lc	Minimum weaving lane changes, LC_{MIN}	359 lc/h
Interchange density, ID	0.7 int/mi	Weaving lane changes, LC_W	752 lc/h
Minimum RF lane changes, LC_{RF}	1 lc/pc	Non-weaving lane changes, LC_{NW}	1047 lc/h
Minimum FR lane changes, LC_{FR}	1 lc/pc	Total lane changes, LC_{ALL}	1799 lc/h
Minimum RR lane changes, LC_{RR}	lc/pc	Non-weaving vehicle index, I_{NW}	499

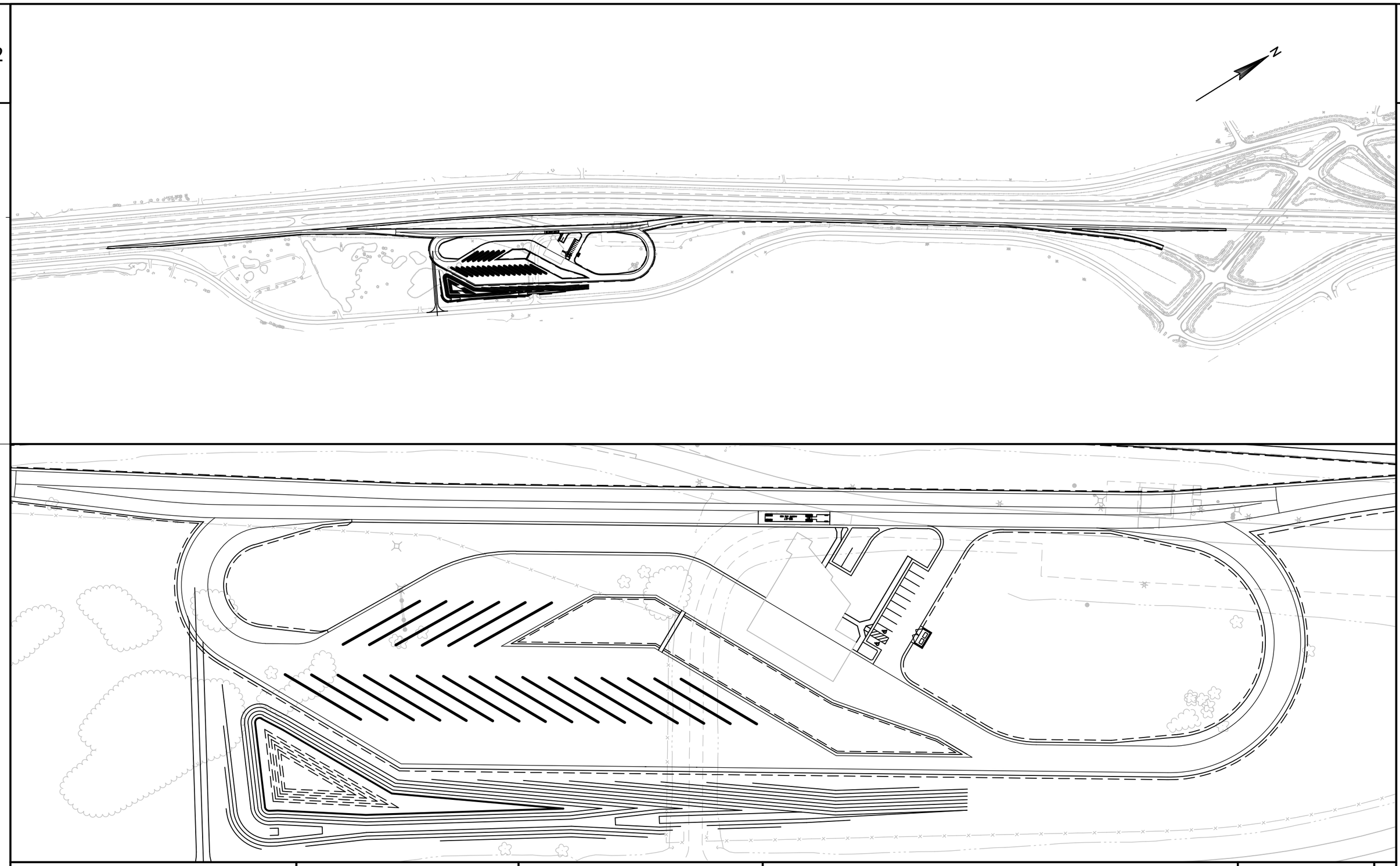
Weaving Segment Speed, Density, Level of Service, and Capacity

Weaving segment flow rate, v	3883 veh/h	Weaving intensity factor, W	0.208
Weaving segment capacity, c_w	9061 veh/h	Weaving segment speed, S	64.5 mph
Weaving segment v/c ratio	0.428	Average weaving speed, S_W	62.2 mph
Weaving segment density, D	15.2 pc/mi/ln	Average non-weaving speed, S_{NW}	64.7 mph
Level of Service, LOS	B	Maximum weaving length, L_{MAX}	3458 ft

Notes

a. Weaving segments longer than the calculated maximum length should be treated as isolated merge and diverge areas using the procedures of Chapter 13, "Freeway Merge and Diverge Segments".
b. For volumes that exceed the weaving segment capacity, the level of service is "F".

APPENDIX D
Proposed Safety Weight Enforcement Facility Alternative



PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PROJECT OVERVIEW	SHEET	E

USH 41 South

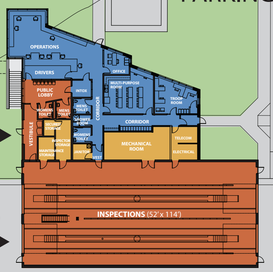
USH 41 North

SCALE

PURSUIT VEHICLE PARKING

EMPLOYEE PARKING

OPERATIONS BUILDING



INSPECTIONS BUILDING

EXIT RAMP

TRUCK PARKING

North

0 20 40 60 120

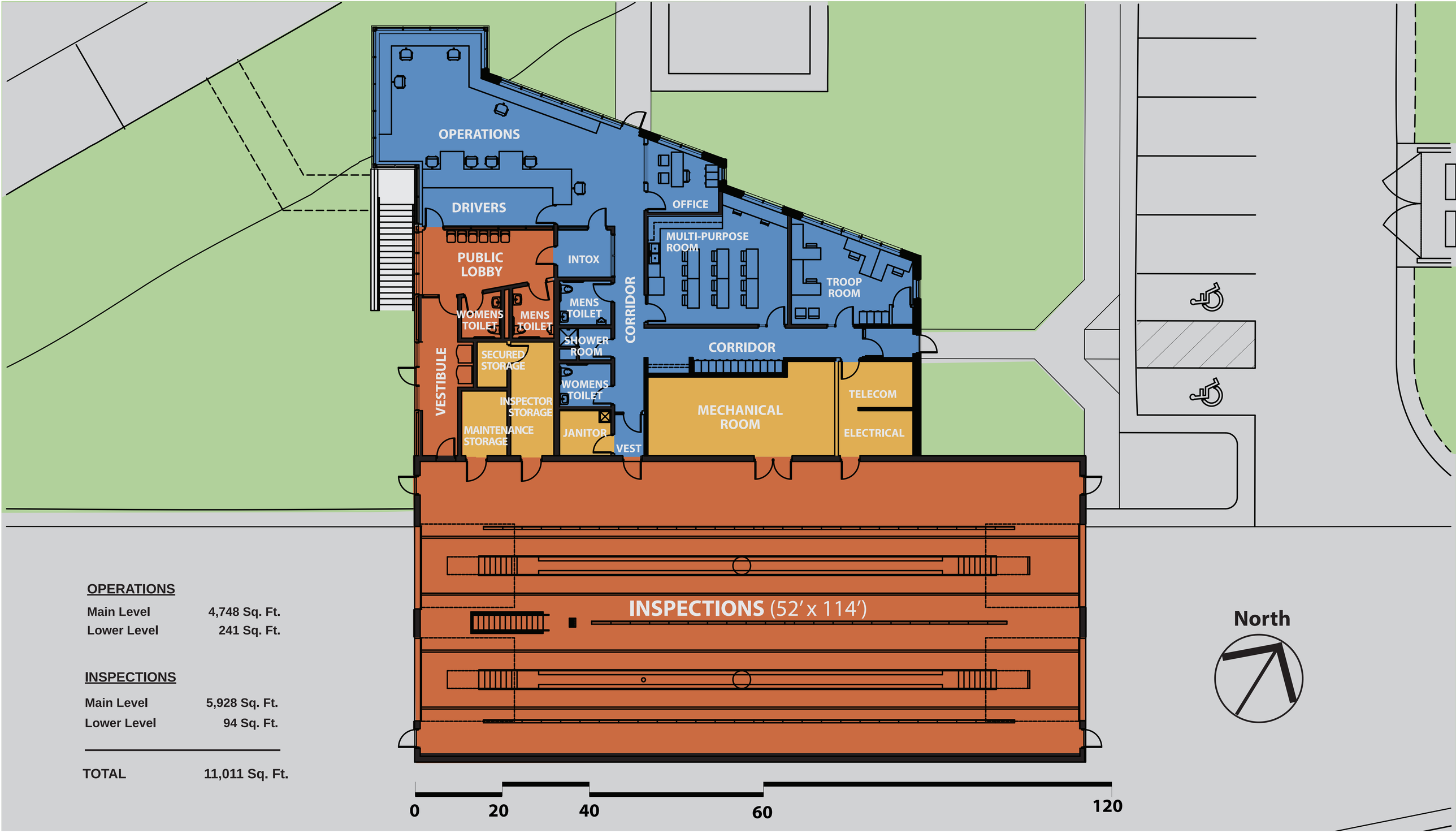
WRIGHTSTOWN SAFETY & WEIGHT ENFORCEMENT FACILITY

US HIGHWAY 41 | OUTAGAMIE COUNTY

STATE PROJECT NO. 1130-44-71 | SWEF NO. 34

WISCONSIN DEPARTMENT OF TRANSPORTATION

VANTAGE ARCHITECTS INC
La Crosse, Wisconsin



OPERATIONS

Main Level	4,748 Sq. Ft.
Lower Level	241 Sq. Ft.

INSPECTIONS

Main Level	5,928 Sq. Ft.
Lower Level	94 Sq. Ft.

TOTAL	11,011 Sq. Ft.

Wrightstown Safety & Weight Enforcement Facility

US Highway 41 | Outagamie County

State Project No. 1130-44-71 | SWEF No. 34

Wisconsin Department of Transportation

VANTAGE ARCHITECTS INC
La Crosse, Wisconsin

APPENDIX E
Environmental Report

ENVIRONMENTAL EVALUATION OF FACILITIES DEVELOPMENT ACTIONS

Wisconsin Department of Transportation

Basic Sheet 1

Project ID 1130-44-00 (71) 1130-44-01 (73)	**Project Terminl** (00)County J-Orange Lane (01)Wrightstown SWEF	**Funding Sources - Check all that apply** ☒ Federal ☒ State ☐ Local
Route Designation (if applicable) US 41 National Highway System (NHS) Route ☒ Yes ☐ No	**Nearest Community** Wrightstown	**Estimated Project Cost** (00) $24,840,000 (01) $5,999,000 Real Estate Acquisition Portion of Estimated Cost (00) $ 0 (01) $ 415,000
Project Name Appleton – Green Bay		
County Outagamie/Brown	**Section-Township-Range** Section 33 T22N-R19E	**Right of Way Acquisition**
Bridge Number(s), if applicable B-5-80 and B-5-53	**Scheduled start date** (Operational Planning Meeting (OPM), or specify other) OPM 2/22/12	

	Acres
Fee	4.79
TLE	
PLE	

Functional Classification of Existing Route	Urban	Rural
Freeway/Expressway	☐	☒
Principal Arterial	☐	☐
Minor Arterial	☐	☐
Major Collector		☐
Minor Collector		☐
Collector	☐	
Local	☐	☐
No Functional Class	☐	☐

WisDOT Project Classification	
Resurfacing	☒
Pavement Replacement	☐
Reconditioning	☐
Expansion	☐
Bridge Rehabilitation	☐
Bridge Replacement	☐
A "Majors" Project	☐
SHRM	☐
Preventive Maintenance	☐
Safety	☐
Other, Describe	☐

☐ **FHWA Categorical Exclusion, Type 2c**

☐ **FHWA Environmental Assessment. No significant Impacts Indicated by Initial Assessment.**

(Signature) (Company/Org.) 9/25/14 (Date) PROJECT MANAGER (Title)

(Signature) (Company/Org.) 9/26/14 (Date) Project Engineer (Title)

(Signature) 9-29-14 (Date) P&D MANAGER (Title)

(☒ Region ☐ Aeronautics ☐ Rails & Harbors)

(Signature) (Date) (Title)
(Director, Bureau of Equity & Environmental Services)

(Signature) (Date) (Title)

(☐ FHWA ☐ FAA ☐ FTA ☐ FRA)

PETER M GARCIA

Digitally signed by PETER M GARCIA
DN: c=US, o=U.S. Government, ou=DOT FHWAMadisonWI, ou=FHWA FHWAMadisonWI, cn=PETER M GARCIA
Date: 2014.09.29 10:30:33 -05'00'

After reviewing public comments and coordinating with other agencies, it is determined that this action:

A) Will not significantly affect the quality of the human environment. This document is a:

☐ Finding of No Significant Impact (FONSI)

B Has potential to significantly affect the quality of the human environment:

☐ Environmental Impact Statement (EIS) Required

(Signature) (Company/Org.) (Date) (Title)

(Signature) (Company/Org.) (Date) (Title)

(Signature) (Date) (Title)

(☐ Region ☐ Aeronautics ☐ Rails & Harbors)

(Signature) (Date) (Title)
(Director, Bureau of Equity & Environmental Services)

(Signature) (Date) (Title)

(☐ FHWA ☐ FAA ☐ FTA ☐ FRA)

Basic Sheet 2

1. Purpose and need of proposed action:

1130-44-00

The purpose of this project is to update the existing facility to current Interstate design standards, extend the life of the pavement, extend the life of the Apple Creek bridges and address the limited capacity of a Park and Ride lot.

US 41 is proposed to be designated as an Interstate Highway between Milwaukee and Green Bay. The portions of US 41 adjacent to this project already meet Interstate design standards. There are sub-standard shoulder widths and median slopes on US 41 inside the project limits. There is an increased risk of injury or fatality during a crash due to these sub-standard geometrics.

The existing Portland Cement Concrete (PCC) has transverse joint/crack distress and the existing Hot Mix Asphalt (HMA) pavement has non-structural cracking and is aging.

The existing typical section of US 41 from County J to Orange Lane is composed of two 12-foot lanes, a 6-foot inside shoulder (3-foot paved), and a 10-foot outside shoulder (8-foot paved) with side-slopes varying from 3:1 to 4:1 in both the northbound and southbound directions. Current In-place Interstate design standards require a typical section with 12-foot lanes, a 6-foot inside shoulder (4-foot paved), and an 11-foot outside shoulder (10-foot paved) with shoulder slopes of 4:1 on the outside and 6:1 in the median in both the northbound and southbound directions.

This portion of US 41 consists of individual sections that were originally constructed with Portland Cement Concrete (PCC) pavement at different points in time, some of which have been resurfaced with Hot Mix Asphalt (HMA) pavement. US 41 has a posted speed limit of 65 mph within the project limits.

The northbound US 41 structure over Apple Creek (B-5-53) was constructed in 1964, the deck was repaired in1992, and has received bituminous overlays in both 1997 and 2003. The southbound US 41 structure over Apple Creek (B-5-80) was constructed in 1987 and received a bituminous overlay in 2003.

The existing park and ride lot at the CTH S interchange is undersized. Currently the lot is not large enough to accommodate the demand from drivers.

See project location map, Attachment A.

1130-44-01

The purpose of this project is to upgrade the existing safety and weight enforcement facility 34 (SWEF 34) to meet current design standards for the roadway ramps and for the building components. The existing SWEF 34 was constructed in 1966, with building upgrades constructed in 1978. The facility has outdated technology, sub-standard exit ramp length and has reached the end of its expected service life.

The facility currently has a small operations building, a single deck static scale and a parking lot. There is no building for conducting indoor commercial vehicle safety inspections. There is a shared restroom in the operations building, but no other amenities for truck drivers. There is limited storage and meeting space for staff. The facility is not able to implement Weigh-In-Motion (WIM) technology due to insufficient exit ramp length.

2. Summary of alternatives considered and if they are not proposed for adoption, why not:

1130-44-00

Alt 1: No Build Alternative: The No Build alternative does not address the deteriorating pavement conditions within the project limits, the substandard shoulders and median slopes along the existing facility, or the safety concerns along the project. The no build alternative also fails to address capacity problems at the County Trunk S Park and Ride. This is not the preferred alternative. However, it serves as a baseline for comparison.

Alt 2: Resurface US 41 between County J and Orange Lane Alternative (No Widening): This alternative addresses the deteriorating pavement conditions; however, it does not address the substandard shoulders and median, safety concerns or existing capacity issues of the Park and Ride. This is not the preferred alternative.

Alt 3: Resurface US 41 between County J and Orange Lane Alternative (Widening) (Preferred Alt): This alternative addresses the deteriorating pavement conditions and substandard shoulders and medians by resurfacing the roadway, widening the paved shoulders and re-grading the median. Safety concerns will be addressed by adding median cable guard. Existing Park and Ride capacity issues will be addressed by doubling the size of the existing facility. This alternative has a design year LOS of E, which is worse than the acceptable LOS of C. In order to obtain an acceptable design year LOS, it will be necessary to reconstruct USH

41 into a six-lane facility. There are long-range plans (20 to 30 year time frame) to do this work under a Majors Expansion Project and this alternative will allow the roadway to accommodate traffic until this expansion is necessary. This is the preferred alternative.

1130-44-01

Alt A: No Build Alternative: With this alternative the existing ramp and building would remain as-is. Without Weigh-in-Motion (WIM), wait times are longer and fewer trucks can be monitored each day. WIM technology would allow inspectors to weigh trucks at highway speeds and screen traffic to find overweight vehicles. The lack of modern amenities at the facility limits the usefulness of the building. The No Build alternative does not address the lack of (WIM) technology or the sub-standard building. This alternative has been eliminated from further consideration and is not the preferred alternative.

Alt B: Relocate weigh station to another location along US 41: Siting a new weigh station will require a section of undeveloped land that covers at least 2,500 ft in length to allow room for exit and entrance ramps and the weigh station facility. The corridor from Oshkosh to Green Bay was reviewed to identify undeveloped lands that met this minimum length. The only section that might meet this criterion is in a rural section in Brown County, north of Wrightstown. The Brown County segment still would require removal of at least one active farm operation to configure a parcel large enough to meet the 2,500 foot minimum length. This is not the preferred alternative.

Alt C: Rebuild the weigh station at the existing site (Preferred Alt): Rebuilding the existing site consists of upgrading the facility to meet current design standards for the roadway ramps and for the building components. This alternative is the most cost effective solution and minimizes impacts for the alternatives considered that require construction of a new building. This is the preferred alternative.

3. Description of Proposed Action (attach project location map and other appropriate graphics):

1130-44-00

The proposed action would resurface US 41 from County J to Orange Lane, widen the existing shoulders to meet interstate standards, and re-grade the median to meet standards for cable guard installation along the length of the project. Outside foreslopes will be re-graded to meet current standards, drainage structures will be adjusted for the re-graded median and shoulders, and some existing culvert pipes will be replaced or lined. This project will also replace the deck on the northbound US 41 bridge over Apple Creek (Structure B-5-53) and overlay the deck on the southbound US 41 bridge over Apple Creek (Structure B-5-80). The existing Park and Ride at County S will be resurfaced and an expansion to south for additional capacity will be constructed.

1130-44-01

Construction Project ID 1130-44-73 will raze the existing safety and weight enforcement facility known as SWEF 34 which is located .68 miles south of County U and on the right side of northbound US 41. The project will construct a new redesigned SWEF including a new scale and building with driver contact area, truck inspection bays, classroom area, trooper offices, as well as additional truck parking. It will be built in approximately the same location. It will include a new exit and entry to and from the facility. An acceleration lane for merging trucks leaving the SWEF will be added between the entry lane and the County U exit ramp. See Attachment B.

The project also includes the installation of weigh-in-motion devices (WIM's). This will include an advance northbound WIM approximately 1 mile south of the SWEF on US 41, a southbound WIM on US 41 in the area across from the SWEF. It will also include a WIM on County S between McCabe Road and County U and one on Wisconsin State Trunk Highway 96 between County JJ and County U for northbound trucks attempting to bypass the scale. See Attachment C.

The proposed site will include an administrative building with a static scale, a truck inspection building that allows all weather inspections and weigh in motion technology to prescreen trucks entering the site.

Ramps that enter and exit the site will also be upgraded to reflect current design standards for high speed interstate ramps, allowing trucks to exit off the mainline lanes before beginning to decelerate. Trucks reentering US 41 will have an auxiliary lane that will allow them to reach operating speeds of 55-60 mph before reentering the mainline highway.

The footprint of the site for the weigh station will be expanded to allow room for the entrance and exit ramps, the administrative building, the inspection building and room for parking semis that have been taken out of service due to faulty equipment. See Attachment B. This alternative is the most cost effective solution and minimizes impacts for the alternatives considered that require construction of a new building.

4. In general terms, briefly discuss the construction and operational energy requirements and conservation potential of the various alternatives under consideration. Indicate whether the savings in operational energy are greater than the energy required to construct the facility:

Construction energy requirements for the proposed project will consist primarily of fuel consumption by construction equipment and energy expended in producing materials needed to construct the new facility. Operational energy requirements are measured by the efficiency of vehicle operation in the corridor. While the amount of construction energy expended would be least for the No Build Alternative, the projected construction energy requirements for Build Alternatives 2 and 3 would be relatively similar.

Immediate energy requirements for construction of the Build Alternatives would be greater than the No-Build Alternative. However, the No-Build Alternative would perpetuate the use of an inefficient transportation system and deteriorated pavement structure. Unimproved geometrics and clearances would potentially increase crash and safety problems as well. Over the design life of the facility, savings in operational energy would likely be greater than the energy required to construct the facility and, in the long-term, would result in net savings in energy usage.

5. Describe existing land use (attach land use maps, if available):

a. Land use of properties that adjoin the project:The land use adjacent to US 41 is predominately agricultural. There is also a mix of residential, industrial and commercial properties located along the length of the project. See Attachment D.

b. Land use surrounding project area:
The land use surrounding US 41 is similar to that within the immediate project area. It is composed of a mix between commercial, residential, industrial and agricultural. See Attachment D.

6. Briefly identify adopted local or regional plans for the project area and zoning regulations. Discuss whether the proposed action is compatible with the plan or zoning:
There are no known local or regional plans along this project.

7. Describe how the project development process complied with Executive Order 12898 on Environmental Justice. If populations of any group covered by EO 12898 are present in the project area, complete Factor Sheet B-4, Environmental Justice (Form DT2093):
This document is in compliance with US, DOT, and FHWA policies to determine whether a proposed project will have induced socioeconomic impacts or any adverse impacts on minority or low income populations, and it meets the requirements of Executive Order on Environmental Justice 12898 – "Federal Actions to Address Environmental Justice in Minority and Low-Income Populations." Neither minority nor low-income populations would receive disproportionately high or adverse impacts as a result of the preferred alternative.

How was information obtained about the presence of populations covered by EO 12898?	
x Windshield Survey	☐ Official Plan
x US Census Data	☐ Survey Questionnaire
☐ Real Estate Company	☐ WisDOT Real Estate
_ Public Information Meeting	☐ Local Government
☐ Human Resources Agency Identify agency Identify plan, approval authority and date of approval	
☐ Other (Identify)	

a. x No - Populations covered by EO 12898 are not present in project area.
b. _ Yes - Populations covered by EO 12898 are present. Factor Sheet B-4 must be completed.

8. Indicate whether individuals covered by Title VI of the 1964 Civil Rights Act, the Americans with Disabilities Act or the Age Discrimination Act were identified: *Title VI prohibits discrimination on the basis of race, color, or country of origin.*

a. x No - Individuals covered by the above laws were not identified.

_ Yes - Individuals covered by the above laws were identified.

☐ Civil Rights issues were not identified.

☐ Civil Rights issues were identified. Explain:

9. Briefly summarize public involvement methods:

a. Meetings.

Date	Meeting Sponsor (WisDOT, RPC, MPO, etc.)	Type of Meeting (PIM, Public Hearings, etc.)	Location	Approx. # Attendees
06/10/14	WisDOT	PIM	Town of Lawrence	6

b. Other methods, describe:

Phone Calls, Letters, and Emails

c. Identify groups that participated in the public involvement process. Include any organizations and special interest groups:

Property owners and businesses that may be affected along the project were invited to the PIM, but no specific organizations or special interest groups have participated.

d. Indicate plans for additional public involvement, if applicable:

No additional public involvement meetings are planned.

10. Briefly summarize the results of public involvement:a. Describe the issues, if any, identified by individuals or groups during the public involvement process: No issues were identified.

b. Briefly describe how the issues identified above were addressed:

Not necessary

11. Local/regional government coordination:

a. Identify units of government contacted and provide the date coordination was initiated:

Unit of Government	Coordination	Coordination Initiation Date	Coordination Completion Date	Comments
MPO, RPC, City, County, Village, Town, etc.	Correspondence Attached Y/N			
Brown County	Y	2/27/2014	3/14/2014	No issues
Outagamie County	Y	2/27/2014	3/14/2014	No issues
City of De Pere	Y	2/27/2014	3/14/2014	No issues
Town of Kaukauna	Y	2/27/2014	3/14/2014	No issues
Town of Wrightstown	Y	2/27/2014	3/14/2014	No issues
Town of Lawrence	Y	2/27/2014	3/14/2014	No issues

b. Describe the issues, if any, identified by units of government during the public involvement process:

No issues were identified

c. Briefly describe how the issues identified above were addressed:

Not necessary

d. Indicate any unresolved issues or ongoing discussion: N/A

Basic Sheet 3

Coordination

INTERNAL WisDOT	**Coordination Required?**	**Correspondence Attached? Y = Yes N = No**	**Comments** Explain or give results. If no correspondence is attached to this document, indicate when coordination with the agency was initiated and, if available, when coordination was completed. If coordination is not required, state why.
Bureau of Aeronautics	**X** No	N	Coordination is not required. Project is not located within 2 miles (3.22 km) of a public or military use airport nor would the project change the horizontal or vertical alignment of a transportation facility located within 5 miles (8.05 km) of a public use or military airport.
	☐ Yes		Coordination has been completed and project effects have been addressed. Explain:
Bureau of Rails & Harbors	**X** No	N	Coordination is not required because no railways or harbors are in or planned in the project area.
	☐ Yes		Coordination has been completed and project effects have been addressed. Explain:
Regional Real Estate Section	**X** No	N	Coordination is not required because no inhabited houses or active businesses will be acquired.
	☐ Yes		Coordination has been completed. Project effects and relocation assistance have been addressed. Conceptual Stage Relocation Plan attached as Exhibit _____
STATE AGENCY	**Coordination Required? Y = Yes N = No**	**Correspondence Attached? Y = Yes N = No**	
Agriculture (DATCP)	Y	Y	Farmland is affected by this project. The impacts total less than 5 acres. DATCP has been notified and it was determined and AIS was not warranted. See Attachment E.
Natural Resources (WDNR)	Y	Y	An initial notification letter was sent on 5/25/12. Preliminary Comments have been received 7/6/2012. See Attachment F. Ongoing coordination will continue throughout construction.
State Historic Preservation Office (SHPO)	Y	Y	The project is on the screening list for history. An archaeological survey was completed on 7/3/2013 and found no potential sites within the project limit. The section 106 review was completed and signed on 12/6/13. See Attachment G.
Others:	N/A		
FEDERAL AGENCY	**Coordination Required? Y = Yes N = No**	**Correspondence Attached? Y = Yes N = No**	
Advisory Council on Hist.Pres. (ACHP)	N	N	No coordination is required because no historic properties are affected by the proposed project.
Corps of Engineers (COE)	Y	Y	An initial notification letter was sent on 5/25/12. Preliminary Comments have been received 6/21/2012. See Attachment H. Ongoing coordination may be required.
Environmental Protection Agency (EPA)	N	N	No coordination is required for this project.
National Park Service (NPS)	N	N	No coordination is required is because no 6f properties are within the proposed project limits.

Nat. Resource Cons. Service (NRCS)	Y	Y	Farmland is affected by this project. Less than 60 points was scored on form NRCS-CPA-106. The form is on file. See Attachment I.
US Coast Guard (USCG)	N	N	No commercial navigable waterways are within the project limits.
Fish & Wildlife Serv. (FWS	Y	Y	An initial notification letter was sent on 5/25/12. No response has been received to date. An online section 7 review was conducted. None of the species listed are expected to be impacted by the project. See Attachment J.
Other(Identify)	N		
AMERICAN INDIAN TRIBES	Y	Y	An initial notification letter was sent on 5/25/12. One tribal office responded on 6/1/12 with no concerns. A second tribal office responded on 6/7/12. The Forest County Potawatomi Tribe requested the results of the arch/history reports. Further coordination with this tribe is being handled through WisDOT central office. See Attachment K.

Basic Sheet 4
Environmental Factors Matrix

FACTORS	EFFECTS				
	Adverse	Benefit	None Identified	Factor Sheet Attached	Note: Comments should be of a summary nature and should not extensively duplicate information contained in an attached factor sheet. If an "adverse" effect is permanent, a factor sheet must be attached. If an "adverse" effect is temporary, it must be explained on this sheet under "comments". If "None Identified" is indicated, explain why. **Comments**
A. ECONOMIC FACTORS					
A-1 General Economics	☐	☐	☒	☒	This project will not have a significant impact on the general economics of the project area.
A-2 Business	☒	☐	☐	☐	Construction activities will result in some short term inconvenience for traffic within the project limits, but the project should not harm business activities. All frontage roads will remain open to the businesses along the project.
A-3 Agriculture	☒	☐	☐	☒	There will be 3.27 acres of cropland and 1.52 acres of other use land acquired for the reconstruction of the Wrightstown SWEF.
B. SOCIAL/CULTURAL FACTORS					
B-1 Community or Residential	☐	☐	☒	☐	Residents and commuters who travel through the area will endure minor construction inconveniences during the project, but will be provided with a safer and better quality roadway once construction is completed.
B-2 Indirect Effects	☐	☐	☒	☐	No effects foreseen.
B-3 Cumulative Effects	☐	☐	☒	☐	No effects foreseen.
B-4 Environmental Justice	☐	☐	☒	☐	Minority and low income populations will not be disproportionately affected by the proposed project.
B-5 Historic Resources	☐	☐	☒	☐	None Identified at this time.
B-6 Archaeological Sites	☐	☐	☒	☐	None Identified at this time.
B-7 Tribal Issues	☐	☐	☒	☐	None Identified at this time.
B-8 Section 4(f) and 6(f) or Other Unique Areas	☐	☐	☒	☐	There are no 4(f) or 6(f) properties within the project area that will be affected.
B-9 Aesthetics	☐	☐	☒	☐	This project will not substantially change the existing aesthetic character.
C. NATURAL SYSTEM FACTORS					
C-1 Wetlands	☒	☐	☐	☒	Wetlands will be filled as part of the project.
C-2 Rivers, Streams and Floodplains	☐	☐	☒	☐	No impacts anticipated.
C-3 Lakes or Other Open Water	☐	☐	☒	☐	The project will not affect lakes or other open water.
C-4 Groundwater, Wells, and Springs	☐	☐	☒	☐	The project will not affect groundwater, wells, or springs.
C-5 Upland Wildlife and	☐	☐	☒	☐	No affects to upland wildlife or habitat are foreseen.

Habitat					
C-6 Coastal Zones	☐	☐	☒	☐	There are no coastal zones in the project area.
C-7Threatened and Endangered Species	☐	☐	☒	☐	None Identified at this time.
D. PHYSICAL FACTORS					
D-1 Air Quality	☐	☐	☒	☐	This project is exempt from permit requirements formerly contained under Wisconsin Administration Code – Chapter NR 411. No substantial impacts to air quality are expected.
D-2 Construction Stage Sound Quality	☐	☐	☒	☐	Project Special Provisions and WisDOT Standard Specifications 107.8(6) and 108.7.1 will apply.
D-3 Traffic Noise	☐	☐	☒	☐	A noise analysis was not required. No impacts are anticipated.
D-4 Hazardous Substances or Contamination	☐	☐	☒	☐	A Phase 1 Hazardous materials assessment was completed and showed no documented properties within the project limits.
D-5 Stormwater	☐	☐	☒	☒	Proper erosion control measures will need to be taken to prevent sediment from disrupting existing drainage structures. A detention pond will also be added at the SWEF.
D-6 Erosion Control	☐	☐	☒	☐	Standard WisDOT erosion control methods will be used on this project to minimize adverse impacts from erosion.
E. OTHER FACTORS					
E-1	☐	☐	☐		
E-2	☐	☐	☐		

Basic Sheet 5
Alternatives Comparison Matrix

(All estimates, including costs, are based on conditions described in this document at the time of preparation. Additional agency or public involvement may change these estimates in the future.)

ENVIRONMENTAL ISSUE	UNIT MEASURE	ALTERNATIVES/SECTIONS					
		1130-44-00			1130-44-01		
		No Action Alt 1	Resurface Alt 2	Resurface Alt 3 (Preferred)	No Action Alt A	Relocate SWEF Alt B	Rebuild SWEF Alt C (Preferred)
Project Length	Miles	0	12.44	12.44	0	0.70	0.70
Preliminary Cost Estimate							
Construction	Million $	0	12.25 M	24.84 M	0	5.99 M	5.99 M
Real Estate	Million $	0	0	0	0	0.42 M	0.12 M
Total	Million $	0	12.25 M	24.84 M	0	6.41 M	6.11 M
Land Conversions							
Wetland Area Converted to ROW	Acres	0	0	0	0	0	2.33
Upland Habitat Area Converted to ROW	Acres	0	0	0	0	0	0
Other Area Converted to ROW	Acres	0	0	0	0	16.80	2.46
Total Area Converted to ROW	Acres	0	0	0	0	16.80	4.79
Real Estate							
Number of Farms Affected	Number	0	0	0	0	1	1
Total Area Required From Farm Operations	Acres	0	0	0	0	7.08	3.27 of cropland and 1.52 of other use
AIS Required	Yes/No	No	No	No	No	No	No
Farmland Rating	Score	0	0	0	0	49	49
Total Buildings Required	Number	0	0	0	0	0	0
Housing Units Required	Number	0	0	0	0	0	0
Commercial Units Required	Number	0	0	0	0	0	0
Other Buildings or Structures Required	Number (Type)	0	0	0	0	0	0
Environmental Issues							
Indirect Effects	Yes/No	No	No	No	No	No	No
Cumulative Effects	Yes/No	No	No	No	No	No	No
Environmental Justice Populations	Yes/No	No	No	No	No	No	No
Historic Properties	Number	0	0	0	0	0	0
Archeological Sites	Number	0	0	0	0	0	0
106 MOA Required	Yes/No	No	No	No	No	No	No
4(f) Evaluation Required	Yes/No	No	No	No	No	No	No
Flood Plain	Yes/No	No	No	No	No	No	No
Total Wetlands Filled	Acres	0	0	1.39	0	0	3.12
Stream Crossings	Number	0	5	5	0	0	0
Endangered Species	Yes/No	No	No	No	No	No	No
Air Quality Permit Required	Yes/No	No	No	No	No	No	No
Design Year Noise Sensitive Receptors		N/A	N/A	N/A	N/A	N/A	N/A
No Impact	Number						
Impacted	Number						
Contaminated Sites	Number	0	0	0	0	0	0

Basic Sheet 6
Traffic Summary Matrix

	ALTERNATIVES/SECTIONS					
	1130-44-00			1130-44-01		
	No Action Alt 1	Resurface Alt 2	Resurface Alt 3 (Preferred)	No Action Alt A	Relocate Alt B	Rebuild Alt C (Preferred)
TRAFFIC VOLUMES						
Existing ADT Yr. 2009	52500	52500	52500	N/A	N/A	N/A
Const. Yr. ADT Yr. 2017	57200	57200	57200	N/A	N/A	N/A
Const. Plus 10 Yr. ADT Yr. 2027	63100	63100	63100	N/A	N/A	N/A
Design Yr. ADT Yr. 2037	69000	69000	69000	N/A	N/A	N/A
DHV Yr. 2037	6969	6969	6969	N/A	N/A	N/A
TRAFFIC FACTORS						
K30 $[_{30/100/200}]$ (%)	10.1	10.1	10.1	N/A	N/A	N/A
D (%)	60/40	60/40	60/40	N/A	N/A	N/A
Design Year T (% of ADT)	9.4	9.4	9.4	N/A	N/A	N/A
T (% of DHV)	5.2	5.2	5.2	N/A	N/A	N/A
Level of Service 2037	E	E	E	N/A	N/A	N/A
SPEEDS						
Existing Posted	65 MPH	65 MPH	65 MPH	N/A	N/A	N/A
Future Posted	65 MPH	65 MPH	65 MPH	N/A	N/A	N/A
Design Year Project Design Speed	70 MPH	70 MPH	70 MPH	N/A	N/A	N/A
OTHER (Specify)						
P (% of ADT)						
K (% OF ADT)						

ADT = Average Daily Traffic DHV = Design Hourly Volume

K [$_{30/100/200}$] : K_{30} = Interstate, K_{100} = Rural, K_{200} = Urban, % = ADT in DHV D = % DHV in predominate direction of travel

T = Trucks P = % ADT in peak hour

K_8 = % ADT occurring in the average of the 8 highest consecutive hours of traffic on an average day. (Only required when a carbon monoxide analysis must be performed per Wisconsin Administrative Code - Chapter NR 411.)

Basic Sheet 7

EIS Significance Criteria

In determining whether a proposed action is a "major action significantly affecting the quality of the human environment", the proposed action must be assessed in light of the following criteria. If it is found that significant impact(s) will result, the preparation of an environmental impact statement (EIS) should commence immediately. Indicate whether the issue listed below is a concern for the proposed action or alternative. If the issue is a concern, explain how it is to be addressed or where it is addressed in this environmental document.

1) Will the proposed action stimulate substantial indirect environmental effects?

☒ No
☐ Yes – Explain or indicate where addressed.

2) Will the proposed action contribute to cumulative effects of repeated actions?

☒ No
☐ Yes – Explain or indicate where addressed.

3) Will the creation of a new environmental effect result from this proposed action?

☒ No
☐ Yes – Explain or indicate where addressed.

4) Will the proposed action impact geographically scarce resources?

☒ No
☐ Yes – Explain or indicate where addressed.

5) Will the proposed action have a precedent-setting nature?

☒ No
☐ Yes – Explain or indicate where addressed.

6) Is the degree of controversy associated with the proposed action high?

☒ No
☐ Yes – Explain or indicate where addressed.

7) Will the proposed action be in conflict with official agency plans or local, state, or national policies, including conflicts resulting from potential effects of transportation on land use and land use on transportation demand?

☒ No
☐ Yes – Explain or indicate where addressed.

Basic Sheet 8
Environmental Commitments

Identify and describe any commitments made to protect the environment. Indicate when the commitment should be implemented and who in WisDOT will have jurisdiction to assure fulfillment for each commitment. Note if the commitment will be recorded in the plans, "special provisions", "notes to construction" or some other written format. Note if the commitment is mandated by law, and therefore legally binding.

Commitments on Basic Sheet 8 supplement environmental commitments incorporated in WisDOT's Standard Specifications for Highway and Bridge Construction.

ATTACH A COPY OF THIS PAGE TO THE DESIGN STUDY REPORT AND THE PS&E SUBMITTAL PACKAGE

Factors	Commitments
A-1 General Economics	No commitments made.
A-2 Business	No commitments made.
A-3 Agriculture	No commitments made.
B-1 Community or Residential	No commitments made.
B-2 Indirect Effects	No commitments made.
B-3 Cumulative Effects	No commitments made.
B-4 Environmental Justice	No commitments made.
B-5 Historic Resources	No commitments made.
B-6 Archaeological Sites	No commitments made.
B-7 Tribal Issues	No commitments made.
B-8 Section 4(f) and 6(f) or Other Unique Areas	No commitments made.
B-9 Aesthetics	No commitments made.
C-1 Wetlands	No commitments made.
C-2 Rivers, Streams & Floodplains	No work to take place in Apple Creek
C-3 Lakes or other Open Water	No commitments made
C-4 Groundwater, Wells and springs	No commitments made.
C-5 Upland Wildlife and Habitat	No commitments made.
C-6 Coastal Zones	No commitments made.
C-7 Threatened and Endangered Species	No commitments made.
D-1 Air Quality	No commitments made.
D-2 Construction Stage Sound Quality	Check all that apply: X (box) WisDOT Standard Specification 107.8(6) and 108.7.1 and Special Provisions will apply. _ (box) Special construction stage noise abatement measures will be required. Describe: .
D-3 Traffic Noise	No Commitments made.
D-4 Hazardous Substances or Contamination	No Commitments made.

D-5 Stormwater	The SWEF storm water runoff rates will be limited to pre-existing rates for the 2, 10 and 100 yr storm events. Sediments will be trapped in the wet basin to achieve over 80% TSS removal. Oil and grease will be removed through the use of gravel filters at the edge of parking lots. Grassed swales serving the north 1/4 of the SWEF site will be used to reduce TSS and oil and grease contamination.
D-6 Erosion Control	An erosion control implementation plan (ECIP) for the project must be developed by the contractor, and submitted to the DNR office 14 days prior to the preconstruction meeting.
E Other	

GENERAL ECONOMICS EVALUATION

Wisconsin Department of Transportation

Factor Sheet A-1

Alternative 3 – Resurface with shoulder widening	Total Length of Center Line of Existing Roadway 12.44 miles Length of This Alternative 12.44 miles
Preferred ☒ Yes ☐ No ☐ None Identified	

1. Briefly describe the existing economic characteristics of the area around the project:

Economic Activity	Description
a. Agriculture	Row Crops, Beef, Dairy, and Horse Farms
b. Retail business	Farm Equipment Dealer, Fencing Dealer, Window and Door Dealer, Cleaning Service, Heavy Duty Truck Dealers, Construction Equipment Dealers, Golf Car Dealer, Manufactured Home Dealer, Motorcycle Dealer, Equipment Rental Shop
c. Wholesale business	Auto Auction Service, Steel Dealer, Paint Distributor
d. Heavy industry	None in immediate area
e. Light industry	Hydraulic Line Manufacturer, Custom Home Builder, Data Cabling Service, Industrial Automation Company, Welding Shop, Various Technological Service Companies, Food Service, General Contractor, Diesel Mechanics Shop
f. Tourism	None in the immediate area
g. Recreation	Supper Club, Golf Courses, Banquet Hall
h. Forestry	None in the immediate area
i.	

2. Discuss the economic advantages and disadvantages of the proposed action and whether advantages would outweigh disadvantages. Indicate how the project would affect the characteristics described in item 1 above:
Advantages of the proposed project include an improved condition of roadway which results in a safer roadway adjacent to the frontage roads which service the businesses. It will make travel to the existing and future businesses more inviting and safer. The expansion of the park and ride will allow additional carpooling for the employees and customers of these businesses.

The disadvantage would be the inconvenience of the construction project. Two lanes of directional traffic will be maintained during peak hours during the project, but some traffic congestion is possible.

The advantages of having a roadway with widened shoulders and reconditioned surface outweighs the disadvantage of the short term inconvenience.

3. What effect will the proposed action have on the potential for economic development in the project area?

☒ **The proposed project will have no effect on economic development.**

☐ **The proposed project will have an effect on economic development.**

- ☐ Increase, describe:
- ☐ Decrease, describe: _____

AGRICULTURE EVALUATION

Wisconsin Department of Transportation

Factor Sheet A-3

Alternative 3 - Resurface with shoulder widening	Total Length of Center Line of Existing Roadway 12.44 mi. Length of This Alternative 12.44 mi.
Preferred ☒ Yes ☐ No ☐ None identified	

1. Total acquisition interest, by type of agricultural land use:

Type of Land Acquired From Farm Operations	Type of Acquisition (acres)		Total Area Acquired (acres)
	Fee Simple	Easement	
Crop land and pasture	3.27		3.27
Woodland	0		0
Land of undetermined or other use (e.g., wetlands, yards, roads, etc.)	1.52		1.52
Totals	4.79		4.79

2. Indicate number of farm operations from which land will be acquired:

Acreage to be Acquired	Number of Farm Operations
Less than I acre	0
1 acre to 5 acres	1
More than 5 acres	0

3. Is land to be converted to highway use covered by the Farmland Protection Policy Act?

☒ No
- ☐ The land was purchased prior to August 6, 1984 for the purpose of conversion.
- ☐ The acquisition does not directly or indirectly convert farmland.
- ☐ The land is clearly not farmland
- ☐ The land is already in, or committed to urban use or water storage.

☐ Yes (This determination is made by the Natural Resources Conservation Service (NRCS) via the completion of the Farmland Impact Conversion Rating Form, NRCS Form AD-1006)
- ☐ The land is prime farmland which is not already committed to urban development or water storage.
- ☐ The land is unique farmland.
- ☐ The land is farmland which is of statewide or local importance as determined by the appropriate state or local government agency.

4. Has the Farmland Impact Conversion Rating Form (AD-1006) been submitted to NRCS?

☐ No - Explain. The site assessment criteria score (Part VI of the form AD-1006) is less than 60 points. Therefore, according to the FDM (5-5-5.3.2) the submittal of form AD-1006 to the NRCS is not required. (See Exhibit 14)

(On form AD-1006, the total acres to be converted directly differs from what is listed on Basic Sheet 5. When form AD-1006 was submitted, the acreage was estimated. Since that submittal, more accurate information has been obtained and the acreage areas have been refined. A new form was not resubmitted because the impacts to farmland were much less than originally expected.)

☒ Yes
- ☒ The Site Assessment Criteria Score (Part VI of the form) is less than 60 points for this project alternative.
  Date Form AD-1006 completed. 9/19/13
- ☐ The Site Assessment Criteria Score is 60 points or greater.
  Date Form AD-1006 completed. _____

5. Is an Agricultural Impact Statement (AIS) Required?

☒ No
- ☐ Eminent Domain will not be used for this acquisition
- ☐ The project is a “Town Highway” project
- ☐ The acquisition is less than 1 acre

☒ The acquisition is 1-5 acres and DATCP chooses not to do an AIS.
☐ Other. Describe _____

☐ Yes
- ☐ Eminent Domain may be used for this acquisition.
- ☐ The project is not a "Town Highway" project.
- ☐ The acquisition is 1-5 acres and DATCP chooses to do an AIS.
- ☐ The acquisition is greater than 5 acres.

6. Is an Agricultural Impact Notice (AIN) Required?

☐ No, the project is not a State Trunk Highway Project - AIN not required but complete questions 7-16.
☒ Yes, the project is a State Trunk Highway Project - AIN may be required.
Is the land acquired "non-significant"?
☐ Yes - (All must be checked) An AIN is not required but complete questions 7-16.
- ☐ Less than 1 acre in size
- ☐ Results in no severances
- ☐ Does not significantly alter or restrict access
- ☐ Does not involve moving or demolishing any improvements necessary to the operation of the farm
- ☐ Does not involve a high value crop

☒ No
- ☒ Acquisition 1 to 5 acres - **AIN required**. Complete Pages 1 and 2, Form DT1999, (Pages 1 and 2, Figure 1, Procedure 21-25-30.)
- ☐ Acquisition over 5 acres - **AIN required**. Complete Pages 1, 3 and 4, Form DT1999. (Pages 1, 3 and 4, Figure 1, Procedure 21-25-30)

If an AIN is completed, do not complete the following questions 7-16.

7. Identify and describe effects to farm operations because of land lost due to the project:
☐ Does Not Apply.
☐ Applies – Discuss.

8. Describe changes in access to farm operations caused by the proposed action:
☐ Does Not Apply.
☐ Applies – Discuss.

9. Indicate whether a farm operation will be severed because of the project and describe the severance (include area of original farm and size of any remnant parcels):
☐ Does Not Apply.
☐ Applies – Discuss.

10. Identify and describe effects generated by the acquisition or relocation of farm operation buildings, structures or improvements (e.g., barns, silos, stock watering ponds, irrigation wells, etc.). Address the location, type, condition and importance to the farm operation as appropriate:
☐ Does Not Apply.
☐ Applies – Discuss.

11. Describe effects caused by the elimination or relocation of a cattle/equipment pass or crossing. Attach plans, sketches, or other graphics as needed to clearly illustrate existing and proposed location of any cattle/equipment pass or crossing:
☐ Does Not Apply.
☐ Replacement of an existing cattle/equipment pass or crossing is not planned. Explain.
☐ Cattle/equipment pass or crossing will be replaced.
☐ Replacement will occur at same location.
☐ Cattle/equipment pass or crossing will be relocated. Describe.

12. Describe the effects generated by the obliteration of the old roadway:
☐ Does Not Apply.
☐ Applies – Discuss.

13. Identify and describe any proposed changes in land use or indirect development that will affect farm operations and are related to the development of this project:

☐ Does Not Apply.
☐ Applies – Discuss.

14. Describe any other project-related effects identified by a farm operator or owner that may be adverse, beneficial or controversial:

☐ No effects indicated by farm operator or owner.
☐ Applies – Discuss.

15. Indicate whether minority or low-income population farm owners, operators, or workers will be affected by the proposal: (Include migrant workers, if appropriate.)

☐ No
☐ Applies – Discuss.

16. Describe measures to minimize adverse effects or enhance benefits to agricultural operations:

Factor Sheet C-1

Alternative 3- Resurface with shoulder widening	Total Length of Center Line of Existing Roadway 12.44 mi. Length of This Alternative 12.44 mi.
Preferred ☒ Yes ☐ No ☐ None identified	

1. Describe Wetlands:.

	Wetland 1		Wetland 2		Wetland 3	
Name (If known)						
Location County	Outagamie		Outagamie		Outagamie	
Location (Section-Township-Range)	8 21N 19E and 5 21N 19E		5 21N 19E		5 21N 19E	
Location Map	See Exhibit Wetland 1,2,3		See Exhibit Wetland 2,3		See Exhibit Wetland 2	
Wetland Type(s)[1]	M		SM		M	
Total Wetland Loss ***Temporary impacts are anticipated to revert back to wetlands post-construction.***	Acres Permanent 0.41 Acres Temporary 1.22		Acres Permanent 0.12 Acres Temporary 0.25		Acres Permanent 0.0 Acres Temporary 0.12	
Wetland is: (Check all that apply)[2]	Yes	No	Yes	No	Yes	No
• **Isolated from stream, lake or other surface water body**		No	Yes			No
• **Not contiguous (in contact) with a stream, lake, or other water body, but within 5-year floodplain**		No		No		No
• **Name the stream, lake or water body adjacent or contiguous to the wetland and include the Section-Township-Range location.**	5 21N 19E				5 21N 19E	

[1]Use wetland types as specified in the "WisDOT Wetland Mitigation Banking Technical Guideline, Table 3-C"
[2]If wetland is contiguous to a stream, complete Factor Sheet C-2, Rivers, Streams and Floodplains Impact

2. Are any impacted wetlands considered "wetlands of special status" per WisDOT Wetland Mitigation Banking Technical Guideline, page 10?

☒ No
☐ Yes:
- ☐ Advanced Identification Program (ADID) Wetlands
- ☐ Other – Describe: _____

3. Describe proposed work in the wetland(s), e.g., excavation, fill, marsh disposal, other:
The proposed work in the wetlands is due to the re-grading of the medians to meet the cable guard requirements and the re-grading of the outside foreslopes to meet current standards.

4. List any observed or expected waterfowl and wildlife inhabiting or dependent upon the wetland: (List should include both permanent, migratory and seasonal residents). Heron, duck species, song birds, small mammals, reptiles and amphibians.
.

5. Federal Highway Administration (FHWA) Wetland Policy:

☐ Not Applicable - Explain

☐ Individual Wetland Finding Required - Summarize why there are no practicable alternatives to the use of the wetland.

☒ Statewide Wetland Finding: **NOTE: All three boxes below must be checked for the Statewide Wetland Finding to apply.**

- ☒ Project is either a bridge replacement or other reconstruction within 0.3 mile of the existing location.
- ☒ The project requires the use of 7.4 acres or less of wetlands.
- ☒ The project has been coordinated with the DNR and there have been no significant concerns expressed over the proposed use of the wetlands.

6. Erosion control or storm water management practices which will be used to protect the wetland are indicated on form: (Check all that apply)

☐ Factor Sheet D-6, Erosion Control Impact Evaluation
☒ Factor Sheet D-5, Stormwater Impact Evaluation
☐ Neither Factor Sheet - Briefly describe measures to be used
Standard WisDOT erosion control methods will be used on this project during construction to minimize adverse impacts from erosion.

7. US Army Corps of Engineers (USACE) Jurisdiction - Section 404 Permit (Clean Water Act):

☐ Not Applicable – No fill to be placed in wetlands or wetlands are not under USACE jurisdiction.
☒ Applicable - Fill will be placed in wetlands under the jurisdiction of the USACE

Indicate area of wetlands filled: Acres – 4.58 Permanent and 4.02 Temporary. Temporary areas are anticipated to revert back to wetlands post-construction.

Type of 404 permit anticipated:
☐ Individual Section 404 Permit required.
☒ General Permit (GP) or Letter Of Permission (LOP) required to satisfy Section 404 Compliance.
Indicate which GP or LOP is required:
- ☐ Non-Reporting GP
- ☐ Provisional GP
- ☒ Provisional LOP
- ☐ Programmatic GP

Expiration date of 404 Permit, if known _____

8. Section 10 Waters (Rivers and Harbors Act). For navigable waters of the United States (Section 10) indicate which 404 permit is required:

☒ No Section 10 Waters.

Indicate whether Pre-Construction Notification (PCN) to the U.S. Corps of Engineers(USACE) is:
☒ Not applicable.
☐ Required: Submitted on: (Date)

Status of PCN
USACE has made the following determination on: (Date)

USACE is in the process of review, anticipated date of determination is: (Date)

9. Wetland Avoidance and Impact Minimization: [Note: Required before compensation is acceptable]

A. Wetland Avoidance:
1. Describe methods used to avoid the use of wetlands, such as using a lower level of improvement or placing the roadway on new location, etc.:
Avoiding wetlands was not feasible due to the nature of the project. The wetlands adjacent to the roadway will be minimized by adjusting the outside foreslopes.
2. Indicate the total area of wetlands avoided:
Acres: None

B. Minimize the amount of wetlands affected:

1. Describe methods used to minimize the use of wetlands, such as a increasing of side slopes or use of retaining walls, equalizer pipes, upland disposal of hydric soils, etc.:
   The outside foreslopes were modified from a desirable 6:1 slope to a minimum 4:1 slope.

2. Indicate the total area of wetlands saved through minimization:
   Acres: 2.99

10. Compensation for Unavoidable Wetland Loss:

According to Section 401 (b) (1), of the Clean Water Act, unavoidable wetland losses must be mitigated on-site, if possible. If no on-site opportunities exist, near/off-site wetland compensation sites must be considered. If neither exists, the losses may be debited to an existing wetland mitigation bank site. Compensation ratios are based on WisDOT Wetland Mitigation Banking Technical Guideline.

	Type	Acre(s) Loss	Ratio	Compensation Type and Acreage			
				On-site	Near/off site	Consolidation Site	Bank site
RPF(N)	Riparian wetland (wooded)						
RPF(D)	Degraded riparian wetland (wooded)						
RPE(N)	Riparian wetland (emergent)						
RPE(D)	Degraded riparian wetland (emergent)						
M(N)	Wet and sedge meadows, wet prairie, vernal pools, fens	3.24	1.0				Peshtigo Brook Phase2
M(D)	Degraded meadow						
SM	Shallow marsh	1.34	1.0				Peshtigo Brook Phase 2
DM	Deep marsh						
AB(N)	Aquatic bed						
AB(D)	Degraded aquatic bed						
SS	Shrub Swamp, shrub carr, alder thicket						
WS(N)	Wooded swamp						
WS(D)	Degraded wooded swamp						
Bog	Open and forested bogs						

D = Degraded
N = Non-degraded

11. If on-site compensation is not possible, explain why and describe how a search for an off-site compensation site was conducted:

There was no opportunity for onsite mitigation. Utilization of an existing statewide bank site was selected as appropriate mitigation follow sequencing outlined in the U.S. Army Corps of Engineers (USACE) and U.S. Environmental Protection Agency (EPA) joint rule on Compensatory Mitigation for losses of Aquatic Resources (33 CFR Parts 325 and 332; and 40 CFR Part 230-dated April 10, 2008). Compensatory mitigation will be consistent with amendments to the Cooperative Agreement between WDNR and WisDOT on compensatory mitigation for unavoidable wetland losses (July 2012), and the WisDOT Interagency Coordination Agreement and Wetland Mitigation Banking Technical Guidelines with WDNR, USACE, EPA, USFWS and FHWA (March 2002).

12. Summarize the coordination with other agencies regarding the compensation for unavoidable wetland losses: Attach appropriate correspondence:

Agency responses pending, coordination will continue through the project development and permitting process.

	Wetland 4		Wetland 5		Wetland 6		Wetland 7	
Name								
Location County	Outagamie		Outagamie		Outagamie		Outagamie	
Location (Sec.-Twn.-Rng.)	5 21N 19E		33 22N 19E		33 22N 19E		33 22N 19E	
Location Map	See Exhibit Wetland 3		See Exhibit Wetland 4		See Exhibit Wetland 4		See Exhibit Wetland 5	
Wetland Type	M		M		SM(D)		FW,M	
Total Wetland Loss	Acres Permanent		Acres Permanent		Acres Permanent		Acres Permanent	
	0.07		0.00		0.00		1.50	
	Acres Temporary		Acres Temporary		Acres Temporary		Acres Temporary	
	0.01		0.03		0.02		0.00	
Wetland is:	Yes	No	Yes	No	Yes	No	Yes	No
> Isolated from stream, lake or surface water body		No		No		No	Yes	
> Not contiguous with a stream, lake or other water body, but within 5-year floodplain		No		No		No		No
> If adjacent lake or contiguous, identify stream, lake or other body by Sec.-Twn.-Rng.	5 21N 19E		33 22N 19E		33 22N 19E			

	Wetland 8		Wetland 9		Wetland 10		Wetland 11	
Name								
Location County	Outagamie		Outagamie		Brown		Brown	
Location (Sec.-Twn.-Rng.)	33 22N 19E and 28 22N 19E		28 22N 19E		27 22N 19E		27 22N 19E	
Location Map	See Exhibit Wetland 5		See Exhibit Wetland 6		See Exhibit Wetland 11		See Exhibit Wetland 11	
Wetland Type	SM		M		Artificial		SM	
Total Wetland Loss	Acres Permanent		Acres Permanent		Acres Permanent		Acres Permanent	
	0.62		0.04		0.01		0.05	
	Acres Temporary		Acres Temporary		Acres Temporary		Acres Temporary	
	0.21		0.00		0.03		0.05	
Wetland is:	Yes	No	Yes	No	Yes	No	Yes	No
> Isolated from stream, lake or surface water body		No		No		No		No
> Not contiguous with a stream, lake or other water body, but within 5-year floodplain		No		No		No		No
> If adjacent lake or contiguous, identify stream, lake or other body by Sec.-Twn.-Rng.	33 22N 19E		33 22N 19E		27 22N 19E		27 22N 19E	

	Wetland 12		Wetland 13		Wetland 14		Wetland 15	
Name								
Location County	Brown		Brown		Brown		Brown	
Location (Sec.-Twn.-Rng.)	27 22N 19E		27 22N 19E		27 22N 19E		27 22N 19E	
Location Map	See Exhibit Wetland 12		See Exhibit Wetland 12		See Exhibit Wetland 12		See Exhibit Wetland 12	
Wetland Type	Artificial		Artificial		Artificial		Artificial	
Total Wetland Loss	Acres Permanent		Acres Permanent		Acres Permanent		Acres Permanent	
	0.02		0.00		0.06		0.04	
	Acres Temporary		Acres Temporary		Acres Temporary		Acres Temporary	
	0.02		0.00		0.00		0.01	
Wetland is:	Yes	No	Yes	No	Yes	No	Yes	No

> Isolated from stream, lake or surface water body		No		No		No		No
> Not contiguous with a stream, lake or other water body, but within 5-year floodplain		No		No		No		No
> If adjacent lake or contiguous, identify stream, lake or other body by Sec.-Twn.-Rng.	27 22N 19E		27 22N 19E		27 22N 19E		27 22N 19E	

	Wetland 16		**Wetland 17**		**Wetland 18**		**Wetland 19**	
Name								
Location County	Brown		Brown		Brown		Brown	
Location (Sec.-Twn.-Rng.)	22 22N 19E		22 22N 19E		22 22N 19E		22 22N 19E	
Location Map	See Exhibit Wetland 13,14		See Exhibit Wetland 13		See Exhibit Wetland 13		See Exhibit Wetland 14	
Wetland Type	M		SM		SM		M	
Total Wetland Loss	Acres Permanent		Acres Permanent		Acres Permanent		Acres Permanent	
	0.02		0.11		0.02		0.01	
	Acres Temporary		Acres Temporary		Acres Temporary		Acres Temporary	
	0.07		0.04		0.01		0.00	
Wetland is:	Yes	No	Yes	No	Yes	No	Yes	No
> Isolated from stream, lake or surface water body		No		No		No		No
> Not contiguous with a stream, lake or other water body, but within 5-year floodplain		No		No		No		No
> If adjacent lake or contiguous, identify stream, lake or other body by Sec.-Twn.-Rng.	27 22N 19E		27 22N 19E		27 22N 19E		27 22N 19E	

	Wetland 20		**Wetland 21**		**Wetland 22**		**Wetland 23**	
Name								
Location County	Brown		Brown		Brown		Brown	
Location (Sec.-Twn.-Rng.)	22 22N 19E		22 22N 19E		22 22N 19E		15 22N 19E	
Location Map	See Exhibit Wetland 14		See Exhibit Wetland 14		See Exhibit Wetland 15		See Exhibit Wetland 15	
Wetland Type	SM		M		Artificial		SM	
Total Wetland Loss	Acres Permanent		Acres Permanent		Acres Permanent		Acres Permanent	
	0.01		0.00		0.02		0.11	
	Acres Temporary		Acres Temporary		Acres Temporary		Acres Temporary	
	0.01		0.00		0.01		0.00	
Wetland is:	Yes	No	Yes	No	Yes	No	Yes	No
> Isolated from stream, lake or surface water body		No		No	Yes		Yes	
> Not contiguous with a stream, lake or other water body, but within 5-year floodplain		No		No		No		No
> If adjacent lake or contiguous, identify stream, lake or other body by Sec.-Twn.-Rng.	27 22N 19E		27 22N 19E					

	Wetland 24	**Wetland 25**	**Wetland 26**	**Wetland 27**
Name				
Location County	Brown	Brown	Brown	Brown

Location (Sec.-Twn.-Rng.)	15 22N 19E and 14 22N 19E		15 22N 19E		15 22N 19E and 14 22N 19E		14 22N 19E	
Location Map	See Exhibit Wetland 15,16		See Exhibit Wetland 15		See Exhibit Wetland 15,16		See Exhibit Wetland 16	
Wetland Type	SM		M		SM		M	
Total Wetland Loss	Acres Permanent		Acres Permanent		Acres Permanent		Acres Permanent	
	0.09		0.09		0.04		0.49	
	Acres Temporary		Acres Temporary		Acres Temporary		Acres Temporary	
	0.21		0.00		0.04		0.05	
Wetland is:	Yes	No	Yes	No	Yes	No	Yes	No
> Isolated from stream, lake or surface water body	Yes		Yes		Yes		Yes	
> Not contiguous with a stream, lake or other water body, but within 5-year floodplain		No		No		No		No
> If adjacent lake or contiguous, identify stream, lake or other body by Sec.-Twn.-Rng.								

	Wetland 28		Wetland 29		Wetland 30		Wetland 31	
Name								
Location County	Brown		Brown		Brown		Brown	
Location (Sec.-Twn.-Rng.)	14 22N 19E		14 22N 19E		14 22N 19E		11 22N 19E	
Location Map	See Exhibit Wetland 17		See Exhibit Wetland 17		See Exhibit Wetland 17		See Exhibit Wetland 17	
Wetland Type	SM		SM				M	
Total Wetland Loss	Acres Permanent		Acres Permanent		Acres Permanent		Acres Permanent	
	0.01		0.07		0.01		0.00	
	Acres Temporary		Acres Temporary		Acres Temporary		Acres Temporary	
	0.09		0.07		0.02		0.03	
Wetland is:	Yes	No	Yes	No	Yes	No	Yes	No
> Isolated from stream, lake or surface water body		No		No		No		No
> Not contiguous with a stream, lake or other water body, but within 5-year floodplain		No		No		No		No
> If adjacent lake or contiguous, identify stream, lake or other body by Sec.-Twn.-Rng.	11 22N 19E		11 22N 19E		11 22N 19E		11 22N 19E	

	Wetland 32		Wetland 33		Wetland 34		Wetland 35	
Name								
Location County	Brown		Brown		Brown		Brown	
Location (Sec.-Twn.-Rng.)	11 22N 19E		11 22N 19E		11 22N 19E		11 22N 19E	
Location Map	See Exhibit Wetland 17,18		See Exhibit Wetland 17,18		See Exhibit Wetland 18		See Exhibit Wetland 19	
Wetland Type	SM		Artificial		Artificial		Artificial	
Total Wetland Loss	Acres Permanent		Acres Permanent		Acres Permanent		Acres Permanent	
	0.01		0.03		0.00		0.04	
	Acres Temporary		Acres Temporary		Acres Temporary		Acres Temporary	
	0.07		0.10		0.01		0.04	
Wetland is:	Yes	No	Yes	No	Yes	No	Yes	No
> Isolated from stream, lake or surface water body		No		No		No		No
> Not contiguous with a stream, lake or other water body, but within 5-year floodplain		No		No		No		No

> If adjacent lake or contiguous, identify stream, lake or other body by Sec.-Twn.-Rng.	11 22N 19E	11 22N 19E	11 22N 19E	11 22N 19E

	Wetland 36		**Wetland 37**		**Wetland 38**		**Wetland 39**	
Name								
Location County	Brown		Brown		Brown		Brown	
Location (Sec.-Twn.-Rng.)	11 22N 19E		11 22N 19E		11 22N 19E		1 22N 19E	
Location Map	See Exhibit Wetland 19		See Exhibit Wetland 19		See Exhibit Wetland 19		See Exhibit Wetland 20	
Wetland Type	Artificial		Artificial		Artificial		Artificial	
Total Wetland Loss	Acres Permanent		Acres Permanent		Acres Permanent		Acres Permanent	
	0.00		0.00		0.00		0.00	
	Acres Temporary		Acres Temporary		Acres Temporary		Acres Temporary	
	0.01		0.00		0.02		0.13	
Wetland is:	Yes	No	Yes	No	Yes	No	Yes	No
> Isolated from stream, lake or surface water body		No		No		No	Yes	
> Not contiguous with a stream, lake or other water body, but within 5-year floodplain		No		No		No		No
> If adjacent lake or contiguous, identify stream, lake or other body by Sec.-Twn.-Rng.	11 22N 19E		11 22N 19E		11 22N 19E			

	Wetland 40		**Wetland 41**		**Wetland 42**		**Wetland 43**	
Name								
Location County	Brown		Brown		Brown		Brown	
Location (Sec.-Twn.-Rng.)	1 22N 19E		1 22N 19E		1 22N 19E		1 22N 19E	
Location Map	See Exhibit Wetland 21		See Exhibit Wetland 21		See Exhibit Wetland 22		See Exhibit Wetland 22	
Wetland Type	M		Artificial		M		M(D)	
Total Wetland Loss	Acres Permanent		Acres Permanent		Acres Permanent		Acres Permanent	
	0.02		0.01		0.00		0.01	
	Acres Temporary		Acres Temporary		Acres Temporary		Acres Temporary	
	0.15		0.01		0.01		0.07	
Wetland is:	Yes	No	Yes	No	Yes	No	Yes	No
> Isolated from stream, lake or surface water body	Yes		Yes			No		No
> Not contiguous with a stream, lake or other water body, but within 5-year floodplain		No		No		No		No
> If adjacent lake or contiguous, identify stream, lake or other body by Sec.-Twn.-Rng.					1 22N 19E		1 22N 19E	

	Wetland 44	**Wetland 45**	**Wetland 46**	**Wetland 47**
Name				
Location County	Brown	Brown	Brown	Brown
Location (Sec.-Twn.-Rng.)	1 22N 19E	1 22N 19E	1 22N 19E	1 22N 19E
Location Map	See Exhibit Wetland 22	See Exhibit Wetland 22	See Exhibit Wetland 22	See Exhibit Wetland 23
Wetland Type	M(D)	Artificial	Artificial	Artificial
Total Wetland Loss	Acres Permanent	Acres Permanent	Acres Permanent	Acres Permanent
	0.03	0.00	0.00	0.00

	Acres Temporary		Acres Temporary		Acres Temporary		Acres Temporary	
	0.21		0.04		0.05		0.00	
Wetland is:	Yes	No	Yes	No	Yes	No	Yes	No
> Isolated from stream, lake or surface water body		No		No		No		No
> Not contiguous with a stream, lake or other water body, but within 5-year floodplain		No		No		No		No
> If adjacent lake or contiguous, identify stream, lake or other body by Sec.-Twn.-Rng.	1 22N 19E		1 22N 19E		1 22N 19E		1 22N 19E	

	Wetland 48		**Wetland 49**		**Wetland 50**		**Wetland 51**	
Name								
Location County	Brown		Brown		Brown		Brown	
Location (Sec.-Twn.-Rng.)	1 22N 19E		36 23N 19E		36 23N 19E and 31 23N 19E		36 23N 19E and 31 23N 19E	
Location Map	See Exhibit Wetland 23		See Exhibit Wetland 23		See Exhibit Wetland 24		See Exhibit Wetland 24	
Wetland Type	Artificial		Artificial		M		M	
Total Wetland Loss	Acres Permanent		Acres Permanent		Acres Permanent		Acres Permanent	
	0.00		0.01		0.00		0.31	
	Acres Temporary		Acres Temporary		Acres Temporary		Acres Temporary	
	0.04		0.01		0.01		0.53	
Wetland is:	Yes	No	Yes	No	Yes	No	Yes	No
> Isolated from stream, lake or surface water body		No	Yes			No		No
> Not contiguous with a stream, lake or other water body, but within 5-year floodplain		No		No		No		No
> If adjacent lake or contiguous, identify stream, lake or other body by Sec.-Twn.-Rng.	1 22N 19E				31 23N 19E		31 23N 19E	

	Wetland 52		**Wetland 53**					
Name								
Location County	Brown		Brown					
Location (Sec.-Twn.-Rng.)	31 23N 19E		31 23N 19E					
Location Map	See Exhibit Wetland 24		See Exhibit Wetland 24					
Wetland Type	SM		M					
Total Wetland Loss	Acres Permanent		Acres Permanent					
	0.07		0.00					
	Acres Temporary		Acres Temporary					
	0.14		0.01					
Wetland is:	Yes	No	Yes	No				
> Isolated from stream, lake or surface water body		No		No				
> Not contiguous with a stream, lake or other water body, but within 5-year floodplain		No		No				
> If adjacent lake or contiguous, identify stream, lake or other body by Sec.-Twn.-Rng.	31 23N 19E		31 23N 19E					

STORMWATER EVALUATION

Wisconsin Department of Transportation

Factor Sheet D-5

Alternative 3- Resurface with shoulder widening	Total Length of Center Line of Existing Roadway 12.44 mi. Length of This Alternative 12.44 mi.
Preferred ☒ Yes ☐ No ☐ None identified	

1. Indicate whether the affected area may cause a discharge or will discharge to the waters of the state (Trans 401.03).

Special consideration should be given to areas that are sensitive to water quality degradation. Provide specific recommendations on the level of protection needed.

☐ No water special natural resources are affected by the alternative.
☒ Yes - Water special natural resources exist in the project area.
- ☐ River/stream
- ☒ Wetland
- ☐ Lake
- ☐ Endangered species habitat
- ☐ Other – Describe

_____

2. Indicate whether circumstances exist in the project vicinity that require additional or special consideration, such as an increase in peak flow, total suspended solids (TSS) or water volume.

☐ No additional or special circumstances are present.
☒ Yes - Additional or special circumstances exist. Indicate all that are present.

☐ Areas of groundwater discharge	☐ Areas of groundwater recharge
☐ Stream relocations	☒ Overland flow/runoff
☐ Long or steep cut or fill slopes	☐ High velocity flows
☐ Cold water stream	☐ Impaired waterway
☒ Large quantity flows	☐ Exceptional/outstanding resource waters
☐ Increased backwater	

☐ Other - Describe any unique, innovative, or atypical stormwater management measures to be used to manage additional or special circumstances. _____

3. Describe the overall stormwater management strategy to minimize adverse and enhance beneficial effects.

1130-44-00 – US 41 Resurface with shoulder widening
The stormwater management will remain as existing.

1130-44-01 – Safety Weigh Enforcement Facility (SWEF)
The existing safety weigh enforcement facility (SWEF) will be removed and a new SWEF will be constructed at the existing site. The existing SWEF consists of a small administrative building and a single static scale, with a three stall truck parking area. The new SWEF will include a larger administrative building and a two bay truck inspection building together with a 22 stall truck parking area. The larger truck parking lot is available for commercial drivers who need to take a rest break, and is used when a truck is taken out of service due to equipment malfunctions.

The paved area of the new SWEF will be 7.8 acres compared to 2.0 acres for the existing SWEF, and the storm water runoff generated at this site will increase from 17.3 cfs to 66.1 cfs in the 100 yr storm event. The southern ¾ of the site flows into existing ditches and roadway culverts east of the site. To avoid overloading the existing culverts and causing erosion, the proposed improvements include construction of a wet detention basin located at the southeast corner of the new truck parking lot.

The detention basin will provide a sediment trap during the construction phase of the new site. After construction is completed, the wet basin will control peak runoff volume and reduce TSS. Following the design standards established in Chapter 48 of the Outagamie County, Code of Ordinances, the outlet to the basin will be designed to release flows at pre-development rates for the 2, 10 and 100 yr storm events.

Storm water generated in the north ¼ of the site will flow into existing culverts that cross US 41. Discharge rates will be controlled through the use of baffles located at the culvert entrance following the Outagamie County design standards noted above. During construction silt fences, ditch checks and erosion mat will be used to control erosion in this northern section.

4. Indicate how the stormwater management plan will be compatible with fulfilling Trans 401 requirements.

1130-44-00 – US 41 Reconditioning
None

1130-44-01 – Safety Weigh Enforcement Facility (SWEF)
The proposed improvements meet the requirements of TRANS 401 in the following ways:
Erosion Control

1) Limiting exposed land areas through the use of staged construction
2) Control of overland flows by installing diversion ditches directed toward the wet basin
3) Trapping sediments in wet basins, ditch checks, silt fence and tracking pads
4) Regular erosion control maintenance
5) Proper disposal of waste building materials

Storm Water Management

1) Limiting runoff rates to pre-existing rates for the 2, 10 and 100 yr storm events
2) Trapping sediments in the wet basin to achieve over 80% TSS removal
3) Oil and grease removal through the use of gravel filters at the edge of parking lots
4) Grassed swales serving the north 1/4 of the site to reduce TSS and oil and grease contamination
5) Note - Infiltration is not recommended due to hazardous contaminants often found leaking from trucks that will be parked at this site.

5. Identify the stormwater management measures to be utilized.

- ☒ Swale treatment (parallel to flow) Trans 401.106(10)
- ☐ Vegetated filter strips (perpendicular to flow)
- ☐ Constructed storm water wetlands
- ☐ Buffer areas – Trans 401.106(6)
- ☐ In-line storm sewer treatment, such as catch basins, non-mechanical treatment systems.
- ☒ Detention/retention basins – Trans 401.106(6)(3)
- ☐ Distancing outfalls from waterway edge
- ☐ Infiltration – Trans 401.106(5)
- ☐ Other

Describe - _____ _____

6. Indicate whether any Drainage District may be affected by the project.

- ☒ No - None identified
- ☐ Yes

Has initial coordination with a drainage board been completed?

- ☐ No - Explain _____
- ☐ Yes - Discuss results _____

7. Indicate whether the project is within WisDOT's Phase I or Phase II stormwater management areas.

Note: See Procedure 20-30-1, Figure 1, Attachment A4, the Cooperative Agreement between WisDOT and WisDNR. Contact Regional Stormwater/erosion Control Engineer if assistance in needed to complete the following:

- ☒ No - the project is outside of WisDOT's stormwater management area.
- ☐ Yes - The project affects one of the following and is regulated by a WPDES stormwater discharge permit, issued by the WisDNR:
  - ☐ A WisDOT storm sewer system, located within a municipality with a population greater than 100,000 (Outagamie County)
  - ☐ A WisDOT storm sewer system located within the area of a notified owner of a municipal separate storm sewer system.
  - ☐ An urbanized area, as defined by the U.S. Census Bureau, NR216.02(3).
  - ☐ A municipal separate storm sewer system serving a population less than 10,000.

8 Has the effect on downstream properties been considered?

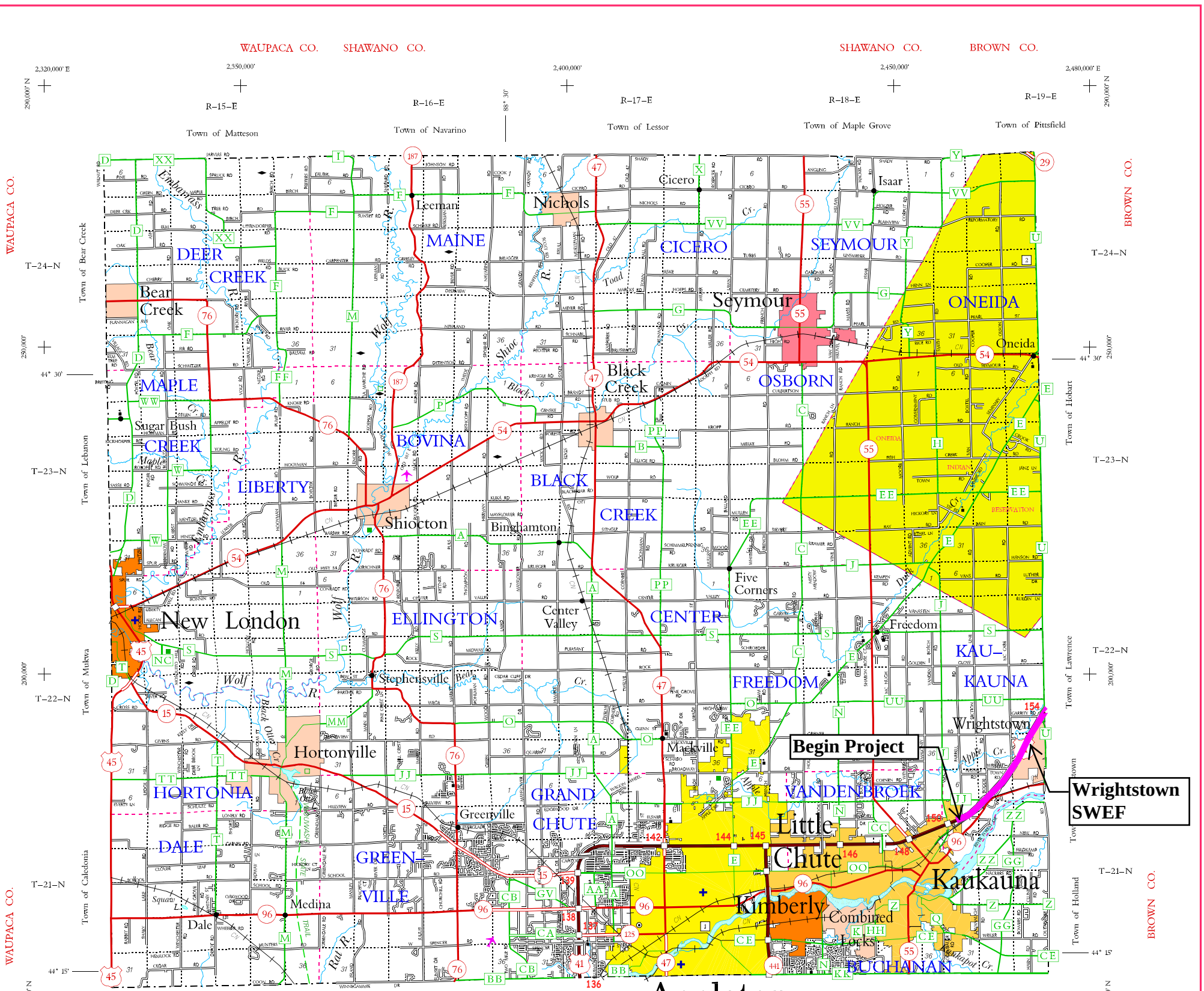
- ☐ No
- ☒ Yes - Runoff has been limited to pre-existing rates to minimize any adverse impacts.

9. Are there any property acquisitions required for storm water management purposes?

- ☐ No
- ☒ Yes - Complete the following:
  - ☐ Safety measures, such as fencing are <u>not</u> needed for potential conflicts with existing and expected surrounding land use.
  - ☒ Safety measures <u>are</u> needed for potential conflicts with existing and expected surrounding land use. Describe: A fence will be erected around the entire SWEF site to limit access. The wet basin will be inside the fenced area.

Attachment Index

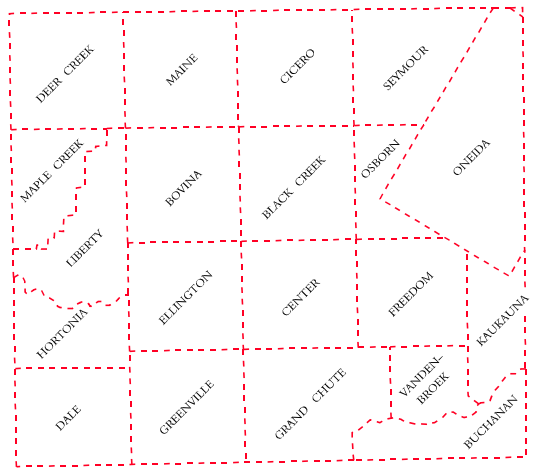
ATTACHMENT A - PROJECT LOCATION MAP

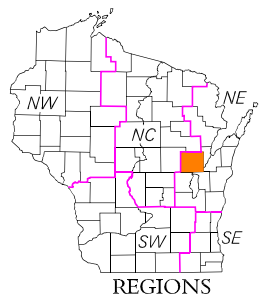


CIVIL TOWNS

LEGEND

Freeway		Dam	
Multilane Divided		Hospital	
U.S. or State Hwy		Schools	
County Trunk Hwy		Airport	
Town Road		County Seat	
Firelane		Unincorporated Village	
Railroad		Fish Hatchery	
State Trail		Game Farm	
Interchange		Public Hunt. or Fish. Grds.	
Highway Separation		Public Camp & Picnic Grds.	
Interstate Highway No.	94	Ranger Station	
U.S. Highway No.	18	State Park	
State Highway No.	59	County Park ..With Facilities	
County Highway Letter	T	..Without Facilities	
State Boundary		Rest Area ..Modern Facilities	
County Boundary		Wayside ..Rustic Facilities	
Civil Town Boundary		*Lawrence University*	1
Section Line		*Green Bay Work Release Center*	2





REGIONS

MILES OF HIGHWAY
as of Dec. 31, 2010

STATE	187
COUNTY	346
LOCAL ROADS	1,462
OTHER ROADS	10
TOTAL FOR COUNTY	2,005

Land Area (2000 Census) ..... 640 sq mi
Population (2000 Census) 160,971
County Seat ..... Appleton

For boundaries of public hunting and fishing grounds please contact the Department of Natural Resources

Grid based on the state plane coordinate system central zone and the NAD 27

SECTION NUMBERING OF A TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

OUTAGAMIE CO.

DEPARTMENT OF TRANSPORTATION
STATE OFFICE BUILDING
Madison, Wisconsin

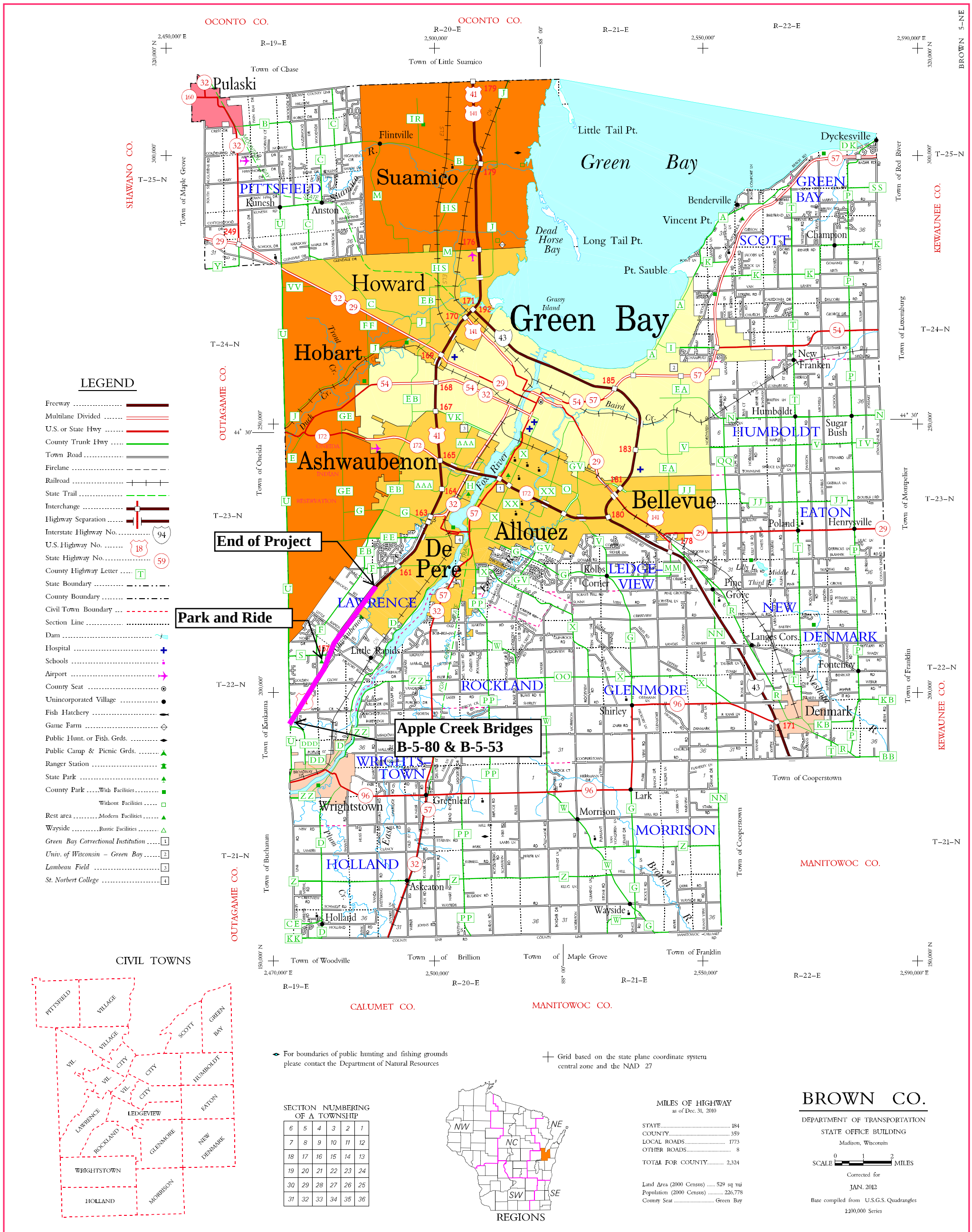
SCALE 0 1 2 MILES

Corrected for
JAN. 2012

Base compiled from U.S.G.S. Quadrangles
1:100,000 Series

OUTAGAMIE 44–NE

ATTACHMENT A - PROJECT LOCATION MAP



LEGEND

- Freeway
- Multilane Divided
- U.S. or State Hwy
- County Trunk Hwy
- Town Road
- Firelane
- Railroad
- State Trail
- Interchange
- Highway Separation
- Interstate Highway No. (94)
- U.S. Highway No. (18)
- State Highway No. (59)
- County Highway Letter (T)
- State Boundary
- County Boundary
- Civil Town Boundary
- Section Line
- Dam
- Hospital
- Schools
- Airport
- County Seat
- Unincorporated Village
- Fish Hatchery
- Game Farm
- Public Hunt. or Fish. Grds.
- Public Camp & Picnic Grds.
- Ranger Station
- State Park
- County Park ..... With Facilities
- Without Facilities
- Rest area ..... Modern Facilities
- Wayside ..... Rustic Facilities
- *Green Bay Correctional Institution* (1)
- *Univ. of Wisconsin – Green Bay* (2)
- *Lambeau Field* (3)
- *St. Norbert College* (4)

CIVIL TOWNS

For boundaries of public hunting and fishing grounds please contact the Department of Natural Resources

Grid based on the state plane coordinate system central zone and the NAD 27

SECTION NUMBERING OF A TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

REGIONS

MILES OF HIGHWAY
as of Dec. 31, 2010

STATE	184
COUNTY	359
LOCAL ROADS	1773
OTHER ROADS	8
TOTAL FOR COUNTY	2,324

Land Area (2000 Census) ..... 529 sq mi
Population (2000 Census) 226,778
County Seat ..... Green Bay

BROWN CO.

DEPARTMENT OF TRANSPORTATION
STATE OFFICE BUILDING
Madison, Wisconsin

SCALE 0 1 2 MILES

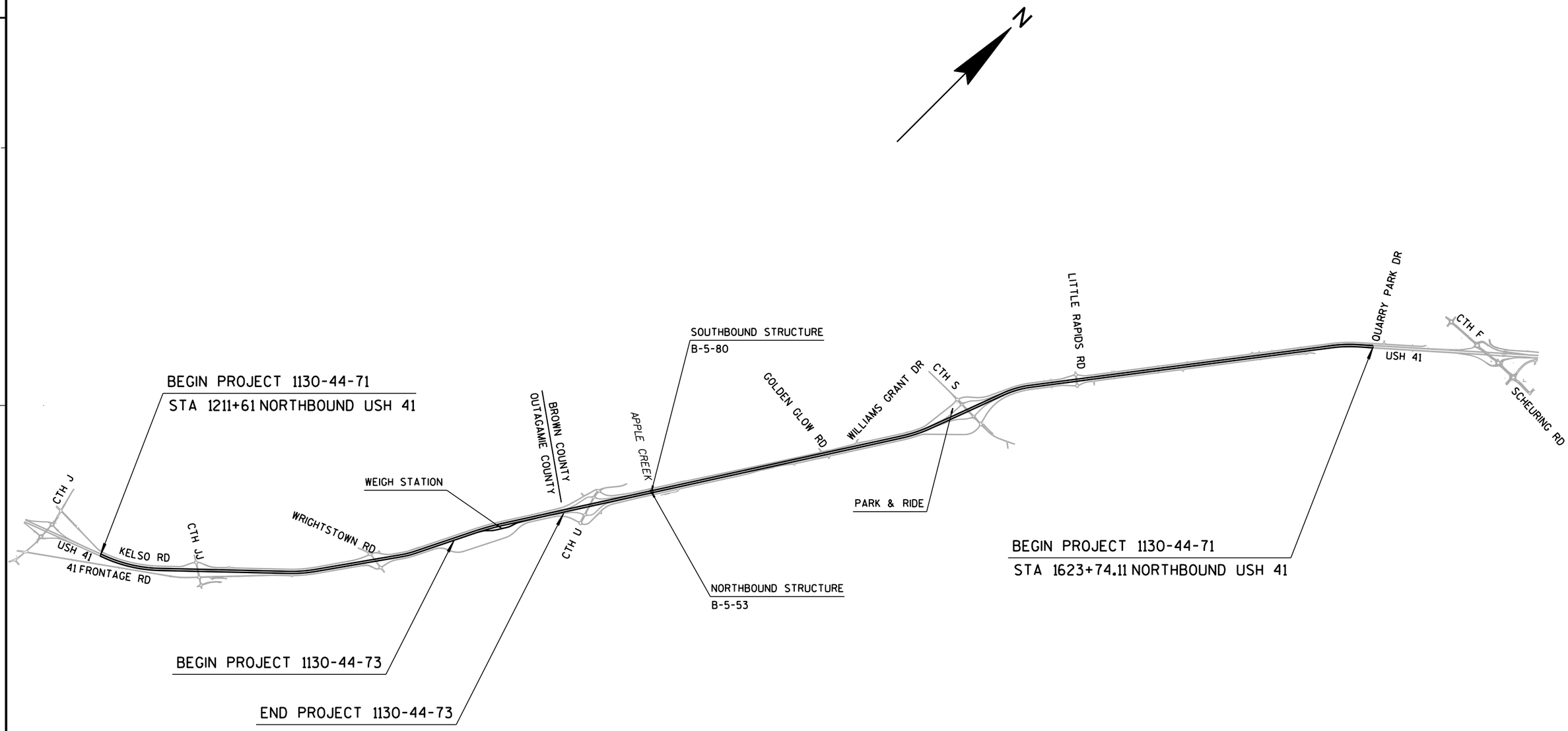
Corrected for
JAN. 2012

Base compiled from U.S.G.S. Quadrangles
1:100,000 Series

BROWN 5-NE

ATTACHMENT A - PROJECT LOCATION MAP

2



2

PROJECT NO: 1130-44-71 & 1130-44-73	HWY: USH 41	COUNTY: BROWN & OUTAGAMIE	PROJECT OVERVIEW	SHEET	E

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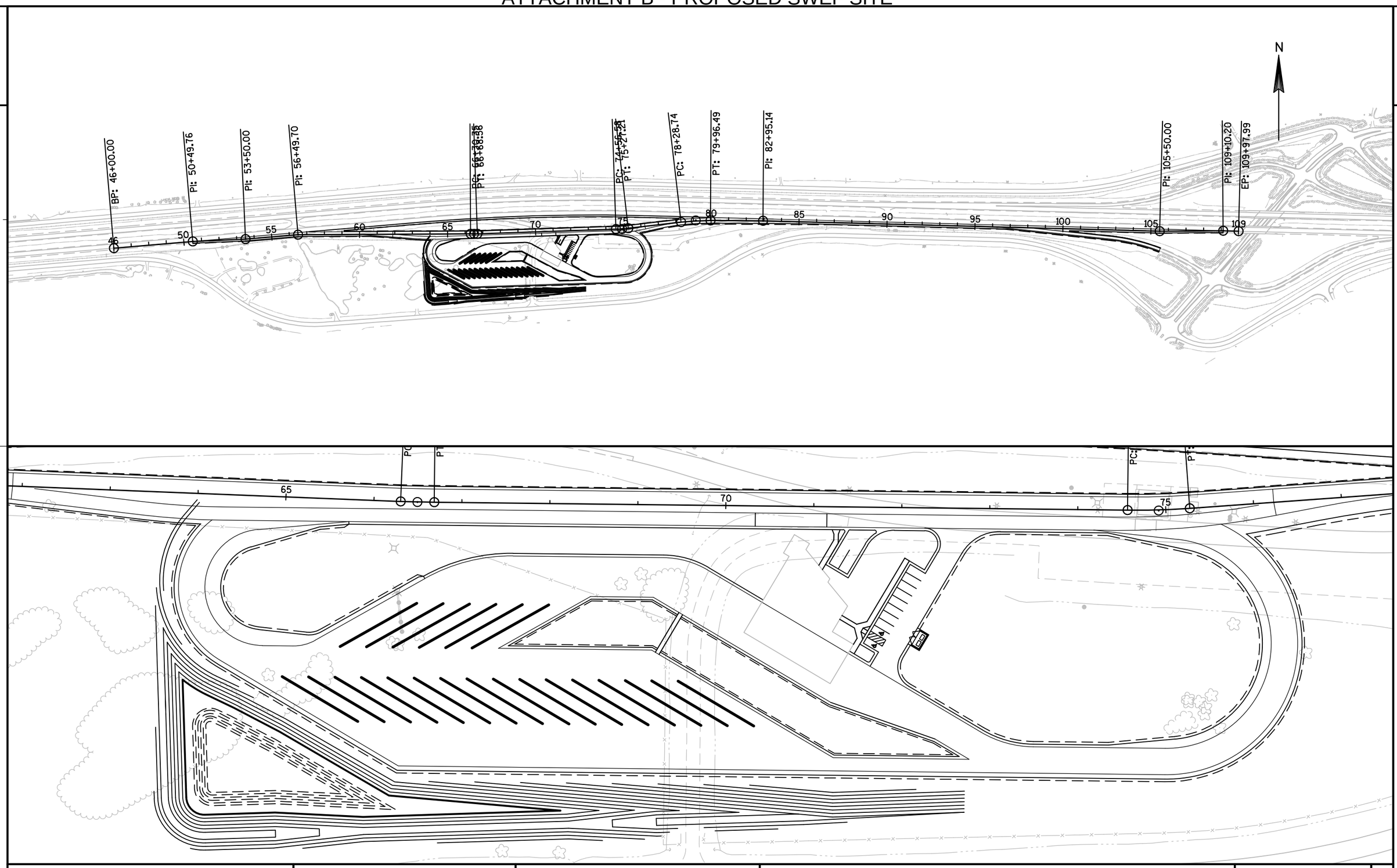
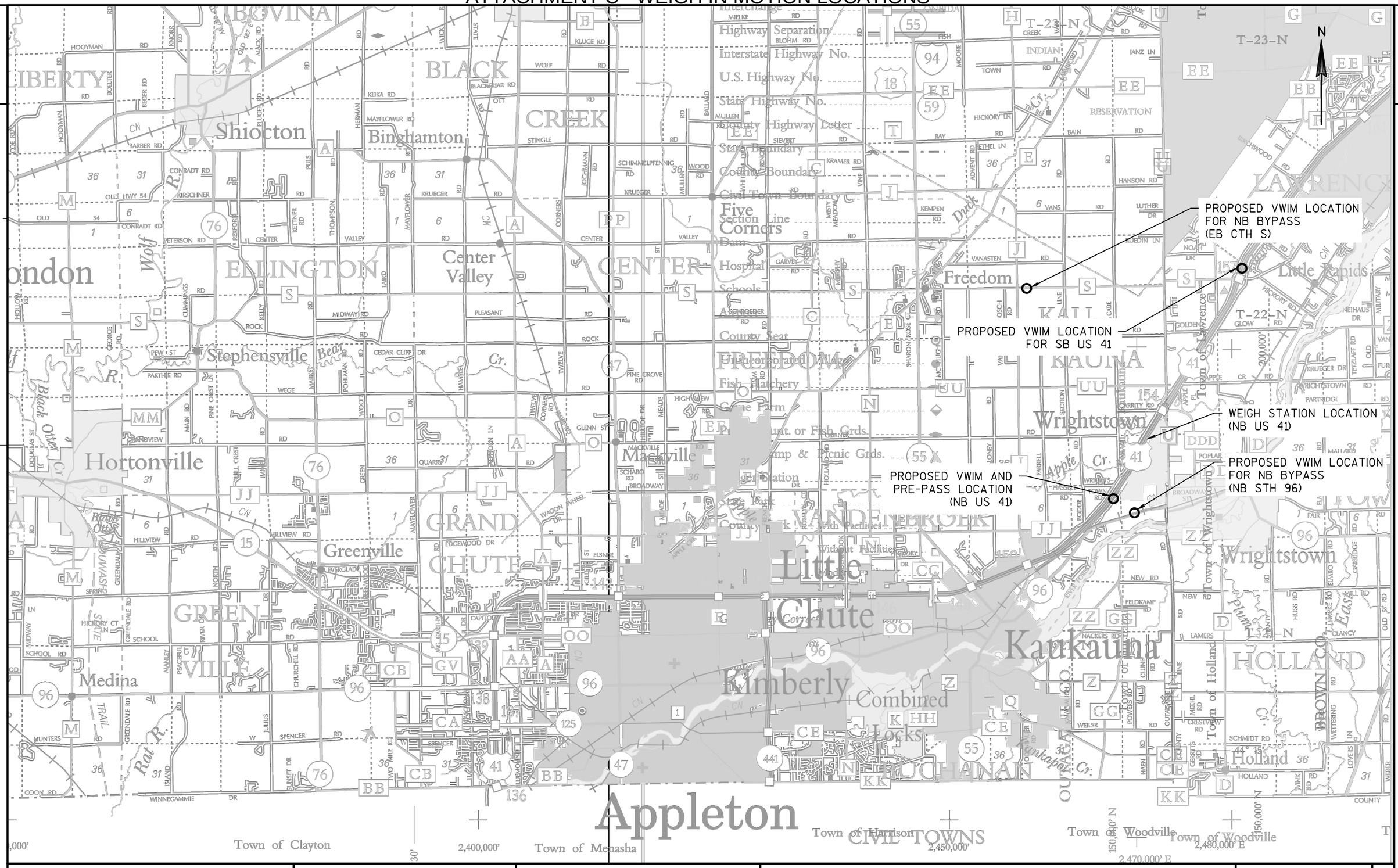
WISDOT/CADDS SHEET 42

ATTACHMENT B - PROPOSED SWEF SITE



PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PROJECT OVERVIEW	SHEET	E

ATTACHMENT C - WEIGH IN MOTION LOCATIONS



PROJECT NO: 1130-44-73	HWY: OUTAGAMIE	COUNTY: XXX	VIRTUAL WEIGH IN MOTION LOCATION MAP	SHEET	E

FILE NAME : N:\BHO\03 PAVTROAD\C3D\11304401\DESIGN\SWEF_34_SB-VWIM.DWG PLOT DATE : 10/16/2013 7:51 AM PLOT BY : SCHMALE, RICHARD J PLOT NAME : PLOT SCALE : 1 IN:1 MI

ATTACHMENT C - WEIGH IN MOTION LOCATIONS

PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PLAN: SB US 41 VWIM	SHEET	E

FILE NAME : N:\BHO\03 PAVTROAD\C3D\11304401\DESIGN\SWEF_34_SB-VWIM.DWG PLOT DATE : 10/16/2013 7:37 AM PLOT BY : SCHMALE, RICHARD J PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

ATTACHMENT C - WEIGH IN MOTION LOCATIONS

PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	STATE 96 VWIM	SHEET	E

FILE NAME : N:\BHO\03 PAVTROAD\C3D\11304401\DESIGN\SWEF_34_SB-VWIM.DWG PLOT DATE : 10/16/2013 7:39 AM PLOT BY : SCHMALE, RICHARD J PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

ATTACHMENT C - WEIGH IN MOTION LOCATIONS

2

2

PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	PLAN: COUNTY S VWIM	SHEET	E

EXHIBIT 7-6

FUTURE LAND USE

Outagamie County, WI

0 1 2 4 Miles

Land Use Catagories

- Residential
- Commerical
- Industrial
- Quarries
- Institutional Facilities
- Transportation
- Utilities/Communications
- Agriculture
- Recreational Facilities
- Woodlands
- Open Other Land
- Water Areas

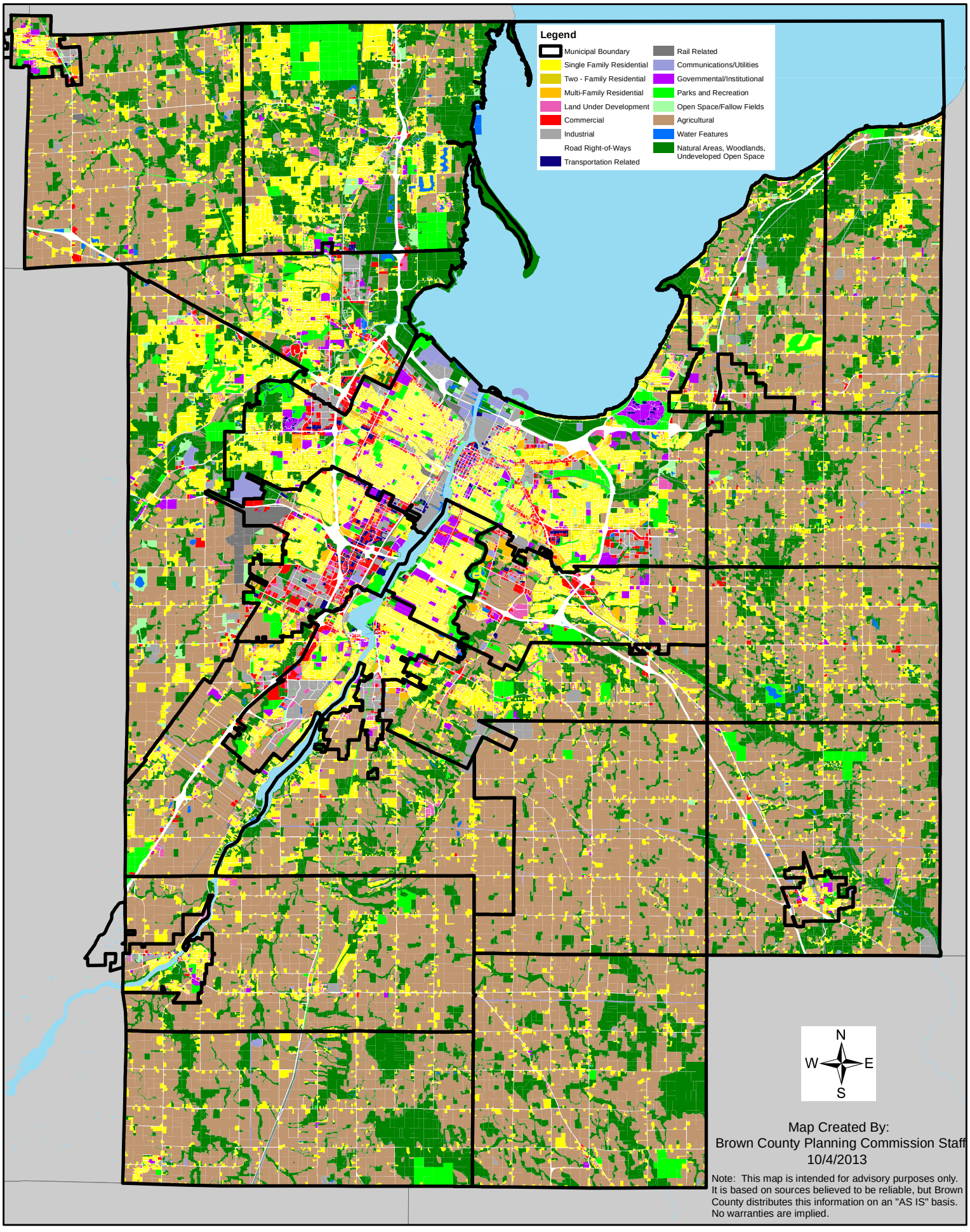
Revised per Resolution
No. 117--2011-2012
Dated: March 13, 2012

Cartographer: Traci Meulemans
Outagamie County Planning Department
Appleton, WI 54911

P:\GIS_Warehouse\Departments\Planning\CompPlanMaps\LUfolder\FutureLandUse11by17.mxd

ATTACHMENT D - LAND USE MAPS

Brown County Land Use 2013



Map Created By:
Brown County Planning Commission Staff
10/4/2013

Note: This map is intended for advisory purposes only. It is based on sources believed to be reliable, but Brown County distributes this information on an "AS IS" basis. No warranties are implied.

ATTACHMENT E - DATCP RESPONSE

State of Wisconsin
Governor Scott Walker

Department of Agriculture, Trade and Consumer Protection
Ben Brancel, Secretary

October 28, 2013

Todd Marohl
WisDOT Northeast Region
944 Vanderperren Way
Green Bay, WI 54304-5344

Dear Todd Marohl:

Re: Project ID: 1130-44-01
Project Name: USH 41 Wrightstown Safety & Weight Facility
County: Outagamie

The Department of Agriculture, Trade, and Consumer Protection (DATCP) has reviewed the notification and any supplemental information you have provided concerning the potential need for an agricultural impact statement (AIS) for the above project. We have determined that an AIS will not be prepared for this project.

Since the USH 41 project from Appleton to Green Bay, 1130-44-00, does not require the acquisition of any land, I did not include it as a separate project. If you need a separate letter for this project, pleas let me know.

Please note that if the proposed project or project specifications are altered in any way which could be construed as increasing the potential adverse effects of the project on agriculture or on any farm operation, the DATCP should be renotified. Questions on the AIS program can be directed to me at the above address or by dialing 608/224-4646.

Sincerely,

Alice Halpin

Alice Halpin
Agricultural Impact Program

ATTACHMENT F - WDNR RESPONSE

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
Northeast Region Headquarters
2984 Shawano Avenue
Green Bay WI 54313-6727

Scott Walker, Governor
Cathy Stepp, Secretary
Jean Romback-Bartels, Regional Dir.
Telephone 920-662-5100
FAX 920-662-5413
TTY Access via relay - 711

WISCONSIN
DEPT. OF NATURAL RESOURCES

2012 JUL -6 P 12:36

July 5, 2012

DOT: Brown/Outagamie, 13306

Timothy Borowski
Wisconsin Department of Transportation
944 Vanderperren Way
Green Bay, WI 54304

SUBJECT: DOT/DNR Initial Project Review
Project I.D.#: 1130-44-00/71 and 1130-44-01/73
Project Title: USH 41 Rehab and Wrightstown Safety and Weight Facility Reconst.
Location: CTH J to Orange Lane
County: Brown and Outagamie

Dear Mr. Borowski:

Preliminary information on the above referenced project has been reviewed by DNR Northeast Region staff under the DOT/DNR Cooperative Agreement. This project includes pavement work, cable guard, shoulder widening, ramp repairs, park and ride expansion, and reconstruction of the Wrightstown Safety and Weight Facility. Pertinent environmental considerations are presented below:

WETLANDS

According to the DNR Surface Water Data Viewer there are wetland areas within the project limits. During a visit on June 18, 2012 I did see evidence of wetlands. The wetland occurred in the ditches and the majority should be classified as E2K (Emergent/wet meadow, Narrow-leaved persistent, Wet soil, Palustrine).

I did not see wetland vegetation by the existing park and ride near the CTH S interchange.

The two interchanges (CTH S and CTH U) do have wetland vegetation is the ditches with open water present in all four quadrants of the CTH U interchange.

I did see wetland vegetation near the Wrightstown Safety and Weight Facilty northbound ramp, which may be impacted by the possible auxiliary lane. I also noted wetland vegetation near the southeastern side though that area may be outside the project area.

WILDLIFE/FISHERIES

Much of the area is rural with some buildings (residential and commercial) and a golf course along the corridor. Apple Creek does provide fish and wildlife habitat. Small mammals, common furbearers, songbirds, and deer may use the area.

ENDANGERED RESOURCES

There are recent records for several listed plants and animals however based on the preferred habitat of the listed species adverse impacts are not anticipated.

FLOODPLAINS

A determination must be made as to whether the project lies within a mapped/zoned floodplain. If the project lies in such an area, DNR required submittal of the results of a 100 year flood analysis for the structure(s). Also, if the new structure(s) will create an increase in the 100 year backwater condition, DNR requires that all affected upstream landowners be notified, and appropriate legal arrangements made. For areas lying outside mapped/zoned floodplain, DNR may request the results of

DOT flow and backwater calculations. For project-specific information, please consult with the Brown and Outagamie County Zoning Administrators.

OTHER COMMENTS

1. There is potential for wetland impacts to occur as a result of this project and therefore wetland impacts must be minimized and/or avoided to the greatest extent possible. Unavoidable wetland impacts must be mitigated in accordance to the DOT/DNR Cooperative Agreement and the Wisconsin Department of Transportation Wetland Mitigation Banking Technical Guideline. The Department requests information regarding the amount of unavoidable wetland impacts.

2. A joint field review with DOT may be needed to complete a wetland determination for the project.

3. The bridge should be inspected for evidence of swallow nesting. If evidence exists then swallow nests with eggs and/or young cannot be disturbed between May 1 and August 30 of a given year. If the proposed construction schedule will conflict with the swallow nesting period, means of preventing swallows from nesting on the bridge must be implemented.

4. All construction must take place outside of Apple Creek.

5. All demolition material generated as a result of this project must be disposed of according to state law.

6. Common Reed Grass (*Phragmites australis*) is classified as a *restricted* invasive species under the NR-40 rule. *Restricted* species are already established in the state, but they may not be transported, transferred, or introduced. If they are already on your property, you are encouraged to remove them. Information of common reed grass can be found at http://dnr.wi.gov/org/water/greatlakes/Phragmites2007.pdf .

7. Efforts should be taken to prevent the spread of invasive species from the active work zone.

8. All equipment must be disinfected prior to arriving to and upon completion of the project to prevent the spread of invasive/exotic species and viruses. Please have the contractor follow these steps:
   a. Inspect equipment and remove any vegetation (fragments, stems, leaves, or roots) or mud and dispose of debris prior to leaving the point of origin;
   b. Drain any trapped water;
   c. Wash all equipment (inside and out) with high pressure hot water (> 104 degree Fahrenheit), or;
   d. Dry the equipment thoroughly for 5 days.

9. Proper erosion control measures must be used and maintained during and after construction. An erosion control implementation plan for the project must be developed by the contractor and submitted to this office 14 days prior to the preconstruction conference.

The above comments represent the Department's initial concerns for the proposed project and do not constitute final concurrence. Final concurrence will be granted after review of plans and further consultation if necessary. If any of the concerns or information provided in this letter requires further clarification, please contact this office at (920) 662-5119.

Sincerely,

James P. Doperalski Jr.
Environmental Analysis and Review Specialist

c. Mike Helmrick – DOT NER, Green Bay
Matt Schaeve – Green Bay
File: 13306

ATTACHMENT G - SIGNED SECTION 106

SECTION 106 REVIEW
ARCHAEOLOGICAL/HISTORICAL INFORMATION

Wisconsin Department of Transportation
DT1635 11/2006

SHPO

For instructions, see FDM Chapter 26

I. PROJECT INFORMATION

Project ID 1130-44-00 AND 1130-44-01	Highway - Street USH 41	County OUTAGAMIE/BROWN
Project Termini Appleton - Green Bay	RECEIVED	Region - Office NE Region
Regional Project Engineer - Project Manager Todd Marohl / Charles Karow	DEC 02 2013	Area Code - Telephone Number 920-492-4117 / 920-492-5997
Consultant Project Engineer - Project Manager N/A	DIV HIST PRES	Area Code - Telephone Number N/A
Archaeological Consultant UW-Milwaukee, Historic Resources Management Services		Area Code - Telephone Number 414-229-2440
Architecture/History Consultant None		Area Code - Telephone Number
Date of Need Spring 2013		SHSW # B-1182/BR/04 pg 1/3
Return a signed copy of this form to:		

II. PROJECT DESCRIPTION

Project Length 9.66 miles	Land to be Acquired: Fee Simple 6.3 acres	Land to be Acquired: Easement 0.0 acres

Distance as measured from existing centerline	Existing	Proposed	Other Factors	Existing	Proposed
Right-of-Way Width	Varies	Varies	Terrace Width	None	None
Shoulder (Paved)	8-10' Outside 3-4' Inside	10' Outside 4' Inside	Sidewalk Width	None	None
Slope Intercept	varies	varies	Number of Lanes	4	4
Edge of Pavement	10'	12'	Grade Separated Crossing	N/A	N/A
Back of Curb Line	N/A	N/A	Vision Triangle 0 acres		
Realignment	N/A	N/A	Temporary Bypass 0 acres	N/A	N/A
Other - List:	Weigh Station	New Safety and Weight Enforcement Facility (SWEF)	Stream Channel Change	☐ Yes	☒ No
Attach Map(s) that depict "maximum" impacts.	☒ Yes	☐ No	Tree topping and/or grubbing	☐ Yes	☒ No

Brief Narrative Project Description - Include all ground disturbing activities. For archaeology, include plan view map indicating the maximum area of ground disturbance and/or new right-of-way, whichever is greater. Include all temporary, limited and permanent easements.

This project will begin at just north of CTH J in Outagamie County and end at Orange Lane in Brown County. The proposed scope of the project includes the following:

- Concrete pavement repairs on US 41 as needed.
- Mill and overlay of the asphaltic sections of US 41.

- Safety improvements including installation of median cable guard, repair of concrete barriers and shoulder widening.
- Replace and upgrade the signing and pavement markings.
- Concrete surface repairs on a majority of bridges .
- Rehab deck overlay on the NB and SB bridges over Apple Creek. There is the potential of replacing one or both of these structures to accommodate traffic management issues associated with this project.
- Reconstruction of the Wrightstown Safety and Weight Enforcement Facility. In addition to the reconstruction, weigh in motion scales will be added to the traffic lanes.
- The County S Park and Ride facility will be resurfaced and expanded to the south.
- Repairs between the ramps on County U and County S. This includes joint and shoulder repair.
- Possible addition of an auxiliary lane between the Safety and Weight Enforcement Facility and the northbound County U exit ramp.
- The acquisition of additional right-of-way is being considered to expand the site of the Safety and Weight Enforcement Facility. No other additional right-of-way will be needed along the project.

13-1182/BR/on
pg 2/3

☐ Add continuation sheet, if needed.

ATTACHMENT G - SIGNED SECTION 106

III. CONSULTATION

How has notification of the project been provided to:

☒ Property Owners
- ☐ Public Information Meeting Notice
- ☒ Letter - Required for Archaeology
- ☐ Telephone Call
- ☒ Other: A future Public Information Meeting will be held

☒ Historical Societies/Organizations
- ☐ Public Information Meeting Notice
- ☒ Letter
- ☐ Telephone Call
- ☐ Other:

☒ Native American Tribes
- ☐ Public Info. Mtg. Notice
- ☒ Letter
- ☐ Telephone Call
- ☐ Other:

*Attach one copy of the base letter, list of addresses and comments received. For history include telephone memos as appropriate.

IV. AREA OF POTENTIAL EFFECTS - APE

ARCHAEOLOGY: Area of potential effect for archaeology is the existing and proposed ROW, temporary and permanent easements. Agricultural practices do not constitute a ground disturbance exemption.

HISTORY: Describe the area of potential effects for buildings/structures.
No structures or buildings will be aquired.

RECEIVED
DEC 02 2013
DIV HIST PRES

V. PHASE I ARCHEOLOGICAL OR RECONNAISSANCE HISTORY SURVEY NEEDED

ARCHAEOLOGY

☒ Archaeological survey **is needed**

☐ Archaeological survey **is not needed** - Provide justification
- ☐ Screening list (date).

HISTORY

☐ Architecture/History survey **is needed**

☒ Architecture/History survey **is not needed**
- ☐ No structures or buildings of any kind within APE
- ☒ Screening list 5-7-13 (date).

VI. SURVEY COMPLETED

ARCHAEOLOGY

☒ **NO** archaeological sites(s) identified - ASFR attached

☐ **NO** potentially eligible site(s) in project area - Phase I Report attached

☐ Potentially eligible site(s) identified-Phase I Report attached
- ☐ Avoided through redesign
- ☐ Phase II conducted – go to VII (Evaluation).

☐ Phase I Report attached - Cemetery/cataloged burial documentation

HISTORY

☐ **NO** buildings/structures identified - A/HSF attached

☐ Potentially eligible buildings/structures identified in the APE - A/HSF attached

☐ Potentially eligible buildings/structures avoided – documentation attached

VII. DETERMINATION OF ELIGIBILITY (EVALUATION) COMPLETED

☐ No arch site(s) eligible for NRHP - Phase II Report attached

☐ Arch site(s) eligible for NRHP - Phase II Report attached

☐ Site(s) eligible for NRHP - DOE attached

☐ No buildings/structure(s) eligible for NRHP - DOE attached

☐ Building/structure(s) eligible for NRHP - DOE attached

VIII. COMMITMENTS/SPECIAL PROVISIONS – must be included with special provisions language

IX. PROJECT DECISION

☒ No historic properties (historical or archaeological) in the APE.

☐ No historic properties (historical or archaeological) affected.

☐ Historic properties (historical and/or archaeological) may be affected by project;
- ☐ Go to Step 4: Assess affects and begin consultation on affects
- ☐ Documentation for Determination of No Adverse Effects is included with this form. WIDOT has concluded that this project will have No Adverse Effect on historic properties. Signature by SHPO below indicates SHPO concurrence in the DNAE and concludes the Section 106 Review process for this project.

13-1182/BR/001
pg 3/3

(Regional Project Manager)	(WIDOT Historic Preservation Officer)	(State Historic Preservation Officer)
5/15/2013 (Date)	11/29/13 (Date)	Dec 6 2013 (Date)
(Consultant Project Manager)		
(Date)		

ATTACHMENT H - ARMY CORPS OF ENGINEERS RESPONSE

DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL MINNESOTA 55101-1678

REPLY TO
ATTENTION

2012 JUN 21 P 1:07

June 19, 2012

Operations
Regulatory (2012-02329-AMN)

Timothy Borowski
Wisconsin Department of Transportation
Northeast Regional Office
944 Vanderperren Way
Green Bay, Wisconsin 54304

Dear Mr. Borowski:

We have received the Initial Project Notification you sent for the proposed Wisconsin Department of Transportation (WisDOT) Appleton – Green Bay U.S. Highway 41, County J – Orange Lane, and Wrightstown Safety & Weight Facility construction project. Based on the limited information that was provided, it is unclear whether or not waters of the United States would be impacted by the proposed project. In lieu of a specific response, please consider the following general information concerning our regulatory program that may apply to the proposed project.

If the proposal involves discharge of dredged or fill material into waters of the United States, it may be subject to the Corps of Engineers' jurisdiction under Section 404 of the Clean Water Act (CWA Section 404). Waters of the United States include navigable waters, their tributaries, and adjacent wetlands (33 CFR § 328.3). CWA Section 301(a) prohibits discharges of dredged or fill material into waters of the United States, unless the work has been authorized by a Department of the Army permit under Section 404.

The Corps' evaluation of a Section 404 permit application involves multiple analyses, including (1) evaluating the proposal's impacts in accordance with the National Environmental Policy Act (NEPA) (33 CFR part 325), (2) determining whether the proposal is contrary to the public interest (33 CFR § 320.4), and (3) in the case of a Section 404 permit, determining whether the proposal complies with the Section 404(b)(1) Guidelines (Guidelines) (40 CFR part 230).

If the proposal requires a Section 404 permit application, the Guidelines specifically require that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences" (40 CFR § 230.10(a)). Time and money spent on the proposal prior to applying for a Section 404 permit cannot be factored into the Corps' decision whether there is a less damaging practicable alternative to the proposal.

If the project would have substantial impacts to waters of the United States, it is highly recommended that a pre-application consultation meeting be scheduled with the Corps to obtain information regarding the data, studies or other information that will be necessary for the permit evaluation process. Depending on the magnitude of impacts or extent of our Regulatory Authority, we may want to be a cooperating agency on any environmental analysis for this project.

For further information or to request a pre-application consultation meeting, please contact Ann Nye at (651) 290-5859, the Corps' project manager for Outagamie County.

Sincerely,

Todd Vogt

for Tamara E. Cameron
Chief, Regulatory Branch

ATTACHMENT I - NRCS-CPA-106

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request **9/19/13**	4. Sheet 1 of **1**
1. Name of Project **1130-44-00 and 1130-44-01**	5. Federal Agency Involved **WisDOT**	
2. Type of Project **US 41 Recondition & SWEF Reconstruction**	6. County and State **Outagamie County, WI**	
PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS	2. Person Completing Form
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☐ NO ☐	4. Acres Irrigated	Average Farm Size
5. Major Crop(s)	6. Farmable Land in Government Jurisdiction Acres: %	7. Amount of Farmland As Defined in FPPA Acres: %
8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment ____			
	Corridor A	**Corridor B**	**Corridor C**	**Corridor D**
A. Total Acres To Be Converted Directly	**3**			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	**0**			
C. Total Acres In Corridor	**3**	**0**	**0**	**0**
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*				
PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))* — **Maximum Points**				
1. Area in Nonurban Use — 15	**10**			
2. Perimeter in Nonurban Use — 10	**4**			
3. Percent Of Corridor Being Farmed — 20	**10**			
4. Protection Provided By State And Local Government — 20	**0**			
5. Size of Present Farm Unit Compared To Average — 10	**10**			
6. Creation Of Nonfarmable Farmland — 25	**0**			
7. Availablility Of Farm Support Services — 5	**5**			
8. On-Farm Investments — 20	**10**			
9. Effects Of Conversion On Farm Support Services — 25	**0**			
10. Compatibility With Existing Agricultural Use — 10	**0**			
TOTAL CORRIDOR ASSESSMENT POINTS — 160	**49**	**0**	**0**	**0**
PART VII *(To be completed by Federal Agency)*				
Relative Value Of Farmland (From Part V) — 100				
Total Corridor Assessment (From Part VI above or a local site assessment) — 160	**49**	**0**	**0**	**0**
TOTAL POINTS *(Total of above 2 lines)* — 260	**49**	**0**	**0**	**0**

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?
Existing roadway	**4.79**	**9/19/13**	YES ☐ NO ☑

5. Reason For Selection:

Project is to recondition, not reconstruct roadway.

Signature of Person Completing this Part: **Todd Marohl** DATE **9/19/13**

NOTE: Complete a form for each segment with more than one Alternate Corridor

Clear Form

ATTACHMENT I - NRCS-CPA-106

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?
More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?
More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?
Site is protected - 20 points
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with $1,000 or more in sales.)
As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?
Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?
High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?
Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?
Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

ATTACHMENT J - U.S. FISH & WILDLIFE ONLINE SECTION 7 REVIEW

U.S. fish and Wildlife Service Online Section 7 Review

Brown	Northern long-eared bat *Myotis septentrionalis*	Proposed as Endangered	Hibernates in caves and mines - swarming in surrounding wooded areas in autumn. During summer, roosts and forages in upland forests.
	Rufa red knot *(Calidris canutus rufa)*	Proposed Threatened	Along Green Bay
	Dwarf lake iris *Iris lacustris*	Threatened	Partially shaded sandy-gravelly soils on lakeshores

Outagamie	Northern long-eared bat *Myotis septentrionalis*	Proposed as Endangered	Hibernates in caves and mines - swarming in surrounding wooded areas in autumn. During summer, roosts and forages in upland forests.
	Snuffbox *Epioblasma triquetra*	Endangered	Small to medium-sized creeks and some larger rivers, in areas with a swift current

ATTACHMENT K - TRIBAL NOTIFICATIONS AND RESPONSES

May 25, 2012

«Company»
ATTN: «Title» «First_Name» «Last_Name», «Credentials»
«Address1»
«City», «State» «Postal_Code»

Project I.D. 1130-44-00 (Design), 1130-44-71 (Construction)
Appleton – Green Bay
County J – Orange Lane
US 41
Brown & Outagamie Counties

Project I.D. 1130-44-01 (Design), 1130-44-73 (Construction)
Appleton – Green Bay
Wrightstown Safety & Weight Facility
US 41
Outagamie County

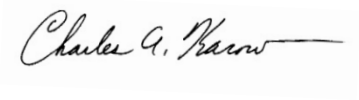
RE: Initial Project Notification

The Department of Transportation is in the process of developing plans for a proposed maintenance project located along US 41 in Brown and Outagamie counties from County J in the south to Orange Lane in the north. The project will consist of concrete joint repair and asphaltic milling and overlay along the mainline pavement and ramps. This project will also include the installation of median cable guard, repair of concrete barriers and shoulder widening. The existing bridges will have surface repairs made as needed. Additionally, the northbound and southbound bridges over Apple Creek will receive a deck overlay of either concrete or asphaltic pavement. The Wrightstown Safety and Weight Enforcement Facility will be reconstructed and possibly expanded to the south and the County S Park & Ride facility will be resurfaced and expanded to the south.

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 Charles A. Karow at 944 Vanderperren Way, Green Bay, WI 54304-5344 or by phone at (920) 492-5997.

Sincerely,



Charles A. Karow, PE
Project Manager

cc: Eugene S. Johnson, Bureau of Equity and Environmental Services
James Becker, Bureau of Equity and Environmental Services

ATTACHMENT K - TRIBAL NOTIFICATIONS AND RESPONSES

Company	Title	First Name	Last Name	Credentials	Office Building	Address1	Address2	City	State	Postal Code
Bad River Band of Lake Superior Chippewa Indians of Wisconsin	Ms.	Edith	Leoso	THPO		P.O. Box 39		Odanah	WI	54861
Forest County Potawatomi Community of Wisconsin	Mr.	Mike	Alloway		Tribal Office	P.O. Box 340		Crandon	WI	54520
Ho-Chunk Nation	Mr.	William	Quackenbush	THPO	Executive Offices	P.O. Box 667	405 Airport Road	Black River Falls	WI	54615
Iowa Tribe of Oklahoma		Cultural	Preservation Director			RR 1, Box 721		Perkins	OK	74059
Lac Courte Oreilles Band of Lake Superior Chippewa Indians of Wisconsin	Mr.	Jerry	Smith	THPO	Tribal Office	13394 West Trepania Road		Hayward	WI	54843
Lac du Flambeau Band of Lake Superior Chippewa Indians of Wisconsin	Ms.	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 Ketegitigaanig Ojibwe Nation	Mr.	Giiwegiizhigookway	Martin	THPO		P.O. Box 249		Water-smeet	MI	49969
Menominee Indian Tribe of Wisconsin	Mr.	David	Gringon	THPO		P.O. Box 910		Keshena	WI	54135
Oneida Nation of Wisconsin	Ms.	Corina	Williams	THPO	Tribal Office	P.O. Box 365		Oneida	WI	54155-0365
Prairie Band Potawatomi Nation	Mr.	Steve	Ortiz	NHPA Representative		16281 Q Road		Mayetta	KS	66509
Prairie Island Indian Community	Mr.	Marc	Mogen	Tribal Engineer	Minnesota Mdewakanton Sioux	5636 Sturgeon Lake Road		Welch	MN	55089
Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin	Mr.	Larry	Balber	THPO	Red Cliff Tribal Council	88385 Pike Road		Bayfield	WI	54814
Sac and Fox Nation of Missouri in Kansas and Nebraska	Ms.	Jane	Nioce	Museum Director		305 North Main		Reserve	KS	66434
Sac and Fox Nation of Oklahoma	Ms.	Sandra	Massey	NAGPRA Representative		RR 2, Box 246		Stroud	OK	74079
Sac and Fox of the Mississippi in Iowa	Mr.	Jonathan	Buffalo	NAGPRA Representative		349 Meskwaki Road		Tama	IA	52339-9629
Sokaogon Chippewa Community Mole Lake Band		Cultural	Preservation Director			3051 Sand Lake Road		Crandon	WI	54520
St. Croix Band Chippewa Indians of Wisconsin	Ms.	Wanda	McFaggen		Tribal Historic Preservation Office	24663 Angeline Avenue		Webster	WI	54893-9246
Stockbridge Munsee Community of Wisconsin	Ms.	Sherry	White	THPO	Tribal Office	W13447 Camp 14 Road		Bowler	WI	54416

Stockbridge-Munsee Tribal Historic Preservation Office

Sherry White - Tribal Historic Preservation Officer
W13447 Camp 14 Road
P.O. Box 70
Bowler, WI 54416

Date May 30, 2012
Project Number 1130-44-00 Design 1130-44-71 Construction
~~TCNS~~ Number 1130-44-01 Design 1130-44-73 Construction
Company Name Brown & Outagamie Co. WisDOT

We have received your letter for the above listed project. Before we can process the request we need more information. The additional items needed are checked below.

Additional Information Required:

___ Site visit by Tribal Historic Preservation Officer
___ Archeological survey, Phase 1
___ Colored maps
___ Pictures of the site
___ Any reports the State Historic Preservation Office may have
___ Review fee of $300.00 must be included with letter
___ Has site been previously disturbed, please explain what the use was and when it was disturbed

After reviewing your letter:

___ We are in the process of gathering more information on this site and will respond to your project request once all information has been gathered.
___ This project has the potential to affect a Mohican cultural site, please contact us
X This project is not within Mohican area of interest
___ This project is within Mohican territory, but we are not aware of any cultural site within the project area.

Additional comments_____

Should this project inadvertently uncover a Native American site, we require you to halt all construction and notify the Stockbridge-Munsee Tribe immediately.

Please do not resubmit projects for changes that are not ground disturbance

Sherry White, gs
Sherry White, Tribal Historic Preservation Officer

(715) 793-3970 *Email: sherry.white@mohican-nsn.gov*

Forest County Potawatomi
Cultural Center and Museum

POTAWATOMI
(Keeper of the Fire)

2012 JUN -7 P 12:47

WISDOT-DIST 3

June 6, 2012

Charles Karow, PE, Project Manager
State of Wisconsin
Division of Transportation
System Development
Northeast Regional Office
944 Vanderperren Way
Green Bay, WI 54304

SUBJECT: Project ID 1130-44-00, 1130-44-71, 1130-44-01, 1130-44-73

Dear Charles Karow:

In response to your letter dated May 25, 2012, the Forest County Potawatomi Community would like to express concerns with any impacts to historic and cultural properties located within the project area of potential effect for the projects mentioned above. These projects are located within areas that have previously been occupied by the Potawatomi.

Please forward all results of an archival review, cultural resource investigation studies, 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.

The Forest County Potawatomi Community Tribal Historic Preservation Office is available to assist in the identification of cultural resources, an archaeological/historical assessment or archival review for a fee.

Please contact us if you have any questions or concerns at (715)478-7248 or by email at Melissa.Cook@fcpotawatomi-nsn.gov. You may send the results of the archival review, cultural resource investigation studies, and archaeological report to:

Forest County Potawatomi Community
Melissa Cook
Tribal Historic Preservation Officer
8130 Mish ko swen Drive
P.O. Box 340
Crandon, WI 54520

Or in digital format to: Melissa.Cook@fcpotawatomi-nsn.gov. Thank you.

Respectfully,

Melissa Cook

Melissa Cook
Tribal Historic Preservation Officer

Exhibit Wetland 1

ATTACHMENT L - WETLAND EXHIBIT

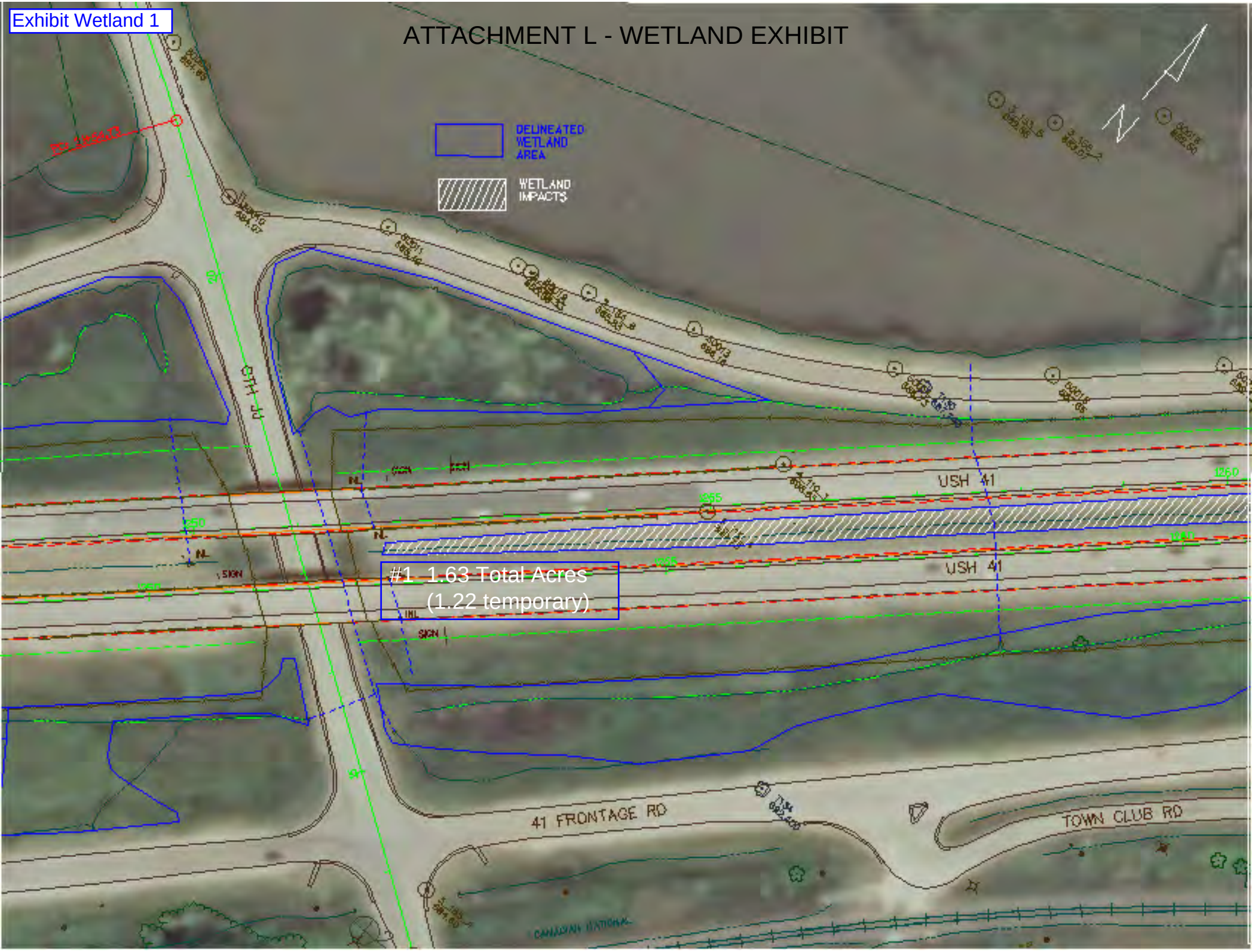


Exhibit Wetland 2

ATTACHMENT L - WETLAND EXHIBIT

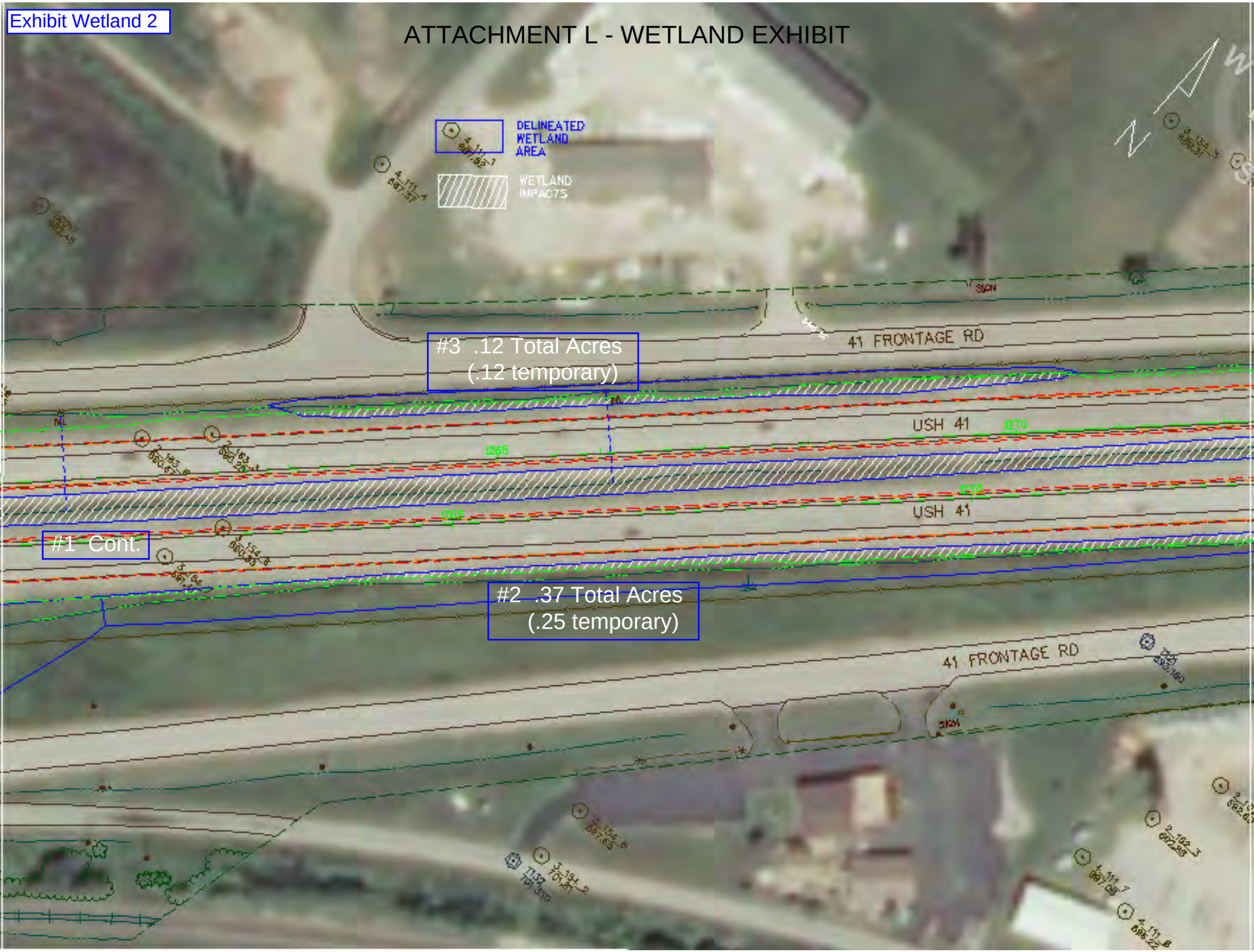
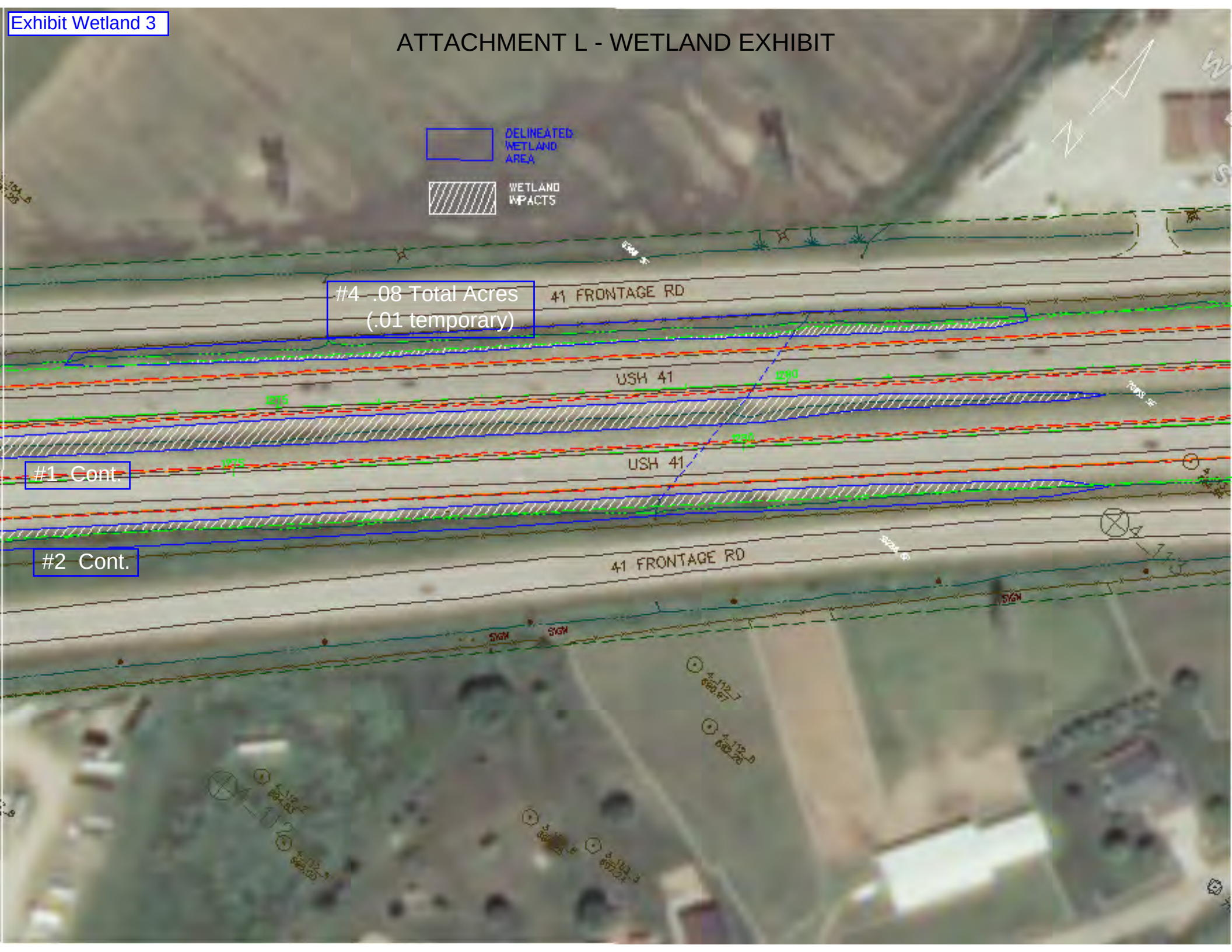


Exhibit Wetland 3

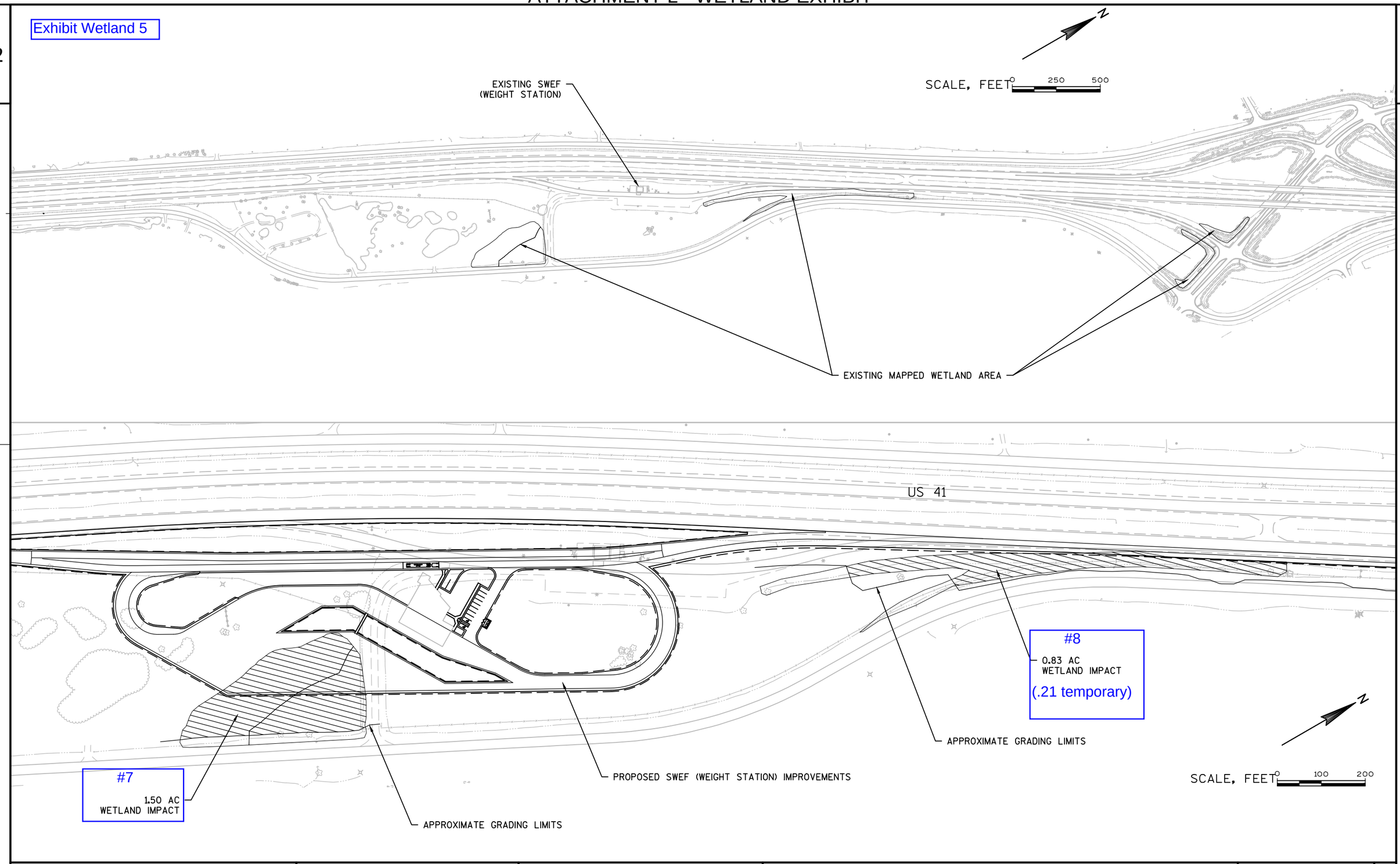
ATTACHMENT L - WETLAND EXHIBIT



ATTACHMENT L - WETLAND EXHIBIT

ATTACHMENT L - WETLAND EXHIBIT

Exhibit Wetland 5



PROJECT NO: 1130-44-73	HWY: US 41	COUNTY: OUTAGAMIE	SWEF IMPROVEMENTS - WETLAND IMPACTS	SHEET	E

Exhibit Wetland 6

ATTACHMENT L - WETLAND EXHIBIT

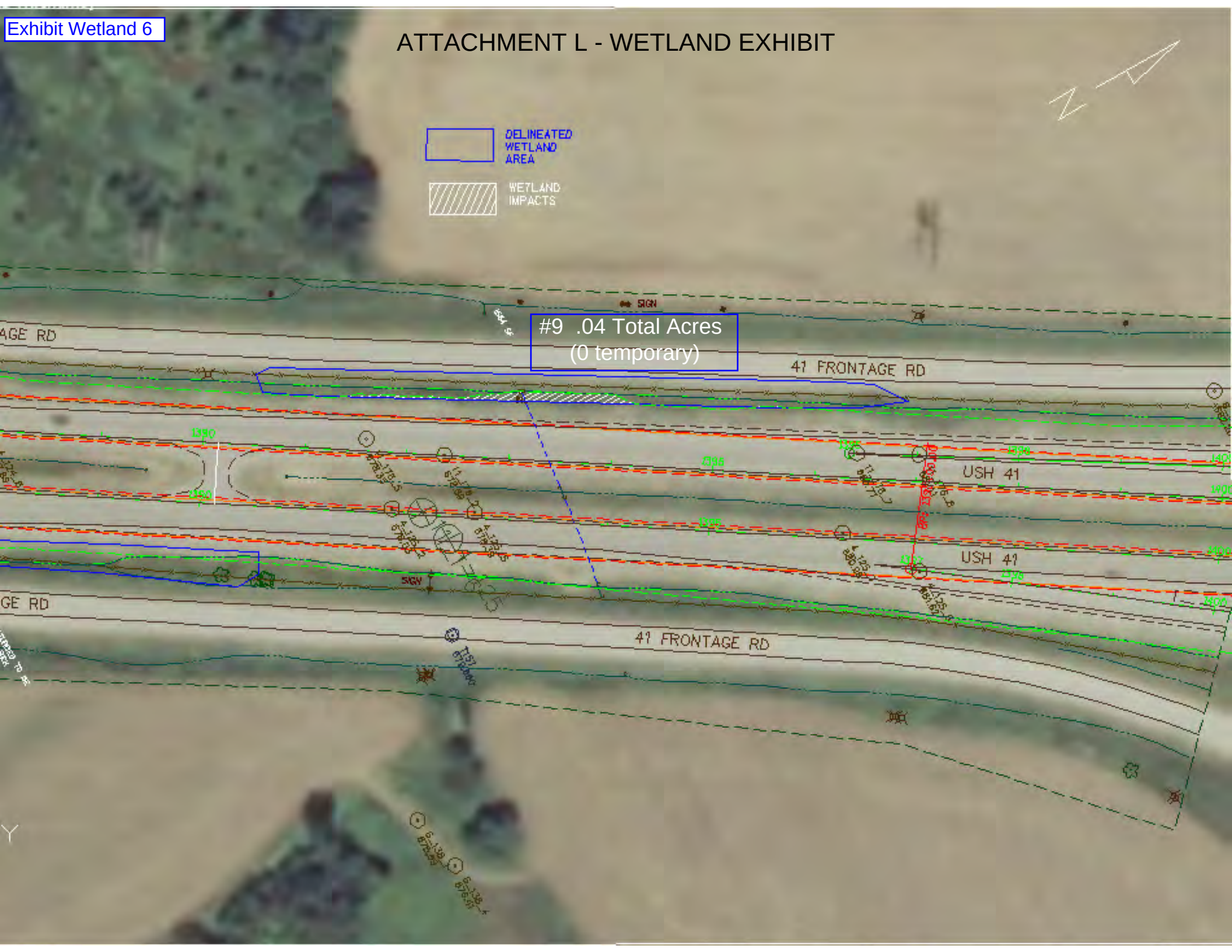


Exhibit Wetland 7

ATTACHMENT L - WETLAND EXHIBIT

Exhibit Wetland 8

ATTACHMENT L - WETLAND EXHIBIT


Exhibit Wetland 9
ATTACHMENT L - WETLAND EXHIBIT
#16 .09 Total Acres
(.07 temporary)
#17 .15 Total Acres
(.04 temporary)
#18 .03 Total Acres
(.01 temporary)
1345
1350
6593 SF
1121 SF
2640 SF


Exhibit Wetland 10
ATTACHMENT L - WETLAND EXHIBIT
#16 Cont.
257 SF
#19 .01 Total Acres
(.00 temporary)
1355
1360
1365
#20 .02 Total Acres
(.01 temporary)
80 SF
1355
1360
1365
#21 .00 Total Acres
(.00 temporary)
206 SF

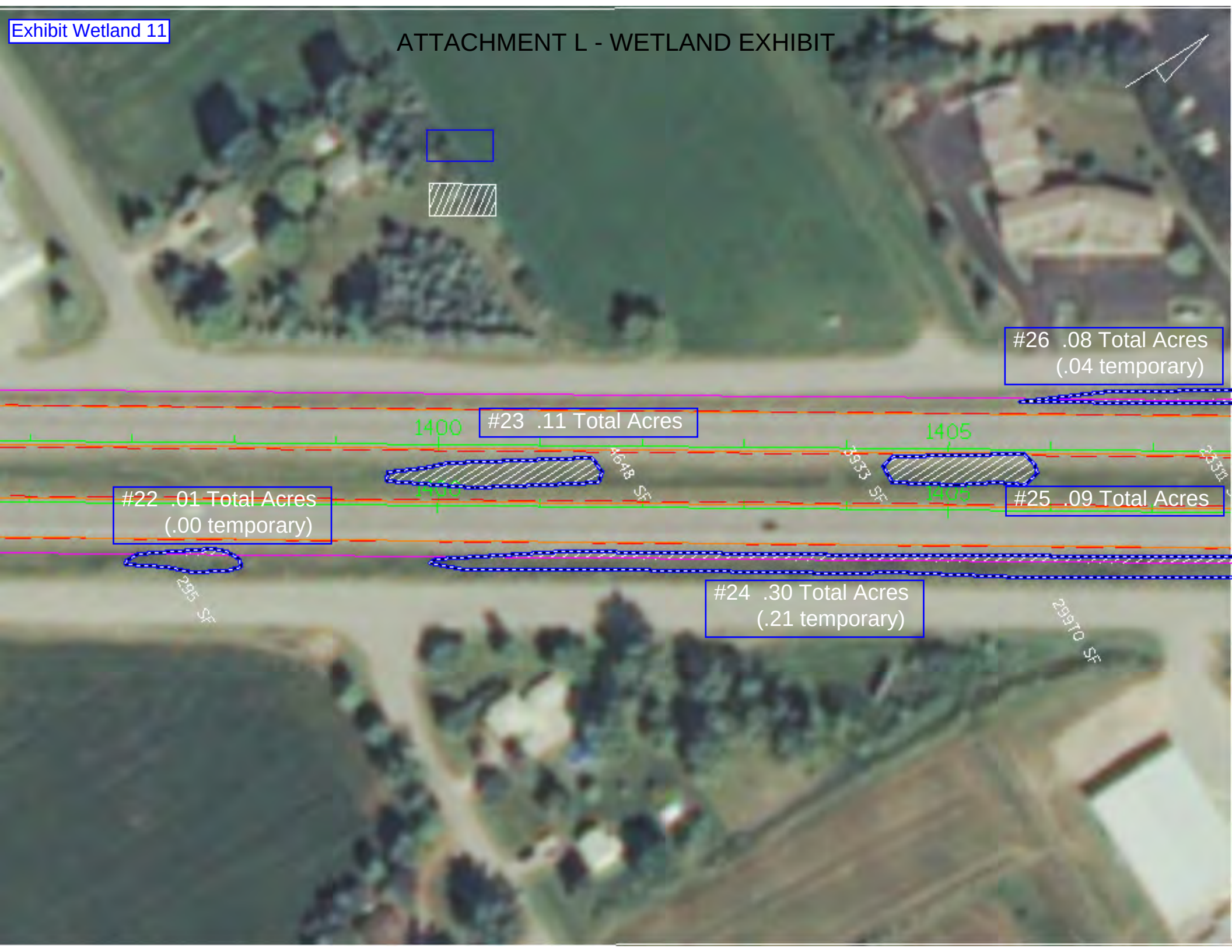


Exhibit Wetland 11
ATTACHMENT L - WETLAND EXHIBIT
#26 .08 Total Acres
(.04 temporary)
#23 .11 Total Acres
1400
1405
4648 SF
2933 SF
#22 .01 Total Acres
(.00 temporary)
#25 .09 Total Acres
295 SF
#24 .30 Total Acres
(.21 temporary)
29970 SF

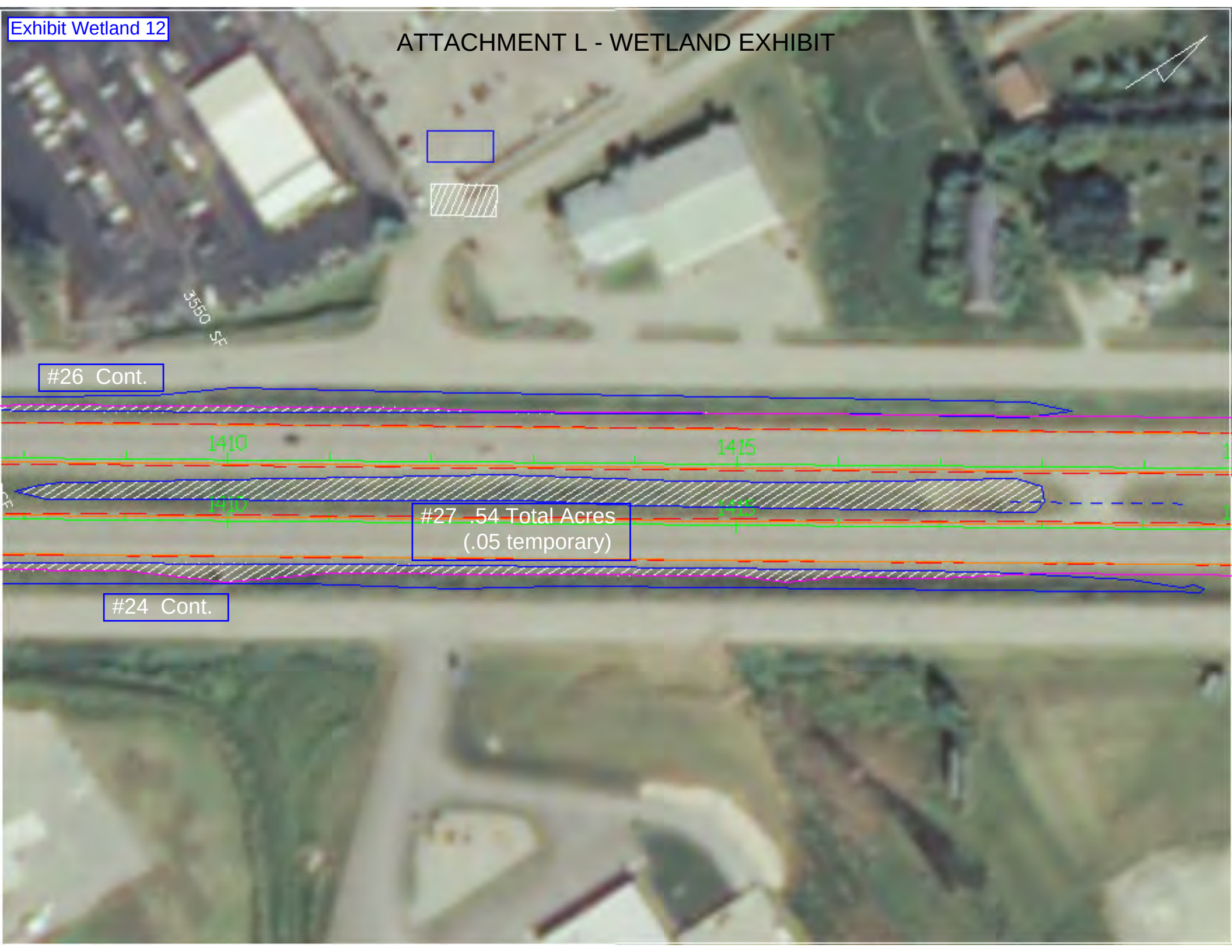


Exhibit Wetland 12
ATTACHMENT L - WETLAND EXHIBIT
#26 Cont.
1410
1415
#27 .54 Total Acres
(.05 temporary)
#24 Cont.

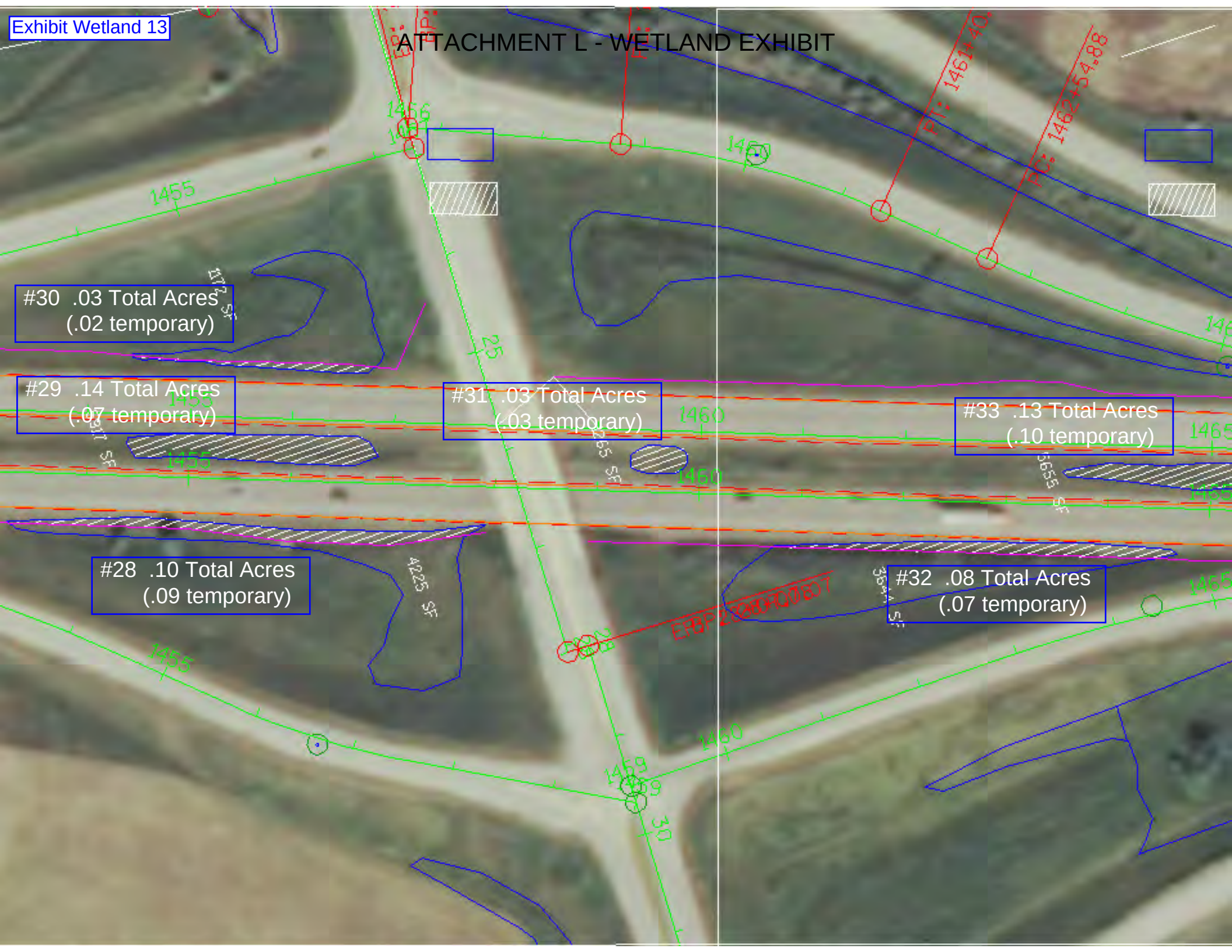


Exhibit Wetland 13
ATTACHMENT L - WETLAND EXHIBIT
#30 .03 Total Acres
(.02 temporary)
#29 .14 Total Acres
(.07 temporary)
#31 .03 Total Acres
(.03 temporary)
#33 .13 Total Acres
(.10 temporary)
#28 .10 Total Acres
(.09 temporary)
#32 .08 Total Acres
(.07 temporary)
PT: 1461+40
PC: 1462+54.88
1455
1460
1465

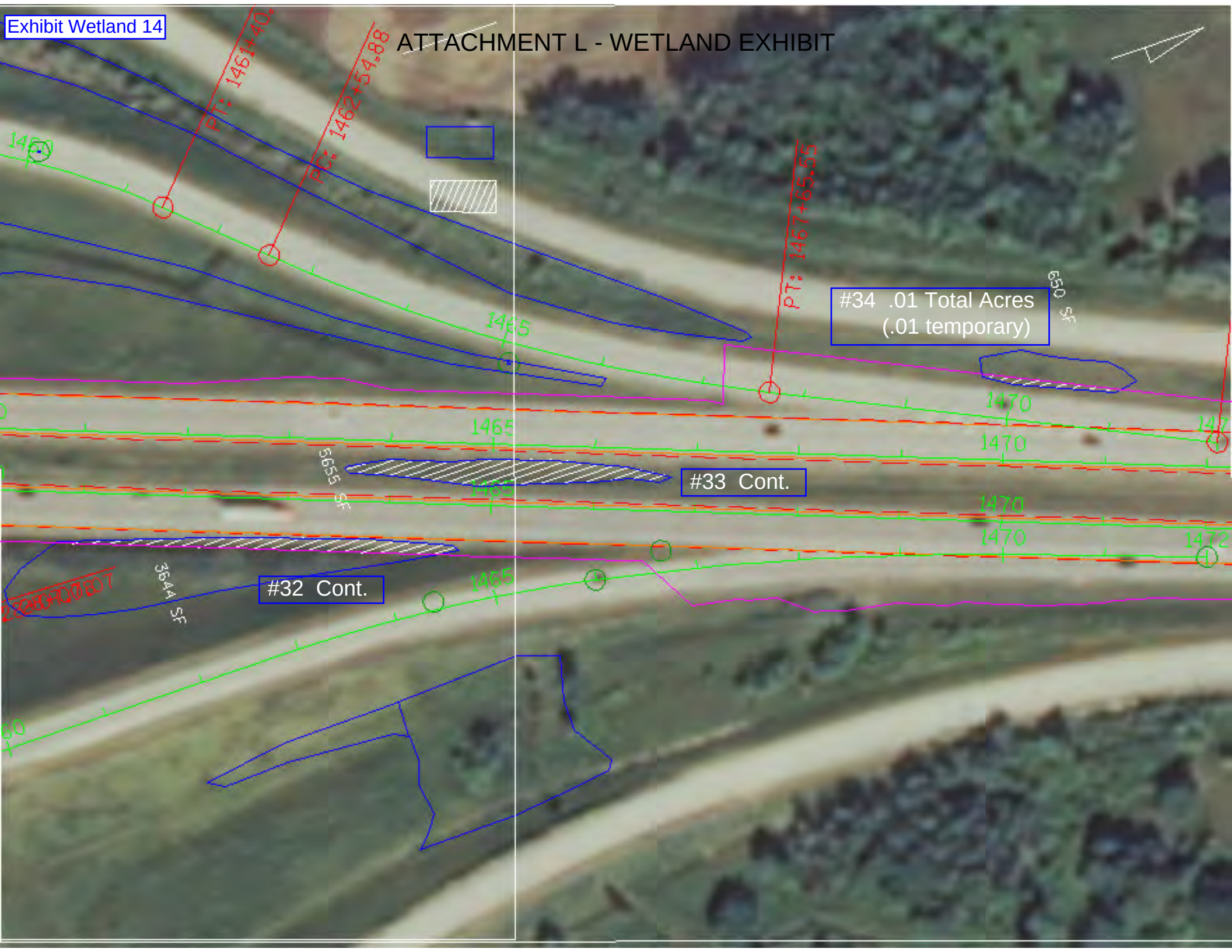


Exhibit Wetland 14
ATTACHMENT L - WETLAND EXHIBIT
PT: 1461+40
PT: 1462+54.88
PT: 1467+65.55
#34 .01 Total Acres
(.01 temporary)
650 SF
#33 Cont.
5655 SF
#32 Cont.
3644 SF
1460
1465
1470
1472


Exhibit Wetland 15
ATTACHMENT L - WETLAND EXHIBIT
#37 .00 Total Acres
(.00 temporary)
207 SF
#36 .01 Total Acres
(.01 temporary)
#38 .02 Total Acres
(.02 temporary)
856 SF
#35 .08 Total Acres
(.04 temporary)
3924 SF
1490
1495
1500


Exhibit Wetland 16
ATTACHMENT L - WETLAND EXHIBIT
#39 .13 Total Acres
(.13 temporary)
1520
1525
3825 SF
1520
1525


Exhibit Wetland 17
ATTACHMENT L - WETLAND EXHIBIT
#41 .02 Total Acres
(.01 temporary)
1535
1540
102 SF
1535
1540
#40 .17 Total Acres
(.15 temporary)
722 SF

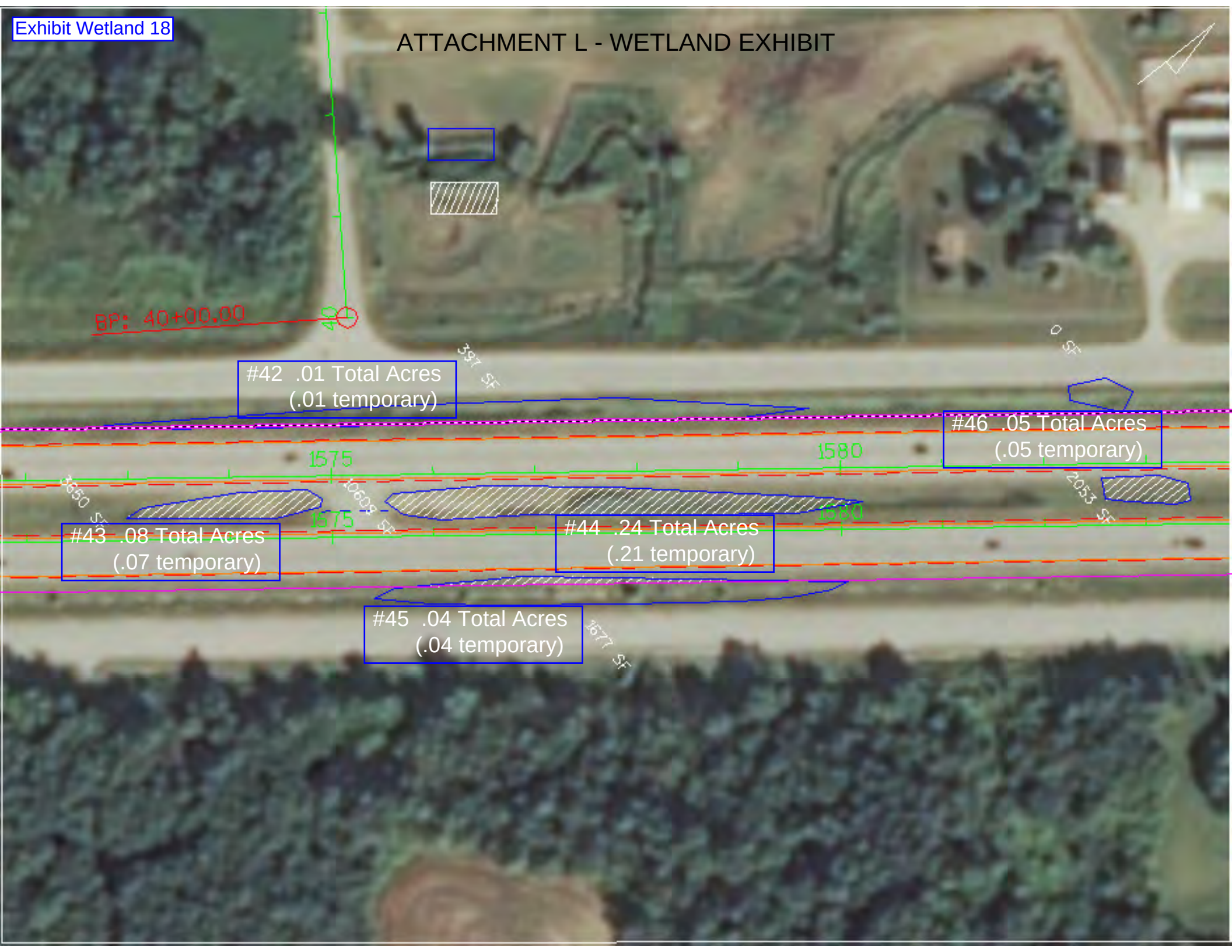


Exhibit Wetland 18
ATTACHMENT L - WETLAND EXHIBIT
BP: 40+00.00
#42 .01 Total Acres
(.01 temporary)
#43 .08 Total Acres
(.07 temporary)
#44 .24 Total Acres
(.21 temporary)
#45 .04 Total Acres
(.04 temporary)
#46 .05 Total Acres
(.05 temporary)
1575
1580
1575
1580
397 SF
0 SF
3650 SF
10608 SF
2053 SF
1677 SF

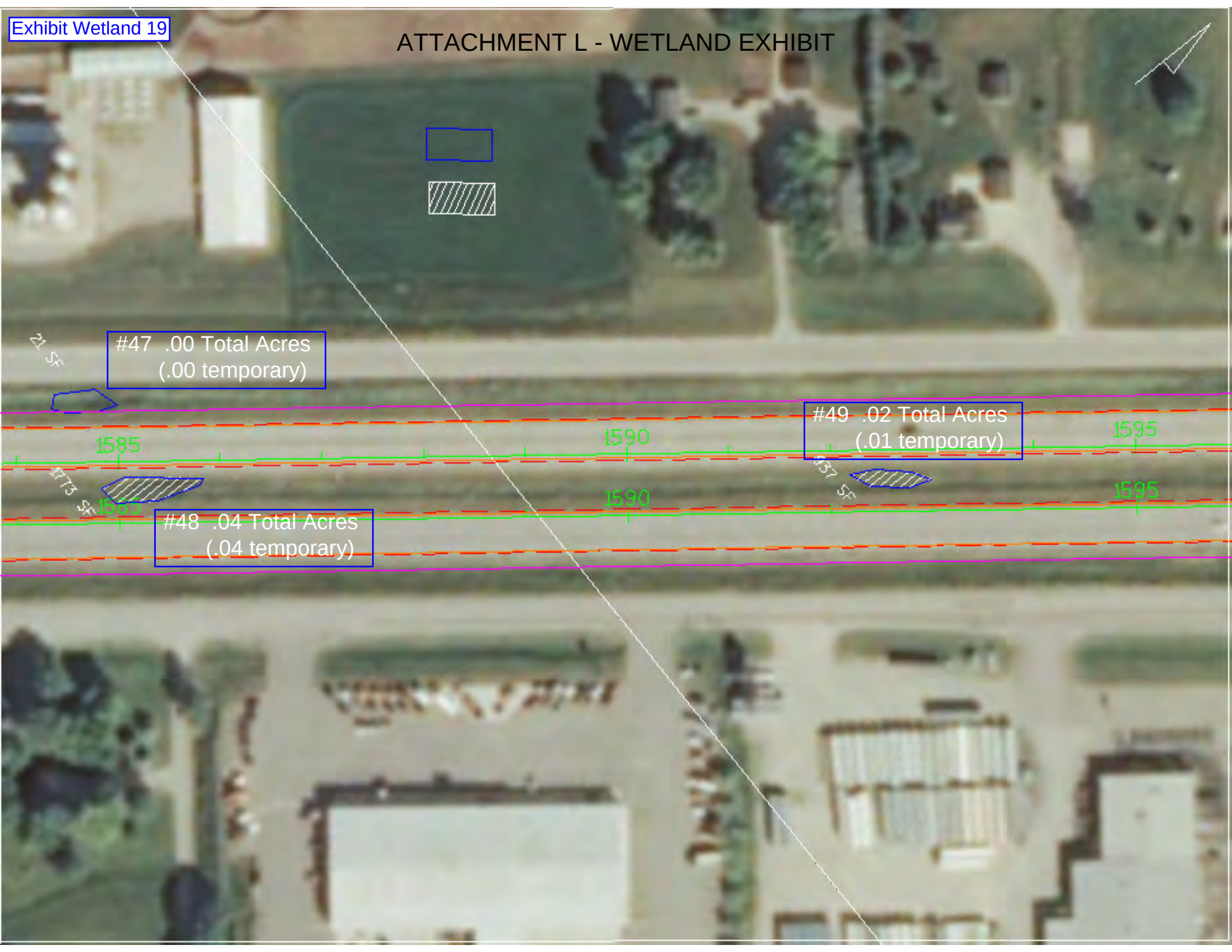


Exhibit Wetland 19
ATTACHMENT L - WETLAND EXHIBIT
#47 .00 Total Acres
(.00 temporary)
#49 .02 Total Acres
(.01 temporary)
#48 .04 Total Acres
(.04 temporary)
1585
1590
1595
1590
1595
1585

Exhibit Wetland 20

ATTACHMENT L - WETLAND EXHIBIT