CORRESPONDENCE/MEMORANDUM **State of Wisconsin**

Date: October 4, 2019

To: Michael Grage, PE
WisDOT DTSD NC Region, Local Program Project Manager

From: Jodie Olson, City Administrator
City of Berlin, Local Public Agency

Subject: MODERNIZATION AND REHABILITATION DESIGN STUDY REPORT
Project I.D. (design) 6995-09-01
C Berlin Ripon Road
South Church Street to City Limits
Local Street
Green Lake County

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

Recommended:

Jodie Olson, City Administrator — Date 10/14/19
City of Berlin

Concur:

Michael Grage, PE — Date 10/18/19
WisDOT DTSD NC Region, Local Program Project Manager

MODERNIZATION AND REHABILITATION DESIGN STUDY REPORT

Project I.D. (design) 6995-09-01
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South Church Street to City Limits
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CONSULTANT'S SEAL

Revised 10/4/2019

MODERNIZATION AND REHABILITATION DESIGN STUDY REPORT

1.0 Project Description and Need

1.1 Federal Oversight Project (Yes or No): No

1.2 Project Length and Termini

Project Length: 1.06 Miles, (0.40 mi urban + 0.66 mi rural)

Termini/Limits:

South Church Street (STH 49) to City Limits (Forest Ridge Road)

The section of Ripon Road to be rehabilitated lies entirely inside the limits of the city of Berlin, Section 10, T17N, R13E, Green Lake County.

This section of Ripon Road is a continuation of County Road F continuing through the city meeting STH 49 at Church Street.

See attachment A for project location map.

1.3 Existing Roadway Information

Roadway	Functional Class (Principal or Minor Arterial, Collector or Local)	Surrounding Development Type? Rural, Urban or Transitional	Corridors 2030 or Backbone (No or State Which)	NHS Route (Yes or No)	Long Truck Route (No or State Federal or State)	Access Control Tier	On Ped. Trans. Plan (Yes or No)	On Bike Trans. Plan (Yes or No)
Ripon Road	Collector	Urban & Rural	No	No	No	4	No	No

Comments: none

1.4 Need for Project

The purpose of this project is to address roadway deficiencies on Ripon Road from South Church Street to the City Limits and extend the service life of the road. This can be accomplished by addressing the following needs:

- Unserviceable pavement structure
- High percentage truck traffic on roadway
- Pedestrian safety and accessibility
- Right of way corrections

Project Needs

Pavement Deficiencies and Safety needs

The existing pavement structure is 4-1/2 to 5 inches of asphalt over 10 to 13 inches of base course, with cross section transition areas showing 4” of asphalt over 8” of base course. Currently the roadway is in poor condition with lane rutting and potholes resulting in hazardous ponding of rainfall.

The PASER scale is a 1-10 rating system for road pavement condition that uses visual inspection to evaluate pavement surface conditions. On a scale from lowest to highest a rating of 0 indicates that the roadway pavement has failed while a rating of 10 indicates perfect pavement. Currently the pavement PASER rating for Ripon Road is 3 from South Church Street to CTH VV and 4 from CTH VV to the Berlin City Limits. The pavement is showing closely spaced longitudinal and transverse cracking, severe lane rutting, some alligator cracking, and numerous patched potholes.

The northerly cross street, June Street, has an 8” concrete pavement running east / west through the intersection. The pavement is uneven and rough from patches made for multiple watermain and sanitary sewer repairs in the 1990’s and the installation of a relief storm sewer in 2011.

Traffic Needs

The WisDOT Traffic Forecast Report for this portion of Ripon Road indicates a year 2040 AADT of 2400 for the urban section, 3300 for the rural section with 25.2% trucks. Ripon Road has a functional classification of Major Collector with Design Class C3 based on Design ADT. This section of roadway is not a Wisconsin designated long truck route, not an oversize-overweight (OSOW) route, and is not part of the National Highway System (NHS).

Pedestrian Safety

Although the project corridor currently has pedestrian facilities that consist of concrete sidewalk with ramps on the north side of Ripon Road, the existing curb ramps do not meet current Americans with Disabilities Act (ADA) standards due to slopes and lack of Detectable Warning Fields.

Right of Way Needs

The proposed improvements will maintain the existing footprint of the current roadway. No work within the project scope will necessitate additional acquisition of Right of Way or construction easements.

2.0 Existing Facility Information

2.1 Posted Speed

Roadway or Roadway Segment	Posted Speed	Advisory Speed
Ripon Road Urban Section Sta 10+22 to Sta 30+47	25 MPH	None
Ripon Road Rural Section Sta 30+47 to Sta 64+88	35 MPH	None

2.2 Geometrics

2.2.1 Horizontal Alignment Features Outside Design Criteria

Horizontal Feature* (Curve, P.I. Deflection, etc.)	Location (Stationing)	Size* (Radius, P.I. Deflection, etc.)	Super-Elevation* (S.E.)	Speed Rating
Horiz Curve	PI Sta 11+00.81 Tight curve at Church St Intersection	Delta 35°28'48" Arc Length 68.98' Radius 111.40	None (curbed section)	Posted 25 MPH
PI Deflection	26+24.96 Deflection is in curbed urban section	Delta 3°44'46" Allowable for 30 MPH Table 5.4 FDM-11-10	None (curbed section)	Posted 25 MPH

* Controlling Criteria for Design Speed ≥ 50 mph

Comments:

Rural Section inside city limits 30+47 to 64+88, posted for 35 MPH, has no horizontal alignment features outside of desirable or minimum design standards.

2.2.2 Vertical Alignment Features/SSD* Outside Design Criteria

Vertical Feature (Curve, Vertical Grade Deflection, etc.)	Location (Stationing)	Sag or Crest	% Grades*	K Value/ Grade Deflection	Speed Rating	SSD** Met *(Yes or No) Length	DSD Met (Yes or No) Length
None							

* Controlling Criteria for Design Speed ≥ 50 mph, **SSD = Stopping Sight Distance

Comments: No mainline vertical alignment features or SSD fall outside of desirable or minimum standards for posted speeds

2.2.3 Grades* and Vertical Clearances* Outside Design Criteria

Location (Stationing, Overpass Structures, etc.)	% Grade*	Vertical Clearance*
none		

*Controlling Criteria for Design Speed ≥ 50 mph

Comments: No mainline grades and vertical clearance fall outside desirable or minimum design standards

2.3 Locations Side-Roads/ Intersections/ Interchanges Information/Geometrics

2.3.1 Locations Side-Roads Design Information

Roadway	Functional Class	Posted Speed (MPH)	Existing Traffic*** (AADT)	Approach Grades	Pedestrian Facilities (Yes or No)	Bicycle Facilities (Yes or No)
June St.	Local	25	>100	East -0.11% West +1.64%	Yes	No
S. Swetting St.	Local	25	<100	North +0.87% South +0.91%	Yes	No
S. Johnson St.	Local	25	260	North +1.25%	Yes	No
South St.	Local	25	<100	South +2.38%	No	No
Quarry St.	Local	25	930	North +0.57%	No	No
S. Industrial Rd.	Local	25	>100	North - 1.23%	No	No
Dartford St.	Local	25	<100	South +1.28	No	No
White Ridge Rd.	local	45	>100	North -2.26	No	No

*** If Existing Traffic volumes are not available, then state at a minimum whether AADT is assumed to be <100 or >100.

Comments: None

2.3.2 Intersections Geometrics Outside Design Criteria

Intersecting Roadway	Intersect. Type	Intersect. Angle	Traffic Control	SSD** Met* (Y/N)/ Length	ISD** Met (Y/N)/ Length	DSD** Met (Y/N)/ Length	Vision Triangle (Y/N)	Corner Clearance to Driveways Present (Y/N)
June St.	Urban	37°	Minor Road Stop	Y/778’	N/420’	Y/778’	No	No
S. Swetting St.	Urban	56°	Minor Road Stop	Y/320’	N/420’	Y/320’	No	No
S. Johnson St.	Urban	56°	Minor Road Stop	Y/662’	N/420’	Y/662’	No	No
South St.	Urban	85°	Minor Road Stop	N/A	N/420’	N/A	No	No
Quarry St.	Rural	83°	Minor Road Stop	Y/948’	Y/560’	Y/948’	Yes	Yes
S. Industrial Rd	Rural	52°	Minor Road Stop	Y/1919’	Y/560’	Y/1919’	Yes	Yes
Dartford St.	Rural	79°	Minor Road Stop	Y/1919’	Y/560’	Y/1919’	Yes	Yes
White Ridge Rd	Rural	50°	Minor Road Stop	Y/444’	Y/560’	Y/444’	Yes	No

* Controlling Criteria for Design Speed ≥ 50 mph

** SSD=Stopping Sight Distance, ISD=Intersection Sight Distance, and DSD=Decision Sight Distance (See FDM 11-25-1).

Comments: none

Has intersection control evaluation (ICE) worksheet been coordinated (Yes or No)? No

2.3.3 Locations Interchanges Geometrics Outside of Design Criteria

Intersecting Roadways	Interchange Type	Ramp Types	Ramp Design Speed	Horizontal Curve on Ramp	Vertical Curve on Ramp	Ramp Grades	SSD** Met* (Y/N) Length	DSD** Met (Y/N) Length
none								

* Controlling Criteria for Design Speed ≥ 50 mph

**SSD = Stopping Sight Distance, DSD = Decision Sight Distance (See FDM 11-25-1).

Comments: No Interchanges in Project

2.4 Segments Cross Section Geometrics Outside of Design Criteria

- Number of roadways 1
- Number of lanes 2
- Median width N/A
- Lane width* 12'
- Shoulder width* (Total and Paved or Curb and Gutter)

Sta 10+22 to 30+47 Urban Section – 8' paved parking lane plus 30" curb and gutter\

Sta 30+37 to 64+88 Rural Section – 6' to 7' shoulder (3' paved + 3' to 4' aggregate)

- Bicycle facility type - None
- Sidewalk and curb ramps - Existing sidewalk ramps to not meet current accessibility standards. Sidewalks ramps will be removed and replaced to meet current accessibility standards. Detectable warning fields (with fabricated truncated dome pattern per current standard) are to be installed at Church St, June St., Swetting St and S. Johnson St. All sidewalk curb ramps in the project area will meet accessibility standards and include truncated dome detectable warning fields when the project is complete.
- Cross slope* - 2.5%
- Super-elevation*

Sta 10+22 to 30+47 Urban Section – none

Sta 30+37 to 64+88 Rural Section – none

- Horizontal clearance*

Sta 10+22 to 30+47 Urban Section – 8' + 2.5' curb & gutter

Sta 30+37 to 64+88 Rural Section – 6' minimum shoulder (3' paved + 3' aggregate)

- Clear zone

Urban Section is curbed

Rural Section 16' from edge of travelway on fore slope

- Vertical clearance* No existing vertical Obstructions or Constraints
- Side-slopes/Ditch sections for Rural Section Existing 4:1 fore-slope

2.5 Pavement Structure/Condition

Roadway	Pavement Types and Thicknesses	Physical Description
Ripon Road (urban section) 10+22 to 12+77 14+80 to 30+47	4.5" to 5" Asphalt Pavement 8" to 13" Aggregate Base Course 12" Sand / Pit Run Gravel	Both longitudinal and transverse cracking Severe potholes Numerous Patches
Ripon Road (urban section) 12+77 to 14+80	8" PCC Pavement 8" to 13" Aggregate Base Course 12" Sand / Pit Run Gravel	Cracking and failing joints This section has extensive patches from san sewer, storm sewer, and watermain replacements
Ripon Road (rural section) 30+47 to 64+88	4.5" to 5" Asphalt Pavement 8" to 13" Aggregate Base Course 12" Sand / Pit Run Gravel	Both longitudinal and transverse cracking Severe potholes Numerous Patches

Comments: none

2.6 Right-of-Way

2.6.1 Encroachments

Location (Station and Distance Left or Right)	Encroachment Type
14+10.3 / 28.2' RT	242 June St House inside RW – corner encroaches 4.8'

2.6.2 Unique Right-of-Way Issues

None

2.7 Structures

Existing Structure I.D. #	Feature Crossed	Structure Type	Sufficiency Rating	Clear Roadway Width*	Railing Type	Structurally Deficient or Functionally Obsolete*	Inventory Load Rating*
none							

* Controlling Criteria for Design Speed ≥ 50 mph

Comments: No structures impacted by proposed improvement

2.8 Utilities

Utility Name	Type of Utility	General Location	Underground/ Overhead/Both
City of Berlin	San Sewer	In roadway from June St to South St - underground utility not impacted by project North of Roadway Sta 39+50 to S Industrial Drive intersection underground utility not impacted by project Intersection of Quarry St & Ripon Rd – 2 MH castings to be replaced as part of this project Intersection of S Industrial Dr & Ripon Road- 1 Manhole casting to be replaced as part of this project	Underground
City of Berlin	Storm Sewer	In roadway at these intersections Church St, June St, Swetting St & Johnson St - underground utility not impacted by project	Underground
City of Berlin	Watermain	In roadway from Church St to Quarry St - underground utility not impacted by project North of and parallel to roadway Quarry St to S Industrial Park Rd - underground utility not impacted by project Intersection of Quarry St & Ripon Rd – 1 Valve Box & 1 Valve MH casting to be replaced as part of this project Intersection of S Industrial Dr & Ripon Road- 2 Valve Boxes to be	Underground

		replaced as part of this project	
Century Link	Telephone	North side of roadway along length of project – overhead utility and poles not impacted by project	Overhead
Spectrum/Charter	Cable Television	North side of roadway along length of project – overhead utility and poles not impacted by project	Overhead
Alliant Energy	Electric	North side of roadway along length of project - – overhead utility and poles not impacted by project	Overhead
Alliant Energy	Natural Gas	North Side roadway from Church St to White Ridge Rd – underground utility not impacted by project South Side of Roadway from White Ridge Road to Forest Ridge Rd – underground utility not impacted by project	Underground

Comments: Utility coordination is ongoing. Due to the nature of the pulverizing / resurfacing no conflicts with existing utilities are anticipated.

2.9 Railroad Crossings

Location (Sta.)	Railroad Name	No. of Tracks	Function	Crossing Type
none				

Comments: No Railroad Crossing on project

2.10 Special Soils Conditions

None

2.11 Unique Project Features

None

3.0 Traffic Information

3.1 Traffic Volumes/Conditions

3.1.1 Traffic Forecast Report Attachment (see attachment D)

3.1.2 Highway Capacity Analysis

Location (Roadway Segment or Intersection)	Existing Level of Service	Design Year Level of Service Under Existing Roadway	Design Year Level of Service Under Proposed Roadway
N/A			

Comments: Highway Capacity Analysis not completed for this project.

3.2 Crash Analysis

3.2.1 Project Crash Information

			Number and Severity of Crashes			
Roadway	Crash Rate (1) (Year)	Statewide Crash Rate (1) (Year)	Fatal	Injury	Property Damage	Total No. Crashes
Ripon Road	345 (2013-2017)	356 (2013-17avg)	0	0	1	3

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

Comments: Crash rate is based on AADT of 3000 vehicles on Ripon Road and a total corridor length of 1.06 miles. Statewide crash rate is based on Local Roads, Urban Streets group (rural city street). There were a total of 4 crashes analyzed within the project area. 3 of the 4 crashes were outside of our project work limits but were at the intersections where our work will be starting and stopping. The last incident was within the project area.

3.2.2 Significant Crash Locations or Patterns

Location or Pattern	Year	Number and Severity of Crashes				Crash Rate(2)	Possible Factors Contributing to Crashes
		Fatal	Injury	Property Damage	Total		
Ripon Road & S Church St Intersection	2013-2017	0	0	2	2	0.37	One accident involved two vehicles where one of the vehicles failed to yield during a lane change on S Church St. The second accident involved an inattentive driver hitting a utility pole. Both accidents appear to be driver error and not related to roadway conditions or design layout. Project scope does not include any work in the intersection of Ripon Road and S Church St.
Ripon Road & S Street Intersection	2013-2017	0	1	0	1	0.86	This accident involved an elderly lady that ran off the road and collided with the box culvert due to inattentive driving. There are no visible obstructions to the roadway and this is a straight section of road corridor; the accident appears to be driver error and not related to roadway conditions or design layout.
Ripon Road & White Ridge Intersection	2013-2017	0	0	1	1	0.86	This accident involved a vehicle that failed to yield while making a left turn to a second vehicle going straight. The accident appears to be driver error and not related to roadway conditions or design layout. Project scope does not include any work in the intersection of Ripon Road and White Ridge Road.

(2) Crashes per million entering vehicles (MEV)

Comments: Crash rate based on AADT of 3000 vehicles on Ripon Road.

4.0 Proposed Design Criteria

4.1 Design Class

Roadway or Roadway Segment	Design Class
Ripon Road	Urban 2a

4.2 Design Speed*

Roadway or Roadway Segment	Design Speed*	Posted Speed
Ripon Road Urban Section Sta 10+22 to Sta 30+47	30 mph	25 mph
Ripon Road Rural Section Sta 30+47 to Sta 64+88	40 mph	35 mph

* Controlling Criteria for all Design Speeds

4.3 S-2/S-3 Design Justifications (DJs)

4.3.1 Controlling Criteria Design Justifications (DJs)

None

4.3.2 Non-Controlling Criteria Design Justifications (DJs)

None

4.4 Typical Cross Section(s) Alternative Features Considered

The project was evaluated using WisPAVE software in order to determine the appropriate paving structure requirements for the project. Several options were considered based on truck traffic counts to meet the structural requirements for the new roadway while still remaining within the existing footprint of the roadway.

The paving design for this work provides two alternates for the urban section and three alternates for the rural cross sections. These have been combined into three project design alternates. A detailed description of these alternates is shown below.

Alternate No-Build consists of continued use of the existing facility with no improvements other than routine maintenance. This alternate would have the least amount of environmental and traffic impacts but does not fulfill the purpose and need of the proposed action and therefore, was eliminated from further consideration. However, this alternative is being used as a baseline for comparison of impacts with other alternatives.

Alternate #1 includes pulverizing both the urban and rural sections of the project excessively deep (15-1/2” in urban and 17” in rural), removing 6" of the pulverized material, and installing 6-1/4" of asphalt pavement.

This alternate also includes updating accessibility ramps to meet current ADA standards, satisfying our need for pedestrian safety and accessibility.

This option did obtain a structural number for both sections that is just above what is required by WisPAVE.

Alternate #2 entails pulverizing the urban section 15-1/2” deep, removing 6" of the pulverized material, and installing 6-1/4" of asphalt pavement. For the rural section, the existing 5" of asphalt pavement would be milled off, 5" of the existing base course would be removed and replaced with 4" of recycled asphalt millings, and 6-

1/4" of asphalt pavement would be installed.

This alternate also includes updating accessibility ramps to meet current ADA standards, satisfying our need for pedestrian safety and accessibility.

This option, like the first, obtains a structural number for the pavement design that just meets that required by WisPAVE. However, both of these options run the risk of underground utility issues due to the deep pulverizing and possibility of multiple passes required to pulverize to these depths. Additionally, the aggregate base course could become contaminated with unwanted sub-grade material by pulverizing to these depths.

Alternate #3 (Preferred Alternative) includes base course stabilization which would maintain the existing centerline elevations, keep the project within the current footprint of the roadway, and meet the structural number required by WisPAVE. With this option, the existing 5" of asphalt pavement would be milled off in both section. Base course stabilization would then be utilized in both sections (5" in urban and 6" in rural), and 5" of asphalt pavement would be installed.

This option is comparable in cost to the other two options, but provides the highest pavement design structural number for each section. Additionally, Alternate 3 eliminates potential issues that could arise from pulverizing to the excessive depths that were proposed in Alternates 1 and 2. Alternate 3 also requires the least amount of excavation and/or grading that is required for removing pulverized material.

The project area located at the June Street Intersection will have 8” of existing concrete removed and 3” of base course added. This area will then have 5” of base course stabilization and 5” asphalt installed in conjunction with the rest of the urban area. It will also meet the same WisPAVE design as listed in the rest of the urban area of the project. This alternate also includes updating accessibility ramps to meet current ADA standards, satisfying our need for pedestrian safety and accessibility.

5.0 Proposed Design Improvement

5.1 Improvement Type(s)

Improvement is Rehabilitation by Pavement Replacement being done through STP-Rural project funding with a legislative subprogram code of 206- Local Transportation Facility Improvement.

5.2 Proposed Geometrics Information

5.2.1 Horizontal Alignment* Information

Existing alignment will be closely maintained with design speed standards of 30 mph in the urban area of the project and 40 mph in the rural area of the project. See attachment C for project plan sheets

5.2.2 Vertical Alignment/Stopping Sight Distance* Information

Existing Vertical Alignment will be closely maintained with design speed standards of 30 mph in the urban area of the project and 40 mph in the rural area of the project. See attachment C for project Plan Sheet

5.2.3 Grades* and Vertical Clearances* Information

Existing grades to be maintained and project has no vertical clearance constraints

5.3 Sideroads/Intersections/Interchanges Information

5.3.1 Side-Roads Information

Roadway Name	Functional Class	Design Speed (MPH)	Design Year Traffic (AADT)	Design Class	Approach Grades	Ped. Facilities (Y/N)	Bike Facilities (Y/N)
June St.	Local Street	25	>100	Local	East -0.11% West +1.64%	Yes	No
S. Swetting St.	Local Street	25	<100	Local	North +0.87% South +0.91%	Yes	No
S. Johnson St.	Local Street	25	260	Local	North +1.25%	Yes	No
South St.	Local Street	25	<100	Local	South +2.38%	No	No
Quarry St.	Local Street	25	930	Local	North +0.57%	No	No
S. Industrial Rd.	Local Street	25	>100	Local	North - 1.23%	No	No
Dartford St.	Local Street	25	<100	Local	South +1.28	No	No
White Ridge Rd.	Local Street	45	>100	Local	North -2.26	No	No

Comments: None

5.3.2 Intersections Information/Proposed Geometrics

Intersecting Roadway Names	Intersect. Type	Intersect. Angle	Traffic Control	SSD** Met* (Y/N)/ Length	ISD** Met (Y/N)/ Length	DSD** Met (Y/N)/ Length	Vision Triangles Proposed (Y/N)	Corner Clearance to Driveways Met (Y/N)
June St.	At Grade	37°	SR Stop	Y/778’	N/420’	Y/778’	No	No
S. Swetting St.	At Grade	56°	SR Stop	Y/320’	N/420’	Y/320’	No	No
S. Johnson St.	At Grade	56°	SR Stop	Y/662’	N/420’	Y/662’	No	No
South St.	At Grade	85°	SR Stop	N/A	N/420’	N/A	No	No
Quarry St.	At Grade	83°	SR Stop	Y/948’	Y/560’	Y/948’	Yes	Yes
S. Industrial Rd	At Grade	52°	SR Stop	Y/1919’	Y/560’	Y/1919’	Yes	Yes
Dartford St.	At Grade	79°	SR Stop	Y/1919’	Y/560’	Y/1919’	Yes	Yes
White Ridge Rd	At Grade	50°	SR Stop	Y/444’	Y/560’	Y/444’	Yes	No

* Controlling Criteria for Design Speed ≥ 50 mph

** SSD = Stopping Sight Distance, ISD = Intersection Sight Distance, DSD = Decision Sight Distance (See FDM 11-25-1).

Comments: None

Has intersection control evaluation (ICE) worksheet been coordinated (Yes or No)? No

5.3.3 Interchanges Information/Proposed Geometrics – N/A to Project

Name of Intersecting Roadways	Interchange Type	Ramp Type	Ramp Design Speed	Ramp Grades	SSD** Met* (Y/N)/ Length	DSD** Met (Y/N)/ Length	Vision Triangle (Yes or No)
none							

*Controlling Criteria for Design Speed ≥ 50 mph

**SSD = Stopping Sight Distance, DSD = Decision Sight Distance (See FDM 11-25-1).

Comments: No Interchanges in Project

5.4 Roundabout(s) Information – N/A to Project

No Roundabouts in Project

5.5 Segments Proposed Cross Section/Pavement Structure Information

- Number of roadways - 1
- Number of lanes - 2
- Median width/type – N/A
- Lane width*/type (Driving, Parking, Bike Lane, etc.) 12’ driving lanes, 8’ parking in urban section
- Shoulder width* (Total and Paved or Curb and Gutter)

Sta 10+22 to 30+47 Urban Section – 8’ paved parking lane plus 30” curb and gutter\

Sta 30+37 to 64+88 Rural Section – 6’ shoulder (3’ paved + 3’ aggregate)

- Bike facilities proposed - None
- Pedestrian facilities/sidewalk proposed – None (existing sidewalk and ramps to remain)
- Accessibility Improvements proposed - Existing sidewalk ramps do not meet current accessibility standards. Sidewalks ramps will be removed and replaced to meet current accessibility standards. Detectable warning fields (with fabricated truncated dome pattern per current standard) are to be installed at Church St, June St., Swetting St and S. Johnson St. All sidewalk curb ramps in the project area will meet accessibility standards and include truncated dome detectable warning fields when the project is complete.
- Cross slope* 2.5%
- Super-elevation*

Sta 10+22 to 30+47 Urban Section – none

Sta 30+37 to 64+88 Rural Section – none (Curve 33+69 to 36+06, R=1350’ /SE not required for design speed)

- Horizontal clearance*

Sta 10+22 to 30+47 Urban Section – 8’ + 2.5’ curb & gutter (existing curb line to be maintained)

Sta 30+37 to 64+88 Rural Section – 6’ minimum shoulder (3’ paved + 3’ aggregate)

- Vertical clearance* No vertical obstructions or constraints to be addressed
- Pavement structure

Sta 10+22 to 30+47 Urban Section – 5” HMA Pavement on 5” Bituminous Base Course Stabilization

Sta 30+37 to 64+88 Rural Section – 5” HMA Pavement on 6” Bituminous Base Course Stabilization

- Clear zone 16’ on foreslope
- Side-slope/Ditch sections existing 4:1 fore-slope is to be maintained

*Controlling Criteria for Design Speed ≥ 50 mph

5.6 Street Lighting Improvements – N/A to Project

Location	Type	Break-away Requirements
none		

5.7 Structure Improvements Information – N/A to Project

5.7.1 Bridge Structures – N/A to Project

Structure I.D. #	Location	Structure Type	Length	Clear Width*	No. of Spans	Vertical Clearance*	Horizontal Clearance*
None							
	Proposed Improvement:						

* Controlling Criteria for Design Speed ≥ 50 mph

Comments: None

5.7.2 Box Culverts and Multiple Pipe Structures – N/A to Project

Structure I.D. #	Location	Type	Length	No. Pipes
None				
	Proposed Improvement:			

Comments: None

5.7.3 Retaining Walls and Noise Barrier Structures – N/A to Project

Structure I.D. #	Location	Type	Length	Height
None				
	Proposed Improvement:			

Comments: None

5.7.4 Sign Bridge Structures – N/A to Project

Structure I.D. #	Location	Type	Length	Clear Roadway Width	Vertical Clearance*	Horizontal Clearance*	Clear Zone Under
None							
	Proposed Improvement:						

* Controlling Criteria for Design Speed ≥ 50 mph

Comments: None

5.7.5 Tunnel Structures – N/A to Project

Structure I.D. #	Location	Type (Veh., Ped., Bicycle, etc.)	Length	Lighting Type	Vertical Clearance*	Horizontal Clearance*
None						

	Safety Features	Coordination with Local Emergency Responders
	Proposed Improvement:	

* Controlling Criteria for Design Speed ≥ 50 mph

Comments: None

5.7.6 Touchdown Points on Local Bridge Program Projects – N/A to Project

None

5.8 Permanent Traffic Control

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

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

Comments: Permanent detour signs will be installed as part of the construction process and removed at project completion. See Transportation Management Plan (TMP) in attachment D.

5.9 Safety Enhancements/Mitigation Measures

Accessibility Concerns:

Presently curb ramps provided for pedestrian crossings at the Church St, June St, Swetting St and S. Johnson St intersections do not meet current accessibility standards.

The existing ramps will be removed and replaced to current accessibility standards including the installation of detectable warning fields per WisDOT standards.

5.10 Real Estate – N/A to Project

No Land or Easement Acquisition is required for this Project

5.10.1 Real Estate Acquisition – N/A to Project

Plat I.D.:

Relocations		Land (Acres)	Permanent Easements	Temporary Easements	Construction Permits
Type	Number				
None					

Comments: None

5.11 Utilities – N/A to Project

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

Describe any special design features to accommodate utilities:

None Required

Major Utility Agreements:

None Required

Comments: None

5.12 Railroads – N/A to Project

Describe improvements to Railroad Facilities:

No Railroad in Project

Railroad Agreements:

N/A

Comments: None

5.13 Financing and Scheduling

Construction I.D.	Cost Estimate	Type of Funding			Proposed Timeframe for Construction	Ties to Other Work or Projects	Incentive/ Disincentive Clauses (Yes or No)
		% Fed.	% State	% Local			
6995-09-71	$1,025,900 With E&C	80	0	20	2020	No	No

Describe Incentive/Disincentive Clauses:

None

Non-participating Work:

None

Deferred Construction Work (Preventative Maintenance projects):

N/A

5.14 Unique or Non-Standard Features

5.14.1 Hazardous Waste

The Project Phase 1 Hazardous Materials Assessment Report indicates that a search of DATCP and WDNR hazardous materials inventory databases shows 5 sites along the project corridor which are either closed LUST or ERP locations. As construction disturbance is generally limited to the existing roadway base course and where spot sections of curbing are to be replaced, disturbance of groundwater, contaminated soils, or hazardous materials adjacent to the identified sites is not foreseen.

5.14.2 Environmental Commitments

Environmental Factor	Commitment (If none, include 'No special or supplemental commitments required.')
General Economics	No special or supplemental conditions required

Business	No special or supplemental conditions required
Agriculture	No special or supplemental conditions required
Community or Residential	No special or supplemental conditions required
Indirect Effects	No special or supplemental conditions required
Cumulative Effects	No special or supplemental conditions required
Environmental Justice	No special or supplemental conditions required
Historic Resources	No Historic Resources or Archaeological Sites affected – Phil Salkin, Archaeological Consulting Services letter dated 8/20/18 (Submitted with Section 106 Materials)
Archaeological/Burial Sites	No Historic Resources or Archaeological Sites affected – Phil Salkin, Archaeological Consulting Services letter dated 8/20/18 (Submitted with Section 106 Materials)
Tribal Coordination/Consultation	Tribal Consultation Letters prepared by KEG and sent by Dennis Mack Cedar Corp dated August 1, 2018
Section 4(f) and 6(f) or Other Unique Areas	No special or supplemental conditions required
Aesthetics	No special or supplemental conditions required
Wetlands	No special or supplemental conditions required – Finding of no impacts is documented in letter by Jay Schiefelbein, WDNR NE Region Environmental Analysis & Review Specialist dated August 2, 2018. (See Appendix E)
Rivers, Streams and Floodplains	No special or supplemental conditions required – Finding of no impacts is documented in letter by Jay Schiefelbein, WDNR NE Region Environmental Analysis & Review Specialist dated August 2, 2018. (See Appendix E)
Lakes or other Open Water	No special or supplemental conditions required – Finding of no impacts is documented in letter by Jay Schiefelbein, WDNR NE Region Environmental Analysis & Review Specialist dated August 2, 2018. (See Appendix E)
Groundwater, Wells and Springs	No special or supplemental conditions required
Upland Wildlife and Habitat	No special or supplemental conditions required
Coastal Zones	No special or supplemental conditions required
Threatened and Endangered Species	No special or supplemental conditions required – Finding of no impacts is documented in letter by Jay Schiefelbein, WDNR NE Region Environmental Analysis & Review Specialist dated August 2, 2018. (See Appendix E)
Air Quality	No special or supplemental conditions required
Construction Stage Sound Quality	No special or supplemental conditions required
Traffic Noise	No special or supplemental conditions required
Hazardous Substances or Contamination	No special or supplemental conditions required – Phase 1 Hazmat Report by Basil Orechwa, Kunkel Engineering Group reported that disturbance of groundwater, contaminated soils, or hazardous materials on identified sites adjacent to the project is not foreseen.

Storm Water	No special or supplemental conditions required – No WPDES Construction Site Storm Water General Permit coverage is required: Project area has less than 1 acre of soil disturbance.
Erosion Control	Project plans show required erosion control measures that shall be implemented by the project contractor. These include as pay items inlet protection for the City of Berlin storm sewer system in the urban area of the project and sections of silt fence adjacent to inventoried wetlands adjacent to the project limits. All project erosion control shall be in place prior to construction and maintained through final stabilization. Per requirements outlined in letter by Jay Schiefelbein, WDNR NE Region Environmental Analysis & Review Specialist dated August 2, 2018: Once the project contract has been awarded, the contractor will be required to outline their construction methods in the ECIP. An adequate ECIP for the project must be developed by the contractor and submitted to this office for review at least 14 days prior to the preconstruction conference. For projects regulated under the TCGP, submit the ECIP as an amendment to the ECP.
Other	No special or supplemental conditions required

5.14.3 Public Involvement

A public involvement meeting was held on August 8, 2019 at the Berlin City Hall Council Chambers in Berlin, WI. The goal of the meeting was to educate and involve the public as well as city officials and stakeholders in the decisions being made throughout the design process. Notification letters were sent out by the City of Berlin and the meeting was attended by a total of 9 people. Primary concerns that were brought to attention and discussed throughout the meeting were how semi-truck access will be maintained for local business on Industrial Park Road. Construction will have to be staged so that intersections are not blocked to the industrial park during construction. Other topics that were discussed included whether or not there would be any ditch grading as part of the project, if the asphalt pavement would be installed thicker at the June Street intersection, and a question about a traffic view obstruction from the dumpsters at a local gas station which the City of Berlin offered to address.

5.14.4 Value Engineering – N/A to Project

6.0 Synopsis

Reports, Documents and Coordination	Completion/ Approval Dates (xx/xx/xxxx)	Status of Coordination or Other Information as Needed
Concept Definition Report (CDR)		N/A to Project
Safety Certification Document (SCD)		N/A to Project
Bridge or Structure Certification Documentation (BOSCD) (if needed)		N/A to Project
Risk Assessment (RA) (if needed)		N/A to Project
Signed Pavement Design Report (PDR)	06/10/2019	
Public Involvement Plan (PIP)	06/10/2019	
Structure Survey Report (SSR) (if needed)		N/A to Project
Public Information Meeting(s) (PIM(s))	08/8/2019	
Signed State Municipal Agreement(s) (SMA(s)) (if needed)	05/15/2019	Revised SMA
Final Scope Certification (FSC)		N/A to Project
SHPO Coordination Acceptance (Section 106, etc.) (SHPO)	06/13/2019	Submitted to WisDOT with Consultant Letter
DNR Coordination Acceptance (401 Cert., etc.) (DNR)	08/02/2018	WDNR review letter, J. Schiefebein
Preliminary Plan Review Complete (PPRC)	06/07/2019	Submitted to WisDOT
Preliminary Structure Plan Review Complete (PSPRC) (if needed)		N/A to Project
Signed Environmental Document (ED) (Type: PCE)	09/11/2019	
Transportation Management Plan (TMP(s)) (Type: 2)	10/14/19	
Freight/OSOW Accommodations Coordination (FOAC)		N/A to Project
Roadside Hazard Analysis Sheet (RHA) (if needed)		N/A to Project
Drainage Design Report (DDR) (if needed)		N/A to Project
Status of Statutory Actions (if needed)		N/A to Project

Comments:

7.0 Attachments

A - Project Location/Overview Map

B - Existing Typical Cross Section(s)/ Finished/Proposed Typical Cross Section(s)

C - Preliminary Plan Sheet(s)

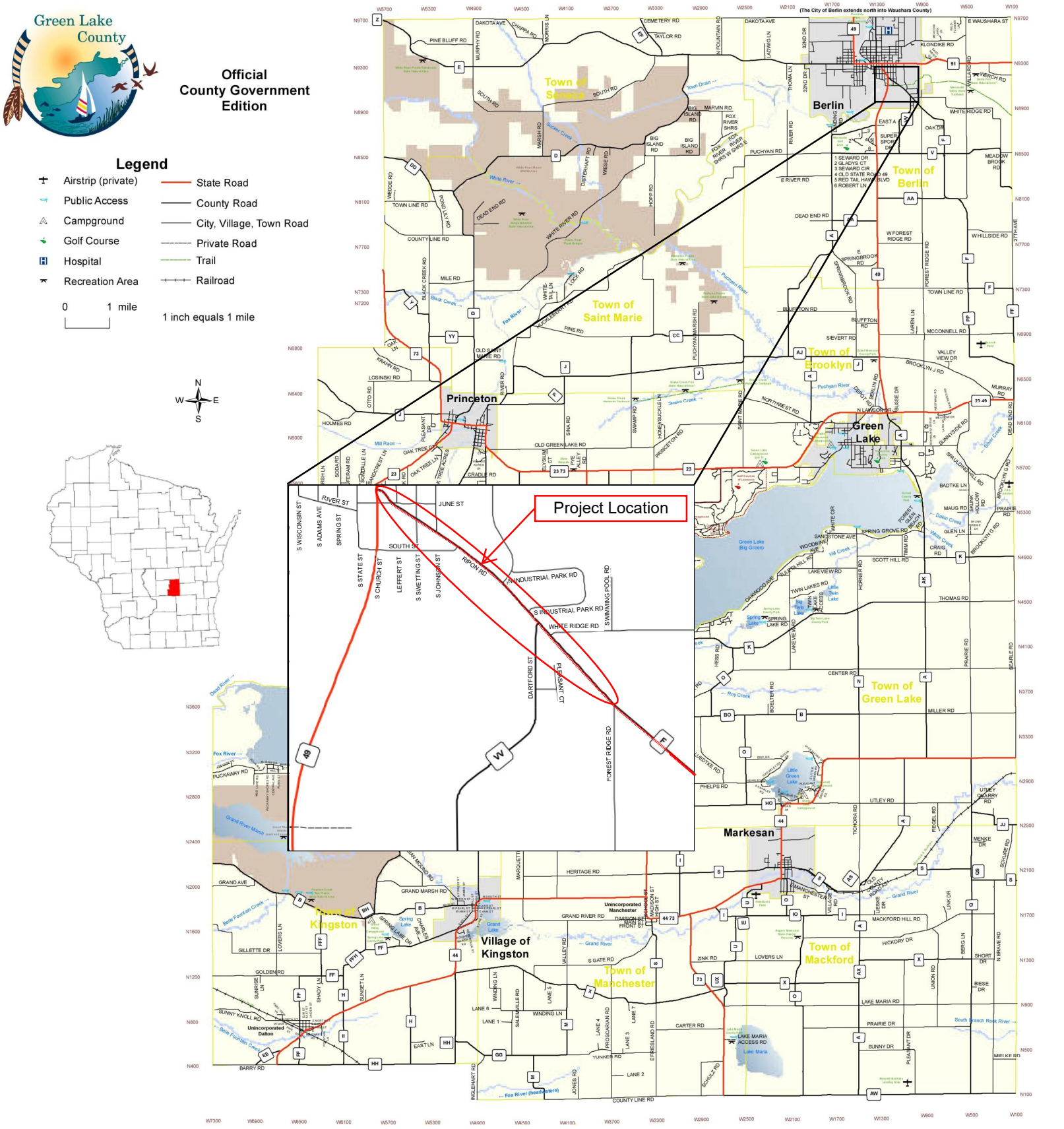
D - Traffic Forecast Report

E - Transportation Management Plan (TMP)

Attachment A

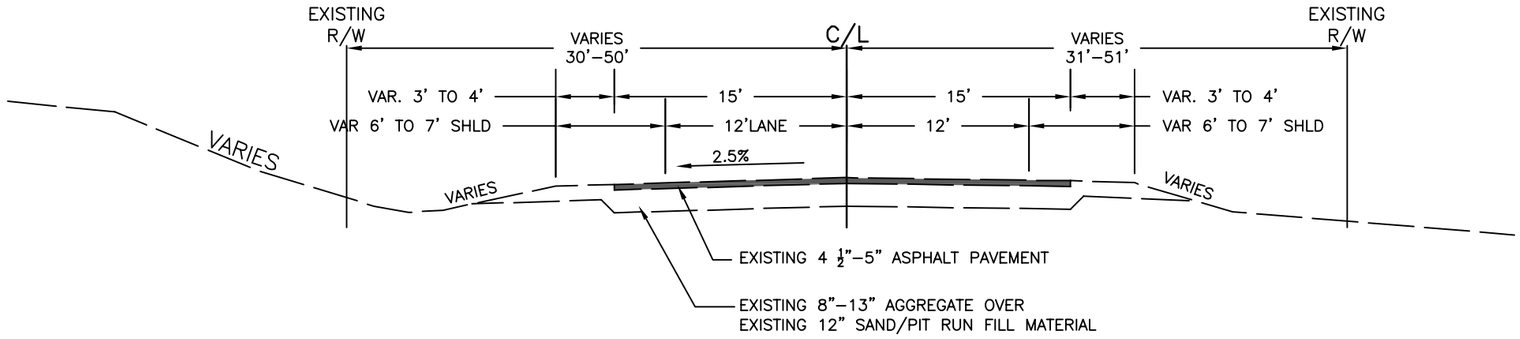
Project Location/Overview Map

Project ID 6995-09-01, 71
C Berlin, Ripon Road
South Church Street to City Limits
Local Street
Green Lake County

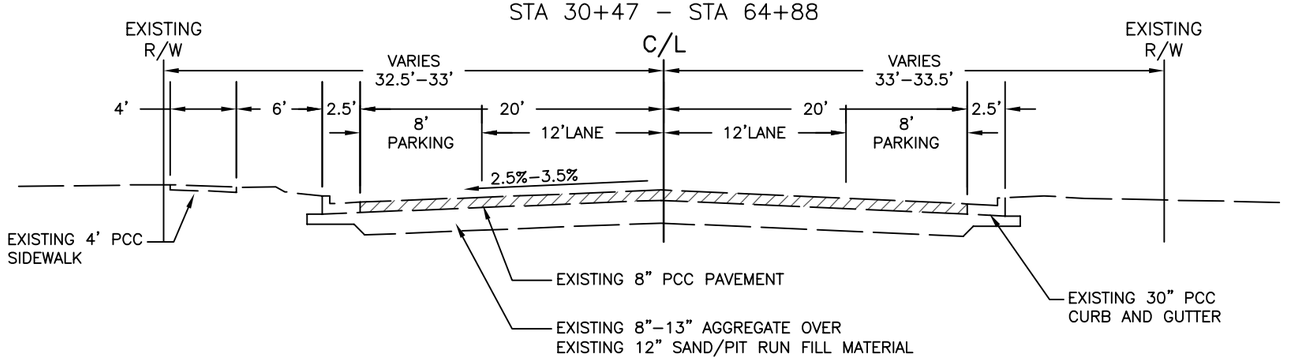


Attachment B

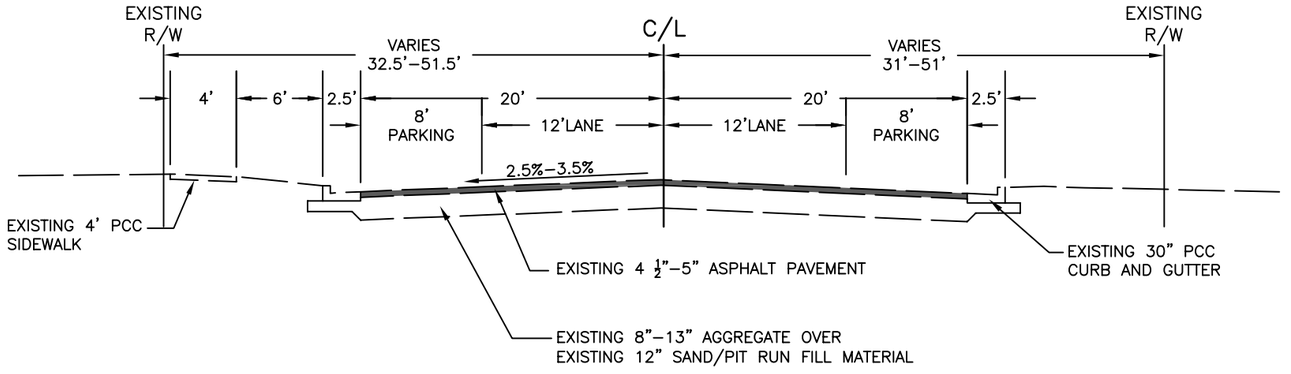
Existing Typical Cross Section(s)/ Finished/Proposed Typical Cross Section(s)



EXISTING TYPICAL SECTION
RIPON ROAD
STA 30+47 – STA 64+88



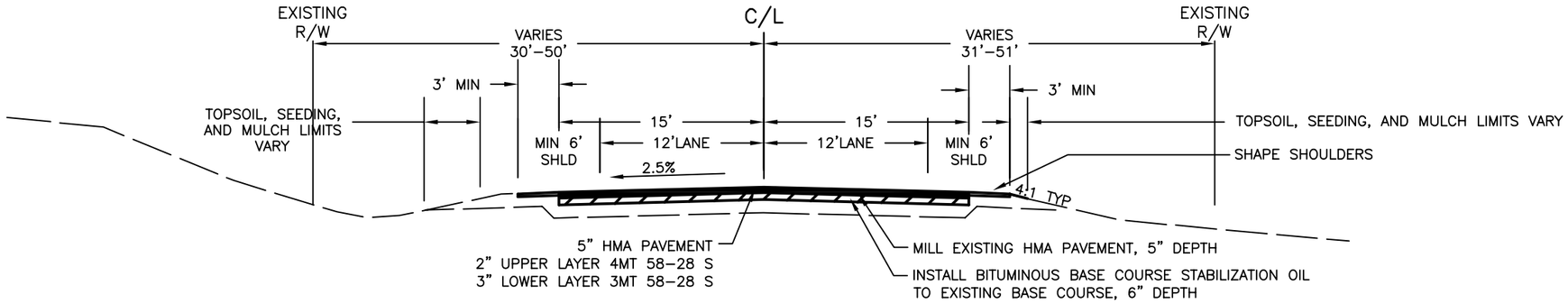
EXISTING TYPICAL SECTION
RIPON ROAD
STA 12+77 – STA 14+80



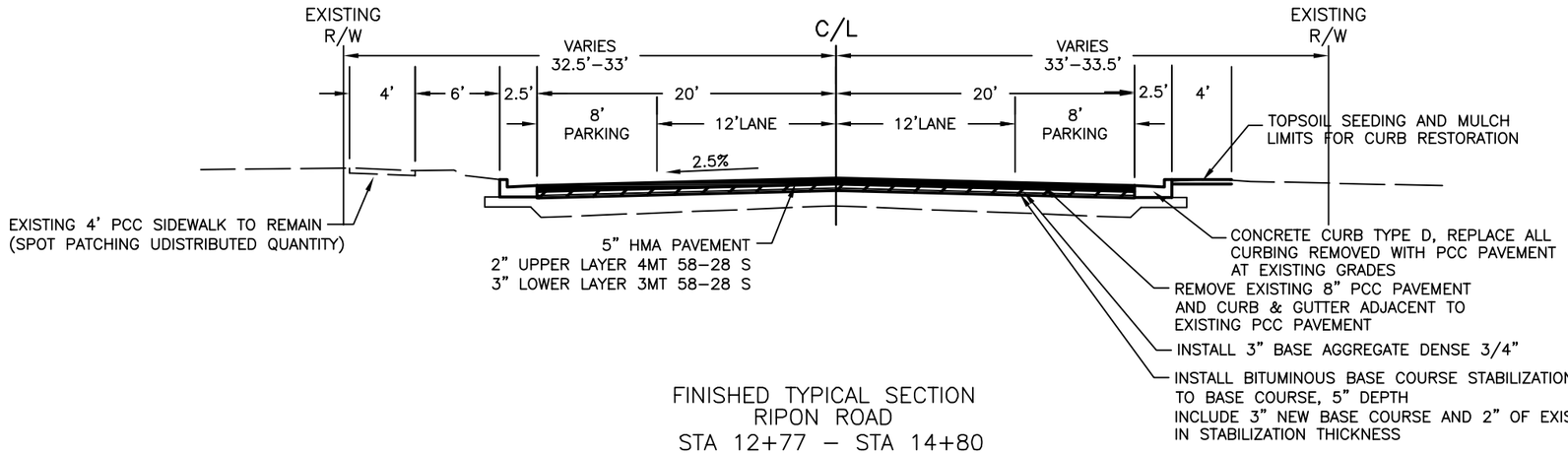
EXISTING TYPICAL SECTION
RIPON ROAD
STA 10+22 – STA 12+77
STA 14+80 – STA 30+47

PROJECT NO: 6995-09-71	HWY: CITY OF BERLIN, RIPON ROAD	COUNTY: GREEN LAKE	PLAN: RIPON ROAD RESURFACING	SHEET	E

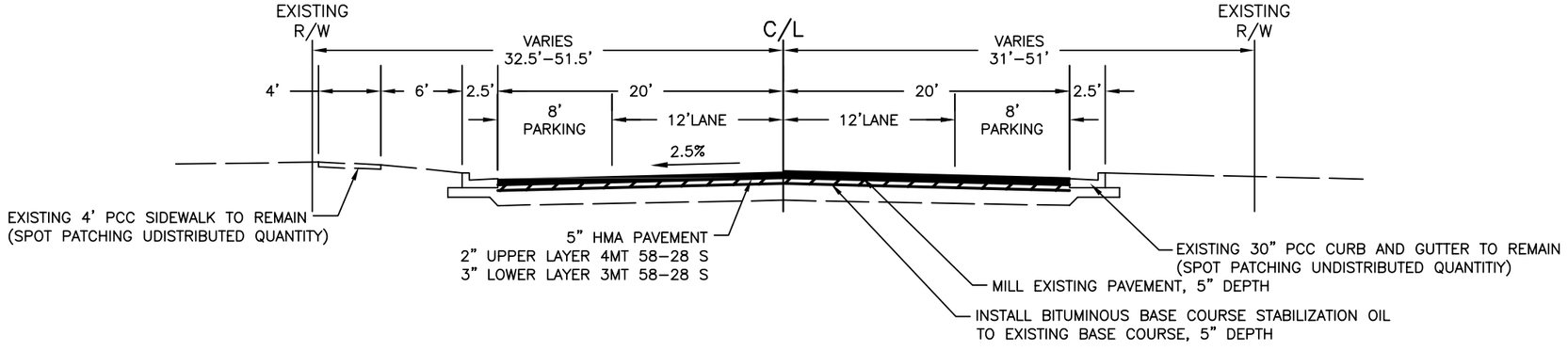
2



FINISHED TYPICAL SECTION
RIPON ROAD
STA 30+47 – STA 64+88



FINISHED TYPICAL SECTION
RIPON ROAD
STA 12+77 – STA 14+80

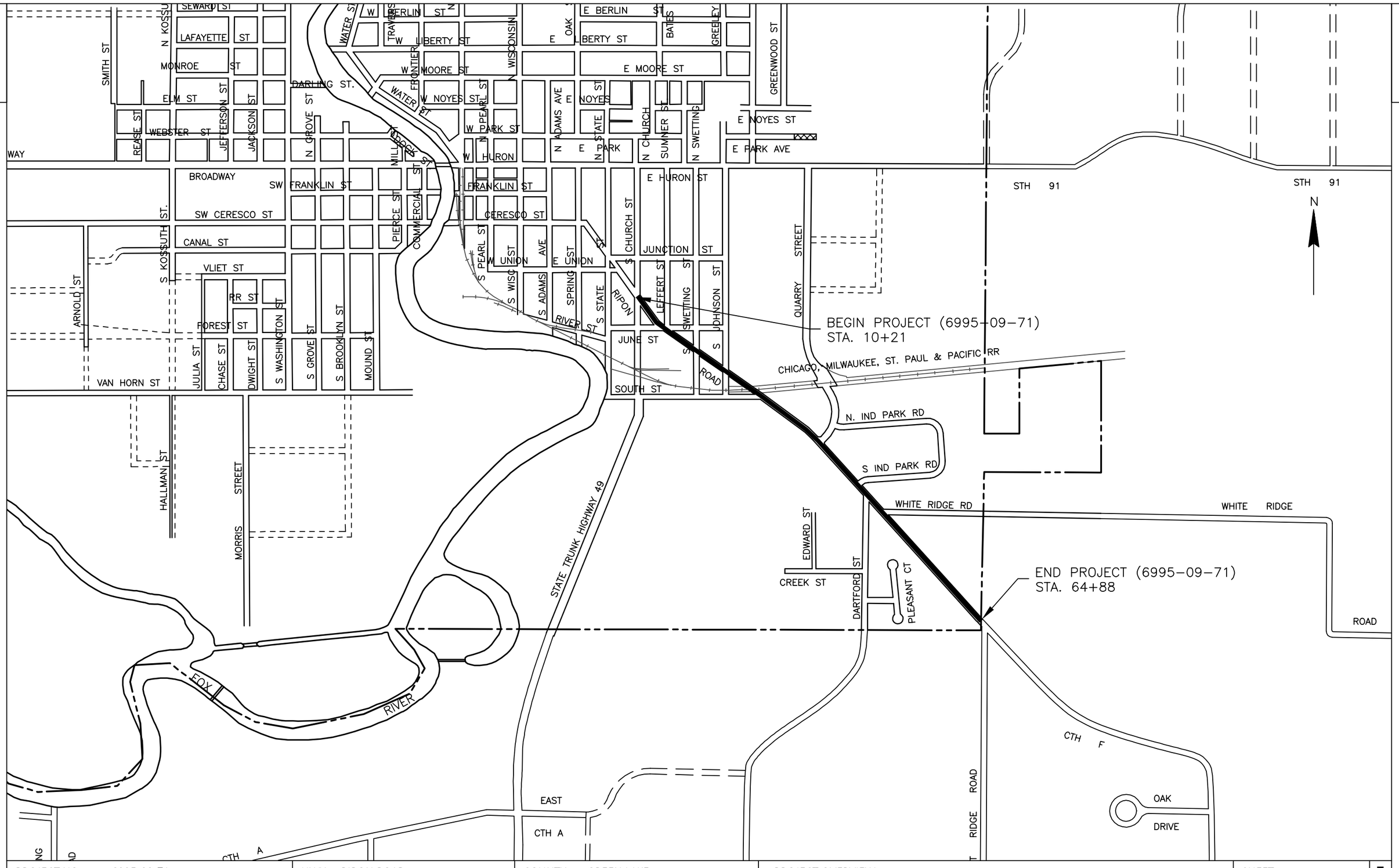


FINISHED TYPICAL SECTION
RIPON ROAD
STA 10+22 – STA 12+77
STA 14+80 – STA 30+47

PROJECT NO: 6995-09-71	HWY: CITY OF BERLIN, RIPON ROAD	COUNTY: GREEN LAKE	PLAN: RIPON ROAD RESURFACING	SHEET	E

Attachment C

Preliminary Plan Sheet(s)



PROJECT NO: 6995-09-71	HWY: RIPON ROAD	COUNTY: GREEN LAKE	PROJECT OVERVIEW	SHEET E

FILE NAME : M:\TOWNS\BERLIN_CITY\RIPON ROAD IMPROVEMENTS\DWG\02-OVERVIEW MAP.DWG
LAYOUT NAME - 02-PROJECT OVERVIEW

PLOT DATE : 8/21/2019 2:44 PM PLOT BY : ALEX WILLIAMS PLOT NAME : PLOT SCALE : 1"=1000'

WISDOT/CADDS SHEET 42

2

2

N

STA 10+64.02/-32.03L
EL: 761.90

STA 10+63.89/-27.03L
EL: 761.83

STA 10+70.49/-32.18L
EL: 761.44

STA 10+74.36/-32.49L
EL: 761.47

STA 10+80.51/-33.18L
EL: 761.93

STA 10+80.96/-28.21L
EL: 761.86

248 RIPON RD

5' CSW

1.5% 5.7%

1.5% 5.7%

1.5%

7%

1.5% 5.7%

1.5% 5.7%

STA 10+70.57/-27.18L
EL: 761.36

STA 10+70.66/-22.79L
EL: 761.05

PC 10+65.17

STA 10+74.58/-27.50L
EL: 760.39

STA 10+74.79/-23.16L
EL: 761.08

ASPH

GRAV

CONC.

STA 10+57.95/26.26R
EL: 761.42

STA 10+78.15/21.57R
EL: 761.17

STA 10+60.80/30.97R
EL: 761.51

STA 10+71.95/22.00R
EL: 761.07

STA 10+54.67/34.67R
EL: 761.44

STA 10+51.37/31.70R
EL: 761.30

PI 11+00.81

11

MH

STA 10+78.80/27.06R
EL: 761.25

STA 10+92.27/21.65R
EL: 761.85

2%

2%

3.6%

1.5%

6%

1%

7%

2%

STA 10+92.17/27.15R
EL: 761.95

PT 11+34.15

8"

STA 10+55.71/36.38R
EL: 761.49

STA 10+72.21/27.53R
EL: 761.15

PKF

STA 10+97.32/30.88R
EL: 762.42

SIGN

BM

INSTALL 25 LF CONCRETE
CURB PEDESTRIAN

STA 10+78.33/31.16R
EL: 762.33

PROJECT NO:6995-09-71	HWY: CITY OF BERLIN, RIPON RD	COUNTY: GREEN LAKE	CURB RAMP DETAIL	SHEET	E

FILE NAME : M:\TOWNS\BERLIN_CITY\RIPON ROAD IMPROVEMENTS\DWG\05-RIPON_RD-6.DWG
LAYOUT NAME -Curb Ramps (1)

PLOT DATE : 8/21/2019 2:44 PM PLOT BY : ALEX WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

2

N

STA 13+55.06/−31.90L
EL: 763.40

STA 13+60.66/−32.31L
EL: 763.32

STA 13+66.28/−32.64L
EL: 763.22

STA 13+73.03/−33.07L
EL: 762.72

STA 13+55.58/−26.92L
EL: 763.33

STA 13+61.08/−27.32L
EL: 763.25

STA 13+66.59/−27.64L
EL: 763.15

STA 13+73.21/−28.07L
EL: 762.69

STA 13+84.58/−33.49L
EL: 762.55

STA 13+78.07/−28.26L
EL: 762.69

1.5%
5%
1.5%
2%
1.5%
8.3%
6.5%
2%

ASPH.
CONC.
8"
CS
SAN
SS
W
G
MH
PT 13+94.54
14
JUNE ST

STA 14+66.47/−33.15L
EL: 762.62

STA 14+65.33/−33.16L
EL: 762.60

STA 14+72.47/−33.11L
EL: 762.92

STA 14+76.47/−33.09L
EL: 763.12

STA 14+80.46/−33.07L
EL: 763.29

STA 14+66.43/−28.15L
EL: 762.65

STA 14+80.44/−28.57L
EL: 763.27

STA 14+72.43/−28.11L
EL: 762.91

STA 14+76.44/−28.34L
EL: 763.11

5%
2%
5%
2%
4.2%
CP2
BW
R/W
CONC.
ASPH.

PROJECT NO: 6995-09-71	HWY: CITY OF BERLIN, RIPON RD	COUNTY: GREEN LAKE	CURB RAMP DETAIL	SHEET	E

FILE NAME : M:\TOWNS\BERLIN_CITY\RIPON ROAD IMPROVEMENTS\DWG\05-RIPON_RD-6.DWG
LAYOUT NAME - Curb Ramps (2)
PLOT DATE : 8/21/2019 2:44 PM
PLOT BY : ALEX WILLIAMS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

N

STA 17+87.85/−31.85L
EL: 763.26

STA 17+81.85/−31.81L
EL: 763.56

STA 17+77.61/−31.79L
EL: 763.76

STA 17+73.61/−31.90L
EL: 763.96

STA 17+69.61/−32.01L
EL: 764.15

INSTALL 10.5 LF CONCRETE
CURB PEDESTRIAN

STA 17+69.65/−27.42L
EL: 764.14

STA 17+73.65/−27.29L
EL: 763.94

STA 17+77.65/−27.17L
EL: 763.74

5%
0.4%
5%
0.4%
5%
0.4%
5%

STA 17+92.26/−31.88L
EL: 763.19

STA 17+81.88/−26.81L
EL: 763.54

INSTALL 6 LF CONCRETE
CURB PEDESTRIAN

STA 17+87.88/−26.85L
EL: 763.24

S SWETTING ST

KRAFT

290 RIPON RD

STA 18+57.30/−32.33L
EL: 763.15

STA 18+63.30/−32.41L
EL: 763.45

STA 18+67.30/−32.46L
EL: 763.65

STA 18+71.30/−32.52L
EL: 763.87

STA 18+53.58/−32.27L
EL: 763.09

STA 18+57.37/−27.33L
EL: 763.12

5%
0.6%
5%
1.4%
5%
2%

STA 18+63.37/−27.41L
EL: 763.42

STA 18+67.37/−27.75L
EL: 763.58

STA 18+71.36/−28.10L
EL: 763.77

PI 18+50.82

18+

8"

15"

PROJECT NO: 6995-09-71	HWY: CITY OF BERLIN, RIPON RD	COUNTY: GREEN LAKE	CURB RAMP DETAIL	SHEET	E

FILE NAME : M:\TOWNS\BERLIN_CITY\RIPON ROAD IMPROVEMENTS\DWG\05-RIPON_RD-6.DWG
LAYOUT NAME - Curb Ramps (3)

PLOT DATE : 8/21/2019 2:45 PM PLOT BY : ALEX WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

N

STA 21+75.75/−32.83L
EL: 765.02

STA 21+79.75/−32.83L
EL: 764.96

STA 21+89.75/−32.79L
EL: 764.26

INSTALL 14 LF CONCRETE
CURB PEDESTRIAN

STA 21+93.43/−32.76L
EL: 764.20

STA 21+75.73/−28.43L
EL: 765.02

STA 21+89.72/−27.79L
EL: 764.26

INSTALL 9.5 LF CONCRETE
CURB PEDESTRIAN

STA 21+79.72/−27.83L
EL: 764.96

S JOHNSON ST

LOPEZ

312 RIPON

STA 22+54.46/−32.50L
EL: 764.37

STA 22+58.23/−32.51L
EL: 764.43

STA 22+68.23/−32.53L
EL: 765.13

STA 22+73.23/−32.54L
EL: 765.01

STA 22+58.16/−27.51L
EL:764.33

STA 22+68.24/−27.53L
EL: 765.06

STA 22+73.24/−28.13L
EL: 765.06

PI 22+52.54

PROJECT NO:6995-09-71	HWY:CITY OF BERLIN, RIPON RD	COUNTY:GREEN LAKE	CURB RAMP DETAIL	SHEET	E

FILE NAME : M:\TOWNS\BERLIN_CITY\RIPON ROAD IMPROVEMENTS\DWG\05-RIPON_RD-6.DWG
LAYOUT NAME - Curb Ramps (4)
PLOT DATE : 8/21/2019 2:45 PM
PLOT BY : ALEX WILLIAMS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1	10+48RT	CHIS. SQUARE IN LIGHT POLE BASE	741.54
2	14+75LT	R.R. SPIKE IN UTILITY POLE	764.39

STA 10+73
REPLACE CONCRETE
SIDEWALK RAMP TYPE 7B
AND INSTALL DETECTABLE
WARNING FIELD

GSD HOLDINGS
248 RIPON RD

DELGADILLO
258 RIPON RD

STA 10+65.7 TO 1079.7
REPLACE 17 LF CONCRETE
CURB AND GUTTER, TYPE D

PC STA 10+65.17

PI STA 11+00.81

PT STA 11+34.15

PETERSON
262 RIPON RD

STA 13+77
REPLACE CONCRETE
SIDEWALK RAMP TYPE 4B1
AND INSTALL DETECTABLE
WARNING FIELD RADIAL

STA 12+76.7 TO 13+88.4
REPLACE 109 LF CONCRETE
CURB AND GUTTER, TYPE D

LEFFERT ST

KRAFT

KRAFT
276 RIPON RD

STA 14+69
REPLACE CONCRETE
SIDEWALK RAMP TYPE 4B1
AND INSTALL DETECTABLE
WARNING FIELD

STA 14+66 TO 14+80.4
REPLACE 25 LF CONCRETE
CURB AND GUTTER, TYPE D

JUNE ST

STA 1058 TO 1097.3
REPLACE 34 LF CONCRETE
CURB AND GUTTER, TYPE D

BEGIN PROJECT
STA. 10+21.6

PC STA 12+87.90

PT STA 13+94.54

STA 16+00

MATCH LINE

STA 10+73
REPLACE CONCRETE
SIDEWALK RAMP TYPE 7A
AND INSTALL DETECTABLE
WARNING FIELD

PI STA 11+00.81
X=574105.44
Y=317068.24
DELTA=35°28'48"
T=35.64'
L=68.98'
R=111.40'
PC STA 10+65.17
PT STA 11+34.15

INSTALL 4" ASPHALT PATCH

BAUMAN FAMILY TRUST
247 RIPON RD

STA 12+77.7 TO 12+94
REPLACE 17 LF CONCRETE
CURB AND GUTTER, TYPE D

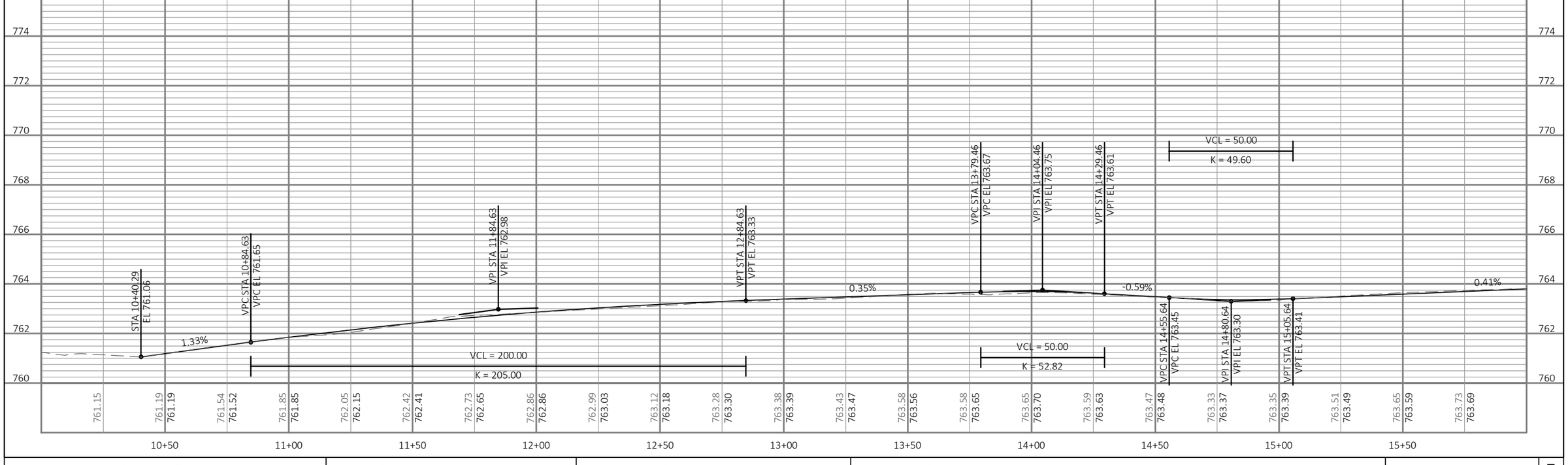
STA 13+73.6 TO 14+70.2
REPLACE 100 LF CONCRETE
CURB AND GUTTER, TYPE D

REMOVE CONCRETE PAVEMENT

SKRAMSTAD
242 JUNE ST

S CHURCH ST

PI STA 13+41.82
X=574248.90
Y=316871.72
DELTA=21°01'57"
T=53.93'
L=106.64'
R=290.50'
PC STA 12+87.90
PT STA 13+94.54

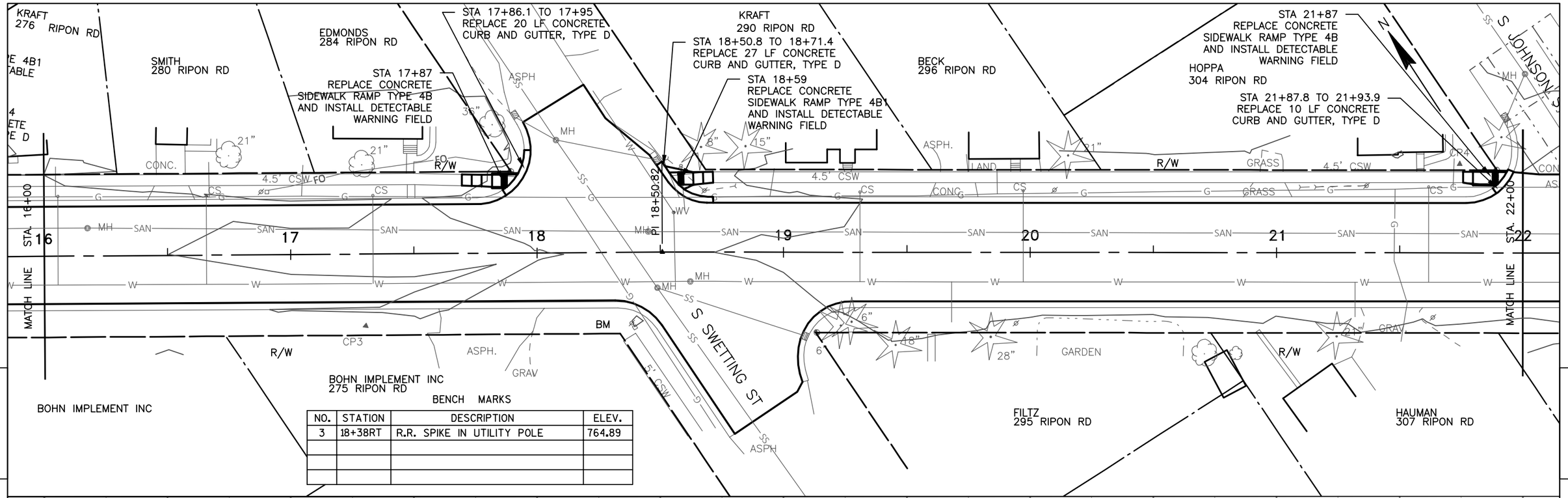


PROJECT NO: 6995-09-71	HWY: CITY OF BERLIN, RIPON ROAD	COUNTY: GREEN LAKE	PLAN AND PROFILE: RIPON ROAD RESURFACING	SHEET E

FILE NAME : M:\TOWNS\BERLIN_CITY\RIPON ROAD IMPROVEMENTS\DWG\05-RIPON_RD-6.DWG
LAYOUT NAME - PlanProf 1 IN 40 FT (1)

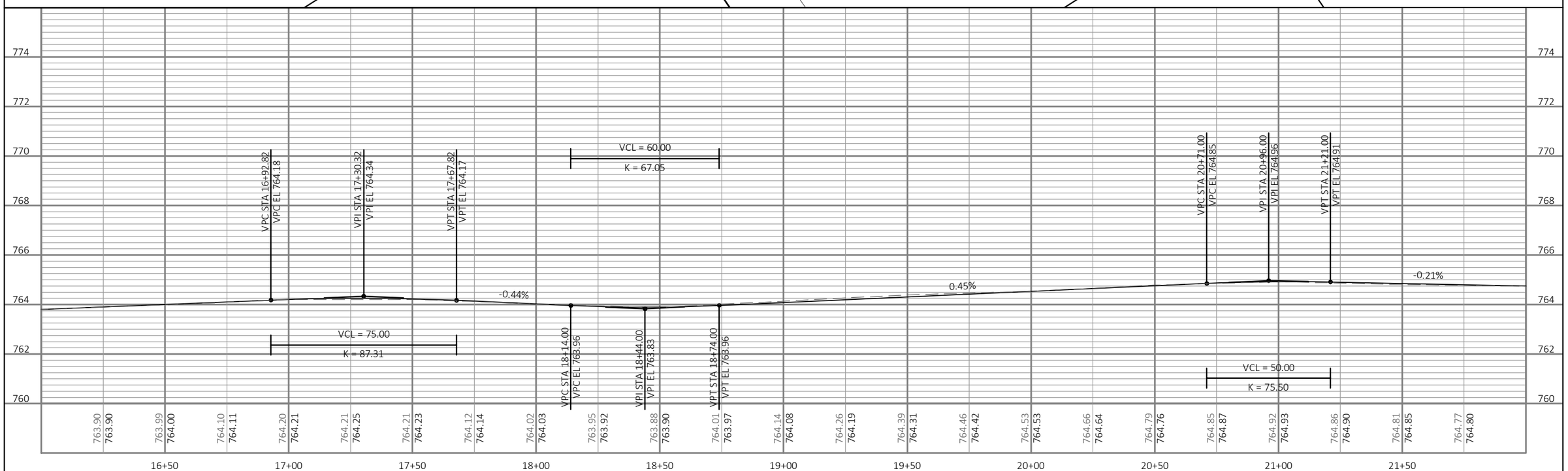
PLOT DATE : 8/21/2019 2:46 PM PLOT BY : ALEX WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
3	18+38RT	R.R. SPIKE IN UTILITY POLE	764.89



PROJECT NO: 6995-09-71	HWY: CITY OF BERLIN, RIPON ROAD	COUNTY: GREEN LAKE	PLAN AND PROFILE: RIPON ROAD RESURFACING	SHEET	E

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
4	24+63RT	R.R. SPIKE IN UTILITY POLE	765.38

LOPEZ & RIVERA
312 RIPON RD
STA 22+60
REPLACE CONCRETE SIDEWALK RAMP TYPE 4B1 AND INSTALL DETECTABLE WARNING FIELD
STA 22+52.3 TO 22+69.5
REPLACE 23 LF CONCRETE CURB AND GUTTER, TYPE D

KRAUSE
318 RIPON RD

JOHNSON
322 RIPON RD

ADAM VENTURES LLC
328 RIPON RD

GREEN LAKE COUNTY

TRAMPF REVOCABLE TRUST
321 RIPON RD

HARGRAVE
317 RIPON RD

S JOHNSON ST

SOUTH ST

GRAVEL TRAIL

BRUSH

MATCH LINE

STA. 22+00

STA. 28+00

PI 22+52.54

PI 26+24.98

BORE #2
GRD 762.88

MON. WELL

BM

CP5

4.5' CSW

R/W

FENCE

CONC.

ASPH

GRAV.

SAN

W

G

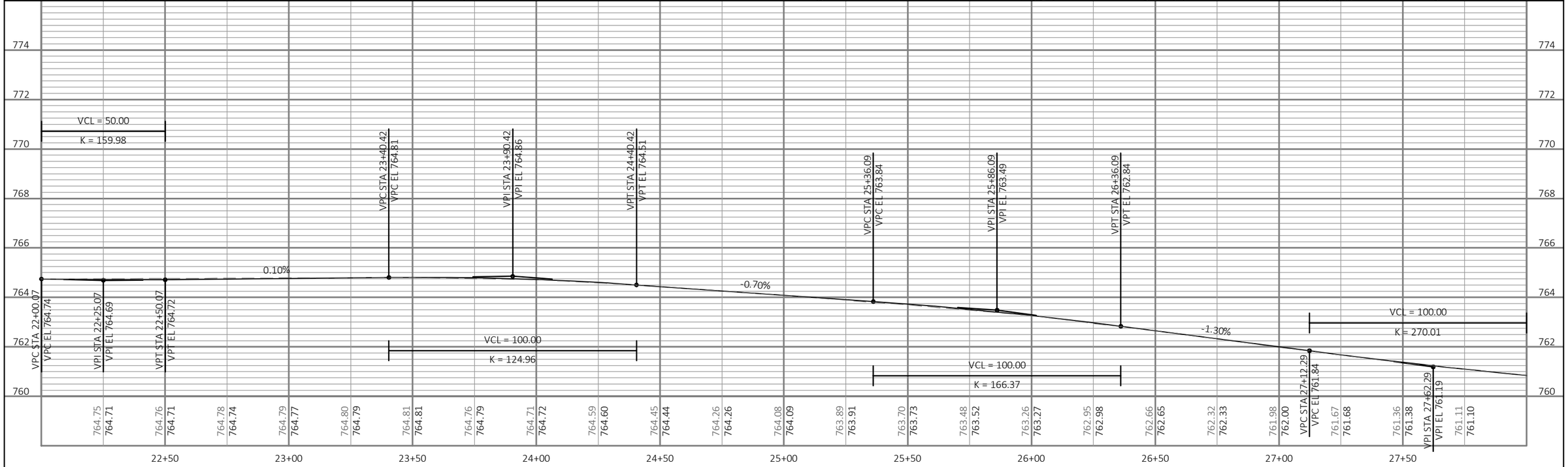
CS

MH

WV

22 23 24 25 26 27 28

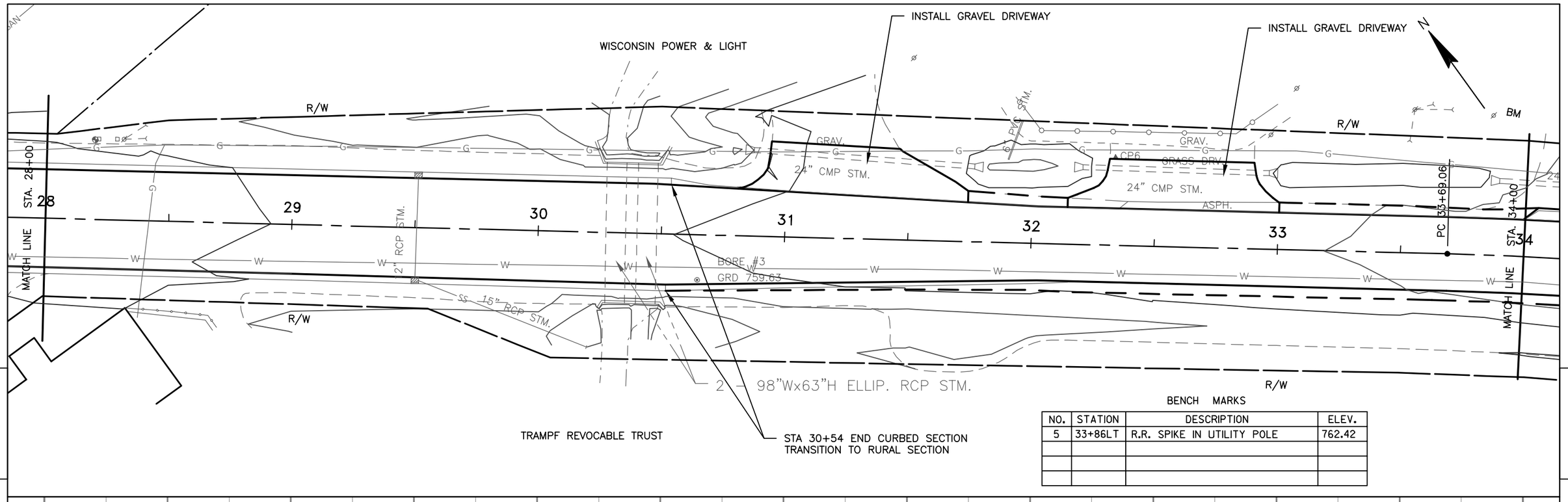
5



PROJECT NO: 6995-09-71	HWY: CITY OF BERLIN, RIPON ROAD	COUNTY: GREEN LAKE	PLAN AND PROFILE: RIPON ROAD RESURFACING	SHEET E

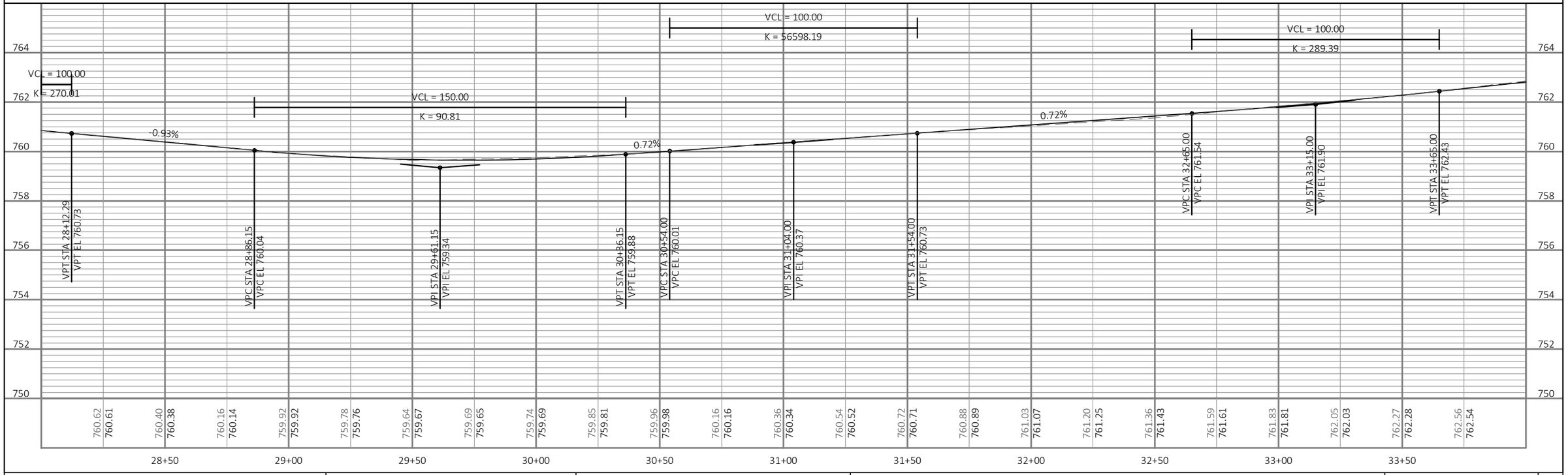
FILE NAME : M:\TOWNS\BERLIN_CITY\RIPON ROAD IMPROVEMENTS\DWG\05-RIPON_RD-6.DWG
LAYOUT NAME - PlanProf 1 IN 40 FT (3)

PLOT DATE : 8/21/2019 2:46 PM PLOT BY : ALEX WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
5	33+86LT	R.R. SPIKE IN UTILITY POLE	762.42



PROJECT NO: 6995-09-71	HWY: CITY OF BERLIN, RIPON ROAD	COUNTY: GREEN LAKE	PLAN AND PROFILE: RIPON ROAD RESURFACING	SHEET	E

FILE NAME : M:\TOWNS\BERLIN_CITY\RIPON ROAD IMPROVEMENTS\DWG\05-RIPON_RD-6.DWG
LAYOUT NAME - PlanProf 1 IN 40 FT (4)

PLOT DATE : 8/21/2019 2:46 PM PLOT BY : ALEX WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

PI STA 34+87.70
X=576008.88
Y=315644.34
DELTA=10°02'42"
T=118.64'
L=236.68'
R=1350.00'
PC STA 33+69.06
PT STA 36+05.74

WASNIAK

INSTALL 4" ASPHALT DRIVEWAY

HIETPAS PROPERTIES LLC

B&G PROPERTIES OF BERLIN LLC

QUARRY ST

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
6	39+22LT	R.R. SPIKE IN UTILITY POLE	767.30

BM

24" CMP

ASPH.

GRAV.

SAN

MH

WV

LP

R/W

STA. 34+00

STA. 40+00

MATCH LINE

P 34+87.70

PT 36+05.74

30" CMP

INSTALL GRAVEL DRIVEWAY

TRAMPF REVOCABLE TRUST

GRASS DRV.

1.07%

0.35%

VCL = 100.00
K = 139.24

VCL = 50.00
K = 381.15

VPC STA 36+09.61
VPC ELL 765.05

VPI STA 36+59.61
VPI ELL 765.58

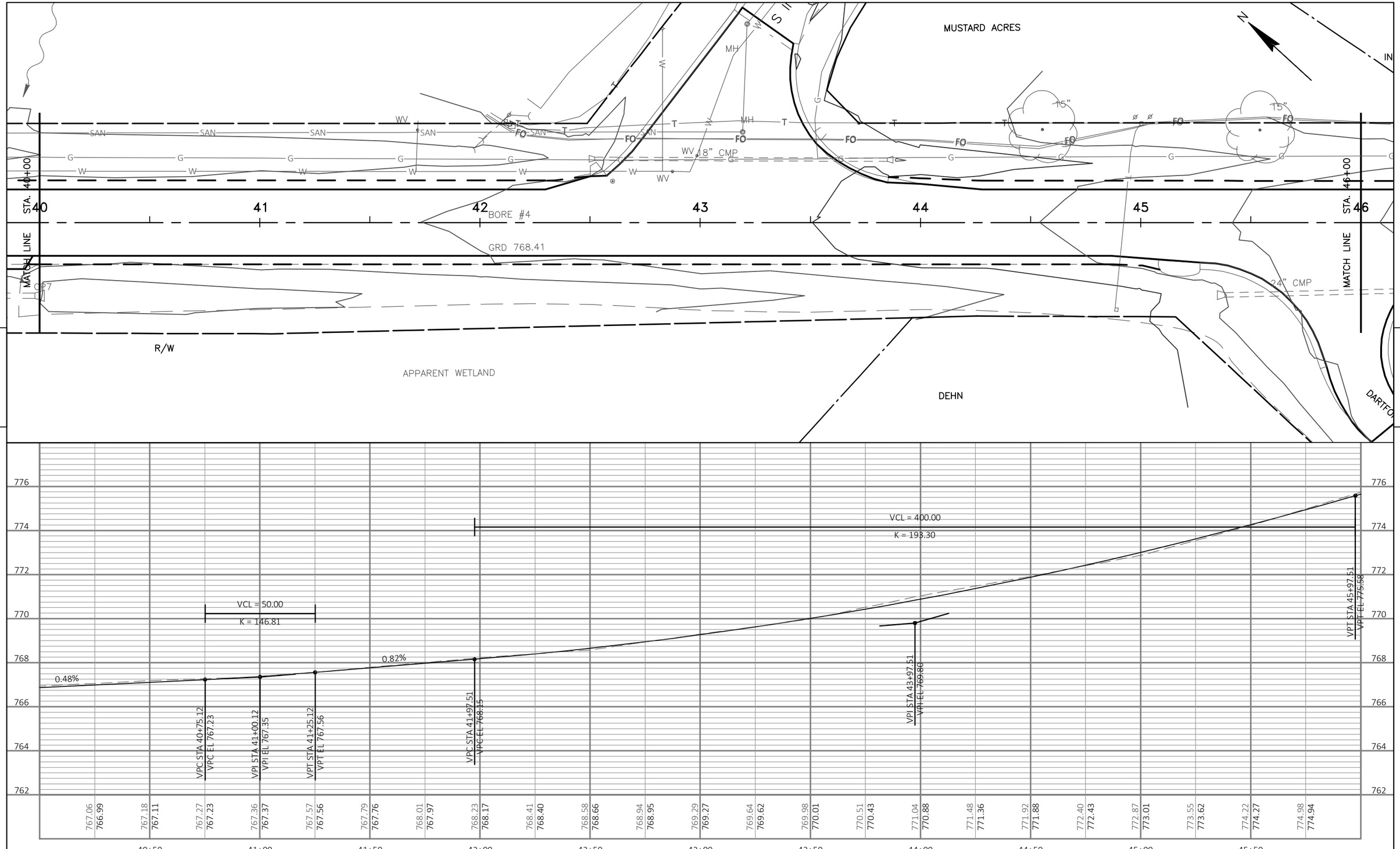
VPT STA 37+09.61
VPT ELL 765.76

VPC STA 39+00.05
VPC EL 766.42

VPI STA 39+25.05
VPI ELL 766.51

VPT STA 39+50.05
VPT EL 766.63

| | | |



PROJECT NO: 6995-09-71	HWY: CITY OF BERLIN, RIPON ROAD	COUNTY: GREEN LAKE	PLAN AND PROFILE: RIPON ROAD RESURFACING	SHEET	E

FILE NAME : M:\TOWNS\BERLIN_CITY\RIPON ROAD IMPROVEMENTS\DWG\05-RIPON_RD-6.DWG
LAYOUT NAME - PlanProf 1 IN 40 FT (6)

PLOT DATE : 8/21/2019 2:46 PM PLOT BY : ALEX WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

MUSTARD ACRES LLC

INSTALL 4" ASPHALT DRIVEWAY

WHITE RIDGE RD

INL

MH

BM

FO

G

18" CMP

CP8

INL

RIPRAP

STA. 46+00

STA. 52+00

MATCH LINE

MATCH LINE

46 47 48 49 50 51 52

GV

24" CMP

RIPRAP

RIPRAP

8" PINES

GRASS

DARTFORD ST.

N

5

5

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
7	48+06LT	R.R. SPIKE IN UTILITY POLE	782.43

THOM

788 786 784 782 780 778 776 774

804 802 800 798 796 794 792 790

VCL = 400.00

K = 100.10

VCL = 400.00

K = 100.10

2.89%

VPC STA 46+10.78
VPC EL 775.96

VPI STA 48+10.78
VPI EL 781.75

VPT STA 50+10.78
VPT EL 795.52

| | | |

TRAMPF REVOCABLE TRUST

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
8	53+09RT	R.R. SPIKE IN UTILITY POLE	821.76

N

R/W

MATCH LINE STA. 52+00

MATCH LINE STA. 58+00

52 53 54 55 56 57 58

12" CMP

12" CMP

CP9

GRASS

GRASS

BM

R/W

INSTALL GRAVEL DRIVEWAY

INSTALL GRAVEL DRIVEWAY

LORENZ

THEODOZIO

5

5

VPC STA 53+88.37
VPC EL 821.53

VPI STA 54+55.87
VPI EL 826.18

VPT STA 55+23.37
VPT EL 828.39

VPC STA 56+25.14
VPC EL 831.72

VPI STA 56+50.14
VPI EL 832.53

VPT STA 56+75.14
VPT EL 833.06

3.27%

2.08%

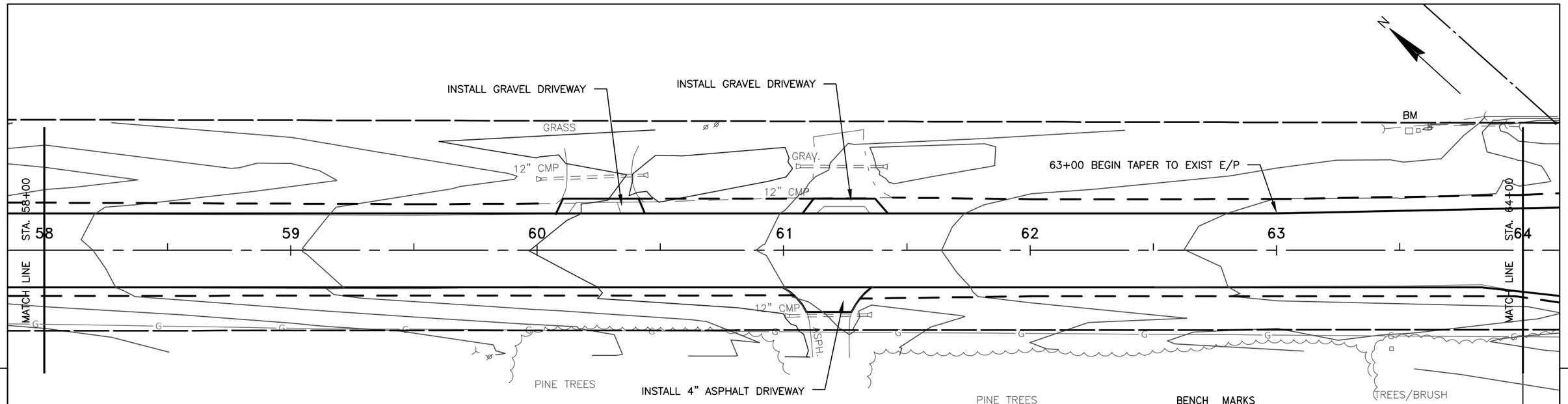
VCL = 135.00
K = 37.34

VCL = 50.00
K = 42.12

822 820 818 816 814 812 810 808

836 834 832 830 828 826 824 822

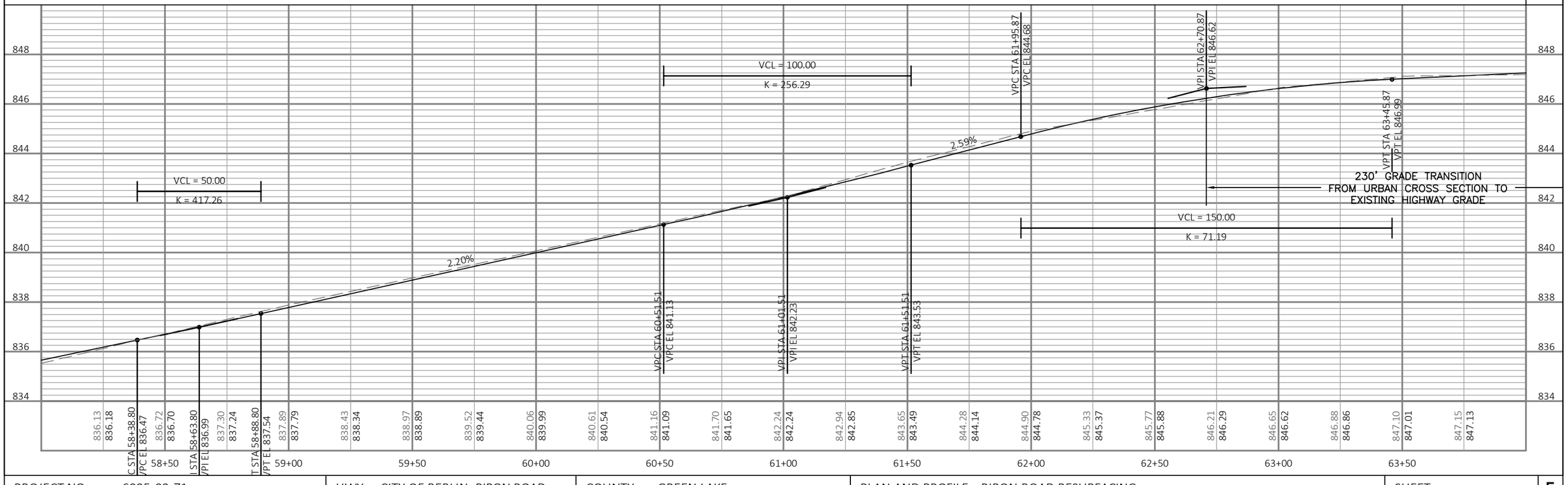
| | | |



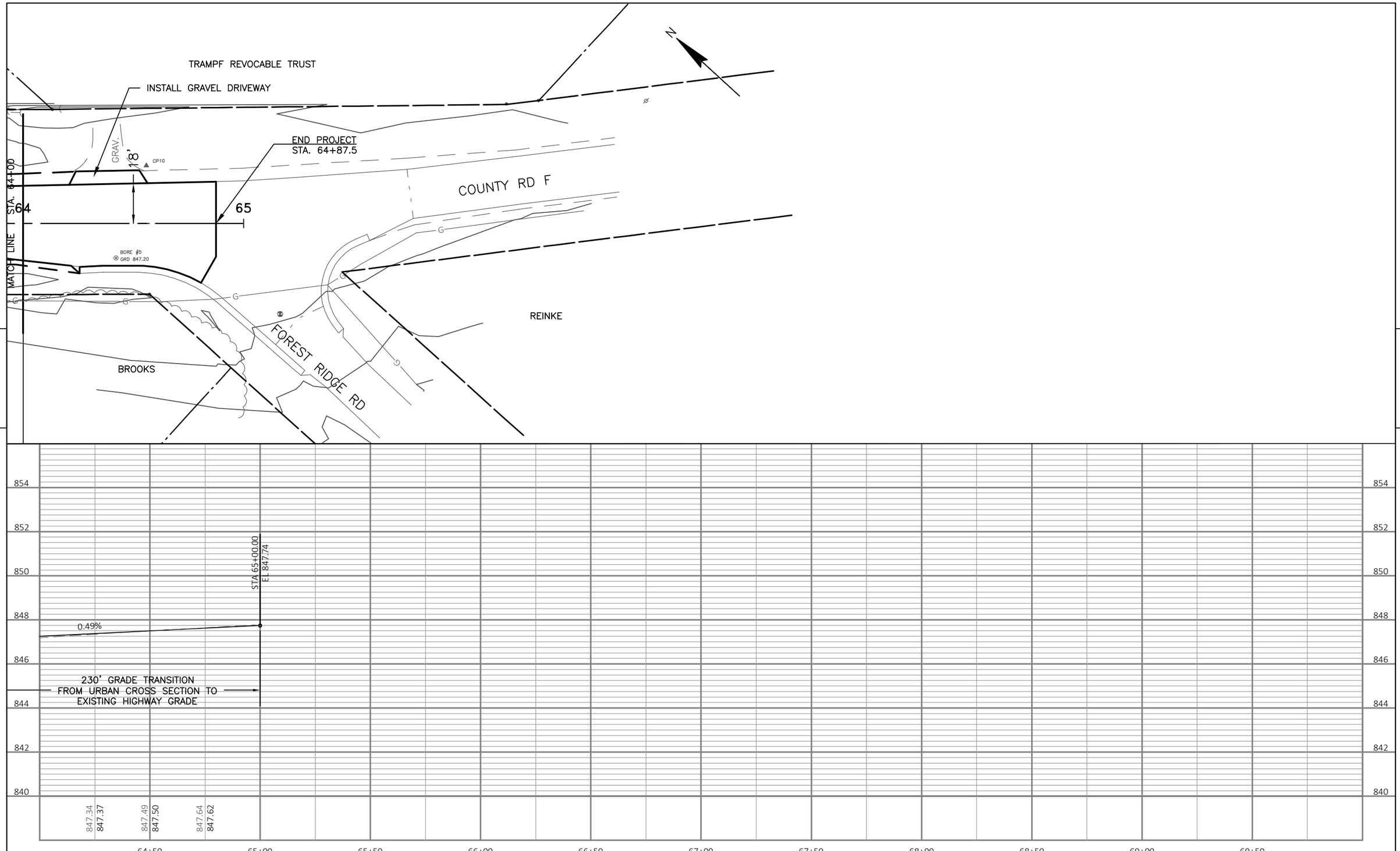
BUCHHOLZ REVOCABLE TRUST

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
9	63+62LT	R.R. SPIKE IN UTILITY POLE	843.18



PROJECT NO: 6995-09-71	HWY: CITY OF BERLIN, RIPON ROAD	COUNTY: GREEN LAKE	PLAN AND PROFILE: RIPON ROAD RESURFACING	SHEET	E



PROJECT NO: 6995-09-71	HWY: CITY OF BERLIN, RIPON ROAD	COUNTY: GREEN LAKE	PLAN AND PROFILE: RIPON ROAD RESURFACING	SHEET E

FILE NAME : M:\TOWNS\BERLIN_CITY\RIPON ROAD IMPROVEMENTS\DWG\05-RIPON_RD-6.DWG
LAYOUT NAME - PlanProf 1 IN 40 FT (10)

PLOT DATE : 8/21/2019 2:46 PM PLOT BY : ALEX WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

Attachment D

Traffic Forecast Report

WisDOT TRAFFIC FORECAST REPORT

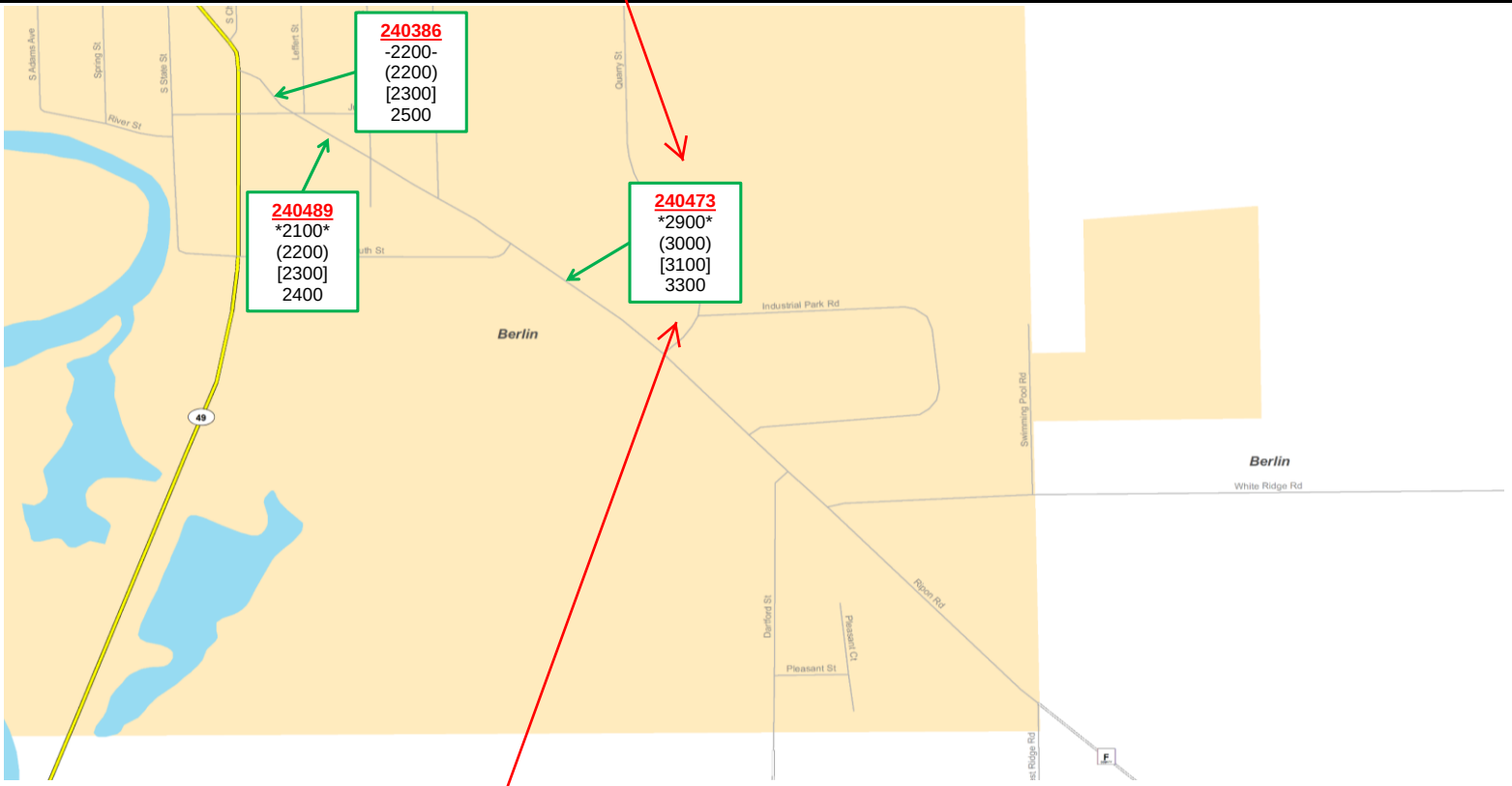
PROJECT ID(S): 6995-09-01/71
ROUTE(S): CTH F

Region/COUNTY(IES): NC / Green Lake
LOCATION: S Church St to City Limits
COMPLETED: 3/12/2018

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

Developed by: Jacci Ziebert
Phone: (608) 266-9646
FAX #: (608) 267-0294
E-Mail: jaclyn.ziebert@dot.wi.gov

Design Values (%)											Truck Classification						
Site(s)	Route(s)	Volume(s)	Site Growth %	K250	K100	K30	P	D(Dsgn. Hr.)	T(DHV)	T(PHV)	AADTT	2D	3AX	2S1+2S2	3-S2	DBL-BTM	Total %
240473	CTH F	3260	0.50%	12.3	12.8	13.8	15.2	59/41	21.6	18.9	730	14.5	3.0	2.5	5.0	0.1	25.2%



Full Vehicle Classification														
Site(s)	Route(s)	MC	CARS	SU2-4	BUSES	SU2-6	SU3	SU4+	ST4-	ST5	ST6+	MU5-	MU6	MU7+
240473	CTH F	0.7	58.4	15.8	1.6	13.0	2.3	0.7	2.5	3.9	1.2	0.0	0.1	0.0

N

SITE ID = Colored, **bolded**, and underlined

Symbol	Count	Symbol	Forecast
-000-	2017 Count	(000)	2020 AADT
000	2014 Count	[000]	2030 AADT
+000+	2011 Count	000	2040 AADT

NOTES ON THE FORECAST:

1. This project does not fall within any Wisconsin Travel Demand Model.

2. Truck classification percentages were taken from observed short-term axle-based 2014 Wisconsin Vehicle Classification Data (Site # 240473). Site was adjusted via statewide averages of the same functional class and same year.

3. CTH F is a Factor Group II (Urban-Other) roadway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as an Urban Minor Arterial (16) for count purposes.

4. The historical traffic count trends will continue increasing at a decreasing rate. Box-Cox regression is used to project past count data.

Wisconsin Department of Transportation

Daily % Class Distribution for 04/07/2014 through 04/09/2014 (48 hours)

Site Names:	240473, , NC	Seasonal Factor Group:	2
County:	Green Lake	Daily Factor Group:	2
Funct. Class:	U Minor Arterial	Axle Factor Group:	6
Location:	CTH F RIPON RD NORTH OF QUARRY ST BERLIN	Growth Factor Group:	NA

	Roadway	Neg DIR	Pos DIR
MC	1.05	1.00	1.09
CAR	49.99	52.35	48.31
PU	23.79	30.49	19.02
BUS	3.59	2.77	4.18
2D	18.00	8.34	24.89
SU 3	0.75	1.04	0.54
SU 4+	0.05	0.08	0.03
ST 4-	2.00	2.37	1.74
ST 5	0.77	1.56	0.20
ST 6+	0.00	0.00	0.00
MT 5-	0.00	0.00	0.00
MT 6	0.00	0.00	0.00
MT 7+	0.00	0.00	0.00
Trucks	25.16	16.17	31.58
Combo Trucks	2.77	3.93	1.95
Classified	100.00	100.00	100.00
Volume	5,989	2,493	3,496

Attachment E

Transportation Management Plan (TMP)

WisDOT TMP Documentation and Request for Approval

TMP ID: 7209

Current Version

This is a request for approval of the Transportation Management Plan (TMP) for the project detailed below. Impacts resulting from project activities meet the current work zone policies of the Wisconsin Department of Transportation.

Section 1A - Project Information:

TmpType:	1
Region:	NC
Local Program:	Yes
Local Program Type:	Roadway - Full Closure Detour
Created Comment:	Roadway closed to through traffic with detour and single lane access to local traf
Federal Oversight:	No
Design ID:	6995-09-01
Project Title:	C BERLIN, RIPON ROAD
County:	GREEN LAKE
Highway:	Other - Local Road
Construction Year:	2020
Mainline AADT:	3000
Crossroad AADT:	
Construction ID(s):	6995-09-71
Project Type:	PAVEMENT REPLACEMENT
Project Limits:	SOUTH CHURCH STREET TO CITY LIMITS
Project Length:	1.04
Project Duration:	150
Engineer's Estimate:	less than $1 Million
PS&E Date:	2019-11-01 00:00:00.0
LET Date:	2020-03-10 00:00:00.0
NHS Route:	No

Section 1B - Project Impacts:

Anticipated Begin: 2020-04-01
Anticipated End: 2020-11-01
OSOW Route: No
OSOW Type:

Section 1C - Location:

Begin County: GREEN LAKE
End County: GREEN LAKE
Roadway Name: Ripon Road
Begin Landmark (LR): South Church Street
End Landmark (LR): City Limits

Section 2-Project Description

Brief description of work activities:

Mill existing 5" asphalt pavement, install bituminous base stabilization, 5" to 6" depth, and resurface with 5" HMA Pavment. Reshape shoulders to finish roadway in rural area of project. Upgrade existing sidewalk ramps to meet current accessibility standards.

Section 3

Within the project limits are there:

Pedestrians: Yes
Bicyclists: Yes
Transit Service: No
Railroads: No
Airports: No
Commercial waterway: No
Controlled intersections: No
Dynamic message boards: No

What are the current traffic conditions:

Posted speed(mph): 35

Normal travel time(min):

Current capacity(vphpl):

Truck %: 25

Queueing present: No

Queueing when:

Section 4

List of chosen strategies:

Strategy	Justification/Comment	Cost
Flagging Operation/One-lane, Two-Way Operation		$0
Detour Route		$0

Cost of chosen strategies (sum of strategy costs): $0

Section 5

Describe how access to traffic generators (businesses, schools, etc.) and everyday services will be maintained:

Describe how impacts to bicycle riders will be mitigated/coordinated:

Are there anticipated traffic impacts from the proposed project on other road/routes in the region/corridor?

Does the project affect other regions/states?

List holidays or major special events that occur during the project:

Holiday/Special Event	Begin Date	End Date

How will traffic disruptions be minimized during listed events and holidays?

Section 6 - Traffic Analysis

Section 6+ - Traffic Analysis

What is the anticipated travel delay during the project for each impacted roadway?

#	Location Description	WZ Capacity (vphpl)	Delay (min)	Queue (min)	Delay Cause

How was the work zone capacity determined?

Section 6+ - Detour Route

Detour Information

Detour Route	Normal Travel Time (min)	Detour Travel Time (min)	Detour Distance (mi)

Section 7 - Public Information Strategies

Choose strategies that will be used to mitigate the impacts to the public:

Strategy	Intended Audience	Comments

Section 8 - Incident Management Strategies

List of chosen strategies:

Strategy	Comments	Cost

Cost of chosen strategies (sum of strategy costs): $

Section 9 - Staging Plans

Briefly describe the staging planned for maintaining traffic:

The intent is for the roadway to be open to local traffic and detoured for thru traffic. Access to local traffic will be maintained by flagging operations and construction signs. A minimum one lane of traffic will remain open during all working hours and 2 lanes of traffic shall be open during all non-working hours.

Describe how pedestrians will be accommodated during construction:

Sidewalks paralleling the project will remain open with intermittent closures for improvements to accessibly ramps at intersections

Vehicle Size Restrictions:

#	Location Description	Min lane width to maintain (ft)	Min lane width plus shoulder (ft)	Min Height (ft)	Min shy distance to TCBP (ft)

Attachments:

Attachments for TMP ID 7209 are listed below:

[F] Section_3

[f] 18_03_12_TFReport_CTH F_69950901.pdf

[F] Section_7

[F] Section_2

[f] Memo-Traffic Impact Analysis.doc

*** [F] represents folder and [f] represents file.**