

# ENVIRONMENTAL EVALUATION OF FACILITIES DEVELOPMENT ACTIONS

Wisconsin Department of Transportation

## Basic Sheet 1

<b>Project ID</b> 9200-04-00	<b>Project Termini</b> From <u>Shawano</u> To <u>Green Bay</u>	<b>Funding Sources - Check all that apply</b> <input checked="" type="checkbox"/> Federal <input checked="" type="checkbox"/> State <input checked="" type="checkbox"/> Local										
<b>Route Designation</b> (if applicable) WIS 29/32 National Highway System (NHS) Route <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Nearest Community</b> <u>Village of Hobart</u> <u>Village of Howard</u>	<b>Estimated Project Cost</b> \$14,812,431.50 Real Estate Acquisition Portion of Estimated Cost \$2.1 Million										
<b>Project Name</b> <u>WIS 29 &amp; County FF Intersection</u>		<table border="1"> <tr> <th colspan="2">Right of Way Acquisition</th> </tr> <tr> <th></th> <th>Acres</th> </tr> <tr> <td>Fee</td> <td>9.303</td> </tr> <tr> <td>TLE</td> <td>1.859</td> </tr> <tr> <td>PLE</td> <td>0.000</td> </tr> </table>	Right of Way Acquisition			Acres	Fee	9.303	TLE	1.859	PLE	0.000
Right of Way Acquisition												
	Acres											
Fee	9.303											
TLE	1.859											
PLE	0.000											
<b>County</b> Brown	<b>Section-Township-Range</b> Sections 07 & 18; T24N; R20E Sections 12 & 13; T24N; R19E											
<b>Bridge Number(s), if applicable</b> B-05-0402	<b>Scheduled start date</b> (Operational Planning Meeting (OPM), or specify other) <u>11/2/2010</u>											

Functional Classification of Existing Route	Urban	Rural
Freeway/Expressway	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Principal Arterial	<input type="checkbox"/>	<input type="checkbox"/>
Minor Arterial	<input type="checkbox"/>	<input type="checkbox"/>
Major Collector		<input checked="" type="checkbox"/>
Minor Collector		<input type="checkbox"/>
Collector	<input type="checkbox"/>	
Local	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
No Functional Class	<input type="checkbox"/>	<input type="checkbox"/>

WisDOT Project Classification	
Resurfacing	<input type="checkbox"/>
Pavement Replacement	<input type="checkbox"/>
Reconditioning	<input type="checkbox"/>
Expansion	<input checked="" type="checkbox"/>
Bridge Rehabilitation	<input type="checkbox"/>
Bridge Replacement	<input type="checkbox"/>
A "Majors" Project	<input type="checkbox"/>
SHRM	<input type="checkbox"/>
Preventive Maintenance	<input type="checkbox"/>
Safety	<input type="checkbox"/>
Other, Describe	<input type="checkbox"/>

- ☐ FHWA Categorical Exclusion, Type 2b (pER)  
☒ FHWA Categorical Exclusion, Type 2c (ER)  
☐ FHWA Environmental Assessment. No significant Impacts Indicated by Initial Assessment.

Preparer:

(Signature) (Company/Org.) (Date) (Title) \_\_\_\_\_ (Signature) (Date) (Title)  
 (Director, Bureau of Equity & Environmental Services)

Reviewed by:

(Signature) (Env. Coordinator) (Date) (Title) \_\_\_\_\_

(Signature) (Date) (Title) \_\_\_\_\_ (Signature) (Date) (Title)  
 (☐ Region ☐ Aeronautics ☐ Rails & Harbors) (☐ FHWA ☐ FAA ☐ FTA ☐ FRA)

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

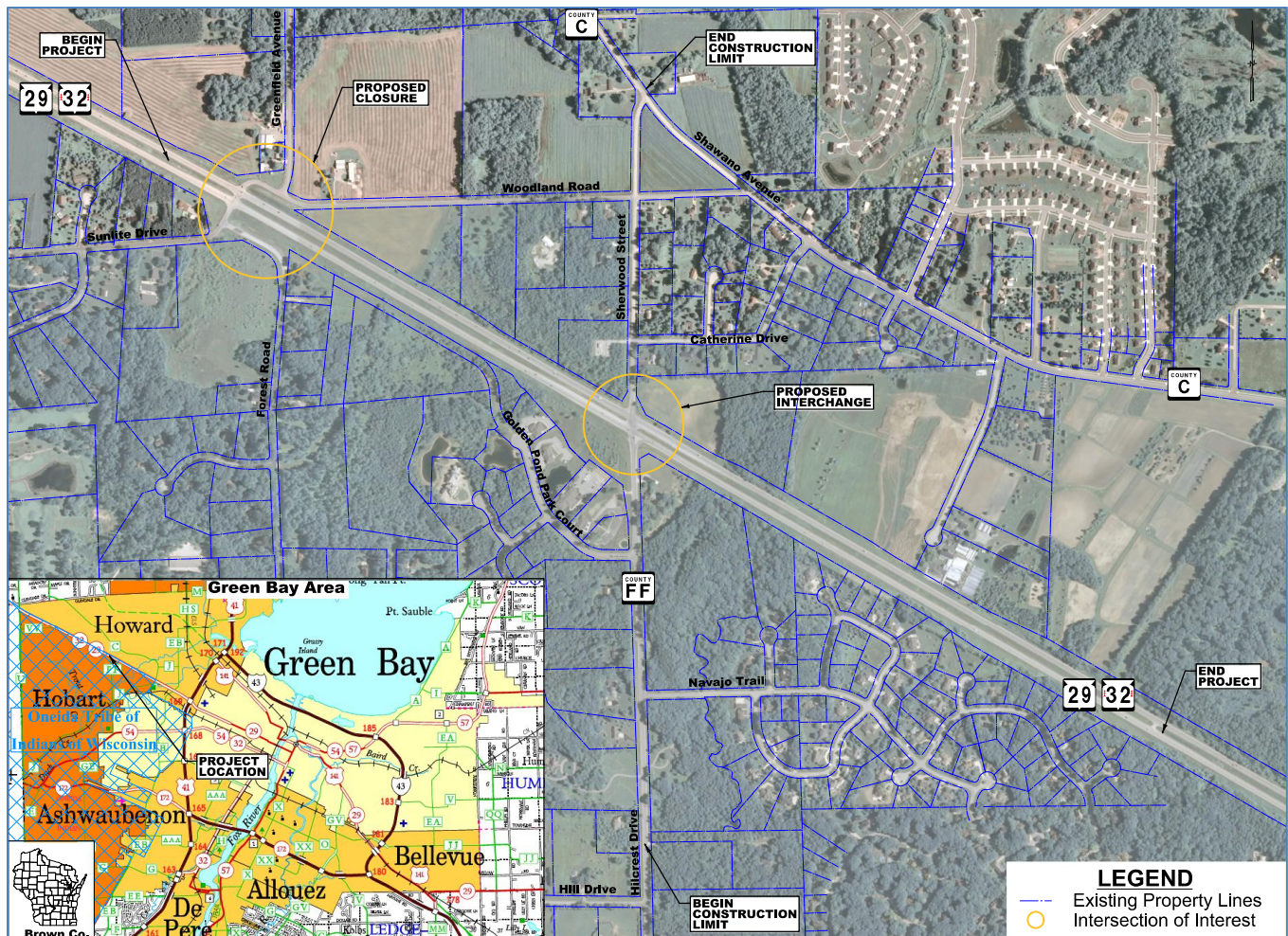
- A) Will not significantly affect the quality of the human environment. This document is a:
- ☐ Finding of No Significant Impact (FONSI)

- B) Has potential to significantly affect the quality of the human environment:
- ☐ Environmental Impact Statement (EIS) Required

(Signature) (Company/Org.) (Date) (Title) \_\_\_\_\_ (Signature) (Date) (Title)  
 (Director, Bureau of Equity & Environmental Services)

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

(Signature) (Date) (Title) \_\_\_\_\_ (Signature) (Date) (Title)  
 (☐ Region ☐ Aeronautics ☐ Rails & Harbors) (☐ FHWA ☐ FAA ☐ FTA ☐ FRA)



**Figure B-1-1 – Project Location Map**

WisDOT Project 9200-04-00/71 is located along the boundary of the Villages of Hobart and Howard in Brown County, Wisconsin. The project is also located along the northern boundary of the Oneida Tribe of Indians of Wisconsin reservation. The project area includes the at-grade intersection of WIS 29/32 and County FF and Sherwood Street. The project also includes the intersection of WIS 29/32 with Greenfield Avenue/Woodland Road and Sunlite Drive/Forest Road, located approximately 3,300 feet west of the intersection of WIS 29/32 with County FF.

WIS 29 and WIS 32 are concurrent for approximately nine miles, from Green Bay to Pulaski, Wisconsin. WIS 29 is considered the primary route in federal and state programming. For the purpose of this document, "WIS 29/32" is used to reference a specific segment of expressway (within the project limits), "WIS 29" is used to reference the state-designated corridor, and "WIS 29-County FF" is used to reference the intersection and interchange.

## Basic Sheet 2

### 1. Purpose and need of proposed action:

The **purpose** of the project is to develop a service interchange at the intersection of Wisconsin State Trunk Highways 29 and 32 (WIS 29/32) and Brown County Trunk Highway FF (County FF), and to develop changes to the local road system to preserve circulation, access and safety for travelers.

The **need** for the WIS 29-County FF interchange project is based on the following transportation issues identified in the Environmental Assessment completed for the WIS 29 Corridor Preservation Plan in 2008:

- *Corridor Preservation.* WIS 29 is a principal arterial highway and is designated as a “backbone” route in the Wisconsin Corridors 2020 Plan. The highway serves interstate and inter-regional trips and functions as the primary east-west route across north central Wisconsin, linking Green Bay, Wausau, Eau Claire with Minneapolis and St. Paul, Minnesota. It is the most heavily traveled east-west highway in Wisconsin, north of Interstate 94. The intersection of WIS 29 and County FF in Brown County is identified in the WIS 29 Corridor Preservation Plan as a preferred location for an interchange as the WIS 29 corridor is converted from an expressway to a freeway to accommodate projected increases in corridor traffic volumes.
- *Safety, Operation and Mobility.* The WIS 29 Corridor Preservation Plan seeks to preserve and enhance the long-term safety, operation and mobility of WIS 29. As a principal arterial, the function of WIS 29 is to provide regional mobility. The current average daily traffic volume on WIS 29 at its intersection with County FF is 27,200 vehicles. This volume is forecasted to grow by 82% by 2035, to 49,400 vehicles. Access locations that are well managed and limited in number are defining characteristics of principal arterial roadways. There is a direct relationship between increased traffic volumes and vehicle conflicts when direct access exists on a facility. As traffic increases on WIS 29, the number of conflicts between vehicles entering and exiting from the existing access points on the highway will also increase, as well as disruptions to traffic flow on the arterial roadway and deterioration of level of service on the intersecting local road system. This project is a component of a long term effort to convert WIS 29 to a limited access freeway west of Highway 41 in Brown County, in which all access will be provided solely at interchanges, with all at-grade intersections eliminated.

The project location witnessed 30 crashes between 2006 and 2010, including one fatality. The reconstruction of the US 41 corridor in Brown County, located approximately 3 miles east of the WIS 29-County FF intersection, is expected to create increases in traffic at the intersection beginning in 2011. As traffic is rerouted through the WIS 29 corridor during the construction of the interchange, the County FF intersection is likely to experience more turning movements and a commensurate degradation of level of service and increase in crashes.

- *Land Use and Transportation Planning Coordination.* Brown County, the Villages of Hobart and Howard abutting the project location, and the Oneida Tribe are all engaged in ongoing land use, economic development and transportation planning. The WIS 29-County FF intersection was identified as a preferred location for an interchange in the WIS 29 Corridor Preservation Plan in cooperation with these jurisdictions. Access to WIS 29 plays a key role in local land use planning decisions, especially as the route is converted into freeway. Land use planning in these jurisdictions accounts for the construction of an interchange at WIS 29 and County FF, and the associated alterations to the local road system have been coordinated with these communities.

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

The WIS 29 Corridor Preservation Plan (WisDOT Project 1058-14-00) included a complete alternatives analysis process to determine the locations of interchanges in the WIS 29 corridor. The WIS 29-County FF intersection was recommended as the location for an interchange in that plan, and conceptual interchange design was undertaken to allow the official mapping of future right of way needs under Wis. Stats. 84-295. Furthermore, an Environmental Assessment evaluated impacts of an interchange at this location, and following review, received a Finding of No Significant Impact in 2008.

The current project proceeded to refine the interchange conceptual design provided in the Environmental Assessment, and included a no-action alternative along with two build alternatives, one of which had several variants as described below.

No Action. With the no action alternative, the WIS 29-County FF intersection would not be converted into an

interchange, and no changes would be made to local road systems except for routine maintenance. The no action alternative was eliminated early in the project development process because, although it would not affect environmental, community or economic resources, it would not meet the purpose and need defined for the project. The no action alternative would not improve safety at the intersection, as traffic volumes increase; it would lead to degraded levels of service and impede regional mobility through the area on WIS 29/32; it would be inconsistent with area and regional land use plans, which were developed in conjunction with the WIS 29 Corridor Preservation Plan.

Alternative 1: Conceptual Design from the WIS 29 Corridor Preservation Plan. Alternative 1 was developed in the 2008 Corridor Preservation Plan, which was evaluated in the Environmental Assessment accompanying that plan. Alternative 1 includes the following elements:

- Closure of at-grade intersection of WIS 29/32 and County FF/Sherwood Street.
- Construction of a diamond interchange at the location of the intersection, with County FF/Sherwood Street traveling over WIS 29/32.
- Closure of at-grade intersection of WIS 29/32 with Sunlite Drive and Woodland Road. This intersection is located 360 feet from the western termini of the WIS 29-County FF interchange ramps; leaving the intersection in place would create an unsafe condition for motorists (minimum distance from a ramp is 2,640 feet based on FDM 11-5 Att. 5.2) and contravene the conversion of WIS 29 to a limited access freeway.
- Closure of the existing intersection of County FF with Golden Pond Park Court. This intersection is located 560 feet from the terminus of the east bound exit and entrance ramps proposed for the WIS 29-County FF interchange. Leaving the intersection in place would create an unsafe condition for motorists as the minimum distance from a ramp terminal at which an intersection may be located is 1,000 feet based on FDM 11-5 Att. 5.2).
- Extension of Golden Pond Park Court southward to a new intersection with County FF and Navajo Drive. This road extension provides access to the homes and businesses located on and adjacent to Golden Pond Park Court. The intersection distance meets standards in its relation to the location of the interchange ramps.
- Reconstruction of County FF/Sherwood Street to a two-lane urban boulevard typical section between Woodland Road on the north and a location approximately 840 feet south of the existing intersection of County FF and Navajo Drive.
- Closure of the intersection of Sherwood Street and Catherine Drive. This intersection falls too near the westbound ramp termini on Sherwood Street (i.e., is less than the minimum distance from the ramp). A cul-de-sac would be constructed on Catherine drive east of Sherwood Street.
- Two driveway relocations to control access along County FF and Sherwood Street.

The environmental impacts of Alternative 1 were evaluated in the 2008 WIS 29 Corridor Preservation Plan Environmental Assessment, and following Federal review, the alternative was given a Finding of No Significant Impact. The right of way needed to implement this alternative was officially mapped under Wis. Stats. 84-295. Based on changing roadway design standards, technical assessments, a more detailed evaluation of environmental, social and economic impacts, evolving land use and transportation planning, real estate acquisition constraints and public response, Alternative 1 was refined to produce the Proposed Action.

Alternative 2: Final Interchange and Associated Roadway Design. Alternative 2 includes most of the elements of Alternative 1, with refinements made based on engineering, environmental and public involvement factors. This alternative differs from Alternative 1 in the following ways:

- The two-lane divided highway cross section on Sherwood Street extends northward to County C from Woodland Road based on evaluation of traffic movements, forecasted traffic volumes and maintaining level of service at the Sherwood Street-Woodland Road and Sherwood Street-County C intersections.
- Based on the results of an Intersection Control Evaluation effort and public involvement, roundabouts would be constructed at four locations: Sherwood Street-County C, Sherwood Street-WIS 29 westbound ramp terminus, County FF-WIS 29 eastbound ramp terminus, County FF-Golden Pond Park Court-Navajo Drive. Intersection controls are not specified in the original Environmental Assessment.
- The County C-Woodland Road intersection would be closed, and a cul-de-sac constructed on Woodland Road just west of the intersection. This change resulted from the Intersection Control Evaluation in order to reduce traffic volumes on the residential segment of Woodland, to manage access points along the county highway, and to enable the Sherwood Street-Woodland Road intersection to function with a two-way stop condition into the foreseeable future. Without a cul-de-sac on Woodland, the intersection is forecast to fail by 2034. Both Brown County and the Village of Howard support this closure.
- The interchange ramps are relocated slightly to meet the roundabouts at the ramp termini.
- A curve would be constructed linking Greenfield Avenue and Woodland Road in conjunction with the closure of



the intersection of WIS 29-Greenfield Road. The radius of this curve is reduced considerably compared to the conceptual plan approved in the WIS 29 Corridor Preservation Plan process. This is done to reduce impacts to agricultural land and to reduce real estate acquisitions.

- The curve connecting Sunlite Drive to Forest Road has been modified to a T-intersection, with the primary movement being Sunlite Drive to Golden Pond Park Court. This would limit through traffic on Forest Road, which is a low-volume residential street, and preserve its status as a Rustic Road.

## Refinements to Local Roadway Connections

Based on public and municipal requests, two additional alignment evaluations for local road connections were undertaken in refining Alternative 2. One alternatives analysis focused on reevaluating the location of the southward extension of Golden Pond Park Court, as area residents expressed concerns about property impacts. Six variations on the horizontal alignment were developed:

- *Alt 1: Corridor Preservation Plan Alignment.* This alignment has been developed in the WIS 29 Corridor Preservation Plan. The alignment would impact 0.8 acres of wetland and requires the acquisition of 7 acres for right of way; it splits two parcels in half with associated costs in damages, requires the total acquisition of one parcel, and requires a 100 foot culvert to cross Thornberry Creek. This alternative has not been selected due to wetland, river and real estate impacts, and due to concerns raised by stakeholders.
- *Alts 2A and 2B: Western Alignment.* This alignment attempts to preserve the integrity of the two parcels bisected in Alternative 2 by moving the centerline of Golden Pond Park Court as far to the west as possible; approximately 40 feet east of the west property line of the two parcels. Alternatives 2A and 2B treat the intersection of the Golden Pond Park Court and Thayer Trail differently, but are otherwise identical. This alternative impacts 1.2 acres of wetland, and requires the acquisition of 9 acres for right of way. The alternative requires total acquisition of one property, and partial acquisition of two others. Acquisition costs are higher than for alternative 2A because of associated damages to the property west of the alignment. The alternative requires a 150 foot culvert to cross Thornberry Creek. This alternative was not selected due to its greater wetland and stream crossing impacts, and because of the costs associated with real estate acquisition.
- *Alt 3: Eastern Alignment.* This alignment attempts to preserve value of remnant parcels by moving the roadway as close to County FF as possible. It will impact 0.7 acres of wetland and require the acquisition of 17 acres for right of way. Two parcels will be acquired in full. A culvert crossing Thornberry Creek will be required to be 230 feet in length. Two complete buy-outs and relocations, but will avoid damages to the parcel to the west. It was not selected due to its impacts to the creek, which is a Class I trout stream.
- *Alts 4 and 5: Existing Intersection Variations.* These alternatives retain the existing location of the intersection of County FF and Golden Pond Park Court. The intersection would be raised above the existing location by 29 feet and 23 feet to enable County FF to travel over WIS 29. These alternatives would minimize real estate acquisitions and wetland impacts. However, spacing between the interchange ramp termini and the intersection would be less than the minimum of 1,000 feet, requiring an exception to standards. Additionally, the off-set intersections of County FF with Golden Pond Park Court and Navajo Trail are not desirable from a safety standpoint compared to a single intersection. For these reasons, these alternatives were not selected.
- *Alt 6: Hybrid Alignment.* The foregoing variations were presented to stakeholders at a public information meeting in June 2011. Based on comments from land owners, another alternative was developed. It locates Golden Pond Park Court eastward from the alignment proposed in the Corridor Preservation Plan (Alternative 2A above), but attempts to minimize impacts to wetlands and Thornberry Creek. This alternative includes retaining walls to avoid wetland fills, and requires a culvert of 53 feet to cross the creek. It requires the relocation of three residences. Based on considerations of cost, reasonableness, public acceptance and environmental impacts, this variation was carried forward into the preferred alternative.

A complete description of the development and evaluation of these sub-alternatives is included in the appendix, which includes detailed descriptions, maps and figures, and an analysis of economic and environmental impacts.

A second alternatives analysis focused on the provision of a frontage road on the south side of WIS 29, connecting Sunlite Drive and the existing cul-de-sac at Golden Pond Park Court. Economic development conditions have substantially changed since the 2008 Finding of No Significant Impact in an area immediately to the west of the study area. The Village of Hobart is in the process of developing the mixed-use Centennial Centre, approximately one mile west of the intersection of WIS 29 and Sunlite Drive; two manufacturing businesses have located in the development, and a considerable number of housing units have been constructed or are planned for construction. The Village of Hobart requested a re-evaluation of the need for a frontage road connecting Sunlite Drive with Golden Pond Park

Court. The Village had previously acquired right-of-way in anticipation of a future local roadway in this area. Given the increased economic activity, it was concluded that the inclusion of a frontage road in this area is necessary for the efficient provision of local access once the intersection of WIS 29 and Sunlite Drive is close following the completion of the County FF interchange. Five alternatives were evaluated:

- *Alt 1A: Rural section on Village-owned right of way.* A rural section with 12' lanes and 5' shoulders along the existing county right of way. The centerline would run west to east approximately 100' from the WIS 29 shoulder. The alternative would impact 1.2 acres of wetland and require the acquisition of 1.28 acres by fee or easement. This alignment was not selected due to its impacts to wetlands.
- *Alt 1B: Urban section along existing right of way.* Aligns the frontage road in the same location as the previous alternative, but with an urban roadway section. This typical section would match that of Golden Pond Park Court. The alternative would impact 1.2 acres of wetland and require the acquisition of 1.28 acres by fee or easement. This alignment was not selected due to its impacts to wetlands.
- *Alt 2B: Alignment snug to WIS 29 with barrier separation.* This alignment pulls the frontage road tight to WIS 29. The roadways would be separated by a 56-inch single slope concrete barrier until the frontage road curves back to meet either Golden Pond Park Court to the southeast or Sunlite Drive to the southwest. The alternative would impact 0.54 acres of wetland and require the acquisition of 1.48 acres by fee or easement. This alignment reduces impacts to wetlands, but it was not selected because it does not allow future expansion of WIS 29, and would introduce a roadside safety hazard to the traffic on WIS 29 that was previously not present.
- *Alt 2B: Alignment snug to WIS 29 with ditch separation.* This alignment is similar to the previous alternative; however, the roadways would be separated by a rural ditch section and a beamguard system at a 2.5:1 slope to the south to reduce impacts to adjacent properties. This would require the alignment to be farther south by 23' compared to the previous alternative. The alternative would impact 0.69 acres of wetland and require the acquisition of 1.48 acres by fee or easement. This alignment was selected to be included with Alternative 2; it minimizes impacts to wetlands compared to using the Village-owned right of way and it will allow for future expansion of WIS 29 while adequately serving local traffic as Centennial Centre continues to be developed.
- *Alt 3: Overpass connecting Sunlite Drive and Woodland Road.* With this alternative, an overpass would be constructed over WIS 29, connecting Sunlite Drive and Woodland Road, allowing a similar east-west movement as the frontage road. This alternative would impact no wetlands, and would require the acquisition of 2.38 acres in by fee or easement. Alternative 3 would likely require a roundabout or traffic signals at the intersection of Sherwood Street and Woodland Road. This alternative was not selected due to its real estate impacts (including acquisition of land from agriculture operations) and due to lack of support from stakeholders.

See the appendix for more details on the frontage road alternatives evaluation.

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

The Proposed Action is Alternative 2 with the additional components developed in the local road refinement process. This alternative would include the construction of a diamond interchange to replace the existing WIS 29-County FF intersection; the reconstruction of County FF and Sherwood Street to create a two-lane divided boulevard with four roundabouts; and changes to the local road system to preserve access and circulation. An overview of the Proposed Action is shown in the appendix. A full description follows:

#### WIS 29-County FF Interchange

- Close at-grade intersection of WIS 29/32 and County FF.
- Construct a grade-separated diamond interchange at the location of the intersection, with County FF traveling on a bridge over WIS 29/32.

#### County FF / Sherwood Street Reconfiguration

- Reconstruct County FF and Sherwood Street as a two-lane urban boulevard between County C on the north and a location approximately 1,100 feet south of the existing intersection of County FF and Navajo Drive on the south.
- Construct four roundabouts: Sherwood Street-County C, Sherwood Street-WIS 29 westbound ramps, County FF-WIS 29 eastbound ramps, County FF-Golden Pond Park Court-Navajo Drive.
- Close the intersection of Woodland Road and County C. Construct a cul-de-sac on Woodland Road west of County C.
- Close the intersection of Sherwood Street and Catherine Drive. Construct a cul-de-sac on Catherine drive east of Sherwood Street.
- Relocate two driveways on County FF and Sherwood Street.

#### Local Road Reconfiguration

- Close at-grade intersection of WIS 29 with Sunlite Drive and Woodland Road.
- Construct T-intersection at Forest Road and Sunlite Drive / Golden Pond Park Court frontage road (frontage road segment constructed by Village of Hobart).
- Close the existing intersection of County FF with Golden Pond Park Court.
- Construct an extension of Golden Pond Park Court southward to a new intersection with County FF and Navajo Drive on the preferred alignment described in Question 2.
- Construct a frontage road on the south side of WIS 29 between Sunlite Drive and Golden Pond Park Court on the preferred alignment described in Question 2.

#### Complete Streets Accommodations

- The reconstruction of County FF includes bicycle lanes and sidewalks.
- The interchange bridge over County FF includes bicycle lanes and sidewalks.
- The extension of Golden Pond Park Court includes bicycle lanes.
- Based on discussions with the Village of Hobart and the Brown County Planning Department, a sidewalk will connect County FF with Golden Pond Park Court on the existing alignment of Golden Pond Park Court. This will provide direct access to businesses for pedestrians without requiring them to travel the new segment of Golden Pond Park Court, which will not include sidewalks in order to minimize wetland and stream impacts.
- The cul-de-sacs on Woodland Road at County C and Catherine Drive and Sherwood Street include pass-throughs (curb-cuts that allow bicycles and pedestrians to pass while prohibiting vehicles).
- A mountable curb section eight feet in width is included in the boulevard median on Sherwood Street north of the westbound ramp roundabout; this allows snowmobiles to cross the road as the segment of Sherwood Street is a marked snowmobile route.

#### **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 is that energy attributed to materials and equipment needed to build or maintain roadways. The proposed action involves construction energy for earthwork operations, structure and pavement construction, and for material manufacturing required for construction. Maintenance energy requirements associated with an interchange structure are greater than that of an at-grade intersection, however the maintenance requirements of maintaining roundabouts is less than those for signalized intersections. There are no construction energy requirements associated with the No Build alternative.

Operational energy is that energy related to fuel consumption of vehicles using the roadways. Among other factors, fuel consumption is influenced by vehicle type, distance traveled, roadway grades, intersection stop conditions, and queuing and congestion created by traffic volumes. A number of intersections within the project limits currently operate at undesirable levels of service and none of the current intersection configurations efficiently operates with projected traffic volumes. The current and future operational energy requirements can be reduced through improving the levels of service to accommodate future traffic volumes. These improvements include modifying intersection configurations, which reduces queuing and congestion. Savings in operational energy requirements are anticipated that offset the construction energy requirements.

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

##### **a. Land use of properties that adjoin the project:**

The land use within the project area, along WIS 29/32, is generally agricultural, woodlands, and single-family residential to the west and a mix of agricultural, woodlands, single- and multi-family residential, and commercial eastward toward Green Bay. The land use along County FF south of WIS 29/32 and Sherwood Street north of WIS 29/32 is primarily single-family residential with areas of woodlands and agricultural uses intermixed.

A business park, Galleria at Golden, is located in the southwest quadrant of the intersection of WIS 29/32 and County FF (Hillcrest Drive) and is home to a several service businesses (financial management, civil engineering). A small manufacturing facility is located in the southeast quadrant of the intersection (a commercial woodworking operation). A utility facility is located in the northwest quadrant (natural gas substation).

Along the proposed extension of Golden Pond Park Court, low density single-family residential land uses are present.

The area at the intersection of WIS 29/32 and Sunlite Drive/Forest Road supports low density residential land use; at the intersection of WIS 29/32 and Woodland Road/Greenfield Avenue, agricultural and low density single-family residential land uses are present.

**b. Land use surrounding project area:**

Land use surrounding the project area is primarily residential and agriculture. Some scattered commercial uses are present along major transportation corridors. The Centennial Centre, a mixed use planned development, is under development approximately one mile west of the existing intersection of WIS 29 and Sunlite Drive.

**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:**

Wisconsin State Highway Plan 2020 (February 2000). WIS 29 is designated a Corridors 2020 Backbone Route. The highway connects major population and economic centers in several regions of the state and links to the national transportation network. The Proposed Action is consistent with the recommendations of the plan.

Brown County Long Range Transportation Plan Update (November 2010). Construction of the WIS 29-County FF interchange is recommended in this document. Furthermore, the plan includes information about environmental justice and wetland impacts analysis used in the completion of this Environmental Report. The Proposed Action is compatible with this plan.

Brown County Bicycle and Pedestrian Plan Update (January 2011). This document includes specifications for bicycle and pedestrian facilities in Brown County which have been utilized in the design of the WIS 29-County FF interchange. The Proposed Action is compatible with this plan.

Village of Howard Comprehensive Plan (September 2002). The Village of Howard Comprehensive Plan acknowledges the village's participation in the WIS 29 Corridor Preservation planning process and incorporates the planning process recommendations, including the construction of an interchange at WIS 29/32 and County FF. The plan includes details on construction staging for this process (maintaining access at WIS 29-Woodland Road until the interchange is complete) and typical section for the reconstruction of Sherwood Street. These items have been incorporated into the Proposed Action. Additionally, the plan notes that the village will retain possession of right of way at WIS 29/32 and Woodland following closure of the intersection in anticipation of the construction of a future pedestrian bridge over WIS 29/32 at this location. The Village of Howard is currently updating its comprehensive plan; the Proposed Action accounts for draft recommendations from that planning process, including designing the roundabout at County C-Sherwood Street to accommodate a future village roadway developed in the draft plan. The Proposed Action is compatible with this plan.

Village of Hobart Comprehensive Plan (December 2006). The Village of Hobart Comprehensive Plan does not specifically recommend the construction of an interchange at WIS 29-County FF. However, the results of a community survey included in the plan show support for adding interchanges to WIS 29 generally, and the plan's transportation objectives call for establishing standards for intersections on County FF.

Village of Hobart Bicycle Audit (2009). This document makes general recommendations to improve cycling conditions in the village. It includes a recommendation for a multi-use path along the south side of WIS 29/32 between Sunlite Drive and Golden Pond Park Court. This recommendation is accounted for in the Proposed Action, which includes a T intersection at Sunlite Drive-Forest Road-Proposed westward extension of Golden Pond Park Court.

**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:**

In addition to data analysis, the project development process for the both the 2008 WIS 29 Corridor Preservation Plan and the design of the WIS 29-County FF interchange included numerous opportunities for involvement by all populations, including those enumerated in Executive Order 12898. Particular outreach efforts to these populations are described in Question 11 below and in Factor Sheet B-4, Environmental Justice. The methodologies utilized to



identify the locations of these populations are summarized below.

How was information obtained about the presence of populations covered by EO 12898?	
<input type="checkbox"/> Windshield Survey	✓ Official Plan: <u>Brown County Long Range Transportation Development Plan (2010), WIS 29 Right of Way Preservation Plan Environmental Assessment</u>
✓ US Census Data	<input type="checkbox"/> Survey Questionnaire
<input type="checkbox"/> Real Estate Company	✓ WisDOT Real Estate
✓ Public Information Meeting	<input type="checkbox"/> Local Government
<input type="checkbox"/> Human Resources Agency Identify agency Identify plan, approval authority and date of approval	
✓ Other (Identify) Meetings with tribal representatives	

- a. ☐ 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.

The Brown County Long Range Transportation Plan Update, completed in 2010, includes a detailed analysis of the locations of protected populations in relation to major project corridors, and an evaluation of the environmental justice impacts of those projects. That analysis shows a minority presence in the WIS 29-County FF project area, and also that the project area is among the highest-income locations in Brown County. Regarding the WIS 29 Freeway Conversion project, that plan concludes: "...most of the WIS 29 corridor project will not negatively affect minority or low-income populations next to the corridor because relatively few people currently live in the area (and most of those who do are relatively affluent non-minorities). However, as many routes as possible should be established over the highway to allow people to travel between the communities using a variety of transportation modes. The freeway should also be built in a way that minimizes noise levels and maximizes its compatibility with the surrounding area." The Proposed Action includes multi-modal facilities to enable cyclists and pedestrians to safely cross the freeway, as recommended in this plan.

**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. ☐ No - Individuals covered by the above laws were not identified.  
 b. ✓ Yes - Individuals covered by the above laws were identified.  
     ✓ Civil Rights issues were not identified.  
     ☐ Civil Rights issues were identified. Explain:

The study area includes elderly and disabled populations. In 2011, 11% of population in the study area was aged 65 and older. Disability rates are typically measured in number of disabilities reported per 1,000 persons aged 5 or more. The rates of persons with disabilities were relatively consistent between the study area communities in 2000 [more recent data are not yet available]: Brown County, 251 disabilities per thousand population; Hobart, 298 disabilities per thousand; Howard, 246 disabilities per thousand. One person may exhibit more than one disability. Based on these data, it is reasonable to assume that persons with disabilities live and work in the study area. See Factor Sheet B-4. Public information meetings were held in accessible buildings, and interpreters and hearing aids were made available with advance notification. The public meetings were well attended by elderly stakeholders.

**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
28 June 2011	WDNR	Snowmobile Club Focus Group	DNR Northeast Office, Green Bay	15
28 June 2011	WisDOT	Public Information Meeting	Hillcrest Elementary School, Hobart	90
16 August 2011	WDNR	Snowmobile Club Focus	DNR Northeast	9

		Group	Office, Green Bay	
26 April 2012	WisDOT	Public Information Meeting	Hillcrest Elementary School, Hobart	upcoming

**b. Other methods, describe:**

Newsletters were produced and distributed throughout the study area; they served to update stakeholder during project development and to invite area residents, employees and property owners to public information activities. A project website was developed to distribute project information and to enable stakeholders to provide comments on the project. Study area municipalities included links to the project site on their websites.

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

Study area snowmobile clubs were the subject of special outreach activities. Two meetings with club representatives were coordinated by the Wisconsin Department of Natural Resources. A club-funded snowmobile trail traverses the project area, including a small footbridge over Lancaster Creek. Impacts to the trail system were mitigated through this coordination process.

The Brown County Chamber of Commerce was notified of public meetings, and distributed information to its members.

Because the project area is partially located on tribal lands, the surrounding Oneida Tribe was notified of the project and its potential impacts.

Hillcrest Elementary School, located approximately 0.75 miles south of the intersection of WIS 29-County FF, used its family notification system to invite parents and others to the public information meetings.

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

Three further public information meetings will be scheduled to update stakeholders on the project development process. The next meeting is scheduled for spring 2012, and will be used to present findings from the environmental documentation process. A newsletter will be developed and distributed prior to each public information meeting. Future meetings will focus on final design and construction.

**10. Briefly summarize the results of public involvement:**

**a. Describe the issues, if any, identified by individuals or groups during the public involvement process:**

At the first Public Information Meeting, attendees were reintroduced to the project, learned about refinements to the conceptual design completed in the WIS 29 Corridor Preservation Plan, and commented on preliminary design for the Proposed Action. Attendees responded favorably to the project, noting that entering, exiting and crossing WIS 29/32 at County FF was difficult due to high traffic volumes and speeds on the state highway. They generally approved of the roundabouts recommended for intersections, and numerous stakeholders approved of the sidewalks and bicycle lanes included on County FF. Residents of Catherine Court welcomed the cul-de-sac proposed for their street, and reported high traffic speeds on the street, as it is a primary "cut-through" route for vehicles accessing WIS 29/32. Two residents on the south side of Catherine Court questioned the proximity of ramp slopes to their property. Although they are not directly affected, they were concerned about increased noise levels and effects on property values if the ramps were located within several hundred feet of their parcels.

The main issue for attendees revolved around real estate impacts. Property owners on Sherwood Street and County FF south of Navajo Trail requested details about driveway relocations and strip acquisitions. Residents directly affected by the relocation of Golden Pond Park Court expressed misgivings about effects to the value of their property.

Snowmobile routing is the second public concern identified through stakeholder involvement activities. Snowmobile club representatives worked closely with project designers to ensure continued recreational access through the interchange.

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

To address the comments received at the Public Information Meeting, a new alternative alignment was developed for the southward extension of Golden Pond Park Court. The alignment includes total buyouts for three parcels, as desired by the affected homeowners. The WisDOT project manager discussed the potential for noise impacts directly with the concerned residents on Catherine Court; a traffic noise analysis concluded that changes in noise levels at this location do not meet noise abatement criteria. See Factor Sheet D-3.

Snowmobile access through the interchange was accommodated through design refinements. The trail was relocated along the northeast ramp of the interchange, and slopes were modified to allow snowmobiles to access Sherwood Street at a location a safe distance from the westbound ramp terminal roundabout. An eight-foot wide section of mountable curbing was utilized in the Sherwood Street median to allow snowmobiles to cross the median at a safe location.

# **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			
Oneida Tribe of Wisconsin	Y	1/4/2011	ongoing	Participated in Stakeholder Advisory Committee
Village of Hobart	Y	1/4/2011	ongoing	Participated in Stakeholder Advisory Committee
Village of Howard	Y	1/4/2011	ongoing	Participated in Stakeholder Advisory Committee
Brown County Planning Commission	Y	1/4/2011	ongoing	Participated in Stakeholder Advisory Committee
Bay-Lake Regional Planning Commission	N	1/4/2011	ongoing	
Howard Suamico School District	N	1/4/2011	ongoing	
Pulaski School District	Y	1/4/2011	Ongoing	Participated in Stakeholder Advisory Committee

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

Oneida Tribe: The tribe is concerned about access to a tribe-owned golf course, Thornberry Creek, immediately west of the project area. The tribe has been involved in the restoration of the trout fishery in Thornberry Creek, and desired to review plans for new stream crossings and impacts to associated wetlands.

Village of Hobart: The village is planning to construct a frontage road on the south side of WIS 29/32, between Sunlite Drive and Golden Pond Park Court. They requested that it be included in the Proposed Action. They feel the road will be an essential link between WIS 29/32 and a planned development, Centennial Centre, one mile west of the intersection of WIS 29 and Sunlite Drive. The village also requested to be the sole party included in determining interchange aesthetic treatments, as it is viewed as a key entrance point to the community.

Village of Howard: The village requested that Sherwood Street be reconstructed as a boulevard northward to County C, rather than stopping at Woodland Road.

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

Oneida Tribe: Access to Thornberry Creek Golf Course will still be available through the local road network but may require additional signing and customer education. Additionally, access to the golf course directly from County FF will be enabled with the construction of the south frontage road (see Village of Hobart, below). Stream crossing design will be reviewed by Oneida Tribe; the crossings have been designed in cooperation with the Wisconsin Department of Natural Resources to avoid or minimize impacts to fisheries.

Village of Hobart: Due to substantial changes in land use since the approval of the WIS 29 Corridor EA in 2008, it was decided that a frontage road connecting Sunlite Drive and Golden Pond Park Court is necessary to maintain adequate local circulation following the closure of the existing WIS 29-Sunlite Drive intersection. The design and construction of this frontage road is included in the WIS 29-County FF interchange design project. The intersection of Sunlite Drive-Forest Road-frontage road has been modified in the Proposed Action to form a T intersection, with the main movement being that from east to west along Sunlite Drive and the frontage road; the conceptual plan did not include this intersection, but proposed a curve connecting Sunlite Road with Forest Road. Aesthetic treatments of for the interchange will be designed to complement those utilized in the US 41 corridor three miles to the east.

Village of Howard: Following the traffic analysis and intersection control evaluations, the conceptual plan approved in the WIS 29 Corridor Preservation Plan was modified to maintain level of service and safety at Sherwood Street intersections by extending the two lane divided boulevard section to the intersection of Sherwood Street and County C and constructing a roundabout at the intersection. To reduce cut through traffic on Woodland Road, the intersection of Woodland Road and County C would be removed and replaced with a cul-de-sac. Additionally, the roundabout at County C-Sherwood Street was modified from initial designs to accommodate a future village roadway to the north, which was developed in the Howard comprehensive plan update.

**d. Indicate any unresolved issues or ongoing discussion:**

All major issues have been resolved.



**Basic Sheet 3  
Coordination**

<b>INTERNAL WisDOT</b>	<b>Coordination Required?</b>	<b>Correspondence Attached?</b> Y = Yes N = No	<b>Comments</b> 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	<input checked="" type="checkbox"/> No		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 4 miles (6.44 km) of a public use or military airport.
	<input type="checkbox"/> Yes		
Bureau of Rails & Harbors	<input checked="" type="checkbox"/> No		Coordination is not required because no railways or harbors are in or planned in the project area.
	<input type="checkbox"/> Yes		
Regional Real Estate Section	<input type="checkbox"/> No		
	<input checked="" type="checkbox"/> Yes		Coordination has been completed. Project effects and relocation assistance have been addressed. Conceptual Stage Relocation Plan attached.
<b>STATE AGENCY</b>	<b>Coordination Required?</b> Y = Yes N = No	<b>Correspondence Attached?</b> Y = Yes N = No	
Agriculture (DATCP)	Y	Y	<p>A project notification letter for this project was sent on January 4, 2011. No response has been received.</p> <p>An Agricultural Impact Notice (AIN) will be submitted in 2012.</p> <p>An Agricultural Impact Statement (AIS) is required, and is expected to be completed in late June 2012.</p>
Natural Resources (WDNR)	Y	Y, meeting minutes	<p>Coordination between WisDOT and WDNR is ongoing.</p> <p>In a letter dated February 1, 2011, WDNR offered the preliminary comments regarding interest in the following (See attachments for original correspondence):</p> <ul style="list-style-type: none"> <li>• Wetlands</li> <li>• Waterways/Fisheries</li> <li>• Wildlife</li> <li>• Endangered Resources</li> <li>• Erosion Control</li> <li>• Invasive Species Control</li> </ul> <p>Subsequent coordination with DNR focused on water resource issues, leading to the following refinements to conceptual designs to avoid and minimize impacts: Use of three-sided (bottomless) culverts for crossings of Thornberry Creek; development of additional wetland restoration opportunities in conjunction with stormwater management design; additional retaining walls to avoid and minimize wetland impacts and reduction of median widths. Finally, DNR coordination was essential in determining an alternate route for the existing snowmobile trail through the project area.</p>

State Historic Preservation Office (SHPO)	Y	Y	<p>Section 106 documentation was approved by the WisDOT Historic Preservation Office on January 9, 2012 and the Oneida Tribal Historic Preservation Office on February 2, 2012. No historically significant or culturally significant resources are anticipated to be affected by this project. See appendix.</p> <p>Approval is contingent on satisfying the following commitments/provisions:</p> <ol style="list-style-type: none"> <li>1. Provide onsite monitoring in coordination with the Oneida Tribal Historic Preservation Office (THPO). (Applicable to Sunlite frontage road only)</li> <li>2. Provide Cultural Sensitive Training onsite. (Applicable to Sunlite frontage road only)</li> <li>3. Provide reports and have data recovery plan in conjunction with Archeological survey field work.</li> <li>4. Coordinate weekly with THPO.</li> </ol>
Others: WisDOT Rustic Roads Coordinator	Y	N	<p>The WisDOT Rustic Road Coordinator was contacted via telephone on February 1, 2011.</p> <p>Rustic Road #40 – Forest Road -- is affected by the Proposed Action. Design modifications to accommodate the Village of Hobart's south frontage road resulted in the inclusion of a T intersection at Sunlite Drive-Forest Road-South Frontage Road. East-west movements are prioritized, with a stop control for traffic on Forest Road. This will result in continued low speed, low volume traffic on Forest Road and will not impact it status as a Rustic Road.</p>
<b>FEDERAL AGENCY</b>	<b>Coordination Required? Y = Yes N = No</b>	<b>Correspondence Attached? Y = Yes N = No</b>	
Advisory Council on Hist.Pres. (ACHP)	N	N	Coordination with the ACHP was not required.
Corps of Engineers (USACE)	Y	Y	<p>Coordination between WisDOT and the Army Corps of Engineers (USACE) is ongoing.</p> <p>Application for a USACE permit will be submitted upon approval of the environmental document. Section 401(a) of the Clean Water Act 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.</p>
Environmental Protection Agency (EPA)	Y	Y	<p>In a letter dated February 8, 2011, EPA recommended that WisDOT avoid impacting wetlands and document how wetland impacts were avoided and minimized. If wetland impacts were unavoidable, EPA directed that Section 404(b)(1) of the Clean Water Act must be followed. EPA also suggested early coordination with the Oneida Tribe. Lastly, EPA recommended the following:</p> <ul style="list-style-type: none"> <li>• construction materials be re-used</li> <li>• that the use of alternative construction materials either made of recycled goods or provide an environmental benefit</li> <li>• highway lighting be energy efficient</li> </ul> <p>EPA Region 5 (Chicago office) was contacted via telephone on June 2, 2011. EPA provided further guidance for impacts to Oneida tribal lands, which require a general stormwater permit separate from that issued by WDNR.</p> <p>Application for an EPA General Permit for Storm Water Discharges will be submitted in early 2013.</p>
National Park Service (NPS)	N	N	No NPS administered lands are affected by the project.
Nat. Resource Cons. Service (NRCS)	Y	Y	<p>A project notification letter was sent on January 4, 2011. No response has been received.</p> <p>Further coordination with NRCS is dependent on further coordination with DATCP. See appendix.</p>
US Coast Guard (USCG)	N	N	Navigable waters of the United States are not affected by project.

Fish & Wildlife Serv. (FWS)	Y	Y	<p>In a letter dated January 31, 2011, FWS stated that no federally-listed species are expected in the project area. It noted that if additional information on listed or proposed listed species or their critical habitat become available or the project plans change, it is recommended that the local FWS office be contacted for further review.</p> <p>The letter also noted that "in refining and selecting project alternatives, efforts should be made to select an alternative that does not adversely impact wetlands. If no other alternative is feasible and wetland disturbance or loss cannot be avoided, a mitigation plan should be developed." Also, the project "should include design features such as culverts to retain hydrological connection between areas fragmented by the project." See appendix.</p>
Other(Identify)			
<b>AMERICAN INDIAN TRIBES</b>	Y	Y	<p>Extensive coordination was conducted with Oneida Tribe of Indians of Wisconsin. The Proposed Action is partly within the Oneida Reservation boundaries. The Oneida were represented on the Stakeholder Advisory Committee, and three local officials meetings were held with tribal representatives. Issues raised by the tribe and their resolution are described in Question 11 above. See appendix and SHPO/THPO coordination.</p>

**Basic Sheet 4**  
**Environmental Factors Matrix**

FACTORS	EFFECTS				
	Adverse	Benefit	None Identified	Factor Sheet Attached	<p>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.</p> <p style="text-align: center;"><b>Comments</b></p>
<b>A. ECONOMIC FACTORS</b>					
A-1 General Economics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>The Environmental Assessment for the WIS 29 Corridor Preservation Plan (Corridor EA) noted that the project would have short-term adverse effects related to construction and that economic benefits would be realized as a result of reduced maintenance costs and improved efficiency of the facility.</i></p> <p>The preliminary cost estimate for the project is \$14,812,431.50.</p> <p>While the Proposed Action will include the loss of an isolated woodworking business and 11 acres of land from farming operations through fee simple and easement, the general economic advantages of the project will outweigh the disadvantages. The management of access along the corridor will facilitate organized development and will enable the surrounding communities to manage the intensity of surrounding land uses.</p>
A-2 Business	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>The Corridor EA noted that one business would be displaced and that other businesses along the highway may experience reduced sales due to access changes. The EA stated that businesses would experience benefits of improved safety and increase transportation efficiency along WIS 29. It also noted that improvements along the corridor would guide future development and improve predictability of future land use decisions.</i></p> <p>During construction, access to local businesses will be impacted and will necessitate additional travel for some employees. A woodworking business will be relocated. A farming operation that creates seasonal trucking traffic will need to adjust routes and access to the state highway during and after construction. Following the completion of the project, access to the local businesses will be safer and more convenient.</p>
A-3 Agriculture	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>The Corridor EA stated that impacts to agricultural land uses would primarily be associated with acquisitions needed for right of way. It also noted that the project would improve safety and efficiency for operations that move equipment and personnel across the state highway.</i></p> <p>The Proposed Action will acquire 11 acres from a total of five farming operations; approximately 10 acres will be acquired outright and less than one acre through easement. An Agricultural Impact Notice will be submitted to DATCP in 2012. An AIS is required and is expected to be completed by DATCP in late June 2012. No acquisition in excess of five acres from one farming operation is proposed as part of the Proposed Action. Access to farming operations will change during and after construction. While access to the state highway will be more restrictive, local access will be safer as a result of wider roadways, roundabouts and grade separation at the interchange.</p>
<b>B. SOCIAL/CULTURAL FACTORS</b>					
B-1 Community or Residential	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>The Corridor EA reported that the adverse effect of the project for the local communities will be less direct access to WIS 29. Benefits of the project include a safer and more efficient transportation system, and bicycle and pedestrian accommodations.</i></p> <p>In addition, five single-family residential homes will be displaced as part of this project. Generally, residents expressed support for the Proposed Action at public information meetings. Input from property owners and communities was sought early in the design and has guided the development and refinement of the Proposed Action.</p>



FACTORS	EFFECTS				
	Adverse	Benefit	None Identified	Factor Sheet Attached	<p>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.</p> <p><b>Comments</b></p>
B-2 Indirect Effects	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><i>In March 2007, an indirect and cumulative effects analysis was prepared in conjunction with Corridor EA. Possible indirect effects included growth induced by improved transportation links, conversion of farmland to other uses, and increase rates of impacts to water resources. These land use changes were anticipated in the community's comprehensive plans.</i></p> <p>Similar trends and conclusions of the analysis are anticipated with respect to the refined proposed action. Beneficial effects include increase ability to meet significant local objectives for economic development, particularly in the Centennial Centre development which will be served, in part, by the proposed action. See Factor Sheet B-1 Community or Residential Evaluation for more information.</p>
B-3 Cumulative Effects	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The project may contribute to cumulative effects in the same manner as indirect effects. Investments in transportation at the project location are to lead to further investments over time as the area urbanizes. Over time, combined actions result in conversion of cropland and upland habitat to more intense uses. These actions contribute to increase economic opportunities for the study area.</p>
B-4 Environmental Justice	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>The Corridor EA noted that minority or low-income populations were present in the project corridor but that neither would be disproportionately affected by the project.</i></p> <p>Two interests of the Oneida Tribe will be impacted by the Proposed Action. Travel time to the Tribe-owned Thornberry Creek Golf Course will change as a result of closure of the intersection of WIS 29 and Sunlite Drive. The Oneida Tribe has also invested in the habitat restoration of Thornberry Creek (Class 1 Trout Stream). The Proposed Action will include a narrowed roadway cross section at the stream crossing and the use of three-sided (bottomless) culverts to minimize effects to the streams. Although some adverse effects may exist, they are not disproportionately high compared to the beneficial effects.</p>
B-5 Historic Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p><i>The Corridor EA concluded that there were no historic resources within the project area that were potentially eligible for the National Register of Historic Places.</i></p> <p>Further results of investigations of historic resources concurs with the Corridor EA.</p>
B-6 Archaeological Sites	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p><i>The Corridor EA concluded that there were no archeological sites within the project area that were potentially eligible for the National Register of Historic Places.</i></p> <p>Further results of investigations of archeological sites concurs with the Corridor EA.</p>
B-7 Tribal Issues	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Consultation with the Oneida Tribe is ongoing throughout the design development.</p>
B-8 Section 4(f) and 6(f) or Other Unique Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p><i>The Corridor EA noted that there were no 4(f) or 6(f) resources in the project area.</i></p> <p>A snowmobile trail follows the north side of WIS 29 and crosses Sherwood Street within the project limits. The trail is maintained by a private snowmobile club. The trail is allowed by landowner consent and there is no public ownership of the trail. Therefore, it is not a Section 4(f) resource.</p> <p>There are no wildlife or waterfowl refuges within the project area.</p>
B-9 Aesthetics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><i>The Corridor EA noted that the resulting viewshed changes of an elevated structure over WIS 29 would adversely affect aesthetics of the project area; this effect was found to have no significant impact.</i></p>

FACTORS	EFFECTS				
	Adverse	Benefit	None Identified	Factor Sheet Attached	<p>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.</p> <p><b>Comments</b></p>
					<p>The Proposed Action will continue the general aesthetic treatments developed for the US 41 Corridor Community Sensitive Design. The urbanizing nature of Proposed Action's aesthetics will complement the planned development of the local communities, which envision increasing densities of residential and business land uses in the project area.</p>
<b>C. NATURAL SYSTEM FACTORS</b>					
C-1 Wetlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>The Corridor EA estimated that approximately 6.07 acres of wetlands (within the corridor study limits) would be affected by the project. It also noted that techniques such as retaining walls and steep embankment slopes would be considered in the design to minimize or avoid impacts. Where impacts could not be avoided onsite, offsite, and banking mitigation options would be considered.</i></p> <p>Based on design refinements, approximately 9.50 acres of wetland (in the vicinity of the intersection of WIS 29 &amp; County FF) will be impacted by the Proposed Action. Approximately 0.4 acres of wetlands will be avoided by implementing the Golden Pond Park Court alignment included as part of the Proposed Action. Further avoidance and/or minimization will be realized through installing equalizer pipes to maintain wetland flow and hydrology, disposing excavated wetland soil on the new roadway slopes or upland area, and using effective erosion control measures to minimize sedimentation into wetlands, as well as techniques suggested in the Corridor EA.</p>
C-2 Rivers, Streams and Floodplains	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>The Corridor EA recorded that nine tributary stream locations (within the corridor study limits) would be affected by the project. No long term impacts to the floodplain were anticipated.</i></p> <p>The following streams will be impacted by the Proposed Action: Lancaster Creek, Thornberry Creek, and two unnamed streams. Minimal, if any, impacts to the floodplain are anticipated as a result of the Proposed Action. Floodplains have been mapped in the Village of Hobart (south of WIS 29), and hydraulic data will be provided to the locals for map revision. Hydraulic modeling will be conducted and will include an analysis of backwater changes. The analysis will guide the final design such that the floodplain is not, or minimally, impacted. Fish habitat will be accommodated with three-side (bottomless) culverts at stream crossings. The installation of "fish lights" will also be considered. In-stream restrictions from October 15 through May 1 will be enforced to minimize any adverse impacts to migrating of spawning trout or sediment deposition on eggs.</p>
C-3 Lakes or Other Open Water	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>No open water resources will be affected by the Proposed Action.</p>
C-4 Groundwater, Wells, and Springs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>At least one private well has been identified within the project limits. The Proposed Action will include acquiring the property. This and any wells on other acquired properties will be filled and sealed in accordance to Wisconsin Administrated Code Ch. NR 112 and WDNR requirements. No other impacts to other private wells are anticipated.</p> <p>An underdrain/spring has been identified within the proposed slope limits at the culvert crossing of Thornberry Creek and County FF. The spring outlets via a 6- to 10-inch underdrain that runs parallel adjacent to the steel culvert. The underdrain and spring will be accommodated by the Proposed Action.</p>
C-5 Upland Wildlife and Habitat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>The Corridor EA estimated that approximately 1.7 acres of wooded upland habitat (in the vicinity of the County FF intersection) would be affected by the project. It also noted that the forested communities are not unique to any known endangered or threatened species but they do provide support for "life-cycle elements" for a number of species in the area.</i></p>

FACTORS	EFFECTS				
	Adverse	Benefit	None Identified	Factor Sheet Attached	<p>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.</p> <p><b>Comments</b></p>
					<p>Further coordination with WDNR has identified that the area is classified as a Migratory Bird Concentration Site of Special Concern. WDNR suggested that impacts to wooded areas be avoided if possible, or kept to an absolute minimum. Impacts caused by the Proposed Action will be minimized by measures such as using retaining walls and steeper slopes and by reducing the width of the roadway and sidewalks.</p> <p>Also, see discussion of State Threatened species in C-7.</p>
C-6 Coastal Zones	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Brown County is located in a coastal zone. However, the proposed action does not affect a Special Coastal area and is therefore, consistent with the Coastal Zone Management Plan.
C-7 Threatened and Endangered Species	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><i>The Corridor EA suggested exclusion fencing as a technique to protect a state threatened species, wood turtle (Clemmys insculpta) potentially residing in the area.</i></p> <p>In addition, enclosing the work area with tight fitting silt fence or turbidity barrier should exclude the turtles from the site and prevent nesting in exposed soils. Silt fence will be installed prior to March 15 of a given construction season and any turtles found onsite will be removed from the construction site prior to work.</p>
<b>D. PHYSICAL FACTORS</b>					
D-1 Air Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	As noted in the Corridor EA, the project is exempt from permit requirements under Wisconsin Administrative Code – Chapter NR 411. No substantial impacts to air quality are anticipated.
D-2 Construction Stage Sound Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Corridor EA suggested that special provisions be included that require all motorized equipment be operated in compliance with applicable local, state, and federal laws and regulations related to noise levels. WisDOT Standard Specifications 107.8(6) and 108.7.1 would apply.
D-3 Traffic Noise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>The Corridor EA concluded that noise abatement measures were not necessary for the project.</p> <p>Upon further refinement of the alternatives, the Proposed Action was determined to be a Type I project that requires a noise analysis. The analysis determined that the Proposed Action would impact noise quality in the vicinity of the WIS 29 and Sunlite Drive/Woodland Road intersection(s). However, a 15-foot sound barrier at this location would exceed the \$30,000 per benefitted receptor limit defined in FDM 23-35-15. Shorter walls were considered but do not meet a goal of reducing the noise by 9 decibels.</p>
D-4 Hazardous Substances or Contamination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A Phase I Hazardous Materials Assessment determined that two properties were identified to potentially contain contaminants. A Phase II investigation is recommended for one of the sites but has not been conducted to-date.
D-5 Stormwater	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>The Corridor EA noted that the project would impact stormwater management during and after construction. Stormwater management measures would be included to minimize adverse effects.</p> <p>A stormwater management plan is currently being prepared. The plan will include proven stormwater management strategies in accordance with TRANS 401 (see factor sheet). Swale treatment and detention/retention basins will be considered.</p>
D-6 Erosion Control	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>The Corridor EA stated that standard erosion control measures would be used to minimize any adverse effects to the surrounding areas and that the measures would be in compliance with the Wisconsin Administrative Code (Chapter TRANS 401) and the WisDOT/DNR Cooperative Agreement.</p> <p>In addition, an Erosion Control Implementation Plan (ECIP) will be developed by the contractor and submitted to WDNR 14 days prior to a preconstruction conference.</p>

FACTORS	EFFECTS				
	Adverse	Benefit	None Identified	Factor Sheet Attached	<p>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.</p> <p><b>Comments</b></p>
<b>E. OTHER FACTORS</b>					
E-1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
E-2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

**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		
		No Action	Corridor EA (Alt. 1-D; County FF Interchange extracted)	Prop. Action (Alternative 2)
Project Length	Miles	1.6	1.6	1.6
<b>Preliminary Cost Estimate</b>				
Construction	Million \$	0	N/A	14.8
Real Estate	Million \$	0	N/A	2.1
Total	Million \$	0	N/A	16.9
<b>Land Conversions</b>				
Wetland Area Converted to ROW	Acres	0	6.07	9.50
Upland Habitat Area Converted to ROW	Acres	0	3.85	4.6
Other Area Converted to ROW	Acres	0	20.52	18.2
Total Area Converted to ROW	Acres	0	26.12	30.6
<b>Real Estate</b>				
Number of Farms Affected	Number	0	3	5
Total Area Required From Farm Operations	Acres	0	7.39	11.0
AIS Required	Yes/No	No	Yes	Yes
Farmland Rating	Score	N/A	54	45
Total Buildings Required	Number	0	5	11
Housing Units Required	Number	0	1	6
Commercial Units Required	Number	0	1	1
Other Buildings or Structures Required	Number (Type)	0	--	--
<b>Environmental Issues</b>				
Indirect Effects	Yes/No	No	Yes	Yes
Cumulative Effects	Yes/No	No	Yes	Yes
Environmental Justice Populations	Yes/No	No	No	No
Historic Properties	Number	0	0	0
Archeological Sites	Number	0	0	0
106 MOA Required	Yes/No	No	No	No
4(f) Evaluation Required	Yes/No	No	No	No
Flood Plain	Yes/No	No	Yes	Yes
Total Wetlands Filled	Acres	0	6.07	9.50
Stream Crossings	Number	0	5 total, 1 new	5 total, 2 new
Endangered Species	Yes/No	No	No	No
Air Quality Permit Required	Yes/No	No	No	No
Design Year Noise Sensitive Receptors			5	58
No Impact	Number		3	56
Impacted	Number		2	2
Contaminated Sites	Number	0	2	2

**Basic Sheet 6**  
**Traffic Summary Matrix**

	<b>ALTERNATIVES/SECTIONS</b>		
	No Action (4/4/2011 Traffic Forecast Report)*	WIS 29 Right of Way Preservation Plan (Corridor EA) Alt 1-D (County VV – County FF)*	Proposed Action Alternative 2 (WIS 29 - County FF Interchange)*
<b>TRAFFIC VOLUMES</b>			
Existing AADT	21,300 (2009)	22,400 (2003)	21,300 (2009)
Const. Yr. AADT	24,800	N/A	24,700
Const. Plus 10 Yr. AADT	31,800	N/A	31,700
Design Yr. AADT	38,900 (2034)	49,400 (2040)	38,900 (2034)
DDHV	2,310 (2034)	3,290 (2040)	2,310 (2034)
<b>TRAFFIC FACTORS</b>			
K <sub>100</sub> (%)	9.9	11.5	9.9
D (%)	60	58	60
Design Year T (% of ADT)	N/A	10.6	5.3
T (% of DHV)	4.5	7.3	4.5
Level of Service	F	D	C
<b>SPEEDS</b>			
Existing Posted	55-65 MPH	55-65 MPH	55-65 MPH
Future Posted	65 MPH	65 MPH	65 MPH
Design Year Project Design Speed	N/A	70 MPH	70 MPH
<b>OTHER (Specify)</b>			
P (% of ADT)	N/A	N/A	N/A
K (% OF ADT)	N/A	N/A	N/A

ADT = Average Daily Traffic

K [30/100/200] : K<sub>30</sub> = Interstate, K<sub>100</sub> = Rural, K<sub>200</sub> = Urban, % = ADT in DHV

T = Trucks

K<sub>8</sub> = % 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.)

DHV = Design Hourly Volume

D = % DHV in predominate direction of travel

P = % ADT in peak hour

*\*Data for Alt 1-D were prepared for the WIS 29 Right of Way Preservation Plan in 2008 when that plan was completed. Traffic data were updated for this environmental report in 2011, as reported for the No Action alternative and the Proposed Action alternative.*



**Basic Sheet 7**  
**EIS Significance Criteria**

When the significance of impact of a transportation project proposal is uncertain, an environmental assessment (ES) is prepared to assist in making this determination. 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

<b>Factors</b>	<b>Commitments</b>
<b>A-1 General Economics</b>	No Commitments Needed
<b>A-2 Business</b>	No Commitments Needed
<b>A-3 Agriculture</b>	Commitments Made; An Agricultural Impact Statement will be prepared by DATCP prior to final design.
<b>B-1 Community or Residential</b>	No Commitments Needed
<b>B-2 Indirect Effects</b>	No Commitments Needed
<b>B-3 Cumulative Effects</b>	No Commitments Needed
<b>B-4 Environmental Justice</b>	No Commitments Needed
<b>B-5 Historic Resources</b>	No Commitments Needed
<b>B-6 Archaeological Sites</b>	Commitments Made; The WisDOT Northeast Region project manager will ensure that the following commitments/provisions, requested by the Oneida Tribal Historic Preservation Office, are satisfactorily met for the duration of the project: <ol style="list-style-type: none"> <li>1. Provide onsite monitoring in coordination with the Oneida Tribal Historic Preservation Office (THPO). (Applicable to Sunlite frontage road only)</li> <li>2. Provide Cultural Sensitive Training onsite. (Applicable to Sunlite frontage road only)</li> <li>3. Provide reports and have data recovery plan in conjunction with Archeological survey field work.</li> <li>4. Coordinate weekly with THPO.</li> </ol>
<b>B-7 Tribal Issues</b>	Commitments Made; The WisDOT Northeast Region project manager will continue coordination with the Oneida Tribe during further project development phases.
<b>B-8 Section 4(f) and 6(f) or Other Unique Areas</b>	No Commitments Needed
<b>B-9 Aesthetics</b>	Commitments Made; General aesthetic treatments developed for the US 41 Corridor Community Sensitive Design will be applied to this project. The WisDOT Northeast Region project manager will ensure these aesthetic treatments are incorporated into the final design.
<b>C-1 Wetlands</b>	Commitments Made; The initial plan involved on-site mitigation, however, WisDOT and the WDNR are currently working together to seek suitable alternative banking mitigation sites. Wetland impacts will be mitigated in accordance with the WI Wetland Mitigation Technical Guideline applicable regulations and permits from the EPA, USACE, and WDNR will be obtained. A detailed mitigation plan will be developed as part of the final design. The WisDOT Northeast Region Environmental Coordinator and project manager will ensure that wetland mitigation will be incorporated into the final design.
<b>C-2 Rivers, Streams &amp; Floodplains</b>	Commitments Made; The WisDOT Northeast Region project manager will ensure that measures are used to minimize encroachment into the floodplain and that any structures provide a flow line 6 inches below the existing streambed. Fish habitat will be accommodated with "fish lights" and three-side (bottomless) culverts at stream crossings. In-stream restrictions from October 15 through May 1 will be enforced via special provisions to minimize any adverse impacts to migrating of spawning trout or sediment deposition on eggs in coldwater streams (Lancaster and Thornberry Creeks). In stream restrictions from March 1 through June 1 will be put in place for the culvert north of Catherine Drive to minimize any adverse impacts on pike migration and spawning in warmwater streams (unnamed tributaries to Lancaster Creek).
<b>C-3 Lakes or other Open Water</b>	Not Applicable
<b>C-4 Groundwater, Wells and springs</b>	Commitments Made; Any wells on other acquired properties will be filled and sealed in accordance to Wisconsin Administrated Code Ch. NR 112 and WDNR requirements. An underdrain/spring has been identified within the proposed slope limits at the culvert crossing of Thornberry Creek and County FF. The underdrain/spring will be accommodated during final design. The WisDOT Northeast Region project manager will ensure that these actions are incorporated into the final design.

<b>C-5 Upland Wildlife and Habitat</b>	Commitments Made; WDNR suggested that impacts to wooded areas, a Migratory Bird Concentration Site of Special Concern, be avoided if possible, or kept to an absolute minimum. The WisDOT Northeast Region project manager will ensure that measures, such as using retaining walls and steeper slopes and by reducing the width of the roadway and sidewalks, are incorporated into final design.
<b>C-6 Coastal Zones</b>	No Commitments Needed
<b>C-7 Threatened and Endangered Species</b>	Commitments Made; The WisDOT Northeast Region project manager will ensure that exclusion fencing be designed to protect a state threatened species, wood turtle ( <i>Clemmys insculpta</i> ) potentially residing in the area. The project manager will also require special provisions that silt fence will be installed prior to March 15 of a given construction season and any turtles found onsite will be removed from the construction site prior to work.
<b>D-1 Air Quality</b>	No Commitments Needed
<b>D-2 Construction Stage Sound Quality</b>	Check all that apply: <input checked="" type="checkbox"/> WisDOT Standard Specification 107.8(6) and 108.7.1 will apply. <input type="checkbox"/> Special construction stage noise abatement measures will be required. Describe:
<b>D-3 Traffic Noise</b>	No Commitments Needed
<b>D-4 Hazardous Substances or Contamination</b>	Commitments Made; The WisDOT Northeast Region project manager will ensure that a Phase 2 investigation is performed during the final design phase and require special provisions are included in the contract documents, if mitigation/removal of hazardous substances or contamination is required.
<b>D-5 Stormwater</b>	Commitments Made; During construction, impacts to water quality will be minimized by implementing erosion control measures as specified in the construction contract documents and by assuring that measures conform to the contract special provisions and WisDOT's standard specifications. Stormwater will also be managed and total suspended solids will be reduced by installing drainage swales and/or detention/retention ponds. The WisDOT Northeast Region project manager will ensure that these measures are incorporated into contract documents and the WisDOT Northeast Region construction engineer will ensure that the measures are implemented in the field.
<b>D-6 Erosion Control</b>	Commitments Made; Standard erosion control measures will be used to minimize any adverse effects to the surrounding areas and that the measures will be in compliance with the Wisconsin Administrative Code (Chapter TRANS 401) and the WisDOT/DNR Cooperative Agreement. An Erosion Control Implementation Plan (ECIP) will be developed by the contractor and submitted to WDNR 14 days prior to a preconstruction conference. The WisDOT Northeast Region project manager will ensure that these measures are incorporated into contract documents and the WisDOT Northeast Region construction engineer will ensure that the measures are implemented in the field.
<b>E Other</b>	

# GENERAL ECONOMICS EVALUATION

Wisconsin Department of Transportation

## Factor Sheet A-1

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

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

Generally, economic activity in the study area is limited to small-scale agricultural uses and service industries. These characteristics are summarized in the table below.

Economic Activity	Description
a. Agriculture	Small agriculture operations are conducted in scattered farm fields north of WIS 29; these consist of field crops and a grain elevator. One parcel is used to pasture horses.
b. Retail business	There are no retail businesses in the study area; several small service businesses are located in the southwest quadrant of the WIS 29-County FF.
c. Wholesale business	There exist no wholesale businesses in the study area
d. Heavy industry	No heavy industry exists in the study area
e. Light industry	One light industrial use exists in the study area. A custom woodworking shop is located in the southeast quadrant of the proposed WIS 29-County FF interchange. Two industrial uses have recently located in the Centennial Centre development, approximately one mile west of the project area.
f. Tourism	The study area is a not a major tourism destination in Brown County.
g. Recreation	A golf course is located to the west of the study area; recreational angling is supported in Thornberry Creek (a Class I trout stream) and Lancaster Creek (a Class II trout stream). A snowmobile trail traverses the study area.
h. Forestry	Forestry is not represented in the study area.

### 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:

*The Environmental Assessment for the WIS 29 Corridor Preservation Plan did not elaborate on economic advantages and disadvantages of the proposed interchange at County FF.*

The general economic advantages of the Proposed Action outweigh its disadvantages. The overall level of economic activity in the study area is low, as the land uses are primarily residential at this time. The proposed action will improve safety on both WIS 29 and the local road system, and thereby produce considerable advantages to all travelers in the study area, making travel to and from work and recreation destinations safer. Additional advantages include preservation of capacity on the state trunk highway system, enabling the efficient movement of goods and people throughout the region, while allowing safe and convenient local access to the regional system.

Economic disadvantages of the proposed action include the necessity of relocating one small woodworking business. See Factor Sheet A-2, Business Evaluation. Additionally, the project will require the acquisition of 11.1 acres of land from farming operations (9.3 acres acquired by fee; 1.8 acres in easement).

**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:

*The Environmental Assessment for the WIS 29 Corridor Preservation Plan concluded that the interchange at County FF could increase economic development in the study area.*

The civil communities in the study area – the Villages of Hobart and Howard are experiencing sustained growth, having increased in population by 21% and 28% respectively between 2000 and 2010. The proposed action will contribute to planned economic development in these jurisdictions by facilitating controlled access to and from the study area. The Villages of Howard and Hobart are both anticipating and planning for development in and around the study area and have incorporated the proposed action into this planning. Since the completion of the Corridor Environmental Assessment in 2008, a former agricultural area immediately east of the study area has been developed with medium-high density multifamily residential uses, with additional multi-family development planned for the immediate future. The Centennial Centre planned development west of the project area is developing with business and residential uses. By controlling access to the state highway system, the proposed action will facilitate orderly development and redevelopment of land in the study area, providing a focused area for future commercial or higher density residential uses, while enabling the communities to maintain lower intensity land development and open space preservation in other areas of the WIS 29 corridor.

☐ Decrease, describe: \_\_\_\_\_

## BUSINESS EVALUATION

Wisconsin Department of Transportation

### Factor Sheet A-2

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

**1. Is a Conceptual Stage Relocation Plan attached to this document?**

- ☒ Yes  
☐ No - (Explain)

**2. Describe the economic development or existing business areas affected by the proposed action:**

Businesses in the study area include small agriculture operations, one light manufacturing business and a small cluster of service businesses.

Agriculture operations are focused on field crops such as field corn and grain on small parcels. Sorensen Grain Farms operates an elevator at the intersection of Greenfield and Woodland Roads.

A small business park on Golden Pond Park Court in the southwest quadrant of the intersection of WIS 29 and County FF includes an engineering firm and an investment firm, along with the office of the property's developer. A commercial parcel located on the south side of WIS 29 at the intersection of Sunlite Drive includes appears to be vacant at this time. The building recently housed the offices of a mortgage servicing firm.

A custom woodworking shop is located in the southeast quadrant of the intersection of WIS 29 and County FF.

**3. Identify and discuss existing modes of transportation and their traffic within the economic development or existing business area:**

The businesses in the study area generate modest traffic volumes, as all are service businesses with a small number of employees and no retail operations. Transportation modes consist mainly of automobile and limited truck traffic. Pedestrian and bicycle traffic are also present, but currently there exists no dedicated facilities for these modes. There is no transit service in the project area. Transportation for agriculture in the study area is also limited as there are few acres dedicated to active farm use; farm transportation consists primarily of truck traffic accessing fields. Sorensen Grain Farms, at the intersection of Greenfield and Woodland Roads, was observed to generate regular truck traffic in the autumn months; that traffic currently relies on the intersection of WIS 29 and Woodland Road for access. Some trucking activity generated by light industrial uses in the Centennial Centre development one mile west of the project area access WIS 29 at its intersection with Sunlite Drive.

**4. Identify and discuss effects on the economic development potential and existing businesses that are dependent upon the transportation facility for continued economic viability:**

- ☐ The proposed project will have no effect on a transportation-dependent business or industry.  
☒ The proposed action may change the conditions for a business that is dependent upon the transportation facility. Identify effects, including effects which may occur during construction.

*The WIS 29 Corridor Preservation Plan Environmental Analysis identified no impacts to the viability of businesses at this location due to changes in the transportation system.*

During construction, access to the service businesses will be impacted, with additional travel for some employees resulting from road closures. However, following completion of the Proposed Action, access to these businesses will be safer and more convenient, with little or no additional travel. The intersection of WIS 29 and Sunlite Drive / Woodland Road will remain open until the interchange is completed, enabling local access to and from the state highway, and the construction of a frontage road connecting Sunlite Drive to Golden Pond Park Court and County FF will enable this access permanently. During construction, truck traffic to and from Sorensen Grain Farms may be impacted by the additional traffic diverted from County FF and Sherwood Street to Woodland Road. Following



completion of the project, trucks accessing Sorensen Grain Farm will use the interchange, with improved safety and convenience for that traffic.

The custom woodworking shop located in the southeast quadrant of WIS 29 and County FF will be relocated. The owner of this parcel may redevelop the remainder of the property for other uses, depending on the extent of the acquisition.

**5. Describe both beneficial and adverse effects on:**

- A. The existing business area affected by the proposed action. Include any factors identified by business people that they feel are important or controversial.

*The WIS 29 Corridor Preservation Plan Environmental Analysis identified no impacts to the viability of businesses at this location due to changes in the transportation system. It noted that right of way acquisition from farmlands will slightly affect farm operations.*

Business people located in the office park in the southwest quadrant of the proposed interchange have expressed support for the proposed action, as they perceive the existing intersection of WIS 29 and County FF to be dangerous and inconvenient. The construction of a frontage road connecting Sunlite Drive with Golden Pond Park Court will enable safe access for employees and goods traveling to the Centennial Centre development.

- B. The existing employees in businesses affected by the proposal. Include, as appropriate, a discussion of effects on minority populations or low-income populations.

Employees and customers of businesses located in the project area will experience a safer and more convenient transportation system with the completion of the proposed action.

**6. Estimated number of businesses and jobs that would be created or displaced because of the project:**

Business/Job Type	Businesses			Jobs	
	Created	Displaced	Value	Created	Displaced
Retail	0	0	0	0	0
Service	0	0	0	0	0
Wholesale	0	0	0	0	0
Manufacturing	0	1	\$200,000	0	1
Other (List)	0	0	0	0	0

**7. Are any owners or employees of created or displaced businesses elderly, disabled, low-income or members of a minority group?**

☒ No

☐ Yes – If yes, complete Factor Sheet B-4, Environmental Justice Evaluation.

**8. Is Special Relocation Assistance Needed?**

☒ No

☐ Yes – Describe special relocation needs.

**9. Identify all sources of information used to obtain data in item 8:**

☒ WisDOT Real Estate Conceptual Stage Relocation Plan  
☐ Newspaper listing(s)

☐ Multiple Listing Service (MLS)  
☐ Other - Identify:

**10. Describe the business relocation potential in the community:**

- A. Total number of available business buildings in the community. 16

- B. Number of available and comparable business buildings by type and price (Include business buildings in price

ranges comparable to those being dislocated, if any).

11 Number of available and comparable type business buildings in the price range of \$0-\$149,000

5 Number of available and comparable type business buildings in the price range of \$150,000-\$200,000

**11. Describe how relocation assistance will be provided in compliance with the WisDOT Relocation Manual or FHWA regulation 49 CFR Part 24. Check all that apply:**

☒ Business acquisitions and relocations will be completed in accordance with the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), as amended." In addition to providing for payment of "Just Compensation" for property acquired, additional benefits are available to eligible displaced persons forced to relocate from their business. Some available benefits include relocation advisory services, reimbursement of moving expenses and replacement of business payments. In compliance with State law, no person would be displaced unless a comparable replacement business would be provided.

Compensation is available to all displaced persons without discrimination. Before initiating property acquisition activities, property owners will be contacted and given an explanation of the details of the acquisition process and Wisconsin's Eminent Domain Law under Section 32.05, Wisconsin Statutes. Any property to be acquired will be inspected by one or more professional appraisers. The property owner will be invited to accompany the appraiser during the inspection to ensure the appraiser is informed of every aspect of the property. Property owners will be given the opportunity to obtain an appraisal by a qualified appraiser that will be considered by WisDOT in establishing just compensation. Reasonable cost of an owner's appraisal will be reimbursed to the owner if received within 60 days of initiation of negotiations. Based on the appraisal(s) made, the value of the property will be determined, and that amount offered to the owner.

☐ Describe other relocation assistance requirements, not identified above.

**12. Identify any difficulties relocating a business displaced by the proposed action and describe any special services needed to remedy identified unusual conditions:**

None identified.

**13. Describe any additional measures that will be used to minimize adverse effects or provide benefits to those relocated. Also discuss accommodations made to minimize adverse effects to businesses that may be affected by the project, but not relocated:**

Particular effort was made in the project development process to minimize acquisitions of active farmland, including reducing the radius of the curve proposed in the corridor plan at Greenfield Avenue and Woodland Road and siting the roundabout at County C and Sherwood Street to avoid impacts to cropland. The curve proposed at Sunlite Drive and Forest Road was redesigned to a T-intersection to accommodate the frontage road along WIS 29, which will serve a planned mixed use development to the west of the project area.

**AGRICULTURE EVALUATION**

Wisconsin Department of Transportation

**Factor Sheet A-3**

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	8.2	0.8	9.0
Woodland	0.8	0.1	0.9
Land of undetermined or other use (e.g., wetlands, yards, roads, etc.)	0.3	0.9	0.1
<b>Totals</b>	9.3	1.8	11.1

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

Acreage to be Acquired	Number of Farm Operations
Less than 1 acre	2
1 acre to 5 acres	3
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 - Agricultural Impact Notice (Form DT1999) submitted to Wisconsin Department of Trade, Agriculture and Consumer Protection for evaluation of necessity to submit form AD-1006.
- ☒ Yes – Form CPA-106 was completed in place of form AD-1006
- ☒ The Site Assessment Criteria Score (Part VI of the form) is less than 60 points for this project alternative.  
Value was calculated to be 45.  
Date Form AD-1006 completed. 04-19-2012
- ☐ 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. *(AIN to be submitted in 2012)*
- ☐ 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 –

**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 –

**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 –

**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:**

# COMMUNITY OR RESIDENTIAL EVALUATION

Wisconsin Department of Transportation

## Factor Sheet B-1

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

### 1. Give a brief description of the community or neighborhood affected by the proposed action:

The proposed action is located in the Villages of Hobart and Howard, and partially within the boundaries of the Oneida Indian Reservation. These geographies overlap in some cases. For detailed analysis, the project area geography is defined as the Village of Hobart and Brown County 2010 census tract 205.04, the smallest geographies for which detailed data are collected. The characteristics of these communities are described generally in the tables below. Census geography is depicted in Figure B-1-1.

Name of Community/Neighborhood Village of Hobart Incorporated <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Total Population 6,182 in 2010		
Demographic Characteristics		
	Census Year 2010	% of Population
	School Age (5-18 years)	23%
	Elderly (65 years or older)	13%
	Minority	22%
	American Indian or Alaska Native	18%
	Renter occupied housing units	10%

Name of Community/Neighborhood Village of Howard Incorporated <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Total Population 17,399 in 2010			
Demographic Characteristics			
		Village of Howard	Census Tract 205.04
	Census Year 2010	% of Population	% of Population
	School Age (5-18 years)	21%	24%
	Elderly (65 years or older)	11%	8%
	Minority	6%	3.3%
	American Indian or Alaska Native	1%	0.6%
	Renter occupied housing units	34%	7%

### 2. Identify and discuss existing modes of transportation and their importance within the community or Neighborhood:

The WIS 29 Corridor Environmental Assessment noted that automobile and truck travel is the dominant transportation mode in the study area. Modes also include pedestrian and bicycle travel, although at present no dedicated facilities exist for these modes. There is no transit service in the corridor.

Stakeholders expressed concern for improving non-motorized travel, as well as for improving safety for motorized travel.

**3. Identify and discuss the probable changes resulting from the proposed action to the existing modes of transportation and their function within the community or neighborhood:**

In general, the proposed action will improve safety and convenience for motorized travel in the study area by eliminating dangerous turning and crossing movements at the intersection of WIS 29 and County FF. Access will be preserved at this location, and delays during peak periods to enter the state highway are likely to be reduced. Additionally, bicycle and pedestrian travel will be improved in the project area, particularly for crossing WIS 29.

*The WIS 29 Corridor Environmental Assessment noted that removing access at Sunlite Drive and Woodland Road will require motorists to find new routes to WIS 29 and throughout the corridor, causing traffic patterns to change and potentially increasing traffic on other roadways.*

This evaluation remains valid. The frontage road connecting Sunlite Drive and Golden Pond Park Court will serve planned development to the west of the project area. See question 4. The frontage road will also bring truck traffic and automobile traffic from the manufacturing facilities located at Centennial Centre, one mile west of the project area, onto Golden Pond Park Court. This road is currently a cul-de-sac serving a small residential neighborhood and a business park with a limited number of service businesses.

**4. Briefly discuss the proposed action's direct and indirect effect(s) on existing and planned land use in the community or neighborhood:**

*The WIS 29 Corridor Study EA noted that the proposed action will affect future development, and notes that the proposed interchange locations were developed with an understanding of planned land use change in the study area.*

The proposed action will enhance the transportation system in the study area, leading to safer and more convenient travel; it has been designed to do so in the context of evolving land use in this growing area of Brown County, and will serve growing densities of residential and business uses. The proposed action has been modified and refined to accommodate planned changes in land use. The Village of Hobart is actively developing a retail, manufacturing and housing complex west of the WIS 29-County FF project area. The proposed changes to the intersection of WIS 29 and Sunlite Drive have been modified to incorporate a frontage road that will serve as an alternate access to the development area. In the Village of Howard, the proposed intersection of County C and Sherwood Street was modified to include a roundabout able to accommodate a future north leg that will serve a planned residential development.

Indirect effects are also possible, but likely to be limited in scale as the area is already partly developed or under development. The most likely indirect effect would be an eventual conversion of residential land uses to commercial land uses along County FF and Sherwood Street. Similarly, the construction of a frontage road connecting Sunlite Drive with Golden Pond Park Court may induce conversion of residential land uses to commercial land uses along this corridor, as it will now provide convenient access to WIS 29. Also, this frontage road is likely to bring increased truck and vehicle traffic near the residential areas along Golden Pond Park Court, making them less desirable for residential uses over the longer term and more desirable for commercial uses.

**5. Address any changes to emergency or other public services during and after construction of the proposed project:**

*The WIS 29 Corridor Study Environmental Assessment concluded that access would be provided to all properties during construction, although access may be delayed or temporarily disrupted due to construction activities. Emergency access between locations north and south of WIS 29 will be improved since emergency vehicles will be able to cross WIS 29 more quickly and safely using the overpass than is the case with the existing at-grade intersection.*

Additionally, the proposed action will improve access to public services by improving safety and reducing conflicts and delay. It will improve safety in the area around Hillcrest School by slowing traffic on County FF through the addition of roundabouts. Stakeholders identified this effect as desirable.

**6. Describe any physical or access changes that will result. This could include effects on lot frontages, side slopes or driveways (steeper or flatter), sidewalks, reduced terraces, tree removals, vision corners, etc.:**

Two driveways will be relocated from Sherwood Street to side streets. Additional driveways along County FF, Sherwood Street, Woodland Road, Greenfield Avenue, Forest Road and Golden Pond Park Court will be slightly

altered where they intersect these roadways, including slightly steepening driveway slopes in the area around the interchange ramps. Sidewalks will be added on all non-state highway roads and on the overpass, except for the east side of County FF between the east bound interchange ramps and Navajo Trail, and the west side of the Golden Pond Park Court extension. A median in County FF/Sherwood Street will preclude left turns into or out of residential driveways along these segments; directional changes will take place at the roundabouts. Existing encroachments may be removed. These include landscaping walls, flagpoles and fences.

**7. Indicate whether a community/neighborhood facility will be affected by the proposed action and indicate what effect(s) this will have on the community/neighborhood:**

No community facilities will be directly affected by the proposed action. Hillcrest Elementary School is located approximately three-quarters of a mile south of the study area on County FF. School administrators were consulted in the project development process and expressed support for the roundabouts, which will slow traffic near the school, and for the addition of sidewalks and bicycle lanes in the vicinity of the school.

**8. Identify and discuss factors that residents have indicated to be important or controversial:**

Residents generally expressed support for the proposed action at a public information meeting. Many were satisfied with the design, as they perceive safety problems in accessing and crossing WIS 29 at County FF. The major issue of concern among residents is real estate impacts and acquisitions. The alignment of the extension of Golden Pond Park Court in the proposed alternative is considerably modified from that in the approved WIS 29 Corridor Preservation Plan; it was refined in response to those concerns to minimize the splitting of parcels and to fully acquire residences where the owners requested full acquisitions due to concerns that their property would lose value due to the magnitude of acquisitions.

**9. List any Community Sensitive Design considerations, such as design considerations and potential mitigation measures.**

This project did not include a community sensitive design component. Aesthetic treatments for the overpass bridge and retaining walls are consistent with those developed with the CSS process undertaken for the WIS 41 corridor reconstruction project three miles to the east of the proposed action.

**10. Indicate the number and type of any residential buildings that will be acquired because of the proposed action. If either item a) or b) is checked, items 11 through 18 do not need to be addressed or included in the environmental document. If item c) is checked, complete items 11 through 18 and attach the Conceptual Stage Relocation Plan to the environmental document:**

- a. ☐ None identified.
- b. ☐ No occupied residential building will be acquired as a result of this project. Provide number and description of non-occupied buildings to be acquired.
- c. ☒ Occupied residential building(s) will be acquired. Provide number and description of buildings, e.g., single family homes, apartment buildings, condominiums, duplexes, etc.

Five single-family residential homes will be acquired. Three of these are located along the new alignment of Golden Pond Park Court, one is located on the Sunlite Drive frontage road, and two are located on Sherwood Street within the slope limits of the proposed interchange ramp in the northeast quadrant of the interchange.



**11. Anticipated number of households that will be relocated from the occupied residential buildings identified in item 10c, above:**

Total Number of Households to be Relocated: 5
---

(Note that this number may be greater than the number shown in 10c above because an occupied apartment building may have many households.)

a. Number by Ownership

Number of Households Living in Owner Occupied Buildings: 5
--

Number of Households Living in Rented Quarters: 0
---

b. Number of households to be relocated that have.

1 Bedroom: 0
--------------

2 Bedroom: 0
--------------

3 Bedroom: 3
--------------

4 or More Bedrooms: 2
-----------------------

c. Number of relocated households by type and price range of dwelling.

Number of Single Family Dwelling: 5
-------------------------------------

Price Range: \$153,200-\$351,400
----------------------------------

Number of Multi-Family Dwellings: 0
-------------------------------------

Price Range:
--------------

Number of Apartment: 0
------------------------

Price Range:
--------------

**12. Describe the relocation potential in the community:**

a. Number of Available Dwellings

1 Bedroom: 0
--------------

2 Bedrooms: 2
---------------

3 Bedrooms: 17
----------------

4 or More Bedrooms: 5
-----------------------

b. Number of Available and Comparable Dwellings by Location

19 within zip code 54313
--------------------------

2 within zip code 54155
-------------------------

3 within zip code 54303
-------------------------

c. Number of Available and Comparable Dwellings by Type and Price. (Include dwellings in price ranges comparable to those being dislocated, if any.)

Single Family Dwellings: 23
-----------------------------

Price Range: \$139,900 - \$459,000
------------------------------------

Multi-Family Dwellings: 1
---------------------------

Price Range: \$112,900
------------------------

Apartments: 0
---------------

**13. Identify all the sources of information used to obtain the data in item 12:**

☒ WisDOT Real Estate Conceptual Stage Relocation Plan

☒ Multiple Listing Service (MLS)

☐ Newspaper Listing(s)

☒ Other – Identify [www.realtor.com](http://www.realtor.com)

**14. Indicate the number of households to be relocated that have the following special characteristics:**

- ☐ None identified.  
☒ Yes - 5 total households to be relocated. Complete table below

Special Characteristics	Number of Households with Individuals with Special Characteristics
Elderly	2
Disabled	
Low income	
Minority	
Household of large family (5 or more)	
Not Known	
No special characteristics	3

**15. Describe how relocation assistance will be provided in compliance with the WisDOT Relocation Manual or FHWA regulation 49 CFR Part 24:**

☒ Residential acquisitions and relocations will be completed in accordance with the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), as amended." In addition to providing for payment of "Just Compensation" for property acquired, additional benefits are available to eligible displaced persons required to relocate from their residence. Some available benefits include relocation advisory services, reimbursement of moving expenses, replacement housing payments, and down payment assistance. In compliance with State law, no person would be displaced unless a comparable replacement dwelling would be provided. Federal law also requires that decent, safe, and sanitary replacement dwelling must be made available before any residential displacement can occur.

Compensation is available to all displaced persons without discrimination. Before initiating property acquisition activities, property owners would be contacted and given an explanation of the details of the acquisition process and Wisconsin's Eminent Domain Law under Section 32.05, Wisconsin Statutes. Any property to be acquired would be inspected by one or more professional appraisers. The property owner would be invited to accompany the appraiser during the inspection to ensure the appraiser is informed of every aspect of the property. Property owners will be given the opportunity to obtain an appraisal by a qualified appraiser that will be considered by WisDOT in establishing just compensation. Based on the appraisal(s) made, the value of the property would be determined, and that amount offered to the owner.

☐ Identify other relocation assistance requirements not identified above.

**16. Identify any difficulties or unusual conditions for relocating households displaced by the proposed action:**

None identified.

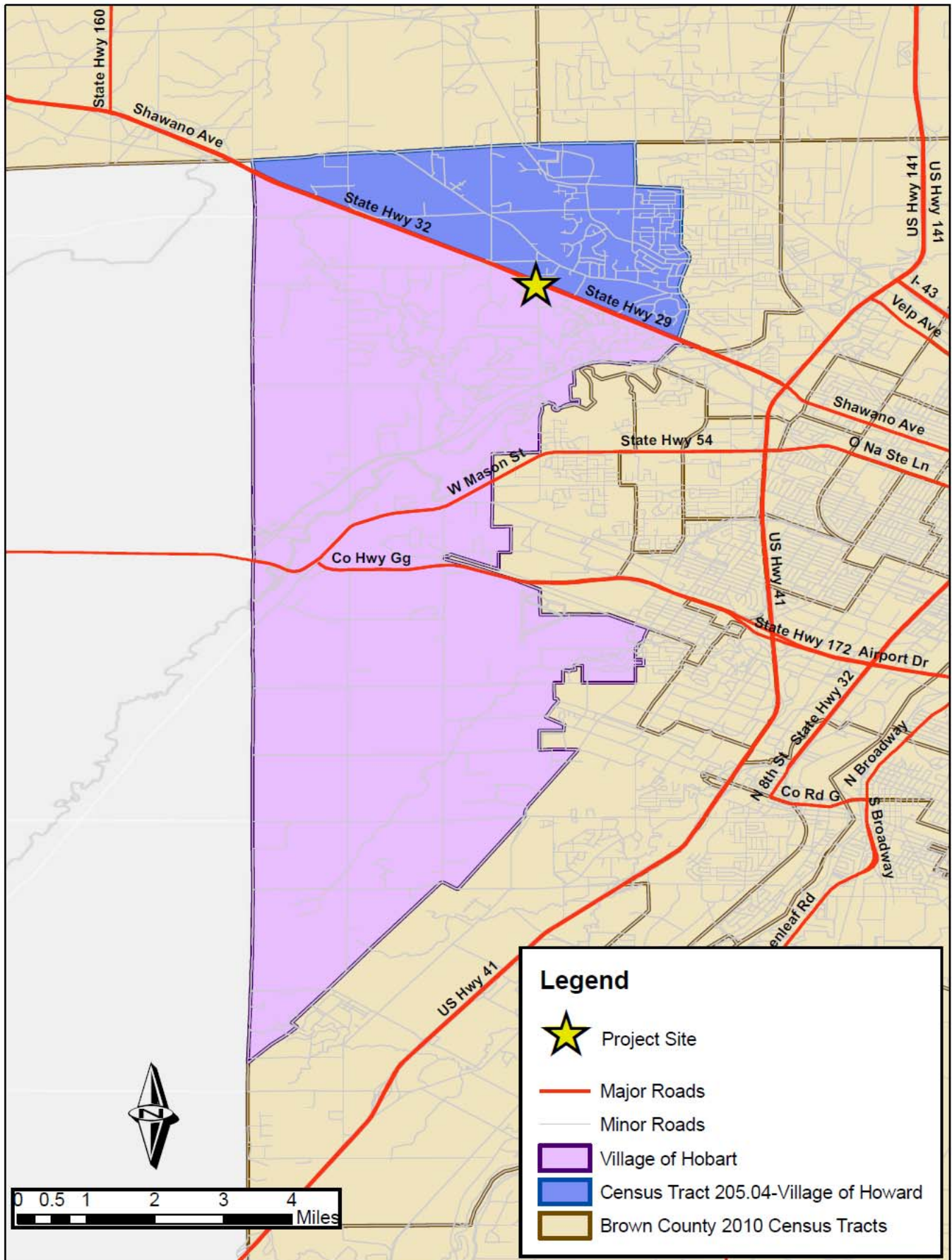
**17. Indicate whether Special Relocation Assistance Service will be needed. Describe any special services or housing programs needed to remedy identified difficulties or unusual conditions noted in item #14 above:**

- ☒ None identified  
☐ Yes - Describe services that will be required

**18. Describe any additional measures that will be used to minimize adverse effects or provide benefits to those relocated, those remaining, or to community facilities affected:**

None identified. Most of the affected property owners have participated in public involvement activities and are aware of their rights in the relocation process. The alignment of the extension of Golden Pond Park Court was refined at the request of affected property owners to develop an alternative that best meets their needs.

# Exhibit B-1-1: WIS29-County FF Census Geograpy



# ENVIRONMENTAL JUSTICE EVALUATION

Wisconsin Department of Transportation

## Factor Sheet B-4

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

1. **Identify and give a brief description of the populations covered under Executive Order 12898 (EO 12898). Include the relative size of the populations and their pertinent demographic characteristics: (Check all that apply.)**

For demographic analysis, the study area was defined as the Village of Hobart, and census tract 205.4 in the Village of Howard. Recent census data at smaller geographies is not available. See Figure 1 in Factor Sheet B-1: Community and Residential Impacts for a depiction of this geography.

Population Groups	Low Income	Elderly	Disabled
<input checked="" type="checkbox"/> Black (having origins in any of the black racial groups of Africa) Describe: 0.4%	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input checked="" type="checkbox"/> Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race) Describe: 1.9%	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input checked="" type="checkbox"/> Asian American (origins in any of the original peoples of the Far East, SE Asia, the Indian subcontinent, or the Pacific Islands) Describe: 1.1%	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input checked="" type="checkbox"/> American Indian and Alaska Native (having origins in any of the original people of North American and who maintains cultural identification through tribal affiliation or community recognition) Describe: 10.2%	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input checked="" type="checkbox"/> White and any combination of the above. Describe:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Non-minority low-income population Describe:		Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>

*The WIS 29 Corridor Preservation Plan Environmental Assessment noted that low income and elderly populations exist to some extent in all communities in the corridor. Available statistical data regarding these populations does not differentiate between minorities and non-minorities. Based on site visits, public involvement activities and the Green Bay Metropolitan Planning Organization Long Range Transportation Plan – which includes an environmental justice evaluation of the WIS 29 freeway conversion project – low income and minority populations do not appear to be present in higher proportions in minority populations than in non-minority populations. Overall, 11% of the study area was elderly in 2010.*

2. **How was information on the proposed action communicated to populations covered by Executive Order 12898. Check all that apply:**

<input type="checkbox"/> Advertisements	<input type="checkbox"/> Brochures
<input checked="" type="checkbox"/> Newsletters	<input type="checkbox"/> Notices
<input type="checkbox"/> Utility Bill Inserts	<input type="checkbox"/> E-mails
<input type="checkbox"/> Public Service Announcements	<input type="checkbox"/> Direct Mailings
<input checked="" type="checkbox"/> Key Persons	<input checked="" type="checkbox"/> Other, identify Public Information Meeting

3. **How was input from populations covered by EO 12898 obtained? Check all that apply:**

<input type="checkbox"/> Mailed Surveys	<input checked="" type="checkbox"/> Targeted Small Group Information Meetings
<input type="checkbox"/> Door-to-door interviews	<input type="checkbox"/> Targeted Workshop/conferences
<input type="checkbox"/> Focus Group Research	<input checked="" type="checkbox"/> Public Meetings
<input checked="" type="checkbox"/> Public Hearings	<input type="checkbox"/> Key Person Interviews
<input type="checkbox"/> Other, identify _____	

4. **Indicate any special accommodations made to encourage participation from populations covered by EO 12898. Check all that apply:**

- ☐ Interpreters
 ☐ Listening Aids  
☒ Accessibility for Elderly & Disabled
 ☐ Transportation Provided  
☐ Child Care Provided
 ☐ Sign Language  
☒ Other, children's activities provided at public meetings; interpreters and other assistance offered on request.

Small group meetings were held with Oneida tribal representatives.

5. **If there is a project advisory committee, identify and describe committee members from populations covered by EO 12898**

- ☐ None identified  
☒ Yes - Check all that apply and describe below:  
☐ Black  
☐ Hispanic  
☐ Asian-American  
☒ American Indian or Alaska Native  
☐ White and any combination of the above  
☐ Non-minority low-income

Describe: \_\_\_\_\_

6. **As a result of public involvement and inter-agency coordination, identify and describe issues of concern or controversy to populations covered by EO 12898:**

A. Economic Development and Business

- ☐ No issues of concern or controversy identified.  
☒ Yes - Issues of concern or controversy identified.

1. List effects on businesses and populations covered by EO 12898:

☐ None identified.

☒ Yes.

List and discuss – The Oneida Tribe owns Thornberry Creek Golf Course to the west of the study area. The tribe expressed concerns that closure of Sunlite Drive would lead to increased travel for golf course patrons. The frontage road connecting Sunlite Drive and Golden Pond Park Court will give patrons direct access to the course from WIS 29 and County FF; alternatively, patrons may exit WIS 29 at County VV and access Thornberry Creek from the west.

Population Groups	Number of Businesses Created That Will:		Number of Businesses Displaced That:	
	Employ	Serve	Employ	Serve
Elderly	0	0	0	0
Disabled	0	0	0	0
Low income	0	0	0	0
Minority	0	0	0	0

2. List other effects.

☒ None identified.

☐ Yes

List and discuss - \_\_\_\_\_

B. Agriculture

- ☒ No issues of concern or controversy identified.  
☐ Yes - Issues of concern or controversy identified.

1. List effects on agricultural operations owned by members of populations covered by EO 12898.

☐ None identified.

☐ Yes

List and discuss - \_\_\_\_\_

2. List effects on agricultural operations which employ members of populations covered by EO 12898, including migrant workers

☐ None identified.

☐ Yes

List and discuss - \_\_\_\_\_

3. List other effects on members of populations covered by EO 12898:

☐ None identified.

☐ Yes

List and discuss - \_\_\_\_\_

C. Community/Residential

☒ No issues of concern or controversy identified.

☐ Yes - Issues of concern or controversy identified.

List and discuss - \_\_\_\_\_

1. List relocation effects on households covered by EO 12898:

☐ None identified.

☐ Yes

List and discuss - \_\_\_\_\_

Population Groups	Number of Households Relocated
Elderly	
Disabled	
Low income	
Minority	

2. List other effects on members of populations covered by EO 12898.

☐ None identified.

☐ Yes

List and discuss - \_\_\_\_\_

D. Other

☐ No issues of concern or controversy identified.

☒ Issues of concern or controversy identified.

List and discuss - Thornberry Creek is a Class 1 Trout Stream, and the Oneida Tribe has invested in its restoration in order to promote sport fishing in the study area. Tribal representatives expressed concerns that the project would negatively impact the creek. Working with WDNR, the project was designed to minimize impacts to the creek by refining the alignment to reduce the length of the stream crossing, narrowing the median of County FF, and using three-sided (bottomless) box culverts for roadway crossings. This will leave in place the natural stream bottom, the character of which affects trout spawning behavior.

**7. Indicate whether effects on populations covered by EO 12898 are beneficial or adverse:**

A. Beneficial effects.

☒ Describe effects on populations and discuss whether they are direct, indirect or cumulative. Include a discussion of any measures to enhance beneficial effects. Describe methods used to determine beneficial effects resulting from the proposed project. (If only beneficial effects, process is complete.)

The beneficial effects of the proposed action will accrue to all populations using the transportation system in the study area. These effects include safer travel, more convenient access to and across the state highway system, enhanced movement of goods through and to the study area, and improved conditions for pedestrians and bicyclists.

B. Adverse effect.

☒ 1. Adverse Effects are proportional or disproportionately low. Identified adverse effects are proportionate or disproportionately low to those experienced by the general population.

Describe effects on populations and discuss whether they are direct, indirect or cumulative. Describe methods used to determine adverse effects resulting from the proposed project. Include a discussion of any measures to avoid, minimize, or mitigate adverse effects. (If only beneficial or proportional or disproportionately low effects, process is complete.)

Adverse effects will be experienced equally by all populations in the study area. Direct effects include noise and inconvenience during construction, the potential for increased traffic on the local roadway system, and the conversion of private property to public right-of-way. These effects were minimized by reducing the roadway width, creating small curve radii where possible, and through the completion of a construction staging plan designed to minimize inconvenience. Indirect effects include the potential for accelerated changes in land use in areas directly adjacent to the interchange. Insofar as these changes are foreseeable, the proposed action has been designed to accommodate local land use planning.

- ☐ 2. Adverse Effects are disproportionately high. A disproportionately high and adverse effect means an adverse effect that:
- a.) is predominately borne by populations covered by EO 12898; or
  - b.) will be suffered by populations covered by EO 12898 and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by population not covered by EO 12898.

Describe disproportionately high and adverse effects on populations covered by EO 12898 and discuss whether they are direct, indirect or cumulative. Describe methods used to determine adverse effects resulting from the proposed project. Include a discussion of any measures to avoid, minimize, or mitigate disproportionately high and adverse effects or enhance beneficial effects.

**8. Will the alternative be carried through final design even with disproportionately high and adverse effects on populations covered by EO 12898?**

Not applicable. Effects are not disproportionately high.

- A. ☐ No, the alternative will not be carried out because of disproportionately high and adverse effects on populations covered by EO 12898.
- 1. ☐ Another alternative with less severe effects on populations covered by EO 12898 can meet the purpose and need of the proposed alternative and is practicable.
  - 2. ☐ Other.  
Describe. \_\_\_\_\_
- B. ☐ Yes, the alternative will be carried out with the mitigation of disproportionately high and adverse effects on populations covered by EO 12898.
- 1. ☐ All disproportionate effects will be mitigated by the following measures.  
List and discuss measures:
  - 2. ☐ The alternative will be carried through final design without fully mitigating disproportionately high and adverse effects. A substantial need for the alternative exists based on the overall public interest.  
Alternatives that would have less adverse effects on populations covered by EO 12898 have either:
    - a) ☐ Adverse social, economic, environmental, or human health impacts that are more severe.
    - b) ☐ Would involve increased costs of an extraordinary magnitude.

# TRIBAL ISSUES

Wisconsin Department of Transportation

## Factor Sheet B-7

Alternative  
Alternative 2

Total Length of Center Line of Existing Roadway:  
WIS 29 - 1.578 mi, CTH FF - 1.015 mi  
Length of This Alternative:  
WIS 29 - 1.578 mi, CTH FF - 1.015 mi

Preferred

☒ Yes ☐ No ☐ None identified

### 1. Summary of Coordination with American Indian Tribes for Cultural Issues (Attach response letters):

American Indian Tribe	Initial Coordination Date	Response Received		Phase I Arch. Report Sent	Phase II Arch. Report Sent	D for C Sent	MOA Sent	Human Remains	Trad. Cultural Properties	Acq. of Tribal Lands
		Yes	No							
Bad River Band of Lake Superior Chippewa Indians of Wis.	1/4/11		✓							
Forest County Potawatomi Community of Wisconsin	1/4/11		✓							
Ho-Chunk Nation	1/4/11		✓							
Iowa Tribe of Oklahoma	1/4/11		✓							
Lac Courte Oreilles Band of Lake Superior Chippewa Indians	1/4/11		✓							
Lac du Flambeau Band of Lake Superior Chippewa Indians of Wis.	1/4/11		✓							
Menominee Indian Tribe of Wisconsin	1/4/11		✓							
Prairie Island Indian Community. Minnesota Mdewakanton Sioux,			✓							
Prairie Band Potawatomi Nation	1/4/11		✓							
Stockbridge-Munsee Community Band of Mohican Indians	1/4/11	✓								
Oneida Nation of WI	1/4/11	✓							no	no
Red Cliff Band of Lake Superior Chippewa Indians	1/4/11		✓							
Sac & Fox of the Mississippi in Iowa	1/4/11		✓							
Sac & Fox Nation of Missouri in Kansas and Nebraska	1/4/11		✓							
Sac & Fox Nation of Oklahoma	1/4/11		✓							
St. Croix Band of Lake Superior Chippewa Indians	1/4/11		✓							
Sokaogon (Mole Lake) Band of Chippewa Indians	1/4/11		✓							



Tribes may have additional concerns, rules and requirements related to non-cultural resource issues. These should be documented on the Environmental Justice Factor Sheet (Factor Sheet B-4) and other appropriate factor sheets (e.g. Stormwater, Historic Resources, Archaeological Sites Sheets).

## 2. Summary of Issues Identified by Tribes:

Tribe	Date	Issues
Oneida Tribe of Indian of Wisconsin	ongoing	Access to Thornberry Creek Golf Course (owned by tribe); efforts to minimize impacts to fishery on Thornberry Creek.

## 3. Archaeological and Historic Structure/Buildings Issues:

Historic Structure/Building Issues:

☒ No

☐ Yes Complete Factor Sheet B-5 – Historic Resources Evaluation.

Archaeological Issues:

☒ No

☐ Yes Complete Factor Sheet B-6 – Archaeological Sites Evaluation.

## 4. Human Remains:

Have American Indian remains/burials been reported or encountered during archaeological studies?

☒ No

☐ Yes

☐ Consultation dates:

☐ American Indian Tribe: \_\_\_\_\_

☐ SHPO: \_\_\_\_\_

☐ Burial Sites Office: \_\_\_\_\_

☐ Area avoided.

☐ Burials will not be affected.

☐ Burials left in place.

☐ Burials will be affected:

☐ Permission to re-inter from Wisconsin Historical Society Director (date) \_\_\_\_\_

☐ MOA prepared?

☐ No

☐ Yes

☐ Signatories to MOA and dates:

☐ FHWA: \_\_\_\_\_

☐ American Indian Tribe: \_\_\_\_\_

☐ WisDOT: \_\_\_\_\_

☐ ACHP: \_\_\_\_\_

☐ Other \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

☐ Commitments to be included in contract specifications:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

☐ All documentation attached:

☐ Project may proceed.

## 5. Traditional Cultural Property (TCP):

Is a TCP present within the Area of Potential Effect of the project?

☒ No

☐ Yes:

Tribal Affiliation: \_\_\_\_\_

Type of Property:

☐ Sacred Place

☐ Cemetery

☐ Gathering place

☐ Place or resource that is significant in tribal traditions

Is there an effect on a TCP?

☐ No Explain

☐ Yes:

Steps to avoid impact to the TCP

\_\_\_\_\_  
\_\_\_\_\_

**6. Will lands owned by American Indian tribes be acquired for this project?**

☒ No. A parcel owned by a member of the Oneida Tribe is located in the northwest quadrant of the T-intersection proposed at Sunlite Road and Forest Road. The intersection was designed to avoid any acquisitions from this parcel.

☐ Yes:

Are the lands held in trust for the tribe by the US government?

☐ No

☐ Yes, explain.

# WETLANDS EVALUATION

Wisconsin Department of Transportation

## Factor Sheet C-1

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

### 1. Describe Wetlands:

	Wetland 1		Wetland 2		Wetland 3	
Name (If known)	STH 29-1		STH 29-2		STH 29-3	
Location County	Brown		Brown		Brown	
Location (Section-Township-Range)	12-24-19		12-24-19		12-24-19	
Location Map	See Exhibit Map 1		See Exhibit Map 1		See Exhibit Map 1	
Wetland Type(s) <sup>1</sup>	WS		WS		WM(D)	
Total Wetland Loss	Acres 3.65		Acres 1.36		Acres 0.61	
Wetland is: (Check all that apply) <sup>2</sup>	Yes	No	Yes	No	Yes	No
<ul style="list-style-type: none"> <li>Isolated from stream, lake or other surface water body</li> </ul>		✓		✓		✓
<ul style="list-style-type: none"> <li>Not contiguous (in contact with) a stream, lake, or other water body, but within 5-year floodplain</li> </ul>		✓		✓		✓
<ul style="list-style-type: none"> <li>If adjacent or contiguous, identify stream, lake or water body by Section-Township-Range</li> </ul>	12-24-19		12-24-19		12-24-19	

	Wetland 4		Wetland 5		Wetland 6	
Name (If known)	STH 29-4		STH 29-5		STH 29-6	
Location County	Brown		Brown		Brown	
Location (Section-Township-Range)	18-24-20		18-24-20		18-24-20	
Location Map	See Exhibit Map 1		See Exhibit Map 1		See Exhibit Map 1	
Wetland Type(s) <sup>1</sup>	RPF		RPF		WM	
Total Wetland Loss	Acres 1.44		Acres 0.49		Acres 0.09	
Wetland is: (Check all that apply) <sup>2</sup>	Yes	No	Yes	No	Yes	No
<ul style="list-style-type: none"> <li>Isolated from stream, lake or other surface water body</li> </ul>		✓		✓		✓
<ul style="list-style-type: none"> <li>Not contiguous (in contact with) a stream, lake, or other water body, but within 5-year floodplain</li> </ul>		✓		✓		✓
<ul style="list-style-type: none"> <li>If adjacent or contiguous, identify stream, lake or water body by Section-Township-Range</li> </ul>	18-24-20		18-24-20		18-24-20	

<sup>1</sup>Use wetland types as specified in the "WisDOT Wetland Mitigation Banking Technical Guideline, Table 3-C"

<sup>2</sup>If wetland is contiguous to a stream, complete Factor Sheet C-2, Rivers, Streams and Floodplains Impact Evaluation. If wetland is contiguous to a lake or other water body, complete Factor Sheet C-3, Lake or Water Body Impact Evaluation.

	Wetland 7		Wetland 8		Wetland 9	
Name (If known)	CTH FF-1		CTH FF-2		CTH FF-3	
Location County	Brown		Brown		Brown	
Location (Section-Township-Range)	12-24-19		12-24-19		12-24-19	
Location Map	See Exhibit Map 1		See Exhibit Map 1		See Exhibit Map 1	
Wetland Type(s) <sup>1</sup>	WS		WS		WS	
Total Wetland Loss	Acres 0.27		Acres 0.35		Acres 0.12	
Wetland is: (Check all that apply) <sup>2</sup>	Yes	No	Yes	No	Yes	No
<ul style="list-style-type: none"> <li>Isolated from stream, lake or other surface water body</li> </ul>		✓		✓	✓	
<ul style="list-style-type: none"> <li>Not contiguous (in contact with) a stream, lake, or other water body, but within 5-year floodplain</li> </ul>		✓		✓		✓
<ul style="list-style-type: none"> <li>If adjacent or contiguous, identify stream, lake or water body by Section-Township-Range</li> </ul>	12-24-19		12-24-19		-	
	Wetland 10		Wetland 11		Wetland 12	
Name (If known)	CTH FF-4		CTH FF-5		CTH FF-6	
Location County	Brown		Brown		Brown	
Location (Section-Township-Range)	12-24-19		12-24-19		12-24-19	
Location Map	See Exhibit Map 1		See Exhibit Map 1		See Exhibit Map 1	
Wetland Type(s) <sup>1</sup>	WM		WM(D)		WS	
Total Wetland Loss	Acres 0.05		Acres 0.03		Acres 0.14	
Wetland is: (Check all that apply) <sup>2</sup>	Yes	No	Yes	No	Yes	No
<ul style="list-style-type: none"> <li>Isolated from stream, lake or other surface water body</li> </ul>	✓			✓		✓
<ul style="list-style-type: none"> <li>Not contiguous (in contact with) a stream, lake, or other water body, but within 5-year floodplain</li> </ul>		✓		✓		✓
<ul style="list-style-type: none"> <li>If adjacent or contiguous, identify stream, lake or water body by Section-Township-Range</li> </ul>	-		12-24-19		12-24-19	
<p><sup>1</sup>Use wetland types as specified in the "WisDOT Wetland Mitigation Banking Technical Guideline, Table 3-C"</p> <p><sup>2</sup>If wetland is contiguous to a stream, complete Factor Sheet C-2, Rivers, Streams and Floodplains Impact Evaluation. If wetland is contiguous to a lake or other water body, complete Factor Sheet C-3, Lake or Water Body Impact Evaluation.</p>						

	Wetland 13		Wetland 14		Wetland 15	
Name (If known)	CTH FF-7		CTH FF-8		CTH FF-9	
Location County	Brown		Brown		Brown	
Location (Section-Township-Range)	18-24-20		18-24-20		18-24-20	
Location Map	See Exhibit Map 1		See Exhibit Map 1		See Exhibit Map 1	
Wetland Type(s) <sup>1</sup>	WM(D)		RPF		RPF	
Total Wetland Loss	Acres 0.02		Acres 0.16		Acres 0.40	
Wetland is: (Check all that apply) <sup>2</sup>	Yes	No	Yes	No	Yes	No
<ul style="list-style-type: none"> <li>Isolated from stream, lake or other surface water body</li> </ul>		✓		✓		✓
<ul style="list-style-type: none"> <li>Not contiguous (in contact with) a stream, lake, or other water body, but within 5-year floodplain</li> </ul>		✓		✓		✓
<ul style="list-style-type: none"> <li>If adjacent or contiguous, identify stream, lake or water body by Section-Township-Range</li> </ul>	18-24-20		18-24-20		18-24-20	
	Wetland 16					
Name (If known)	GPPC-1					
Location County	Brown					
Location (Section-Township-Range)	18-24-20					
Location Map	See Exhibit Map 1		See Exhibit Map 1		See Exhibit Map 1	
Wetland Type(s) <sup>1</sup>	RPF					
Total Wetland Loss	Acres 0.32		Acres ____		Acres ____	
Wetland is: (Check all that apply) <sup>2</sup>	Yes	No	Yes	No	Yes	No
<ul style="list-style-type: none"> <li>Isolated from stream, lake or other surface water body</li> </ul>		✓				
<ul style="list-style-type: none"> <li>Not contiguous (in contact with) a stream, lake, or other water body, but within 5-year floodplain</li> </ul>		✓				
<ul style="list-style-type: none"> <li>If adjacent or contiguous, identify stream, lake or water body by Section-Township-Range</li> </ul>	18-24-20					
<p><sup>1</sup>Use wetland types as specified in the "WisDOT Wetland Mitigation Banking Technical Guideline, Table 3-C"</p> <p><sup>2</sup>If wetland is contiguous to a stream, complete Factor Sheet C-2, Rivers, Streams and Floodplains Impact Evaluation. If wetland is contiguous to a lake or other water body, complete Factor Sheet C-3, Lake or Water Body Impact Evaluation.</p>						

**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: The project area includes riparian forested wetlands as identified by the US Fish and Wildlife Service. Additionally, affected wetlands provide habitat for the state threatened wood turtle.

**3. Describe proposed work in the wetland(s), e.g., excavation, fill, marsh disposal, other:**

The proposed improvements would impact a total of approximately 9.50 acres of wetland from a total of 16 wetland locations. The majority of the affected wetlands are located within the proposed interchange area and along County FF. Affected wetland types include 5.89 acres of Wooded Swamp (WS), 2.81 acres of Riparian Wetland (wooded), 0.14 acres of Wet Meadow (WM), and 0.66 acres of Wet Meadow Degraded (WM(D)). Wetland impacts will occur due to roadway fill.

**4. List any observed or expected waterfowl and wildlife inhabiting or dependent upon the wetland:** (List should include permanent, migratory and seasonal residents).

*According to the WIS 29 Corridor Preservation Plan Environmental Assessment, waterfowl and wildlife species potentially occurring in project wetlands are typical of the area. They include heron and duck species, song bird species, small mammals such as mice and voles, raccoons, rabbits, white-tailed deer, 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.

The majority of the affected wetlands are located within the proposed WIS 29-County FF interchange area and along the County FF mainline. The No Build Alternative would avoid wetlands, but this alternative was eliminated from consideration because it would not address project purpose and need. In order to construct the interchange to meet project purpose and need, it is not practicable or feasible to avoid wetland impacts. Impacts have been minimized to the greatest extent possible by narrowing roadway widths and through the use of retaining walls.

☐

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

**7. U S 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 9.50

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 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.:

Due to the scattered location of wetlands in the highway corridor, proximity of wetlands to the proposed interchange and highway mainline, and scope of proposed improvements, it is not possible to completely avoid wetland impacts. A lower level of improvement would not address project purpose and need.

The alignments of Golden Park Pond Court and the Sunlite Drive frontage road were modified from their original design to minimize negative impacts on the surrounding wetlands.

2. Indicate the total area of wetlands avoided:  
Acres: 0.51

**B. Minimize the amount of wetlands affected:**

1. Describe methods used to minimize the use of wetlands, such as a steepening of side slopes or use of retaining walls, equalizer pipes, upland disposal of hydric soils, etc.:

The median width of County FF was substantially reduced to minimize overall roadway width and thus minimize fills to adjacent wetlands. Additionally, the Proposed Action includes retaining walls to minimize wetland fills on the proposed extension of Golden Pond Park Court and along the east-bound entrance ramp of the interchange. Side slopes were steepened to the maximum extent possible, and sidewalks were eliminated on the east side of County FF and the west side of Golden Pond Park Court to minimize overall project width. Steepness of the slopes on either side of Sunlite Drive will be maximized to ensure wetland impact is minimal.

2. Indicate the total area of wetlands saved through minimization:  
Acres: Not calculated. No baseline was proposed, as wetland impact minimization was identified as a key issue in the early coordination process with the Department of Natural Resources.

**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.

Several viable sites for wetland compensation have been identified in the project area. The location of the wetland compensation areas is still being determined in coordination with WisDOT, the Department of Natural Resources and area property owners. The extent of the compensation areas will account for technical guidelines, including impacts to wetlands of special status (i.e. riparian forested wetlands).

	Type	Acre(s) Loss	Ratio	Compensation Type and Acreage			
				On-site	Near/off site	Consolidation Site	Bank site
<b>RPF(N)</b>	Riparian wetland (wooded)	2.81					
<b>RPF(D)</b>	Degraded riparian wetland (wooded)	-	-	-	-	-	-
<b>RPE(N)</b>	Riparian wetland (emergent)	-	-	-	-	-	-
<b>RPE(D)</b>	Degraded riparian wetland (emergent)	-	-	-	-	-	-
<b>M(N)</b>	Wet and sedge meadows, wet prairie, vernal pools, fens	0.14					
<b>M(D)</b>	Degraded meadow	0.66					
<b>SM</b>	Shallow marsh	-	-	-	-	-	-
<b>DM</b>	Deep marsh	-	-	-	-	-	-
<b>AB(N)</b>	Aquatic bed	-	-	-	-	-	-
<b>AB(D)</b>	Degraded aquatic bed	-	-	-	-	-	-
<b>SS</b>	Shrub Swamp, shrub carr, alder thicket	-	-	-	-	-	-
<b>WS(N)</b>	Wooded swamp	5.89					
<b>WS(D)</b>	Degraded wooded swamp	-	-	-	-	-	-
<b>Bog</b>	Open and forested bogs	-	-	-	-	-	-

D = Degraded

N = Non-degraded

**11. If on-site compensation is proposed, describe how a search for a compensation site was conducted:**

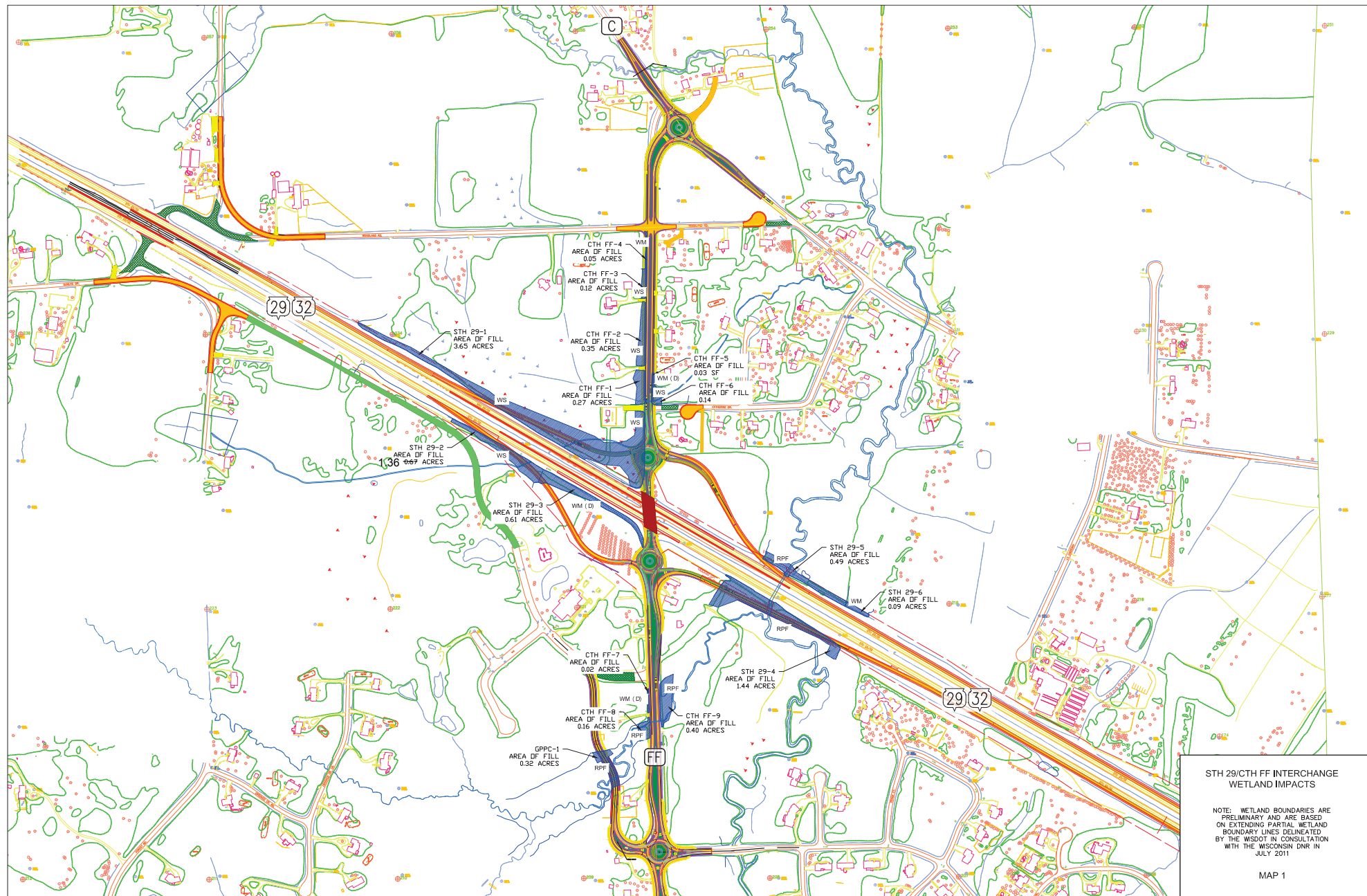
Several options for compensation sites were identified with the project area through close coordination with the Wisconsin Department of Natural Resources and the Wisconsin Department of Transportation. This identification process accounts for hydrology, quality of the wetlands, real estate acquisition necessary for the project and the preferences of affected adjacent property owners.

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



# Exhibit C-1-1

## WIS29-County FF Interchange Wetland Impacts



# RIVERS, STREAMS AND FLOODPLAINS EVALUATION

Wisconsin Department of Transportation

## Factor Sheet C-2

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

**1. Stream Name:** Thornberry Creek

**2. Stream Type: (Indicate Trout Stream Class, if known)**

- ☐ Unknown  
☐ Warm water  
☒ Cold water

If trout stream, identify trout stream classification: Class 1

- ☐ Wild and Scenic River

**3. Size of Upstream Watershed Area: (Square miles or acres)**

Thornberry Creek is part of the Duck Creek Watershed in Brown County that has a total area of 151.62 square miles.  
The stream has a total length of 1.43 miles. See Figure C-2-1.

**4. Stream flow characteristics:**

- ☒ Permanent Flow (year-round)  
☐ Temporary Flow (dry part of year)

**5. Stream Characteristics:**

A. Substrate:

1. ☒ Sand  
2. ☐ Silt  
3. ☐ Clay  
4. ☐ Cobbles  
5. ☐ Other-describe:

B. Average Water Depth: 12 in.

C. Vegetation in Stream

- ☒ Absent  
☐ Present - If known describe:

D. Identify Aquatic Species Present: Coldwater fish species

E. If water quality data is available, include this information: No current water quality data available

F. Is this river or stream on the WDNR's "Impaired Waters" list?

- ☒ No  
☐ Yes - List: \_\_\_\_\_

**6. If bridge or box culvert replacement, are migratory bird nests present?**

- ☐ Not Applicable  
☒ None identified  
☐ Yes – Identify Bird Species present  
Estimated number of nests is:

**7. Is a Fish & Wildlife Depredation Permit required to remove swallow nests?**

- ☒ Not Applicable  
☐ Yes  
☐ No - Describe mitigation measures:

**8. Describe land adjacent to stream:** Wetland-RPF; at County FF, residential uses, forested land; at Forest Rd: residential land use. Typical riparian plant species include ferns, horsetail, jewelweed, woodland sunflower, ash, elm, birch, boxelder and poplar.

**9. Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the project site:**

*The WIS 29 Corridor Preservation Plan Environmental Assessment noted that discharge into Thornberry Creek is generally from overland flow. There are no identifiable dischargers or receivers within ½ mile (0.8 kilometers) of the project site.*

**10. Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment:** [Note: Coast Guard must be notified when Section 10 waters are affected by a proposal. Also see Wetland Evaluation, Factor Sheet C-1, Question 8.]

The Proposed Action includes the replacement of a culvert beneath County FF and the construction of a new box culvert over Thornberry Creek for the extension of Golden Pond Park Court. Retaining walls are being used to minimize crossing lengths, and “bottomless” culverts will preserve natural streambeds.

**11. Discuss the effects of any backwater which would be created by the proposed action. Indicate whether the proposed activities would be in compliance with NR 116 by creating 0.01 ft. backwater or less:**

A hydraulic analysis is currently being undertaken in conjunction with preliminary structure design. The structure will be sized to ensure that backwaters created would be less than 0.01 ft (3mm). The proposed action will be consistent with Wisconsin Administrative Code – Chapter NR 116, the National Flood Insurance Program.

**12. Describe and provide the results of coordination with any floodplain zoning authority:**

Brown County regulates floodplain management in the unincorporated areas of the county. All work in the Proposed Action is to be undertaken in incorporated areas. The municipalities regulate development in the floodplain through their zoning and development permitting processes. Coordination has taken place with the Village of Hobart and Howard.

**13. Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?**

- ☒ No impacts would occur.
- ☐ Significant interruption or termination of emergency vehicle service or a community's only evacuation route.
- ☐ Significant flooding with a potential for property loss and a hazard to life.
- ☐ Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.

**14. Discuss existing or planned floodplain use and briefly summarize the project's effects on that use:**

Ongoing planning in the affected municipalities accounts for protection of the floodplain and the implementation of the Proposed Action. The proposed action will not affect existing or planned use of the floodplain.

**15. Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream:**

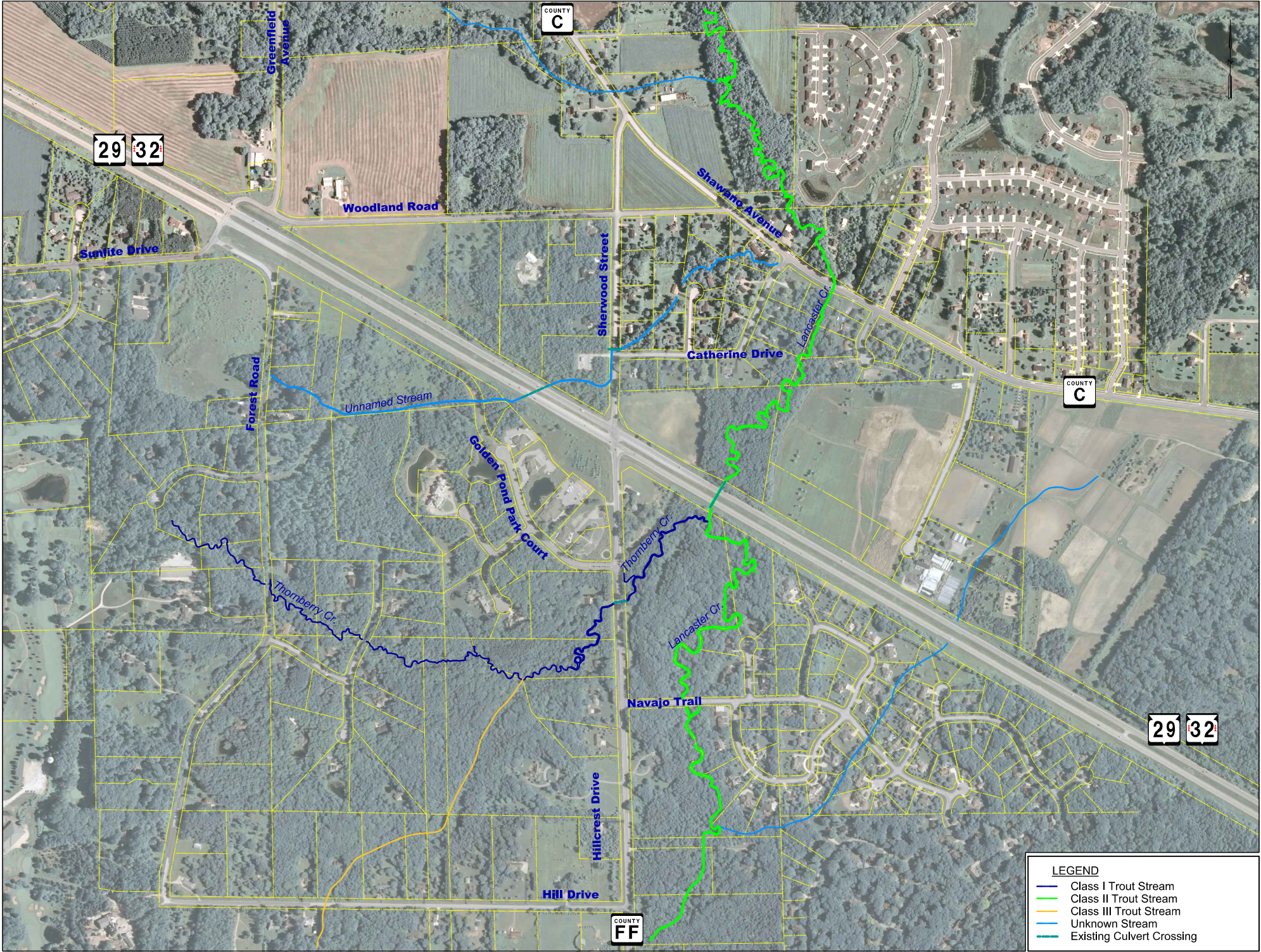
*The WIS 29 Corridor Preservation Plan Environmental Assessment concluded that there are no long term impacts anticipated on the floodplain. During construction, there may be a slight impact to the floodplain, but this will be minimized through the use of silt fence, turbidity barrier, erosion bales, and other erosion control measures. All efforts will be made to minimize any potential off-site sedimentation. There will be minimal effects to plants, animals, and fish. Appropriate stormwater control measures direct impacts to water quality associated can be minimized.*

**16. Are measures proposed to enhance beneficial effects?**

- ☐ No
- ☒ Yes. Describe: Several measures to benefit aquatic habitat are incorporated into the Proposed Action –
  - “Bottomless” box and arch culverts at the proposed crossings of Thornberry Creek to maintain a natural streambed

- Minimized stream crossing distances through the use of retaining walls





- LEGEND
- Class I Trout Stream
  - Class II Trout Stream
  - Class III Trout Stream
  - Unknown Stream
  - Existing Culvert Crossing



# RIVERS, STREAMS AND FLOODPLAINS EVALUATION

Wisconsin Department of Transportation

## Factor Sheet C-2

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

1. **Stream Name:** Lancaster Creek (upper portion)

2. **Stream Type: (Indicate Trout Stream Class, if known)**

- ☐ Unknown  
☐ Warm water  
☒ Cold water

If trout stream, identify trout stream classification: Class 2

☐ Wild and Scenic River

3. **Size of Upstream Watershed Area: (Square miles or acres)**

Lancaster Creek is part of the Duck Creek Watershed in Brown County that has a total area of 151.62 square miles. This waterway also has an upper and a lower portion. The upper portion of Lancaster Creek lies within the project area. The total length of this portion of the waterway is 6.3 miles. See Figure C-2-1.

4. **Stream flow characteristics:**

- ☒ Permanent Flow (year-round)  
☐ Temporary Flow (dry part of year)

5. **Stream Characteristics:**

A. Substrate:

1. ☒ Sand  
2. ☐ Silt  
3. ☐ Clay  
4. ☐ Cobbles  
5. ☐ Other-describe:

B. Average Water Depth: 12 in.

C. Vegetation in Stream

- ☒ Absent  
☐ Present - If known describe:

D. Identify Aquatic Species Present: Coldwater fish species

E. If water quality data is available, include this information: No current water quality data available.

F. Is this river or stream on the WDNR's "Impaired Waters" list?

- ☒ No  
☐ Yes - List: \_\_\_\_\_

6. **If bridge or box culvert replacement, are migratory bird nests present?**

- ☒ Not Applicable  
☐ None identified  
☐ Yes – Identify Bird Species present  
Estimated number of nests is:

7. **Is a Fish & Wildlife Depredation Permit required to remove swallow nests?**

- ☒ Not Applicable  
☐ Yes  
☐ No - Describe mitigation measures:

**8. Describe land adjacent to stream:** Wetland RPF; Wetland WM, forested uplands and residential uses. Typical riparian plant species include boxelder, willow, and poplar.

**9. Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the project site:**

*The WIS 29 Corridor Preservation Plan Environmental Assessment noted that discharge into Lancaster Creek is generally from overland flow. There are no identifiable dischargers or receivers within ½ mile (0.8 kilometers) of the project site.*

**10. Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment:** [Note: Coast Guard must be notified when Section 10 waters are affected by a proposal. Also see Wetland Evaluation, Factor Sheet C-1, Question 8.]

The existing twin cell box culvert carrying Lancaster Creek beneath WIS 29 will be extended to accommodate new interchange ramps. Some fills will take place within the 100 year floodplain. Retaining walls are incorporated into the design to minimize floodplain encroachments.

**11. Discuss the effects of any backwater which would be created by the proposed action. Indicate whether the proposed activities would be in compliance with NR 116 by creating 0.01 ft. backwater or less:**

A hydraulic analysis is currently being undertaken in conjunction with preliminary structure design. The structure will be sized to ensure that backwaters created would be less than 0.01 ft (3mm). The proposed action will be consistent with Wisconsin Administrative Code – Chapter NR 116, the National Flood Insurance Program.

**12. Describe and provide the results of coordination with any floodplain zoning authority:**

Brown County regulates floodplain management in the unincorporated areas of the county. All work in the Proposed Action is to be undertaken in incorporated areas. The municipalities regulate development in the floodplain through their zoning and development permitting processes. Coordination has taken place with the Village of Hobart and Howard.

**13. Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?**

- ☒ No impacts would occur.
- ☐ Significant interruption or termination of emergency vehicle service or a community's only evacuation route.
- ☐ Significant flooding with a potential for property loss and a hazard to life.
- ☐ Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.

**14. Discuss existing or planned floodplain use and briefly summarize the project's effects on that use:**

Ongoing planning in the affected municipalities accounts for protection of the floodplain and the implementation of the Proposed Action. The proposed action will not affect existing or planned use of the floodplain.

**15. Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream:**

*The WIS 29 Corridor Preservation Plan Environmental Assessment concluded that there are no long term impacts anticipated on the floodplain. During construction, there may be a slight impact to the floodplain, but this will be minimized through the use of silt fence, turbidity barrier, erosion bales, and other erosion control measures. All efforts will be made to minimize any potential off-site sedimentation. There will be minimal effects to plants, animals, and fish. Appropriate stormwater control measures direct impacts to water quality associated can be minimized.*

**16. Are measures proposed to enhance beneficial effects?**

- ☐ No
- ☒ Yes. Describe: Several measures to benefit aquatic habitat are incorporated into the Proposed Action –
  - Minimized stream crossing distances through the use of retaining walls

- The installation of “fish lights” – openings allowing the passage of daylight – is being considered, and will be built into the extensions of the culvert allowing Lancaster Creek to pass beneath WIS 29. These fish lights will enhance fish passage by naturally lighting long, dark lengths of culvert that can restrict fish passage.



# RIVERS, STREAMS AND FLOODPLAINS EVALUATION

Wisconsin Department of Transportation

## Factor Sheet C-2

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

**1. Stream Name: Unnamed Stream (Tributary to Thornberry Creek)**

**2. Stream Type: (Indicate Trout Stream Class, if known)**

☐ Unknown

☒ Warm water

☐ Cold water

If trout stream, identify trout stream classification: \_\_\_\_\_

☐ Wild and Scenic River

**3. Size of Upstream Watershed Area: (Square miles or acres)**

The unnamed stream is located within the Duck Creek Watershed that is 151.62 square miles in area. See Figure C-2-1.

**4. Stream flow characteristics:**

☐ Permanent Flow (year-round)

☒ Temporary Flow (dry part of year)

**5. Stream Characteristics:**

A. Substrate:

1. ☐ Sand

2. ☒ Silt

3. ☐ Clay

4. ☐ Cobbles

5. ☐ Other-describe: \_\_\_\_\_

B. Average Water Depth: \_\_\_\_ dry \_\_\_\_

C. Vegetation in Stream

☐ Absent

☒ Present - If known describe: aquatic plants, cattails

D. Identify Aquatic Species Present: Warmwater fish species, including walleye during spawning season.

E. If water quality data is available, include this information: No current water quality data available.

F. Is this river or stream on the WDNR's "Impaired Waters" list?

☒ No

☐ Yes - List: \_\_\_\_\_

**6. If bridge or box culvert replacement, are migratory bird nests present?**

☒ Not Applicable

☐ None identified

☐ Yes – Identify Bird Species present

Estimated number of nests is: \_\_\_\_\_

**7. Is a Fish & Wildlife Depredation Permit required to remove swallow nests?**

☒ Not Applicable

☐ Yes

☐ No - Describe mitigation measures: \_\_\_\_\_

**8. Describe land adjacent to stream:** Wetland-RPF(D); Wetland-RPF/E(D); utility and residential land uses

**9. Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the**

**project site:**

*The WIS 29 Corridor Preservation Plan Environmental Assessment noted that discharge into the unnamed creek is generally from overland flow. There are no identifiable dischargers or receivers within ½ mile (0.8 kilometers) of the project site.*

- 10. Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment:** *[Note: Coast Guard must be notified when Section 10 waters are affected by a proposal. Also see Wetland Evaluation, Factor Sheet C-1, Question 8.]*

The Proposed Action includes replacement of a culvert beneath Sherwood Street and the extension of culverts beneath the new WIS 29 on- and off-ramps west of County FF. There will also be a culvert placed beneath the Sunlite Drive frontage road.

- 11. Discuss the effects of any backwater which would be created by the proposed action. Indicate whether the proposed activities would be in compliance with NR 116 by creating 0.01 ft. backwater or less:**

A hydraulic analysis is currently being undertaken in conjunction with preliminary structure design. The structure will be sized to ensure that backwaters created would be less than 0.01 ft (3mm). The proposed action will be consistent with Wisconsin Administrative Code – Chapter NR 116, the National Flood Insurance Program.

- 12. Describe and provide the results of coordination with any floodplain zoning authority:**

Brown County regulates floodplain management in the unincorporated areas of the county. All work in the Proposed Action is to be undertaken in incorporated areas. The municipalities regulate development in the floodplain through their zoning and development permitting processes. Coordination has taken place with the Village of Hobart and Howard.

- 13. Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?**

- ☒ No impacts would occur.  
☐ Significant interruption or termination of emergency vehicle service or a community's only evacuation route.  
☐ Significant flooding with a potential for property loss and a hazard to life.  
☐ Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.

- 14. Discuss existing or planned floodplain use and briefly summarize the project's effects on that use:**

Ongoing planning in the affected municipalities accounts for protection of the floodplain and the implementation of the Proposed Action. The proposed action will not affect existing or planned use of the floodplain.

- 15. Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream:**

*The WIS 29 Corridor Preservation Plan Environmental Assessment concluded that there are no long term impacts anticipated on the floodplain. During construction, there may be a slight impact to the floodplain, but this will be minimized through the use of silt fence, turbidity barrier, erosion bales, and other erosion control measures. All efforts will be made to minimize any potential off-site sedimentation. There will be minimal effects to plants, animals, and fish. Appropriate stormwater control measures direct impacts to water quality associated can be minimized.*

- 16. Are measures proposed to enhance beneficial effects?**

- ☒ No  
☐ Yes. Describe: \_\_\_\_\_

# RIVERS, STREAMS AND FLOODPLAINS EVALUATION

Wisconsin Department of Transportation

## Factor Sheet C-2

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

**1. Stream Name: Unnamed Stream (Tributary to Lancaster Creek)**

**2. Stream Type: (Indicate Trout Stream Class, if known)**

- ☒ Unknown  
☐ Warm water  
☐ Cold water  
If trout stream, identify trout stream classification: \_\_\_\_\_  
☐ Wild and Scenic River

**3. Size of Upstream Watershed Area: (Square miles or acres)**

The unnamed stream is located within the Duck Creek Watershed that is 151.62 square miles in area. See Figure C-2-1.

**4. Stream flow characteristics:**

- ☐ Permanent Flow (year-round)  
☒ Temporary Flow (dry part of year)

**5. Stream Characteristics:**

- A. Substrate:
1. ☐ Sand
  2. ☒ Silt
  3. ☐ Clay
  4. ☐ Cobbles
  5. ☐ Other-describe: \_\_\_\_\_
- B. Average Water Depth: \_\_\_\_ dry \_\_\_\_
- C. Vegetation in Stream  
☐ Absent  
☒ Present - If known describe: reed canary grass
- D. Identify Aquatic Species Present: Unknown
- E. If water quality data is available, include this information: No current water quality data available.
- F. Is this river or stream on the WDNR's "Impaired Waters" list?  
☒ No  
☐ Yes - List: \_\_\_\_\_

**6. If bridge or box culvert replacement, are migratory bird nests present?**

- ☐ Not Applicable  
☒ None identified  
☐ Yes – Identify Bird Species present  
Estimated number of nests is:

**7. Is a Fish & Wildlife Depredation Permit required to remove swallow nests?**

- ☒ Not Applicable  
☐ Yes  
☐ No - Describe mitigation measures:

**8. Describe land adjacent to stream:** agricultural, residential, commercial

**9. Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the**

**project site:**

*The WIS 29 Corridor Preservation Plan Environmental Assessment noted that discharge into the unnamed creek is generally from overland flow. There are no identifiable dischargers or receivers within ½ mile (0.8 kilometers) of the project site.*

- 10. Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment:** *[Note: Coast Guard must be notified when Section 10 waters are affected by a proposal. Also see Wetland Evaluation, Factor Sheet C-1, Question 8.]*

The Proposed Action includes replacement of a culvert beneath Shawano Avenue.

- 11. Discuss the effects of any backwater which would be created by the proposed action. Indicate whether the proposed activities would be in compliance with NR 116 by creating 0.01 ft. backwater or less:**

A hydraulic analysis is currently being undertaken in conjunction with preliminary structure design. The structure will be sized to ensure that backwaters created would be less than 0.01 ft (3mm). The proposed action will be consistent with Wisconsin Administrative Code – Chapter NR 116, the National Flood Insurance Program.

- 12. Describe and provide the results of coordination with any floodplain zoning authority:**

Brown County regulates floodplain management in the unincorporated areas of the county. All work in the Proposed Action is to be undertaken in incorporated areas. The municipalities regulate development in the floodplain through their zoning and development permitting processes. Coordination has taken place with the Village of Hobart and Howard.

- 13. Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?**

- ☒ No impacts would occur.
- ☐ Significant interruption or termination of emergency vehicle service or a community's only evacuation route.
- ☐ Significant flooding with a potential for property loss and a hazard to life.
- ☐ Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.

- 14. Discuss existing or planned floodplain use and briefly summarize the project's effects on that use:**

Ongoing planning in the affected municipalities accounts for protection of the floodplain and the implementation of the Proposed Action. The proposed action will not affect existing or planned use of the floodplain.

- 15. Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream:**

*The WIS 29 Corridor Preservation Plan Environmental Assessment concluded that there are no long term impacts anticipated on the floodplain. During construction, there may be a slight impact to the floodplain, but this will be minimized through the use of silt fence, turbidity barrier, erosion bales, and other erosion control measures. All efforts will be made to minimize any potential off-site sedimentation. There will be minimal effects to plants, animals, and fish. Appropriate stormwater control measures direct impacts to water quality associated can be minimized.*

- 16. Are measures proposed to enhance beneficial effects?**

- ☒ No
- ☐ Yes. Describe: \_\_\_\_\_

# UPLAND WILDLIFE AND HABITAT EVALUATION

Wisconsin Department of Transportation

## Factor Sheet C-5

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

### 1. Proposed Work in Upland Areas:

- A. Describe the nature of proposed work in the upland habitat area (e.g., grading, clearing, grubbing, etc.):

The project will require clearing and grubbing of trees, bushes and brush in the area and subsequent grading for the permanent conversion of the upland areas to highway facilities and right of way. The separated grade interchange will need significant fill to raise the existing ground elevation to the required height for the structure approaches. Swales will be constructed along the roadway to create proper drainage facilities for runoff.

### 2. Vegetation/Habitat:

- A. Give a brief description of the upland habitat area. Include prominent plant community(ies) at the project site (list vegetation with a brief description of each community type if more than one present).

The dominant upland habitat area around the project site is Broad-Leaved/Mixed Deciduous Forest. Broad-Leaved/Mixed Deciduous Forests may include tree species such as oak, maple, beech, hickory, chestnut, elm, walnut, basswood and sweetgum. This vegetation provides food, cover and travel corridors to numerous wildlife species. There are also smaller areas of grasslands, which contain grasses and herbaceous plant communities. They provide food, shelter and migration passages to many animal species. The rest of the area is mostly covered in agricultural (monocultural) plots that do not provide ideal conditions for plant and animal communities to inhabit.

- B. Will the project result in changes in the vegetative cover of the roadside?

The project will result in changes of small portions of vegetative cover, primarily affecting the forested roadside areas south of the WIS 29 freeway corridor. Many of the affected areas north of WIS 29 are residential and agricultural areas that currently do not have significant roadside vegetative cover.

### 3. Wildlife:

- A. Identify and describe any observed or expected wildlife associations with the plant community(ies) listed in question #1:

There is a wide array of fauna that depend on these plant communities to provide habitat. These species include small mammals, common furbearers, wild turkey, deer, snakes, and many bird and insect species. More specifically, the state-threatened Wood Turtle is likely to inhabit areas near the project site.

- B. Identify and describe any known wildlife or bird use areas or movement corridors that will be severed or affected by the proposed action:

The Proposed Action is located in an area defined as a Migratory Bird Connection Site by the Wisconsin DNR, and is therefore designated as an area of special concern. The construction should not significantly impact the integrity of this use, as minimal deforestation will occur.

- C. Discuss other direct impacts on wildlife and estimate significance:

Slower traffic speeds caused by the installation of roundabouts throughout the project area may lead to lower wildlife mortality rates. The elimination of roadside vegetation will be minimal – converting privately owned landscaped lawn to public landscaped lawn – resulting in minor adverse impacts on wildlife habitat.

D. Identify and discuss any probable indirect impacts on wildlife in the area expected due to the project:

There will be very minimal to no further habitat fragmentation occurring in the upland areas, creating a low potential for negative effects on wildlife. Over the longer term, the Proposed Action is likely to facilitate further development in the area around the WIS 29-County FF interchange, due to improvements to access at this location to the regional transportation system. The Villages of Hobart and Howard have accounted for this indirect in their future land use planning, but it could have the effect of contributing to the reduction of available habitat over a period of decades.

E. Describe measures to avoid and/or minimize adverse effects or to enhance beneficial effects:

Retaining walls have been included in the design to minimize negative impacts on upland habitats. To avoid impacts on Wood Turtle habitat during construction, the project will require turtle exclusion fencing in the identified turtle habitat. See Factor Sheet C-7: Threatened and Endangered Species Evaluation. Also, enclosing the construction area with silt fencing or a turbidity barrier will occur in order to prevent the turtles from nesting in exposed soils.

In addition, fill and borrow sites will be selected in accordance with WisDOT standard specifications. Contaminated or hazardous materials found in any excavated material within the project limits will not be allowed as fill material and will be removed as appropriate.

# THREATENED AND ENDANGERED SPECIES EVALUATION

Wisconsin Department of Transportation

## Factor Sheet C-7

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

**1. Are there any known threatened or endangered species in the vicinity of the project?**

- ☐ None identified  
☒ Yes - Identify the species and indicate its status on Federal or State lists:

Species Common Name	Species Scientific Name	Federal Status	State Status	Affected by Project? Y/N
<b>Plants</b>				
<b>Animals</b>				
Wood turtle	<i>Glyptemys insculpta</i>		Threatened	Potentially affected
<b>Other</b>				

**2. Explain How a Species Is or Is Not Affected by the Action:**

- ☐ Species Not Affected:  
☒ Species Affected:

The project site contains potential habitat for the wood turtle (*Glyptemys insculpta*); construction activities will take place in this habitat.

**3. Describe Coordination:**

U.S. Fish & Wildlife Service:

- ☒ Has Section 7 coordination been completed?  
     ☒ No  
     ☐ Yes    - Describe mitigation required to protect the federally listed endangered species:

WDNR

- ☐ Has coordination with DNR been completed?  
     ☐ No  
     ☒ Yes - Describe mitigation required to protect the state-listed species:

DNR indicates impacts to turtles can be avoided by exclusion fencing to be erected between the streams and the construction zone prior to the beginning of their active period (March 15) of the construction year to discourage turtles from entering the work area. Fencing will also be needed for construction site erosion control. Location and timing of the fencing will be determined in the early stages of final design, when specific plans are being prepared. This approach will allow the contractor to address erosion control issues and wood turtle exclusion with one tool, properly applied to meet both needs. The silt fence will be installed prior to construction activities and the area behind the silt fence will be surveyed and any turtles confined within the project area removed prior to any site disturbance.

# AIR QUALITY EVALUATION

Wisconsin Department of Transportation

## Factor Sheet D-1

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

### 1. Ozone:

#### A. Is the project located in a county which is designated non-attainment or maintenance for ozone?

- ☒ No  
☐ Yes – If Yes, one of the following boxes must be checked:  
☐ This project is included in the approved Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP) endorsed by the region's Metropolitan Planning Organization (MPO). The TIP was found to conform by the Federal Highway Administration and the Federal Transit Administration. Provide RTP Name, TIP name, MPO name, TIP number and conformity finding date(s):

RTP Name

TIP Name

MPO Name

TIP Number

Conformity Finding Date(s):

- ☐ This project is located outside of a Metropolitan Planning Organization's boundaries and has received a positive conformity determination per the rural conformity section of the WisDOT/WDNR Memorandum of Agreement regarding determination of conformity. Provide conformity finding date.  
☐ This project is located outside of a Metropolitan Planning Organization's boundaries and is exempt from conformity requirements per 40 CFR 93.126  
☐ This project has been determined to be Not Regionally Significant  
☐ Other, describe:



## 2. Carbon Monoxide:

A. Is this project exempt from air quality analysis under Wisconsin Administrative Code – NR 411?

☐ No – NR 411 exemptions do not apply.

☒ Yes – NR 411 exemption(s) apply – Identify exemption(s) and explain why project is exempt.

The project is located in Brown County, which is a metropolitan county. According to Wisconsin Administrative Code NR 411, this project will be exempt from air quality analysis if all applicable exemptions are met. The following NR 411 exemptions apply:

(1) *For any new road or highway segment or new intersection leg located in a metropolitan county, a peak hour volume of less than 1200 motor vehicles per hour.*

The maximum volume of the new exit ramp intersection legs is approximately 545 vehicles per hour.

(2) *For any modified road or highway segment located in a metropolitan county, an increase in the peak hour volume [from construction year to construction year plus 10 years] of less than 1200 motor vehicles per hour.*

The maximum peak hour traffic volume increase of any highway segment or intersection leg is located on westbound WIS 29/32 east of County FF with an increase of 575 vehicles per hour from 2014 to 2024.

(3) *Where there is a shift in one or more of the intersection approach legs, one of the following:*

- a. *A maximum shift in the nearest roadway edge of less than 12 feet toward any potential receptor location within the new intersection boundary for any modified intersection.*
- b. *Where the maximum in the nearest roadway edge toward any potential receptor location is 12 or more feet, and each new road or highway segment has no more than 2 approach lanes, not including exclusive turning lanes, and any potential receptor is located at more than 25 feet from the nearest proposed roadway edge, a peak hour traffic volume on each approach of less than 1800 motor vehicles per hour.*

No potential receptors are located less than 25 feet from the nearest proposed roadway edge. No intersection approach leg has more than 2 lanes. The peak hour traffic volumes on all intersection approach legs will be less than 1,800 vehicles per hour.

This project satisfies all applicable NR 411 exemptions; therefore, an air quality analysis is not required.

### B. Was an air quality analysis required?

☒ No

☐ Yes – Identify the air quality modeling technique or program used to perform the analysis. Complete the Maximum Projected Carbon Monoxide (CO) Concentrations Table to illustrate the results:

### C. If an air quality analysis was performed, will a construction permit be required to address air quality before the project may proceed?

☐ No

☐ Letter of concurrence from WDNR Bureau of Air Management requested. (See attached request letter – Exhibit )

☐ Letter of concurrence received from WDNR Bureau of Air Management. (See attached Exhibit )

☐ Yes – Indicate:

Date Permit Requested

OR Date of Permit

# CONSTRUCTION STAGE SOUND QUALITY EVALUATION

Wisconsin Department of Transportation

## Factor Sheet D-2

Alternative Alternative 2	Total Length of Center Line of Existing Roadway Length of This Alternative WIS 29: 1.578 miles County FF: 1.015 miles
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

**1. Identify and describe residences, schools, libraries, or other noise sensitive areas near the proposed action and which will be in use during construction of the proposed action. Include the number of persons potentially affected:**

Several clusters of residential development adjacent to the proposed WI 29 interchange and roadway alignments would be affected by construction noise. In particular, residences in the NE and NW quadrants of the interchange, those near the four proposed roundabouts, and those in the SE and SW quadrants of the WI 29/Woodland Road intersection closure. Approximately 86 first and second row homes would be affected. Assuming an average of 3 residents per home, approximately 258 residents would be potentially affected by construction noise. In addition, there are five commercial properties in the SW quadrant of the proposed interchange that would be potentially affected by construction noise. Distances were measured from these noise sensitive areas to the near lane of the nearest proposed action (i.e. interchange, WIS 29, roundabout) and the distances ranged from 30 to 1100+ feet. The closest noise sensitive area was a small cluster of homes adjacent to the proposed Sherwood Street northbound realignment north of the Sherwood Street/WB ramps roundabout.

**2. Describe the types of construction equipment to be used on the project. Discuss the expected severity of noise levels including the frequency and duration of any anticipated high noise levels:**

The noise generated by construction equipment will vary greatly, depending on equipment type/model/make, duration of operation and specific type of work effort. However, typical noise levels may occur in the 67 to 107 decibel (dBA) range at a distance of 50 feet. Table D-2-1 lists typical noise levels for a variety of construction equipment. Adverse effects related to construction noise are anticipated to be of a localized, temporary, and transient nature.

**3. Describe the construction stage noise abatement measures to minimize identified adverse noise effects.**

**Check all that apply:**

- ☒ WisDOT Standard Specifications 107.8(6) and 108.7.1 will apply.
- ☐ WisDOT Standard Specifications 107.8(6) and 108.7.1 will apply with the exception that the hours of operation requiring the engineer's written approval for operations will be changed to \_\_\_\_\_ P.M. until \_\_\_\_\_ A.M.
- ☐ WisDOT Standard Specifications 107.8(6) and 108.7.1 will apply with the exception that the hours of operation requiring the engineer's written approval for operations will be changed to \_\_\_\_\_ P.M. until \_\_\_\_\_ A.M.
- ☐ Special construction stage noise abatement measures will be required. Describe:

**Table D-2-1: Construction Equipment Sound Levels**

<b>Equipment Powered by Internal Combustion Engines</b>	<b>Range of Sound Levels (dBA) at 50 feet</b>
<b>Earth Moving</b>	
Compactors (rollers)	72-75
Front loaders	72-85
Backhoes	77-94
Tractors	76-97
Scrapers, graders	80-94
Pavers,	86-89
Trucks	54-95
<b>Materials Handling</b>	
Concrete mixers	75-87
Concrete pumps	81-84
Cranes (movable)	76-86
Cranes (derrick)	86-89
<b>Stationary</b>	
Pumps	67-72
Generators	72-82
Compressors	75-87
<b>Impact Equipment</b>	
Pneumatic wrenches	82-89
Jack Hammers and Rock Drills	81-97
Impact pile drivers (peaks)	95-105
<b>Other</b>	
Vibrator	69-81
Saws	72-83

*Source: Adapted from Figure 2-36, Report to the President and Congress on Noise, prepared by the US EPA, February, 1972*

# TRAFFIC NOISE EVALUATION

Wisconsin Department of Transportation

## Factor Sheet D-3

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

### 1. Need for Noise Analysis:

- A. Is the proposed action considered a Type I project? (A Type I project is defined as a project that involves construction of a roadway on new location or the physical alteration of an existing highway which substantially changes either the horizontal or vertical alignment or increases the number of through-traffic lanes).
- ☐ No – Complete only Factor Sheet D-2, Construction Stage Sound Quality Impact Evaluation.
- ☒ Yes – Complete Factor Sheet D-2, Construction Stage Sound Quality Impact Evaluation, and the rest of this sheet.

### 2. Traffic Data:

- A. Indicate whether traffic volumes for sound prediction are different from the Design Hourly Volume (DHV) on Basic Sheet 6, Traffic Summary Matrix:
- ☒ No
- ☐ Yes – Indicate volumes and explain why they were used:

Automobiles	Veh/hr
Trucks	Veh/hr
Or Percentage (T)	%

- B. Identify and describe the noise analysis technique or program used to identify existing and future sound levels: (See attached receptor location map as Exhibit D-3-1). A receptor location map must be included with this document.

Existing and future sound levels were evaluated in the project area using the FHWA Traffic Noise Model (TNM) version 2.5. The noise analysis was based on the preliminary design information available. The noise analysis evaluated residential and commercial receptors representing first and second row homes adjacent to proposed improvements along WIS 29/32 as well as County FF/Sherwood Street. The receptor locations are presented in Exhibit D-3-1. The presence of dense forested areas with thick underbrush was assumed to remain largely undisturbed outside the project right-of-way and undeveloped lots. The results of the noise analysis are presented in Table D-3-1.

- C. Identify sensitive receptors, e.g., schools, libraries, hospitals, residences, etc. potentially affected by traffic sound: (See attached receptor location map – Exhibit D-3-1).

Noise sensitive receptors in the project area include residences and commercial properties. Exhibit D-3-1 illustrates the locations of the receptors. There is also undeveloped land with future land use identified as residential in the vicinity of the interchange on either side of WIS 29/32.

- D. If this proposal is implemented will future sound levels produce a noise impact?

- ☐ No
- ☒ Yes - The impact will occur because:
- ☒ The Noise Abatement Criteria (NAC) is approached (1 dBA less than the NAC) or exceeded.
- ☐ Existing sound levels will increase by 15 dBA or more.

Noise Abatement Criteria (NAC) is approached (1 dBA less than the NAC) or exceeded on the south side of WIS 29/32 in the vicinity of the WIS 29/32 and Sunlite Drive/Woodland Road intersection. Therefore, the project will result in noise impacts in this location.

The 66 dBA contour, which corresponds to approaching (1 dBA less than) the NAC for activity categories B (residential) and C (outside areas of frequent human use), typically extends 200 to 250 feet from the nearest roadway edge of the WIS 29/32 corridor. Local agencies should encourage development of these types of activity categories for undeveloped lands outside of this impact contour.

E. Will traffic noise abatement measures be implemented?

- ☐ Not applicable – Traffic noise impacts will not occur.
- ☒ No – Traffic noise abatement is not reasonable or feasible (explain why). See noise abatement analysis below.
- ☐ Yes – Traffic noise abatement has been determined to be feasible and reasonable. Describe any traffic noise abatement measures which are proposed to be implemented. Explain how it will be determined whether or not those measures will be implemented:

**Noise Abatement Analysis**

When it is determined that noise impacts will occur, the Facilities Development Manual stipulates that WisDOT must then determine whether or not noise abatement is reasonable, feasible, and likely to be incorporated. The following noise mitigation alternatives were considered for this project:

- (1) Traffic Control Measures – Traffic control measures that could be employed include prohibition of certain vehicle types (typically trucks) or restricting vehicles from operating during noise-sensitive times of the day. It was determined that restricting truck traffic would be incompatible with the function of the WIS 29/32 corridor, which is a primary route for the transport of goods.
- (2) Buffer Zones – The project can acquire real property or interests therein (predominately unimproved property) to serve as a buffer zone to preempt development which would be adversely impacted by traffic noise. It was determined that acquisition of property adjacent to the proposed improvements would add significant cost to the project with limited benefit to the developed areas adjacent to the project.
- (3) Noise barriers – Noise barriers can be either earth berms or wood or concrete walls constructed from prequalified materials and designs. The walls must be continuous and of sufficient length and height to break the line of sight between the noise source and the receptor. Noise barriers were evaluated where noise impacts were identified; these are shown in Exhibit D-3-1. This evaluation determined noise barriers would not be reasonable (see further discussion below).
- (4) Soundproofing – Only land uses with exclusive indoor use (e.g. schools, hospitals, nursing homes) are eligible for consideration for soundproofing to reduce interior noise levels. No properties of this type will be impacted by the Proposed Action.

**Noise Barrier Evaluation**

According to FDM 23-35, before a noise barrier can be proposed for construction, it must first be determined to be feasible and reasonable. The feasibility and reasonableness measures, as defined in the FDM, are listed below.

- For a noise barrier to be feasible, it must achieve a 5 decibel noise reduction at a minimum of one (1) impacted receptor or common use area.
- For a noise barrier to be reasonable, the noise barrier design must achieve the reduction design goal of 9 decibels at a minimum of one (1) receptor. In addition, the total cost of the barrier may not exceed \$30,000 per benefitted receptor. For purposes of reasonableness determination, a benefitted receptor must receive a minimum reduction of 8 decibels.

A noise barrier (Wall C) was evaluated for the impacted residences in the Sunlite Drive neighborhood south of WIS 29/32. See Exhibit D-3-1 for an illustration of the barrier location. The noise barrier was approximately 3,008 feet long with a maximum height of 15 feet and an average height of 14.64 feet. The barrier meets the feasibility reduction criteria of 5 decibels and the reduction design goal of 9 decibels for at least one receptor. A total of 2 receptors will be benefitted by the barrier design. Using a construction cost of \$18.00/sf, the total cost was estimated to be \$396,270 per benefitted receptor. This exceeds the \$30,000 per benefitted receptor limit in FDM 23-35-15. Therefore, the barrier is not reasonable and is not proposed. See Table D-3-1 for the noise analysis results. Shorter barrier heights were evaluated but did not meet the reduction design goal of 9 decibels. Taller barriers were evaluated but were less cost effective than the barrier height of 15 feet.

**Table D-3-1: Noise Analysis**

Receptor Location or Site Identification (See attached map) <sup>2</sup>	Distance from C/L of Near Lane to Receptor <sup>3</sup> in feet (ft.)	Number of Families or People Typical of this Receptor Site	Sound Level L <sub>eq</sub> <sup>1</sup> (dBA)			Impact Evaluation		
			Noise Abatement Criteria <sup>4</sup> (NAC)	Future Sound Level (2034) <sup>5</sup>	Existing Sound Level (2011)	Difference in Future and Existing Sound Levels (Col. e minus Col. f)	Difference in Future Sound Levels and Noise Abatement Criteria (Col. e minus Col. d)	Impact <sup>6</sup> or No Impact
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
A1 (SF)	260	1 Homes	67	60	58	2	-7	N
A2 (SF)	500	2 Homes	67	55	52	3	-12	N
A3 (SF)	260	6 Homes	67	61	57	4	-6	N
A4 (SF)	450	2 Homes	67	55	51	4	-12	N
A5 (SF)	600	4 Homes	67	54	50	4	-13	N
A6 (SF)	380	1 Homes	67	58	52	6	-9	N
A7 (SF)	530	2 Homes	67	59	53	6	-8	N
A8 (SF)	510	2 Homes	67	61	55	6	-6	N
A9 (SF)	310	5 Homes	67	63	59	4	-4	N
A10 (SF)	260	1 Homes	67	64	61	3	-3	N
A11 (SF)	740	2 Homes	67	56	50	6	-11	N
A12 (SF)	820	2 Homes	67	53	51	2	-14	N
A13 (SF)	1180	2 Homes	67	55	50	5	-12	N
A14 (SF)	180	1 Homes	67	57	52	5	-10	N
A15 (SF)	660	2 Homes	67	55	48	7	-12	N
A16 (SF)	900	1 Homes	67	55	49	6	-12	N
A17 (SF)	960	1 Homes	67	52	47	5	-15	N
B1 (SF)	910	1 Homes	67	52	49	3	-15	N
B2 (COM)	250	2 Properties	72	60	57	3	-12	N
B3 (COM)	300	3 Properties	72	56	55	1	-16	N
B4 (SF)	160	1 Homes	67	59	55	4	-8	N
B5 (SF)	90	1 Homes	67	62	57	5	-5	N
B6 (SF)	220	1 Homes	67	58	52	6	-9	N
B7 (SF)	240	1 Homes	67	57	51	6	-10	N
C1 (SF)	330	1 Homes	67	60 (55) [-5]	58	2	-7	N
C2 (SF)	430	3 Homes	67	58 (55) [-3]	56	2	-9	N
C3 (SF)	260	1 Homes	67	69 (58) [-11]	67	2	2	I
C4 (SF)	200	1 Homes	67	67 (58) [-9]	63	4	0	I

<sup>1</sup> Whole numbers only.<sup>2</sup> Land use: SF: single family; COM: commercial property.<sup>3</sup> Distances measured from centerline of nearest lane of proposed improvements.<sup>4</sup> Noise Abatement Criteria from Wisconsin Administrative Code, Chapter Trans. 405.04, Table 1.<sup>5</sup> Sound levels: 53: sound level without mitigation, (50): sound level with mitigation; [-3]: reduction in sound level.<sup>6</sup> An impact occurs when future sound levels exceed existing sound levels by 15 dB or more, or, future sound levels approach or exceed the Noise Abatement Criteria ("approach" is defined as 1 dB less than the Noise Abatement Criteria, therefore an impact occurs when Column (h) is -1 db or greater). I = Impact, N = No Impact.

**Table D-3-1 cont.**

Receptor Location or Site Identification (See attached map) <sup>2</sup>	Distance from C/L of Near Lane to Receptor <sup>3</sup> in feet (ft.)	Number of Families or People Typical of this Receptor Site	Sound Level L <sub>eq</sub> <sup>1</sup> (dBA)			Impact Evaluation		
			Noise Abatement Criteria <sup>4</sup> (NAC)	Future Sound Level (2034) <sup>5</sup>	Existing Sound Level (2011)	Difference in Future and Existing Sound Levels (Col. e minus Col. f)	Difference in Future Sound Levels and Noise Abatement Criteria (Col. e minus Col. d)	Impact <sup>6</sup> or No Impact
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
C5 (SF)	440	1 Homes	67	57 (55) [-2]	54	3	-10	N
C6 (SF)	600	1 Homes	67	56 (54) [-2]	52	4	-11	N
C7 (SF)	790	2 Homes	67	53 (51) [-2]	51	2	-14	N
D1 (COM)	230	1 Property	72	66	62	4	-6	N
D2 (COM)	570	1 Property	72	59	55	4	-13	N
E1 (SF)	70	1 Homes	67	62	58	4	-5	N
E2 (SF)	210	2 Homes	67	59	55	4	-8	N
E3 (SF)	530	1 Homes	67	55	52	3	-12	N
E4 (SF)	30	2 Homes	67	63	58	5	-4	N
E5 (SF)	350	1 Homes	67	56	53	3	-11	N
E6 (SF)	680	4 Homes	67	54	51	3	-13	N
E7 (SF)	440	2 Homes	67	53	50	3	-14	N
E8 (SF)	70	2 Homes	67	60	55	5	-7	N
E9 (SF)	220	2 Homes	67	56	53	3	-11	N
E10 (SF)	670	1 Homes	67	57	52	5	-10	N
E11 (SF)	1040	2 Homes	67	65	58	7	-2	N
E12 (SF)	120	1 Homes	67	61	54	7	-6	N
E13 (SF)	840	1 Homes	67	62	56	6	-5	N
E14 (SF)	1120	1 Homes	67	63	56	7	-4	N
F1 (SF)	180	1 Homes	67	59	59	0	-8	N
F2 (SF)	200	1 Homes	67	57	55	2	-10	N
F3 (SF)	530	1 Homes	67	54	51	3	-13	N
F4 (SF)	180	1 Homes	67	56	51	5	-11	N
F5 (SF)	340	1 Homes	67	56	50	6	-11	N
F6 (SF)	200	1 Homes	67	57	50	7	-10	N
F7 (SF)	100	1 Homes	67	62	55	7	-5	N
F8 (SF)	850	1 Homes	67	65	59	6	-2	N
F9 (SF)	550	1 Homes	67	60	54	6	-7	N
G1 (SF)	300	1 Homes	67	61	58	3	-6	N
G2 (SF)	380	1 Homes	67	59	55	4	-8	N

<sup>1</sup> Whole numbers only.

<sup>2</sup> Land use: SF: single family; COM: commercial property.

<sup>3</sup> Distances measured from centerline of nearest lane of proposed improvements.

<sup>4</sup> Noise Abatement Criteria from Wisconsin Administrative Code, Chapter Trans. 405.04, Table 1.

<sup>5</sup> Sound levels: 53: sound level without mitigation, (50): sound level with mitigation; [-3]: reduction in sound level.

<sup>6</sup> An impact occurs when future sound levels exceed existing sound levels by 15 dB or more, or, future sound levels approach or exceed the Noise Abatement Criteria ("approach" is defined as 1 dB less than the Noise Abatement Criteria, therefore an impact occurs when Column (h) is -1 db or greater). I = Impact, N = No Impact.





WIS 29/32 and  
County FF Interchange  
Noise Analysis

Proposed Roadway Improvements

Receptors

Exhibit D-3-1  
Receptor Locations  
Proposed Improvements



## HAZARDOUS SUBSTANCES OR CONTAMINATION EVALUATION

Wisconsin Department of Transportation

## Factor Sheet D-4

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None Identified	

**1. Briefly describe the results of the Phase 1 Hazardous Materials Assessment for this alternative. Do not use property identifiers (owner name, address or business name):**

Two areas within the project limits were identified as hazardous materials concerns: 1) the Shrovnal property, located at 4696 Hillcrest Drive, is a former underground storage tank (UST) site and a current furniture manufacturing facility, and 2) the Canterbury Farm & Greenhouse closed leaking underground storage tank (LUST) site located at the end of the Frederic Court cul-de-sac, at the eastern project limit.

Portions of the Shrovnal property are planned for WisDOT acquisition due to R/W encroachment associated with proposed ramp construction to eastbound STH 29 from CTH FF/Hillcrest Drive. Though no contamination was reported at the time of the UST removal in 1995, a tank closure assessment was not conducted to determine if a release occurred. In addition, the property has been historically used for light manufacturing, which suggests the likelihood of past chemical handling at this property. The Canterbury Farm & Greenhouse is a closed LUST site with documented contamination within the Frederic Court right-of-way.

Site Reference #	Land Use of Concern (Past or Present)	Contaminants of Concern	Phase 1 Recommendations	Phase 2 Recommended?
				Y/N
1	Furniture Manufacturing, former gas UST	BTEX	Conduct Phase 2 to determine if contamination is present at property. Property inspection and interview with property owner necessary to identify location of former UST.	Y
2	Landscape Nursery, closed LUST site	Lead, BTEX	Impacts located outside of proposed work area. Neither additional hazardous materials investigation nor special standard provisions are warranted. Geotechnical contractor should be made aware of documented BTEX contamination in Frederic Court cul-de-sac R/W (if applicable).	N

Attach additional sheets, if necessary

Additional comments: \_\_\_\_\_

**2. Were any parcels not included in the Phase 1 assessment?**

- ☒ No  
☐ Yes - How many:  
Why were they not reviewed?

**3. Have Phase 2 or 2.5 Assessments been completed? No Discuss the results: NA**

Site Reference #	Phase 2/2.5 Recommendations	Remediation Recommended?		Is WisDOT a Responsible Party?	
		Yes	No	Yes	No

**4. Describe the results of any additional investigations performed by WisDOT or others: (Include the number of sites investigated, the level of investigation and results for each site)**

NA

**5. Describe proposed action to avoid hazardous materials contamination:**

Conduct a Phase 2 of Site 1 to determine for the presence of contaminated soil.

**6. Describe the remediation and waste management practices to be included in the design for areas where contamination cannot be avoided (e.g., waste handling plan, remediation of contamination, design changes to minimize disturbances):**

Pending results of Phase 2. If contaminated soil is detected during Phase 2, excavation and disposal would be the likely remedy.

**7. List any parcels with known contamination, proposed for acquisition:**

None

**8. Bridge Projects Only: Has the structure been inspected for the presence of asbestos containing materials (ACMs)?**

☐ No - Explain

☐ Yes:

Were regulated ACMs identified?

☐ No

☐ Yes:

State the standard language to be incorporated in the special provisions of the project:

# STORMWATER EVALUATION

Wisconsin Department of Transportation

## Factor Sheet D-5

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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: State threatened wood turtle habitat is affected, see Factor Sheet C-7  
☐ 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 effects and enhance beneficial effects.**

Guidelines and regulations for highway project stormwater management include the WisDOT Facilities Development Manual, Chapter 10, Erosion Control and Storm Water Quality; Wisconsin Administrative Code Chapter TRANS 401, Construction Site Erosion Control and Storm Water Management Procedures for Department Actions; and the WisDOT/DNR Cooperative Agreement Amendment—Memorandum of Understanding on Erosion Control and Storm Water Management. The overall stormwater management strategy for the proposed project would include the following:

- Limit disturbance of natural drainage features and vegetation.
- Prior to land disturbance, prepare and implement an approved erosion and sediment control plan.
- Protect areas that provide important water quality benefits and/or that are susceptible to erosion and sediment loss.
- Reduce direct discharge of highway runoff into streams and wetlands by having it flow through a filter strip or vegetated swale.
- Reduce runoff velocities by running storm water in shallow, flat-bottom ditches.

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

A specific stormwater management plan will be developed in the engineering design phase when more detailed engineering information is available. The plan will be developed in view of the overall stormwater management strategies listed in question 3 and which are compatible with TRANS 401 requirements.

**5. Identify the stormwater management measures to be utilized.**

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Swale treatment (parallel to flow)<br>Trans 401.106(10) | <input type="checkbox"/> In-line storm sewer treatment, such as catch basins,<br>non-mechanical treatment systems. |
| <input type="checkbox"/> Vegetated filter strips<br>(perpendicular to flow)                 | <input type="checkbox"/> Detention/retention basins – Trans 401.106(6)(3)  |
| <input type="checkbox"/> Constructed storm water wetlands                                   | <input type="checkbox"/> Distancing outfalls from waterway edge  |
| <input type="checkbox"/> Buffer areas – Trans 401.106(6)                                    | <input type="checkbox"/> Infiltration – Trans 401.106(5)   |
| <input type="checkbox"/> 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 is 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.
- ☐ 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 - Coordination is in process.

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

- ☒ No
- ☐ Yes - Complete the following:
- ☐ Safety measures, such as fencing are not needed for potential conflicts with existing and expected surrounding land use.
- ☐ Safety measures are needed for potential conflicts with existing and expected surrounding land use.
- Describe:

# EROSION CONTROL EVALUATION

Wisconsin Department of Transportation

## Factor Sheet D-6

Alternative Alternative 2	Total Length of Center Line of Existing Roadway: WIS 29 - 1.578 mi, CTH FF - 1.015 mi Length of This Alternative: WIS 29 - 1.578 mi, CTH FF - 1.015 mi
Preferred <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None identified	

**1. Give a brief description of existing and proposed slopes in the project area, both perpendicular and longitudinal to the project. Include both existing and proposed slope length, percent slope and soil types.**

The existing terrain is relatively flat with the at-grade intersection at WIS 29/32 and County FF. The interchange ramps have a maximum 4.00% slope at the southwest ramp to reach proper structure height to accommodate desirable clearance under the structure. Moving north along County FF, the slopes change from 2.30% on the south end and flatten to -1.00%. Upon approach to the structure it changes to roughly 3.3%. On the north side of WIS 29/32, the slopes flatten off the bridge from -3.0% to 0.75% and to 0.50% on the very north end.

The elevation of County C stays roughly constant from existing to proposed vertical curvature. The new alignment along Golden Pond Park Court varies greatly from the existing profile. The proposed profile starts at -3.00% and flattens to -0.50% across the structure, climbing at 1.54% to match County FF. There will be a cut of roughly 10 feet just north of the structure and another south of it, roughly 20 feet. Navajo Trail is steep at a slope starting at -1.98% and increasing to -7.0%, but is slightly flatter than the existing profile at the intersection. Sunlite Drive, Forest Road, Woodland Road and Greenfield Avenue will all closely match the existing profile. Greenfield Avenue will start at 6.00% and Woodland Road will drop off at -3.65%. Sunlite Drive will start at -1.10% and fall at the T-intersection to -2.57%. Along the alignment there will be minor fill locations of 1 to 8 feet. The frontage road, however, will require roughly a 12 foot cut and a 15 foot fill along the new alignment before tying back into the existing Golden Pond Park Court alignment. It has a downward grade of -2.66% along the majority of the alignment. Forest Road will go from -0.55% to 2.00% with a maximum cut of 8 feet.

Cross slopes range from 2.00% on the travel lanes to 4.00% on the paved shoulders. Side slopes ranged from 3.5:1 maximum to 6:1.

The soil characteristics within the project area, based on boring data, can be found below:

### Sunlite Drive/Forest Road

- Silty sand (A-2-4), Sandy Silt (A-4), Clayey Sand (A-2-6), Clayey Silt (A-4)
- Fine to Medium Sand (A-2-4), Sandy/Lean Clay (A-6/A-7-6), Silty Fine Sand (A-4), Fine Sand with Silt Seams (A-3),
- Native soil strata with underlying base course of silty fine sand
- No bedrock at these locations
- Brown fine sand with some silty seams or brown silty fine sand
- Brown lean clay at one boring locations

### Greenfield Avenue/ Woodland Road

- Primarily silty sand (A-2-4) with some locations of Lean Clay (A-6), Sandy Silt (A-4), Clayey Silt (A-4)
- Native soil strata with underlying base course of silty fine sand
- No bedrock at these locations
- Brown fine sand with some silty seams or brown silty fine sand
- Brown sandy lean clay at three boring locations
- The marsh boring found black organic soil with some clay above gray silty fine sand and gravel

### Bridge Location

- Silty sand (A-2-4), Lean Clay (A-6), Sandy Silt (A-4), Clayey Sand (A-2-6), Clayey Silt (A-4)
- Pier locations had moist silty or clayey sand
- Retaining wall locations had 1-foot topsoil above moist to wet silty and sandy soils

### Ramps

- Primarily silty sand (A-2-4) with some locations of Lean Clay (A-6), Sandy Silt (A-4), Clayey Silt (A-4)
- Topsoil over thick native silt, sand or lean clay soils
- Mostly moist soils with three saturated soil borings

County FF (Hillcrest Drive)/Sherwood Street

- Primarily silty sand (A-2-4) with some locations of Lean Clay (A-6)
- Asphalt and base upper with range of fill depths
- Fill classified as silty sand or sandy clay and generally moist

Golden Pond Park Court

- Primarily loamy fine sand and silt loam

Frontage Road

- Primarily loamy sand and loamy fine sand with some instances of gravel
- Some areas of moist to wet conditions within the wetland boundaries

**2. Indicate all natural resources to be affected by the proposal that are sensitive to erosion, sedimentation, or waters of the state quality degradation and provide specific recommendations on the level of protection needed.**

- ☐ No - there are no sensitive resources affected by the proposal.
- ☒ Yes - Sensitive resources exist in or adjacent to the area affected by the project.
- ☒ River/stream
  - ☐ Lake
  - ☒ Wetland
  - ☐ Endangered species habitat
  - ☒ Other - Describe: State-threatened Wood Turtle habitat

**3. Are there circumstances requiring additional or special consideration?**

- ☐ No - Additional or special circumstances are not present.
- ☒ Yes - Additional or special circumstances exist. Indicate all that are present.
- ☒ Areas of groundwater discharge
  - ☒ Overland flow/runoff
  - ☒ Long or steep cut or fill slopes
  - ☒ Areas of groundwater recharge (fractured bedrock, wetlands, streams)
  - ☐ Other - Describe any unique or atypical erosion control measures to be used to manage additional or special circumstances\_\_\_\_\_

**4. Describe overall erosion control strategy to minimize adverse effects and/or enhance beneficial effects.**

Erosion controls techniques will follow *Chapter 10: Erosion Control and Storm Water Quality* of the WisDOT Facilities Development Manual (FDM). Basic techniques include but are not limited to the following:

Slopes will be stabilized as soon as possible after grading, especially in areas of significant cut and fill. The size and duration of exposure will be minimized to the extent possible. Affects to sensitive areas will carefully be managed by proper installation and maintenance of silt fencing, proper grading, ditch sections, detention basins, and ground protection such as seeding, mulching, and erosion mats and fabrics. All runoff will be contained within the construction site to avoid further affects near the project location. Existing drainage patterns will be utilized to effectively manage runoff. Riprap, silt fence and erosion bales will be used to reduce the velocity of sediments and runoffs near the construction site.

**5. Erosion control measures reached consensus with the appropriate authorities as indicated below:**

- ☐ WisDNR
- ☐ County Land Conservation Department
- ☐ American Indian Tribe
- ☐ US Army Corps of Engineers

Specific erosion control measures will be developed when more detailed engineering data is available later in the design process. Erosion control measures will be coordinated with the DNR, the Tribe, and local officials.

Note: All erosion control measures (i.e., the Erosion Control Plan) shall be coordinated through the WisDOT-WisDNR liaison process and TRANS 401 except when Tribal lands of American Indian Tribes are involved. WisDNR's concurrence is not forthcoming without an Erosion Control Plan. In addition, TRANS 401 requires the contractor to prepare an Erosion Control Implementation Plan (ECIP), which identifies timing and staging of the project's erosion control measures. The ECIP should be submitted to the WisDNR and to WisDOT 14 days prior to the preconstruction conference (Trans401.08(1)) and must be approved by WisDOT before implementation. On Tribal lands, coordination for 402 (erosion) concerns are either to be coordinated with the tribe affected or with the U.S. Environmental Protection Agency (EPA). EPA or the tribes have the 401 water quality responsibility on Trust lands. Describe how the Erosion Control/Storm Water Management Plan can be compatible.

**6. Identify the temporary and permanent erosion control measures to be utilized on the project. Consult the FDM, Chapter 10, and the Products Acceptability List (PAL).**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Minimize the amount of land exposed at one time | <input checked="" type="checkbox"/> Detention basin   |
| <input checked="" type="checkbox"/> Temporary seeding                               | <input checked="" type="checkbox"/> Vegetative swales |
| <input checked="" type="checkbox"/> Silt fence                                      | <input type="checkbox"/> Pave haul roads              |
| <input checked="" type="checkbox"/> Ditch checks                                    | <input type="checkbox"/> Dust abatement               |
| <input checked="" type="checkbox"/> Erosion or turf reinforcement mat               | <input checked="" type="checkbox"/> Rip rap           |
| <input type="checkbox"/> Ditch or slope sodding                                     | <input type="checkbox"/> Buffer strips                |
| <input checked="" type="checkbox"/> Soil stabilizer                                 | <input type="checkbox"/> Dewatering – Describe method |
| <input checked="" type="checkbox"/> Inlet protection                                | <input type="checkbox"/> Silt screen                  |
| <input checked="" type="checkbox"/> Turbidity barriers                              | <input type="checkbox"/> Temporary diversion channel  |
| <input type="checkbox"/> Temporary settling basin                                   | <input checked="" type="checkbox"/> Permanent seeding |
| <input checked="" type="checkbox"/> Mulching  |   |
| <input type="checkbox"/> Other - Describe _____                                     |   |

## **APPENDICES**

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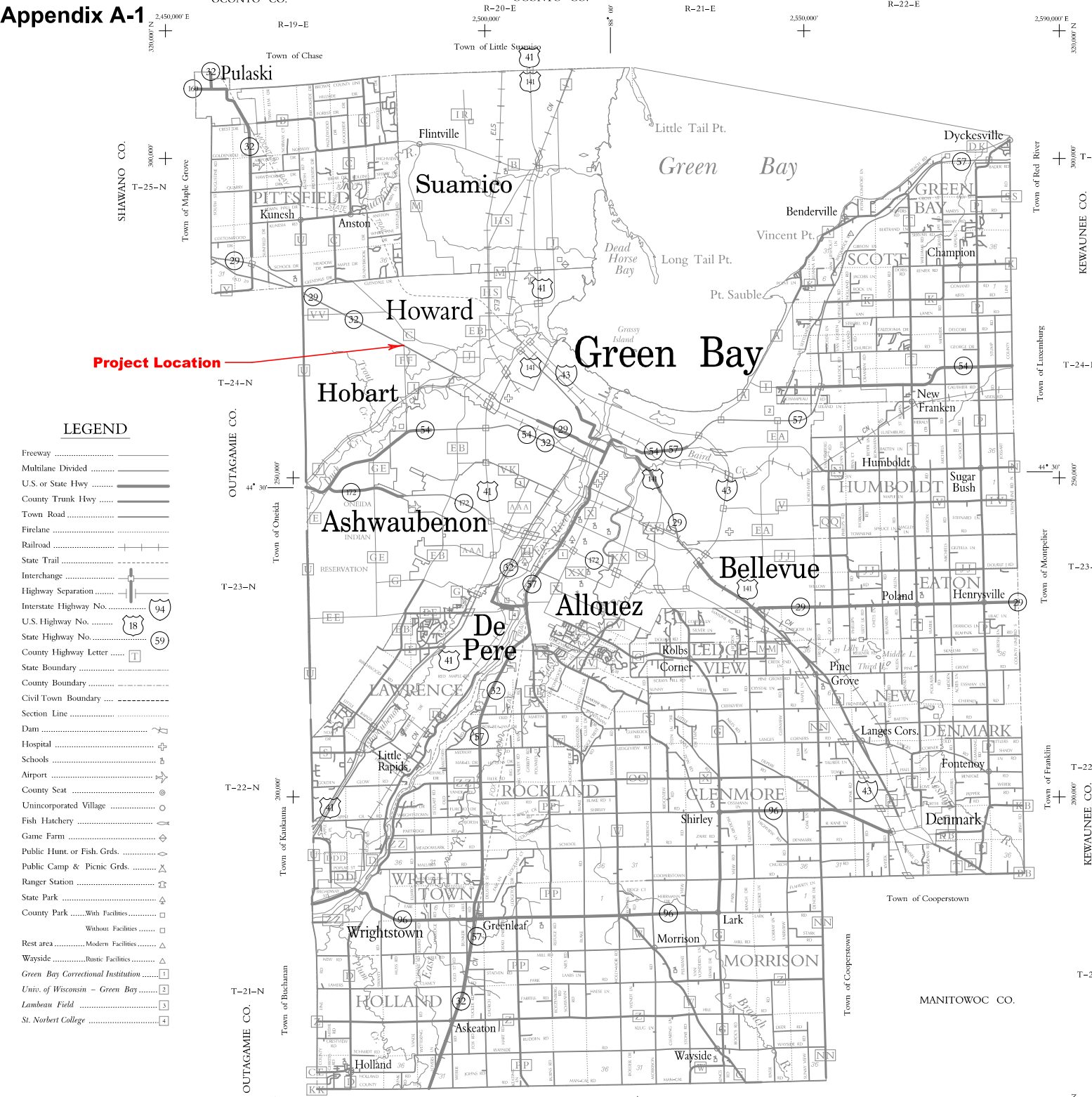
APPENDIX E - Sunlite-Golden Pond Park Court Frontage Road Alternatives Analysis

APPENDIX F - Section 106 Review

APPENDIX G - Conceptual Stage Relocation Plan



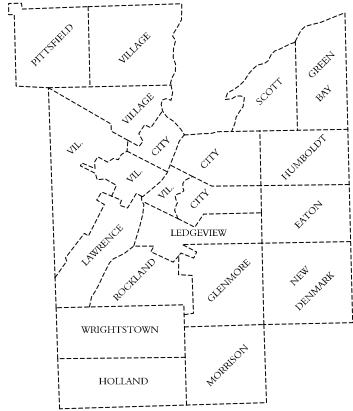
# APPENDIX A - Maps



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. .... 1
- Public Camp & Picnic Grds. .... 2
- 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
- Lambau Field..... 3
- St. Norbert College..... 4

CIVIL TOWNS

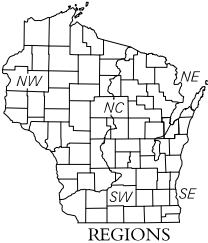


For boundaries of public hunting and fishing grounds please contact the Department of Natural Resources

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



MILES OF HIGHWAY as of Dec. 31, 2006

STATE.....	185
COUNTY.....	358
LOCAL ROADS.....	1765
OTHER ROADS.....	24
TOTAL FOR COUNTY.....	2,332

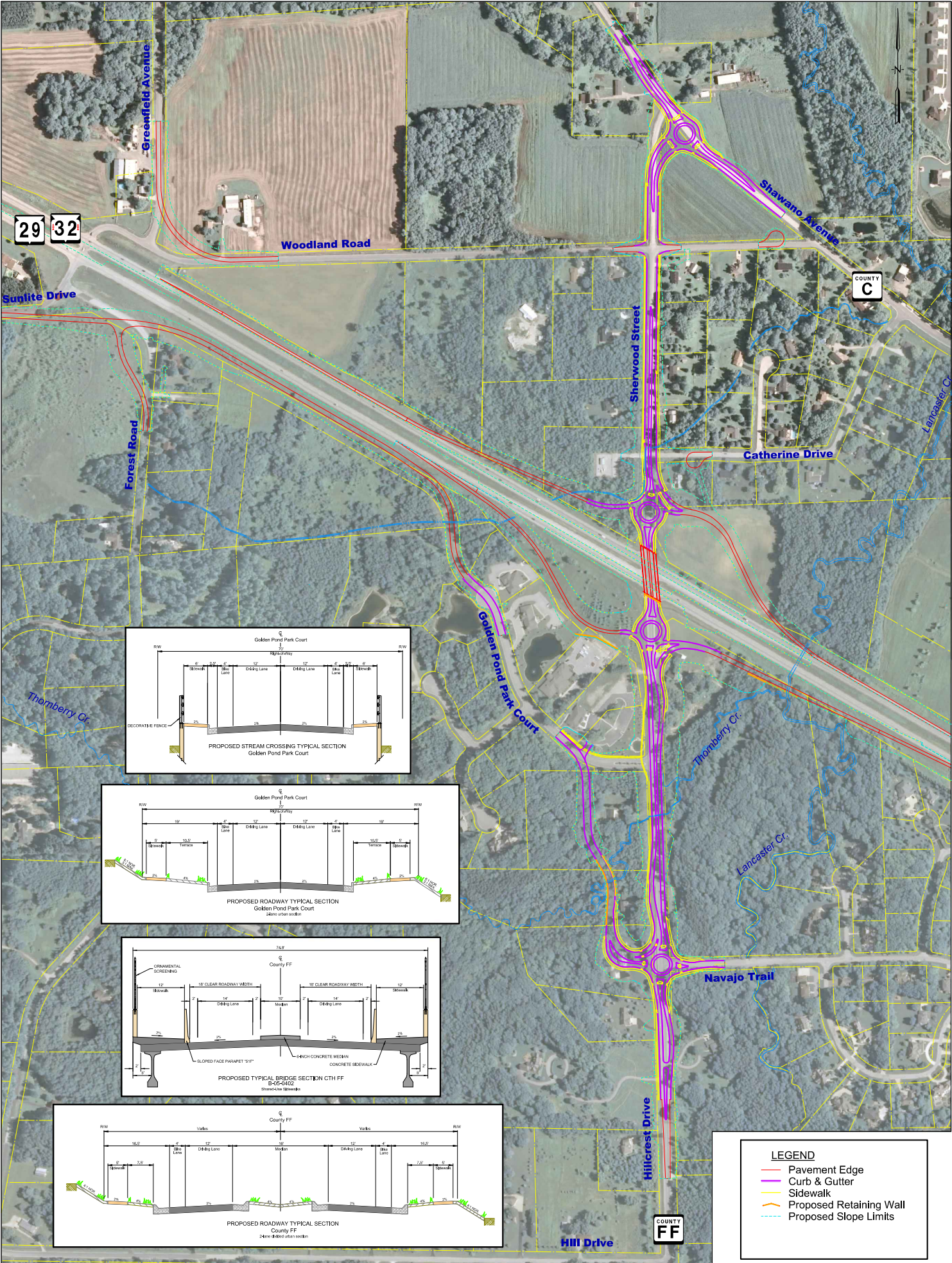
Land Area (2000 Census) .....529 sq mi  
Population (2000 Census) .....226,778  
County Seat .....Green Bay

BROWN CO.

DEPARTMENT OF TRANSPORTATION  
STATE OFFICE BUILDING  
Madison, Wisconsin

0 1 2 MILES  
Corrected for  
JAN. 2008  
Base compiled from U.S.G.S. Quadrangles  
1:100,000 Series





## APPENDIX B - Agency Correspondence



## Appendix B: Agency Correspondence

Project ID: 9200-04-00  
WIS 29 & CTH FF Interchange  
Brown County  
Agency Contacts

	First Name	Last Name	Agency	Branch/Unit	Address1	Address2	City	State	Zip	Phone	Email	Remark
Federal	Todd	Vesperman	U.S. Army Corps of Engineers	Regulatory Branch	Old Fort Square	211 N Broadway Street, Suite 221	Green Bay	WI	54303	920.448.2824	<a href="mailto:todd.m.vesperman@usace.army.mil">todd.m.vesperman@usace.army.mil</a>	Chief
	Louise	Clemency	U.S. Fish and Wildlife Service	Division of Ecological Services	2661 Scott Tower Drive		New Franken	WI	54229	920.866.1717	<a href="mailto:greenbay@fws.gov">greenbay@fws.gov</a>	Field Supervisor
	Kenneth	Westlake	United States Environmental Protection Agency	Region V	77 West Jackson Boulevard		Chicago	IL	60604	312.886.2910	<a href="mailto:westlake.kenneth@epa.gov">westlake.kenneth@epa.gov</a>	Regional Contact
	Superintendent	Great Lakes Agency	Bureau of Indian Affairs	US Department of the Interior	916 West Lakeshore Drive		Ashland	WI	54806	715.682.4527		per FDM 5-5-10 send when surveying is to be done on Indian lands
	Phillip	Meyer	United States Department of Agriculture	Natural Resources Conservation Service	3369 West Brewster St.		Appleton	WI	54914	920.733.1575	<a href="mailto:phil.meyer@wi.usda.gov">phil.meyer@wi.usda.gov</a>	EA
State	Al	Stranz	Wisconsin Department of Natural Resources		2984 Shawano Avenue		Green Bay	WI	54313-6727	920.662.5118	<a href="mailto:allan.stranz@wisconsin.gov">allan.stranz@wisconsin.gov</a>	Supervisor
	Peter	Nauth	Department of Agriculture, Trade & Consumer Protection	Agriculture Resource Management Division	P.O. Box 8911	2811 Agricultural Drive	Madison	WI	53708-8911	608.224.4650	<a href="mailto:peter.nauth@wisconsin.gov">peter.nauth@wisconsin.gov</a>	
	Sherman	Banker	Office of Preservation Planning	Wisconsin Historical Society	816 State Street		Madison	WI	53706-1482	608.264.6507	<a href="mailto:sherman.banker@wisconsinhistory.org">sherman.banker@wisconsinhistory.org</a>	
Local	Andrew	Vickers	Village of Hobart	Village Administrator	2990 S. Pine Tree Road		Oneida	WI	54155	920.869.3804	<a href="mailto:andrew@hobart-wi.org">andrew@hobart-wi.org</a>	website
	Robert	Bartelt	Village of Howard	Village Administrator	2456 Glendale Avenue		Green Bay	WI	54313	920.434.4640	<a href="mailto:rbartelt@villageofhoward.com">rbartelt@villageofhoward.com</a>	website
	Brian	Lamers	Brown County Highway Department		2198 Glendale Avenue		Green Bay	WI	54303			
	Richard	Heath	Bay-Lake Regional Planning Commission	Interim Executive Director	441 South Jackson Street		Green Bay	WI	54301	920.448.2820	<a href="mailto:rheath@baylakerpc.org">rheath@baylakerpc.org</a>	
	Chuck	Lamine	Brown County Planning Commission	Planning Director	305 E. Walnut Street, Room 320	P.O. Box 23600	Green Bay	WI	54305-3600	920.448.6480	<a href="mailto:lamine_cf@co.brown.wi.us">lamine_cf@co.brown.wi.us</a>	EA

Note: formal tribal coordination including Oneida undertaken separately



January 4, 2011

Addressee

Re: 9200-04-00  
WIS 29-County FF Interchange Design  
Brown County, WI

Dear XXXX,

The Wisconsin Department of Transportation (WisDOT) is working with local stakeholders and URS Corporation to design an interchange for the intersection of WIS 29 and County FF in the Villages of Hobart and Howard, Brown County. This letter is being sent to advise your agency of the project and to solicit your input in project development.

The WIS 29-County FF interchange is one component in a WIS 29 corridor improvement plan that also includes the construction of an interchange at County VV, and overpasses at County U and Pinetree Road, along with access management and local roadway improvements. A corridor environmental assessment was completed in 2007 with the issue of a Finding of No Significant Impact by the Federal Highway Administration. That planning process included extensive agency coordination and public involvement, and produced preliminary design parameters for the interchanges and overpasses. WisDOT is advancing the design for each of these improvements as standalone projects. The County FF interchange is the only project that has had funding allocated for construction, which is scheduled to commence in 2013.

The limits for this project are approximately 400 feet south of the intersection of County FF and Navajo Trail on the south; Shawano Avenue on the north; approximately 800 feet east of the intersection of WIS 29 with Fredrick Court (extended) on the east; and approximately 700 feet west of the intersection of WIS 29 and Sunlite Drive on the west. A project location map is enclosed. This proposed layout was developed during the corridor planning process in 2006 and 2007.

The WIS 29-County FF interchange project will provide for safer travel for both regional and local trips, while preserving access to the state highway system. The project involves the closure of at-grade access to WIS 29 from County FF, and the construction of a diamond interchange at this location. County FF/Sherwood Street will be reconstructed as a four-lane, divided roadway for approximately 0.4 miles to the south of WIS 29, and 0.3 miles to the north of WIS 29. In addition, the project includes several changes to the local roadway system:

- The access point for Golden Pond Park Court to County FF will be relocated approximately 1,000 feet south to align with the existing intersection of Navajo Trail. This will preserve a desirable distance from the interchange ramps to the nearest intersection.
- Access to Sherwood Street from Catherine Drive will be eliminated, with a cul-de-sac constructed on Catherine Drive. This will preserve a desirable distance from the interchange ramps to the nearest intersection.
- Access to WIS 29 from Sunlite Drive and Woodland Road will be eliminated. This at-grade intersection is located approximately 0.6 miles west of the interchange.
- Approximately 22 private driveways will be relocated.



Please provide us with a response letter describing concerns your agency may have or issues of which you may be aware related to the design of the WIS 29-County FF interchange. Identifying these issues at the beginning of the design process will enable the timely completion of this important safety project and will help produce a design that meets stakeholder needs.

Thank you for your interest in the WIS 29-County FF interchange design project. We look forward to working with you. If you have any questions, please contact me at 414-831-4176.

Cordially,

A handwritten signature in blue ink, appearing to read "Bill Schilling", is positioned above the typed name.

Bill Schilling, P.E.  
URS Project Manager

Tel: 414-831-4176  
Bill\_Schilling@urscorp.com

Enclosure



REPLY TO  
ATTENTION

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

**JAN 14 2011**

Operations  
Regulatory (2011-00073-LMK)

Mr. Bill Schilling  
URS Corporation  
6737 W. Washington Street  
Milwaukee, Wisconsin 53214

Dear Mr. Schilling:

We have received the letter entitled "WisDOT 9200-04-00 WIS 29-County FF Interchange Design" dated January 4, 2011. Due to limited staff and resources, it is unlikely that U.S. Army Corps of Engineers Regulatory staff will review or comment on this letter until we receive a permit application. 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 activity in navigable waters of the United States, it may be subject to the Corps of Engineers' jurisdiction under Section 10 of the Rivers and Harbors Act of 1899 (Section 10). Section 10 prohibits the construction, excavation, or deposition of materials in, over, or under navigable waters of the United States, or any work that would affect the course, location, condition, or capacity of those waters, unless the work has been authorized by a Department of the Army permit.

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. Information about the Corps permitting process can be obtained online at <http://www.mvp.usace.army.mil/regulatory>.

The Corps' evaluation of a Section 10 and/or 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).

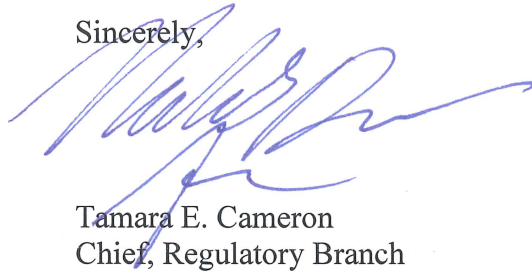
If the proposal requires a Section 404 permit application, the Guidelines specifically require that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic



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 you have any questions regarding the application process please contact Nick Domer in our Green Bay office at 920-448-2824, the Corps' contact for the County in which this proposal is located.

Sincerely,



Tamara E. Cameron  
Chief, Regulatory Branch



January 6, 2011

Mr. Bill Schilling  
URS Corporation  
6737 W. Washington St., Ste. 2265  
Milwaukee, WI 53214

RE: STH 29/CTH FF Interchange Design  
ID: 9200-04-00/Brown County

Dear Mr. Schilling:

Thank you for informing us of the above referenced project. We no longer conduct initial reviews for these types of WisDOT projects. Mr. Robert Newbery, WisDOT Staff Historian, conducts all initial WisDOT project reviews. If Mr. Newbery determines that any project that he reviews may affect historic properties, the project is forwarded to us for further review, pursuant to the applicable state or federal laws.

I have sent your submittal to Mr. Newbery, pursuant to the above. With further questions about the nature of his review or the timing of same, you may contact Mr. Newbery directly at (608) 266-0369. Additionally, please send all future project proposals of this nature to Mr. Newbery, Wisconsin Dept. of Transportation, Bureau of Equity and Environmental Services, 4802 Sheboygan Ave., Madison, WI 53707, for his review.

Thank you very much for your attention to, and concern for historic preservation and its relevance in your project design.

Sincerely,

Dan Duchrow  
Division of Historic Preservation  
and Public History

Cc: (w/Enclosure)  
Robert Newbery, WisDOT

Collecting, Preserving and Sharing Stories Since 1846

816 State Street Madison, Wisconsin 53706

[wisconsinhistory.org](http://wisconsinhistory.org)

PLANNING COMMISSION

Brown County



305 E. WALNUT STREET, ROOM 320  
P.O. BOX 23600  
GREEN BAY, WISCONSIN 54305-3600

CHUCK LAMINE, AICP

PHONE (920) 448-6480 FAX (920) 448-4487  
WEB SITE [www.co.brown.wi.us/planning](http://www.co.brown.wi.us/planning)

PLANNING DIRECTOR

January 13, 2011

Bill Schilling, P.E.  
URS Corporation  
6737 West Washington Street, Suite 2265  
Milwaukee, WI 53214

Dear Mr. Schilling:

Brown County Planning Commission (BCPC) staff supports the STH 29/CTH FF interchange project that is identified in your January 4, 2011 letter. This project is consistent with the recommendations in the 2002 *STH 29 Corridor Study* that was completed by the BCPC in cooperation with WisDOT, two counties, three communities, and the Oneida Nation of Wisconsin.

Please contact me at (920) 448-6480 or at [lamine\\_cf@co.brown.wi.us](mailto:lamine_cf@co.brown.wi.us) if you have questions.

Sincerely,

A handwritten signature in dark ink, appearing to read "Chuck Lamine".

Chuck Lamine, AICP  
Planning Director

CL:sh





February 1<sup>st</sup>, 2011

Bill Schilling, P.E.  
URS Corporation  
6737 W. Washington Street, Suite 2265  
Milwaukee WI 53214

Subject: DOT/DNR Initial Project Review/Preliminary Concerns  
DOT Project I.D.#: 9200-04-00  
Project Title: WIS 29-County FF Interchange  
Location: Villages of Hobart and Howard  
County: Brown

Dear Mr. Schilling:

Preliminary information on the above referenced project has been reviewed by DNR Northeast Region staff under the DOT/DNR Cooperative Agreement. This project involves the closure of at-grade access to WIS 29 from County FF, and the construction of a diamond interchange at this location. County FF/Sherwood Street will be reconstructed as a four-lane, divided roadway for approximately 0.4 miles to the south of WIS 29, and 0.3 miles to the north of WIS 29. Pertinent **preliminary** environmental considerations are presented below:

#### WETLANDS

- According to the DNR Surface Water Data Viewer, wetlands are present at numerous locations within or adjacent to the proposed project limits. The majority of the wetlands would be classified as T3K (forested broad leaved deciduous, wet soil, palustrine), with one area classified as T3/5K (forested, broad leaved deciduous and needle leaved evergreen, wet soil, palustrine). An onsite visit confirmed the presence of these wetlands. Efforts should be made to avoid or minimize wetland impacts.
- 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 any unavoidable wetland impacts. A wetland delineation will be needed to define any wetland limits within the project boundary.
- As this watershed area contains sensitive recovering stream systems, as well as wooded wetlands utilized by a variety of wildlife, we would like to explore the potential for compensatory wetland mitigation within the impacted systems. On-site or near-site mitigation would be ideal, focusing on staying within this watershed area for wetland mitigation purposes.

## WATERWAYS/FISHERIES

- An unnamed tributary to Duck Creek is transected by CTH FF, approximately 0.2 miles north of STH 29, and again transected by STH 29 approximately 0.2 miles northwest of CTH FF. Both areas are likely to be impacted by this project. Construction should be scheduled to avoid any in-stream disturbance from March 1<sup>st</sup> through June 15<sup>th</sup> of any year, to minimize any adverse impacts to migrating or spawning northern pike.
- Lancaster Brook and Thornberry Creek are designated trout streams and constitute an especially sensitive area. Thornberry Creek is transected by CTH FF, approximately 0.45 miles south of WIS 29, and is designated as a Class I Trout stream. Lancaster Brook is approximately 0.3 miles southeast of the current CTH FF/WIS 29 intersection, and is designated as a Class II Trout stream. Construction should be scheduled to avoid any in-stream disturbance from October 15<sup>th</sup> through March 1<sup>st</sup> of any year, to minimize any adverse impacts to migrating or spawning trout, or sediment deposition on eggs in redds.
- The Department would like to see the use of bottomless structures in the case of Class I Trout Stream crossings. The existing CMP in place at the CTH FF-Thornberry Creek crossing will likely need to be replaced as part of this project, and the Department would like to see it replaced with a bottomless structure. Also the proposed new access drive from Golden Pond Park Court to CTH FF/Navajo Trail will result in another crossing of Thornberry Creek. Again, the use of a bottomless structure at this new crossing of Thornberry Creek would be ideal. A stream profile survey may need to be conducted to ensure the appropriate sized structure is selected.
- This area is known to have numerous freshwater springs. It is important that construction does not disrupt the springs that feed the wetlands and waterways in the area.

## WILDLIFE

- The project is located in an area classified as a *Migratory Bird Concentration Site*, and these sites are of *Special Concern* in the state of Wisconsin. Migratory bird concentration sites are important resting and feeding areas for birds as they fly between their breeding and wintering grounds. This site designation is primarily based on a large wooded area that migrating birds use for resting and perching. This designation does not restrict construction activities, however it is strongly recommended that impacts to the wooded areas be avoided if possible, or kept to an absolute minimum.
- Small mammals, common furbearers, songbirds, wild turkey, and deer are known to use this area. The presence of such a variety of wildlife further emphasizes the necessity to retain as large wooded tracts as possible.

## ENDANGERED RESOURCES

- There are several rare species found in the project vicinity. Most likely to be affected by the project is the State Threatened Wood turtle (*Glyptemys insculpta*). It will be necessary to install turtle fencing in areas of suitable habitat for wood turtles. Enclosing the work area with tight fitting silt fence or turbidity barrier should exclude the turtles from the site and prevent them from nesting in exposed soils. Wood turtles are known to inhabit the waterways and their riparian corridors, and the associated wetlands.

- If the project construction will start in spring, the perimeter of the areas to be disturbed that are along the riparian corridors should be protected with properly trenched-in silt fence prior to March 15 to discourage turtles from entering the work area. If the construction area cannot be silt-fenced by March 15, the silt fence must be installed prior to construction activities and the area behind the silt fence must be surveyed and any turtles confined within the project area removed prior to any site disturbance, and throughout the construction period.

#### OTHER COMMENTS

- Proper erosion control measures and storm water management measures must be used and maintained both prior to and throughout construction. **Erosion control measures must be properly installed and maintained.** 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.
- All demolition material generated as a result of this project must be disposed of according to state law. **Disposal in wetlands or waterways is not permitted.**
- All equipment must be disinfected prior to arriving, and upon completion of the project, in order to prevent the spread of invasive/exotic species and viruses. The Departments most recent decontamination protocols can be found at:  
[http://dnr.wi.gov/fish/documents/disinfection\\_protocols.pdf](http://dnr.wi.gov/fish/documents/disinfection_protocols.pdf) .
- If any changes relating to the environmental features of this project are altered, or modified, this office will need to be notified.
- Wetlands are present in the project vicinity, which will likely require a permit from the U.S. Army Corps of Engineers. For further information on their permit requirement you should contact Linda Kurtz at the Corps office in Green Bay 920-448-2824.

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) 662-5472, or email at [matthew.schaeve@wisconsin.gov](mailto:matthew.schaeve@wisconsin.gov) .

Sincerely,



Matt Schaeve  
Environmental Analysis and Review Specialist

Cc. Mike Helmrick WDOT NER, Green Bay  
Linda Kurtz USACOE, Green Bay  
Jim Doperalski WDNR NER, Green Bay  
Jon Brand WDNR NER, Green Bay  
Steve Hogler WDNR NER, Green Bay  
Lisie Kitchel WDNR NER, Madison  
Andy Lundin WDNR NER, Green Bay  
File # 12049

Date: 1 March 2011

To: File

From: Nathan Guequierre

Subject: **WIS 29 – County FF Meeting with Department of Natural Resources Officials  
February 23, 2011  
Project ID 9200-04-00**

Participants: Matthew Schaeve, DNR  
James Doperalski, DNR  
Bill Schilling, URS  
Nathan Guequierre, URS

This meeting was held at the Green Bay regional office of the Wisconsin Department of Natural Resources to discuss environmental impacts to be considered in the design of an interchange at WIS 29 and County FF in Brown County. The meeting was scheduled to follow up on issues pertaining to the interchange raised in DNR scoping correspondence for the project dated 1 February 2011 (attached). Items discussed are detailed below.

- URS to check on overall length of culvert underneath WIS 29 immediately east of County FF. The existing culvert is a twin cell configuration with Lancaster Creek running through the west cell, and the easterly cell used for passage of terrestrial fauna. DNR would like to know if culvert is to be extended for interchange ramps, and for designer to consider measures such as daylighting portion of the culvert and adding baffles to improve aquatic habitat through the culvert. Jim Doperalski mentioned a project on Beaver Dam Creek which uses similar techniques, although it is a warm-water stream and Lancaster Creek is a cold water trout stream.

*Action item:* URS determine length of additional culvert necessary and inform Matt Schaeve as design progresses.

- DNR asked if width of County FF median could be reduced to minimize fill in wetlands. Bill Schilling replied that the 24-foot median is desirable, but URS can investigate potential to use narrower median and other design techniques to reduce overall roadway width.
- DNR noted that to build an extension of Golden Pond Park Road to the west as a WIS 29 frontage road would require a study to show the need for the extension, as well as showing that other alternatives for local circulation have been considered and that no better alternative exists. Because of wetland fill in this area, the Army Corps of Engineers would control permitting. Any structures could not create backwater or restrict hydrologic connections between wetland and Thornberry Creek. Pike spawn in wetlands, traveling up ditches. It is important to design project to prevent them from getting trapped if water levels drop.

*Action item:* URS to add to issues map: Order 1 headwater stream.

- The woodlands in the project area are migrating bird habitat. The design should avoid fragmenting woodlands.
- On-site mitigation of wetland impacts is strongly preferred by the DNR. Reestablish wetlands in the same watershed.

*Action items:* URS to verify acreage of wetlands impacts and discuss with DNR; URS to check on watershed -- Duck Creek sub watershed or Green Bay watershed?

- Regarding storm water impacts, design should avoid letting storm water flow directly into waterways. Local projects will require a WS-4 permit.

*Action item:* URS to schedule meeting with storm water management sub consultant and DNR in spring, after design parameters are established.

- DNR requested that URS survey for freshwater springs in the project area. These coldwater springs are essential to the health of area trout streams. Maintain hydrologic connections. French drains may work in some circumstances.
- These waterways are considered navigable, but are not priority navigable streams.
- For impacts to Lancaster Creek, be very careful with spawning habitat. The trout require water depths of six inches or less, pebbly bottom, deeper holes for overwintering. Check for specific quality of habitat to be impacted.

*Action item:* URS to determine quality and type of habitat to be impacted as preliminary design progresses and discuss with DNR.

*These minutes represent the writers' interpretation of key topics discussed and resolution of issues. Please contact Nathan Guequierre, of URS Corporation at 414-831-4100 to discuss modification or additions to the minutes*



Received from Matt Schaeve, WDNR.

Project Notes: STH 29 / CTH FF Design-Construction Concerns & Ideas

- With regards to the long culvert under STH 29 and on-off ramps, Lancaster Brook, DNR doesn't like them because fish don't like them. Trout don't like the dark, and long dark culvert could make it impassible to fish. It is disorienting to them. In order to maintain fish passage, would need to install light-vents along the culvert. The light-vents would be grates, and would allow stormwater and light through, but a couple techniques should be integrated to treat stormwater prior to entering Lancaster, and some ideas are...
  - Install grassy swales prior to water entering the light-vents. Stepped-grassy swales (like rice paddy steps) would be better than a straight run swale.
  - Install/construct a curb (like a street curb) around the light-vent, with a pooling area. This will allow the water a chance to pool prior to entering the vent/grate, and allowing sediment drop out. Install appropriate inlet protection until area around vent/grate is stabilized. Ideally HWY crews would monitor the curb and shovel away any built up sediment.
  - Within the culvert install rock piles or lunker structures periodically, alternating from side to side, but placed against the walls. If high flows are an issue, can install rebar cribs to hold rocks/lunkers in place so they don't wash out.
- Ideally, DNR does not want to see another crossing of Thornberry Creek, but we understand this may be unavoidable. Exploring other options would be preferred. This is a very sensitive, and recovering area. DNR would like to see bottomless structures used on Class I Trout streams (i.e. Thornberry Creek).
- With regards to wetland impacts, our mantra is AVOID, MINIMIZE, MITIGATE. Clearly explain techniques to be implemented to avoid or minimize wetland impacts. What alternatives were considered. Why is that boulevard necessary N and S of STH 29 (24feet wide seems excessive)? On-Site mitigation is strongly recommended, and there appears to be room to do this.

Date: 30 Sep 2011

To: File

From: Nathan Guequierre

Subject: **WIS 29 – County FF Meeting with Department of Natural Resources Officials  
September 28, 2011  
Project ID 9200-04-00**

Participants: Matthew Schaeve, DNR  
Jill Hilbert, WisDOT  
Roxanne Johnson, Professional Engineering, Inc.  
Bill Schilling, URS  
Nathan Guequierre, URS

This meeting was held at the Green Bay regional office of the Wisconsin Department of Natural Resources to discuss water resource impacts related to the design of the WIS 29 and County FF in Brown County. Items discussed are detailed below.

1. Restore wetlands on-site. Mitigation banking will not be allowed for this project as it is a sensitive area. The following areas for potential mitigation were discussed.
  - Area north and south of Thornberry Creek east of Golden Pond Park Court
  - Area east of FF, south of 29 and west of Thornberry Creek
  - Area north of the southwest ramp and south of 29
  - Area south of the northeast ramp and north of 29
  - Area west of cul-de-sac off of Catherine Drive. Although there needs to be room for a sidewalk connection to FF in this area.
  - If those areas do not provide enough space consider agricultural land east of FF, north of Woodland, and south of Shawano Ave.
2. The following stormwater management plan ideas were discussed.
  - Pond in NW corner of Navajo and Golden Pond Park Court. Pond would discharge into recreated wetlands south of Thornberry Creek. Majority of road would drain into upper pond. Low point of road would discharge into recreated wetlands.
  - Potential Pond north of creek as well if needed.
  - Pond north of SW ramp. Slope ramp to drain to pond
  - Pond south of NE ramp. Slope ramp to drain to pond
  - Look into filter strips between 29 and SE and NW ramps. Area is tight – Bill will check into this further to see if it is possible with the grading.
  - Pond North of creek off of Catherine Drive
  - Drainage swale east of FF along Woodland Road
  - Potential swale in Shawano Ave west of roundabout
  - Need scour protection on all outfalls
  - Minimum TSS removal is 40%. Since this is a highly sensitive area, they would

like more where possible. Not sure about peak flow reduction. Check with Tom Kobus at the DOT (920-492-0143) on both the removal rates and the peak flow reduction.

3. The box culvert extension east of 29 is in the flood plain. There will be some filling of the floodplain due to the ramp construction. However, a flood plain study will not be required.
4. There are some restriction on construction during the following periods
  - Pike restriction 3/ 1-6/ 1 for culvert north of Catherine Drive
  - Trout restriction 10/ 15-5/ 1 on Lancaster and Thornberry creeks
5. Be sensitive to the springs along Thornberry Creek during construction. Extend pipes discharging spring water where needed.

***These minutes represent the writers' interpretation of key topics discussed and resolution of issues. Please contact Nathan Guequierre, of URS Corporation at 414-831-4100 to discuss modification or additions to the minutes***



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

FEB 08 2011

REPLY TO THE ATTENTION OF:

E-19J

Dan Segerstrom  
Wisconsin Department of Transportation  
Northeast Region  
944 Vanderperren Way  
Green Bay, WI 54304-0080

Re: Scoping Request for WIS 29-County FF Interchange Design, Brown County, Wisconsin

Dear Mr. Segerstrom:

The U.S. Environmental Protection Agency has reviewed the scoping request received by our office on January 7, 2011 for the proposed interchange design at WIS 29 and County Road FF in Brown County, Wisconsin. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508) and Section 309 of the Clean Air Act.

The proposed project is one component of the larger WIS 29 corridor improvement plan that also includes general roadway upgrades as well as overpass and interchange construction. The WIS 29-County FF interchange includes the closure of at-grade access to WIS 29 from County FF, and the construction of a diamond interchange at this location. County FF/Sherwood Street will be reconstructed as a four-lane, divided roadway from 0.4 miles south to 0.3 miles north of WIS 29 interchange. The proposed project will also relocate or eliminate several local road access points on WIS 29 and County FF.

At this time, we recommend the following items be included in the forthcoming NEPA document.

- Our analysis indicates that there are wetlands in the project area. Any direct impacts to wetlands should be avoided. Should the project footprint include impacts to wetlands, the alternatives analysis should include how wetland impacts were avoided and then minimized. Finally, any unavoidable wetland impacts should be mitigated following the Section 404(b)(1) guidelines of the Clean Water Act. This analysis should also include any indirect impacts to the wetlands, including, but not limited to, construction impacts and runoff.
- The proposed project area is partially within and adjacent to Oneida Indian Reservation boundaries. We recommend early coordination with the Oneida Tribe regarding environmental and cultural impacts, including impacts to uniquely used resources.
- During design consideration, U.S.EPA recommends the beneficial re-use of construction materials and the use of alternative construction materials that are either made of recycled goods, such as reclaimed aggregate or glass-phalt, or

provide an environmental benefit, such as permeable pavement. Highway lighting should be energy efficient.

We appreciate the opportunity to provide comments related to the proposed project throughout the entire process. We look forward to receiving future NEPA documents. Should you have any questions, please do not hesitate to contact me or Elizabeth Poole of my staff at (312) 353-2087 or poole.elizabeth@epa.gov.

Sincerely,



Kenneth A. Westlake  
Chief, NEPA Implementation Section  
Office of Enforcement and Compliance Assurance

cc: Bill Schilling, URS Corporation





## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Green Bay ES Field Office  
2661 Scott Tower Drive  
New Franken, Wisconsin 54229-9565  
Telephone 920/866-1717  
FAX 920/866-1710

January 31, 2011

Mr. Bill Schilling  
URS Corporation  
6737 W. Washington Street, Suite 2265  
Milwaukee, Wisconsin 53214

re: ID 9200-04-00  
WIS 29-County FF Interchange Design  
Villages of Hobart and Howard  
Brown County, Wisconsin

Dear Mr. Schilling:

The U.S. Fish and Wildlife Service (Service) has received your letter dated January 4, 2011, requesting comments on the subject project. The project involves the construction of an interchange for the intersection of WIS 29 and County FF in the Villages of Hobart and Howard, Brown County, Wisconsin. We have reviewed the information provided in your letter and our comments follow.

#### **Federally-Listed Species, Candidate Species, and Critical Habitat**

Due to the project location, no federally-listed species would be expected within the project area. This precludes the need for further action on this project as required by the 1973 Endangered Species Act, as amended. Should additional information on listed or proposed species or their critical habitat become available or if project plans change or if portions of the proposed project were not evaluated, it is recommended that you contact our office for further review.

#### **Wetlands and Streams**

We note that the project area includes wetlands. In refining and selecting project alternatives, efforts should be made to select an alternative that does not adversely impact wetlands. If no other alternative is feasible and it is clearly demonstrated that project construction resulting in wetland disturbance or loss cannot be avoided, a wetland mitigation plan should be developed that identifies measures proposed to minimize adverse impacts and replace lost wetland habitat values and other wetland functions and values. Any project that impacts wetlands or waterways, including seasonally ephemeral and intermittent streams, should include design features such as culverts to retain hydrological connection between areas fragmented by the project.

We appreciate the opportunity to respond. Questions pertaining to these comments can be directed to Ms. Jill Utrup 920-866-1734.

Sincerely,

A handwritten signature in black ink that reads "Louise Clemency". The signature is fluid and cursive, with the first name "Louise" and last name "Clemency" clearly legible.

Louise Clemency  
Field Supervisor

## APPENDIX C - Tribal Correspondence



Appendix C: Tribal Correspondence

<u>First Name</u>	<u>Last Name</u>	<u>Agency</u>	<u>Department</u>	<u>Address1</u>	<u>Address2</u>	<u>City</u>	<u>State</u>	<u>Zip</u>	<u>Phone</u>	<u>Email</u>
Michael	Allen	Great Lakes Inter-Tribal Council, Inc.		P.O. Box 9		Lac du Flambeau	WI	54538		
Edith	Leoso	Bad River Band of Lake Superior Chippewa Indians of Wisconsin	THPO	P.O. Box 39		Odanah	WI	54861		
Mike	Alloway	Forest County Potawatomi Community of Wisconsin	Tribal Office	P.O. Box 340		Crandon	WI	54520		
William	Quackenbush	Ho-Chunk Nation	THPO, Executive Offices	P.O. Box 667	405 Airport Road	Black River Falls	WI	54615		
Joyce	Miller	Iowa Tribe of Oklahoma	Cultural Preservation Office	RR 1, Box 721		Perkins	OK	74059		
Jerry	Smith	Lac Courte Oreilles Band of Lake Superior Chippewa Indians of Wisconsin	THPO, Tribal Office	13394 W. Trepania Road		Hayward	WI	54843		
Kelly	Jackson	Lac du Flambeau Band of Superior Chippewa Indians of Wisconsin	Tribal Historic Preservation Office	P.O. Box 67		La du Flambeau	WI	54538		
David	Grignon	Menominee Indian Tribe of Wisconsin	THPO	P.O. Box 910		Keshena	WI	54135		
Corina	Burke	Oneida Nation of Wisconsin	THPO, Tribal Office	P.O. Box 365		Oneida	WI	54155-0365		
Larry	Balber	Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin	THPO	88385 Pike Road, Highway 13		Bayfield	WI	54814		
Wanda	McFaggen	St. Croix Band Chippewa Indians of Wisconsin	Tribal Historic Preservation Office	24663 Angeline Avenue		Webster	WI	54893-9246		
Cultural Preservation		Sokaogon Chippewa Community Mole Lake Band	Attn: Cultural Preservation Director	3051 Sand Lake Road		Crandon	WI	54520		
Sandra	Massey	Sac and Fox Nation of Oklahoma	NAGPRA Representative	RR 2, Box 246		Stroud	OK	74079		
Jane	Nioce	Sac and Fox Nation of Missouri in Kansas and Nebraska		305 N. Main		Reserve	KS	66434		
Jonathan	Buffalo	Sac and Fox of the Mississippi in Iowa	NAGPRA Representative	349 Meskwaki Road		Tama	IA	52339-9629		
Linda	Yazzie	Prairie Band Potawatomi Nation	NAGPRA Representative	16281 Q Road		Mayetta	KS	66509		
giiwegiizhigoo kway	Martin	Lac Vieux Desert Band of Lake Superior Chippewa Indians	Ketegitigaaning Ojibwe Nation	THPO	P.O. Box 249	Watersmeet	MI	49969		
Eugene S.	Johnson	Wisconsin Department of Transportation	Bureau of Equity and Environmental Services	4802 Sheboygan Avenue	Room 451	Madison	WI	53707	608-261-0137	
James	Becker	Wisconsin Department of Transportation	Bureau of Equity and Environmental Services		Room 451	Madison	WI	53707		
Troy D.	Parr, AIA	Oneida Nation	Project Manager	Little Bear Development Center	N7332 Water Circle Place, PO Box 365	Oneida	WI	54155	920.869.4529	tparr@oneidanation.org



**Division of Transportation  
System Development**  
Northeast Regional Office  
944 Vanderperren Way  
Green Bay, WI 54304

**Scott Walker, Governor  
Mark Gottlieb, Secretary**  
Internet web site: [www.dot.wisconsin.gov](http://www.dot.wisconsin.gov)

Telephone: (920)492-5643  
Facsimile (FAX): (920)492-5640  
E-mail: [greenbay.dtd@dot.wi.gov](mailto:greenbay.dtd@dot.wi.gov)

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January 3, 2011

Addressee  
Oneida Nation  
Project Manager  
Little Bear Development Center  
N7332 Water Circle Place, PO Box 365  
Oneida, WI 54155

Re: Project 9200-04-00  
WIS 29-County FF Interchange Design, Brown County

The Wisconsin Department of Transportation (WisDOT) is in the process of developing plans for a proposed project located at the intersection of WIS 29 and County FF in Brown County. The project will consist of constructing a diamond interchange at this location, with related improvements to the local roadway system. As part of this project, access to WIS 29 at Sunlite Drive/Woodland Road will be removed, and 22 private driveways will be relocated. Construction on this project is scheduled to commence in 2013.

The limits for this project are approximately 400 feet south of the intersection of County FF and Navajo Trail on the south; Shawano Avenue on the north; approximately 800 feet east of the intersection of WIS 29 with Fredrick Court (extended) on the east; and approximately 700 feet west of the intersection of WIS 29 and Sunlite Drive on the west. A project location map is enclosed. This proposed layout was developed during the corridor planning process in 2006 and 2007.

The WIS 29-County FF interchange project will provide for safer travel for both regional and local trips, while preserving access to the state highway system. The project involves the closure of at-grade access to WIS 29 from County FF, and the construction of a diamond interchange at this location. County FF/Sherwood Street will be reconstructed as a four-lane, divided roadway for approximately 0.4 miles to the south of WIS 29, and 0.3 miles to the north of WIS 29. In addition, the project includes several changes to the local roadway system:

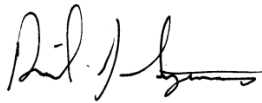
- The access point for Golden Pond Park Court to County FF will be relocated approximately 1,000 feet south to align with the existing intersection of Navajo Trail. This will preserve a desirable distance from the interchange ramps to the nearest intersection.
- Access to Sherwood Street from Catherine Drive will be eliminated, with a cul-de-sac constructed on Catherine Drive. This will preserve a desirable distance from the interchange ramps to the nearest intersection.
- Access to WIS 29 from Sunlite Drive and Woodland Road will be eliminated. This at-grade intersection is located approximately 0.6 miles west of the interchange.
- Approximately 22 private driveways will be relocated.

On April 14, 2011, a public information meeting is tentatively scheduled to familiarize interested parties with the project. The location for this meeting will be determined shortly. In the near future, cultural

resource investigation studies will be conducted for the 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, including endangered species survey, contaminated material investigations, soil testing and right-of-way surveys. Information obtained from these studies will assist the designers to avoid, minimize or mitigate the proposed project's effect upon cultural and natural resources.

WisDOT would be pleased to receive any comments regarding this project or any information you wish to share pertaining to cultural resources located in the area. If your tribe wishes to become a consulting party under Section 106 of the National Historic Preservation Act or would like to receive additional information regarding this proposed project, please contact me at 920-492-7718 or at the address above.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel J. Segerstrom", with a stylized flourish at the end.

Daniel Segerstrom, P.E.

cc: Eugene S. Johnson, Bureau of Equity and Environmental Services, WisDOT  
James Becker, Bureau of Equity and Environmental Services, WisDOT  
Troy D. Parr, AIA, Project Manager, Oneida Nation of Wisconsin

enclosure

# Stockbridge-Munsee Tribal Historic Preservation Office

Sherry White - Tribal Historic Preservation Officer

W13447 Camp 14 Road

P.O. Box 70

Bowler, WI 54416

Date 5-24-11  
 Project Number ID 9200-06-00 Freeway Conversion  
 TCNS Number \_\_\_\_\_  
 Company Name Wis DOT

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
- ☐ Literature/record search including colored maps
- ☐ Pictures of the site
- ☐ Any reports the State Historic Preservation Office may have
- ☐ Has the site been previously disturbed
- ☐ Review fee must be included with letter

If site has been previously disturbed please explain what the use was and when it was disturbed.

Other comments or information needed \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## After reviewing your letter we find that:

\_\_\_\_\_ "No Properties" the Tribe concurs with a Federal agency's finding that there are no National Register eligible or listed properties within the Federal undertaking's area of potential effect or APE 36CFR 800.4 (d) (1)

\_\_\_\_\_ "No Effect" historic or prehistoric properties are present but the Federal undertaking will have no effect on the National Register eligible or listed properties as defined in Sec. 800.16(i)

\_\_\_\_\_ "No Adverse Effect" refers to written opinions provided to a Federal agency as to whether or not the Tribe agrees with (or believes that there should be) a Federal agency finding that its Federal undertaking would have "No Adverse Effect" 36 CFR 800.5(b)

\_\_\_\_\_ "Adverse Effect" refers to written opinions provided to a Federal Agency that undertaking would cause Adverse Effects to the area of potential effect on National Register or eligible properties according to the criteria set forth in 36 CFR 800. 5(a) (1), (2) (i)- (vii)

☒ Project not within a county the Mohican Tribe has interest in

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

**Please do not resubmit project for changes that are not ground disturbance.**

Sincerely,



Sherry White  
Tribal Historic Preservation Officer

# **APPENDIX D - Golden Pond Park Court Extension Alternatives Analysis**





# Technical Memorandum

Date: August 3, 2011

To: Dan Segerstrom, Wisconsin Department of Transportation Northeast Region  
Jill Hilbert, Wisconsin Department of Transportation Northeast Region

From: William R. Schilling, PE, URS Project Manager  
Nicholas J. Becker, PE, URS Transportation Engineer

Project ID: **9200-04-00**

Project: WIS 29 & County FF Interchange  
Brown County

Subject: **Analysis of alternative locations for Golden Pond Park Ct realignment**

In 2007, The WIS 29 Corridor Preservation Plan recommended construction of a service interchange at the existing intersection of WIS 29 and Brown County FF. County FF's vertical profile will be raised to overpass the existing elevation of WIS 29/32. Interchange construction would require relocating the existing "T" intersection of Golden Pond Park Ct with County FF to the south to create a four way intersection with Navajo Trail and County FF to preserve desirable spacing between the interchange ramps and the nearest access points. This would require extending Golden Pond Park Ct southward approximately 1,000 feet. The proposed extension would bisect two residential parcels and require the full acquisition of a third parcel and residential structure.

In 2010, as interchange design was begun, property owners requested an analysis of alternative locations for the extension of Golden Pond Park Ct and its intersection with County FF. This memorandum outlines the impacts of five alternatives for the location of the roadway.

## Alternative Development

Six alternatives were developed. Alternatives 1, 2, 3 and 6 adjust the horizontal alignment of Golden Pond Park Ct to the east or west to run nearer the parcel boundaries, thus leaving larger or smaller remnant parcels, but still creates a four leg intersection with County FF and Navajo Trail. Alternatives 4 and 5 maintains Golden Pond Park Ct on its existing alignment, and the vertical alignment of County FF is adjusted to meet design standards. The alternatives are described in detail below, and illustrated attachments 1 through 6.

- **Alternative 1 – 2007 WIS 29 Corridor Preservation Plan recommendation:** Alternative 1 retains the 2007 corridor study horizontal alignment and includes an updated vertical profile to meet current FDM design standards.
- **Alternatives 2A and 2B – Centerline located 40 feet from western property line:** Alternatives 2A and 2B aligns Golden Pond Park Ct further to the west in an effort to reduce the impacts to two of the impacted parcels. The alternatives treat the intersection of Golden Pond Park Ct and Thayer Tr differently, but are identical otherwise.
- **Alternative 3 – Centerline located as close to County FF as possible:** Alternative 3 aligns Golden Pond Park Ct further to the east, locating the roadway as close to County FF as acceptable given roadway design standards and the elevation of the county road.
- **Alternative 4 – Existing roadway alignment with 29 foot elevated intersection:** Golden Pond Park Ct profile intersects a County FF profile that meets current FDM design standards for a 45 MPH roadway and provides acceptable driveway grades between 2% and 8%.
- **Alternative 5 – Existing roadway alignment with 23 foot elevated intersection:** Golden Pond Park Ct profile intersects a County FF profile that meets FDM current design standards for a 45 MPH

roadway and meets the design standards if the WIS 29/32 ramp termini are configured as roundabouts; This vertical profile provides acceptable driveway grades between 2% and 8%.

- **Alternative 6 – Centerline located as close to County FF while minimizing creek crossing:** Alternative 6 aligns a section of Golden Pond Park Ct further to the east, locating the roadway as close to County FF as acceptable given roadway design standards and the elevation of the county road. This will minimize the impact to the creek and associated wetlands. The vertical profile is lower to accommodate the culvert at this location. This alternative will require 300-foot long retaining walls on both side of the roadway to achieve the minimum impact.

All slopes are designed 4:1 or flatter to clearzone and 3:1 beyond clearzone to avoid the need for barrier protection and retaining walls. Slopes of 4:1 or flatter are desirable because slopes between 3:1 and 4:1 are non-recoverable. Proposed right of way and slope limits shown on the attached are approximate and for information purposes only. All horizontal curves on Golden Pond Park Ct are designed for 30 MPH using AASHTO method 2 superelevation which allows for a minimum curve radius of 255 feet for normal crown.

The distance between existing Golden Pond Park Ct and the proposed ramp terminals is 594 feet. According to FDM 11-5-5, if Golden Pond Park Ct remains where it is today, a traffic impact analysis will be required to justify a less than desirable access control distance prepared with the County FF/WIS 29/32 Interchange. The desirable access control length is 1,320 feet, with a minimum distance of 1,000 feet. In addition, for distances less than 1,000 feet, an exception to standards will be required.

## Alternative Impacts

The alternatives were evaluated against a range of impact categories, including acquisitions, wetland impacts, traffic safety and operations. Quantifiable real estate and wetland impacts are shown in table 1 below. Wetland impacts are based on the 2007 corridor study wetland delineation. Alternatives 1, 2, and 3 have varying real estate acquisition impacts for the extension of Golden Pond Park. Parcel HB-575, 4611 Hillcrest Drive (where Golden Pond Park Ct meets Navajo Trail) would be completely acquired in all alternatives.

**Table 1**

Alternative	Wetland Impact	Right of Way Impact
1	0.9 acres	7 acres (assumes splitting parcel)
		12 acres (assumes acquiring complete rear portion of parcel)
		17 acres (if entire parcel is acquired)
2A	1.2 acres	9 acres
2B	1.2 acres	9 acres
3	0.8 acres	17 acres (entire parcel must be acquired)
4	0.1 acres	0.87 acres
5	0.1 acres	0.65 acres
6	0.5 acres	17 acres (entire parcel must be acquired)

Table 2 details other impacts for each alternative. As final design progresses, consideration of including barrier protection and retaining walls may be desirable to reduce impacts to adjacent properties.



**Table 2**

<b>Alternative 1 Impacts – 2007 Corridor Plan recommendation</b>	
Real estate acquisitions can vary depending on negotiations. See Table 1.	
10,000 CY of fill (borrow) which is about a 19,000 CY difference from Alt 2A/Alt 2B	
Splits Parcel HB 574-2, 4653 Hillcrest Dr, and HB-573-3, 4619 Hilcrest Dr, in half	
Parcel HB-575, 4611 Hillcrest Drive acquisition.	
Drainage structure required for stream crossing. (approximate 100')	
Access Control spacing between Ramp Terminals and Golden Park Ct / Navajo Tr is greater than 1,320 feet.	
A more desirable single intersection configuration than two offset intersections.	
An increased level of service, connectivity with local roads and traffic movements due to a single intersection.	
<b>Alternative 2A Impacts – Centerline 40 feet from western property line</b>	
9,000 CY of cut (earth ex). If soil is good, it could be used for fill on County FF.	
Reconstruct intersection of Thayer trail and Golden Pond Park Ct.	
Cul De Sac is required	
The owner of Parcel HB-2420, 1257 Thayer Trail, is concerned about property value if Golden Pond Park Ct were to be closer to their property.	
Parcel HB-575, 4611 Hillcrest Drive acquisition.	
Drainage structure required for stream crossing. (approximate 150')	
Access Control spacing between Ramp Terminals and Golden Park Ct / Navajo Trail is greater than 1,320 feet.	
A more desirable single intersection configuration than two offset intersections.	
An increased level of service, connectivity with local roads and traffic movements due to a single intersection.	
<b>Alternative 2B Impacts – Centerline is 40 feet from western property line</b>	
8,500 CY of cut (earth ex). If soil is good, it could be used for fill on County FF.	
Do not have to reconstruct the intersection of Thayer trail and Golden Pond Park Ct.	
The owner of Parcel HB-2420, 1257 Thayer Trail, is concerned about property value if Golden Pond Park Ct were to be closer to their property.	
Parcel HB-575, 4611 Hillcrest Drive acquisition.	
Drainage structure required for stream crossing. (approximate 150')	
Access Control spacing between Ramp Terminals and Golden Park Ct / Navajo Trail is greater than 1,320 feet.	
A more desirable single intersection configuration than two offset intersections.	
An increased level of service, connectivity with local roads and traffic movements due to a single intersection.	

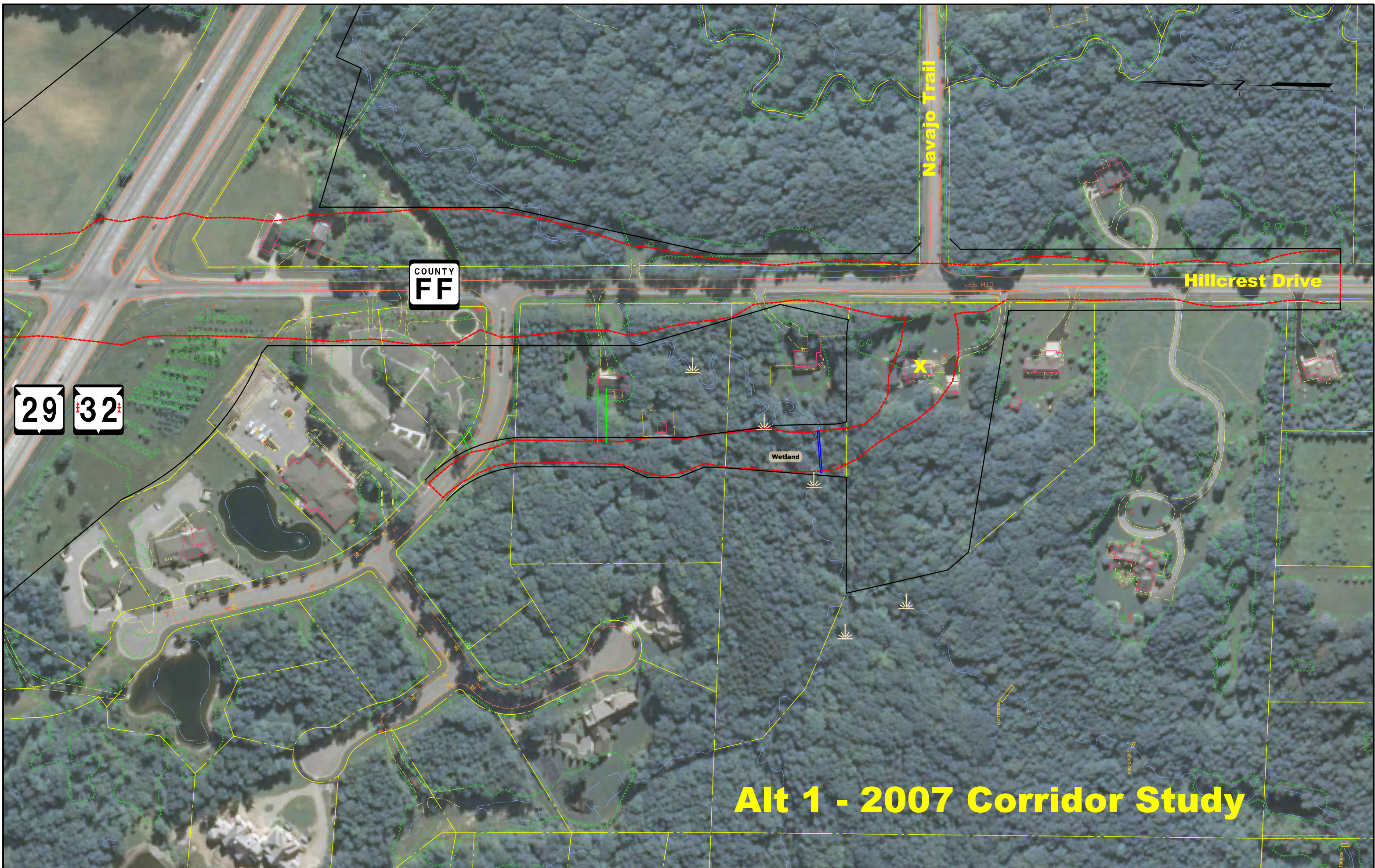
**Table 2 continued**

<b>Alternative 3 Impacts – As close to County FF as possible</b>
4,000 CY of fill (borrow) which is about 13,000 CY difference than Alt 2
Acquire parcels HB-575, 4611 Hillcrest Drive, HB 574-2, 4653 Hillcrest Dr, and HB-573-3, 4619 Hillcrest Dr.
Wetland to west of roadway may limit development potential
Drainage structure required for stream crossing. (approximate 230') Extensive DNR issues with sensitive stream
Minimum intersection skew at Golden Park Pond Ct and Navajo Trail. (75 degrees)
Access Control spacing between Ramp Terminals and Golden Park Ct / Navajo Trail is greater than 1,320 feet.
A more desirable single intersection configuration than two offset intersections.
An increased level of service, connectivity with local roads and traffic movements due to a single intersection.
<b>Alternative 4 – County FF profile version 1</b>
Avoid real estate acquisition from three properties south of Golden Pond Park Ct along County FF.
Fewer wetland impacts versus realigning Golden Pond Park Ct.
Loss of driveways and drive through for building in the parcel in northwest quadrant of Golden Pond Park Ct and County FF. An easement and driveway connection to the adjacent parcel to the west will be necessary to gain access to this property. In addition, loss of majority of parking lot. May not meet village code for parking. Further investigation is required.
Offset intersection between Navajo Trail and Golden Pond Park Ct is not desirable because of traffic operations.
Access Control spacing between Ramp Terminals and Golden Park Ct is less than desirable distance of 1,320 feet and minimum distance of 1,000 feet. An approved traffic impact analysis justifying this is required.
Intersection of County FF with Golden Pond Park Ct may be required to be right in-right out only to mitigate substandard distance from ramp termini.
60,000 cubic yards of fill (borrow) needed. 51,000 more than relocated Golden Pond Park Ct. Existing Golden Pond Park Ct intersection with County FF will be 29 feet higher.
<b>Alternative 5 – County FF profile version 2</b>
Avoid real estate acquisition from three properties south of Golden Pond Park Ct along County FF.
Fewer wetland impacts versus realigning Golden Pond Park Ct.
Loss of driveways and drive through for building in the parcel in northwest quadrant of Golden Pond Park Ct and County FF. An easement and driveway connection to the adjacent parcel to the west will be necessary to gain access to this property. In addition, loss of majority of parking lot. May not meet village code for parking. Further investigation is required.
Offset intersection between Navajo Trail and Golden Pond Park Ct is not desirable because of traffic operations.
Access Control spacing between Ramp Terminals and Golden Park Ct is less than desirable distance of 1,320 feet and minimum distance of 1,000 feet. An approved traffic impact analysis justifying this is required.
Intersection of County FF with Golden Pond Park Ct may be required to be right in-right out only to mitigate substandard distance from ramp termini.
40,000 cubic yards of fill (borrow) needed. 31,000 more than relocating Golden Pond Park Ct. Existing Golden Pond Park Ct intersection with County FF will be 23 feet higher.

<b>Alternative 6 – As close to County FF while minimizing creek crossing</b>
8,500 CY of cut (earth ex). If soil is good, it could be used for fill on County FF.
Acquire parcels HB-575, 4611 Hillcrest Drive, HB 574-2, 4653 Hillcrest Dr, and HB-573-3, 4619 Hillcrest Dr.
Drainage structure required for stream crossing. (approximate 230') Extensive DNR issues with sensitive stream
Minimum intersection skew at Golden Park Pond Ct and NavajoTrail. (75 degrees)
Access Control spacing between Ramp Terminals and Golden Park Ct / Navajo Trail is greater than 1,320 feet.
A more desirable single intersection configuration than two offset intersections.
An increased level of service, connectivity with local roads and traffic movements due to a single intersection.
Requires two 300-foot long retaining walls to decrease creek crossing by 53-feet.
A lowered profile allows a 4-foot culvert with 3-feet of cover, which matches the culvert under County FF and minimizes the retaining walls.
A bypass lane will be required for County FF southbound to Golden Pond Park Ct westbound and the roundabout may need to be moved eastward.

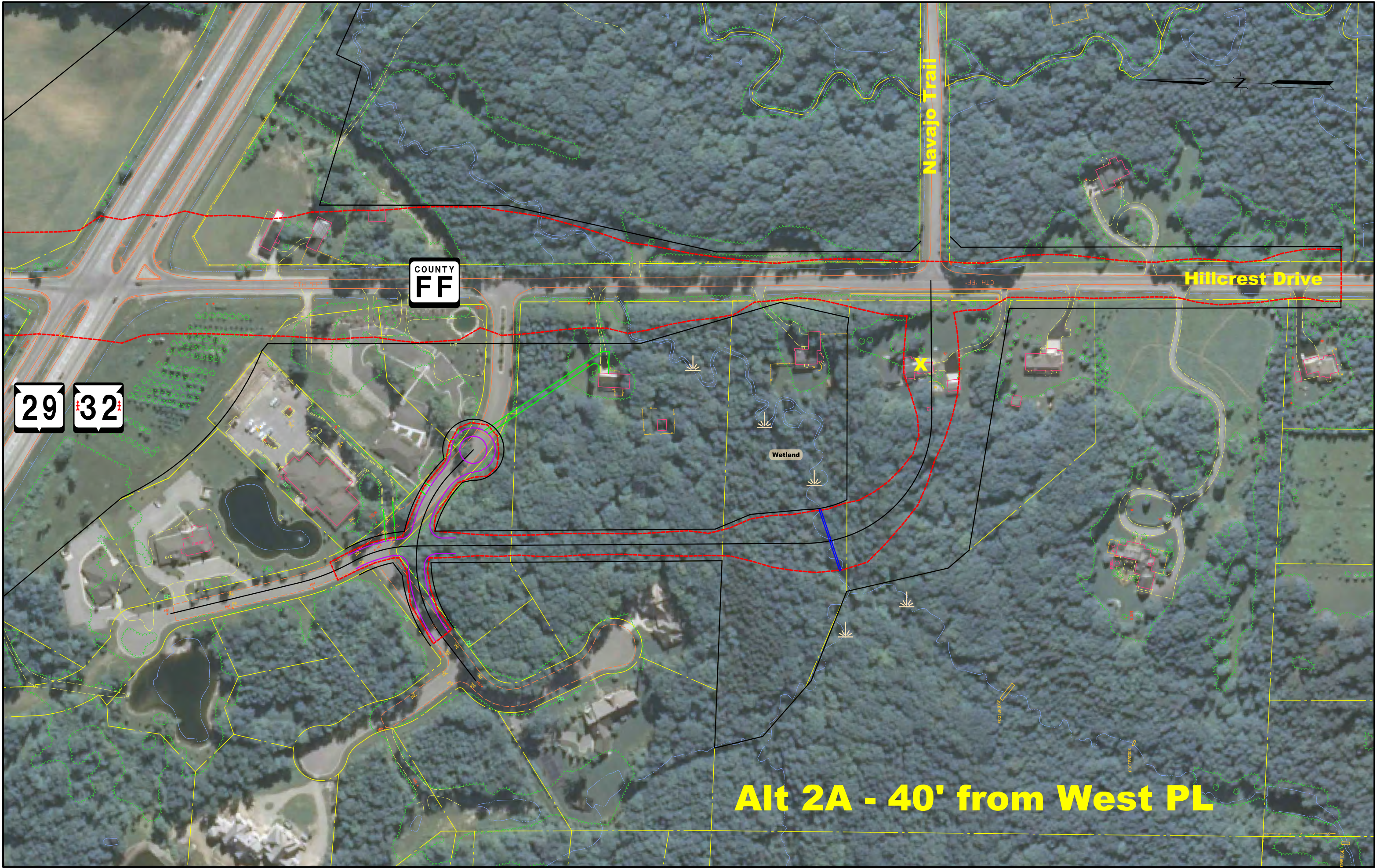
cc: URS File





**Alt 1 - 2007 Corridor Study**





COUNTY  
FF

Navajo Trail

Hillcrest Drive

Wetland

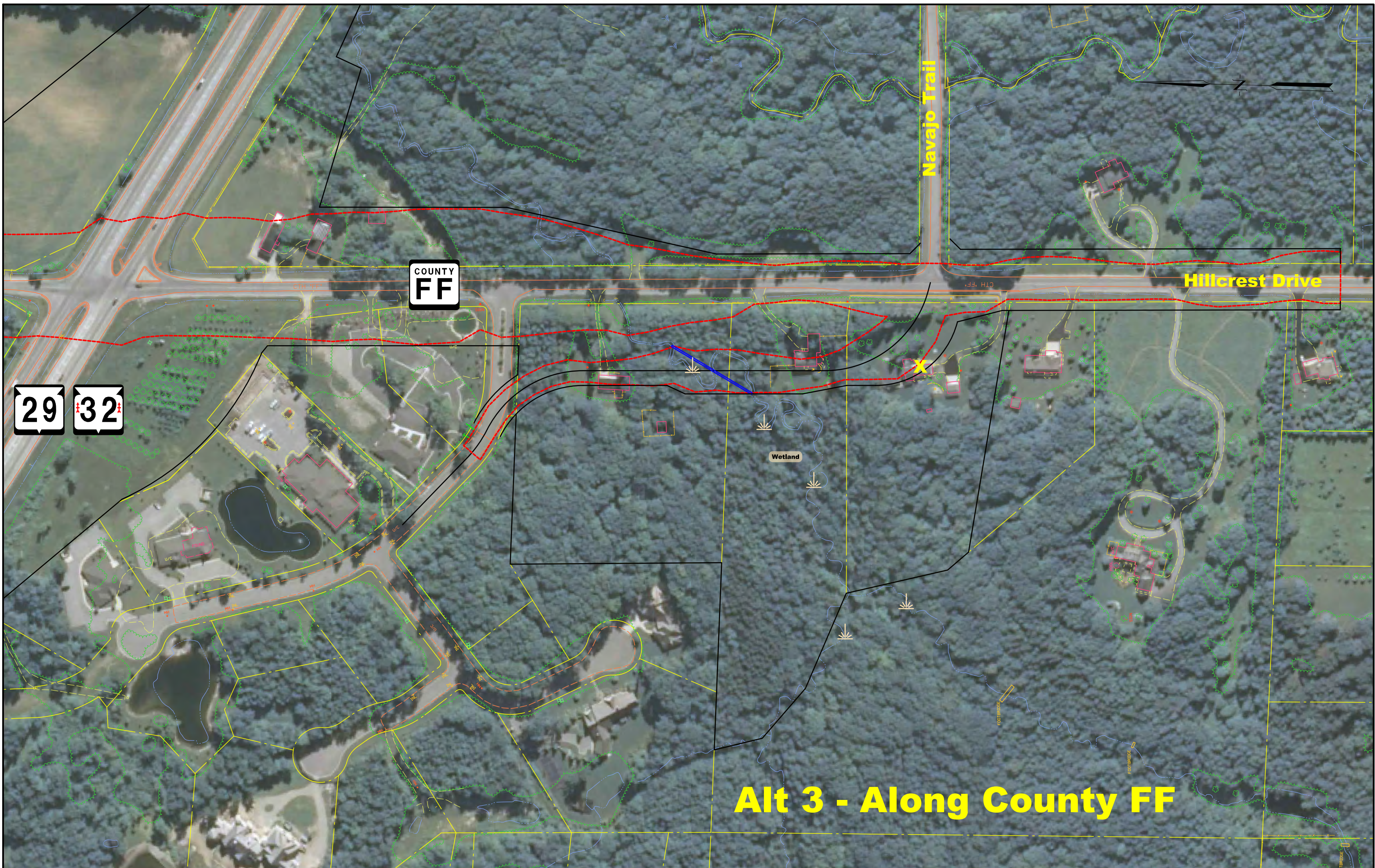
Alt 2A - 40' from West PL

29 32









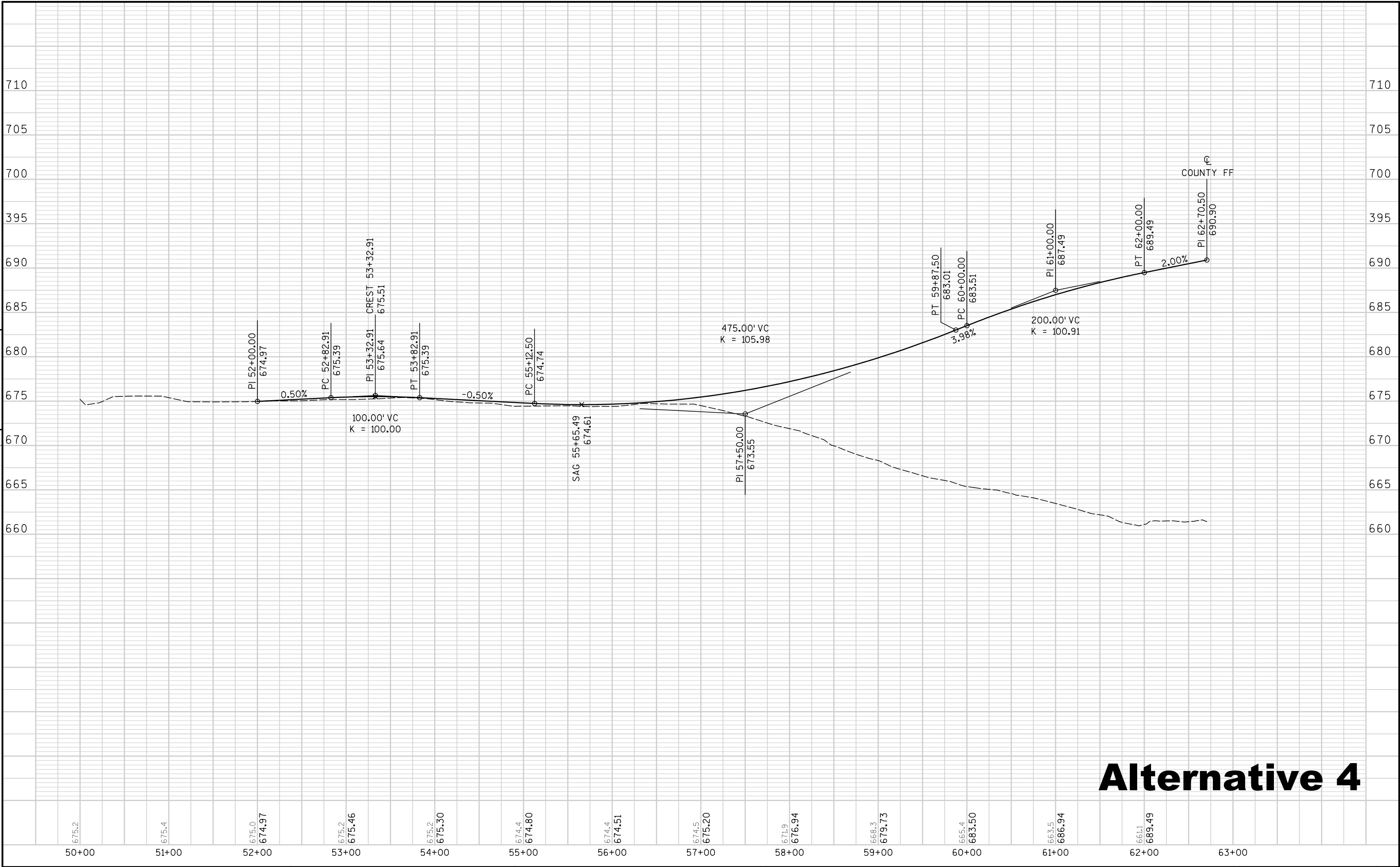




**Alternative 4**



5



5

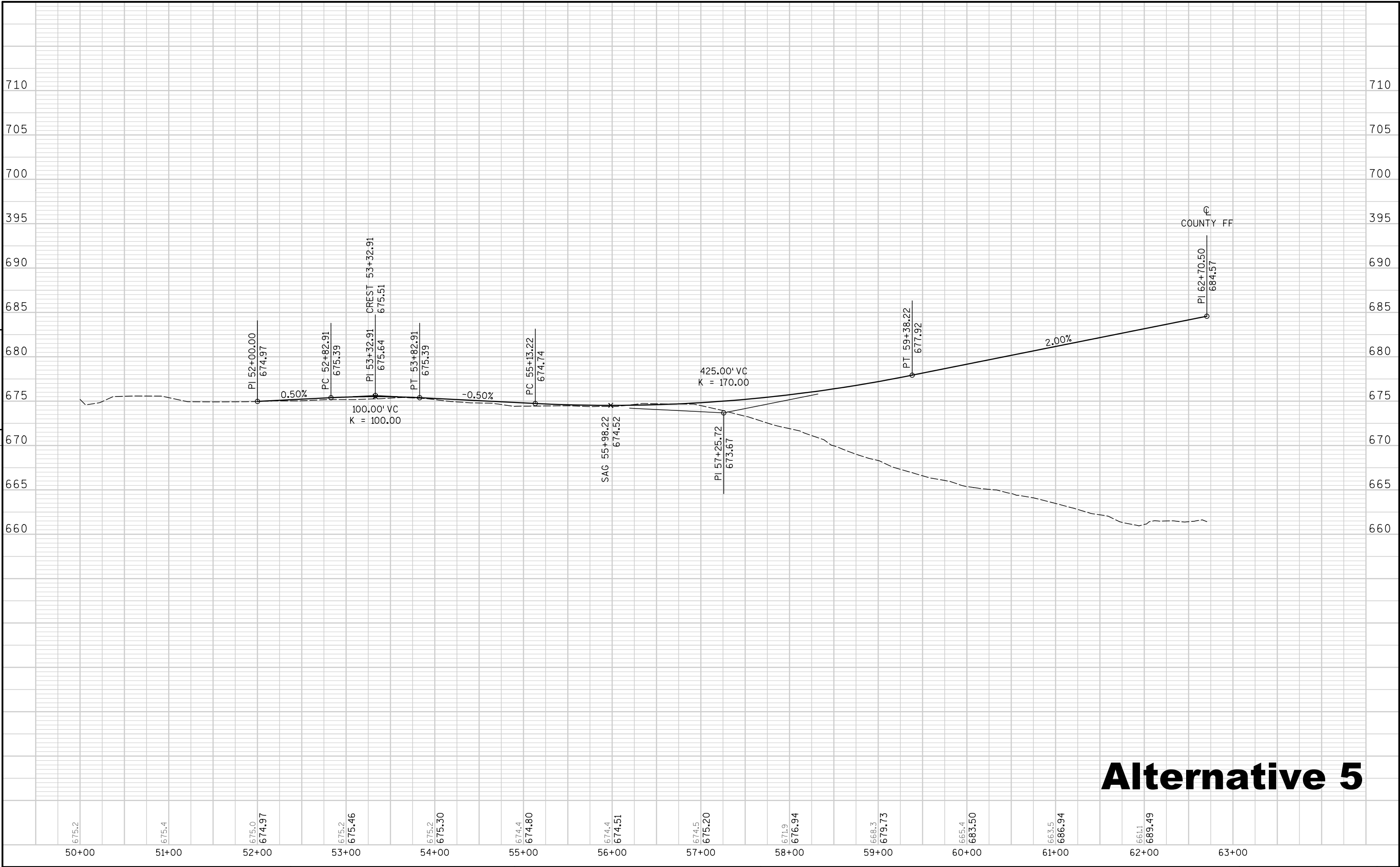
Alternative 4





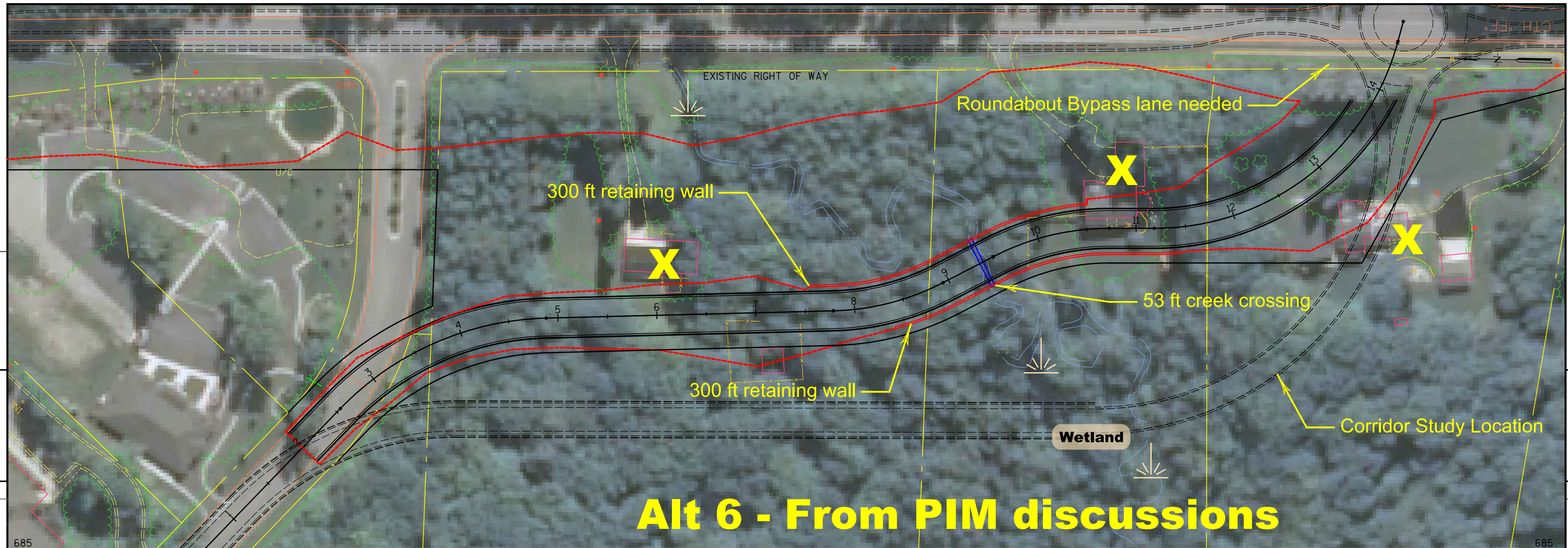


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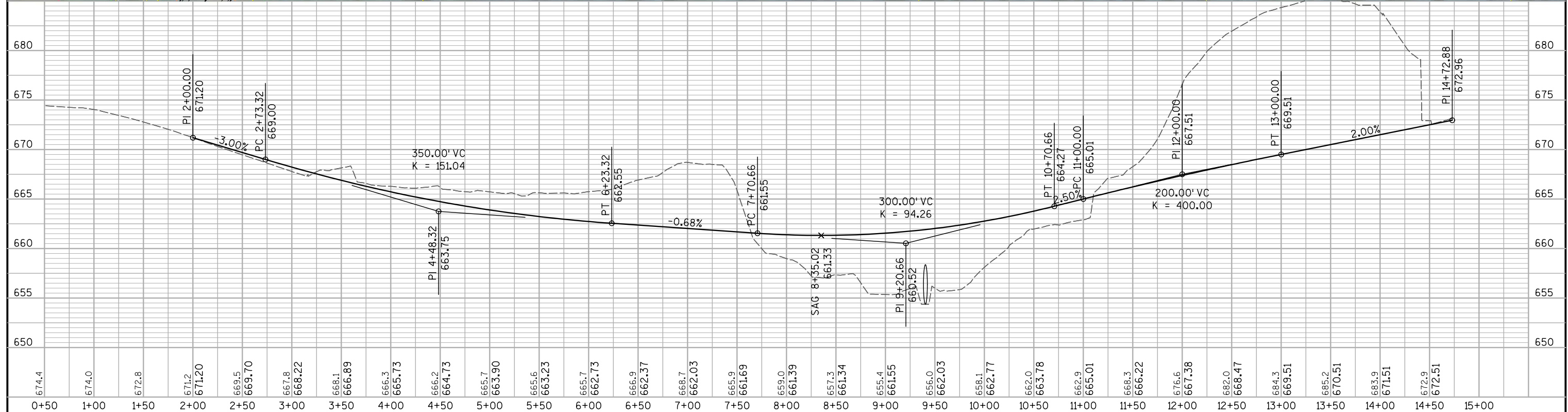


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# Alternative 5



# Alt 6 - From PIM discussions



# **APPENDIX E - Sunlite-Golden Pond Park Court Frontage Road Alternatives Analysis**

Date: January 30, 2012

To: Dan Segerstrom, Wisconsin Department of Transportation Northeast Region  
Jill Hilbert, Wisconsin Department of Transportation Northeast Region

From: William R. Schilling, PE, URS Project Manager  
Nicholas J. Becker, PE, URS Transportation Engineer

Project ID: **9200-04-00**

Project: WIS 29 & County FF Interchange  
Brown County

Subject: **Analysis of alternatives for the frontage road between Sunlite Drive and Golden Pond Park Court**

In 2007, The WIS 29 Corridor Preservation Plan recommended construction of a service interchange at the existing intersection of WIS 29 and Brown County FF. County FF's vertical profile will be raised to overpass the existing elevation of WIS 29/32. Interchange construction required relocating the existing intersection of Sunlite Drive and Woodland Road with STH 29/32 just west of the interchange to ensure desirable spacing between the interchange ramps and the nearest access points. Sunlite Drive and Forest Road would be realigned with a T-intersection farther west of its current location and Greenfield Avenue and Woodland Road would intersect along a curve north of its existing location. Concerns arose that this closure and realignment would limit access from and across STH 29/32 to Sunlite Drive and Woodland Road.

In 2010, as interchange design was started and an alternative analysis was requested for possible locations of the frontage road connecting Golden Pond Park Court and Sunlite Drive. This memorandum outlines five alternatives and their impacts for the location of the frontage road.

## Alternative Development

Five alternatives were developed. Alternatives 1A and 1B utilize the existing village right of way with a rural and urban section, respectively. Alternatives 2A and 2B would use a 'snug' option of aligning the frontage road as close to STH 29/32 as possible. The first option would use barrier for separation and the second, a rural ditch section. Alternative 3 would leave Golden Pond Park Court with its existing western most termini and connect Sunlite Drive and Woodland Road with an overpass above STH 29/32. The alternatives are described in detail below, and illustrated in attachments 1 through 5.

- **Alternative 1A – Rural section along existing right of way:** Alternative 1 involves a rural section with 12' lanes and 5' shoulders along the existing county right of way. The centerline would run west to east approximately 100' from the STH 29/32 shoulder.
- **Alternatives 1B – Urban section along existing right of way:** Alternatives 2B aligns the frontage road in the same location as the previous alternative, but with an urban roadway section. This typical section would match that of Golden Pond Park Court.
- **Alternative 2A – Alignment snug to STH 29/32 with barrier separation:** Alternative 2A aligns the frontage road tight to STH 29/32. The roadways would be separated by a 56-inch single slope concrete barrier until the frontage road curves back to meet either Golden Pond Park Court to the southeast or Sunlite Drive to the southwest.
- **Alternative 2B – Alignment snug to STH 29/32 with ditch separation:** This alternative is similar to Alternative 2A, however, the roadways would be separated by a rural ditch section and a beamguard system at a 2.5:1 slope to the south to reduce impacts to adjacent properties. This would require the alignment to be farther south by 23' compared to the previous alternative.
- **Alternative 3 – Overpass connecting Sunlite Drive and Woodland Road:** An overpass would connect Sunlite Drive and Woodland Road over the existing STH 29/32. This alternative would

allow a similar movement from east to west across STH 29/32 as the existing at grade intersection. This alternative would most likely require a roundabout or signals to be installed at the intersection of Sherwood Street and Woodland Road due to the anticipated increase in traffic volumes through the intersection.

All slopes are designed 4:1 or flatter to clearzone and 3:1 beyond clearzone to avoid the need for barrier protection and retaining walls except for alternative 2A, which requires concrete barrier between roadways and 2B requiring beamguard and 2.5:1 slopes to reduce wetland impacts. Slopes of 4:1 or flatter are desirable because slopes between 3:1 and 4:1 are non-recoverable. Proposed right of way and slope limits shown on the attached are approximate and for information purposes only. All horizontal curves on Golden Pond Park Ct are designed for 30 MPH using AASHTO method 2 superelevation which allows for a minimum curve radius of 255 feet for normal crown.

### Alternative Impacts

The alternatives were evaluated against a range of impact categories, including acquisitions, wetland impacts, traffic safety and operations. Drainage treatments may also be necessary along the frontage road and STH 29/32. Further design will be necessary to determine which treatments are appropriate for the roadways. Quantifiable real estate and wetland impacts are shown in Table 1 below. Wetland impacts are based on the 2007 corridor study wetland delineation. The alternatives have varying real estate acquisition impacts for the frontage road extension.

**Table 1**

Alternative	Wetland Impact	Right of Way Impact	
	(acres)	Fee (acres)	TLE (acres)
1A	1.20	0.92	0.36
1B	1.20	0.92	0.36
2A	0.54	0.70	0.78
2B	0.69	0.70	0.78
3	0.00	1.03	1.35

Table 2 details other impacts for each alternative. Overall cost, impact to adjacent properties, and ease of use are all very important in design selection. Some of these concerns are outlined below.



**Table 2**

<b>Alternative 1A Impacts - Rural section along existing right of way</b>
10,700 CY of fill (borrow) required.
An increase in connectivity through the Village of Hobart from east to west.
<b>Alternative 1B Impacts – Urban section along existing right of way</b>
16,150 CY fill (borrow) required.
An increase in connectivity through the Village of Hobart from east to west.
<b>Alternative 2A Impacts – Alignment snug to STH 29/32 with barrier separation</b>
29,400 CY of cut (earth ex) with 1,100 CY fill (borrow) still required.
Does not allow for future expansion of STH 29/32.
Smaller real estate acquisitions and temporary easement impacts compared to Alternative 1A/1B.
An increase in connectivity through the Village of Hobart from east to west.
Inlets and culvert pipe required along barrier section for proper drainage; additional maintenance anticipated.
<b>Alternative 2B Impacts - Alignment snug to STH 29/32 with ditch separation</b>
32,500 CY of cut (earth ex) with 4,600 CY fill (borrow) still required.
Allows for future expansion of STH 29/32.
Smaller real estate acquisitions and temporary easement impacts compared to Alternative 1A/1B.
An increase in connectivity through the Village of Hobart from east to west.
Beamguard system and 2.5:1 slopes along wetlands to reduce impacts.
<b>Alternative 3 Impacts – Overpass connecting Sunlite Drive and Woodland Road</b>
74,800 CY fill (borrow) required; being the most costly of the alternatives for soil.
Significantly higher cost due to structure in this alternative.
Greenfield Avenue and Woodland Road would need to be realigned to maneuver around structure.
Real estate acquisition would require farmland to be purchased.
Intersection updates required at Sherwood Street and Woodland Road.
Increase in connectivity north and south of STH 29/32 and between the Village of Hobart and Village of Howard.



## Cost Analysis

Each alternative was evaluated for overall cost based on materials cost of the roadway, structure, real estate, and construction and design fees. Based on this cost analysis and the impacts previously determined for the frontage road, a more informed decision can be made on the alternative that fits the needs of the community and the roadway system.

**Table 3**

Cost Categories	Alternative				
	1A	1B	2A	2B	3*
Roadway	\$ 932,000.00	\$ 984,000.00	\$ 1,189,000.00	\$ 1,141,000.00	\$ 1,152,000.00
Structure	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000.00
Misc. Unquantified (30%)	\$ 279,600.00	\$ 295,200.00	\$ 356,700.00	\$ 342,300.00	\$ 645,600.00
Total	\$ 1,211,600.00	\$ 1,279,200.00	\$ 1,545,700.00	\$ 1,483,300.00	\$ 2,797,600.00
Say	\$1.2 Million	\$1.3 Million	\$1.6 Million	\$1.5 Million	\$2.8 Million

\*Alternative 3 includes the Forest Road realignment

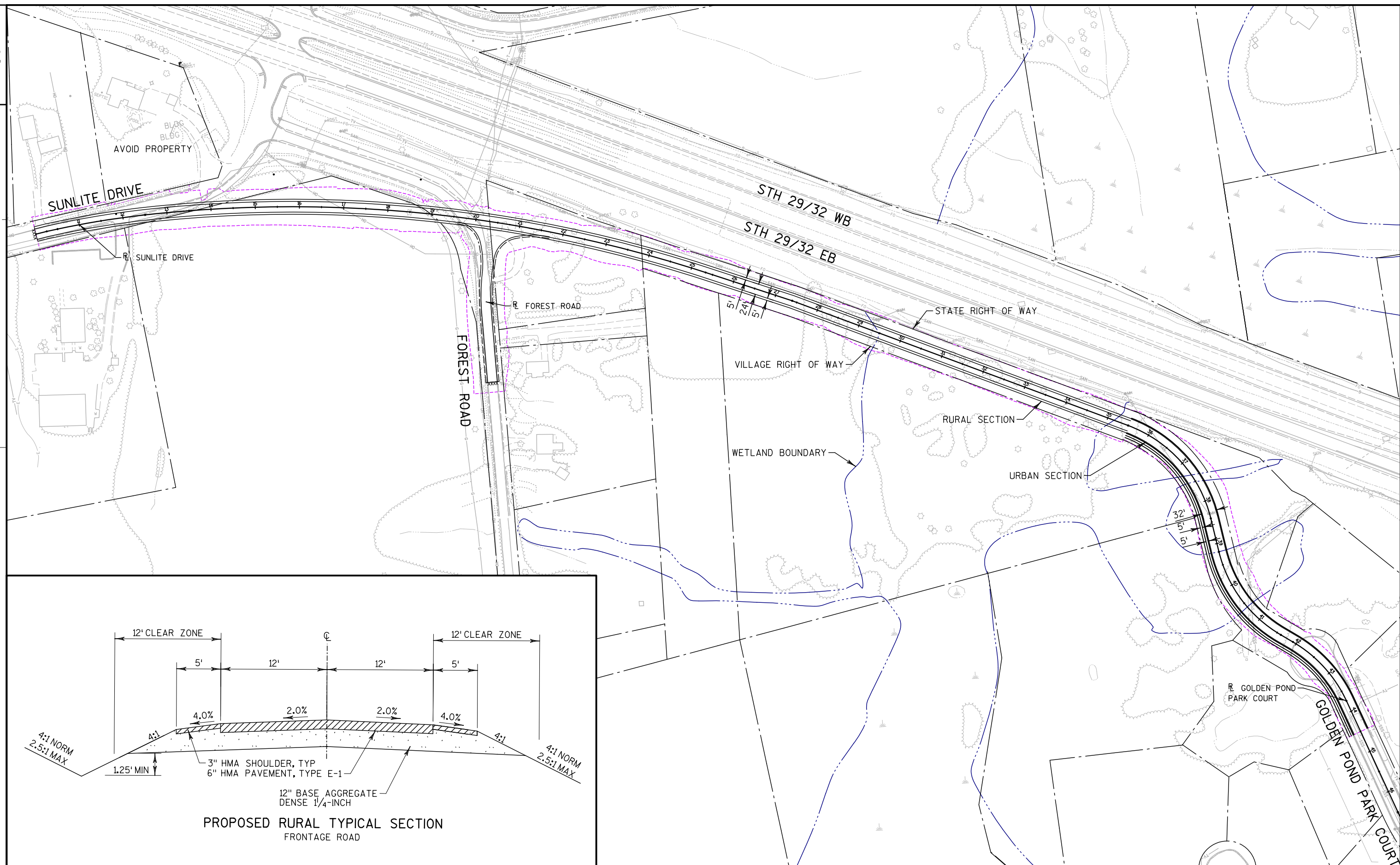
Alternative 3 also consists of significant realignment of both Forest Road and Greenfield Avenue. Forest Road was included in the above table as noted. Table 4, below, shows the estimated pavement and base costs for each realignment option of Greenfield Avenue. Alignment GR-2 is currently the most cost effective for this alternative and will increase the overall Alternative 3 cost to \$3.2 Million.

**Table 4**

Cost Categories	Alternative		
	GR-1	GR-2	GR-3
Roadway	\$ 390,000.00	\$ 330,000.00	\$ 400,000.00
Structure	\$ -	\$ -	\$ -
Misc. Unquantified (30%)	\$ 117,000.00	\$ 99,000.00	\$ 120,000.00
Total	\$ 507,000.00	\$ 429,000.00	\$ 520,000.00
Say	\$0.4 Million	\$0.35 Million	\$0.4 Million

2

2



PROJECT NO: 9200-04-00

HWY: STH 29

COUNTY: BROWN

FRONTAGE ROAD - ALTERNATIVE 1A

SHEET

E

FILE NAME : P:\Transportation\WIS 29 Interchange\Reports\Tech Memo Frontage Road Jan 2012\050101\_pp.dgn

PLOT DATE : 1/19/2012

PLOT BY : jessica\_meddaugh

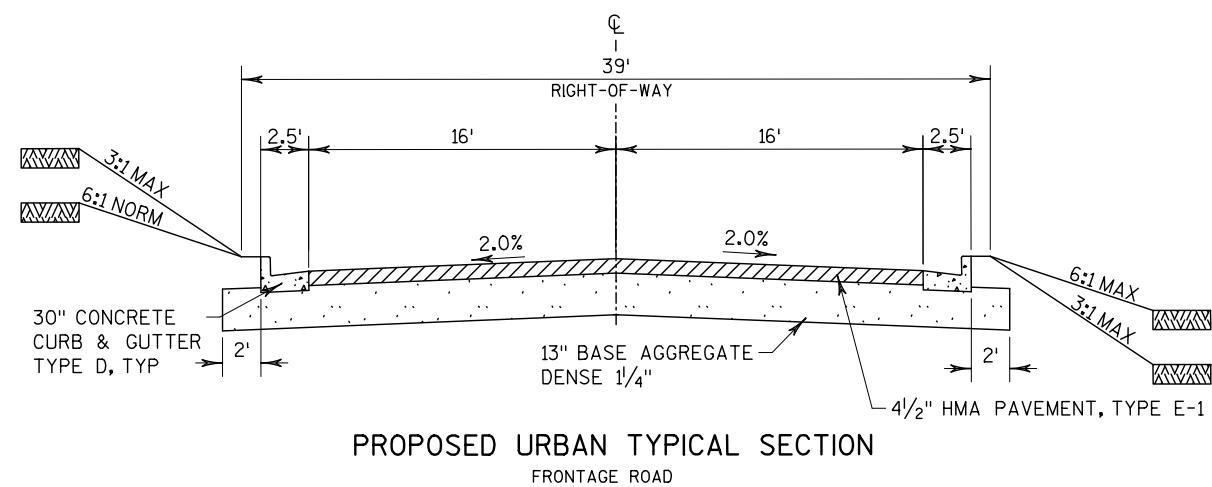
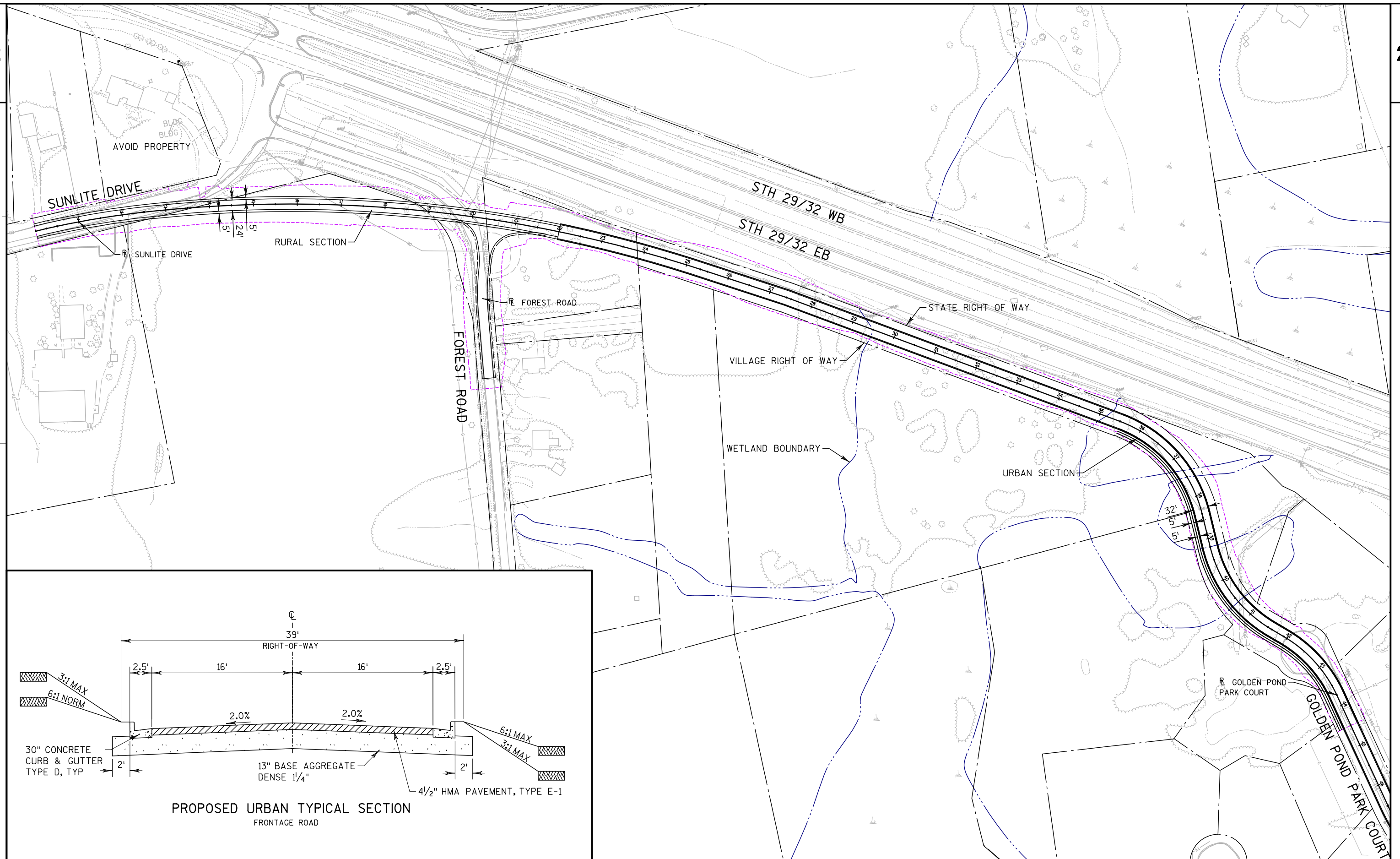
PLOT NAME :

PLOT SCALE : 200.0000 sf / in.

WISDOT/CADDs SHEET 42

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PROJECT NO: 9200-04-00

HWY: STH 29

COUNTY: BROWN

FRONTAGE ROAD - ALTERNATIVE 1B

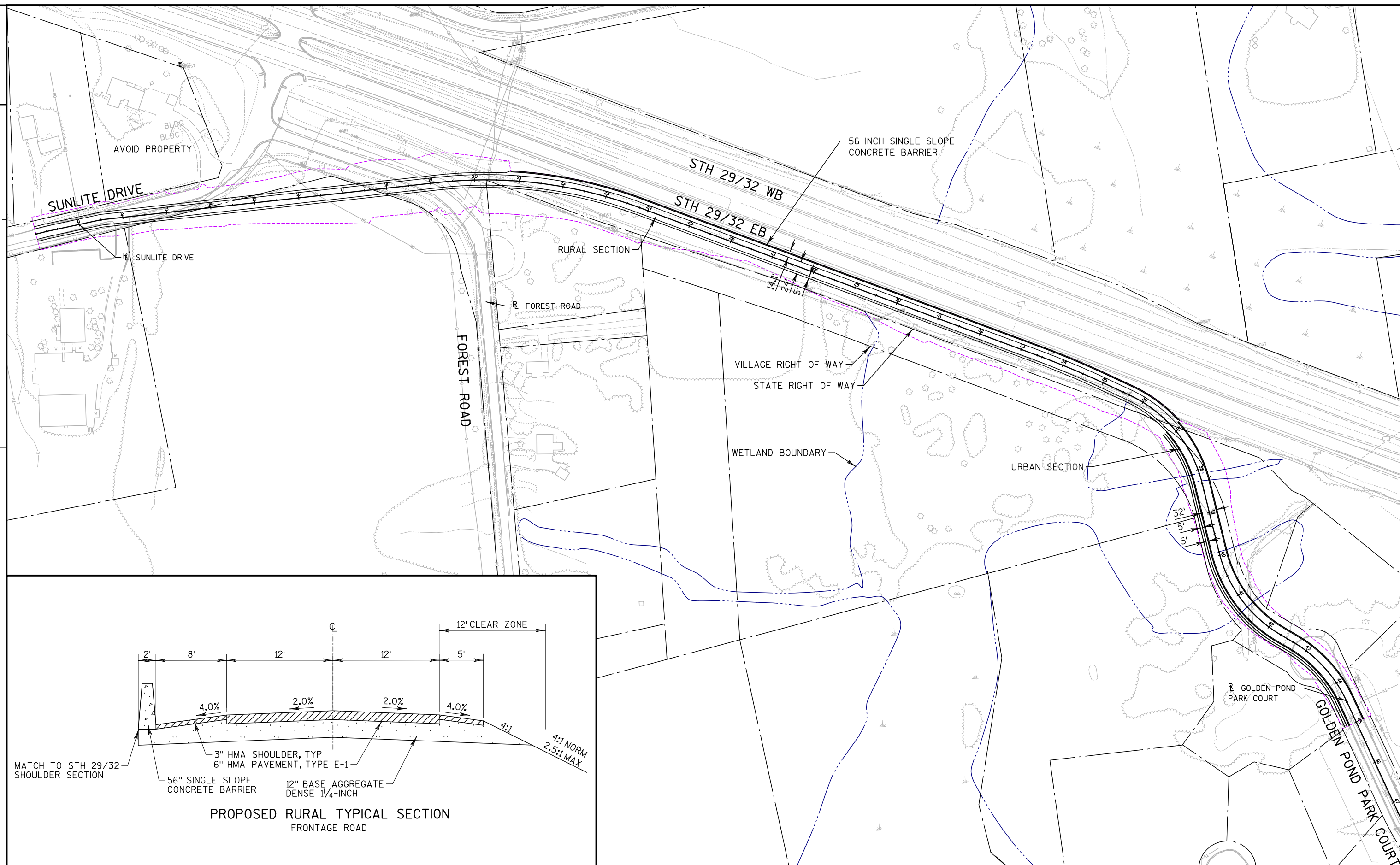
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PROJECT NO: 9200-04-00

HWY: STH 29

COUNTY: BROWN

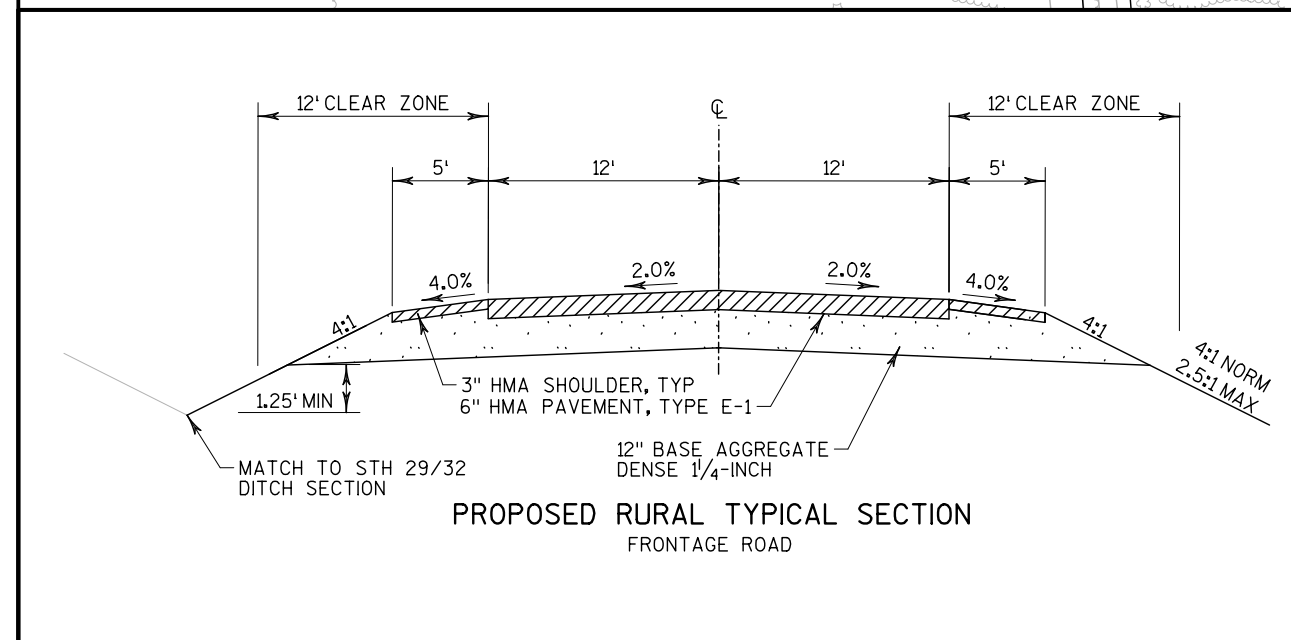
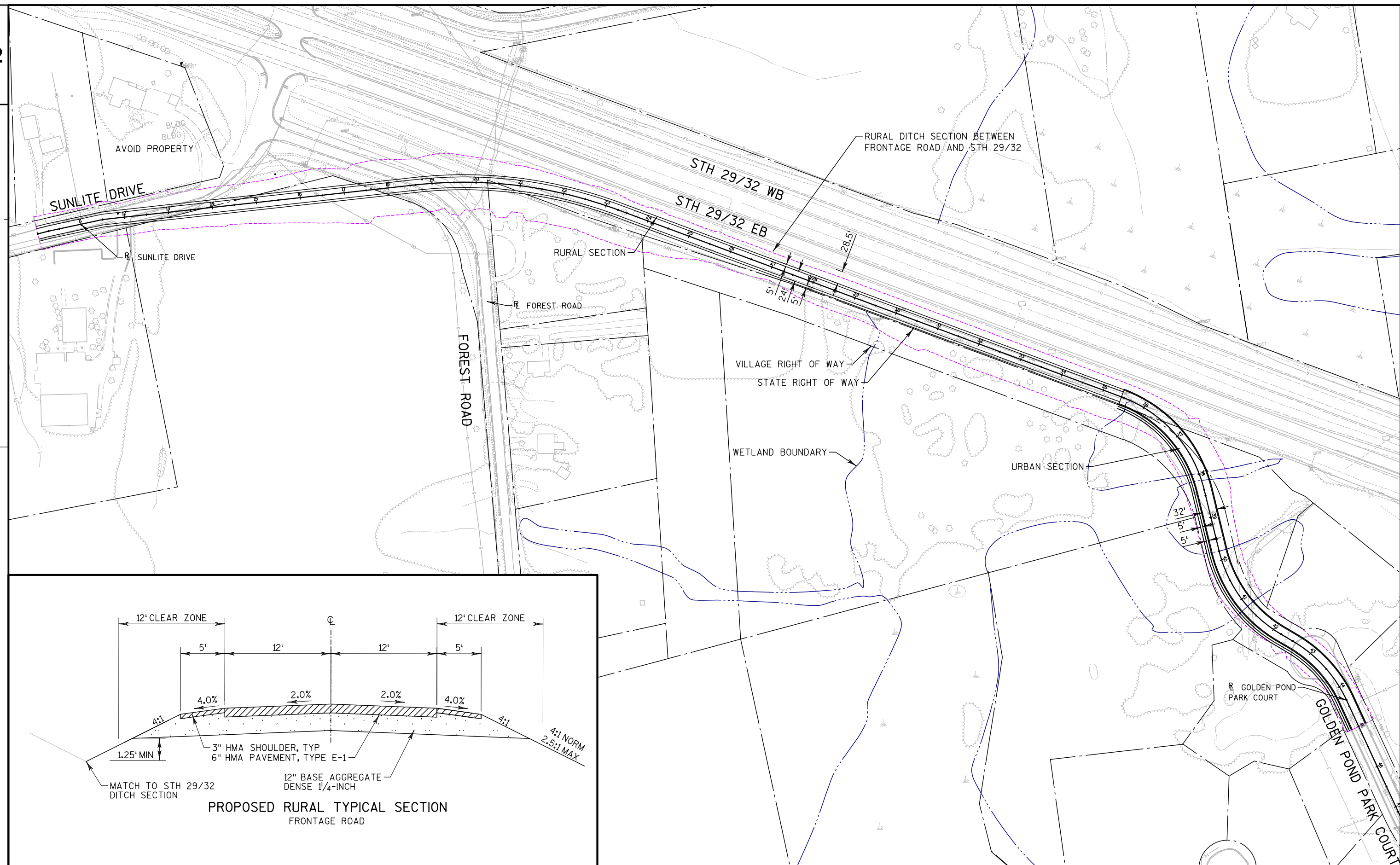
FRONTAGE ROAD - ALTERNATIVE 2A

SHEET

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PROJECT NO: 9200-04-00

HWY: STH 29

COUNTY: BROWN

FRONTAGE ROAD - ALTERNATIVE 2B

SHEET

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PLOT DATE : 1/19/2012

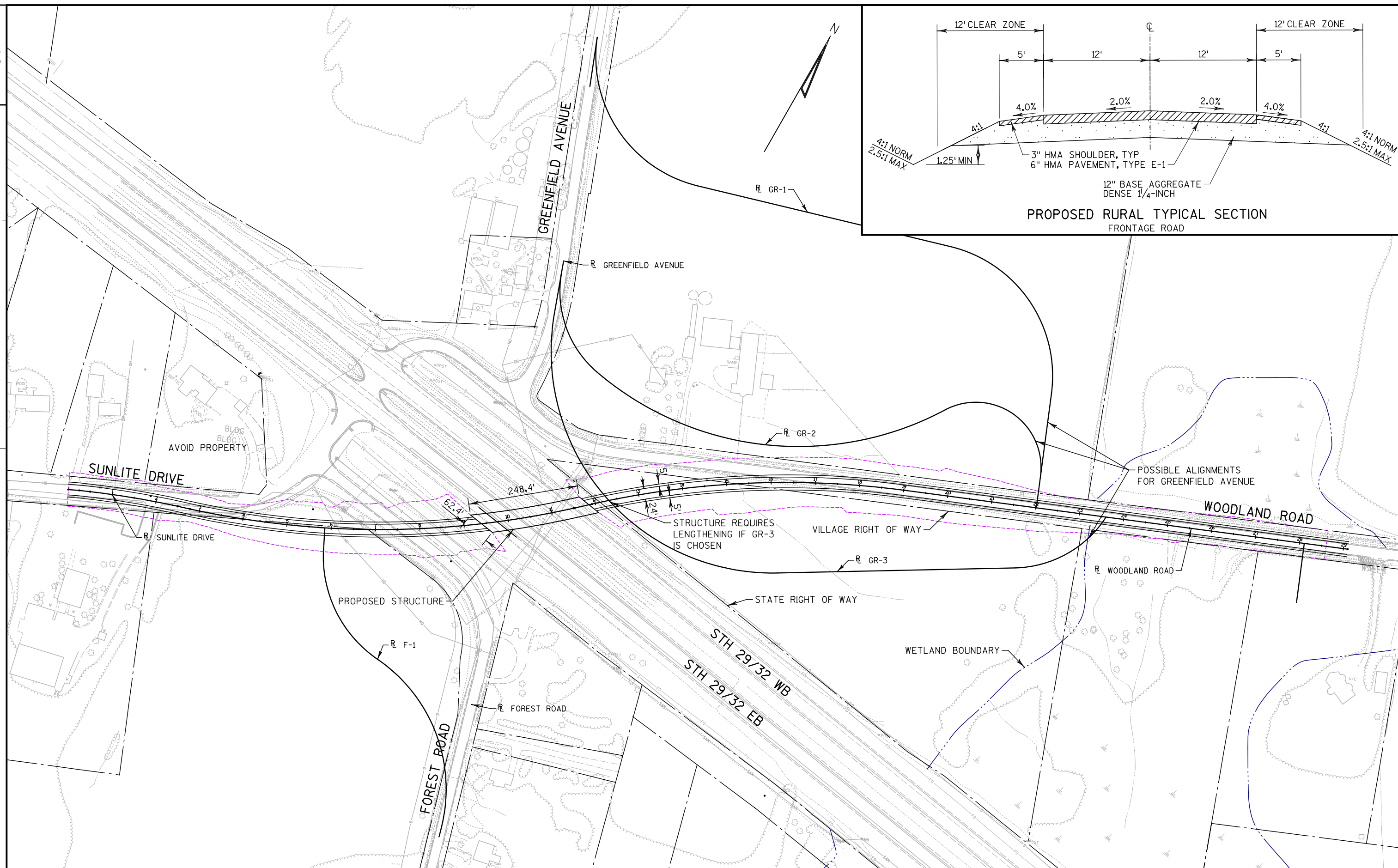
PLOT BY : jessica\_meddaugh

PLOT NAME :

PLOT SCALE : 200.0000 sf / in.

WISDOT/CADDs SHEET 42





# APPENDIX F - Section 106 Review

# Tribal Lands

## SECTION 106 REVIEW ARCHAEOLOGICAL/HISTORICAL INFORMATION

Wisconsin Department of Transportation  
DT1635 11/2006

For instructions, see FDM Chapter 26

### I. PROJECT INFORMATION

Project ID <b>9200-04-00</b>	Highway - Street <b>WIS 29</b>	County <b>Brown</b>
Project Termini <b>WIS 29 &amp; County FF Interchange, Shawano - Green Bay</b>		Region - Office <b>Northeast</b>
Regional Project Engineer - Project Manager <b>Daniel Segerstrom</b>		Area Code - Telephone Number <b>920-492-7718</b>
Consultant Project Engineer - Project Manager <b>William Schilling - URS Corporation</b>		Area Code - Telephone Number <b>414-831-4176</b>
Archaeological Consultant <b>Great Lakes Archaeological Research Center, Inc.</b>		Area Code - Telephone Number <b>414-481-2093</b>
Architecture/History Consultant <b>Great Lakes Archaeological Research Center, Inc.</b>		Area Code - Telephone Number <b>414-481-2093</b>
Date of Need		SHSW #
Return a signed copy of this form to:		

### II. PROJECT DESCRIPTION

Project Length <b>1.578 miles</b>	Land to be Acquired: Fee Simple <b>55 - 70 acres</b>	Land to be Acquired: Easement <b>0.5 - 1 acres</b>
--------------------------------------	---	---

Distance as measured from existing centerline	Existing	Proposed	Other Factors	Existing	Proposed
Right-of-Way Width			Terrace Width		
WIS 29	50'-390'	50'-390'	WIS 29	N/A	N/A
County FF - Sherwood Street	35'-50'	50'-160'	County FF - Sherwood Street	N/A	7.5'-8'
Golden Pond Park Court	35'-40'	20'-110'	Golden Pond Park Court	N/A	10.5'
Town Roads	25'-35'	50'-110'	Town Roads	N/A	N/A
Shoulder			Sidewalk Width		
WIS 29	6'-34'	6'-47'	WIS 29	N/A	N/A
County FF - Sherwood Street	19'	N/A	County FF - Sherwood Street	N/A	5'
Golden Pond Park Court	N/A	N/A	Golden Pond Park Court	N/A	5'-6'
Town Roads	15'	15'	Town Roads	N/A	N/A
Slope Intercept			Number of Lanes		
WIS 29	N/A	70'-190'	WIS 29	4	4
County FF - Sherwood Street	N/A	40'-150'	County FF - Sherwood Street	2	2
Golden Pond Park Court	N/A	20'-100'	Golden Pond Park Court	2	2
Town Roads	N/A	25'-62'	Town Roads	2	2
Edge of Pavement			Grade Separated Crossing		
WIS 29	3'-32'	3'-45'		0	1 - County FF over WIS 29
County FF - Sherwood Street	11'	23'-24'			
Golden Pond Park Court	16.5'	16'			
Town Roads	11'	11'			
Back of Curb Line			Vision Triangle		
WIS 29	N/A	N/A	acres	3 Int. meet; 3 do not meet	All Intersections will meet sight distance requirements. No additional acquisitions needed for sight distance reasons.
County FF - Sherwood Street	N/A	26.5'-27'			
Golden Pond Park Court	18.5'	18.5'			
Town Roads	N/A	N/A			
Realignment	Golden Pond Park Ct., Greenfield Ave./Woodland Rd., Sunlite Dr/Forest Rd.		Temporary Bypass	N/A	N/A
			acres		
Other - List:			Stream Channel Change	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Attach Map(s) that depict "maximum" Impacts.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Tree topping and/or grubbing	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> 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.

The purpose of the project is to develop a service interchange at the intersection of WIS 29 and Brown County FF, and to develop changes to the local road system to preserve circulation, access and safety for travelers.

The need for the WIS 29-County FF Interchange project is based on the following transportation issues identified in the Environmental Assessment completed for the WIS 29 Corridor Preservation Plan in 2008:

- **Corridor Preservation.** WIS 29 is a principal arterial highway and is designated as a "backbone" route in the Wisconsin Corridors 2020 Plan. The highway serves interstate and inter-regional trips and functions as the primary east-west route across north central Wisconsin, linking Green Bay, Wausau, Eau Claire and Minneapolis and St. Paul, Minnesota. It is the most heavily traveled east-west highway in Wisconsin, north of Interstate 94. The intersection of WIS 29 and County FF in Brown County is identified in the Corridor Preservation Plan as a preferred location for an interchange as the corridor is converted from an expressway to a freeway to accommodate projected increases in corridor traffic volumes.
- **Safety, Operation and Mobility.** The WIS 29 Corridor Preservation Plan seeks to preserve and enhance the long-term safety, operation and mobility of WIS 29. As a principal arterial, the function of WIS 29 is to provide regional mobility. The current average daily traffic volume on WIS 29 at its intersection with County FF is 27,200 vehicles. This volume is forecasted to grow by 82% by 2035, to 49,400 vehicles. Access locations that are well managed and limited in number are defining characteristics of principal arterial roadways. There is a direct relationship between increased traffic volumes and vehicle conflicts when direct access exists on a facility. As traffic increases on WIS 29, the number of conflicts between vehicles entering and exiting from the existing access points on the highway will also increase, as well as disruptions to traffic flow on the arterial roadway and deterioration of level of service on the intersecting local road system. This project is a component of a long term effort to convert WIS 29 to a limited access freeway in Brown County, in which all access will be provided solely at interchanges, with all at-grade intersections eliminated.

The project location witnessed 30 crashes between 2006 and 2010, including one fatality. The reconstruction of the US 41 corridor in Brown County, east of the WIS 29-County FF intersection, is expected to create significant increases in traffic at the intersection in the coming decade. As traffic is rerouted through the WIS 29 corridor during construction, the County FF Intersection is likely to see more turning movements and a commensurate degradation of level of service and increase in crashes.

- **Land Use and Transportation Planning Coordination.** Brown County, the Villages of Hobart and Howard abutting the project location, and the Oneida Tribe are all engaged in ongoing land use, economic development and transportation planning. The WIS 29-County FF intersection was identified as a preferred location for an interchange in the Corridor Preservation Plan in cooperation with these jurisdictions. Access to WIS 29 plays a key role in local land use planning decisions, especially as the route is converted into freeway. Land use planning in these jurisdictions accounts for the construction of an interchange at WIS 29 and County FF, and the associated alterations to the local road system have been coordinated with these communities.

The proposed action includes the construction of a diamond interchange to replace the existing intersection of WIS 29/32 and County FF; the reconstruction of County FF (Hillcrest Drive)/Sherwood Street to create a two-lane divided boulevard with four roundabouts; and changes to the local road system to preserve access and circulation. The proposed action includes constructing a new structure (B-05-0402) over WIS 29/32 to carry County FF (Hillcrest Drive) traffic, four retaining walls, and extensions for box culvert C-05-0029.

The project also includes removing the existing at-grade intersection of WIS 29/32 with Woodland Road and Sunlite Drive, located approximately 3,300 feet west of the intersection of WIS 29/32 with County FF. A T-Intersection is proposed at Forest Road and Sunlite Drive/Golden Pond Park Court frontage road (frontage road segment constructed by Village of Hobart). A new alignment is proposed to reconnect Woodland Road and Greenfield Avenue.

The proposed action also includes TRANS 75 "Complete Streets" accommodations for bicyclist and pedestrians. In addition, a mountable curb section will be included on the Sherwood Street segment to accommodate a marked snowmobile route.

☐ Add continuation sheet, if needed.

### III. CONSULTATION

How has notification of the project been provided to:

- ☒ Property Owners  
☐ Public Information Meeting Notice  
☒ Letter - Required for Archaeology  
☐ Telephone Call  
☐ Other:

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

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

\*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.

The project is located in northwestern Brown County, in the Villages of Howard and Hobart. The project consists of several reconfigurations, intersection improvements, and extensions:

- the intersection of STH 32/29 and CTH FF will be reconfigured, with an overpass and new access ramps
- the intersection of CTH FF (Sherwood St) and CTH C (Shawano Ave) will be reconfigured
- the intersections of Woodland Rd and CTH FF (Sherwood St) and Woodland Rd and CTH C (Shawano Ave) will be reconstructed
- Navajo Trail will be extended across CTH FF (Hillcrest Dr) to meet Park Ct
- the access between STH 32/29 and Woodland Rd and Greenfield Ave will be reconfigured
- the access between STH 32/29 and Forest Rd and Sunlite Dr will be reconfigured
- Pine Tree Rd will be extended from Sunlite Dr, across STH 32/29 via an overpass, to Milltown Rd

An Area of Potential Effects (APE) was established which included all properties along the above-named areas. (See attached map for APE locations) All properties within the APE which were at least 40 years old and maintained a degree of integrity were evaluated for historic significance.

### 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 (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

- ① on-site monitoring in coordination with historic preservation office @ weekly coordination  
② cultural sensitive training must shall provide training on site with THPO.  
③ archaeological survey field notes shall provide reports and this data recovery plan

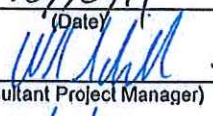
### IX. PROJECT DECISION

- ☒ 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.

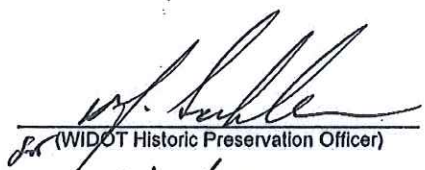


  
(Regional Project Manager)

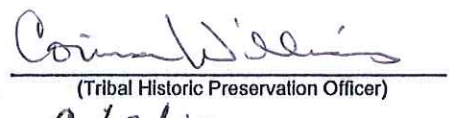
10/10/11  
(Date)

  
(Consultant Project Manager)

10/6/11  
(Date)

  
(WIDOT Historic Preservation Officer)

1/9/12  
(Date)

  
(Tribal Historic Preservation Officer)

2/2/12  
(Date)





United States Department of the Interior

BUREAU OF INDIAN AFFAIRS

MIDWEST REGIONAL OFFICE  
NORMAN POINTE II, SUITE 500  
5600 WEST AMERICAN BOULEVARD  
BLOOMINGTON, MINNESOTA 55437



ARCHAEOLOGICAL RESOURCES PROTECTION ACT  
PERMIT  
PUBLIC LAW 96-95

For the purposes of conducting archaeological work upon Indian land held in trust or subject to restrictions against alienation by the United States.

PERMIT NUMBER: 2011-OND-02

DATE: AUGUST 8, 2011

NAME, ADDRESS AND INSTITUTIONAL AFFILIATION OF:

PRINCIPAL INVESTIGATOR: KATHERINE SHILLINGLAW, PRINCIPAL INVESTIGATOR  
GREAT LAKES ARCHAEOLOGICAL RESEARCH CENTER, INC.  
P.O. Box 511549  
MILWAUKEE, WISCONSIN 53203

FIELD DIRECTOR: JENNIFER R. HAAS

APPLICATION DATED: JULY 22, 2011

AUTHORIZES THE FOLLOWING ACTIVITIES: SURFACE SURVEY AND/OR SHOVEL TESTING

ON LANDS DESCRIBED AS FOLLOWS AND SHOWN ON THE ATTACHED MAP:  
SURVEY OF PORTIONS OF HIGHWAY 29/43 ON ONEIDA NATION LAND IN:  
Section 3, T24N, R19E and Section 12, T24N, R19E in Brown County, Wisconsin

FOR THE PERIOD TO: JULY 8, 2011 EXTENDED FROM JULY 1, 2011 TO OCTOBER 30, 2011

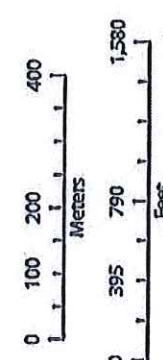
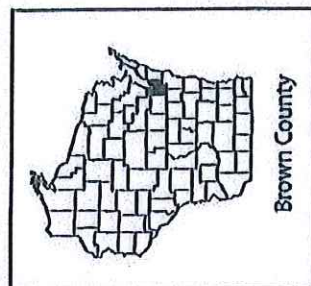
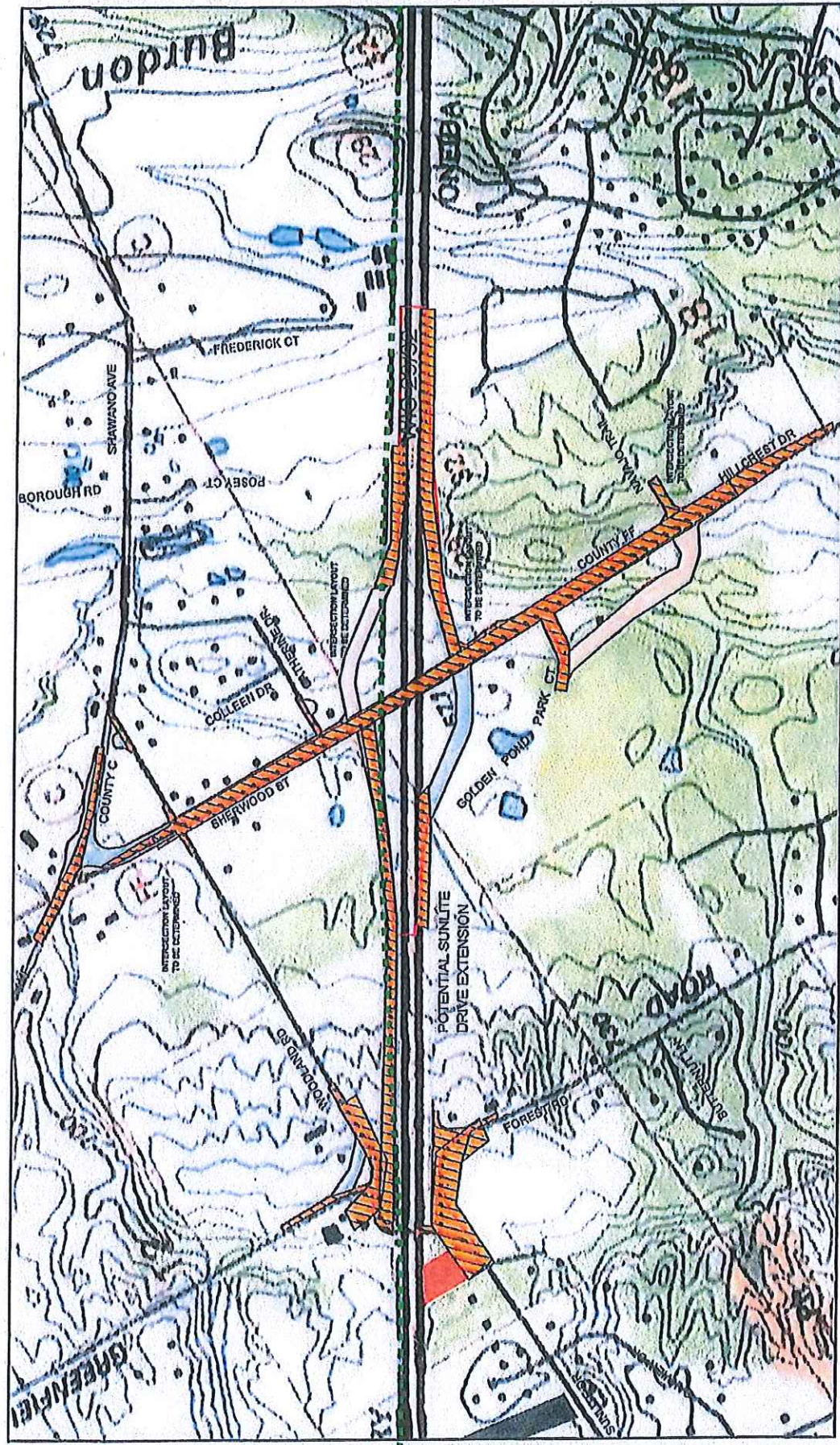
SPECIAL CONDITIONS: This permit is subject to the provisions of the Archaeological Resources Protection Act approved October 1979 and the regulations thereunder, as well as any special conditions as attached.

SIGNATURE AND TITLE OF APPROVING OFFICIAL:

DATE 8/9/11

REGIONAL DIRECTOR, BUREAU OF INDIAN AFFAIRS, MIDWEST REGIONAL OFFICE



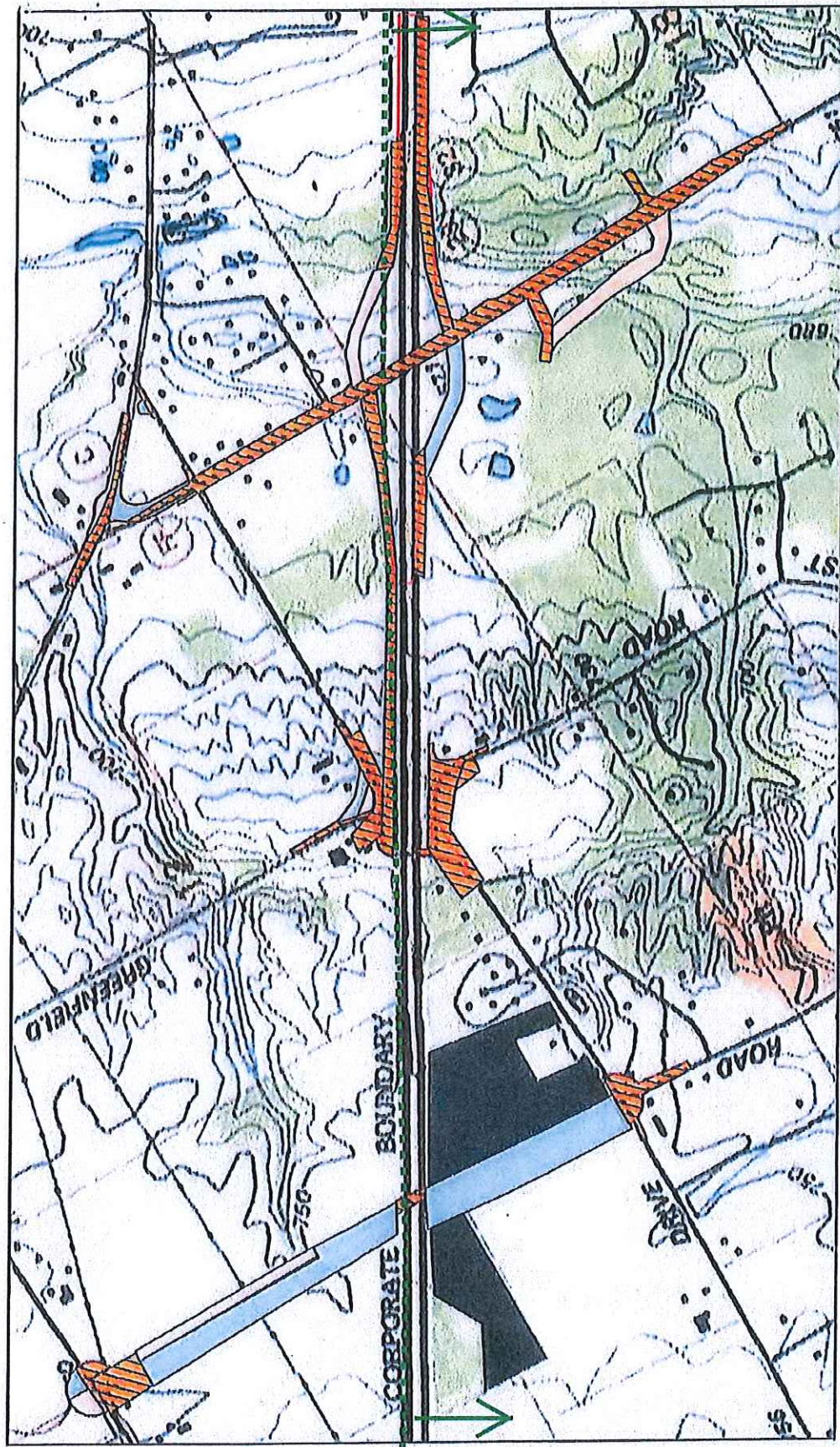


- Legend**
- Additional Survey Area
  - Access Denied
  - Pedestrian Survey
  - Shovel Tested
  - Visual Inspection Disturbed
  - Tribal Lands

Oneida Reservation Boundary as depicted  
on the Oneida North USGS topographic quadrangle, 7.5' series

**STH 29 and County Road FF  
Overview Survey Coverage**  
 WisDOT ID: 9200-04-00  
 Great Lakes Archaeological Research  
 Center, Inc. Project 10.151  
 Mapped: 14 September 2011, NJW  
 Sources: USGS, Ayres, GLARC

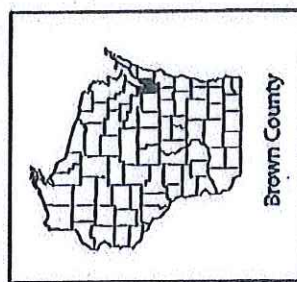
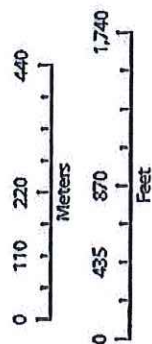




**STH 29 and County Road FF  
with Pine Tree Road Survey Coverage**  
 WisDOT ID: 9200-04-00  
 Great Lakes Archaeological Research  
 Center, Inc. Project 10.151  
 Mapped: 14 September 2011, NUW  
 Sources: USGS, Ayrtes, GLARC

**Legend**

- Additional Survey Area
- Access Denied
- Pedestrian Survey
- Shovel Tested
- Visual Inspection Disturbed
- Oneida Reservation Boundary as depicted on the Oneida North USGS topographic quadrangle, 7.5' series





# **ARCHAEOLOGICAL SURVEY FIELD REPORT**

Wisconsin Department of Transportation  
DT1978 8/2007 (Replaces ED864)

<b>PROJECT INFORMATION</b>			
Project ID <b>9200-04-00</b>	Highway/Street <b>STH 29/CTH FF</b>	County <b>Brown</b>	SHSW Compliance Number
Project Termini		Project Size miles	6.21 acres
Township(s) <b>Hobart</b>	Town/Range <b>T24N/R19E and T24N/R20E</b>	Sections <b>11, 12, 13, 14 and 7, 18</b>	
Project Type <input checked="" type="checkbox"/> Reconstruction <input type="checkbox"/> Reconditioning <input type="checkbox"/> Bridge <input type="checkbox"/> Wetland Mitigation <input type="checkbox"/> Other			
Landowners Contacted - If No, Explain <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Permits Obtained - If Yes, Attach <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>LITERATURE SEARCH</b>			
Previously Reported Sites In Project Area <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Archaeology and Records Literature Search <input checked="" type="checkbox"/> Attached	Cemetery In Project Area <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>FIELDWORK</b>			
Dates of Field Work <b>9/7/2011</b>	Crew Size <b>2</b>	Area Surveyed <b>6.21 acres</b>	
<b>SURVEY TECHNIQUES - Attach project plans showing survey coverage.</b>			
<input checked="" type="checkbox"/> Shovel Testing <input type="checkbox"/> Surface Collection		<input checked="" type="checkbox"/> Other - Describe Soil cored 0.10 acres and visual inspection of 6.06 acres of paved/disturbed.	
0.05 acres 15 interval		acres interval	
Describe Visibility There was zero visibility for surface collection.			
<b>LAND USE - Describe. Also, attach map, showing location.</b>			
Were there area(s), which were not surveyed? If yes, show on project plans and explain. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Were there area(s), which were extensively impacted? If yes, show on project plans and explain. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No    Much of the area was paved or disturbed by previous road construction.			
Comments 47BR0373, the Eli Pelegrin Site, is mapped in the project area. The site was reported based on the recovery of an isolated copper spear point located on the property; the exact location of the find is unknown. Survey of the area coincident with the site boundaries did not locate any additional materials.			
<b>ISOLATED FINDS - Describe. Also, attach map, showing location.</b>			
None			
I certify that the literature search and all fieldwork conducted for this report was done according to the Wisconsin Archeological Survey Guidelines. No archeological sites were identified in the project area.			

Great Lakes Archaeological Research Center, Inc.  
(Print Name of Firm or Institution)

Katherine E. Shillinglaw, MS, RPA  
(Print Name of Archaeologist)

(Signature of Archaeologist)

9/20/2011  
(Date)

**Note:** Current archaeological methods may not detect buried sites or burial areas. If artifacts, or human remains are discovered during construction, immediately stop construction in that area and notify the Wisconsin Department of Transportation, Bureau of Equity & Environmental Services.





Crew conducting shovel test survey south of Catherine Drive for the Cui Du Sac redesign facing east.



Crew conducting shovel test survey on the north side of CTH C for the CTHC/CTHFF intersection redesign, facing southeast.

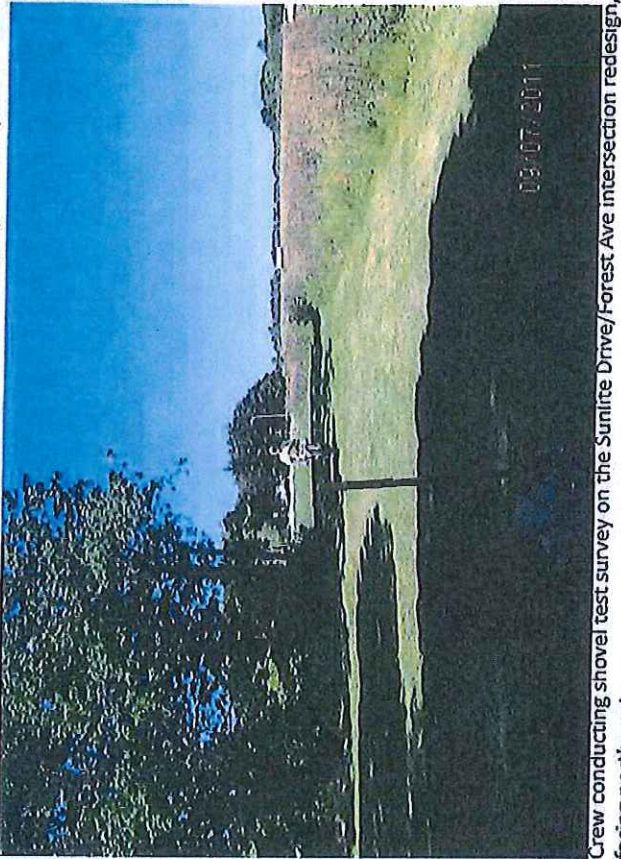


Heavily landscaped area of the City FF/Navajo Trail, facing southwest.

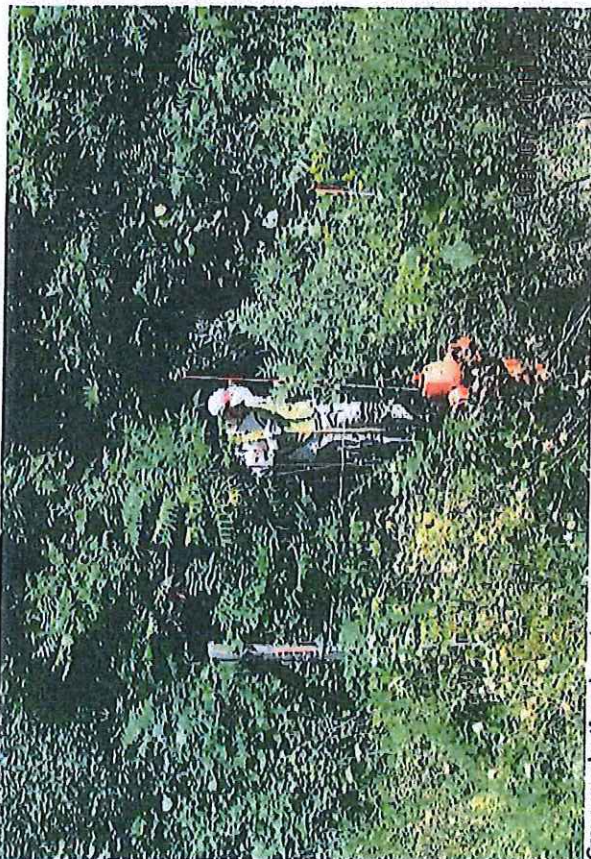


Disturbed/Landscaped area of the City FF/STH 29 south ramps intersection redesign, facing east.

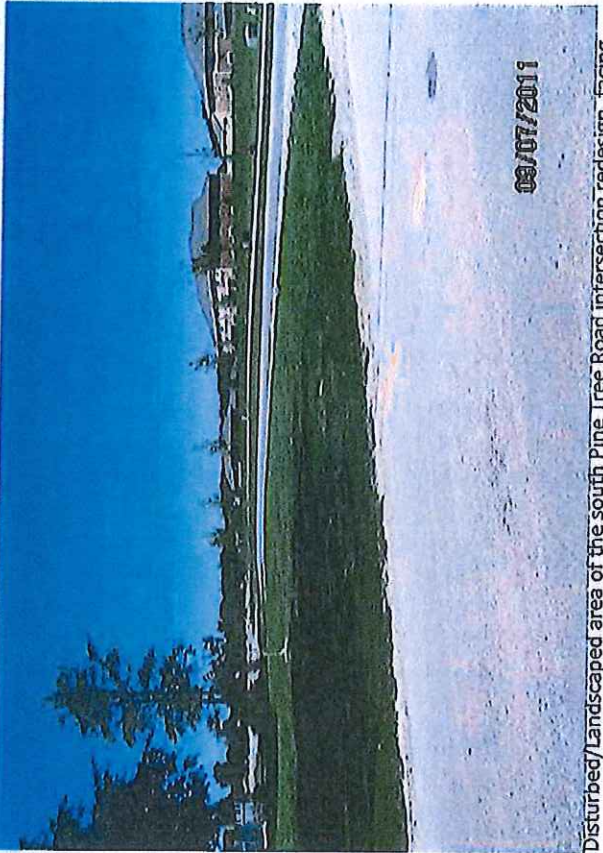




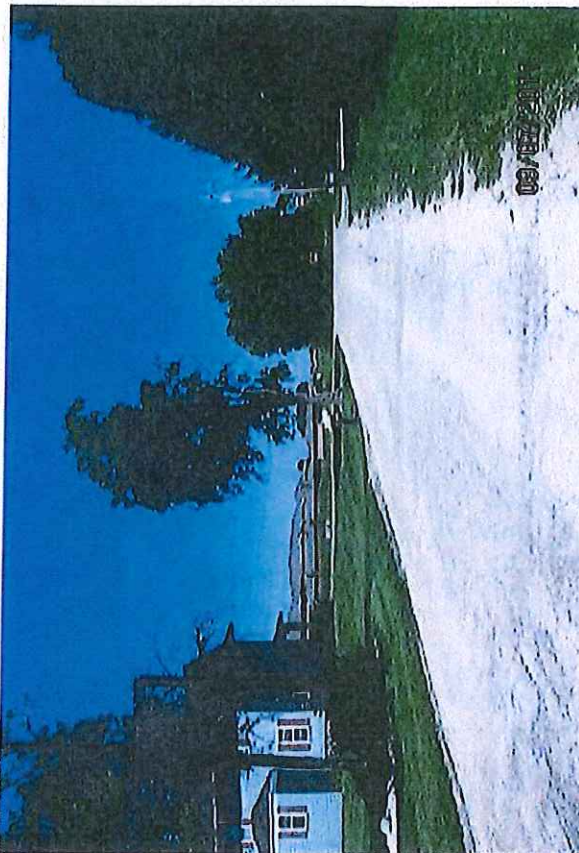
Crew conducting shovel test survey on the Sunlite Drive/Forest Ave intersection redesign, facing northwest



Crew conducting shovel test survey on the northeast corner of the Cty FF/Navajo Trail intersection redesign, facing northeast

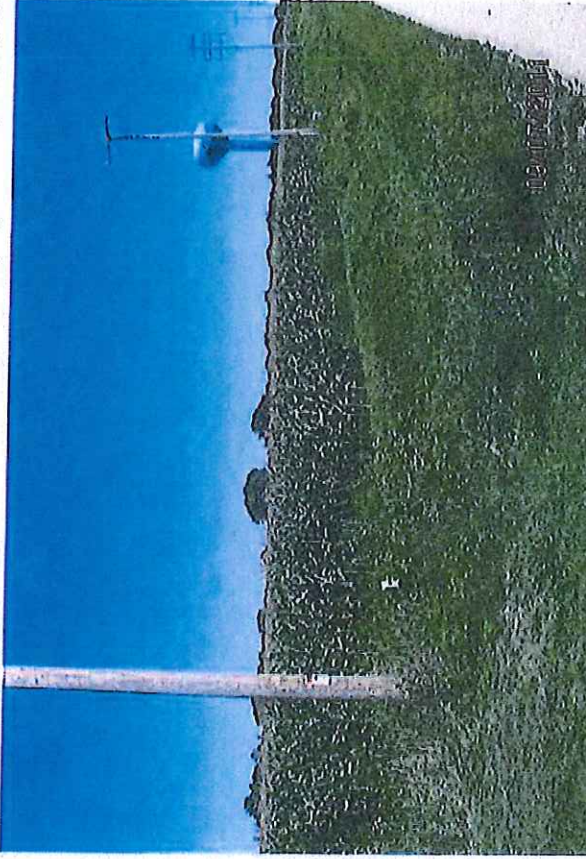


Disturbed/Landscaped area of the south Pine Tree Road intersection redesign, facing northwest

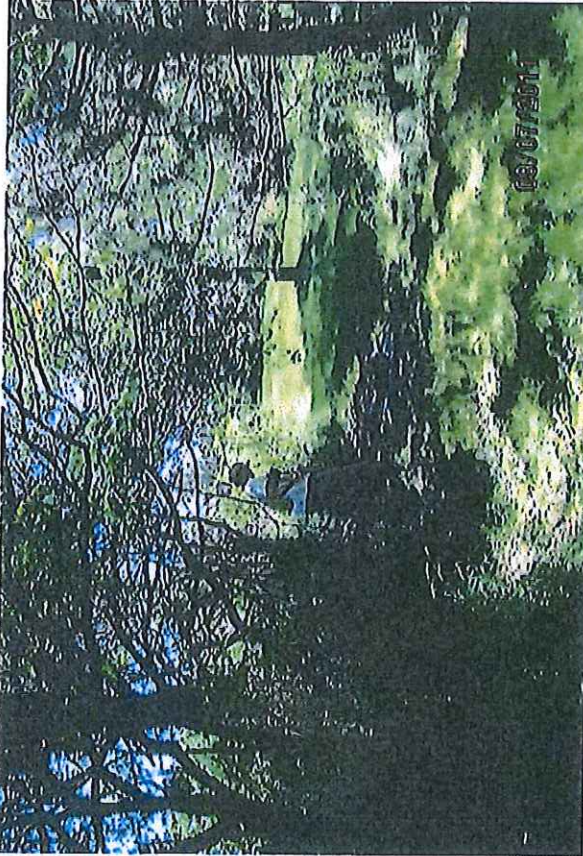


Disturbed areas south of the south Pine Tree Road intersection redesign, facing north





Field surveyed with pedestrian survey on the northeast corner of the north Pine Tree Road intersection redesign, facing northeast



Crew conducting shovel test survey in the area of the north Pine Tree Road intersection redesign, facing south.

# ARCHAEOLOGICAL LITERATURE AND RECORDS REVIEW

DT1459 3/2003

Wisconsin Department of Transportation

## PROJECT INFORMATION

Project ID 9200-04-00	Highway/Street STH 29/CTH FF	County Brown	SHSW Compliance Number
Project Termini			

Township(s) Hobart	Town/Range T24N/R19E and T24NR19E	Sections 11, 12, 13, 14 and 7, 18
USGS Quadrangle(s) Onelda North		

## SOURCES RESEARCHED

☐ See Continuation Sheet

<input checked="" type="checkbox"/> OSA USGS Maps	<input checked="" type="checkbox"/> Previous Surveys	<input checked="" type="checkbox"/> CEB Atlas
<input checked="" type="checkbox"/> WI Land Economic Inventory (WLEI)	<input checked="" type="checkbox"/> County History	<input checked="" type="checkbox"/> CEB Manuscripts
<input checked="" type="checkbox"/> Burial Sites Office	<input type="checkbox"/> Archival Maps:	
Publisher Snyder, Van Vechten and Co	Year 1878	Publisher C.M. Foote and Co.
Publisher W.W. Hixson and Co	Year 1900	Publisher W.W. Hixson and Co.
		Year 1889
		Year 1924
<input checked="" type="checkbox"/> Other General Land Office Maps		

## SITES IN PROJECT AREA

☐ See Continuation Sheet

Total Number of Sites	Prehistoric 1	Historic 0	Cemeteries/Burials 0
Code #47 (t)BR-0373	Type Isolated find	Affiliation Unknown Prehistoric	
#47 -			
#47 -			

## SITES WITHIN ONE MILE OF THE PROJECT AREA

☐ See Continuation Sheet

Total Number of Sites	Prehistoric 10	Historic 1	Cemeteries/Burials 1
Code #47 BR-0264	Type Campsite/village	Affiliation Late Woodland	
#47 (t)BR-0323	Campsite/village	Archaic	
#47 (t)BR-0324	Campsite/village	Late Archaic, Late Paleo-Indian	
<input checked="" type="checkbox"/> Sites Reported In the Project Area <input checked="" type="checkbox"/> Sites Reported Within One Mile <input type="checkbox"/> No Sites Reported in the Project Area			
Research Conducted by Katherine Shillinglaw			Date 9/20/2011

I certify that the literature search was done according to the Wisconsin Survey Guidelines.

Katherine E. Shillinglaw, MS, RPA

(Print Name of Archaeologist)

Great Lakes Archaeological Research Center, Inc.

(Print Name of Firm or Institution)

(Signature of Archaeologist)

September 20, 2011

(Date)



**SOURCES RESEARCHED (Continued)**

Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year
Publisher	Year	Publisher	Year

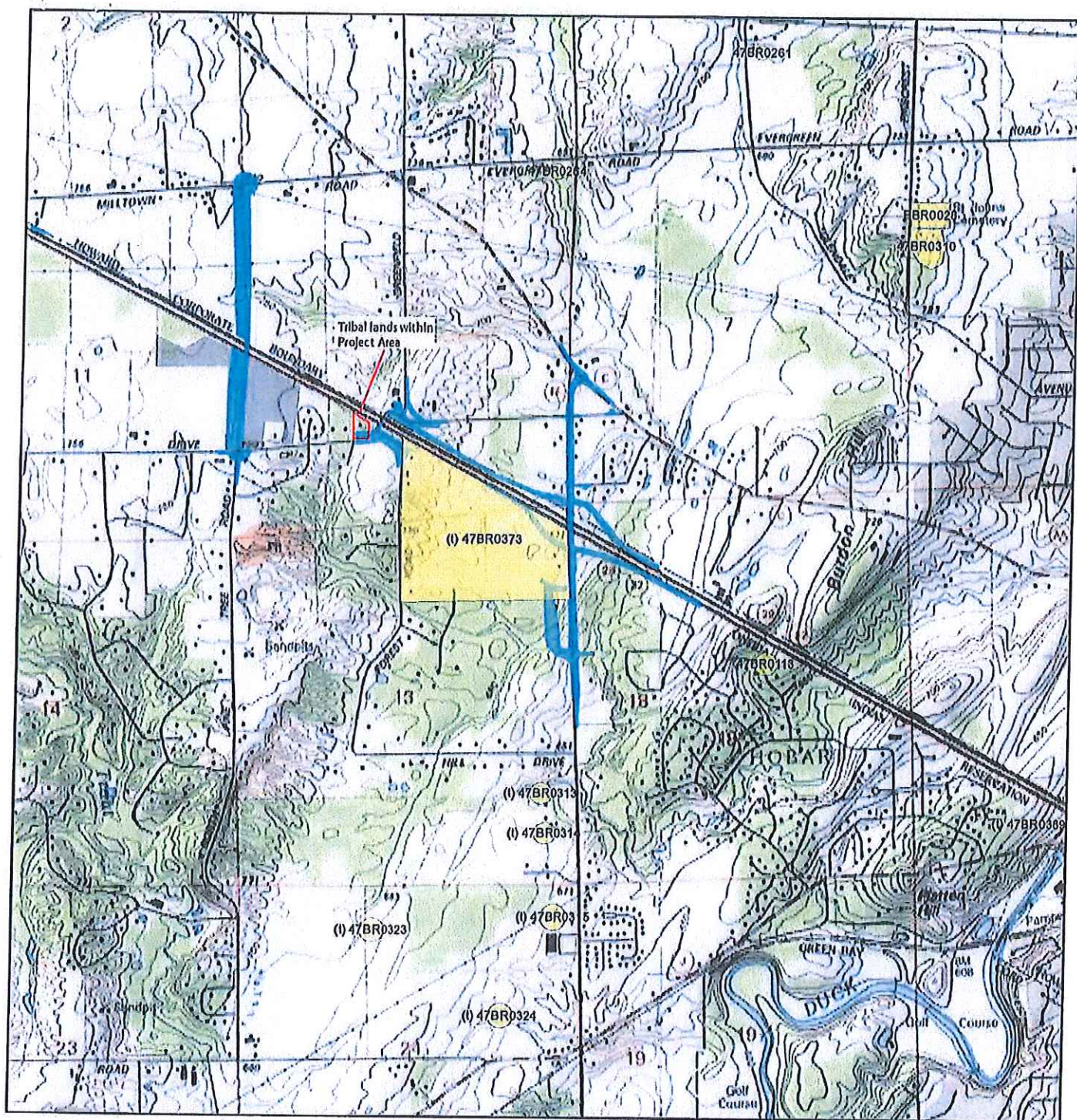
**SITES IN PROJECT AREA (Continued)**

Code	Type	Affiliation
#47 -		
#47 -		
#47 -		
#47 -		
#47 -		
#47 -		
#47 -		
#47 -		
#47 -		

**SITES WITHIN ONE MILE OF THE PROJECT AREA (Continued)**

Total Number of Sites	Prehistoric 10	Historic 1	Cemeteries/Burials 1
Code	Type	Affiliation	
#47 (t)BR-0313	Lithic scatter	Early Archaic, Middle Archaic	
#47 (t)BR-0314	Lithic scatter	Early Archaic, Middle Archaic	
#47 (t)BR-0315	Campsite/village	Archaic, Historic Indian, Late Prehistoric, Woodland	
#47 BR-0113	Isolated finds	Unknown Prehistoric	
#47 BBR-0028	Cemetery/burial	Historic Euroamerican	
#47 BR-0261	Isolated find	Unknown Prehistoric	
#47 BR-0310	Campsite/village	Early Woodland	
#47 (t)BR-0389	Campsite/village	Archaic, Late Archaic, Late Woodland, Middle Woodland, Woodland	
#47 -			





**Previously Reported Archaeological Sites  
within one mile of the  
STH 29/CTH FF Project Area**

WisDOT ID 9200-04-00

Great Lakes Archaeological Research Center, Inc.

Mapped: September 19, 2011

Data Sources: USGS, WHS, THPO, GLARC.

0 215 430 860

Meters

0 650 1,300 2,600

Feet

1:24,000



Brown County



## BIBLIOGRAPHY OF ARCHAEOLOGICAL REPORT FORM

WHS/SHSW # \_\_\_\_\_ COUNTY: Brown

AUTHORS: Shillinglaw, Katherine E.

REPORT TITLE: ASFR, STH 29/CTH FF, Brown County, Wisconsin (WisDOT 9200-04-00)

DATE OF REPORT (MONTH AND YEAR): September 2011

SERIES/NUMBER: \_\_\_\_\_

PLACE OF PUBLICATION: Great Lakes Archaeological Research Center, Milwaukee, WI

LOCATIONAL INFORMATION [LEGAL DESCRIPTION OF SURVEY AREA (T-R-S)]  
T24N/R19E/Section 11, 12, 13, 14

U.S.G.S. QUAD MAP(S): Oneida North

SITE(S) INVESTIGATED: BR-0373

ACRES INVESTIGATED: 6.21

AGENCY # WisDOT

### INVESTIGATION TECHNIQUES COMPLETED (Check all that apply.)

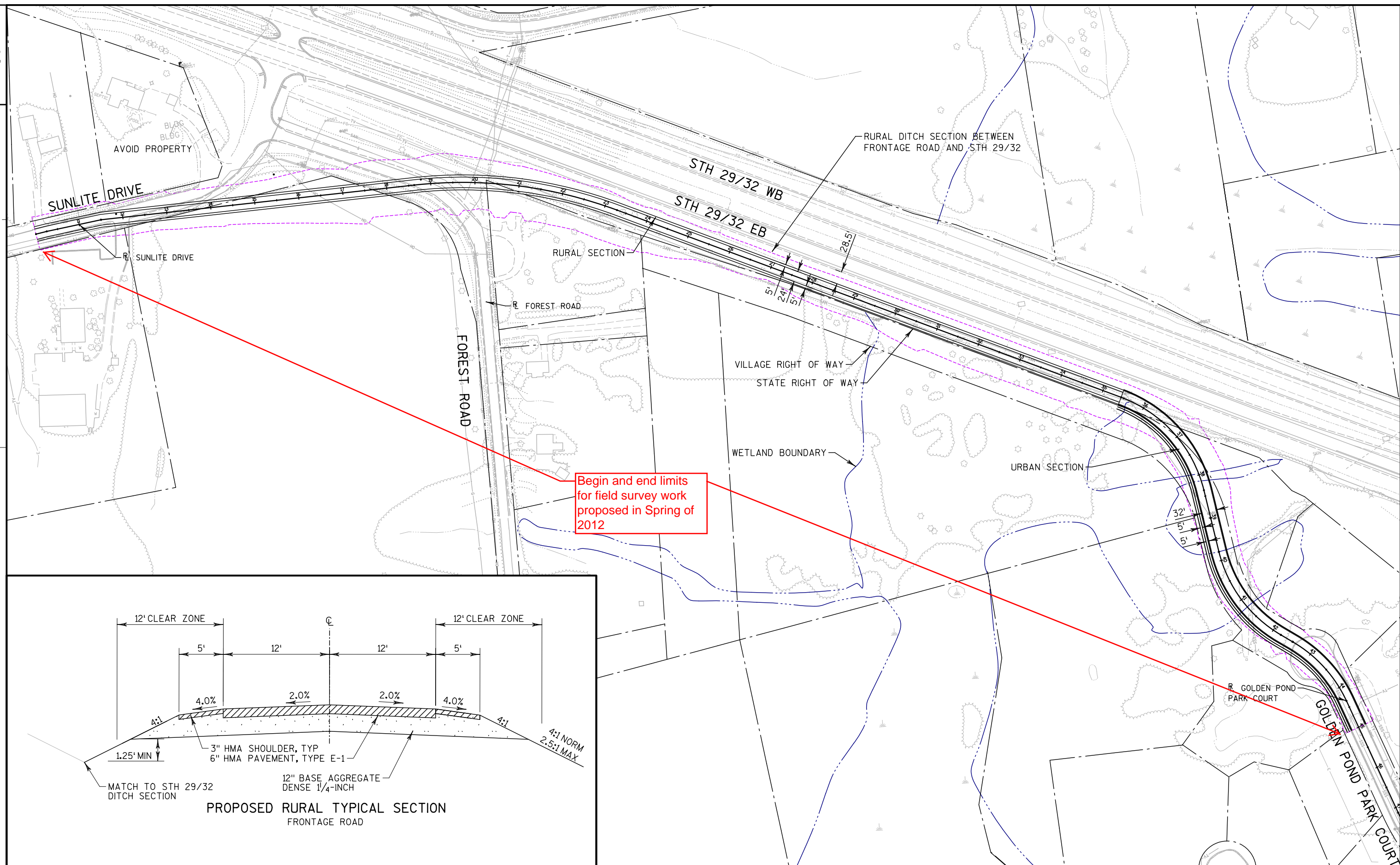
- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Avocational Survey                        | <input type="checkbox"/> Chance Encounter                          | <input checked="" type="checkbox"/> Controlled Surface Collection |
| <input type="checkbox"/> Faunal Analysis                           | <input type="checkbox"/> Floral Analysis                           | <input type="checkbox"/> Geomorphology                            |
| <input type="checkbox"/> Historical Research                       | <input type="checkbox"/> Interview/Informant                       | <input type="checkbox"/> Land Use History                         |
| <input checked="" type="checkbox"/> Literature Background Research | <input type="checkbox"/> Major Excavation                          | <input type="checkbox"/> Mechanical Stripping                     |
| <input type="checkbox"/> Monitoring                                | <input type="checkbox"/> Osteological Analysis                     | <input checked="" type="checkbox"/> Phase I-Surface Survey        |
| <input type="checkbox"/> Phase II                                  | <input type="checkbox"/> Phase II-Corridor Only                    | <input type="checkbox"/> Phase III                                |
| <input type="checkbox"/> Phase III-Corridor Only                   | <input type="checkbox"/> Records/Background                        | <input type="checkbox"/> Records/Background (Pred. Model)         |
| <input type="checkbox"/> Remote Sensing                            | <input checked="" type="checkbox"/> Shovel Testing/Probing (Inten) | <input checked="" type="checkbox"/> Soil Core                     |
| <input type="checkbox"/> Surface Survey (Intensive)                | <input type="checkbox"/> Test Excavation                           | <input type="checkbox"/> Traditional Knowledge                    |
| <input type="checkbox"/> Vandalism                                 | <input type="checkbox"/> Walk Over (Reconnaissance)                | <input type="checkbox"/> Unknown                                  |
| <input type="checkbox"/> Other: _____                              |  |   |

ABSTRACT: ☐ Included in report ☒ Written in space below

Phase I archaeological investigations were conducted for STH 29 intersection improvements in Brown County, Wisconsin. No cultural resources were recovered as a result of the survey.

Office of the State Archaeologist

BAR # \_\_\_\_\_





1. Prior to leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species;
2. Drain all water from boats, trailers, bilges, live wells, coolers, bait buckets, engine compartments, and any other area where water may be trapped;
3. Inspect boat hulls, propellers, trailers and other surfaces. Scrape off any attached mussels, remove any aquatic plant materials (fragments, stems, leaves, seeds, or roots), and dispose of removed mussels and plant materials in a garbage can prior to leaving the area or invested waters; and
4. Disinfect your boat, equipment and gear by either:
  - Washing with ~212° F water (steam clean), OR
  - Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, OR
  - Disinfecting with either 200 ppm (0.5 oz per gallon or 1 Tablespoon per gallon) Chlorine for 10-minute contact time or 1:100 solution (38 grams per gallon) of Virkon Aquatic for 20- to 30-minute contact time. Note: Virkon is not registered to kill zebra mussel veligers nor invertebrates like spiny water flea. Therefore this disinfect should be used in conjunction with a hot water (>104° F) application.

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.

### **5.3 Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.**

The department obtained the U.S. Army Corps of Engineers Section 404 Permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit is available from the regional office by contacting Paul Vraney at (920) 492-2232.  
(090105) 107-054

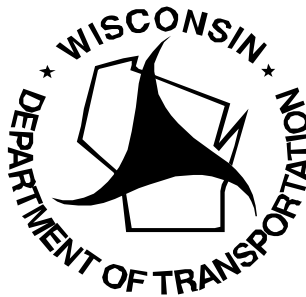
### **5.4 Notice to Contractor – Tribal Cultural Resource Sensitivity Training.**

Prior to start of field construction activities all contractor and subcontractor personnel planning to work on this contract must attend tribal cultural resource sensitivity training. The training is anticipated to last approximately two hours. Provide two weeks advanced notice to the Bureau of Equity and Environmental Services (BEES) to schedule training. The contact at BEES is Lynn Cloud (608) 266-0099 or Jim Becker (608)261-013. This training cost is considered incidental to construction.

# **APPENDIX G - Conceptual Stage Relocation Plan**

# **CONCEPTUAL STAGE RELOCATION PROGRAM PLAN**

**STH 29 & CTH FF Interchange  
Brown County  
WisDOT Project I.D. 9200-04-21**



**December 6, 2011**

**PREPARED BY:  
Dawn Van Oudenhoven  
Wisconsin Department of Transportation  
Northeast Region – Real Estate**

## **PURPOSE**

This conceptual Stage Relocation Plan has been prepared in accordance with the Federal Highway Administration (FHWA) Environmental Impact and Related Procedures Final Rule (23CFR 771), the FHWA Technical Advisory for environmental document preparation (T6640.8A, October 1987), and the Wisconsin Department of Transportation (WisDOT) Relocation Assistance Manual. The purpose of the conceptual plan is to provide preliminary information about the potential relocations that may occur as a result of the proposed STH 29 & CTH FF improvement.

## **PROJECT DESCRIPTION**

### **Project purpose and need**

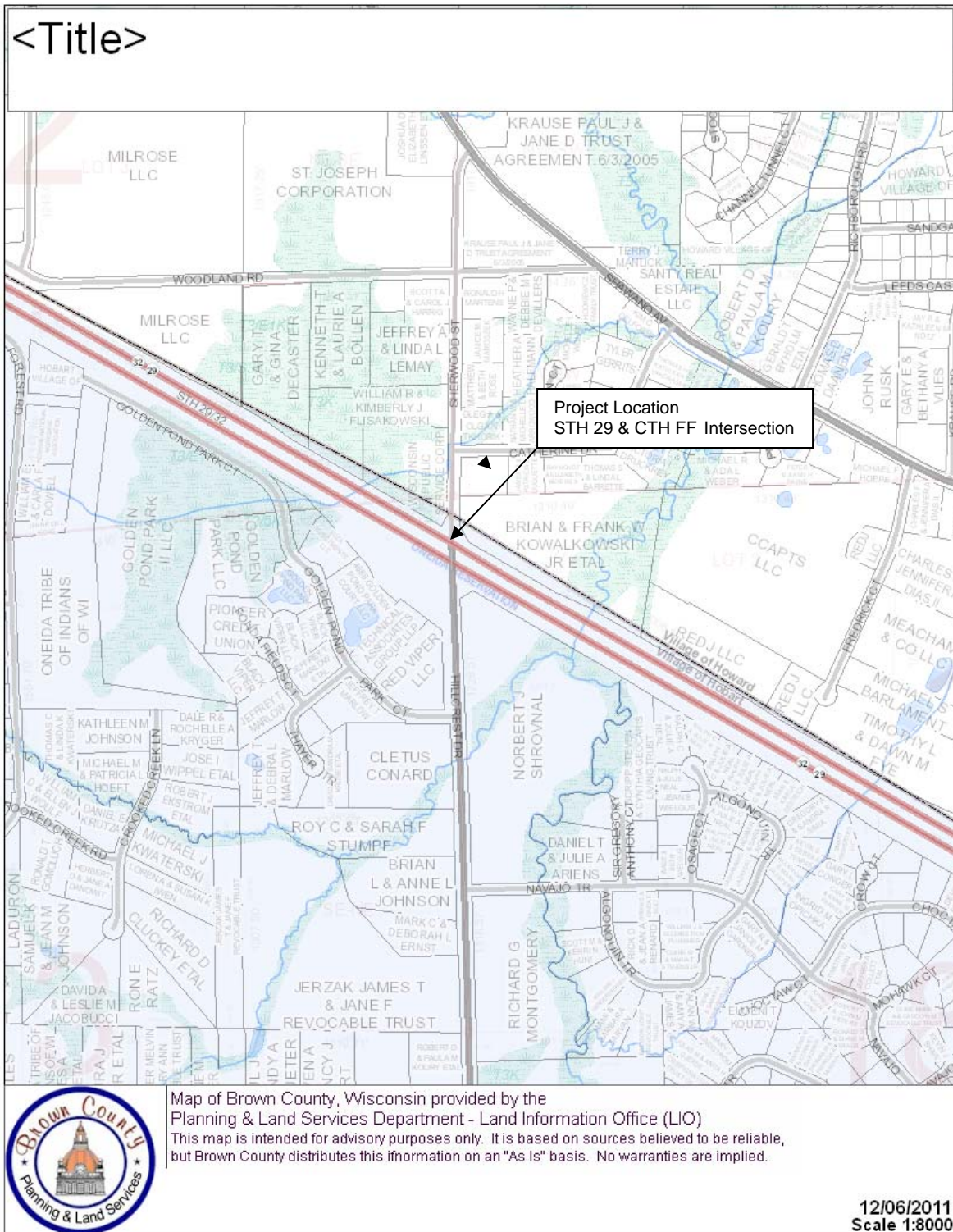
WIS 29 functions as the primary route across north-central Wisconsin. Current traffic volumes make WIS 29 the state's most heavily traveled east-west highway north of I-94. WIS 29 also carries a high volume of truck traffic that illustrates its importance to Wisconsin's industry, business, and agriculture. This section of WIS 29 was converted to a 4-lane facility with a mix of at-grade intersections and interchanges in the 1980's and 1990's. Through a freeway conversion project, limiting access only to interchanges would maintain the corridor investment by providing a safer facility for both regional and local traffic and improving mobility on this project segment. The conversion would also coordinate the State's transportation planning effort with local comprehensive planning initiatives.

### **Project description**

This section of WIS 29 was recently mapped for conversion to a freeway through the process established in Chapter 84, Section 295 of the Wisconsin State Statutes (84.295). This project proposes to produce plans that are "shelf" ready to convert a portion of the corridor from the west county line to Green Bay. The at-grade intersection at County FF will be replaced with a diamond interchange. Additionally, the location of the Golden Pond Park Court access will be relocated to allow a desirable distance between the access point and the interchange. A cul-de-sac will also be constructed at Catherine Drive to limit access near the interchange.



# PROJECT MAP



## DEMOGRAPHIC INFORMATION ON COMMUNITIES AFFECTED

Table 1  
Population Information

Location	Population Year 2010	Population by Race			Population by Age		
		White, Non Hispanic	African American	Other	Under 18	18 and Over	65 and Over
Village of Howard	17,399	16,316	261	822	4,643	12,756	1,866
Village of Hobart	6,182	4,829	31	1,322	1,678	4,504	792
Source: United States Census Bureau – Census 2010							

Table 2  
Household Information

	Total Housing Units	Owner Occupied Units	Renter Occupied Units	Vacant Housing Units
Village of Howard	7223	6,941	2,339	188
Village of Hobart	2275	1,959	221	37
Source: United States Census Bureau – Census 2010				

Table 1 indicates population information for the Villages of Howard and Hobart. Table 2 indicates household information for each of the Villages.

Executive order 12898 on Environmental Justice requires agencies to achieve environmental justice by identifying and addressing disproportionately high and adverse human health and environmental effects (including interrelated social and economic effects) on minority, low-income, disabled and elderly populations. The demographic information for Brown County indicates little possibility for affecting Environmental Justice populations. Further, the project team has met or spoken with the affected business owner/occupant through the project's public information meetings and through individual contacts by the WisDOT Northeast Region Real Estate Staff. There are no known Environmental Justice Concerns.

## **RELOCATION ASSISTANCE INFORMATION**

Acquisitions and relocations resulting from the proposed STH 29 and CTH FF improvement will be done in accordance with the Uniform Relocation Act of 1972. This law ensures landowners and tenants are treated fairly when the public interest requires acquisition and relocation of homes and businesses. Eligible persons relocated from their home or business will receive “Just Compensation for Property Acquired.” Other relocation assistance benefits include relocation advisory services, reimbursement of moving expenses, replacement housing payments, down payment assistance, replacement business payments, and business reestablishment expenses. Under state law, no person or business will be displaced unless a comparable replacement home or business is provided.

### **Relocation Services for Residential Displacements**

In addition to maintaining necessary records and performing various other administrative functions, the relocation staff will offer and provide the following assistance to all displacees:

1. Counsel each individual and family with regard to their specific re-housing needs, resulting in each securing replacement housing that is decent, safe and sanitary; adequate for their needs; suitably located; and within their financial means.
2. Continually gather data commensurate with the relocatee’s needs and advise them accordingly. Provide current and continuing information on the availability, prices and rentals of comparable decent, safe and sanitary sales and rental housing and of comparable commercial properties and locations for displaced businesses. Appointments will be made, as well as arrangements for the inspection of referral housing. Inspections will be made of those units that the relocatee indicates a desire to rent or purchase to formally certify adequacy and that they are decent, safe and sanitary.
3. Assist prospective homeowners in obtaining mortgage financing and aid in the preparation and submission of offers to purchase. Assist in obtaining relocated documents, e.g. credit reports, appraisals, surveys, etc.
4. Advise prospective tenants on lease arrangements, tenant/landlord responsibilities, security deposit practices, rental ranges, etc.
5. Provide information and referrals to local welfare and social service assistance agencies when it appears a need for such service.
6. Provide information on school district boundaries and the routing and scheduling of public transportation.
7. Make personal contacts with each displacee regularly for the purpose of discussing and providing leads, referrals and all such other matters regarding re-housing which is of interest to the relocatee and necessary for his successful relocation. Visitation will be geared to the complexity, the specific need and the level of availability and will be

repeated regularly to assure that the re-housing responsibilities are discharged completely and fully in compliance with the spirit and intent of the program.

8. Provides assistance of complete claims for relocation payments for which each displacee may be eligible.

9. Assist in making moving arrangements including the transfer of utility service.

10. Provide all required written notices, delivered by personal contact whenever feasible, to insure full understanding of eligibility requirements, payment options project information and other notices required by law, regulations or as otherwise appropriate.

11. Advise them of grievance procedures, arrangements, and agencies involved.

### **Services for Commercial Displacements**

Relocation services for commercial displacements include the following:

#### **A. Commercial Project Assurances**

In accordance with Section 32.25(2)(b), Wisconsin Statutes, "Assist owners of displaced business concerns and farm operations in obtaining and becoming established in suitable business locations or replacement farms."

B. The commercial properties affected by this project will be assisted in their relocation in the following manner:

1. Maintaining listings of vacant commercial properties.
2. Maintaining close contact with local real estate agencies and brokers dealing in commercial space.
3. Informing business concerns of the Small Business Administration entitlements when federal aid is involved.
4. Contacting local development corporations and other similar organizations to make all possible assistance available.
5. Assist in obtaining or transferring business permits and licenses.
6. Assist in securing and making moving arrangements.
7. Joint development of inventory of personal property to be moved.
8. Advise businesses in site management procedures and occupancy terms and conditions.
9. Advise them of their relocation claim entitlements and assist them in filing the claim with documentation.

C. Contact with each commercial displacee will be made at regular intervals during which various leads or referrals will be offered. Visitations will be geared to the complexity, the specific needs and the level of availability of replacement properties and will be repeated until the relocation agent's responsibilities are completely and fully discharged and are in compliance with the spirit and intent of the program.



## **DIVISIVE OR DISRUPTIVE EFFECTS ON COMMUNITIES AND NEIGHBORHOODS**

There appears to be no unusual circumstances regarding the residential and business relocations. This project will have a very minimal effect on the communities that remain after the relocation process.

In addition, no significant disruption effects should exist, with the possible exception of the construction period. No known concentration of predominant ethnic minority, elderly, or handicapped people were noted at the previous public meetings.

## **SPECIAL RELOCATION ADVISORY SERVICES**

As noted under “Demographic Information on Affected Communities” there are no known unusual circumstances with respect to race, income level, age, disability, or other factors that would require special relocation advisory services for owners or occupants of displaced homes or businesses.

Sufficient relocation housing and business sites are expected to be available at the time real estate activities are initiated for the proposed STH 29 & CTH FF improvement. The number of residential and business displacements will not cause an undue hardship to the real estate market.

Table 3 summarizes housing availability in the Villages of Howard and Hobart. A total of 126 single family homes and condominiums are currently listed. Of the 126 single family residential structures 71 are listed in the Village of Howard and 55 are listed in the Village of Hobart. It is clear from the information shown in Table 3 that the real estate market is very strong and the potential displaces will have an abundant number of properties to choose from.

Table 3  
Housing Availability

Price Range	3 BR	4 BR	5+ BR
\$ 0 - \$ 74,999	0	1	0
\$ 75,000 - \$ 99,999	1	0	0
\$100,000 - \$124,999	4	0	0
\$125,000 - \$149,999	9	1	0
\$150,000 - \$174,999	31	2	0
\$175,000 - \$199,999	12	8	0
\$200,000 - \$249,999	14	8	2
\$250,000 - \$349,999	6	8	3
\$350,000 - \$450,000	1	4	3
<b>Total</b>	<b>78</b>	<b>40</b>	<b>8</b>

The total number of displaced living units for the project is 5 (see Table 4). The size of the living units based on the estimated number of bedrooms is as follows:

- 3 bedrooms (3 units)
- 4 bedrooms (2 units)

Approximately 126 residential structures are for sale in Green Bay and surrounding areas. Of the approximate 126 residential structures, 71 structures are listed in the Village of Howard and 55 structures are listed in the Village of Hobart. In addition, there are numerous listings available in the Green Bay and surrounding areas as well.

A cursory check of available commercial properties in or near the project area indicated there were approximately 16 commercial and industrial sites with buildings that were for sale. The availability of commercial properties for sale is as follows: 11 buildings for sale between \$ 0 - \$149,999 and 5 buildings for sale between \$150,000 - \$249,999.

## ESTIMATE OF RESIDENTIAL DISPLACEMENTS

The proposed STH 29 & CTH FF improvement has the potential to impact 5 Residential structures. The residential displacements are summarized in Table 4.

Table 4  
Residential Displacement Summary

Parcel Number <sup>1</sup> and General Location	Occupancy		Characteristics	
	Owner	Rental	Type	Size (Estimated # of bedrooms)
1. 4653 Hillcrest Drive	X		1 story	3
2. 4619 Hillcrest Drive	X		1 story	3
3. 4611 Hillcrest Drive	X		1.5 story	4
4. 824 Sherwood Street	X		2 story	4
5. 838 Sherwood Street	X		2 story	3

<sup>1</sup>Parcel numbers are for purposes of this report only.

Residential displacement cost estimates are summarized in Table 5. The total estimated cost for the 5 displaced living units is approximately \$1,430,000.

**Table 5**  
**Residential Displacement Cost Summary**

Parcel Number <sup>1</sup> and General Location	Living Units	Acquisition Price <sup>2</sup>	Relocation Cost	Interest & Closing Cost	Moving Cost	Total Cost
1. 4653 Hillcrest Drive	1	\$155,000	30,000	1,500	2,500	189,000
2. 4619 Hillcrest Drive	1	\$270,000	30,000	1,500	2,500	304,000
3. 4611 Hillcrest Drive	1	\$475,000	30,000	1,500	2,500	509,000
4. 824 Sherwood St.	1	\$160,000	30,000	1,500	2,500	194,000
5. 838 Sherwood St.	1	\$200,000	30,000	1,500	2,500	234,000

<sup>1</sup> Parcel numbers are for purposes of this report only.

<sup>2</sup> Acquisition price (land & improvements) is based on a combination of 2010 assessed values from Brown County property tax records and WisDOT estimates.



## ESTIMATE OF BUSINESS DISPLACEMENTS

The proposed STH 29 & CTH FF improvement has the potential to impact 1 business to the extent to cause their relocation. The business displacement is summarized in Table 6.

Table 6  
Business Displacement Summary

Parcel Number and General Location	Name	Occupancy	Type and Characteristics
1. 4696 Hillcrest Drive	Norbert J. Shrovnal	Owner	Woodworking Shop
1. Parcel numbers used in this table are for purposes of this report only.			

Table 7  
Discussion of Potential Problems and Solutions

Unit	Potential Problem	Potential Solution
1	None	None

Business displacement cost estimates are summarized in Table 8. The total estimated cost for the business displacements is approximately \$ 289,000.

Table 8  
Business Displacement Cost Summary

Name	Acquisition Price	Relocation	Searching	Re-establish	Interest And Closing	Moving	Total
1. Norbert Shrovnal	\$200,000	50,000	2,500	10,000	1,500	25,000	289,000

## **SUMMARY**

The proposed STH 29 & CTH FF improvement will displace 5 residential structures. The total estimated cost for the displaced living units is \$1,430,000.

The proposed STH 29 & CTH FF improvement project will displace 1 individual business. The total estimated cost for the displaced businesses is \$289,000.

The residential and business displacements discussed in this Conceptual Stage Relocation Plan are based on preliminary project information and are subject to change when more detailed engineering plans are developed.

There are no known Environmental Justice concerns with the business displacements, no substantive divisive or disruptive effects on communities or neighborhoods were identified, and no special relocation advisory services are anticipated.