# STATEWIDE TRIBAL TRANSPORTATION SAFETY PLAN

**WISDOT PROJECT ID 0608-09-40**

**August 2018**

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# 1.0 Introduction

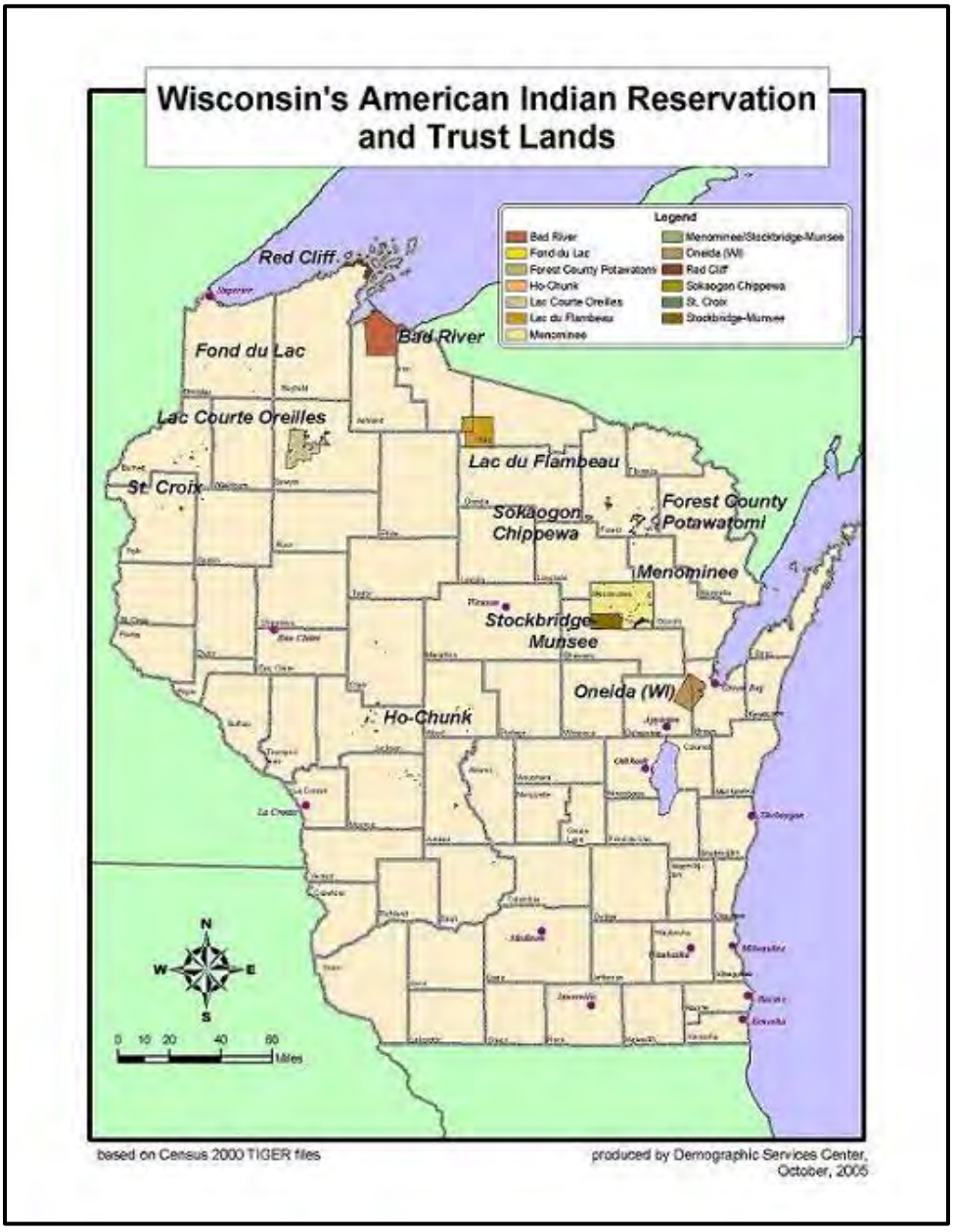
To address safety issues on Tribal lands, the Federal Highway Administration (FHWA) has initiated efforts to improve safety. The following steps were taken by FHWA:

- Developed the Strategic Highway Safety Plan for Indian Lands and Safety Management System in 2005. This plan's mission was to implement effective transportation safety programs to save lives, while respecting Native American culture and tradition by fostering communication, coordination, collaboration, and cooperation.
- The Safety Management System Implementation Plan was developed and updated in 2011. This plan is intended to aid tribal governments in collaborating with federal agencies and state departments of transportation; pursue training to increase the capacity and expertise of tribal governments in the roadway safety arena; and stimulate tribal innovation through peer to peer and best practice exchanges.
- Prepared a report to Congress on "Tribal Governments and Transportation Safety Data" in May 2017. This report summarizes the quality of safety data available to Tribal governments and makes recommendations for improving the quality and availability of safety data in Tribal areas.
- Developed an updated Tribal Transportation Strategic Safety Plan in August 2017.
- Prepared a report to Congress on "Options for Improving Transportation Safety in Tribal Areas" in January 2018. This report summarizes a list of transportation safety strategies that can be implemented to reduce transportation related fatalities and injuries in Tribal areas.
- Tribal Transportation Program Safety Fund is money set aside under the Fixing America's Surface Transportation Act (FAST Act) highway bill to address safety issues in Native America.

The FAST Act highway bill provides a 2% set aside for Tribal safety planning and an additional 2% set aside for Tribal safety projects ($8.99 million was awarded in 2016). Tribes may apply for safety funding each year, and can apply for funding for more than one project each year. The intent of the safety planning funding is for every Tribe to develop a Tribal Transportation Safety Plan (TTSP). Once a Tribe completes a TTSP, they can apply for funding for individual projects that are identified in their plan to improve safety within their communities. FHWA evaluates all project applications, and awards funds to projects that will address and improve identified safety issues, with the goal to reduce fatalities and serious injuries in transportation related crashes.

The Wisconsin Department of Transportation is preparing a statewide Tribal Transportation Safety Plan (TTSP) in coordination with the WisDOT Inter Tribe Task Force and the 11 federally recognized Indian Tribes located in the state. Locations for the Indian reservations and scattered trust lands are shown in Figure 1.

**Figure 1: Indian Reservation and Trust Lands**




The purpose of this plan is to identify safety concerns, areas of emphasis, and potential improvement options for improving safety on all Tribal lands in the state of Wisconsin. There are 11 federally recognized Tribes located in various locations throughout the state. The plan will also identify opportunities to combine projects from various Tribes and locations in order to package improvements as larger projects.

## 2.0 Vision

A vision, mission statement, and overall goals were developed for the TTSP. These statements and goals provide concise messages to guide the Tribes in improving safety on their transportation networks. The vision is a clear description of the desired long term outcomes for the Tribes, and includes a summarizing phrase to serve as a trigger to the rest of the vision in the mind of everyone that reads it. The Mission Statement supports the plan's vision and describes how the plan will achieve this vision.

Vision: To reduce total crashes on Tribal roadways by at least 20% within 10 years, and to provide a safe system for all transportation users.

Mission Statement: To improve safety and safety awareness for all transportation users in Tribal communities, through implementation of cost effective and culturally sensitive education, engineering, law enforcement, and emergency services solutions.

Goals:

- To reduce overall crashes on Tribal transportation networks by at least 20% within 10 years
- To enhance safety and opportunities for all users, including bicyclists and pedestrians
- To increase safety awareness within the community through education campaigns
- To include culturally sensitive elements in improvements where appropriate
- To encourage collaboration between Tribes in planning and implementing safety improvement projects

# 3.0 Process

The process followed in the development of this TTSP was based on FHWA's guidance, *Developing a Transportation Safety Plan*, which is part of a continuing educational series for Tribal governments entitled *Transportation Decision-making: Information Tools for Tribal Governments*. The process generally consists of seven steps:

1. Establish a safety leadership framework
2. Collect and analyze safety data
3. Determine emphasis areas
4. Research and identify potential strategies
5. Prioritize and incorporate strategies
6. Draft the plan
7. Evaluate and update the Transportation Safety Plan

## 4.0 Previous Reports and Data

Safety reports have been completed previously for all of the tribes in Wisconsin. These reports include Road Safety Audits (RSA's) and Road Safety Plans (RSP's). These reports summarized crash information for the Tribes, and identified safety issues and potential improvement strategies. Table 1 summarizes the available previous road safety reports for each Tribe.

**Table 1: Available Previous Road Safety Reports**

| Tribe | RSA | RSP/TTSP |
|---|---|---|
| Bad River Band of Lake Superior Chippewa Indians | X | |
| Forest County Potawatomi Community of Wisconsin | | X |
| Ho-Chunk Nation | | X |
| Lac Courte Oreilles Band of Lake Superior Chippewa Indians | X | X |
| Lac du Flambeau Band of Lake Superior Chippewa Indians of Wisconsin | X | X |
| Menominee Indian Tribe of Wisconsin | X | X |
| Oneida Tribe of Indians of Wisconsin | X | |
| Red Cliff Band of Lake Superior Chippewa Indians | X | X |
| Sokaogon Chippewa Community Mole Lake Band | X | X |
| St. Croix Band Chippewa Indians of Wisconsin | | X |
| Stockbridge-Munsee Community | X | X |
| Miscellaneous Reports:<br>Menominee Indian Tribe Existing Conditions Report (2011)<br>Crashes on Wisconsin Indian Reservations: Reporting, Conclusions, and Recommendations (2012) | | |

In addition to the RSA's and RSP's, all of the Tribes received Tribal Transportation Program Safety Funds (TTPSF) from Federal Highway Administration (FHWA) in order to update or create safety plans, or to construct safety improvement projects on Tribal lands. These grants, the status of the associated work, and any other safety initiatives for each Tribe are listed below in Table 2.

**Table 2: TTPSF Funding and Other Safety Initiatives**

| Tribe | Year of Funding | Amount | Purpose of Funding | Status of Work |
|---|---|---|---|---|
| Bad River Band of Lake Superior Chippewa Indians | 2013 | $12,500 | Develop Safety Plan | Completed/ approved in 2015 |
| Forest County Potawatomi Community of Wisconsin | 2014 | $12,500 | Develop TTSP | Plan completed/ approved by Tribal Council in July 2016 |
| | 2017 | $800,000 | Improvements to Kwe da kik Lane/US 8 intersection | To be completed with WisDOT project along US 8 |
| | 2017/ 2018 | -- | Construct pedestrian trail project and pedestrian | Applied for funding |

| Tribe | Year of Funding | Amount | Purpose of Funding | Status of Work |
|---|---|---|---|---|
| | | | underpass of US 8 | |
| Ho-Chunk Nation | 2013 | $12,500 | Ho-Chunk Nation Roads Safety Plan | Plan completed April 2016 |
| | 2014 | $12,500 | Engineering for turn lanes at Hwy 21/Eureka Road intersection | Project is currently in design phase |
| Lac Courte Oreilles Band of Lake Superior Chippewa Indians | 2013 | $12,500 | Tribal Safety Plan | Plan submitted to WisDOT spring 2016 |
| Lac du Flambeau Band of Lake Superior Chippewa Indians of Wisconsin | 2013 | $12,000 | Develop Safety Plan | TTSP in progress |
| Menominee Indian Tribe of Wisconsin | 2013 | $905,000 | Improvements to STH 47/STH 55 from Duquaine Road to CTH VV; includes sidewalks, lighting, crosswalks with beacons | Construction scheduled for 2020 |
| Oneida Tribe of Indians of Wisconsin | 2013 | $12,500 | Develop TTSP | TTSP has not been started; Tribe is working with BIA and WisDOT to identify potential safety projects |
| Red Cliff Band of Lake Superior Chippewa Indians | 2013 | $12,500 | Develop Safety Plan | |
| Sokaogon Chippewa Community Mole Lake Band | 2013 | $7,500 | Safety Plan Update | Updates completed in 2014 |
| | 2013 | $7,500 | Revise Dec 2008 Mole Lake RSA | Updates completed in 2014 |
| | 2014 | $290,248 | Engineering for recreational paths along County M and Indian Settlement Road | Path construction completed in 2017 |
| St. Croix Band Chippewa Indians of Wisconsin | 2013 | $12,500 | St. Croix Tribal Safety Plan | Plan completed in 2015 |
| Stockbridge-Munsee Community | 2014 | $12,500 | Develop TTSP | TTSP Approved by Tribal Council (May 2016) |

Many of the reports include crash data that is more than 5 years old. In order to determine if there have been changes in crash types or patterns, updated crash data (2010 through 2014) was obtained from Lac Courte Oreilles Ojibwa Community College for all the Tribes except the Menominee Indian Tribe of Wisconsin. This data was analyzed to determine crash numbers and severity, predominant crash types,

and high crash locations on the various reservation roadways. Crash data from the previous reports and from the updated crash data are summarized below in Tables 3 and 4.

## Table 3: Crash Data from Previous Reports

| Tribe | Report Type | Years of Crash Data Used | Total # Crashes | Total # Injury Crashes | % Injury Crashes | Total # Fatal Crashes | Most Common Crash Type |
|---|---|---|---|---|---|---|---|
| Bad River Band of Lake Superior Chippewa Indians | RSA | 5 years (2006-2010) | 148 | 61 | 41% | 4 | Single Vehicle/ Run off Road (63%) |
| Forest County Potawatomi Community of Wisconsin | RSP | 1 year (2013) | 298* | 64* | 21%* | 3* | Not specified |
| Ho-Chunk Nation | *Data from previous reports is not available for Tribal roadways* | | | | | | |
| Lac Courte Oreilles Band of Lake Superior Chippewa Indians | RSA | 5 years (2004-2008) | 124 | 53 | 43% | 5 | Single Vehicle/ Run off Road (78%) |
| | RSP | 5 years (2006-2010) | 178 | 80 | 45% | 6 | Single Vehicle/ Run off Road (71%) |
| Lac du Flambeau Band of Lake Superior Chippewa Indians of Wisconsin | RSA | 5 years (2004-2008) | 175 | 63 | 37% | 3 | Single Vehicle/ Run off Road (71%) |
| | RSP | 5 years (2004-2008) | 175 | 63 | 37% | 3 | Single Vehicle/ Run off Road (71%) |
| Menominee Indian Tribe of Wisconsin | *Data from previous reports is not available for Tribal roadways* | | | | | | |
| Oneida Tribe of Indians of Wisconsin | RSA | 7 years (2007-2013) | 682 | 259 | 38% | 5 | Angle (31%) |
| Red Cliff Band of Lake Superior Chippewa Indians | RSA | 3 years (2006-2008) | 6 | 2 | 40% | 1 | Single Vehicle/ Run off Road (60%) |
| | RSP | 5 years (2004-2008) | 29 | 10 | 35% | 1 | Single Vehicle/ Run off Road (73%) |
| Sokaogon Chippewa Community Mole Lake Band | RSA | 5 years (2003-2007) | 14 | 6 | 42% | 0 | Single Vehicle/ Run off Road (50%) |
| | RSP | 5 years (2004-2008) | 20 | 4 | 20% | 0 | Single Vehicle/ Run off Road (74%) |
| St. Croix Band Chippewa Indians of Wisconsin | *Data from previous reports is not available for Tribal roadways* | | | | | | |

| Tribe | Report Type | Years of Crash Data Used | Total # Crashes | Total # Injury Crashes | % Injury Crashes | Total # Fatal Crashes | Most Common Crash Type |
|---|---|---|---|---|---|---|---|
| Stockbridge-Munsee Community | RSA | 7 years (2007-2013) | 76 | 33 | 43% | 0 | Single Vehicle/ Run off Road (78%) |
| * Crash data for Forest County Potawatomi Community includes all of Forest County and includes non-Tribal roadways. | | | | | | | |

**Table 4: Updated Crash Data**

| Tribe | Years of Crash Data Used | Total # Crashes | Total # Injury Crashes | % Injury Crashes | Total # Fatal Crashes | Most Common Crash Type |
|---|---|---|---|---|---|---|
| Bad River Band of Lake Superior Chippewa Indians | 5 years (2010-2014) | 155 | 49 | 32% | 5 | Single Vehicle/ Run off Road (68%) |
| Forest County Potawatomi Community of Wisconsin | 5 years (2010-2014) | 191 | 44 | 20% | 3 | Single Vehicle/ Run off Road (74%) |
| Ho-Chunk Nation | 5 years (2010-2014) | 107 | 35 | 33% | 1 | Single Vehicle/ Run off Road (55%) |
| Lac Courte Oreilles Band of Lake Superior Chippewa Indians | 5 years (2010-2014) | 127 | 49 | 39% | 4 | Single Vehicle/ Run off Road (76%) |
| Lac du Flambeau Band of Lake Superior Chippewa Indians of Wisconsin | 5 years (2010-2014) | 192 | 77 | 40% | 4 | Single Vehicle/ Run off Road (67%) |
| Menominee Indian Tribe of Wisconsin | *Information for the Menominee Indian Tribe of Wisconsin is not currently available* | | | | | |
| Oneida Tribe of Indians of Wisconsin | 5 years (2010-2014) | 360 | 83 | 23% | 3 | Single Vehicle/ Run off Road (65%) |
| Red Cliff Band of Lake Superior Chippewa Indians | 5 years (2010-2014) | 42 | 14 | 33% | 0 | Single Vehicle/ Run off Road (67%) |
| Sokaogon Chippewa Community Mole Lake Band | 5 years (2010-2014) | 29 | 6 | 21% | 1 | Single Vehicle/ Run off Road (51%) |
| St. Croix Band Chippewa Indians of Wisconsin | 5 years (2010-2014) | 62 | 18 | 29% | 2 | Single Vehicle/ Run off Road (69%) |
| Stockbridge-Munsee Community | 5 years (2010-2014) | 128 | 35 | 27% | 0 | Single Vehicle/ Run off Road (84%) |

Detailed discussion of the data for each Tribe can be found in subsequent sections of this report.

# 5.0 Bad River Band of Lake Superior Chippewa Indians

The Bad River Reservation is located in Ashland and Iron counties in northern Wisconsin. The reservation encompasses approximately 195 square miles and is primarily undeveloped. The largest developed area is along US 2 in the vicinity of the Tribal government offices and the Bad River Lodge and Casino. The majority of the roadways are two-lane rural roads, many of which are unpaved. The main roadway through the reservation is US 2. There is a multi-use path connecting the casino to nearby residential areas and Tribal government offices.

**Data Summary**

An RSA was completed for the Bad River Band of Lake Superior Chippewa Indians in 2011. The report used crash data from 2006 through 2010. During that time period, there were 148 crashes on Tribal roadways. Of these, 61 crashes (41%) resulted in at least one injury, and another 4 crashes (3%) resulted in a fatality.

The majority of crashes (63%) were single vehicle crashes, where the vehicle left the roadway and either struck a fixed object or overturned. Most crashes (64%) occurred during daylight hours. The highest numbers of crashes were observed during January and June.

The RSA identified the following safety concerns on Bad River roadways:

- Interaction of modes – ATV's and snowmobiles crossing or using the multi-use path create conflicts with bikes and pedestrians
- Missing or damaged signing
- Guardrail does not meet standards; it's too low and does not have appropriate end treatments
- Skewed intersections restrict sight distance

The updated crash data shows similar crash numbers and patterns to what was observed in the RSA. During the period from 2010 through 2014 there 155 total crashes on Tribal roadways. Of these, 49 crashes (32%) resulted in at least one injury, and another 5 crashes (3%) resulted in a fatality.

As with the older data, the majority of the crashes (68%) were single vehicle crashes. Most crashes (66%) occurred during daylight hours. The crashes were spread more evenly throughout the year during this five year period than for the period covered by the RSA. The highest numbers of crashes were seen in December and January.

**Existing Efforts/Projects**

The following is a summary of recent Tribal safety efforts or planned projects:

- The Tribe completed an individual Transportation Safety Plan in 2015
- The Tribe and WisDOT are working on plans for turn lane improvements at the casino; the construction for these improvements is tentatively scheduled for 2021-2022
- The Tribe is working to develop an extension the existing ATV/Snowmobile trail

**Emphasis Areas**

**Emphasis Area 1: Improve pedestrian safety**

- There are currently insufficient pedestrian facilities throughout the Reservation
- There is insufficient lighting on existing pedestrian facilities

**Goals/Strategies for Emphasis Area 1:**

- Improve the existing off-road trail from the east limits of the Reservation to Odanah; the existing trail needs to be cleared and improvements need to be made to culverts crossing the trail
- Construct an off-road trail from Odanah west to the Reservation limits (see Appendix A, pages A-1 to A-2 for a layout of the potential trail route)
- Construct a multi-use path adjacent to US 2 from Odanah to Birch Hill Road (see Appendix A, pages A-3 to A-4 for a layout and typical path section)
- Improve the lighting on the existing path near the casino
- Add sidewalks to residential areas where feasible

**Emphasis Area 2: Improve local roads/access**

- The new housing development near Moccasin Drive does not have access to US 2
- There is currently only one crossing of the Bad River in old Odanah; any emergency that closes that crossing cuts off access on the Reservation
- Local roads are unpaved and have poorly delineated curves

**Goals/Strategies for Emphasis Area 2:**

- Provide an access from US 2 to the housing development near Moccasin Drive
- Construct a secondary crossing of the Bad River in old Odanah (see Appendix A, page A-5 for a layout of a potential crossing)
- Pave Beartrap Road
- Add additional curve signing to Old Odanah Road (see Appendix A, pages A-6 and A-7 for a curve signing plans)

**Emphasis Area 3: Reduce run off the road crashes**

- The majority of crashes on Tribal roadways are single vehicle run off the road crashes

**Goals/Strategies for Emphasis Area 3:**

- Expand clear zones
- Add center and/or edge line rumble strips where appropriate

**Emphasis Area 4: Increase safety awareness**

- Using educational outreach campaigns and enforcement campaigns provides opportunities to increase safety awareness among Tribal members

**Goals/Strategies for Emphasis Area 4:**

- Run educational campaigns on safety issues such as using child restraints and texting and driving

In addition to the four main emphasis areas discussed above, some general strategies were identified to increase safety on the Tribal transportation network:

- Replace worn or missing signs
- Replace worn or missing pavement markings

The potential improvement strategies and emphasis areas were prioritized by the Tribal working group. There were four priority groupings identified, based on importance to the Tribe. Each of the priority groupings contains strategies to address one or more of the emphasis areas discussed above. A prioritization matrix was developed to identify the following for each priority grouping:

- Emphasis areas/potential strategies
- Who is responsible for implementing the strategies – responsibility for implementing any improvement strategies will generally fall on the Tribe; improvements that extend off of Tribal lands will require cooperation with the government entity having jurisdiction over the roadway outside of Tribal lands
- Timeframes for implementing the strategies – an approximate schedule for implementing the strategies is identified; exact timeframes will depend on the availability of funding to the Tribe
- Estimated costs for implementing the strategies – improvement strategies are categorized as low, reasonable, moderate, or high cost
- Potential funding sources – potential sources of funding are identified; these include funding from both Federal and State sources; other sources of funding may be available for the strategies, especially the educational outreach strategies

A copy of the prioritization matrix is included as Table 5.

**Table 5: Bad River Band of Lake Superior Chippewa Indians Prioritization Matrix**

| Priority | Emphasis Area/Strategies | Who? | When? | Cost? | Potential Funding Sources |
|---|---|---|---|---|---|
| 1 | Emphasis Area: Improve pedestrian safety | | | | |
| | Improve existing off-road trail from east limits of Reservation to Odanah | Tribe | 2018 - 2025 | $$ - $$$$ | RTP; TAP |
| | Construct off-road trail from Odanah to west limits of Reservation | Tribe | 2020 - 2025 | $$$$ | RTP; TAP |
| | Construct multi-use path adjacent to US 2 from Odanah to Birch Hill Road | Tribe/WisDOT | 2018 - 2025 | $$$ - $$$$ | RTP; TAP |
| | Improve lighting along existing path near casino | Tribe/WisDOT | 2018 - 2020 | $$ - $$$ | TTSP |
| | Emphasis Area: Improve local roads/access | | | | |
| | Provide access from US 2 to housing development near Moccasin Drive | Tribe/WisDOT | 2018 - 2020 | $$$ | TTSP |
| 2 | Emphasis Area: Improve local roads/access | | | | |
| | Provide secondary crossing of Bad River in old Odanah | Tribe/WisDOT | 2020 - 2030 | $$$$ | TTSP |
| | Emphasis Area: Reduce run off the road crashes | | | | |
| | Expand clear zones | Tribe/WisDOT | ongoing | $ - $$ | HRRRP |
| | Emphasis Area: General | | | | |
| | Replace worn or missing signs | Tribe/WisDOT | ongoing | $ | HRRRP |
| | Replace worn pavement markings | Tribe/WisDOT | ongoing | $$ | HRRRP |
| 3 | Emphasis Area: Improve local roads/access | | | | |
| | Pave Beartrap Road | Tribe | 2020 - 2025 | $$$ - $$$$ | TTSP |
| | Emphasis Area: Reduce run off the road crashes | | | | |
| | Center and/or edge line rumble strips where appropriate | Tribe/WisDOT | ongoing | $ - $$$ | HRRRP |
| | Emphasis Area: Increase safety awareness | | | | |
| | Educational campaigns:<br>Child restraints<br>Texting and driving<br>Others | Tribe | ongoing | $ | BOTS; IHSP |
| 4 | Emphasis Area: Improve local roads/access | | | | |
| | Improve Old Odanah Road | Tribe | 2025 - 2030 | $$$$ | TTSP |
| | Emphasis Area: Improve pedestrian safety | | | | |
| | Add sidewalks in residential areas where feasible | Tribe | 2020 - 2030 | $$ - $$$$ | TTSP; TAP |

Implementation Costs

$ = low cost (less than $2,000 per location or mile)
$$ = reasonable cost (less than $10,000 per location or mile)
$$$ = moderate cost (between $10,000 and $75,000 per location or mile)
$$$$ = high cost (more than $75,000 per location or mile)

Potential Fuding Sources:

TTSP Funds = Tribal Transportation Safety Program Funds (FHWA)
HSIP - Highway Safety Improvement Program (must meet crash criteria)
RTP = Recreation Trail Program (Wisconsin DNR)
TAP = Transportation Alternatives Program (WisDOT)
IHSP = Indian Highway Safety Program
HRRRP = High Risk Rural Roads Program (administered by Wisconsin as part of HSIP funding)
BOTS = Bureau of Transportation Safety grants (WisDOT)

## 6.0 Forest County Potawatomi Community of Wisconsin

The Forest County Potawatomi Community encompasses approximately 20 square miles in scattered areas throughout the state of Wisconsin. The main areas of Tribal land are in southern Forest County and northern Oconto County. Most of the land is undeveloped. The three main developed areas include Stone Lake, Carter, and Blackwell. Stone Lake is located along US 8 east of Crandon, and contains the Tribal government offices, a health and wellness center, and cultural center and museum. Carter is located along WIS 32 south of Wabeno and contains a casino and gas station/convenience store. Blackwell is located near the County H/County T intersection southeast of Laona, and primarily contains housing. The majority of Tribal roadways are rural two-lane roadways. US 8/WIS 32 is the main roadway through the reservation.

**Data Summary**

A Transportation Safety Plan was completed for the Tribe in July 2016. The plan used 2013 crash data; the data was for all of Forest County, and not just Tribal roadways. Detail was not provided on crash types or locations. The report noted that 21% of crashes were injury crashes, and 1% of crashes were fatal crashes.

Additional crash data from the years 2007 through 2014 is available. Typically, WisDOT analyzes the most recent 5 years of crash data; crash data from 2010 through 2014 was used in this report. During that time period, there were 191 crashes on the roadways on or adjacent to Tribal lands. Of those crashes, 44 (23%) resulted in at least one injury, while another 3 crashes (2%) resulted in a fatality.

As seen with other Tribes, the majority of crashes (74%) were single vehicle crashes, where the vehicle left the roadway and either struck a fixed object or overturned. Most of the crashes (66%) occurred during daylight hours. The highest number of crashes occurred during the winter months, from November through January, with another peak seen in July.

Locations with a higher number of crashes during the five-year period evaluated include the Bear Road/US 8 intersection, the Kwe Da Kik Lane/US 8 intersection, and the Potawatomi Trail/US 8 intersection.

**Existing Efforts/Projects**

The following is a summary of recent Tribal safety efforts or planned projects:

- The Tribe completed an individual Transportation Safety Plan in July 2016
- The Tribe received funding to improve the intersection of Kwe Da Kik Lane and US 8. This project will be combined with a future WisDOT project along US 8. See Emphasis Area 1 below for more information on potential improvements at this intersection.
- The Tribe has applied for funding for a pedestrian trail project and pedestrian underpass of US 8.

**Emphasis Areas**

**Emphasis Area 1: Improve intersection safety**

- There are sight distance and intersection angle concerns at the Firekeeper Drive, Kwe da kik Lane, Young's Lane, Indian Drive, and Bug Lake Road intersections along US 8
- The intersection of US 8/Firekeeper Drive is congested and unsafe during peak times
- Indian Drive and Bug Lake Road are poorly aligned

**Goals/Strategies for Emphasis Area 1:**

- Grade and clear sight triangles to improve sight distance
- Improve Firekeeper Drive intersection by lengthening right turn lanes; provide for more of a free flow right turn onto US 8; realign Young's Lane to create 4-leg intersection with Firekeeper Drive (see Appendix B, Page B-1 for a layout of potential improvements at this intersection)
- Realign Kwe Da Kik Lane and Indian Drive to a 4-leg intersection with US 8; realign Bug Lake Road to intersect new Kwe Da Kik Lane alignment north of US 8 (see Appendix B, page B-2 for a possible layout for this realignment)

**Emphasis Area 2: Improve walking/biking/ATV trails**

- Currently not any accommodations for pedestrians and bikes other than US 8 shoulder; development of recreation center on Mish Ko Swen Drive will likely increase pedestrian/bike numbers
- There are no pedestrian accommodations in the Carter or Blackwell areas
- Pedestrians and bicycles need to be separated from roadways throughout the Tribal lands
- No marked ATV crossings along US 8
- ATV trails are mostly informal trails

**Goals/Strategies for Emphasis Area 2:**

- Add multi-use path along north side of US 8 from Crandon to Otter Creek Road (see Appendix B, page B-3 for a possible multi-use path route and typical section)
- Add pedestrian accommodations to connect Tribal members to each other and to Tribal facilities, including along Mish Ko Swen Drive.
- Address lack of pedestrian/bicycle accommodations along WIS 32 in Carter and County H in Blackwell.
- Add pedestrian underpass of US 8 just west of Kwe da kik Lane to provide grade separated crossing.
- Improve informal ATV trails and maintain trails after improvement see Appendix B, page B-4 for a trail crossing detail and improved trail typical section); follow guidance from Wisconsin Department of Natural Resources document *So You Want to Build an ATV Trail: A Practical Guide for Evaluating Potential for Trail Grant Sponsors* for trail construction
- Provide marked ATV crossing locations on US 8 (see Appendix B, page B-4 for a trail crossing detail)

**Emphasis Area 3: Improve local road network**

- There are currently several dead end roads with no outlet that have limited access for emergency services and residents to the housing area north of Mish Ko Swen Drive
- Limited local roadway connections in areas with potential for future development
- There are worn or missing signs throughout the Tribal lands

**Goals/Strategies for Emphasis Area 3:**

- Connect Kwe Da Kik Lane and Wej Mo Gek Court to provide better access to housing area; also provide connection to Bug Lake Road (see Appendix B, page B-5 for a possible layout for this roadway connection)
- Provide additional local roadway connections in Blackwell, Carter, and Crandon areas as development warrants
- Replace worn or missing signs

**Emphasis Area 4: Reduce run off the road crashes**

- The majority of crashes on Tribal roadways are single vehicle, run off the road crashes

**Goals/Strategies for Emphasis Area 4:**

- Utilize upcoming WisDOT project to evaluate deficiencies along US 8, including substandard horizontal or vertical alignments, steep fore slopes and lack of cable/beam guard
- Improve pavement markings; replace worn or missing markings
- Add center and/or edge line rumble strips
- Delineate curves along County C and County H with advance signs and chevrons (see Appendix B, pages B-6 to B-22 for signing plans for the curves along County C and County H)
- Evaluate the need for guardrail along County H
- Increase shoulder widths/add paved shoulders

**Emphasis Area 5: Emergency services**

- There are limited routes/access for emergency services
- Emergency services can have a hard time finding locations
- There is a lack of safety data for the Tribe

**Goals/Strategies for Emphasis Area 5:**

- Improve local road network and provide additional accesses; see Emphasis Area 3 for additional details
- Improve signing to assist EMS response
- Improve collection of safety data and maintain data in easily accessible manner

**Emphasis Area 6: Increase safety awareness**

- Using educational outreach campaigns and enforcement campaigns provides opportunities to increase safety awareness among Tribal members

**Goals/Strategies for Emphasis Area 6:**

- Run educational campaigns on safety issues such as seat belt usage and impaired driving

In addition to the six main emphasis areas discussed above, some general strategies were identified to increase safety on the Tribal transportation network:

- Expanded clear zones to increase sight distance and allow more room for vehicle recovery
- Add additional way finding signs for Tribal buildings and facilities
- Add dual language signs on non US/State roadways

The potential improvement strategies and emphasis areas were prioritized by the Tribal working group. There were four priority groupings identified, based on importance to the Tribe. Each of the priority groupings contains strategies to address one or more of the emphasis areas discussed above. A prioritization matrix was developed to identify the following for each priority grouping:

- Emphasis areas/potential strategies
- Who is responsible for implementing the strategies – responsibility for implementing any improvement strategies will generally fall on the Tribe; improvements that extend off of Tribal lands will require cooperation with the government entity having jurisdiction over the roadway outside of Tribal lands
- Timeframes for implementing the strategies – an approximate schedule for implementing the strategies is identified; exact timeframes will depend on the availability of funding to the Tribe
- Estimated costs for implementing the strategies – improvement strategies are categorized as low, reasonable, moderate, or high cost
- Potential funding sources – potential sources of funding are identified; these include funding from both Federal and State sources; other sources of funding may be available for the strategies, especially the educational outreach strategies

A copy of the prioritization matrix is included as Table 6.

**Table 6: Forest County Potawatomi Community Prioritization Matrix**

| Priority | Emphasis Area/Strategies | Who? | When? | Cost? | Potential Funding Sources |
|---|---|---|---|---|---|
| 1 | Emphasis Area: Improve intersection safety | | | | |
| | Improve Firekeeper Drive | Tribe | 2018-2025 | $$$ - $$$$ | TTSP; HSIP* |
| | Realign Kwe Da Kik Lane/Indian Drive/Bug Lake Road | Tribe | 2018-2025 | $$$$ | Funding available; combined with WisDOT US 8 project |
| | Emphasis Area: Improve walking/biking/ATV trails | | | | |
| | Add designated bike/walking trails along US 8 | Tribe/WisDOT | 2018-2030 | $$$ - $$$$ | RTP; TAP |
| | Add pedestrian accommodations along Mish Ko Swen Drive and other locations near Tribal facilities | Tribe | 2018-2025 | $$ - $$$ | RTP; TAP |
| 2 | Emphasis Area: Improve intersection safety | | | | |
| | Improve sight distance/intersection angles along US 8 | WisDOT/Tribe | 2025-2030 | $$$ - $$$$ | TTSP; HRRRP; HSIP* |
| | Emphasis Area: Improve local road network | | | | |
| | Connect Kwe Da Kik Lane and Wej Mo Gek Court; connect to Bug Lake Road | Tribe | 2025-2030 | $$$$ | TTSP |
| | Emphasis Area: Reduce run off the road crashes | | | | |
| | Delineate curves (County H and others) | County/Tribe | 2018-2025 | $ - $$ | HRRRP; TTSP |
| | Evaluate need for guard rail along County H | County/Tribe | 2018-2025 | $$ | HRRRP; TTSP |
| | Emphasis Area: Improve walking/biking/ATV trails | | | | |
| | Provide connection to trail in Crandon | Tribe | 2025-2030 | $$$ - $$$$ | RTP |
| | Provide safer ATV crossings along US 8 | WisDOT/Tribe | 2018-2025 | $$ - $$$ | TTSP |
| | Emphasis Area: Emergency services | | | | |
| | Improve/increase access routes for EMS | Tribe | 2018-2025 | $$$$ | TTSP |
| 3 | Emphasis Area: Reduce run off the road crashes | | | | |
| | Improve pavement markings; replace worn or missing markings | Tribe/County/Town | ongoing | $$ | HRRRP |
| | Add center and/or edge line rumble strips | Tribe/County/Town | ongoing | $ - $$$ | HRRRP |
| | Increase shoulder widths | WisDOT/County/Tribe | ongoing | $$$ | HRRRP |
| | Emphasis Area: Improve walking/biking/ATV trails | | | | |
| | Improve informal trails | Tribe | ongoing | $$$ - $$$$ | RTP |
| | Emphasis Area: Emergency services | | | | |
| | Improve signing to assist EMS response | Tribe | ongoing | $ | |
| | Emphasis Area: Increase safety awareness | | | | |
| | Educational campaigns:<br>Seat belt usage<br>Impaired driving | Tribe | ongoing | $ | BOTS, IHSP |
| | Emphasis Area: General | | | | |
| | Expand clear zones | WisDOT/County/Tribe | ongoing | $ - $$ | HRRRP |
| | Wayfinding signs for Tribal buildings/facilities | Tribe | ongoing | $ | |
| 4 | Emphasis Area: Improve local road network | | | | |
| | Provide additional roadway connections in Blackwell, Carter and Crandon areas as | Tribe | 2025+ | $$$$ | TTSP |
| | Emphasis Area: Emergency services | | | | |
| | Improve safety data | Tribe | ongoing | $$ | |
| | Emphasis Area: General | | | | |
| | Dual language signs on non-US/State roads | Tribe | ongoing | $ | |

Implementation Costs

$ = low cost (less than $2,000 per location or mile)

$$ = reasonable cost (less than $10,000 per location or mile)

$$$ = moderate cost (between $10,000 and $75,000 per location or mile)

$$$$ = high cost (more than $75,000 per location or mile)

Potential Fuding Sources:

TTSP Funds = Tribal Transportation Safety Program Funds (FHWA)

HSIP - Highway Safety Improvement Program (*must meet crash criteria)

RTP = Recreation Trail Program (Wisconsin DNR)

TAP = Transportation Alternatives Program (WisDOT)

IHSP = Indian Highway Safety Program

HRRRP = High Risk Rural Roads Program (administered by Wisconsin as part of HSIP funding)

BOTS = Bureau of Transportation Safety grants (WisDOT)

# 7.0 Ho-Chunk Nation

The Ho-Chunk Nation does not have one continuous reservation, but has scattered land holdings and communities throughout the state. The Ho-Chunk Nation holds 3, 535 acres (approximately 5.5 square miles) of Tribal Trust land, located in 14 counties in Wisconsin and in Illinois. The Tribe also holds an additional 5,328 acres (approximately 8.3 square miles) of fee simple land. Levels of development vary among the different Tribal land locations.

**Data Summary**

A Transportation Safety Plan was completed for the Tribe in April 2016. The plan used crash data from 2009 through 2013; the crash data was for all of Dane, Jackson, Juneau, Marathon, Monroe, Sauk, Shawano, Wood, and Rock Counties, and was not limited to crashes on or adjacent to Tribal trust lands.

Additional crash data from the years 2007 through 2014 is available. Typically, WisDOT analyzes the most recent 5 years of crash data; crash data from 2010 through 2014 was used in this report. During that time period, there were 107 crashes on the roadways on or adjacent to Tribal lands. Of those crashes, 35 (33%) resulted in at least one injury, while another 1 crash (1%) resulted in a fatality.

As seen with other Tribes, the majority of crashes (55%) were single vehicle crashes, where the vehicle left the roadway and either struck a fixed object or overturned. The next most common crash types were rear end crashes (19%) and angle crashes (13%). Most of the crashes (66%) occurred during daylight hours. The highest number of crashes occurred during the winter months, from November through January.

**Existing Efforts/Projects**

Ho-Chunk Nation has been proactive about addressing safety concerns on Tribal roadways, and has completed several improvement projects over the last several years. The Tribe continues to plan for improvements; the following is a summary of some recent Tribal safety efforts or planned projects:

- The Tribe has several projects in the planning/design stage, including: WIS 21/Eureka Road (2018), biking/walking trails in Ho-Chunk Village and Mission/Sand Pillow Area (2019), WIS 21/Ellsworth Avenue (2021), County BB/Reedsburg Road (in TIP).
- The Tribe adds biking/walking paths to BIA roads as they are completed.
- The Tribe is working with WisDOT and City of Madison on additional access roads in the area of the Madison casino.
- The Tribe is working with WisDOT on improvements on WIS 54, including additional turn lanes and an ATV crossing at the casino.

**Emphasis Areas**

**Emphasis Area 1: Improve pedestrian/biking/ATV safety**

- There are inadequate accommodations for pedestrians, bikes, and ATVs in several areas.

**Goals/Strategies for Emphasis Area 1:**

- Improve the ATV crossing of WIS 54 near the casino
- Add walking and biking trails to Tribal roadways

**Emphasis Area 2: Improve local roadways**

- There are access issues around the casino in Madison
- There are safety concerns on Stateline Road and Willowbrook Road in Beloit

**Goals/Strategies for Emphasis Area 2:**

- Work with WisDOT and the City of Madison to improve the access to the casino; improve the existing US 12/18 and Long Drive intersection and provide secondary access from County AB.
- Make improvements to Stateline Road and Willowbrook Road to reduce crashes and crash severity; improvements may include expanding clear zones, adding shoulder rumble strips, or improving intersections.

**Emphasis Area 3: Increase intersection safety**

- There are sight distance concerns at the US 45/Wittbirn Townline Road intersection
- There are safety concerns at various Tribal intersections

**Goals/strategies for Emphasis Area 3:**

- Improve sight distance by removing obstructions in the vision triangle and regrading as needed
- Add additional pavement marking, signing, lighting, or turn lanes as appropriate for the intersections listed in Table 5.

**Emphasis Area 4: Reduce run off the road crashes**

- The majority of crashes on Tribal roadways are single vehicle, run off the road crashes
- There are worn or missing signs and pavement marking

**Goals/Strategies for Emphasis Area 4:**

- Add center and/or edge line rumble strips where appropriate
- Expand clear zones

**Emphasis Area 5: Increase safety awareness**

- Using educational outreach campaigns and enforcement campaigns provides opportunities to increase safety awareness among Tribal members

**Goals/Strategies for Emphasis Area 5:**

- Run educational campaigns on safety issues such as child restraints, impaired driving, and texting and driving

In addition to the five main emphasis areas discussed above, some general strategies were identified to increase safety for the Tribe:

- Increase enforcement for speeding on roadways on or adjacent to Tribal lands
- Replace worn or missing signs
- Replace worn or missing pavement markings

The potential improvement strategies and emphasis areas were prioritized by the Tribal working group. There were four priority groupings identified, based on importance to the Tribe. Each of the priority groupings contains strategies to address one or more of the emphasis areas discussed above. A prioritization matrix was developed to identify the following for each priority grouping:

- Emphasis areas/potential strategies
- Who is responsible for implementing the strategies – responsibility for implementing any improvement strategies will generally fall on the Tribe; improvements that extend off of Tribal lands will require cooperation with the government entity having jurisdiction over the roadway outside of Tribal lands
- Timeframes for implementing the strategies – an approximate schedule for implementing the strategies is identified; exact timeframes will depend on the availability of funding to the Tribe
- Estimated costs for implementing the strategies – improvement strategies are categorized as low, reasonable, moderate, or high cost
- Potential funding sources – potential sources of funding are identified; these include funding from both Federal and State sources; other sources of funding may be available for the strategies, especially the educational outreach strategies

A copy of the prioritization matrix is included as Table 7.

**Table 7: Ho-Chunk Nation Prioritization Matrix**

| Priority | Emphasis Area/Strategies | Who? | When? | Cost? | Potential Funding Sources |
|---|---|---|---|---|---|
| 1 | Emphasis Area: Improve pedestrian /biking/ATV safety | | | | |
| | Improve ATV crossing near casino on WIS 54 | Tribe/WisDOT | 2018-2020 | $$ - $$$ | |
| | Emphasis Area: Improve local roadways | | | | |
| | Provide secondary access to casino area in Madison | Tribe/WisDOT/County | 2020-2025 | $$$$ | |
| | Emphasis Area: Increase intersection safety | | | | |
| | Improve sight distance at US 45/Wittbirn Townline Road intersection | Tribe/WisDOT/County | 2020-2025 | $$$ - $$$$ | TTSP; HSIP |
| 2 | Emphasis Area: Improve local roadways | | | | |
| | Improvements to Stateline Road, Willowbrook Road (City of Beloit) | Tribe/City | 2025-2030 | $$$$ | HSIP |
| | Emphasis Area: Improve pedestrian /biking/ATV safety | | | | |
| | Add walking and biking trails on Tribal roadways | Tribe | | $$ - $$$ | RTP; TAP |
| | Emphasis Area: Increase intersection safety | | | | |
| | Add additional pavement marking, signing, lighting, or turn lanes as appropriate for the following intersections:<br>Ho-Chunk Gaming Black River Falls entrance (Jackson County)<br>WIS 54/Sand Pillow Road (Jackson County)<br>WIS 54/Mission Road (Jackson County)<br>Ho-Chunk Gaming Baraboo entrance (Sauk County)<br>County BD/N. Reedsburg Road (Sauk County)<br>Yellow Thunder Trail/Fern Dell Road (Sauk County)<br>Busse Lane/Moon Road (Sauk County)<br>County G/Winneshiek Lane (Wood County)<br>Ho-Chunk Gaming Nekoosa Entrance (Wood County)<br>Ho-Chunk Gaming Madison entrance (Dane County)<br>WIS 21/Elsworth Avenue (Monroe County)<br>Ho-Chunk Gaming Tomah entrance (Monroe County)<br>Ho-Chunk Gaming Wittenberg entrance (Shawano County) | Tribe/WisDOT/County | 2020-2030 | $$ - $$$$ | TTSP; HSIP |
| 3 | Emphasis Area: General | | | | |
| | Replace worn or missing signs | Tribe/WisDOT/County | ongoing | $ | HRRRP |
| | Replace worn pavement markings | Tribe/WisDOT/County | ongoing | $$ | HRRRP |
| | Increase enforcement for speeding | Tribe/County | ongoing | $ - $$ | BOTS |
| 4 | Emphasis Area: Reduce run off the road crashes | | | | |
| | Expand clear zones | Tribe/WisDOT/County | ongoing | $$ | HRRRP |
| | Center and/or edge line rumble strips where appropriate | Tribe/WisDOT/County | ongoing | $$ - $$$ | HRRRP |
| | Emphasis Area: Increase safety awareness | | | | |
| | Educational campaigns:<br>Impaired driving<br>Child restraints<br>Texting and driving | Tribe | ongoing | $ | BOTS; IHSP |

Implementation Costs
$ = low cost (less than $2,000 per location or mile)
$$ = reasonable cost (less than $10,000 per location or mile)
$$$ = moderate cost (between $10,000 and $75,000 per location or mile)
$$$$ = high cost (more than $75,000 per location or mile)

Potential Fuding Sources:
TTSP Funds = Tribal Transportation Safety Program Funds (FHWA)
HSIP - Highway Safety Improvement Program (must meet crash criteria)
RTP = Recreation Trail Program (Wisconsin DNR)
TAP = Transportation Alternatives Program (WisDOT)
IHSP = Indian Highway Safety Program
HRRRP = High Risk Rural Roads Program (administered by Wisconsin as part of HSIP funding)
BOTS = Bureau of Transportation Safety grants (WisDOT)

# 8.0 Lac Courte Oreilles Band of Lake Superior Chippewa Indians

The Lac Courte Oreilles Reservation encompasses approximately 120 square miles, primarily in Sawyer County; there are also two small plots of off reservation trust land in Burnett and Washburn counties. The reservation land is primarily undeveloped, and is located just west of the Chequamegon National Forest. Tribal roadways are primarily two-lane rural roadways. The major routes through the reservation include County K, County E, and County NN.

**Data Summary**

An RSA and RSP were both completed for the Lac Courte Oreilles Band of Lake Superior Chippewa Indians in 2011. The RSA used crash data from 2004 through 2008, while the RSP used data from 2006 through 2010. There were 124 total crashes on Tribal roadways from 2004 through 2008, and 178 crashes from 2006 through 2010. Of the crashes from 2004 through 2008, 53 crashes (43%) resulted in at least one injury and another 5 crashes (4%) resulted in a fatality. The numbers are similar for the period from 2006 through 2010; there were 80 injury crashes (45% of all crashes) and another 6 fatal crashes (3% of all crashes).

During both time periods, the majority of crashes (78% and 71%) were single vehicle, run off the road crashes. Approximately half the crashes occurred during daylight hours during both time periods. The highest number of crashes occurred during the summer months, from July through September.

The RSA identified the following safety concerns:

- Lane departure
- Missing or worn signing
- Intersection sight distance
- County CC in New Post has inadequate signing, tight curves, and fixed objects in the right of way
- County CC near the Landing has issues with curve delineation and concerns with pedestrians crossing the roadway
- County K/Froemel Road has sight distance issues due to a vertical curve at the intersection, deteriorated pavement, and damaged signing.
- The school zone on Trepania Road has inadequate or improperly installed signage, and lacks appropriate pedestrian facilities.

In addition to noting concerns with lane departure and intersection sight distance, the following specific safety concerns were identified in the RSP:

- County K has a high number of crashes
- County E has a high number of crashes, drainage issues, and restricted sight distance near the intersection with County N
- County NN has narrow and eroded shoulders, deteriorated pavement marking, and shoulder drop-off concerns
- Round Lake School Road has deteriorated pavement

The updated crash data shows similar crash numbers and patterns to what was observed in the RSA. During the period from 2010 through 2014 there 127 total crashes on Tribal roadways. Of these, 49 crashes (39%) resulted in at least one injury, and another 4 crashes (3%) resulted in a fatality.

As with the older data, the majority of the crashes (76%) were single vehicle crashes. Most crashes (57%) occurred during daylight hours. The crashes were spread more evenly throughout the year during this five year period than for the period covered by the RSA. The highest numbers of crashes were seen in August and September.

**Existing Efforts/Projects**

The following is a summary of recent Tribal safety efforts or planned projects:

- The Tribe worked with community members on their safety plan, and have included community surveys in their safety planning efforts.
- The Tribe has recently constructed an off road, multi-use trail along Round Lake School Road between the residential area and the school.
- The curves along County NN near W. Gurno Lake Road were recently redone in cooperation with Sawyer County.

**Emphasis Areas**

**Emphasis Area 1: Increase intersection safety**

- The County E/Flemming Way (old Reserve Road) intersection is poorly aligned.
- Several 3-leg intersections are poorly delineated.
- The County CC/Flowage Road intersection in New Post is poorly aligned.

**Goals/Strategies for Emphasis Area 1:**

- Reconstruct the County E/Flemming Way intersection to provide a better intersection angle for Flemming Way (see Appendix C, page C-1 for a potential intersection realignment layout)
- Improve signing on 3-leg intersections, including County E/County N, County H/County CC, and County N/County CC (see Appendix C, pages C-2 to C-4 for signing plans for these intersections)
- Reconstruct the intersection to soften the curve on County CC and realign the intersection (see Appendix C, page C-5 for a potential intersection layout)

**Emphasis Area 2: Improve Safety on vertical/horizontal curves**

- There is a combination horizontal/vertical curve on County K that has had several accidents; there is concern with ice in this area in winter.
- There are several other areas that experience icing in winter.
- There are several sharp curves along County NN

**Goals/Strategies for Emphasis Area 2:**

- Provide additional advance signing for the curve on County K, including chevrons (see Appendix C, page C-6 for a signing plan)
- Work with the County to evaluate adding high friction surface treatment through this area and other areas identified as icing concerns

- Provide additional signing for the curves on County NN, including chevrons (see Appendix C, page C-7 for a signing plan)
- Evaluate realigning the roadway to soften the curves on County NN (see Appendix C, page C-8 for a potential layout for realigning the curves)

**Emphasis Area 3: Enhance walking/biking opportunities**

- There is a need for additional pedestrian/bicycle connections between residential areas and schools and other Tribal facilities

**Goals/Strategies for Emphasis Area 3:**

- Add additional off road multi-use paths along County K, along Round Lake School Road north of the residential area, along Indian Trail Road, and along Trepania Road between County K and the Tribal offices (see Appendix C, page C-9 for potential path locations and typical section)

**Emphasis Area 4: Reduce run off the road crashes**

- The majority of crashes on Tribal roadways are single vehicle, run off the road crashes
- There are concerns with icing in several locations
- There are worn or missing signs and pavement marking

**Goals/Strategies for Emphasis Area 4:**

- Add center and/or edge line rumble strips where appropriate; evaluate using low-profile rumble strips near residential areas
- Widen shoulders and clear zones where appropriate
- Delineate curves with advance warning signs and chevrons
- Add high friction surface treatment in areas where icing is a concern
- Replace worn or missing pavement markings and signs

**Emphasis Area 5: Improve access/safety for residential areas**

- There are concerns with speeding in residential areas and inconsistent speed limits
- There is limited access to residential areas, potentially increasing response times for emergency services

**Goals/Strategies for Emphasis Area 5:**

- Make speed limits uniform in residential areas and increase enforcement
- Construct new local road connections to provide better access (see Appendix C, page C-10 for potential new roadway connection locations)

In addition to the five main emphasis areas discussed above, some general strategies were identified to increase safety for the Tribe:

- Add signs to warn of hidden driveways where needed
- Run educational campaigns to increase safety awareness among Tribal members; safety campaigns can include programs in schools, community events, billboards, etc.

The potential improvement strategies and emphasis areas were prioritized by the Tribal working group. There were four priority groupings identified, based on importance to the Tribe. Each of the priority

groupings contains strategies to address one or more of the emphasis areas discussed above. A prioritization matrix was developed to identify the following for each priority grouping:

- Emphasis areas/potential strategies
- Who is responsible for implementing the strategies – responsibility for implementing any improvement strategies will generally fall on the Tribe; improvements that extend off of Tribal lands will require cooperation with the government entity having jurisdiction over the roadway outside of Tribal lands
- Timeframes for implementing the strategies – an approximate schedule for implementing the strategies is identified; exact timeframes will depend on the availability of funding to the Tribe
- Estimated costs for implementing the strategies – improvement strategies are categorized as low, reasonable, moderate, or high cost
- Potential funding sources – potential sources of funding are identified; these include funding from both Federal and State sources; other sources of funding may be available for the strategies, especially the educational outreach strategies

A copy of the prioritization matrix is included as Table 8.

**Table 8: Lac Courte Oreilles Band of Lake Superior Chippewa Indians Prioritization Matrix**

| Priority | Emphasis Area/Strategies | Who? | When? | Cost? | Potential Funding Sources |
|---|---|---|---|---|---|
| 1 | Emphasis Area: Increase intersection safety | | | | |
| | Improve signing on 3-leg intersections:<br>County E/County N<br>County H/County CC<br>County N/County CC | County/Tribe | 2018-2025 | $$ - $$$ | HRRRP; TTSP; HSIP* |
| | Emphasis Area: Enchance walking/biking opportunities | | | | |
| | Add additional off road multi-use paths:<br>Along County K<br>Along Round Lake School Road north of residential area<br>Along Indian Trail Road<br>Between County K and Tribal offices | Tribe/County | 2018-2025 | $$$$ | RTP; TAP |
| | Emphasis Area: Improve safety on vertical/horizontal curves | | | | |
| | Improve advance signing | County/Tribe | 2018-2025 | $ - $$ | HRRRP; TTSP |
| | Add high friction surface treatment at bottom of hill on County K | County/Tribe | 2018-2020 | $ - $$$ | HRRRP; TTSP; HSIP* |
| | Emphasis Area: Reduce run off the road crashes | | | | |
| | Replace worn or missing pavement markings | County/Tribe | ongoing | $$ | HRRRP |
| 2 | Emphasis Area: Increase intersection safety | | | | |
| | Realign County E/Flemming Way intersection | County/Tribe | 2025-2030 | $$$ - $$$$ | TTSP; HSIP* |
| | Emphasis Area: Improve access/safety for residential areas | | | | |
| | Make speed limits in residential areas uniform | Tribe | 2018-2020 | $ | |
| | Emphasis Area: Improve safety on vertical/horizontal curves | | | | |
| | Realign curve along County NN | County/Tribe | 2025-2030 | $$$ - $$$$ | TTSP |
| | Emphasis Area: Reduce run off the road crashes | | | | |
| | Delineate curves with advance signs and chevrons | County/Tribe | 2018-2025 | | HRRRP; TTSP |
| 3 | Emphasis Area: Increase intersection safety | | | | |
| | Realign County CC/Flowage Road intersection in New Post | County/Tribe | 2025-2030 | $$$ - $$$$ | TTSP; HSIP* |
| | Emphasis Area: Reduce run off the road crashes | | | | |
| | Widen shoulders and clear zone | County/Tribe | ongoing | $ - $$ | HRRRP |
| | Emphasis Area: General | | | | |
| | Educational campaigns | Tribe | ongoing | $ | BOTS; IHSP |
| 4 | Emphasis Area: Improve access/safety for residential areas | | | | |
| | Construct new road connections | Tribe | 2025-2035 | $$$ - $$$$ | TTSP |
| | Emphasis Area: Reduce run off the road crashes | | | | |
| | Add center and/or edge line rumble strips | County/Tribe | ongoing | $ - $$$ | HRRRP |
| | Add high friction surface treatment in areas with icing | County/Tribe | ongoing | $ - $$$ | HRRRP; TTSP |
| | Emphasis Area: General | | | | |
| | Add signs to warn of hidden driveways | County/Tribe | 2018-2020 | $ - $$ | HRRRP |

Implementation Costs
$ = low cost (less than $2,000 per location or mile)
$$ = reasonable cost (less than $10,000 per location or mile)
$$$ = moderate cost (between $10,000 and $75,000 per location or mile)
$$$$ = high cost (more than $75,000 per location or mile)

Potential Fuding Sources:
TTSP Funds = Tribal Transportation Safety Program Funds (FHWA)
HSIP - Highway Safety Improvement Program (must meet crash criteria)
RTP = Recreation Trail Program (Wisconsin DNR)
TAP = Transportation Alternatives Program (WisDOT)
IHSP = Indian Highway Safety Program
HRRRP = High Risk Rural Roads Program (administered by Wisconsin as part of HSIP funding)
BOTS = Bureau of Transportation Safety grants (WisDOT)

# 9.0 Lac du Flambeau Band of Lake Superior Chippewa Indians

The Lac du Flambeau Reservation encompasses approximately 135 square miles in Vilas, Iron, and Oneida counties. The reservation land is primarily undeveloped. The majority of development is in the unincorporated Lac du Flambeau, which is where the Tribal offices and Lake of the Torches Resort Casino are located. The roadways on the reservation are primarily two-lane rural roadways. Major routes through the reservation include WIS 47, County D, and County H.

**Data Summary**

An RSA was completed for the Lac du Flambeau Band of Lake Superior Chippewa Indians in 2010, and an RSP was completed in 2011. The RSA and RSP both used crash data from 2004 through 2008. During that time period, there were 175 crashes on Tribal roadways. Of these, 63 crashes (36%) resulted in at least one injury, and another 3 crashes (2%) resulted in a fatality.

The majority of crashes (71%) were single vehicle crashes, where the vehicle left the roadway and either struck a fixed object or overturned. Most crashes (57%) occurred during daylight hours. Snowy or icy conditions were observed for 42% of the crashes.

The RSA identified the following safety concerns on Lac du Flambeau roadways:

- Sight distance issues at County F/WIS 47 intersection due to skew
- Sight distance issues WIS 47/County H intersection
- Pedestrian and bicycle use of WIS 47 between Thorofare Road and County D – this area is near the public school; there is sidewalk adjacent to the roadway, but no marked or signed pedestrian crossings; speed management is also an issue in this area as the speed limit reduces from 55 mph to 35 mph
- Sight distance issues at WIS 47/County D intersection (west); there are also concerns with the casino and gas station accesses adjacent to the intersection
- The WIS 47/County D intersection (west) has incomplete pedestrian facilities;
- County D through downtown Lac du Flambeau has poorly located and delineated pedestrian crossings
- The County D/Peace Pipe Road intersection has conflicts between right turns (which are not required to stop) and pedestrians

In addition, the following specific safety concerns were identified in the RSP:

- Lane departure – vehicles crossing centerline
- Intersection signing and sight distance concerns
- Lack of edge line pavement markings or rumble strips
- Inadequate shoulders and objects in the clear zone
- Sharp curves with no warning/delineation along Pokegama Lake Trail
- Pedestrians using the roadway along Thorofare Road
- Sharp curve with inadequate signing on Moss Lake Drive

- Sight distance issues at the Raven Lake Road/WIS 47 intersection

While WisDOT typically analyzes the most recent 5 years of crash data, there were only 3 years of data available for the Lac du Flambeau Band; this data is for the years 2012 through 2014. The updated crash data shows higher crash numbers, but similar crash patterns to what was observed in the RSA. During the period from 2012 through 2014 there 192 total crashes on Tribal roadways. Of these, 77 crashes (40%) resulted in at least one injury, and another 3 crashes (2%) resulted in a fatality.

As with the older data, the majority of the crashes (69%) were single vehicle crashes. Most crashes (74%) occurred during daylight hours. The highest numbers of crashes were seen in the winter months from November through January; a smaller peak in crash numbers was seen in summer, from June through August. As with the older crash data, snowy or icy conditions were observed for 41% of the crashes.

Locations with a higher number of crashes during the five-year period evaluated include the WIS 47/County H intersection, the WIS 47/Fence Lake Road intersection, the WIS 47/Peace Pipe Road intersection, and the downtown Lac du Flambeau area.

**Existing Efforts/Projects**

The following is a summary of recent Tribal safety efforts or planned projects:

- The Tribe completed an updated Road Safety Plan in 2016.

**Emphasis Areas**

**Emphasis Area 1: Improve pedestrian safety**

- There are not pedestrian facilities between most residential areas and downtown
- There are concerns with the crosswalks near the school; they are in poor condition

**Goals/Strategies for Emphasis Area 1:**

- Add multi-use paths and lighting between residential areas and downtown, including along Cemetery Road, County D, and Peace Pipe Lane (see Appendix D, pages D-1 to D-3 for possible multi-use path locations and typical section)
- Improve lighting in residential areas
- Improve and maintain the crosswalks near the school; may be enough pedestrians crossing between the school and Family Dollar store to consider rectangular rapid flashing beacons with advance warning signs (see Appendix D, page D-4 for signing/marking at the school crossing location)

**Emphasis Area 2: Improve intersection safety**

- There are sight distance issues at various locations
- There are concerns with the WIS 47/County F intersection
- There is a sharp curve on Peace Pipe Lane (County D) at Indian Village Road

- The guardrail at Sugarbush Trail/Res. Hwy 6 is too low

**Goals/Strategies for Emphasis Area 2:**

- Clear and maintain sight triangles at areas with sight distance concerns
- Add a bypass lane at WIS 47/County F; realign intersection to be at a 90 degree angle to WIS 47 (see Appendix D, page D-5 for a layout of possible intersection improvements)
- Realign the curve on Peace Pipe Lane (County D) at Indian Village Road (see Appendix D, page D-6 for a possible alignment for the curve)
- Replace the guardrail at Sugarbush Trail/Res. Hwy 6; ensure the installation meets current design standards

**Emphasis Area 3: Reduce run off the road crashes**

- The majority of crashes on Tribal roadways are single vehicle, run off the road crashes

**Goals/Strategies for Emphasis Area 3:**

- Improve pavement markings; replace worn or missing markings
- Add center and/or edge line rumble strips in appropriate locations
- Delineate curves (Thorofare Road and others) with advance signs and chevrons (see Appendix D, page D-7 for a signing plan for the curve on Thorofare Road)
- Increase shoulder widths along WIS 47
- Expand clear zones; clear trees along roadways including Moss Lake Drive

**Emphasis Area 4: Improve roadway drainage**

- There are drainage concerns with flooding and undersized storm sewer and bridges
- The Tribe does not have a good inventory of drainage structures

**Goals/Strategies for Emphasis Area 4:**

- Complete a comprehensive drainage study for the Tribe to identify and prioritize improvements to address flooding issues
- Replace undersized storm sewer in downtown area as part of any future roadway projects
- Replace undersized/narrow bridges
- Delineate culverts and develop a plan for evaluating culvert size and condition

**Emphasis Area 5: Improve local roadway system**

- There are areas where improved or additional roadway connections could provide better access for residents and emergency services
- There are concerns with pavement conditions along WIS 47 in various locations; pavement is in poor condition due to bad roadway base or drainage issues

**Goals/Strategies for Emphasis Area 5:**

- Improve River Road

- Provide additional connection between County H and Gresham Road (see Appendix D, page D-8 for a possible route for a new roadway connection)
- Work with WisDOT on identifying/improving areas along WIS 47 with poor pavement conditions

**Emphasis Area 6: Increase safety awareness**

- Using educational outreach campaigns and enforcement campaigns provides opportunities to increase safety awareness among Tribal members

**Goals/Strategies for Emphasis Area 6:**

- Run educational campaigns in the school and community regarding issues such as bike/ped safety, texting and driving, and child restraints

**Emphasis Area 7: Enforcement**

- There are issues with impaired driving
- There are concerns with speeding, particularly on Thorofare Road

**Goals/Strategies for Emphasis Area 7:**

- Provide better enforcement for impaired driving and speeding
- Conduct educational campaigns to discuss these issues; educational campaigns could be done in the schools to introduce safety concepts at an earlier age

In addition to the seven main emphasis areas discussed above, some general strategies were identified to increase safety for the Tribe:

- Purchase new plow equipment
- Purchase better/longer fire ladders
- Map/mark alternate routes for events in downtown areas
- Identify potential for traffic calming measures in downtown area

The potential improvement strategies and emphasis areas were prioritized by the Tribal working group. There were four priority groupings identified, based on importance to the Tribe. Each of the priority groupings contains strategies to address one or more of the emphasis areas discussed above. A prioritization matrix was developed to identify the following for each priority grouping:

- Emphasis areas/potential strategies
- Who is responsible for implementing the strategies – responsibility for implementing any improvement strategies will generally fall on the Tribe; improvements that extend off of Tribal lands will require cooperation with the government entity having jurisdiction over the roadway outside of Tribal lands
- Timeframes for implementing the strategies – an approximate schedule for implementing the strategies is identified; exact timeframes will depend on the availability of funding to the Tribe
- Estimated costs for implementing the strategies – improvement strategies are categorized as low, reasonable, moderate, or high cost
- Potential funding sources – potential sources of funding are identified; these include funding from both Federal and State sources; other sources of funding may be available for the strategies, especially the educational outreach strategies

A copy of the prioritization matrix is included as Table 9.

## Table 9: Lac du Flambeau Band of Lake Superior Chippewa Indians Prioritization Matrix

| Priority | Emphasis Area/Strategies | Who? | When? | Cost? | Potential Funding Sources |
|---|---|---|---|---|---|
| 1 | Emphasis Area: Improve pedestrian safety | | | | |
| | Multi use paths and lighting between residential areas and downtown:<br>along Cemetery Road<br>along County D<br>along Peace Pipe Lane | Tribe/Town | 2018-2030 | $$$ - $$$$ | RTP; TAP |
| | Improve lighting in residential areas | Tribe | 2018-2030 | $$ - $$$ | TTSP |
| | Improve/maintain crosswalks near school | Tribe/WisDOT | 2018-2025 | $ - $$ | TTSP |
| | Emphasis Area: Improve intersection safety | | | | |
| | Bypass lane at WIS 47/County F | Tribe/WisDOT | 2018-2025 | $$$ - $$$$ | HRRRP; TTSP; HSIP* |
| | Emphasis Area: Improve roadway drainage | | | | |
| | Replace undersized storm sewer in downtown area | Tribe | 2025-2030 | $$$$ | TTSP |
| | Emphasis Area: Increase safety awareness | | | | |
| | Educational campaigns:<br>Child restraints<br>Texting and driving<br>Bike/ped safety | Tribe | ongoing | $ | BOTS; IHSP |
| | Emphasis Area: General | | | | |
| | Purchase better/longer fire ladders | Tribe | 2018-2025 | $$$$ | |
| 2 | Emphasis Area: Improve intersection safety | | | | |
| | Sight distance issues at various locations; clear sight triangle | Tribe/WisDOT/County/Town | ongoing | $ - $$ | HRRRP; TTSP |
| | Realign curve at Peace Pipe Lane (County D) and Indian Village Road | Tribe/County | 2018-2025 | $$$$ | TTSP |
| | Replace low guardrail at Sugarbush Trail/Res. Hwy 6 | Tribe | 2018-2025 | $$ | HRRRP |
| | Emphasis Area: Reduce run off the road crashes | | | | |
| | Delineate curves (Thorofare Road and others) | Tribe/County/Town | 2018-2025 | $$ | HRRRP; TTSP |
| | Increase shoulder widths along WIS 47 | Tribe/WisDOT | 2025-2030 | $$$ | HRRRP |
| | Emphasis Area: Improve roadway drainage | | | | |
| | Correct flooding issues along Peace Pipe Lane south of downtown | Tribe/Town | 2018-2025 | $$ - $$$$ | HRRRP; TTSP |
| | Correct drainage issues at various locations | Tribe/WisDOT/County/Town | ongoing | $$ - $$$$ | HRRRP; TTSP |
| | Delineate culverts and develop plan for evaluating size and condition | Tribe | ongoing | $ - $$ | HRRRP |
| | Emphasis Area: Increase safety awareness | | | | |
| | Safety training for transit drivers | Tribe | ongoing | $ - $$ | BOTS; IHSP |
| | Emphasis Area: Enforcement | | | | |
| | Improve enforcement on drug and alcohol issues | Tribe | ongoing | $ - $$ | BOTS |
| | Address speeding issues along Thorofare Road | Tribe/Town | ongoing | $ - $$ | BOTS |
| | Emphasis Area: General | | | | |
| | Purchase new plow equipments | Tribe | 2018-2025 | $$$$ | |
| 3 | Emphasis Area: Reduce run off the road crashes | | | | |
| | Improve pavement markings; replace worn or missing markings | Tribe/WisDOT/County/Town | ongoing | $$ | HRRRP |
| | Add center and/or edge line rumble strips | Tribe/WisDOT/County/Town | ongoing | $ - $$$ | HRRRP |
| | Expand clear zones/clear trees along roadways | Tribe/WisDOT/County/Town | ongoing | $ - $$ | HRRRP |
| | Emphasis Area: Improve local roadway system | | | | |
| | Work with WisDOT to improve areas along WIS 47 with poor pavement conditions | | ongoing | | HRRRP; TTSP |
| | Emphasis Area: General | | | | |
| | Map/mark alternate routes for events in downtown area | Tribe | 2018-2025 | $ - $$ | |
| | Identify potential for traffic calming measures in downtown area | Tribe | 2018-2025 | $ - $$$ | |
| 4 | Emphasis Area: Improve roadway drainage | | | | |
| | Replace undersized/narrow bridges | Tribe/Town | 2025-2030 | $$$$ | TTSP |
| | Emphasis Area: Improve local roadway system | | | | |
| | Improve River Road | Tribe | 2025-2030 | $$ - $$$$ | TTSP |
| | Provide additional connection between County H and Gresham Road | Tribe | 2030+ | $$$$ | TTSP |

Implementation Costs
$ = low cost (less than $2,000 per location or mile)
$$ = reasonable cost (less than $10,000 per location or mile)
$$$ = moderate cost (between $10,000 and $75,000 per location or mile)
$$$$ = high cost (more than $75,000 per location or mile)

Potential Fuding Sources:
TTSP Funds = Tribal Transportation Safety Program Funds (FHWA)
HSIP - Highway Safety Improvement Program (*must meet crash criteria)
RTP = Recreation Trail Program (Wisconsin DNR)
TAP = Transportation Alternatives Program (WisDOT)
IHSP = Indian Highway Safety Program
HRRRP = High Risk Rural Roads Program (administered by Wisconsin as part of HSIP funding)
BOTS = Bureau of Transportation Safety grants (WisDOT)

## 10.0 Menominee Indian Tribe of Wisconsin

The Menominee Reservation is located in Menominee County and encompasses approximately 358 square miles. The reservation land is primarily undeveloped. The largest developed area is the county seat, Keshena. The Tribal offices and Menominee Casino resort are both located in Keshena. Tribal roadways are primarily rural two-lane roads; there is a short section of 4-lane undivided urban roadway in Keshena. The major routes through the reservation include WIS 47, WIS 55, County VV, and County M.

**Data Summary**

An RSA was completed for the Menominee Indian Tribe of Wisconsin in 2009, while an RSP was completed in 2010. The RSA used crash data from 2003 through 2008, while the RSP used data from 2005 through 2009. There were 152 total crashes on Tribal roadways from 2003 through 2008, and 271 crashes from 2005 through 2009. Of the crashes from 2003 through 2008, 68 crashes (45%) resulted in at least one injury and another 3 crashes (2%) resulted in a fatality. The numbers are similar for the period from 2005 through 2009; there were 100 injury crashes (37% of all crashes) and another 6 fatal crashes (2% of all crashes).

During both time periods, the majority of crashes (70% and 65%) were single vehicle, run off the road crashes. Approximately half the crashes occurred during daylight hours. The highest number of crashes occurred during the winter months from November through January.

The RSA identified the following safety concerns on Menominee roadways:

- Lane departure
- Inadequate signing/delineation
- Speed management
- Sight distance concerns, horizontal and vertical curves, and inadequate signing at the WIS 55 and County M intersections
- Alignment issues at the WIS 47 and County G intersection
- Inadequate signing at the County VV/County Line Road intersection
- There is a need for a barrier in the Spirit Rock area
- Non-motorized facilities in Keshena and Neopit
- Access concerns at the College of Menominee Nation and the casino
- Inadequate signing at the WIS 47/WIS 55/County VV intersection

The RSP identified general concerns with lane departure, signing and delineation, speed management, pedestrians/bicycles, and access management, as well as the following specific safety concerns:

- Sight distance issues at WIS 55/County M intersections
- Alignment issues at WIS 47/County G intersection
- Lack of warning signs at County VV/County Line Road intersection
- Access control concerns near the WIS 47/55/County VV intersection

- Concerns with the wooden barrier adjacent to the roadway in the Spirit Rock area
- Speed management concerns and lack of pedestrian facilities in the town of Zoar

In addition to the RSA and RSP, an Existing Conditions Report was prepared for the Menominee Indian Tribe in 2011. This report documents conditions and identifies issues along WIS 47 and WIS 55 on the Menominee Reservation. The report also identified potential improvement strategies at the following locations:

- WIS 47 and County G
- WIS 47 and County VV (east leg)
- WIS 47 and Lyons Road
- WIS 47 and Courthouse Lane
- WIS 55 and County M (east leg)
- WIS 47 and Tribal Office Loop Road
- WIS 47 and Church Streat
- WIS 55 and Sanapaw Fields Road
- Urban Area near the casino
- Spirit Rock Area

Updated crash data is not available for the Menominee Indian Tribe.

**Existing Efforts/Projects**

The following is a summary of current or recent efforts by the Tribe or others to improve safety:

- The Tribe has recently added sidewalk along Chief Little Wave Road, and is planning to add additional sidewalk along Rabbit Ridge Road and S. Branch Road from WIS 47 to the residential area.
- WisDOT is planning to reconstruct WIS 47 through Keshena. The work will be done as two separate projects, and will add sidewalk and make other improvements to the roadway. The first project will be constructed in 2018, while the second will be constructed in 2020.
- Improvements were made to the WIS 47/County G intersection.
- Sidewalk has been added in Neopit.

**Emphasis Areas**

**Emphasis Area 1: Improve intersection safety**

- There are several intersections with poor sight distance
- There are concerns with the WIS 47/Rabbit Road intersection
- The intersections at County AA and South Branch Road/Clinic Road are poorly aligned
- The WIS 55/County M intersection is poorly aligned
- There are concerns with rear end crashes at the WIS 47/Brooks Lane intersection

**Goals/Strategies for Emphasis Area 1:**

- The Tribe should identify areas where clearing trees brush could improve intersection sight distance
- Add a bypass lane to WIS 47/Rabbit Ridge Road (see Appendix E, page E-1 for a layout for a potential bypass lane)
- Realign the County AA/S. Branch Road/Clinic Road intersections (see Appendix E, pages E-2 to E-3 for a layout of possible intersection realignments)
- Realign the WIS 55/County MM intersection (see Appendix E, page E-4 for a possible intersection realignment)
- Make modifications to the WIS 47/Brooks Lane intersection to better separate turning and through vehicles (see Appendix E, page E-5 for potential intersection improvements)

**Emphasis Area 2: Reduce run off the road crashes**

- The majority of crashes on Tribal roadways are single vehicle run off the road crashes
- Pavement markings and signs are worn or missing
- There are inadequate clear zones in many locations

**Goals/Strategies for Emphasis Area 2:**

- Delineate curves with advance warning signs and chevrons; particular areas of concern are Rushes Lake Crossover and Go Around Road (see Appendix E, pages E-6 to E-12 for curve signing layouts)
- Replace worn or missing pavement markings
- Add center and/or edge line rumble strips where appropriate
- Expand/maintain clear zones where feasible, including along WIS 55

**Emphasis Area 3: Improve local roadway system and access**

- The access to Rivermart is poorly defined
- There are concerns with traffic flow and access on the Tribal Office Loop and Wolf River Drive
- There are concerns with parking along Wolf River Drive near the health clinic
- There are concerns with vehicles pulling off of WIS 47 and driving through yards to access properties in Middle Village

**Goals/Strategies for Emphasis Area 3:**

- Add curb along WIS 47 to better define access at Rivermart; make improvements to existing parking lot to provide better traffic flow to newly defined access points (see Appendix E, page E-13 for a layout of possible access improvements)
- Evaluate converting Tribal Office Loop and Wolf River Drive to one-way roadways to allow for better traffic flow and safer access to and from WIS 47
- Add defined parking along Wolf River Drive near the health clinic (see Appendix E, page E-14 for potential defined parking)
- Provide a full roadway access from WIS 47 to Wekopemeh from the current water tower access; add landscaping or beam guard to prevent cars from pulling off WIS 47 to access parcels at

Middle Village (see Appendix E, page E-15 for a layout of a possible new roadway connection)

**Emphasis Area 4: Improve pedestrian safety**

- There are no pedestrian accommodations along County VV north of WIS 47
- There are concerns with pedestrians crossing near the school in Neopit

**Goals/Strategies for Emphasis Area 4:**

- Add multi-use path along County VV from WIS 47 to Rabbit Ridge Road (see Appendix E, page E-16 for a possible path location and typical section)
- Add beacons to the pedestrian crossing near the school

**Emphasis Area 5: Increase safety awareness**

- Using educational outreach campaigns and enforcement campaigns provides opportunities to increase safety awareness among Tribal members

**Goals/Strategies for Emphasis Area 5:**

- Run educational campaigns in the school and community regarding issues such as bike/ped safety, texting and driving, and child restraints

In addition to the five main emphasis areas discussed above, above, some general strategies were identified to increase safety for the Tribe:

- Evaluate options for addressing drainage issues, particularly near WIS 47/County VV
- Collect and maintain traffic count and speed data in residential areas to help identify areas where additional enforcement or improvements are needed; this could include use of electronic speed signs
- Increase enforcement of speed limits in areas where high speeds are a concern

The potential improvement strategies and emphasis areas were prioritized by the Tribal working group. There were four priority groupings identified, based on importance to the Tribe. Each of the priority groupings contains strategies to address one or more of the emphasis areas discussed above. A prioritization matrix was developed to identify the following for each priority grouping:

- Emphasis areas/potential strategies
- Who is responsible for implementing the strategies – responsibility for implementing any improvement strategies will generally fall on the Tribe; improvements that extend off of Tribal lands will require cooperation with the government entity having jurisdiction over the roadway outside of Tribal lands
- Timeframes for implementing the strategies – an approximate schedule for implementing the strategies is identified; exact timeframes will depend on the availability of funding to the Tribe
- Estimated costs for implementing the strategies – improvement strategies are categorized as low, reasonable, moderate, or high cost
- Potential funding sources – potential sources of funding are identified; these include funding from both Federal and State sources; other sources of funding may be available for the strategies, especially the educational outreach strategies

A copy of the prioritization matrix is included as Table 10.

**Table 10: Menominee Indian Tribe of Wisconsin Prioritization Matrix**

| Priority | Emphasis Area/Strategies | Who? | When? | Cost? | Potential Funding Sources |
|---|---|---|---|---|---|
| 1 | Emphasis Area: Improve intersection safety | | | | |
| | Add bypass lane at WIS 47/Rabbit Ridge Road | WisDOT/Tribe | 2018-2025 | $$$-$$$$ | HRRRP; TTSP; HSIP* |
| | Realign WIS 55/County M intersection | WisDOT/Tribe | 2025-2030 | $$$-$$$$ | HRRRP; TTSP; HSIP* |
| | Emphasis Area: Improve local roadway system and access | | | | |
| | Define access at Rivermart | WisDOT/Tribe | 2018-2020 | $$-$$$ | TTSP |
| | Emphasis Area: Reduce run off the road crashes | | | | |
| | Delineate curves with advance signs/chevrons:<br>Rushes Lake Crossover<br>Go Around Road | WisDOT/Tribe | 2018-2025 | $-$$ | HRRRP; TTSP; HSIP* |
| | Replace worn or missing pavement markings | WisDOT/Tribe | ongoing | $$ | HRRRP; TTSP |
| | Emphasis Area: Improve pedestrian safety | | | | |
| | Add sidewalk along County VV between Rabbit Ridge Road and WIS 47 | Tribe | 2018-2025 | $$$-$$$$ | RTP; TAP |
| | Beacons at school crossings in Neopit | WisDOT/Tribe | 2018-2020 | $-$$ | TTSP |
| 2 | Emphasis Area: Improve intersection safety | | | | |
| | Improve sight distance at various intersections | Tribe | ongoing | $-$$$ | HRRRP; TTSP |
| | Realign intersections at County AA/S. Branch Road | Tribe | 2025-2030 | $$$-$$$$ | TTSP |
| | Address rear end crashes at WIS 47/Brooks Lane intersection | WisDOT/Tribe | 2018-2030 | $$-$$$$ | HRRRP; TTSP; HSIP* |
| | Emphasis Area: Improve local roadway system and access | | | | |
| | Evaluate converting Tribal Office Loop to one-way roadway | Tribe | 2018-2020 | $-$$$ | HRRRP; TTSP |
| | Evaluate converting Wolf River Drive to one-way roadway | Tribe | 2018-2020 | $-$$$ | HRRRP; TTSP |
| | Address parking issues near health clinic | Tribe | 2018-2020 | $-$$ | TTSP |
| | Add new local road connection from WIS 47 to Wekopemeh | Tribe/WisDOT | 2018-2025 | $$$$ | TTSP |
| | Emphasis Area: Reduce run off the road crashes | | | | |
| | Center and/or edge line rumble strips where appropriate | WisDOT/Tribe | ongoing | $-$$$ | HRRRP; HSIP* |
| | Expand/maintain clear zones along WIS 55 and other locations where feasible | WisDOT/Tribe | ongoing | $-$$ | HRRRP |
| 3 | Emphasis Area: Improve local roadway system and access | | | | |
| | Add landscaping or beam guard to prevent cars from pulling off WIS 47 to access | WisDOT/Tribe | 2018-2025 | $$-$$$ | HRRRP |
| | Emphasis Area: Increase safety awareness | | | | |
| | Educational campaigns:<br>Child restraints<br>Texting and driving<br>Bike/ped safety<br>Others? | Tribe | ongoing | $ | BOTS; IHSP |
| | Emphasis Area: General | | | | |
| | Address drainage issues | Tribe | ongoing | $$-$$$ | HRRRP; TTSP |
| 4 | Emphasis Area: Improve intersection safety | | | | |
| | Realign curve at WIS 47/Tribal Office Loop (north leg) intersection | WisDOT/Tribe | 2025-2035 | $$$-$$$$ | TTSP |
| | Emphasis Area: General | | | | |
| | Collect and maintain traffic count and speed data in residential areas | Tribe | ongoing | $$ | BOTS; IHSP |
| | Speed enforcement | Tribe | ongoing | $ | BOTS |

Implementation Costs
$ = low cost (less than $2,000 per location or mile)
$$ = reasonable cost (less than $10,000 per location or mile)
$$$ = moderate cost (between $10,000 and $75,000 per location or mile)
$$$$ = high cost (more than $75,000 per location or mile)

Potential Fuding Sources:
TTSP Funds = Tribal Transportation Safety Program Funds (FHWA)
HSIP - Highway Safety Improvement Program (must meet crash criteria)
RTP = Recreation Trail Program (Wisconsin DNR)
TAP = Transportation Alternatives Program (WisDOT)
IHSP = Indian Highway Safety Program
HRRRP = High Risk Rural Roads Program (administered by Wisconsin as part of HSIP funding)
BOTS = Bureau of Transportation Safety grants (WisDOT)

# 11.0 Oneida Tribe of Indians of Wisconsin

The Oneida Reservation is located in Brown and Outagamie counties and encompasses approximately 102 square miles of land. The western and central areas of the reservation are primarily rural, while the eastern area of the reservation falls within the limits of the City of Green Bay and Village of Ashwaubenon. Roadways in the western and central portions of the reservation are primarily rural, while the roadways in the eastern portion of the reservation are urban. Major routes through the reservation include WIS 29, WIS 54, WIS 55, WIS 172, County E, County EE, County J, and County U.

**Data Summary**

An RSA was completed for the Oneida Tribe of Indians of Wisconsin in 2014. The report used crash data from 2007 through 2013. During that time period, there were 682 crashes on Tribal roadways. Of these, 259 crashes (38%) resulted in at least one injury, and another 5 crashes (1%) resulted in a fatality.

As previously noted, areas of the Oneida Reservation fall within the City of Green Bay and Village of Ashwaubenon, and have a much more urbanized roadway system. This contrasts with the other Tribes in the state, which have primarily rural roadways. This contrast in roadway systems leads to a difference in crash types observed on the Oneida reservation. The majority of crashes (31%) were angle crashes; these crash types are more common at urban intersections. Single vehicle crashes, where the vehicle left the roadway and either struck a fixed object or overturned account for another 29% of the crashes. The majority of the crashes (69%) occurred during daylight hours, with the highest numbers occurring between 4pm and 6pm; this pattern of crashes is consistent with what is commonly seen on an urban roadway. The highest number of crashes occurred during the fall and winter months from October through February.

The RSA identified the following safety concerns on Lac du Flambeau roadways:

- Insufficient intersection delineation
- Worn or missing pavement marking
- Limited sight distance on intersection approaches
- Narrow shoulders
- Inadequate advance curve warning/delineation
- Lack of accommodation for other road users (i.e. bikes and pedestrians)
- Buried guardrail

The previous reports completed for the Oneida Tribe of Indians of Wisconsin contained relatively recent crash data (through 2013). The updated crash data for 2014 shows a lower number or crashes, and differing crash patterns from what was observed in the RSA. During 2014 there 30 total crashes on Tribal roadways. Of these, 12 crashes (40%) resulted in at least one injury; there were no fatalities in 2014.

Unlike the previous data, the majority of the crashes (53%) were single vehicle crashes. The second most common crash type in 2014 was rear end crashes, which accounted for 8 crashes (27%). Most crashes

(57%) occurred during daylight hours. The highest numbers of crashes were seen during the fall and winter months, from October through February.

When looking at the entire 2010 through 2014 period, there were 360 total crashes. Of these, 83 (23%) resulted in at least 1 injury, and an additional 3 crashes (1%) resulted in a fatality. Again, the majority (65%) of crashes were single vehicle crashes. Most crashes (77%) occurred during daylight hours. The highest number of crashes occurred during the fall and winter months, from October through February.

**Existing Efforts/Projects**

The following is a summary of current or recent efforts by the Tribe or others to improve safety:

- The Tribe has recently completed coordination with BIA to identify potential projects on Tribal lands

**Emphasis Areas**

**Emphasis Area 1: Improve pedestrian safety**

- There are insufficient pedestrian accommodations along WIS 54
- Additional pedestrian facilities are needed to connect housing to the elementary school

**Goals/Strategies for Emphasis Area 1:**

- Add sidewalk and pedestrian crossings along WIS 54 and its frontage roads (see Appendix F, pages F-1 to F-2 for a layout of the sidewalk and crossing locations)
- Add a sidewalk along Seminary Road from the southern limits of the housing development to connect with the existing path at Old Seymour Road (see Appendix F, page F-3 for a layout of the potential path)

**Emphasis Area 2: Improve intersection safety**

- There are concerns with traffic flow and safety at the WIS 54 frontage road/ Packerland Drive and WIS 54 frontage road/Hinkle Street intersections

**Goals/strategies for Emphasis Area 2:**

- Evaluate options at Packerland Drive; current development at this intersection may limit feasible options
- Evaluate construction of a backage road at Hinkle Street to provide better separation from the WIS 54 intersection (see Appendix F, page F-4 for a potential backage road layout)

**Emphasis Area 3: Improve access to facilities**

- There are safety concerns with pedestrians crossing between the church and parish hall on County E
- There are concerns with traffic flow and pedestrian access at Mission Park
- There is not any pedestrian access between the airport and hotel
- There is not a good pedestrian access to the health clinic; the current pedestrian path ends at the street entrance to the parking lot

**Goals/strategies for Emphasis Area 3:**

- Improve traffic flow and pedestrian access in area of church/parish hall and Mission Park by: providing marked pedestrian crossing between church and parish hall; extending sidewalk along County E from church entrance to County U; modifying church entrance and providing secondary access from Commissioner Street; adding additional parking along modified access; and widening existing park access from County U to provide better vehicle access (see Appendix F, page F-5 for a potential layout of these improvements)
- Add sidewalk to connect the airport terminal to the hotel (see Appendix F, page F-6 for a sidewalk layout)
- Provide a sidewalk connecting the existing path on Overland Road to the main entrance of the health clinic (see Appendix F, page F-7 for a sidewalk layout)

**Emphasis Area 4: Increase safety awareness**

- Using educational outreach campaigns and enforcement campaigns provides opportunities to increase safety awareness among Tribal members

**Goals/Strategies for Emphasis Area 4:**

- Run educational campaigns in the school and community regarding issues such as texting and driving, and child restraints

In addition to the four main emphasis areas discussed above, above, some general strategies were identified to increase safety for the Tribe:

- Delineate curves
- Replace worn or missing pavement markings and signs
- Add center and/or edge line rumble strips where appropriate
- Expand clear zones

The potential improvement strategies and emphasis areas were prioritized by the Tribal working group. There were four priority groupings identified, based on importance to the Tribe. Each of the priority groupings contains strategies to address one or more of the emphasis areas discussed above. A prioritization matrix was developed to identify the following for each priority grouping:

- Emphasis areas/potential strategies
- Who is responsible for implementing the strategies – responsibility for implementing any improvement strategies will generally fall on the Tribe; improvements that extend off of Tribal lands will require cooperation with the government entity having jurisdiction over the roadway outside of Tribal lands
- Timeframes for implementing the strategies – an approximate schedule for implementing the strategies is identified; exact timeframes will depend on the availability of funding to the Tribe
- Estimated costs for implementing the strategies – improvement strategies are categorized as low, reasonable, moderate, or high cost
- Potential funding sources – potential sources of funding are identified; these include funding from both Federal and State sources; other sources of funding may be available for the strategies, especially the educational outreach strategies

A copy of the prioritization matrix is included as Table 11.

**Table 11: Oneida Tribe of Indians of Wisconsin Prioritization Matrix**

| Priority | Emphasis Area/Strategies | Who? | When? | Cost? | Potential Funding Sources |
|---|---|---|---|---|---|
| 1 | Emphasis Area: Improve pedestrian safety | | | | |
| | Add sidewalk and pedestrian crossings along frontage roads/WIS 54 | Tribe/WisDOT | 2018 - 2025 | $$$$ | TAP; TTSP |
| | Provide sidewalk/path along Seminary Road from residential area to elementary school | Tribe | 2018 - 2025 | $$$$ | TAP; TTSP |
| | Emphasis Area: Improve intersection safety | | | | |
| | Evaluate options at Frontage Road/Packerland Drive | WisDOT/Tribe | 2020 - 2025 | $$$ - $$$$ | TTSP |
| | Backage road at Hinkle Street | WisDOT/Tribe | 2025 - 2030 | $$$$ | TTSP |
| | Emphasis Area: Improve access to facilities | | | | |
| | Provide crossing between church and parish hall | Tribe/County | 2018 - 2020 | $$ - $$$ | TAP; TTSP |
| 2 | Emphasis Area: Improve access to facilities | | | | |
| | Provide better access/circulation at Mission Park | Tribe | 2020 - 2025 | $$$$ | TTSP; IHSP |
| | Provide pedestrian path from airport to hotel | Tribe/WisDOT | 2018 - 2025 | $$$ - $$$$ | TAP; TTSP |
| | Provide crossing/path to entrance of health clinic | Tribe | 2018 - 2025 | $$$ - $$$$ | TTSP |
| 3 | Emphasis Area: Increase safety awareness | | | | |
| | Educational campaigns:<br>Child restraints<br>Texting and driving<br>Others | Tribe | ongoing | $ | BOTS; IHSP |
| 4 | Emphasis Area: General | | | | |
| | Delineate curves | Tribe/County | 2020 - 2030 | $ - $$ | HRRRP |
| | Replace worn or missing pavement markings/signs | Tribe/County | ongoing | $ - $$ | HRRRP |
| | Center and/or edge line rumble strips where appropriate | Tribe/County | ongoing | $ - $$$ | HRRRP |
| | Expand clear zones | Tribe/County | ongoing | $$ | HRRRP |

Implementation Costs

$ = low cost (less than $2,000 per location or mile)
$$ = reasonable cost (less than $10,000 per location or mile)
$$$ = moderate cost (between $10,000 and $75,000 per location or mile)
$$$$ = high cost (more than $75,000 per location or mile)

Potential Fuding Sources:

TTSP Funds = Tribal Transportation Safety Program Funds (FHWA)
HSIP - Highway Safety Improvement Program (must meet crash criteria)
RTP = Recreation Trail Program (Wisconsin DNR)
TAP = Transportation Alternatives Program (WisDOT)
IHSP = Indian Highway Safety Program
HRRRP = High Risk Rural Roads Program (administered by Wisconsin as part of HSIP funding)
BOTS = Bureau of Transportation Safety grants (WisDOT)

## 12.0 Red Cliff Band of Lake Superior Chippewa Indians

The Red Cliff Reservation contains approximately 23 square miles of land in Bayfield County. The reservation is primarily undeveloped. The majority of development is in the unincorporated community of Red Cliff, which contains the Tribal offices and Legendary Waters Resort and Casino. The roadways on the reservation are primarily two-lane rural roads. Major routes through the reservation are WIS 13 and Blueberry Road.

**Data Summary**

An RSA was completed for WIS 13 and Blueberry Road in 2009; these are the two main roadways and carry the majority of the traffic on the reservation. An RSP was completed for the Red Cliff reservation in 2011. The RSA used crash data from 2006 through 2008, and only included crashes on WIS 13 and Blueberry Road. The RSP used data for all reservation roadways from 2004 through 2008. There were 6 total crashes on WIS 13 and Blueberry Road from 2006 through 2008, and 29 crashes on reservation roadways from 2004 through 2008. Of the crashes from 2006 through 2008, 2 crashes (40%) resulted in at least one injury and another crash (20%) resulted in a fatality. For all reservation roadways for the period from 2004 through 2008 there were 10 injury crashes (35% of all crashes) and another 1 fatal crash (3% of all crashes).

During both time periods, the majority of crashes (60% and 73%) were single vehicle crashes. The majority of the crashes occurred during daylight hours during both time periods. The highest number of crashes occurred during the months of April and May.

The RSA identified the following safety concerns:

- Worn or missing pavement marking
- Inconsistent cross sections
- Lack of continuity and connectivity for pedestrians, bikes, and ATVs
- Access issues at the casino
- Multiple intersections in close proximity
- Drivers using the shoulder as a turn lane
- Inconsistent bus activity at Pike Road and WIS 13
- Lack of paved shoulder
- Clear zone issues
- Sight distance issues at fire station access point
- ATVs using and crossing the roadway

In addition, the following specific safety concerns were identified in the RSP:

- Lane departure
- Intersections are not conspicuous; signage and lighting should be improved
- There is a lack of pedestrian accommodations

The updated crash data shows higher crash numbers, but similar crash patterns to what was observed in the RSA. During the period from 2010 through 2014 there 42 total crashes on Tribal roadways. Of these, 14 crashes (33%) resulted in at least one injury; there were no fatalities in the 5-year period.

As with the older data, the majority of the crashes (67%) were single vehicle crashes. Most crashes (64%) occurred during daylight hours. The highest numbers of crashes were seen in the winter months, from November through January, with another peak in August.

Areas with a higher number of crashes during the five-year period investigated include the WIS 13/Blueberry Road/Casino entrance intersection, along Blueberry Road near the housing development, and along Old County K Road south of Emil Road.

**Existing Efforts/Projects**

The following is a summary of current or recent Tribal efforts related to safety:

- The Tribe is completing a long range plan that covers transportation, as well as other issues such as land use. The plan will be completed after the completion of this Statewide TTSP, and will incorporate recommendations from this plan.
- The Town of Russell is planning a project on Little Sand Bay Road/Old County Road K. The project will widen the shoulders and may potentially address profile issues. The project will be completed in 3 or 4 phases.
- The Tribe has applied for a grant to purchase new plowing equipment and to construct a transportation center.

**Emphasis Areas**

**Emphasis Area 1: Improve intersection safety**

- There are safety concerns with the WIS 13/Blueberry Road/Casino entrance intersection
- Access at Tribal offices is a concern during peak times; there are multiple roadways converging at one intersection
- The roadways in the housing areas off of Blueberry Road have steep approaches

**Goals/Strategies for Emphasis Area 1:**

- Reconstruct the WIS 13/Blueberry Road intersection to provide better separation between the intersection and the casino entrance (see Appendix G, pages G-1 to G-2 for two possible improvement options at this intersection)
- Reconstruct the interior roadways to provide better traffic flow prior to the WIS 13 intersection (see Appendix G, pages G-3 to G-4 for two possible improvement options for these roadways/intersections)
- Reconstruct intersections with roundabouts to provide better operations/access; this can be done in conjunction with other improvements to traffic flow (see Appendix G, page G-5 for potential roundabout locations, and pages G-1 to G-4 for other potential improvements to traffic flow)
- Reconstruct the roadways to lower profiles and provide flatter approaches

**Emphasis Area 2: Enhance walking/biking opportunities**

- There are insufficient pedestrian and bicycle accommodations; there is a wider shoulder on Blueberry Road, but it does not provide separation from vehicles
- There are concerns with pedestrians crossing WIS 13 near the health clinic/pow wow grounds during events
- There are concerns with pedestrians crossing WIS 13 between Bresette Hill Road and Blueberry Road, particularly in the area of the grocery store/smoke shop; there are currently three marked crosswalks in this section

**Goals/Strategies for Emphasis Area 2:**

- Add off road, multi-use paths along Blueberry Road from WIS 13 to the housing areas, and along WIS 13 from Blueberry Road to the health clinic/pow wow grounds (see Appendix G, pages G-6 to G-11 for layouts of potential multi-use paths along WIS 13 and Blueberry Road)
- Add marked pedestrian crossing on WIS 13 at the health clinic/pow wow grounds (a marked crossing is shown on the layout for a potential multi-use path along WIS 13 found in Appendix G, pages G-6)
- Add rectangular rapid flashing beacons or other lighting to the marked pedestrian crossings on WIS 13 between Bresette Hill Road and Blueberry Road (see Appendix G, page G-12 for a layout of lighted crossings in this area)
- Increase shoulder widths in other areas

**Emphasis Area 3: Reduce run off the road crashes**

- The majority of crashes are single vehicle, run off the road crashes

**Goals/Strategies for Emphasis Area 3:**

- Add center and/or edge line rumble strips in appropriate locations
- Delineate curves along Blueberry Road, WIS 13 and County K with advance signs and chevrons (see Appendix G, pages G-13 to G-18 for signing plans for the curves along Blueberry Road)
- Use epoxy pavement markings to increase useful life of markings
- Widen shoulders and clear zones where needed

**Emphasis Area 4: Improve access**

- There is only one paved access to the housing development off of Blueberry Road
- Part of Blueberry Road is unpaved, which can create access issues for emergency services

**Goals/Strategies for Emphasis Area 4:**

- Pave secondary access to housing off of WIS 13 (see Appendix G, page G-19 for paving limits for this access)
- Pave the rest of Blueberry Road (see Appendix G, page G-19 for paving limits on Blueberry Road)

**Emphasis Area 5: Increase safety awareness**

- Using educational outreach campaigns and enforcement campaigns provides opportunities to increase safety awareness among Tribal members

**Goals/Strategies for Emphasis Area 5:**

- Run educational campaigns on safety issues such as seat belt usage, impaired driving, ATV usage on roadways, etc. as needed

The potential improvement strategies and emphasis areas were prioritized by the Tribal working group. There were four priority groupings identified, based on importance to the Tribe. Each of the priority groupings contains strategies to address one or more of the emphasis areas discussed above. A prioritization matrix was developed to identify the following for each priority grouping:

- Emphasis areas/potential strategies
- Who is responsible for implementing the strategies – responsibility for implementing any improvement strategies will generally fall on the Tribe; improvements that extend off of Tribal lands will require cooperation with the government entity having jurisdiction over the roadway outside of Tribal lands
- Timeframes for implementing the strategies – an approximate schedule for implementing the strategies is identified; exact timeframes will depend on the availability of funding to the Tribe
- Estimated costs for implementing the strategies – improvement strategies are categorized as low, reasonable, moderate, or high cost
- Potential funding sources – potential sources of funding are identified; these include funding from both Federal and State sources; other sources of funding may be available for the strategies, especially the educational outreach strategies

A copy of the prioritization matrix is included as Table 12.

**Table 12: Red Cliff Band of Lake Superior Chippewa Indians Prioritization Matrix**

| Priority | Emphasis Area/Strategies | Who? | When? | Cost? | Potential Funding Sources |
|---|---|---|---|---|---|
| 1 | Emphasis Area: Improve intersection safety | | | | |
| | Reconfigure WIS 13/Blueberry Road/Casino Entrance | WisDOT/Tribe | 2018-2025 | $$$ - $$$$ | HSIP*; TTSP |
| | Improve Tribal office entrance | Tribe | 2018-2025 | $$$ - $$$$ | TTSP |
| | Emphasis Area: Enhance walking/biking opportunities | | | | |
| | Add off-road biking/walking paths:<br>Blueberry Road (WIS 13 to housing)<br>Along WIS 13 to health clinic/pow wow grounds | WisDOT/Tribe | 2018-2025 | $$$$ | RTP; TAP |
| | Add marked pedestrian crossing at health clinic/pow wow grounds, and along WIS 13 between Bresette Hill Road and Blueberry Road; potentially include RRFB's or other lighting at the crossings | WisDOT/Tribe | 2018-2025 | $$ | TTSP |
| | | | | | |
| 2 | Emphasis Area: Reduce run-off the road crashes | | | | |
| | Delineate curves with advance signs/chevrons<br>Blueberry Road<br>WIS 13<br>County K | WisDOT/County/Tribe | 2018-2025 | $$ - $$$ | HRRRP; TTSP |
| | Epoxy pavement markings (includes passing zones and fog lines) | WisDOT/County/Tribe | ongoing | $$ | HRRRP |
| | Emphasis Area: Improve access | | | | |
| | Pave secondary access to housing area off of WIS 13 | Tribe | 2018-2025 | $$-$$$ | TTSP |
| | Pave remainder of Blueberry Road | Tribe | 2018-2025 | $$-$$$ | TTSP |
| | | | | | |
| 3 | Emphasis Area: Intersection Safety | | | | |
| | Reconstruction intersections with roundabouts | WisDOT/County/Tribe | 2025+ | $$$$ | TTSP |
| | Emphasis Area: Reduce run-off the road crashes | | | | |
| | Center and/or edge line rumble strips | Tribe | ongoing | $ - $$$ | HRRRP |
| | Expand clear zones | WisDOT/County/Tribe | ongoing | $-$$ | HRRRP |
| | Emphasis Area: Enhance walking/biking opportunities | | | | |
| | Increase shoulder widths | WisDOT/County/Tribe | ongoing | $$$ | HRRRP |
| | Emphasis Area: Increase safety awareness | | | | |
| | Educational campaigns | Tribe | ongoing | $ | IHSP; BOTS |
| | | | | | |
| 4 | Emphasis Area: Reduce run-off the road crashes | | | | |
| | Increase shoulder widths | WisDOT/County/Tribe | 2025-2030 | $$$ | HRRRP |
| | Emphasis Area: Improve intersection safety | | | | |
| | Reconstruct steep approaches | Tribe | 2025+ | $$$ - $$$$ | TTSP |

Implementation Costs
$ = low cost (less than $2,000 per location or mile)
$$ = reasonable cost (less than $10,000 per location or mile)
$$$ = moderate cost (between $10,000 and $75,000 per location or mile)
$$$$ = high cost (more than $75,000 per location or mile)

Potential Fuding Sources:
TTSP Funds = Tribal Transportation Safety Program Funds (FHWA)
HSIP - Highway Safety Improvement Program (*must meet crash criteria)
RTP = Recreation Trail Program (Wisconsin DNR)
TAP = Transportation Alternatives Program (WisDOT)
IHSP = Indian Highway Safety Program
HRRRP = High Risk Rural Roads Program (administered by Wisconsin as part of HSIP funding)
BOTS = Bureau of Transportation Safety grants (WisDOT)

## 13.0 Sokaogon Chippewa Community Mole Lake Band

The Mole Lake Reservation is located in Forest County and encompasses approximately 8 square miles. The reservation is primarily undeveloped. The largest area of development is in the unincorporated community of Mole Lake, along WIS 55. This area contains the Mole Lake Casino Lodge and Tribal offices. Roadways on the reservation are primarily two-lane rural roads. Major routes through the reservation include WIS 55 and Sand Lake Road.

**Data Summary**

An RSA was completed for the Sokaogon Chippewa Community Mole Lake Band in 2008, while an RSP was completed in 2010. The RSA used crash data from 2003 through 2007, while the RSP used data from 2004 through 2008. There were 14 total crashes on Tribal roadways from 2003 through 2007, and 20 crashes from 2004 through 2008. Of the crashes from 2003 through 2007, 6 crashes (42%) resulted in at least one injury; there were no fatalities during this period. For the period from 2004 through 2008, there were 4 injury crashes (20% of all crashes); there were no fatalities during this period either.

During both time periods, the majority of crashes (50% and 74%) were single vehicle, run off the road crashes. During the period from 2003 through 2007 another 29% of the crashes were sideswipe crashes. Data from the RSA shows that the majority of crashes (79%) occurred during daylight hours. The highest number of crashes occurred during the months of January and February, with another small peak in June.

The RSA identified the following safety concerns on Mole Lake roadways:

- Interaction of modes; ATVs and dirt bikes using the roadway and sidewalks
- Lack of facilities for pedestrians
- High speeds on STH 55 through Mole Lake
- Missing, worn, or sub-standard signage
- There are concerns with an unofficial trail adjacent to the bridge over Swamp Creek and with pedestrians crossing STH 55 at this location

In addition to the concerns identified in the RSA, the RSP identified the following additional safety concerns on Mole Lake roadways:

- Lack of facilities for bikes
- Cross section does not adequately accommodate large trucks that use the roadways
- There are issues with enforcement; there is not a Tribal Police Department and the County can't patrol BIA roads

The updated crash data shows higher crash numbers, but similar crash patterns to what was observed in the RSA. During the period from 2010 through 2014 there 29 total crashes on Tribal roadways. Of these, 6 crashes (21%) resulted in at least one injury and another 1 crash (3%) resulted in a fatality.

As with the older data, the majority of the crashes (51%) were single vehicle crashes. The next most common crash types were angle and sideswipe crashes; these crash types each accounted for 17% of the total crashes. Most crashes (79%) occurred during daylight hours. The highest numbers of crashes were seen in the winter months, from November through February, with another peak in June and July.

**Existing Efforts/Projects**

The following is a summary of recent Tribal safety efforts or planned projects:

- The Tribe updated their Road Safety Audit and Road Safety Plan in 2014
- Multi-use paths were completed along County M and Indian Settlement Road in 2017
- The Tribe is in the process of establishing their own police department; the department will be operational in 2018

**Emphasis Areas**

**Emphasis Area 1: Improve intersection safety**

- There are issues with cars going through the stop sign at the intersection of the new subdivision roadway with Ackley Circle
- There are issues with cars going through the stop sign at the intersection of Ackley Circle with County M
- Larger vehicles have issues making the turn at the WIS 55/Sand Lake Road intersection
- There is poor sight distance at the WIS 55/Cemetery Road intersection

**Goals/Strategies for Emphasis Area 1:**

- Improve signing/lighting at intersection of new subdivision roadway with Ackley Circle; evaluate use of high friction surface treatment to help prevent cars from sliding through the intersection; improve plowing/salting of intersection (see Appendix H, page H-1 for a signing plan for the intersection and curve on Ackley Circle)
- Improve signing/lighting at intersection of Ackley Circle with County M (see Appendix H, page H-2 for a signing plan for the intersection)
- Reconfigure the WIS 55/Sand Lake Road intersection to improve turns for larger vehicles (see Appendix H, page H-3 for a potential realignment of the intersection)
- Realign the WIS 55/Cemetery Road intersection and clear vision corners to provide better sight distance

**Emphasis Area 2: Enhance pedestrian facilities**

- There is not a safe crossing of WIS 55 between the housing and C-store
- There aren't pedestrian facilities in the area of the Tribal facilities near the health clinic
- Additional pedestrian facilities are needed to connect residential areas
- There is insufficient lighting for pedestrians along WIS 55

**Goals/Strategies for Emphasis Area 2:**

- Add a marked pedestrian crossing between the housing and C-store (see Appendix H, page H-4 for a layout of the crossing)
- Provide delineated pedestrian facilities in the area of the Tribal facilities near the health clinic; better delineate vehicle access to parking lots and facilities (see Appendix H, page H-5 for a layout of pedestrian facilities and access delineation in this area)

- Provide additional trail connection between John K Road and Ackley Circle (see Appendix H, page H-6 for a layout of a possible trail alignment).
- Provide additional lighting along WIS 55

**Emphasis Area 3: Improve ATV access**

- ATV's cross WIS 55 near Sokaogon Drive
- There is an ATV trail that passes through the area of the Tribal facilities near the health clinic

**Goals/Strategies for Emphasis Area 3:**

- Add a marked ATV crossing on WIS 55 at Sokaogon Road (see Appendix H, page H-7 for a layout of the trail crossing)
- Better delineate the ATV trail route in the area of the Tribal facilities near the health clinic

**Emphasis Area 4: Enforcement**

- Vehicles currently park on the multi-use path along County M
- High speeds are a concern on WIS 55 through Mole Lake

**Goals/Strategies for Emphasis Area 4:**

- Once the Tribal police department is established, enforce no parking regulations on the multi-use path; conduct community outreach to discourage using the path for parking
- Work with the County to enforce speeds on WIS 55; evaluate the installation of electronic speed signs on WIS 55 in Mole Lake

**Emphasis Area 5: Improve local roads**

- There are several issues with drainage, driveways, and roadway grades on local roads
- Community Drive is poorly aligned, and runs through the casino parking lot

**Goals/Strategies for Emphasis Area 5:**

- Add warning signs for Fishery driveway
- Improve drainage on Sokaogon Road to prevent water/ice from building up on roadway
- Improve drainage along Community Drive and at Community Drive/WIS 55 intersection
- Work with town to cut down hill on Black Joe Road
- Evaluate alternatives for improving the alignment on Community Drive

**Emphasis Area 6: Increase safety awareness**

- Using educational outreach campaigns and enforcement campaigns provides opportunities to increase safety awareness among Tribal members

**Goals/Strategies for Emphasis Area 6:**

- Run educational campaigns on safety issues such as seat belt usage, impaired driving, ATV usage on roadways, etc. as needed

In addition to the six main emphasis areas discussed above, some general strategies were identified to increase safety on the Tribal transportation network:

- Replace worn or missing signs and pavement markings

- Expand clear zones/shoulder widths as needed

The potential improvement strategies and emphasis areas were prioritized by the Tribal working group. There were four priority groupings identified, based on importance to the Tribe. Each of the priority groupings contains strategies to address one or more of the emphasis areas discussed above. A prioritization matrix was developed to identify the following for each priority grouping:

- Emphasis areas/potential strategies
- Who is responsible for implementing the strategies – responsibility for implementing any improvement strategies will generally fall on the Tribe; improvements that extend off of Tribal lands will require cooperation with the government entity having jurisdiction over the roadway outside of Tribal lands
- Timeframes for implementing the strategies – an approximate schedule for implementing the strategies is identified; exact timeframes will depend on the availability of funding to the Tribe
- Estimated costs for implementing the strategies – improvement strategies are categorized as low, reasonable, moderate, or high cost
- Potential funding sources – potential sources of funding are identified; these include funding from both Federal and State sources; other sources of funding may be available for the strategies, especially the educational outreach strategies

A copy of the prioritization matrix is included as Table 13.

**Table 13: Sokaogon Chippewa Community Prioritization Matrix**

| Priority | Emphasis Area/Strategies | Who? | When? | Cost? | Potential Funding Sources |
|---|---|---|---|---|---|
| 1 | Emphasis Area: Improve intersection safety | | | | |
| | Improve intersection of Ackley Circle/subdivision entrance | Tribe | 2018-2020 | $$$ - $$$$ | TTSP |
| | Add signing at Ackley Circle/County M | Tribe/County | 2018-2020 | $$ - $$$ | TTSP |
| | Improve WIS 55/Sand Lake Road intersection | Tribe/WisDOT | 2020-2025 | $$$ - $$$$ | TTSP |
| | Emphasis Area: Enhance pedestrian facilities | | | | |
| | Provide pedestrian crossing between housing and C-store | Tribe/WisDOT | 2018-2020 | $$ | TAP; TTSP |
| | Provide pedestrian facilities near health clinic and other Tribal facilities | Tribe | 2020-2025 | $$ - $$$ | TAP; TTSP |
| | Provide additional trail connection between John K Road and Ackley Circle | Tribe | 2020-2025 | $$ - $$$ | TAP; TTSP |
| | | | | | |
| 2 | Emphasis Area: Enhance pedestrian facilities | | | | |
| | Provide additional lighting along WIS 55 | Tribe/WisDOT | 2025-2030 | $$ - $$$ | IHSP |
| | Emphasis Area: Improve ATV access | | | | |
| | Provide ATV crossing on WIS 55 at Sokaogon Drive | Tribe/WisDOT | 2020-2025 | $$ | RTP; TAP |
| | Improve ATV path/crossings near health clinic and other Tribal facilities | Tribe | 2020-2025 | $$ | RTP; TAP |
| | Emphasis Area: Improve local roads | | | | |
| | Improve drainage along Community Drive and at Community Drive/WIS 55 intersection | Tribe/WisDOT | 2018-2020 | $$ - $$$ | IHSP |
| | Evaluate alternatives for realigning Community Drive | Tribe | 2020-2025 | $$$$ | TTSP |
| | Emphasis Area: Enforcement | | | | |
| | Enforce no parking on multi-use path along County M | Tribe | ongoing | $ | BOTS |
| | Enforce speeds on WIS 55 near casino; potential for electronic speed sign | Tribe/County | ongoing | $ - $$ | IHSP; BOTS |
| | | | | | |
| 3 | Emphasis Area: Improve intersection safety | | | | |
| | Realign Cemetery Road intersection to improve sight distance | Tribe/WisDOT | 2025-2030 | $$$ - $$$$ | TTSP |
| | Emphasis Area: General | | | | |
| | Replace worn or missing signs | Tribe/WisDOT/County | ongoing | $ | HRRRP |
| | Replace worn or missing pavement markings | Tribe/WisDOT/County | ongoing | $$ | HRRRP |
| | Emphasis Area: Improve local roads | | | | |
| | Improve drainage on Sokaogon Drive | Tribe | 2020-2025 | $$ - $$$ | TTSP |
| | | | | | |
| 4 | Emphasis Area: General | | | | |
| | Expand clear zones/shoulder widths | Tribe/WisDOT/County | ongoing | $$ - $$$ | HRRRP |
| | Emphasis Area: Education | | | | |
| | Educational campaigns:<br>ATV/bike safety on roadways<br>Seatbelt usage<br>Impaired driving | Tribe | ongoing | $ | BOTS; IHSP |
| | Emphasis Area: Improve local roads | | | | |
| | Provide signing for Fishery driveway | Tribe | 2018-2020 | $ | IHSP; HRRRP |
| | Cut down hill on Black Joe Road | Tribe | 2030-2035 | $$$$ | TTSP |

Implementation Costs

$ = low cost (less than $2,000 per location or mile)
$$ = reasonable cost (less than $10,000 per location or mile)
$$$ = moderate cost (between $10,000 and $75,000 per location or mile)
$$$$ = high cost (more than $75,000 per location or mile)

Potential Fuding Sources:

TTSP Funds = Tribal Transportation Safety Program Funds (FHWA)
HSIP - Highway Safety Improvement Program (*must meet crash criteria)
RTP = Recreation Trail Program (Wisconsin DNR)
TAP = Transportation Alternatives Program (WisDOT)
IHSP = Indian Highway Safety Program
HRRRP = High Risk Rural Roads Program (administered by Wisconsin as part of HSIP funding)
BOTS = Bureau of Transportation Safety grants (WisDOT)

## 14.0 St. Croix Band Chippewa Indians of Wisconsin

The St. Croix Reservation encompasses approximately 7.5 square miles and is located primarily in Burnett County; there are also scattered areas of Tribal trust land in Barron, Burnett, and Polk counties. The reservation is primarily undeveloped; most of the Tribe's development, including the St. Croix Casino, is located on Tribal trust land off the reservation. The major route through the reservation is County E.

**Data Summary**

A Transportation Safety Plan was completed for the St. Croix Band in 2015. The TSP used crash data from 2010 through 2014; the crash data was limited to the Danbury Community. There were 42 total crashes on Tribal roadways during this time period. Run off the road crashes were separated from other collisions in the report data, so it cannot be determined what percentage of the total crashes were single vehicle run off the road crashes. Of the crashes noted, 16 crashes (38%) resulted in at least one injury. There was also one fatal crash. The report also notes additional fatalities identified by Tribal members.

The TSP identified the following safety concerns on St. Croix roadways:

- Interaction of modes – increasing pedestrian, bicycle, and ATV traffic are a concern
- Intersection visibility – lack of street lighting and insufficient sight distance
- Worn or missing signs
- Insufficient/overgrown clear zones

Additional crash data from the years 2007 through 2014 for all Tribal roadways is also available. Typically, WisDOT analyzes the most recent 5 years of crash data; crash data from 2010 through 2014 was used in this report. During that time period, there were 62 crashes on the roadways on or adjacent to Tribal lands. Of those crashes, 18 (29%) resulted in at least one injury, while another 2 crashes (3%) resulted in a fatality.

As seen with other Tribes, the majority of crashes (69%) were single vehicle crashes, where the vehicle left the roadway and either struck a fixed object or overturned. Most of the crashes (65%) occurred during daylight hours. The highest number of crashes occurred during the month of August.

**Existing Efforts/Projects**

The following is a summary of current or recent Tribal efforts related to safety:

- The Tribe completed an individual safety plan in 2015.
- The Tribe had a traffic study completed for the Four Winds development in Siren in 2016.
- The Tribe has applied for funding to improve the pedestrian crossing at the casino in Danbury.
- The Tribe is working with local officials to improve street lighting in Danbury and Hertel.
- The Tribe is completing additional traffic studies in Danbury and Round Lake; these are expected to be completed in fall 2018.

**Emphasis Areas**

**Emphasis Area 1: Improve pedestrian safety**

- There are insufficient pedestrian facilities in several of the tribal areas

**Goals/Strategies for Emphasis Area 1:**

- Add/improve the pedestrian crossing between the casino and restaurant in Danbury
- Complete an off-road multi-use path between Lake 26 Road, the casino, and the campground in Danbury (see Appendix I, page I-1 for a path alignment)
- Add street lighting in Danbury, Hertel, and County E/Round Lake

**Emphasis Area 2: Improve access**

- There is limited access in residential areas

**Goals/Strategies for Emphasis Area 2:**

- Provide a secondary access to Gaslyn (see Appendix I, page I-2 for a potential new access location)
- Provide a frontage road in Hertel to allow residents to access Tribal facilities without having to use WIS 70 (see Appendix I, page I-3 for a potential frontage road layout)
- Provide a new access to the Head Start facility off of WIS 70 (see Appendix I, page I-4 for a potential access layout)

**Emphasis Area 3: Address speed concerns**

- Traffic generally travels at a high rate of speed through Tribal areas, especially Hertel and Danbury

**Goals/Strategies for Emphasis Area 3:**

- Work with local officials to add electronic speed signs in areas of concern
- Add reduced speed ahead sign near Lake 26 Road

**Emphasis Area 4: Reduce run off the road crashes**

- The majority of crashes on Tribal roadways are single vehicle run off the road crashes

**Goals/Strategies for Emphasis Area 4:**

- Expand clear zones
- Add center and/or edge line rumble strips where appropriate

**Emphasis Area 5: Increase safety awareness**

- Using educational outreach campaigns and enforcement campaigns provides opportunities to increase safety awareness among Tribal members

**Goals/Strategies for Emphasis Area 5:**

- Run educational campaigns on safety issues such as seat belt usage, child restraints, texting and driving, etc.

In addition to the five main emphasis areas discussed above, some general strategies were identified to increase safety on the Tribal transportation network:

- Add additional plow trucks; the Tribe currently only has one plow truck
- Replace worn or missing signs and pavement markings
- Add intersection lighting as needed

The potential improvement strategies and emphasis areas were prioritized by the Tribal working group. There were four priority groupings identified, based on importance to the Tribe. Each of the priority groupings contains strategies to address one or more of the emphasis areas discussed above. A prioritization matrix was developed to identify the following for each priority grouping:

- Emphasis areas/potential strategies
- Who is responsible for implementing the strategies – responsibility for implementing any improvement strategies will generally fall on the Tribe; improvements that extend off of Tribal lands will require cooperation with the government entity having jurisdiction over the roadway outside of Tribal lands
- Timeframes for implementing the strategies – an approximate schedule for implementing the strategies is identified; exact timeframes will depend on the availability of funding to the Tribe
- Estimated costs for implementing the strategies – improvement strategies are categorized as low, reasonable, moderate, or high cost
- Potential funding sources – potential sources of funding are identified; these include funding from both Federal and State sources; other sources of funding may be available for the strategies, especially the educational outreach strategies

A copy of the prioritization matrix is included as Table 14.

**Table 14: St. Croix Band Chippewa Indians of Wisconsin Prioritization Matrix**

| Priority | Emphasis Area/Strategies | Who? | When? | Cost? | Potential Funding Sources |
|---|---|---|---|---|---|
| 1 | Emphasis Area: Improve pedestrian safety | | | | |
| | Add/improve pedestrian crossing between casino and Log Cabin restaurant in Danbury | Tribe/WisDOT | 2018-2028 | $$ - $$$ | RTP; TAP |
| | Complete off road trail between Lake 26 Road, casino, and campground | Tribe/WisDOT | 2018-2025 | $$$ - $$$$ | RTP; TAP |
| | Add street lighting in Danbury/Hertel | Tribe/WisDOT/County | 218-2025 | $$ | TTSP |
| | Add street lighting on County E/Round Lake | Tribe/County | 2018-2025 | $$ | TTSP |
| | Emphasis Area: Address speed concerns | | | | |
| | Add electronic speed signs in areas of concern | Tribe/WisDOT/County | 2018-2020 | $$ - $$$ | IHSP/TTSP |
| | Add reduced speed ahead sign near Lake 26 Road | Tribe/WisDOT/County | 2018-2020 | $ | IHSP/TTSP |
| 2 | Emphasis Area: Improve access | | | | |
| | Provide secondary access to Gaslyn | Tribe/County | 2018-2020 | $$$ - $$$$ | TTSP |
| | Provide frontage road in Hertel | Tribe/WisDOT | 2018-2020 | $$$$ | TTSP |
| | Provide new access to Head Start facility | Tribe/WisDOT | 2020-2025 | $$$-$$$$ | TTSP |
| 3 | Emphasis Area: General | | | | |
| | Replace worn or missing signs | Tribe/WisDOT/County | ongoing | $ | HRRRP |
| | Replace worn pavement markings | Tribe/WisDOT/County | ongoing | $$ | HRRRP |
| | Add intersection lighting as needed | Tribe/WisDOT/County | ongoing | $$ - $$$ | HRRRP; IHSP |
| | Add additional plow trucks | Tribe | ongoing | $$$$ | |
| | Emphasis Area: Increase safety awareness | | | | |
| | Educational campaigns:<br>Child restraints<br>Texting and driving<br>Others | Tribe | ongoing | $ | BOTS/IHSP |
| 4 | Emphasis Area: Reduce run off the road crashes | | | | |
| | Expand clear zones | Tribe/WisDOT/County | ongoing | $$ | HRRRP |
| | Center and/or edge line rumble strips where appropriate | Tribe/WisDOT/County | ongoing | $ - $$$ | HRRRP |

Implementation Costs

$ = low cost (less than $2,000 per location or mile)
$$ = reasonable cost (less than $10,000 per location or mile)
$$$ = moderate cost (between $10,000 and $75,000 per location or mile)
$$$$ = high cost (more than $75,000 per location or mile)

Potential Fuding Sources:

TTSP Funds = Tribal Transportation Safety Program Funds (FHWA)
HSIP - Highway Safety Improvement Program (must meet crash criteria)
RTP = Recreation Trail Program (Wisconsin DNR)
TAP = Transportation Alternatives Program (WisDOT)
IHSP = Indian Highway Safety Program
HRRRP = High Risk Rural Roads Program (administered by Wisconsin as part of HSIP funding)
BOTS = Bureau of Transportation Safety grants (WisDOT)

# 15.0 Stockbridge-Munsee Community

The Stockbridge-Munsee Reservation is located in Shawano County and encompasses approximately 35 square miles. The reservation land is not all contiguous, but is interspersed with non-reservation lands. The majority of the reservation is undeveloped. The roadways on the reservation are primarily two-lane rural roads. Major routes through the reservation include County A, MoHeConNuck Road, and Camp Road 14.

**Data Summary**

An RSA was completed for the Stockbridge-Munsee Community in 2014. The report used crash data from 7 years (2007 through 2013). Crash data included both Tribal roadways and roadways immediately adjacent due to the scattered nature of Tribal lands. During that time period, there were 76 crashes on the Tribal and adjacent roadways. Of these, 33 crashes (43%) resulted in at least one injury; there were no fatal crashes during the period investigated.

The majority of crashes (78%) were single vehicle crashes, where the vehicle left the roadway and either struck a fixed object or overturned. The majority of the crashes occurred during daylight hours. The highest number of crashes occurred during the winter months from November through January.

The RSA identified the following safety concerns on Stockbridge-Munsee Community roadways:

- Insufficient intersection delineation
- Worn or missing pavement marking
- Limited sight distance on intersection approaches
- Narrow shoulders
- Inadequate advance curve warning/delineation
- Road user accommodation
- Narrow/obstructed clear zone
- Worn or missing signage

In addition to the RSA, a TTSP was completed for the Stockbridge-Munsee Community in 2016. This report used the crash data from the RSA to develop and prioritize safety improvement strategies; identify general impacts and costs for the strategies; and identify potential funding sources for making the improvements. The TTSP also included signing plans to improve intersection delineation and to improve advance curve warning and delineation.

The previous reports completed for the Stockbridge-Munsee Community contained relatively recent crash data (through 2013). The updated crash data for 2014 shows a higher number or crashes, but similar crash patterns to what was observed in the RSA. During 2014 there 29 total crashes on Tribal roadways. Of these, 5 crashes (17%) resulted in at least one injury; there were no fatalities in 2014.

As with the previous data, the majority of the crashes (76%) were single vehicle crashes. Most crashes (59%) occurred during daylight hours. The highest numbers of crashes were seen during the winter months, with 24% of the crashes occurring in February.

When looking at the entire 2010 through 2014 period, there were 128 total crashes. Of these, 35 (27%) resulted in at least 1 injury; there were no fatal crashes observed during the 5-year period. Again, the majority (84%) of crashes were single vehicle crashes. Most crashes (69%) occurred during daylight hours. The highest number of crashes occurred during the fall and winter months, from October through February.

**Existing Efforts/Projects**

The following is a summary of current or recent Tribal efforts related to safety:

- The Tribe completed an individual Tribal Transportation Safety Plan in 2016.
- The Tribe is currently applying for funding for several safety improvement projects, including improvements to the casino/gas station entrances from County A.

**Emphasis Areas**

**Emphasis Area 1: Improve intersection safety**

- The access at the casino/gas station entrances is confusing and causes safety issues
- There is poor sight distance at several intersections
- 3-leg intersections are a particular cause for concern

**Goals/Strategies for Emphasis Area 1:**

- Reconfigure access at the casino/gas station entrances to clearly delineate which entrances should be used (see Appendix J, page J-1 to J-2 for potential alternatives for reconfiguring the access)
- Increase sight distance/acceleration distance at Maple Road by straightening horizontal curve (see Appendix J, page J-3 for a layout of a potential realignment of the horizontal curve)
- Flatten the curve at County A/MoHeConNuck Road to improve sight distance (see Appendix J, page J-4 for a potential layout of the realigned curve)
- Improve the intersection of County A/Healing Way in future to accommodate new Cultural Center (see Appendix J, page J-5 for a layout of a potential intersection improvements)

**Emphasis Area 2: Reduce run off the road crashes**

- 83% of crashes on reservation roadways are single vehicle/run off the road crashes
- Areas of concern include Camp Road 14, County A, and MoHeConNuck Road

**Goals/Strategies for Emphasis Area 2:**

- Improve signing/delineators at curve and flatten the southernmost curve on Camp 14 Road (see Appendix J, pages J-6 to J-13 for potential improvements on Camp 14 Road)
- Add center or edge line rumble strips in other locations where appropriate to alert drivers that are deviating from their lane
- Add white fog lines on all roads to better delineate roadway edges

- Improve signage and delineators at curve locations to give more warning of curve locations (the individual TTSP prepared completed for Stockbridge-Munsee Community in 2016 contains full signing plans for curve delineation)
- Utilize epoxy pavement markings so markings stand up better to snow plowing
- Increase shoulder widths and expand clear zones to allow more room for vehicles to recover

**Emphasis Area 3: Enhance walking/biking opportunities**

- There are currently no on-road bike accommodations along reservation roadways
- There are not any pedestrian accommodations to connect Tribal housing and other Tribal facilities
- New off road bike/pedestrian paths can also be used by emergency services to better access off road crash sites

**Goals/Strategies for Emphasis Area 3:**

- Add shared use paths next to roadways to provide safe accommodations for bikes and pedestrians, and to connect Tribal housing and other Tribal facilities (see Appendix J, pages J-14 to J-18 for possible path locations and crossings)
- Increase shoulder widths to provide safer walking/biking where there are no shared-use paths
- Provide connections to existing paths off the reservation, including the Mountain Bay Trail

**Emphasis Area 4: Increase safety awareness**

- Using educational outreach campaigns and enforcement campaigns provides opportunities to increase safety awareness among Tribal members and others using reservation roadways

**Goals/Strategies for Emphasis Area 4:**

- Add signage in both English and native language
- Provide educational outreach and enforcement for distracted driving and drugged/drunk driving to reduce incidents
- Hold car seat clinics and bike fairs/rodeos to increase safety awareness for Tribal members
- Provide educational outreach on ATV safety and use on roadways

In addition to the four main emphasis areas discussed above, some general strategies were identified to increase safety on the Tribal transportation network:

- Work with WisDOT to improve safety at intersections along WIS 29 commonly utilized by Tribal members.
- Installation of warning signs at multi-use and snowmobile trail crossings to reduce close call incidents at these locations.
- Expanded clear zones to increase sight distance and allow more room for vehicle recovery; includes clearing and grubbing 3-mile section of Townhall Road and the intersection of MoHeConNuck Rd and County Hwy A.
- Improve vertical curves on County G north of Winkle/Leopolis Road and on County A east of Henning Creek Road.

- Restripe roadways to better delineate passing zones on River Road, Camp 14 Road, MoHeConNuck Road, Murphy's Road and Mick's Road.
- Installation of traffic cameras, especially in housing areas, to provide an aid in enforcement and encourage compliance with traffic laws.
- Possible reconstruction of Henning Creek Road to improve safety and correct flooding issues.

The potential improvement strategies and emphasis areas were prioritized by the Tribal working group. There were four priority groupings identified, based on importance to the Tribe. Each of the priority groupings contains strategies to address one or more of the emphasis areas discussed above. A prioritization matrix was developed to identify the following for each priority grouping:

- Emphasis areas/potential strategies
- Who is responsible for implementing the strategies – responsibility for implementing any improvement strategies will generally fall on the Tribe; improvements that extend off of Tribal lands will require cooperation with the government entity having jurisdiction over the roadway outside of Tribal lands
- Timeframes for implementing the strategies – an approximate schedule for implementing the strategies is identified; exact timeframes will depend on the availability of funding to the Tribe
- Estimated costs for implementing the strategies – improvement strategies are categorized as low, reasonable, moderate, or high cost
- Potential funding sources – potential sources of funding are identified; these include funding from both Federal and State sources; other sources of funding may be available for the strategies, especially the educational outreach strategies

A copy of the prioritization matrix is included as Table 15.

**Table 15: Stockbridge-Munsee Community Prioritization Matrix**

| Priority | Emphasis Area/Strategies | Who? | When? | Cost? | Potential Funding Sources |
|---|---|---|---|---|---|
| 1 | Emphasis Area: Improve intersection safety | | | | |
| | Reconfigure access at casino/gas station entrances | County/Tribe | 2018-2020 | $$$ - $$$$ | TTSP |
| | Increase sight distance/acceleration distance at Maple Road | County/Tribe | 2018-2025 | $$$$ | HSIP; TTSP |
| | Install intersection rumble strips on Murphy's Road, River Road | Tribe | 2018-2025 | $$ | TTSP |
| | Improve signing, lighting (solar) at three leg intersections | Tribe | 208-2020 | $$ - $$$ | TTSP |
| | Emphasis Area: Increase safety awareness | | | | |
| | Educational outreach: distracted driving; drugged/drunk driving | Tribe | ongoing | $ - $$ | BOTS, IHSP |
| 2 | Emphasis Area: Reduce run-off the road crashes | | | | |
| | Center or edge line rumble strips | County/Tribe | 2018-2025 | $ - $$$ | HRRRP; TTSP |
| | Improved signage | County/Tribe | 2018-2025 | $ - $$ | HRRRP; TTSP |
| | Delineators at curve locations | Tribe | 2018-2025 | $ | HRRRP; TTSP |
| | Flatten curve on Camp 14 Road | Tribe | 2020-2030 | $$$$ | HRRRP; TTSP |
| | Add fog lines to better delineate roadway edges | Tribe | 2018-2025 | $$ | |
| | Emphasis Area: Enhance walking/biking opportunities | | | | |
| | Add off-road biking/walking paths | Tribe | 2018-2025 | $$$$ | RTP; TAP |
| | Increase shoulder widths | Tribe | 2018-2025 | $$$ | TTSP |
| | Provide additional sidewalks in residential areas | Tribe | 2018-2025 | $$ - $$$ | RTP |
| | Provide connections to existing paths | Tribe | 2018-2025 | $$ - $$$ | RTP |
| 3 | Emphasis Area: Increase safety awareness | | | | |
| | Bike fair/rodeo | Tribe | ongoing | $ | |
| | Car seat clinics | Tribe | ongoing | $ | IHSP |
| | ATV safety | Tribe | ongoing | $ | |
| | Signs in English/native language | Tribe | ongoing | $ - $$ | |
| 4 | Emphasis Area: Reduce run-off the road crashes | | | | |
| | Epoxy pavement markings | Tribe | ongoing | $$ | HRRRP; TTSP |
| | Increase shoulder widths | Tribe | ongoing | $$$ | HRRRP; TTSP |
| | Emphasis Area: General | | | | |
| | Install warning signs at multi-use and snowmobile trail crossings | Tribe | 2018-2020 | $ | TTSP |
| | Expand clear zones | Tribe | ongoing | $$ | HRRRP |
| | Clear and grub Townhall Road | Tribe | ongoing | $$$ | |
| | Improve vertical curves on County A and County G | County/Tribe | 2020-2030 | $$$ - $$$$ | HRRRP; TTSP |
| | Restriping to include passing zones | Tribe | ongoing | $$ | |
| | Add lighting in residential areas | Tribe | 2018-2025 | $$ | |
| | Traffic cameras in housing areas | Tribe | 2018-2025 | $$ | |
| | Emphasis Area: Improve intersection safety | | | | |
| | Intersection improvements at future cultural center | Tribe | 2020-2030 | $$$ - $$$$ | TTSP |
| | Improvements to discourage access to environmental offices from County A | Tribe | 2018-2025 | $$ - $$$ | TTSP |

Implementation Costs

$ = low cost (less than $2,000 per location or mile)

$$ = reasonable cost (less than $10,000 per location or mile)

$$$ = moderate cost (between $10,000 and $75,000 per location or mile)

$$$$ = high cost (more than $75,000 per location or mile)

Potential Fuding Sources:

TTSP Funds = Tribal Transportation Safety Program Funds (FHWA)

HSIP - Highway Safety Improvement Program (must meet crash criteria)

RTP = Recreation Trail Program (Wisconsin DNR)

TAP = Transportation Alternatives Program (WisDOT)

IHSP = Indian Highway Safety Program

HRRRP = High Risk Rural Roads Program (administered by Wisconsin as part of HSIP funding)

BOTS = Bureau of Transportation Safety grants (WisDOT)

# 16.0 Combined Projects

One of the goals of this Statewide TTSP is to identify combined projects that covered multiple Tribes and locations. Many of the safety issues on Tribal roadways are common among all the Tribes in the state; by combining projects between multiple Tribes and locations, larger projects can be created which opens up additional potential funding opportunities. Some of the funding sources that could be utilized for larger combined projects include:

- BUILD grants – Better Utilizing Investments to Leverage Development (administered by US DOT); replace TIGER grants; minimum cost for rural projects is $1 million
- HSIP funding – Highway Safety Improvement Program (administered by WisDOT); safety based funding; need to provide crash data/analysis
- TTSP – Tribal Transportation Safety Program (administered by FHWA)
- RTP – Recreational Trail Program (administered by Wisconsin DNR); can be used for trail projects
- TAP – Transportation Alternatives Program (administered by WisDOT); can be used for pedestrian/bicycle accommodations
- IHSP – Indian Highway Safety Program (administered by BIA)
- HRRRP – High Risk Rural Roads Program (administered by WisDOT as part of HSIP funding)
- BOTS – Bureau of Transportation Safety grants (administered by WisDOT)

There were several issues identified that were common to all the Tribes, that would be candidates for combined projects between Tribes. These include:

- Worn or missing signage and pavement marking
- Insufficient shoulder widths or clear zone widths
- Inadequate curve signing and delineation
- Lack of facilities for pedestrians and bikes
- Need for safety education

**Worn or Missing Signage and Pavement Markings**

It is recommended that the Tribes create an inventory of signs and pavement markings that can be used to identify items that are missing or in poor condition. This inventory could be compiled and maintained through WisDOT's Inter Tribal Task Force. Once areas are identified that need new signs or pavement markings, several Tribes can apply for funding together to address the issues.

Replacing signs and pavement markings is generally a lower cost safety improvement. The following is a summary of approximate costs for this type of improvement:

- Pavement markings - $2,500 per mile for epoxy markings (passing zones and edge lines)
- Signs - $17 per square foot; $600 each for signs with flashing LED lights
- Sign posts - $60 each

The number of Tribes applying together and the types of funding pursued will depend on the number of signs and pavement markings that need to be replaced. However, it is recommended that the combined Tribal groups are larger for this type of improvement. Due to the limited costs involved, a larger group of Tribes will have a larger project and may be more likely to qualify for funding. Possible Tribal groupings for this type of work include:

- Red Cliff Band, Bad River Band, Lac du Flambeau Band, Lac Courte Oreilles Band, St. Croix Band

- Menominee Indian Tribe, Stockbridge-Munsee Community, Forest County Potawatomi Community, Sokaogon Chippewa Community, Oneida Tribe of Indians
- Ho-Chunk Nation could be part of one or both groups, depending on the location of signs and pavement markings that need to be replaced

**Insufficient Shoulder Widths or Clear Zone Widths**

Many Tribal roadways have shoulders that do not meet current design standards for paved width or overall width. Increasing shoulder widths provides additional room for drivers to recover without going off the roadway, and also provide additional areas for bikes and pedestrians. In addition, many Tribal roadways do not have sufficient clear zones; the clear zones are generally overgrown with trees and brush. Providing adequate clear zones again allows additional room for drivers to recover and eliminates fixed objects near the roadway that can be struck by vehicles.

Increasing shoulder widths and clear zones have moderate to high costs depending on existing conditions. Approximate costs associated with this work include:

- $60,000 per mile for 6-foot shoulder (3-foot paved, 3-foot gravel) on both sides or roadway
- $12,000 per mile for expanding clear zones (assumes clearing/grubbing 15-foot clear zone on both sides of roadway)

Due to the higher costs for this type of improvement, it is recommended that smaller groupings of Tribes pursue funding together. Possible Tribal groupings include:

- Red Cliff Band, Bad River Band, Lac du Flambeau Band
- Lac Courte Oreilles Band, St. Croix Band
- Menominee Indian Tribe, Stockbridge-Munsee Community, Oneida Tribe of Indians
- Forest County Potawatomi Community, Sokaogon Chippewa Community
- Ho-Chunk Nation could join any of the groupings depending the location of improvements

**Inadequate Curve Signing and Delineation**

Another common factor in the single vehicle run off the road crashes prevalent on Tribal roadways is the lack of advance notice and delineation of curves. Providing sufficient notice of curves and signing that can help motorists identify the curves, especially at night, can help reduce these types of accidents.

Costs for this type of improvement are generally lower. The total cost will vary slightly depending on the overall length of the curve and the design speed of the roadway, which affects the number of signs needed. However, an average length curve on a rural roadway with a higher design speed will have signing costs of approximately $1,700 per curve for advance warning signs and delineators through the curve.

Due to the lower costs involved, a larger group of Tribes will have a larger project and may be more likely to qualify for funding. Possible Tribal groupings for this type of work include:

- Red Cliff Band, Bad River Band, Lac du Flambeau Band, Lac Courte Oreilles Band, St. Croix Band
- Menominee Indian Tribe, Stockbridge-Munsee Community, Forest County Potawatomi Community, Sokaogon Chippewa Community, Oneida Tribe of Indians

- Ho-Chunk Nation could be part of one or both groups, depending on the location of signs and pavement markings that need to be replaced

**Lack of Facilities for Pedestrians and Bikes**

Many Tribes identified a lack of facilities for pedestrians and bikes as a major concern. Most Tribal roadways are rural in nature and lack sufficient shoulder widths to allow bicyclists and pedestrians to use them comfortably. Providing off road pedestrian/bicycle paths allows Tribes to provide connections between housing and Tribal facilities for members who may not have access to a personal vehicle, or who may want to walk or bike for health reasons.

Costs for adding pedestrian and bike facilities are generally very high, and will vary greatly depending on existing terrain and right of way ownership. For example, a 10-foot wide path with 2-foot wide gravel shoulders in an area with relatively flat terrain and current Tribal ownership of the land needed could cost approximately $100,000 per mile. This cost will increase greatly if there is a substantial amount of grading needed to construct the path, or if the Tribe needs to acquire the right of way necessary for the path from individual property owners.

Based on the higher costs for these projects, it is recommended that smaller groupings of Tribes pursue funding. However, the higher costs may also open up additional opportunities for funding, including BUILD grants, which had a minimum funding level of $1 million for rural projects ($5 million for urban projects) in FY2018. Possible Tribal groupings include:

- Red Cliff Band, Bad River Band, Lac du Flambeau Band
- Lac Courte Oreilles Band, St. Croix Band
- Menominee Indian Tribe, Stockbridge-Munsee Community, Oneida Tribe of Indians
- Forest County Potawatomi Community, Sokaogon Chippewa Community
- Ho-Chunk Nation could join any of the groupings depending the location of improvements

**Need for Safety Education**

Another low cost option for improving safety on Tribal roadways is to conduct educational campaigns regarding issues such as:

- Seat belt usage
- Car seat usage
- Bike/pedestrian/ATV safety
- Texting and driving
- Impaired driving

These campaigns can be run in the community, either as separate events (car seat clinics, bike rodeos, etc.) or as programs in Tribal schools. WisDOT's Inter Tribal Task Force could be utilized to apply for funding and assist in setting up programs for all Tribes in the state.

**Other Combined Projects**

In addition to the projects identified above that could benefit all Tribes, there were also several issues identified by a smaller number of Tribes that would be good candidates for a combined project regardless of proximity of the Tribes. These include:

- Additional lighting on existing pedestrian facilities and crossings on the Bad River, St. Croix, and Lac du Flambeau reservations
- Reduce speeding through increased enforcement or use of electronic speed signs on the Ho-Chunk, Menominee, and St. Croix reservations
- Provide improved cross walks, possibly including beacons, near schools or Tribal facilities on the Red Cliff, St. Croix, Lac du Flambeau, Oneida and Menominee reservations
- Improve signing and lighting at 3-leg intersections on the Lac Courte Oreilles and Stockbridge-Munsee reservations
- Add signs in both English and native languages on the Stockbridge-Munsee and Forest County Potawatomi Community reservations

# 17.0 Evaluation and Implementation

The potential improvement strategies and emphasis areas were prioritized by the individual Tribal working groups. There were four priority groupings identified, based on importance to each of the Tribes. Each of the priority groupings contains strategies to address one or more of the emphasis areas discussed in the sections above. A prioritization matrix was developed to identify the following for each priority grouping:

- Emphasis areas/potential strategies
- Who is responsible for implementing the strategies – responsibility for implementing any improvement strategies will generally fall on the Tribe, in cooperation with local municipalities, counties, or WisDOT, depending on which entity has jurisdiction over the roadway
- Timeframes for implementing the strategies – an approximate schedule for implementing the strategies is identified; exact timeframes will depend on the availability of funding to the Tribe
- Estimated costs for implementing the strategies – improvement strategies are categorized as low, reasonable, moderate, or high cost
- Potential funding sources – potential sources of funding are identified; these include funding from both Federal and State sources; other sources of funding may be available for the strategies, especially the educational outreach strategies

Responsibility for reviewing and monitoring progress on the TTSP will fall to WisDOT's Inter Tribal Task Force. The TTSP should be reviewed after two years to evaluate the progress made on implementing improvements strategies and achieving safety goals, and to determine if there are new safety concerns that should be addressed in the plan. The evaluation should also consider progress made on combined projects between multiple Tribes and locations. The schedule for making safety improvements will also be reviewed and updated as necessary at this time.

After five years, the plan will be reevaluated to determine if priorities have changed, or if there are new safety concerns that should be added to the plan. The Inter Tribal Task Force will continue to periodically review the safety plan and progress made toward achieving the safety and crash reduction goals.

## 18.0 Resources

Tribal Transportation Safety:
http://tribalsafety.org

Tribal Safety Plans:
http://flh.fhwa.dot.gov/programs/ttp/safety/plans.htm

Developing Safety Plans: A Manual for Local Rural Road Owners:
http://safety.fhwa.dot.gov/local_rural/training/fhwasa12017/

Strategic Transportation Safety Plan Toolkit for Tribal Governments:
http://flh.fhwa.dot.gov/programs/ttp/safety/stsp-toolkit.htm

Strategic Highway Safety Plan for Indian Lands:
http://flh.fhwa.dot.gov/programs/ttp/safety/documents/strategic-hsp.pdf

2011 SMS Implementation Plan:
http://flh.fhwa.dot.gov/programs/ttp/safety/documents/sms-implementation.pdf

Highway Safety Improvement Program:
http://safety.fhwa.dot.gov/hsip/

Wisconsin Highway Safety Improvement Program:
http://wisconsindot.gov/Documents/doing-bus/local-gov/astnce-pgms/highway/hsip.pdf

Funding for Wisconsin Trails:
http://dnr.wi.gov/files/pdf/pubs/pr/pr0464.pdf

Wisconsin Transportation Alternatives Program:
http://wisconsindot.gov/Pages/doing-bus/local-gov/astnce-pgms/aid/tap.aspx

Indian Highway Safety Program:
http://www.bia.gov/WhoWeAre/BIA/OJS/who/fieldops/ojs-dhs/index.htm

Wisconsin Law Enforcement Traffic Safety Grants:
http://wisconsindot.gov/Pages/safety/enforcement/agencies/grants.aspx

ATV Trail Construction:
http://dnr.wi.gov/aid/documents/atv/buildatvtrail.pdf

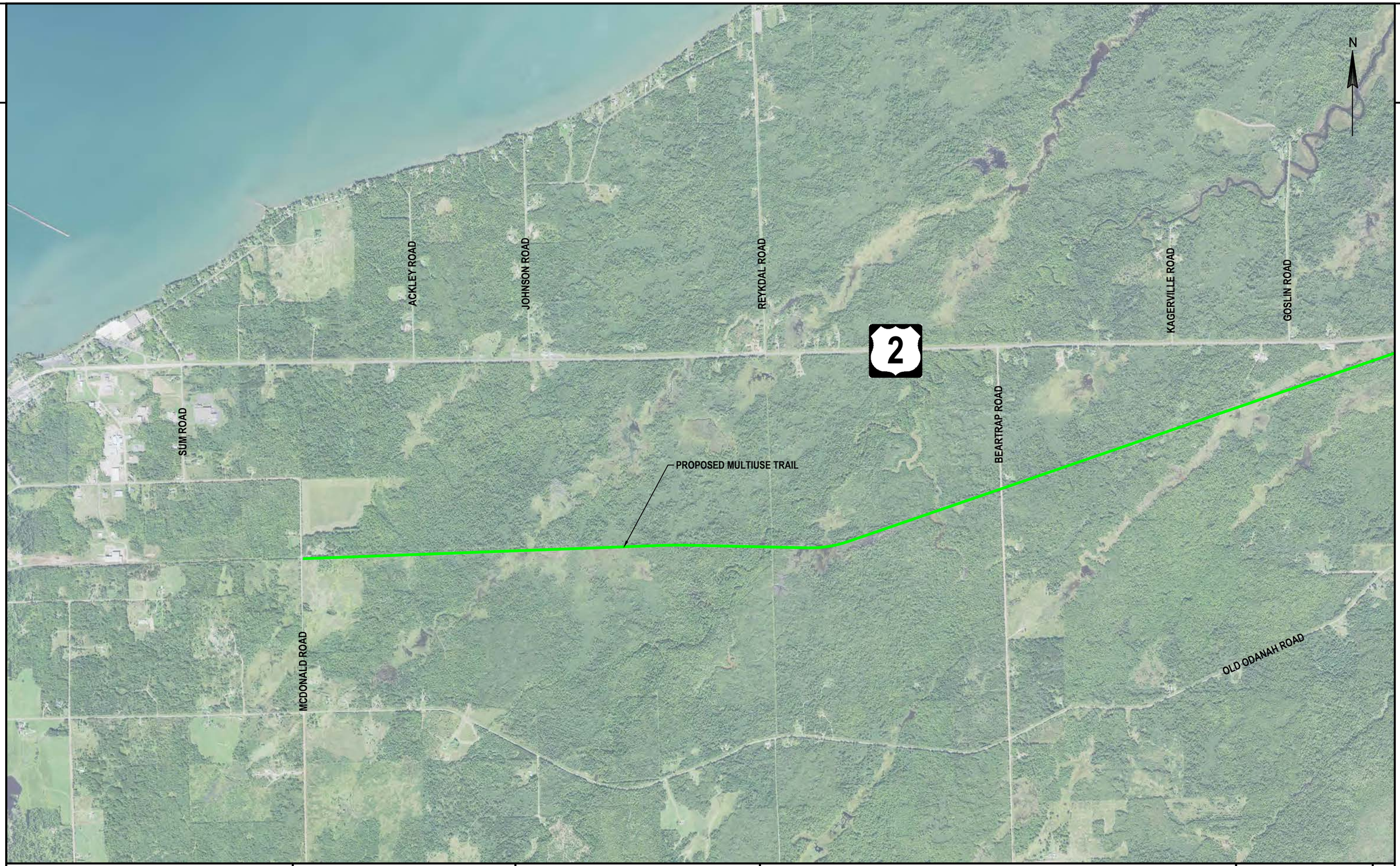
# Appendix A:
# Bad River Band of Lake Superior Chippewa Indians, Safety Improvement Concepts


**A-1 to A-2: Off Road Trail (west Reservation limits to Odanah)**

**A-3 to A-4: Multi-use path (Odanah to Birch Hill Road)**

**A-5: Potential Secondary Crossing of Bad River**

**A-6 to A-7: Old Odanah Road Signing Plan**




| PROJECT NO: 2016097 | BAD RIVER BAND | COUNTY: ASHLAND/IRON | MULTIUSE TRAIL | SHEET | E |
|---|---|---|---|---|---|

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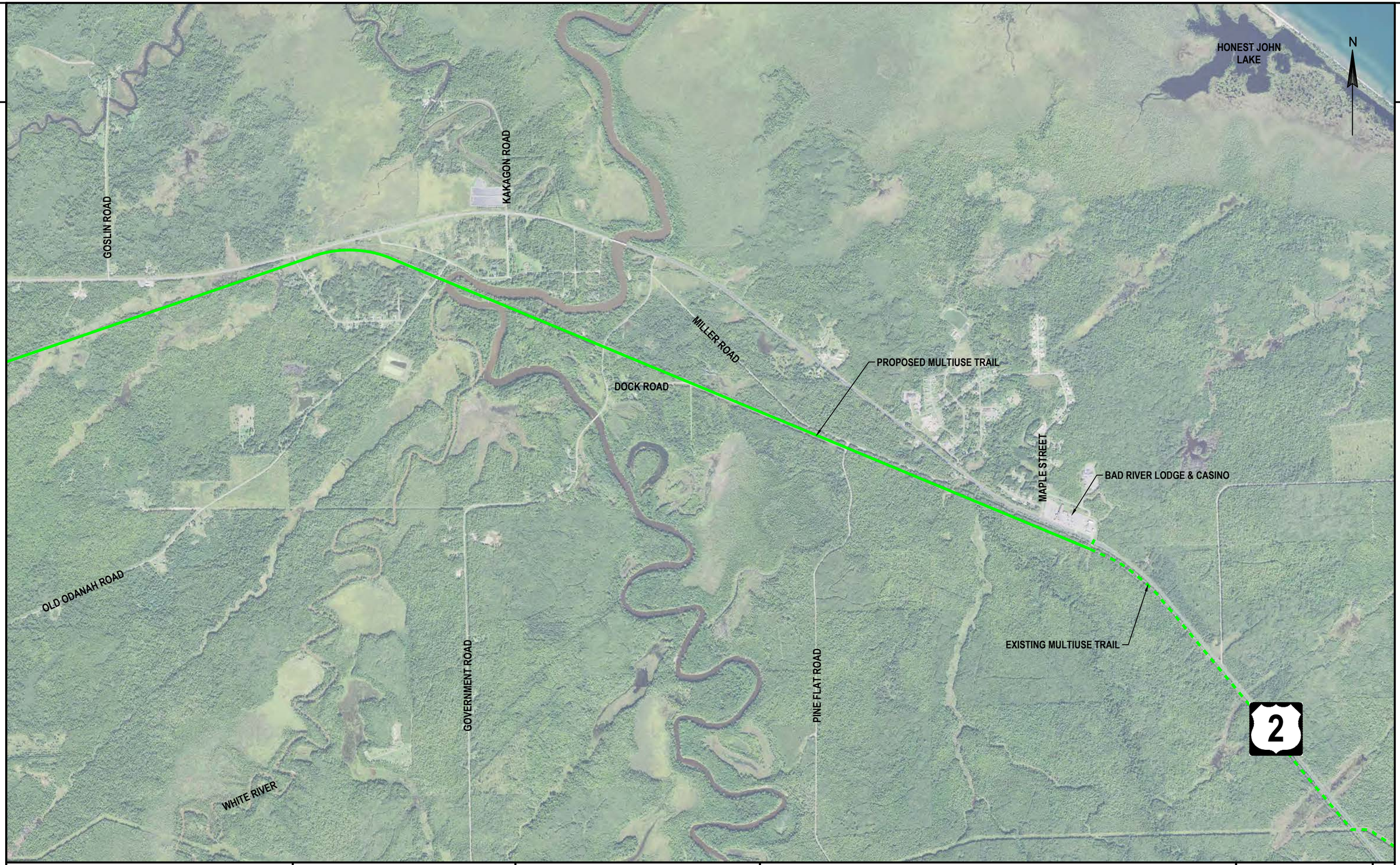
WISDOT/CADDS SHEET 42

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|---|---|---|---|---|---|

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LAYOUT NAME - MultiUseTrail.01

PLOT DATE : 12/13/2017 2:42 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:2000 FT

WISDOT/CADDS SHEET 42

2

BOCK ROAD

MAPLE STREET

BAD RIVER LODGE & CASINO

LAKE ROAD

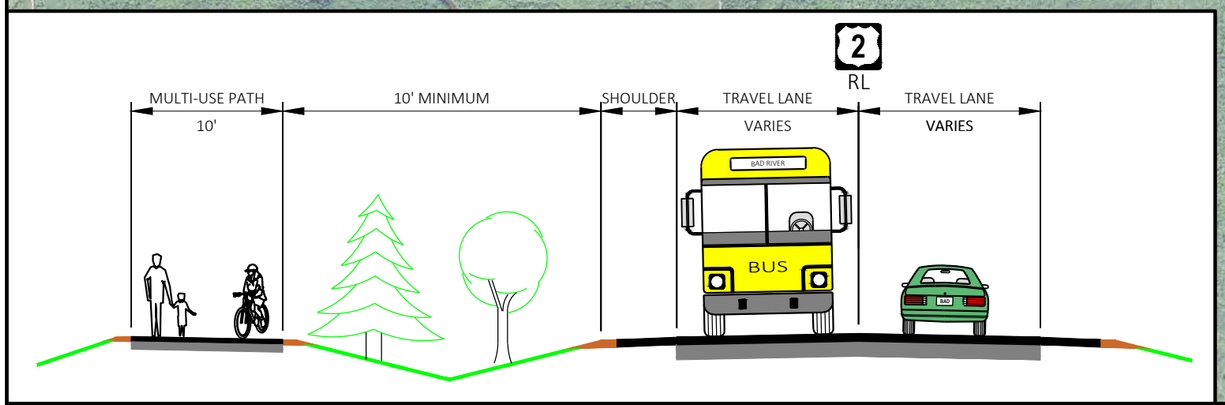
N

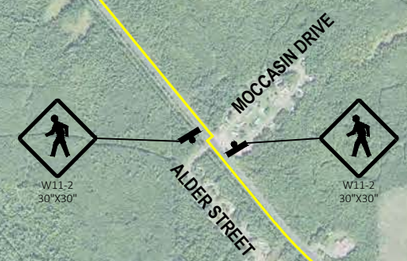
GOVERNMENT ROAD

PINE FLAT ROAD

2

BAD RIVER




| PROJECT NO: 2016097 | BAD RIVER BAND | COUNTY: ASHLAND/IRON | MULTIUSE PATH | SHEET | E |
|---|---|---|---|---|---|

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PLOT DATE : 11/13/2017 2:13 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:2000 FT

WISDOT/CADDS SHEET 42

2

2

N

MOCCASIN DRIVE

ALDER STREET

W11-2
30"X30"

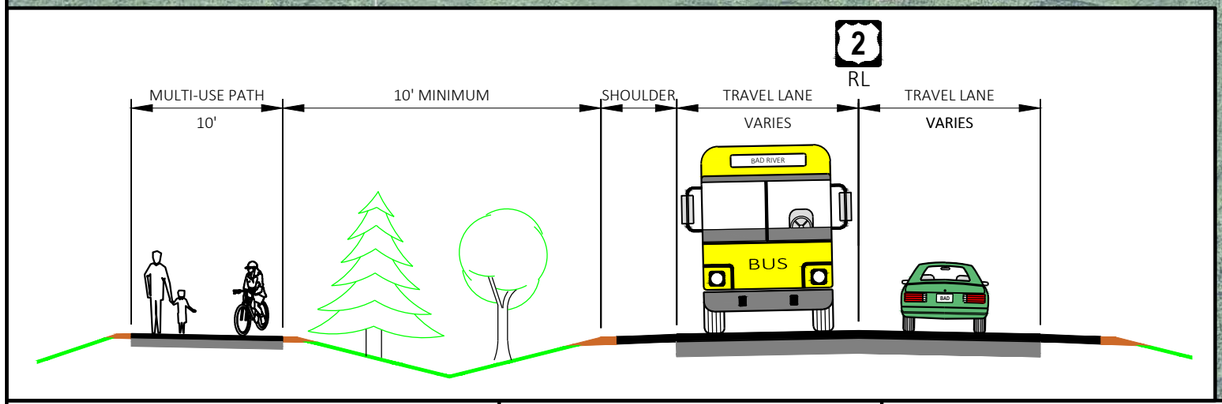
W11-2
30"X30"

GRAVEYARD CREEK ROAD

2

BIRCH HILL ROAD

BIRCH ROAD



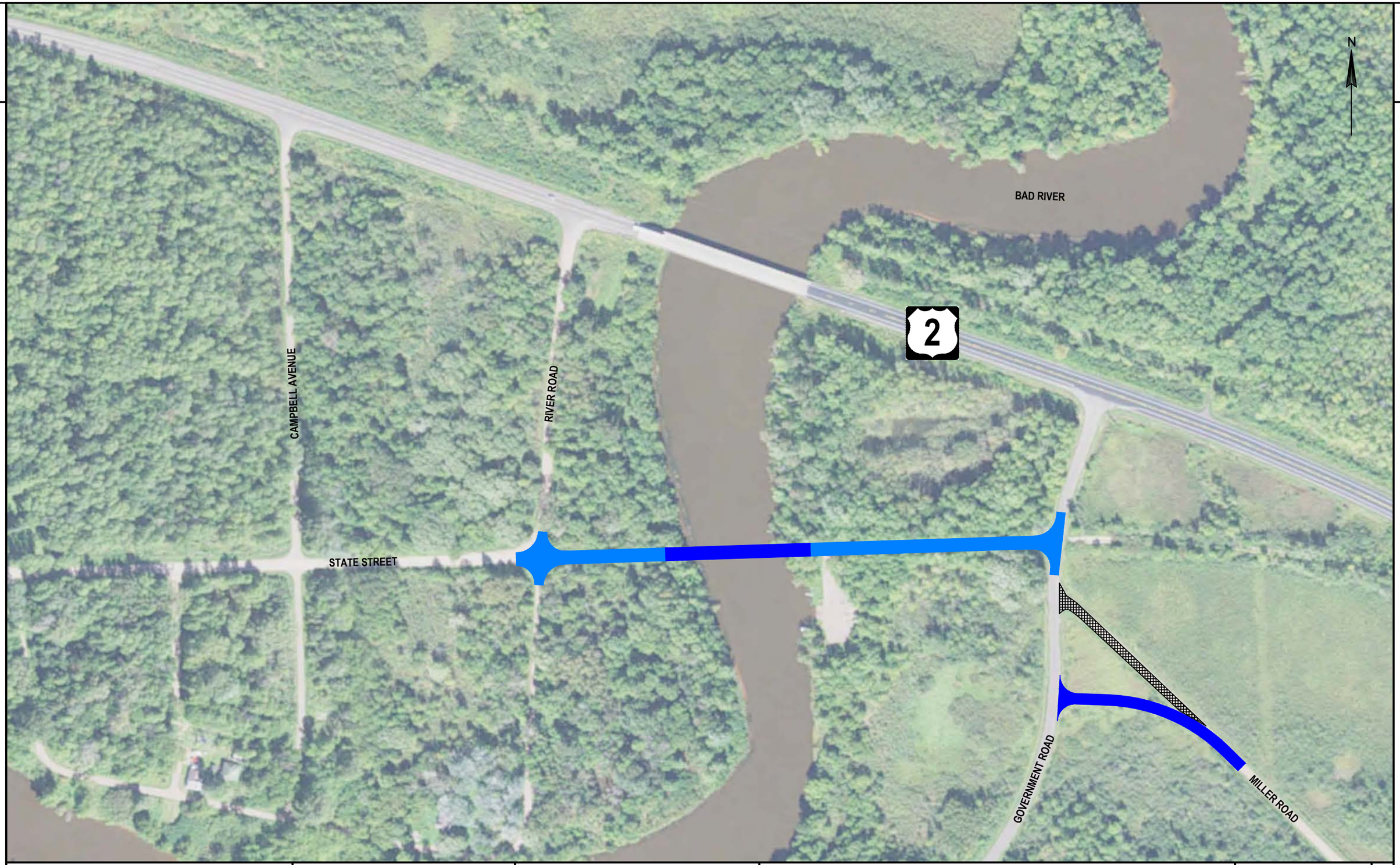

| PROJECT NO: 2016097 | BAD RIVER BAND | COUNTY: ASHLAND/IRON | MULTIUSE PATH | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\BAD RIVER_ALTERNATIVES.DWG
LAYOUT NAME - MultiUsePath.02

PLOT DATE : 11/13/2017 2:14 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:2000 FT

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | BAD RIVER BAND | COUNTY: ASHLAND/IRON | BAD RIVER CROSSING DETAIL | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\BAD RIVER_ALTERNATIVES.DWG
LAYOUT NAME - BadRiverCrossing

PLOT DATE : 11/14/2017 10:23 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

N

W1-8
18"X24"

W1-8
18"X24"

W1-2R
30"X30"

OLD ODANAH ROAD

W1-2L
30"X30"

| PROJECT NO: 2016097 | BAD RIVER BAND | COUNTY: ASHLAND/IRON | CURVE UPGRADES - OLD ODANAH ROAD | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\BAD RIVER_ALTERNATIVES.DWG
LAYOUT NAME - OldOdanahRd_Curves.01

PLOT DATE : 12/13/2017 2:12 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

2

N

OLD ODANAH ROAD

W1-4R
30"X30"

W1-8
18"X24"

W1-8
18"X24"

W1-4R
30"X30"

| PROJECT NO: 2016097 | BAD RIVER BAND | COUNTY: ASHLAND/IRON | CURVE UPGRADES - OLD ODANAH ROAD | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\BAD RIVER_ALTERNATIVES.DWG
LAYOUT NAME - OldOdanahRd_Curves.02

PLOT DATE : 12/13/2017 2:13 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

# Appendix B:
# Forest County Potawatomi Community, Safety Improvement Concepts


**B-1: Firekeeper Drive Intersection**

**B-2: Kwe Da Kik Lane/Indian Drive/Bug Lake Road Intersection**

**B-3: Multi-Use Path, US 8**

**B-4: US 8 Trail Crossing Detail and Typical Section for Improved Trail**

**B-5: Kwe Da Kik Lane/Wej Mo Gek Court Connection**

**B-6 to B-13: County C Curve Signing Plans**

**B-14 to B-22: County H Curve Signing Plans**

2




2

| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | FIRE KEEPER DRIVE INTERSECTION | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - FireKeeperDr

PLOT DATE : 6/25/2018 2:51 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




2

| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | INDIAN DRIVE - BUG LAKE ROAD INTERSECTION, ALTERNATIVE 2 | SCALE, FEET 0 200 400 | E |
|---|---|---|---|---|---|

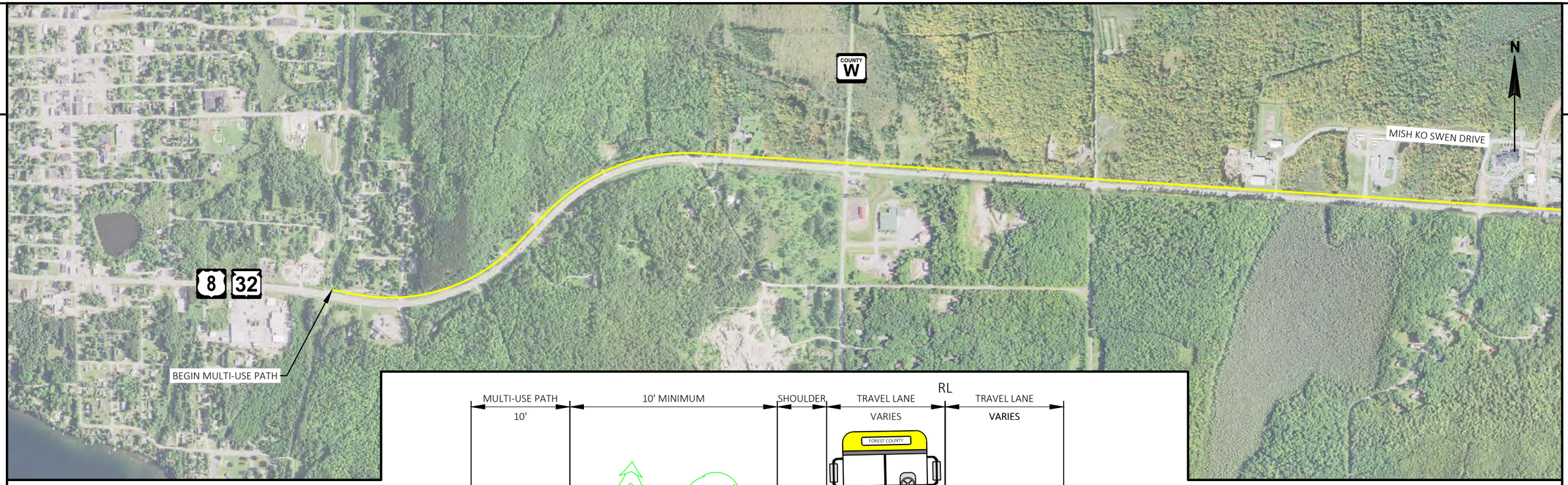
FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - IndianDr-BugLakeRd 2

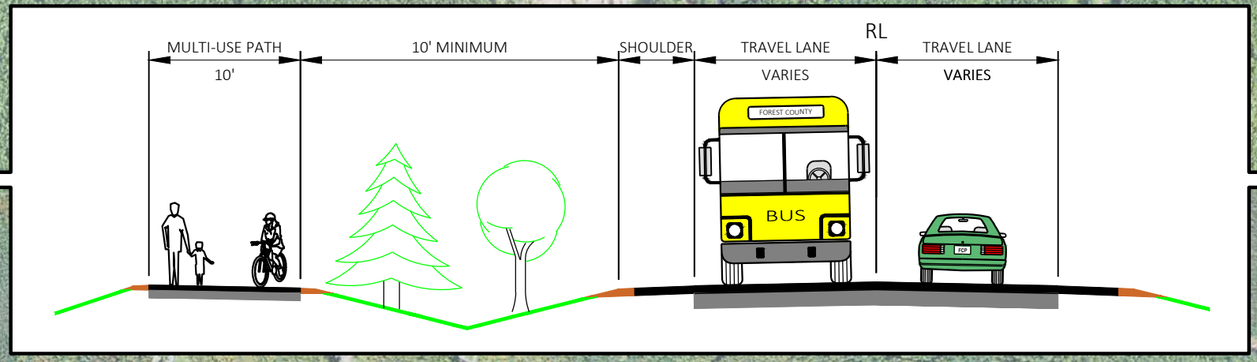
PLOT DATE : 6/27/2018 8:19 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2







| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | MULTI-USE PATH | SCALE, FEET 0 500 1000 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - MultiUse Path

PLOT DATE : 6/14/2017 10:33 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

KWE DA KIK LANE

TRAIL CROSSING

W11-15A
30"X30"

8 32

TRAIL CROSSING

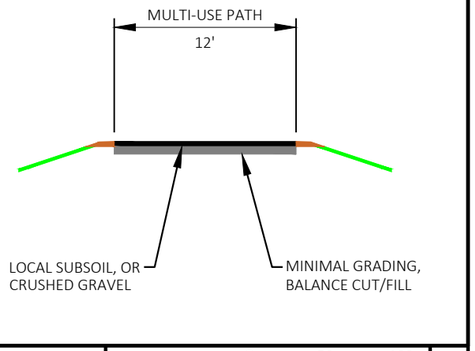
W11-15A
30"X30"

TRAIL CROSSING

W11-15A
30"X30"
AHEAD
S16-9P
24"X12"

TRAIL CROSSING

W11-15A
30"X30"
AHEAD
S16-9P
24"X12"




| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | MULTI-USE TRAIL CROSSING | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - Trail Xing

PLOT DATE : 6/27/2018 8:27 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2



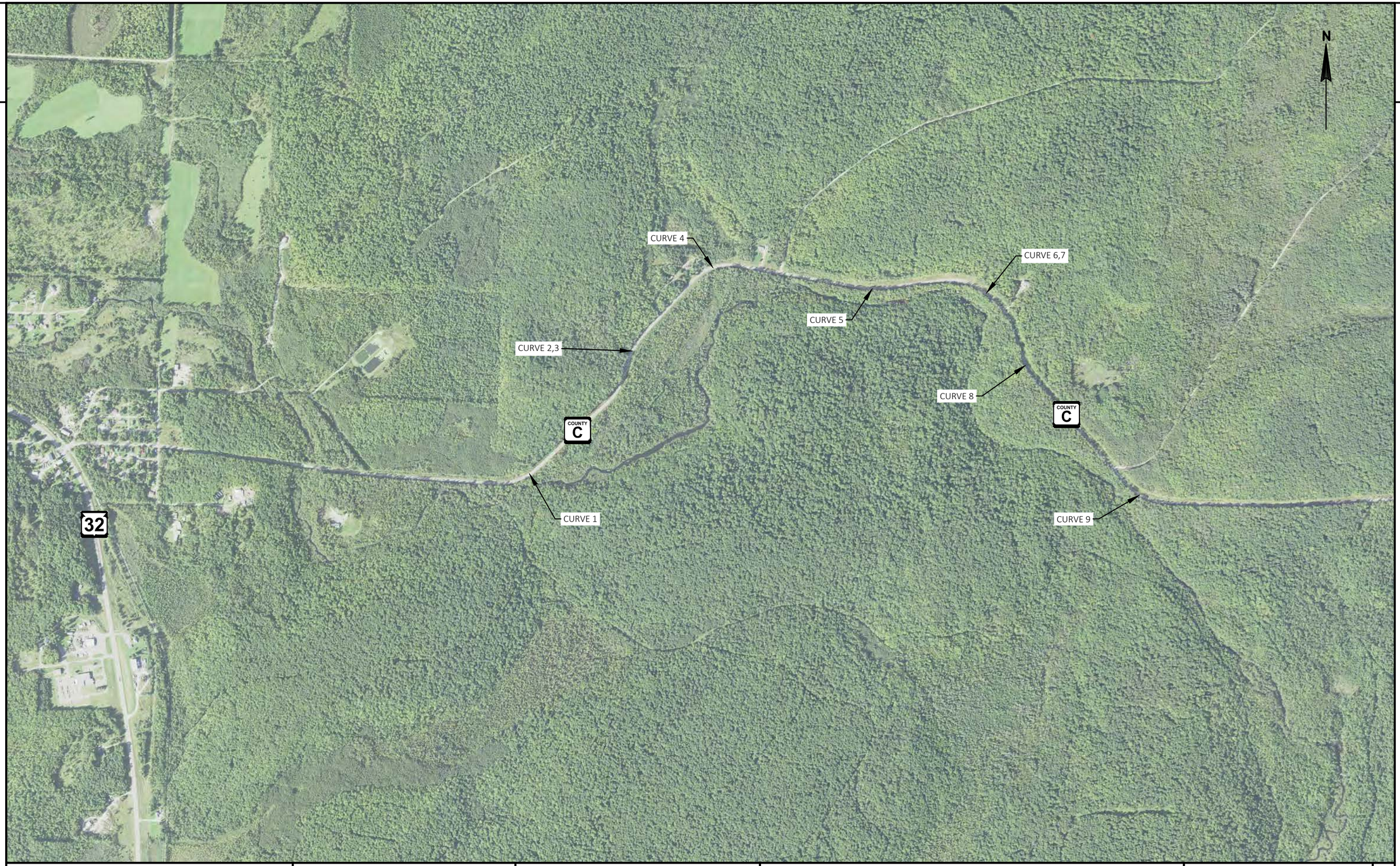

2

| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | KWE DA KIK LANE / WEJ MO GEK COURT | SCALE, FEET 0 200 400 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - Kwe Da Kik La - Wej Mo Gek Ct

PLOT DATE : 6/27/2018 9:44 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42




| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH C CURVE IMPROVEMENTS | SCALE, FEET 0 500 1000 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH C-0-Overview

PLOT DATE : 6/9/2017 8:11 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

W1-2R
30"X30"

40
MPH

W13-1
18"X18"

1

W1-8
18"X24"

2

W1-8
18"X24"

COUNTY
C

A

A

A

A

A

W1-2L
30"X30"

40
MPH

W13-1
18"X18"

| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH C - CURVE 1 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH C-1-Curve

PLOT DATE : 6/8/2017 8:24 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2



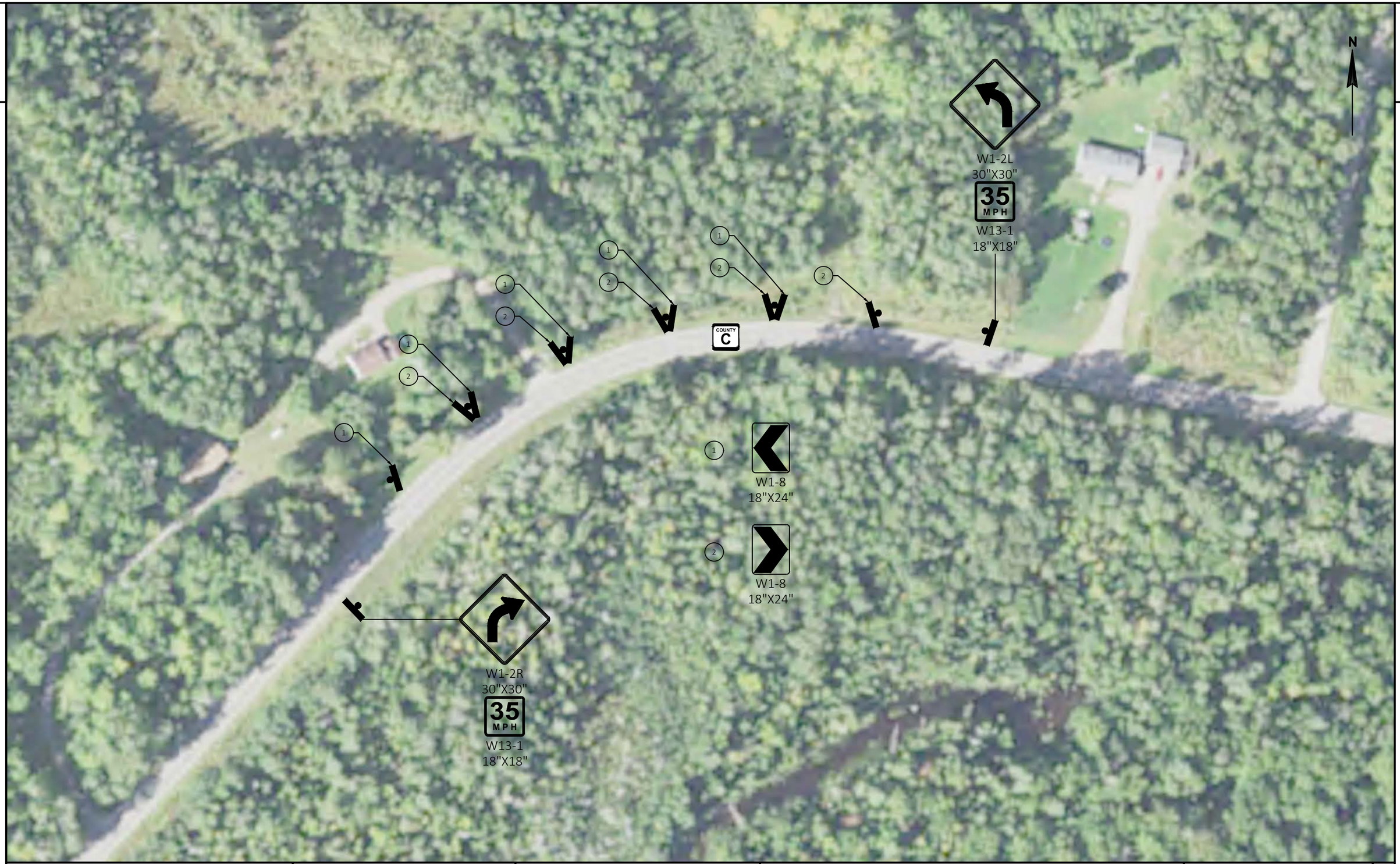

| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH C - CURVE 2, 3 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH C-2-3-Curve

PLOT DATE : 6/8/2017 10:49 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH C - CURVE 4 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH C-4-Curve

PLOT DATE : 6/8/2017 9:44 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42




| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH C - CURVE 5 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH C-5-Curve

PLOT DATE : 6/8/2017 9:43 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

W1-2R
30"X30"

35
MPH

W13-1
18"X18"

W1-8
18"X24"

W1-8
18"X24"

W1-2R
30"X30"

W1-2L
30"X30"

35
MPH

W13-1
18"X18"

COUNTY
C

W1-2L
30"X30"

| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH C - CURVE 6, 7 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH C-6-7-Curve

PLOT DATE : 6/8/2017 10:48 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

COUNTY
C

W1-4R
30"X30"

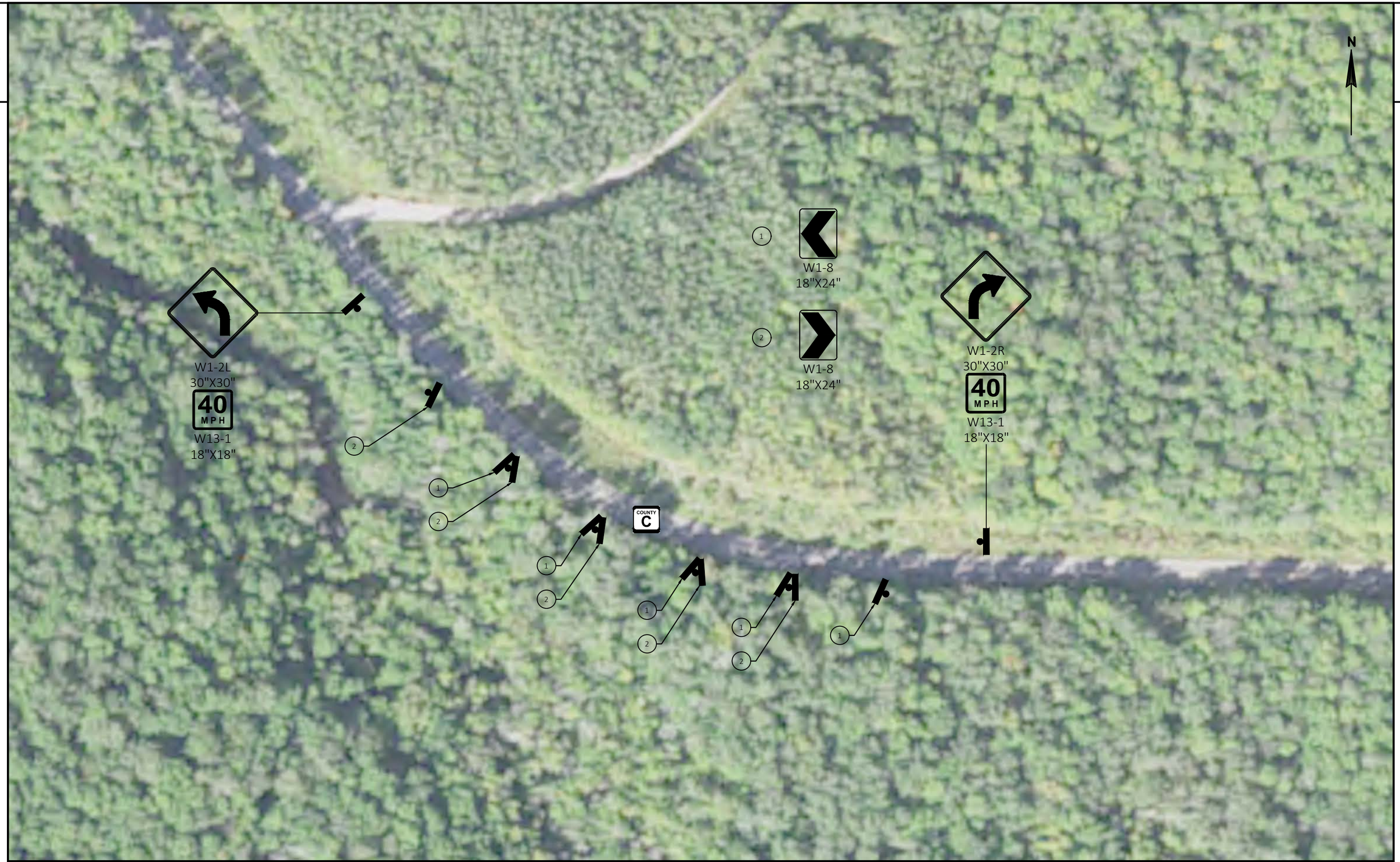
| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH C - CURVE 8 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH C-8-Curve

PLOT DATE : 6/8/2017 11:34 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH C - CURVE 9 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH C-9-Curve

PLOT DATE : 6/8/2017 1:37 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH H CURVE IMPROVEMENTS | SCALE, MILES 0 0.25 0.50 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH H-0-Overview

PLOT DATE : 6/8/2017 1:38 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

RUMMEL ROAD

COUNTY H

W1-2L
30"X30"

35 MPH

W13-1
18"X18"

W1-8
18"X24"

W1-8
18"X24"

W1-2R
30"X30"

35 MPH

W13-1
18"X18"

N

| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH H - CURVE 1 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH H-1-Curve

PLOT DATE : 6/8/2017 1:38 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

W1-2R
30"X30"
35 MPH
W13-1
18"X18"

1
W1-8
18"X24"

2
W1-8
18"X24"

W1-2L
30"X30"
35 MPH
W13-1
18"X18"

COUNTY H

CEMETERY ROAD

| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH H - CURVE 2 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH H-2-Curve

PLOT DATE : 6/8/2017 1:38 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

W1-2L
30"X30"

35
MPH

W13-1
18"X18"

W1-8
18"X24"

W1-8
18"X24"

W1-2R
30"X30"

35
MPH

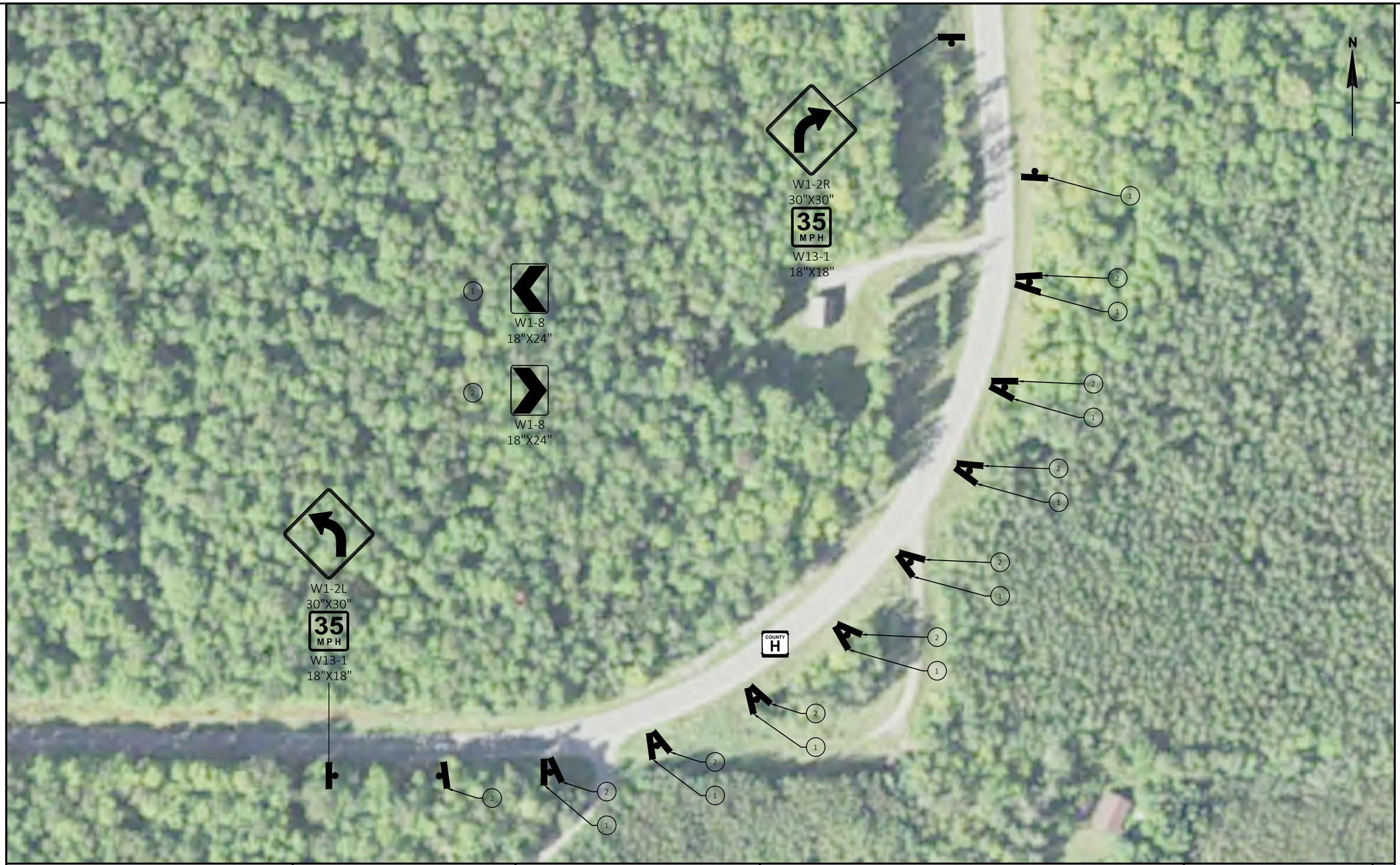
W13-1
18"X18"

| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH H - CURVE 3 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH H-3-Curve

PLOT DATE : 6/8/2017 1:38 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42




| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH H - CURVE 4 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH H-4-Curve

PLOT DATE : 6/8/2017 1:39 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

NOWAK LANE

W1-2R
30"X30"

W1-8
18"X24"

W1-8
18"X24"

W1-2L
30"X30"

COUNTY
H

| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH H - CURVE 5 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH H-5-Curve

PLOT DATE : 6/8/2017 1:39 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

W1-2R
30"X30"

1
W1-8
18"X24"

2
W1-8
18"X24"

COUNTY
H

BAZELEY ROAD

W1-2L
30"X30"

| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH H - CURVE 6 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH H-6-Curve

PLOT DATE : 6/8/2017 1:41 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

W1-2L
30"X30"

35 MPH

W13-1
18"X18"

W1-8
18"X24"

W1-8
18"X24"

W1-2R
30"X30"

35 MPH

W13-1
18"X18"

COUNTY H

BLACKWELL JUNCTION ROAD

| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH H - CURVE 7 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH H-7-Curve

PLOT DATE : 6/8/2017 1:41 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

W1-2R
30"X30"

35 MPH

W13-1
18"X18"

W1-8
18"X24"

W1-8
18"X24"

COUNTY H

W1-2L
30"X30"

35 MPH

W13-1
18"X18"

| PROJECT NO: 2016097 | FOREST COUNTY POTAWATOMI | COUNTY: FOREST | CTH H - CURVE 8 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\FCP_ALTERNATIVES.DWG
LAYOUT NAME - CTH H-8-Curve

PLOT DATE : 6/8/2017 1:41 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

# Appendix C:
# Lac Courte Oreilles Band of Lake Superior Chippewa Indians, Safety Improvement Concepts


C-1: County E/Flemming Way Intersection

C-2 to C-4: Signing/Marking Plan for 3-leg Intersections

C-5: County CC/Flowage Road Intersection

C-6: County K Curve Signing Plan

C-7: County NN Curve Signing Plan

C-8: Potential Curve Realignment on County NN

C-9: Potential Multi-Use Path Alignments and Typical Section

C-10: Potential New Local Roadway Connections

2

2

LITTLE LAC COURTE OREILLES

SHORT CUT ROAD

RESERVE ROAD

COUNTY E

N

STOP

R1-1
30"X30"
(FLASHING RED)

W1-7
48"X24"

175'

100'

W1-2R
30"X30"

25 MPH

S13-1
18"X18"

W3-1
36"X36"

100'

W1-2L
30"X30"

25 MPH

S13-1
18"X18"

| PROJECT NO: 2016097 | LAC COURTE OREILLES TRIBE | COUNTY: SAWYER | CTH E / RESERVE ROAD INTERSECTION | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LAC COURTE OREILLES_ALTERNATIVES.DWG
LAYOUT NAME - CTH E-Reserve Rd

PLOT DATE : 5/23/2017 2:26 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




NOTE:
ADDITIONAL OPTIONS INCLUDE CLEARING & GRUBBING CLEAR ZONE AREA AND THE ADDITION OF OVERHEAD LIGHTING TO THE INTERSECTION AREA.

| PROJECT NO: 2016097 | LAC COURTE OREILLES TRIBE | COUNTY: SAWYER | CTH E / CTH N INTERSECTION | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LAC COURTE OREILLES_ALTERNATIVES.DWG
LAYOUT NAME - CTH E-CTH N
PLOT DATE : 5/24/2017 9:47 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




NOTE:
ADDITIONAL OPTIONS INCLUDE CLEARING & GRUBBING CLEAR ZONE AREA AND THE ADDITION OF OVERHEAD LIGHTING TO THE INTERSECTION AREA.

| PROJECT NO: 2016097 | LAC COURTE OREILLES TRIBE | COUNTY: SAWYER | CTH H / CTH CC INTERSECTION | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LAC COURTE OREILLES_ALTERNATIVES.DWG
LAYOUT NAME - CTH H-CTH CC

PLOT DATE : 5/24/2017 9:48 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | LAC COURTE OREILLES TRIBE | COUNTY: SAWYER | CTH N / CTH CC INTERSECTION | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LAC COURTE OREILLES_ALTERNATIVES.DWG
LAYOUT NAME - CTH N-CTH CC

PLOT DATE : 5/24/2017 9:47 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

COUNTY CC

W1-1R
36"X36"

20 MPH

S13-1
18"X18"

FLOWAGE ROAD

INDIAN LANE

COUNTY CC

W1-8
18"X24"

W1-8
18"X24"

W1-1L
36"X36"

20 MPH

S13-1
18"X18"

| PROJECT NO: 2016097 | LAC COURTE OREILLES TRIBE | COUNTY: SAWYER | CTH CC / FLOWAGE ROAD INTERSECTION | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LCO_ALTERNATIVES.DWG
LAYOUT NAME - CTH CC-FlowageRd

PLOT DATE : 8/4/2017 10:37 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

GRINDSTONE LAKE

COUNTY TRAIL

N

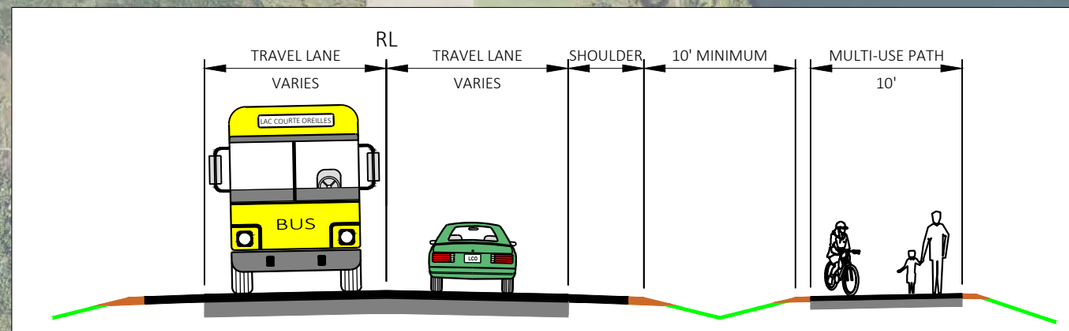
COUNTY K

COUNTY E

MULTI-USE PATH

COUNTY B

ROUND LAKE SCHOOL ROAD




| PROJECT NO: 2016097 | LAC COURTE OREILLES TRIBE | COUNTY: SAWYER | MULTI-USE PATH | SCALE, FEET 0 1000 2000 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LAC COURTE OREILLES_ALTERNATIVES.DWG
LAYOUT NAME - MultiUse Path

PLOT DATE : 5/23/2017 2:25 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

GRINDSTONE LAKE

LAC COURTE OREILLES

125'

W1-4R
30"X30"
45 MPH
S13-1
18"X18"

1
W1-8
18"X24"

2
W1-8
18"X24"

125'

W1-4R
30"X30"
45 MPH
S13-1
18"X18"

COUNTY K

| PROJECT NO: 2016097 | LAC COURTE OREILLES TRIBE | COUNTY: SAWYER | CTH K CURVE IMPROVEMENTS | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LAC COURTE OREILLES_ALTERNATIVES.DWG
LAYOUT NAME - CTH K Curves

PLOT DATE : 5/24/2017 8:32 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

COUNTY NN

125'

W1-2R
30"X30"
45 MPH
S13-1
18"X18"

W1-2L
30"X30"
45 MPH
S13-1
18"X18"

1
W1-8
18"X24"

2
W1-8
18"X24"

N DREAM CATCHER ROAD

W1-2L
30"X30"
45 MPH
S13-1
18"X18"

125'

W1-2R
30"X30"
45 MPH
S13-1
18"X18"

125'

| PROJECT NO: 2016097 | LAC COURTE OREILLES TRIBE | COUNTY: SAWYER | CTH NN CURVE IMPROVEMENTS - ALTERNATIVE 1 | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LAC COURTE OREILLES_ALTERNATIVES.DWG
LAYOUT NAME - CTH NN Curves - Alt 1

PLOT DATE : 5/23/2017 2:27 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | LAC COURTE OREILLES TRIBE | COUNTY: SAWYER | CTH NN CURVE IMPROVEMENTS - ALTERNATIVE 2 | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LAC COURTE OREILLES_ALTERNATIVES.DWG
LAYOUT NAME - CTH NN Curves - Alt 2

PLOT DATE : 5/23/2017 2:27 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | LAC COURTE OREILLES TRIBE | COUNTY: SAWYER | NEW ROADS | SCALE, FEET 0 1000 2000 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LCO_ALTERNATIVES.DWG
LAYOUT NAME - New Roads

PLOT DATE : 8/4/2017 9:41 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

# Appendix D:
# Lac du Flambeau Band of Lake Superior Chippewa Indians, Safety Improvement Concepts


**D-1 to D-3: Multi-Use Path: Cemetery Road, County D, Peace Pipe Lane**

**D-4: Signing/Marking Plan for School Crossing**

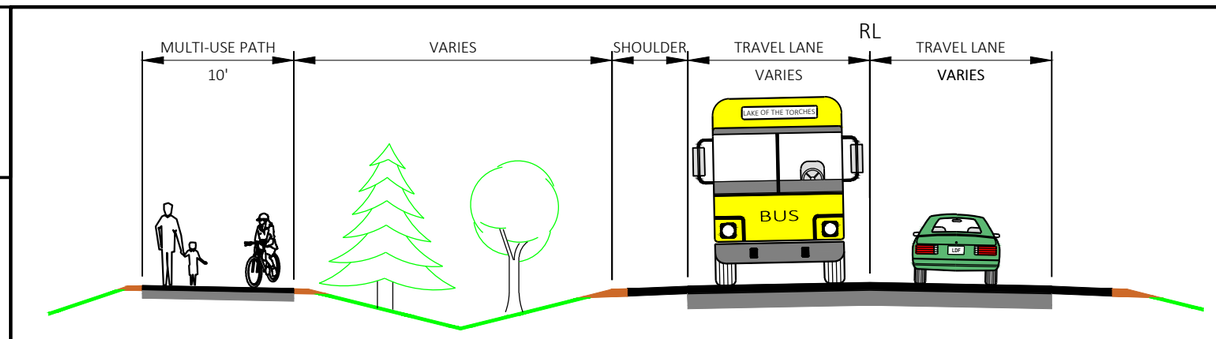
**D-5: WIS 47/County F Intersection**

**D-6: Peace Pipe Lane (County D) Curve Realignment**

**D-7: Thorofare Road Curve Signing Plan**

**D-8: Route for Potential Roadway Connection between County H and Gresham Road**

2







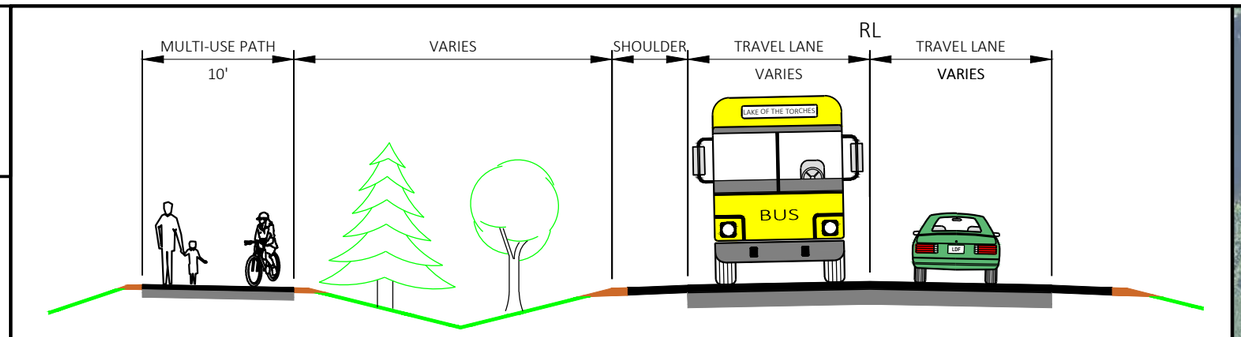
2

| PROJECT NO: 2016097 | LAC DU FLAMBEAU TRIBE | COUNTY: VILAS | MULTI-USE PATH, CEMETERY ROAD | SCALE, FEET 0 500 1000 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LDF_ALTERNATIVES.DWG
LAYOUT NAME - MultiUse Path_CemeteryRd

PLOT DATE : 6/23/2017 8:10 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42






| PROJECT NO: 2016097 | LAC DU FLAMBEAU TRIBE | COUNTY: VILAS | MULTI-USE PATH, CTH D | SCALE, FEET 0 500 1000 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LDF_ALTERNATIVES.DWG
LAYOUT NAME - MultiUse Path_CTH D

PLOT DATE : 6/23/2017 8:14 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

COUNTY D

MOSS LAKE

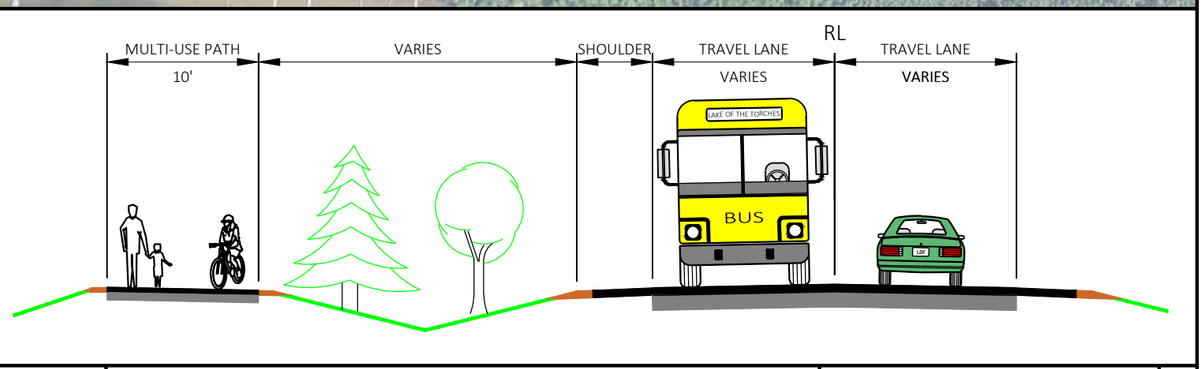
LONG INTERLAKEN LAKE

THOROFARE ROAD

MOSS LAKE DRIVE

MULTI-USE PATH

PEACE PIPE LANE




| PROJECT NO: 2016097 | LAC DU FLAMBEAU TRIBE | COUNTY: VILAS | MULTI-USE PATH, PEACE PIPE LANE/MOSS DRIVE | SCALE, FEET 0 250 500 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LDF_ALTERNATIVES.DWG
LAYOUT NAME - MultiUse Path_PeacePipeLn

PLOT DATE : 6/23/2017 8:11 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ############

WISDOT/CADDS SHEET 42

2

2

N

COUNTY D

47

S1-1
36"X36"

S16-7L
24"X12"

S1-1
36"X36"
AHEAD
W16-9P
24"X12"

GAULKE ROAD

S1-1
36"X36"

S16-7L
24"X12"

LAC DU FLAMBEAU PUBLIC SCHOOL

S1-1
36"X36"
AHEAD
W16-9P
24"X12"

| PROJECT NO: 2016097 | LAC DU FLAMBEAU TRIBE | COUNTY: VILAS | SCHOOL CROSSING | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LDF_ALTERNATIVES.DWG
LAYOUT NAME - School Crossing

PLOT DATE : 6/28/2017 11:13 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | LAC DU FLAMBEAU TRIBE | COUNTY: VILAS | INTERSECTION IMPROVEMENT - STH 47 AND CTH F | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LDF_ALTERNATIVES.DWG
LAYOUT NAME - STH 47-CTH F

PLOT DATE : 6/28/2017 2:32 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

INDIAN VILLAGE ROAD

COUNTY D

N

W1-2L
30"X30"

W1-2R
30"X30"

2

| PROJECT NO: 2016097 | LAC DU FLAMBEAU TRIBE | COUNTY: VILAS | INTERSECTION IMPROVEMENT - CTH D(PEACE PIPE LN) / INDIAN VILLAGE ROAD | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LDF_ALTERNATIVES.DWG
LAYOUT NAME - CTH D-IndianVillage

PLOT DATE : 6/14/2017 1:47 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

MOSS LAKE DRIVE

W1-2L
30"X30"

45
MPH

W13-1
18"X18"

W1-8
18"X24"

W1-8
18"X24"

W1-2R
30"X30"

45
MPH

W13-1
18"X18"

WILDCAT LANE

| PROJECT NO: 2016097 | LAC DU FLAMBEAU TRIBE | COUNTY: VILAS | CURVE IMPROVEMENT - THOROFARE ROAD | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LDF_ALTERNATIVES.DWG
LAYOUT NAME - Curve_Thorofare Rd

PLOT DATE : 6/14/2017 2:24 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

ELLERSON LAKE ROAD

TROUT RIVER

E BOUNDARY TRAIL

MUD CREEK

COUNTY H

ELSIE LAKE ROAD

ELSIE LAKE ROAD EXTENSION

ELSIE LAKE LANE

ELSIE LAKE

| PROJECT NO: 2016097 | LAC DU FLAMBEAU TRIBE | COUNTY: VILAS | ELSIE LAKE ROAD EXTENSION | SCALE, FEET 0 500 1000 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\LDF_ALTERNATIVES.DWG
LAYOUT NAME - ElsieLakeRd Extension

PLOT DATE : 6/14/2017 11:43 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

# Appendix E:
# Menominee Indian Tribe of Wisconsin, Safety Improvement Concepts


**E-1: WIS 47/Rabbit Ridge Road Intersection**

**E-2 to E-3: County AA/S. Branch Road/Clinic Road Intersections**

**E-4: WIS 55/County MM Intersection**

**E-5: WIS 47/Brooks Lane Intersection**

**E-6 to E-12: Rushes Lake Crossover and Go Around Road Curve Signing Plans**

**E-13: Rivermart Access Improvements**

**E-14: Wolf River Drive; Parking at Health Clinic**

**E-15: Potential Roadway Connection from WIS 47 to Wekopemeh**

**E-16: Multi-Use Path: County VV**

2

2

N

COUNTY VV 47 55

RABBIT RIDGE ROAD

100'

217'

150'

100'

325'

200'

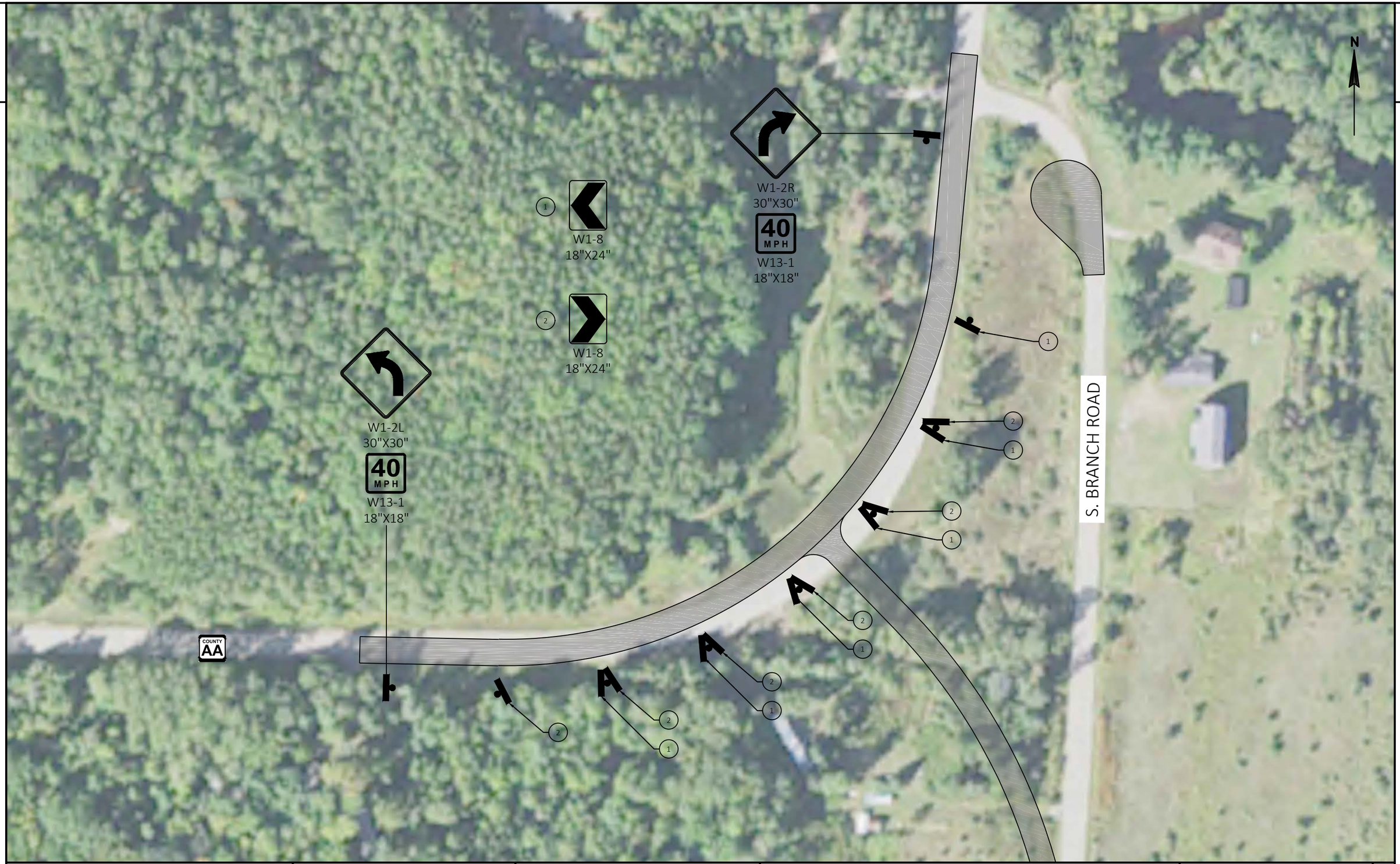
150'

| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | RABBIT RIDGE ROAD INTERSECTION - BYPASS LANE | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - Rabbit Ridge Rd

PLOT DATE : 6/29/2017 1:52 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42




| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | CURVE IMPROVEMENT - CTH AA / S. BRANCH ROAD | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - Curve 03

PLOT DATE : 7/17/2017 9:50 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

CLINIC ROAD

S. CLINIC LANE

COUNTY AA

N

W1-2L
30"X30"

40 MPH
W13-1
18"X18"

W1-8
18"X24"

W1-8
18"X24"

W1-2R
30"X30"

40 MPH
W13-1
18"X18"

| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | CURVE IMPROVEMENT - CTH AA / CLINIC LANE | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - Curve 04

PLOT DATE : 7/17/2017 9:49 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



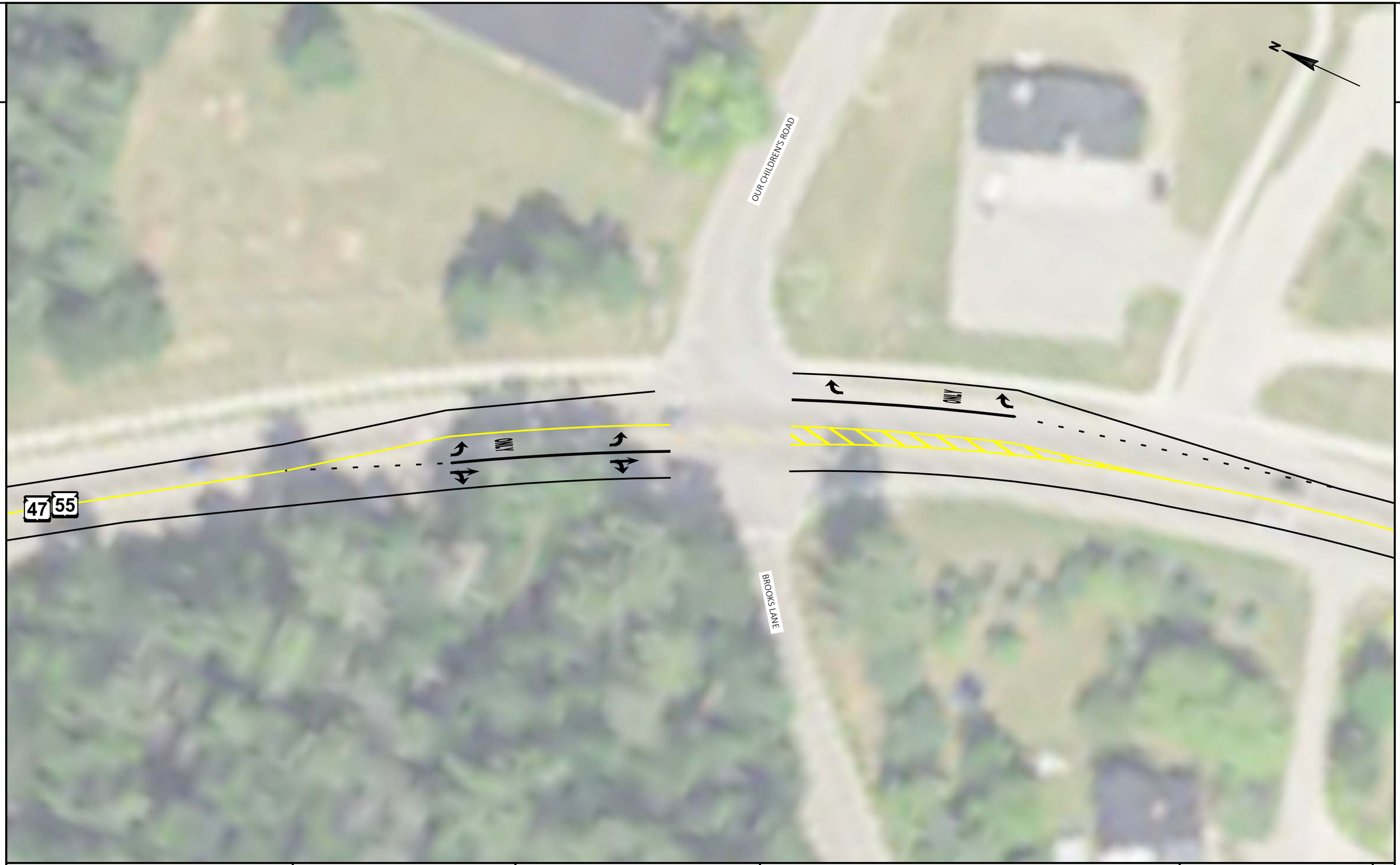

| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | INTERSECTION IMPROVEMENT - STH 55 / CTH M | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - STH 55-CTH M

PLOT DATE : 6/30/2017 11:26 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | STH 47/55 AND BROOKS LANE INTERSECTION | SCALE, FEET 0 20 40 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - BrooksLn

PLOT DATE : 8/25/2017 10:17 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

LONG MARSH ROAD

W1-4R
30"X30"

35
MPH

W13-1
18"X18"

1

2

1

2

1

2

1

2

1

2

1

W1-8
18"X24"

2

W1-8
18"X24"

W1-4R
30"X30"

35
MPH

W13-1
18"X18"

RUSHES LAKE ROAD

| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | RUSHES LAKE ROAD CURVE IMPROVEMENT, LONG MARSH ROAD | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - Curve 01

PLOT DATE : 6/30/2017 8:35 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

N

1
2
1
2
1
2
1
2
1
2
1
2

W1-4L
30"X30"
35
MPH
W13-1
18"X18"

1
W1-8
18"X24"

2
W1-8
18"X24"

W1-4L
30"X30"
35
MPH
W13-1
18"X18"

| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | RUSHES LAKE ROAD CURVE IMPROVEMENT | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - Curve 02

PLOT DATE : 6/30/2017 10:05 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

N

1

W1-8
18"X24"

2

W1-8
18"X24"

W1-1R
36"X36"

15
MPH

W13-1
18"X18"

W1-1L
36"X36"

15
MPH

W13-1
18"X18"

PINE MEADOWS ROAD

GO AROUND ROAD

| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | CURVE IMPROVEMENT - GO AROUND ROAD | SCALE, FEET 0 25 50 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - Curve 05

PLOT DATE : 8/15/2017 1:44 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

PINE MEADOWS ROAD

GO AROUND ROAD

W1-4R
30"X30"

W1-8
18"X24"

W1-8
18"X24"

W1-4R
30"X30"

| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | CURVE IMPROVEMENT - GO AROUND ROAD | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - Curve 06

PLOT DATE : 8/15/2017 2:40 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

W1-4R
30"X30"

1

2

1

2

1

2

GO AROUND ROAD

1

W1-8
18"X24"

2

W1-8
18"X24"

W1-4R
30"X30"

WARRINGTON ROAD

| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | CURVE IMPROVEMENT - GO AROUND ROAD | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - Curve 07

PLOT DATE : 8/15/2017 2:41 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

W1-2R
30"X30"

1

1

W1-8
18"X24"

2

2

1

W1-8
18"X24"

2

2

MIANACEQTAWAK ROAD

GO AROUND ROAD

W1-2L
30"X30"

| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | CURVE IMPROVEMENT - GO AROUND ROAD | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - Curve 08

PLOT DATE : 8/15/2017 3:01 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

W1-4L
30"X30"

GO AROUND ROAD

W1-8
18"X24"

W1-8
18"X24"

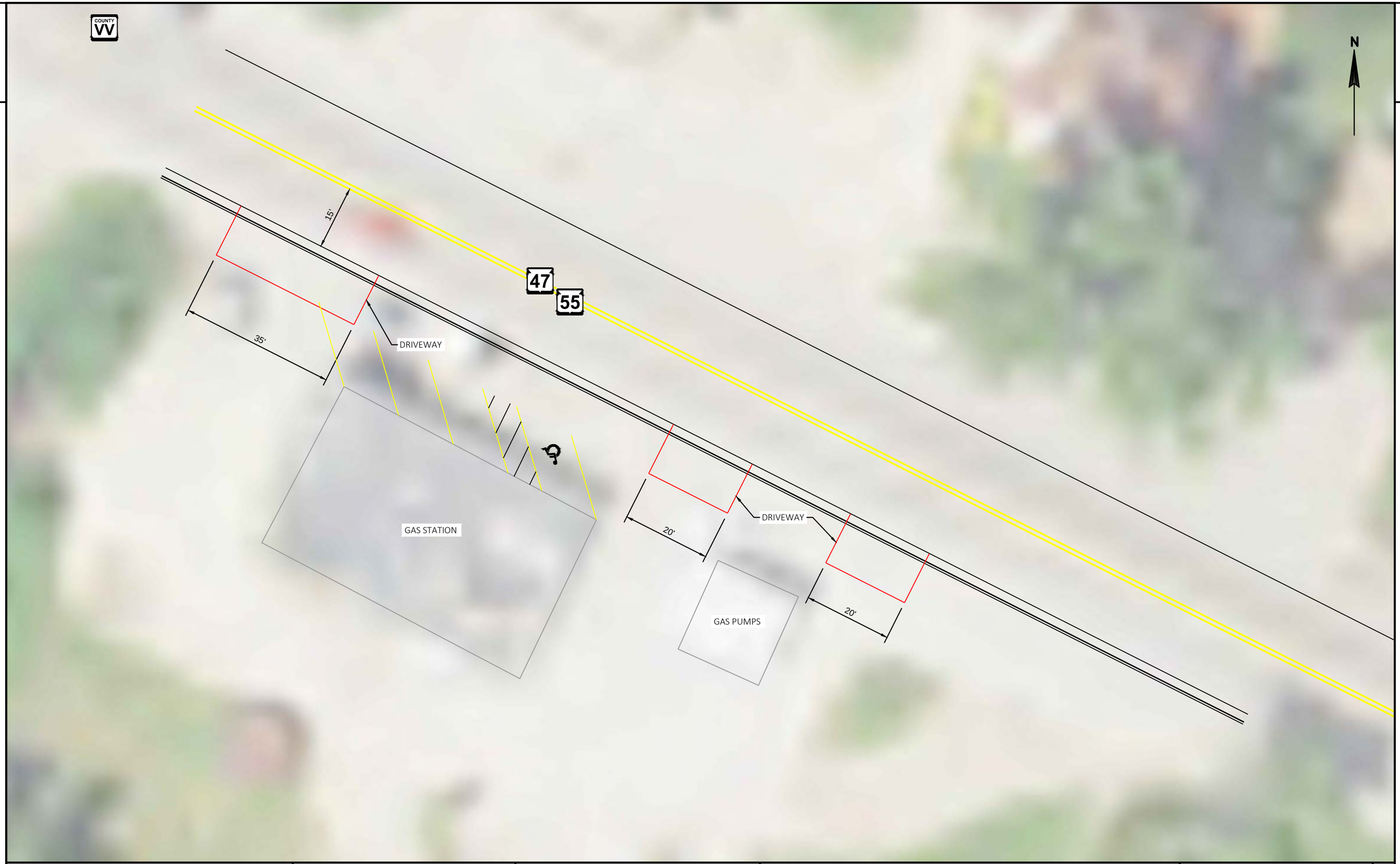
W1-4L
30"X30"

| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | CURVE IMPROVEMENT - GO AROUND ROAD | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - Curve 09

PLOT DATE : 8/15/2017 3:11 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42




| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | GAS STATION ACCESS | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - Gas Station Access

PLOT DATE : 7/17/2017 2:36 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

N

NOTE:
ANGLE PARKING STALLS AS
APPROPRIATE FOR 1-WAY

20'

10'

WOLF RIVER DRVIE

MEDICAL CENTER

| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | WOLF RIVER DRVIE/CLINIC PARKING | SCALE, FEET 0 20 40 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - Wolf River Dr Parking

PLOT DATE : 8/25/2017 10:20 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:40 FT

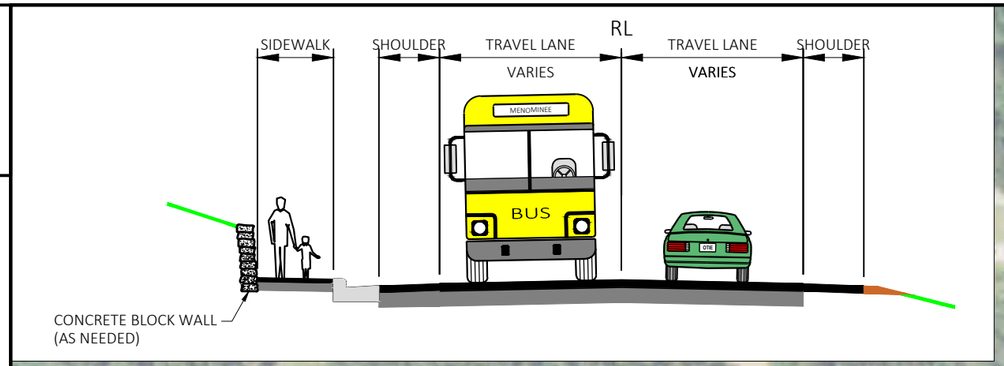
WISDOT/CADDS SHEET 42




| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | WEKOPEMEH ROAD | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - Wekopemeh
PLOT DATE : 8/25/2017 9:09 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42






| PROJECT NO: 2016097 | MENOMINEE TRIBE | COUNTY: MENOMINEE | SIDEWALK - CTH VV | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MENOMINEE_ALTERNATIVES.DWG
LAYOUT NAME - Sidewalk-CTH VV

PLOT DATE : 7/19/2017 9:00 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

# Appendix F:
# Oneida Tribe of Indians of Wisconsin,
# Safety Improvement Concepts

**F-1 to F2: WIS 54 Sidewalk and Pedestrian Crossings**

**F-3: Seminary Road Sidewalk**

**F-4: Backage Road to Hinkle Street**

**F-5: Church, Parish Hall, and Mission Park Improvements**

**F-6: Airport to Hotel Sidewalk**

**F-7: Health Clinic Sidewalk**

2

2

N

GREEN RIDGE DRIVE

LACOUNT ROAD

RED FOX DRIVE

COUNTRY CLUB ROAD

NORTHEAST WISCONSIN TECHNICAL COLLEGE

54

SIDEWALK

CHIEF HILL DRIVE

| PROJECT NO: 2016097 | ONEIDA NATION | COUNTY: BROWN | SIDEWALK - MASTON STREET (STH 54) | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\ONEIDA_ALTERNATIVES.DWG
LAYOUT NAME - 01 Sidewalk

PLOT DATE : 1/2/2018 10:21 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

2

2

N

ISBELL STREET

HINKLE STREET

ONEIDA CASINO
WEST MASON

54

SIDEWALK

PACKERLAND DRIVE

HOBART DRIVE

INTERSTATE
41

GREEN BAY SOUTHWEST
HIGH SCHOOL

| PROJECT NO: 2016097 | ONEIDA NATION | COUNTY: BROWN | SIDEWALK - MASTON STREET (STH 54) | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\ONEIDA_ALTERNATIVES.DWG
LAYOUT NAME - 02 Sidewalk

PLOT DATE : 12/7/2017 3:21 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

2

2

N

ONEIDA NATIONS
ELEMENTARY SCHOOL

OLD SEYMOUR ROAD

SEMINARY ROAD

CORNELIUS CIRCLE

SIDEWALK

CORNELIUS CIRCLE

IDAS WAY

| PROJECT NO: 2016097 | ONEIDA NATION | COUNTY: BROWN | SIDEWALK - SEMINARY ROAD, CORNELIUS CIRCLE | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\ONEIDA_ALTERNATIVES.DWG
LAYOUT NAME - 03 Sidewalk

PLOT DATE : 9/12/2017 2:41 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

2

2

N

HINKLE STREET

54

REMOVE PAVEMENT/DEAD END

CHILI'S

AURORA BAYCARE
HEALTH CENTER

HOBART DRIVE

SPORT CLIPS

NEW PAVEMENT/ROADWAY

TROJAN DRIVE

| PROJECT NO: 2016097 | ONEIDA NATION | COUNTY: BROWN | FRONTAGE ROAD ACCESS | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\ONEIDA_ALTERNATIVES.DWG
LAYOUT NAME - FrontageRd

PLOT DATE : 9/12/2017 3:01 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

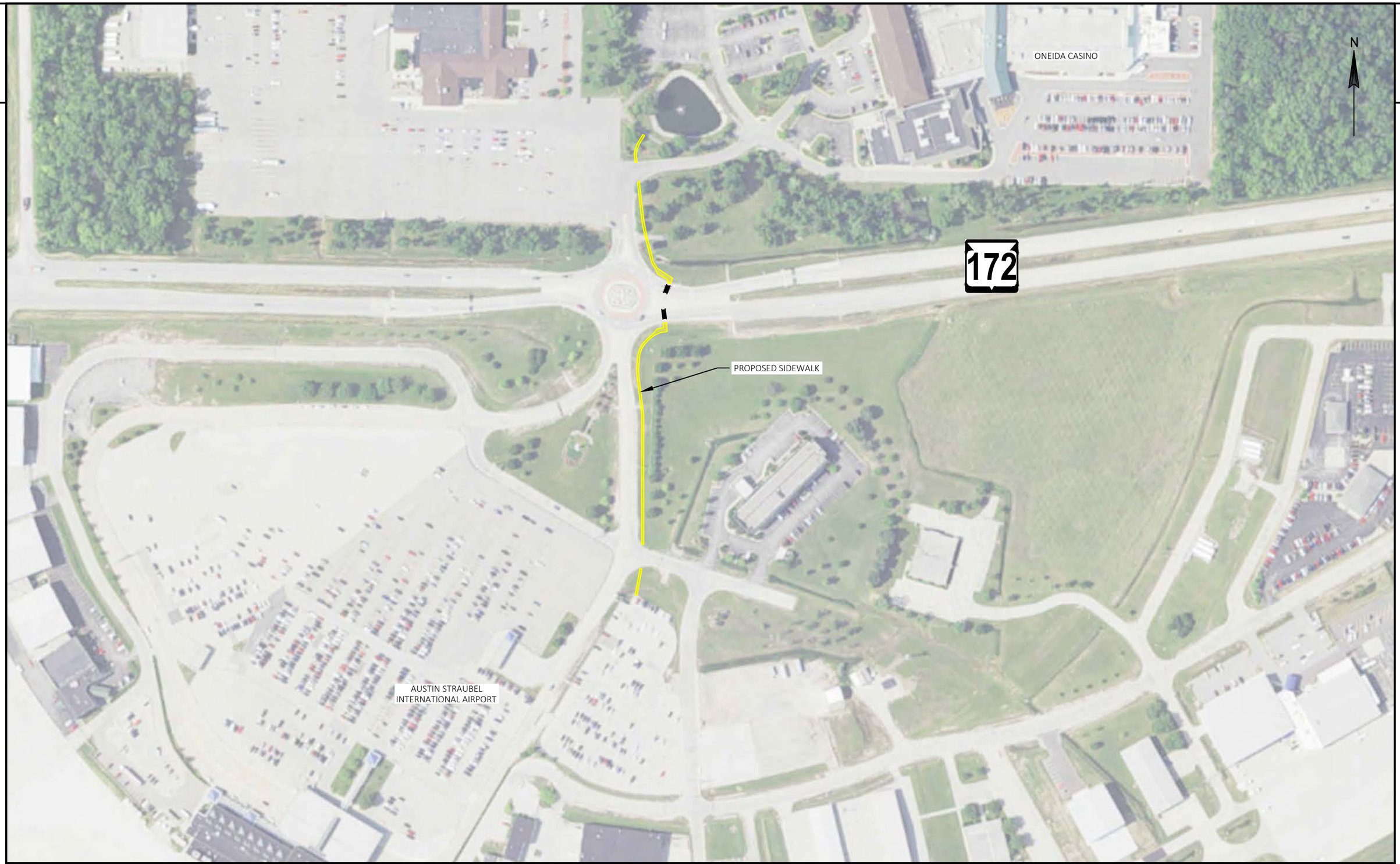



| PROJECT NO: 2016097 | ONEIDA NATION | COUNTY: BROWN | MISSION PARK/HOLY APOSTLES CHURCH ACCESS | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\ONEIDA_ALTERNATIVES.DWG
LAYOUT NAME - MissionPark

PLOT DATE : 12/7/2017 3:19 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42




| PROJECT NO: 2016097 | ONEIDA NATION | COUNTY: BROWN | SIDEWALK - AUSTIN STRAUBEL AIRPORT, ONEIDA CASINO | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\ONEIDA_ALTERNATIVES.DWG
LAYOUT NAME - 05 Sidewalk

PLOT DATE : 1/2/2018 11:34 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2




| PROJECT NO: 2016097 | ONEIDA NATION | COUNTY: BROWN | SIDEWALK - MEDICAL CENTER | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\ONEIDA_ALTERNATIVES.DWG
LAYOUT NAME - 04 Sidewalk

PLOT DATE : 9/13/2017 2:01 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

# Appendix G:
# Red Cliff Band of Lake Superior Chippewa Indians, Safety Improvement Concepts


G-1 to G-2: WIS 13/Blueberry Road/Casino Entrance Intersection

G-3 to G-4: Tribal Offices; Internal Roadways and WIS 13 Intersection

G-5: Potential Roundabout Locations

G-6 to G-11: Multi-Use Path, WIS 13 and Blueberry Road

G-12: RRFB's Along WIS 13

G-13 to G-18: Blueberry Road Curve Signing Plans

G-19: Paving Limits for Blueberry Road/Peterson Hill Road and Residential Access

2

2

STOP
R1-1
30"X30"

CHURCH ROAD

BLUEBERRY ROAD

DO NOT ENTER
R5-1
30"X30"

13

N

REMOVE PAVEMENT,
SEED, FERTILIZE & MULCH

LEGENDARY WATERS RESORT & CASINO

| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | LEGENDARY WATERS RESORT AND CASINO ACCESS - ALTERNATIVE 1 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_ALTERNATIVES.DWG
LAYOUT NAME - Casino-Alt 1

PLOT DATE : 6/23/2017 1:14 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

G-1

2

2

N

CHURCH ROAD

STOP
R1-1
30"X30"

BLUEBERRY ROAD

STOP
R1-1
30"X30"

DO NOT
ENTER
R5-1
30"X30"

13

REMOVE PAVEMENT,
SEED, FERTILIZE & MULCH

LEGENDARY WATERS RESORT & CASINO

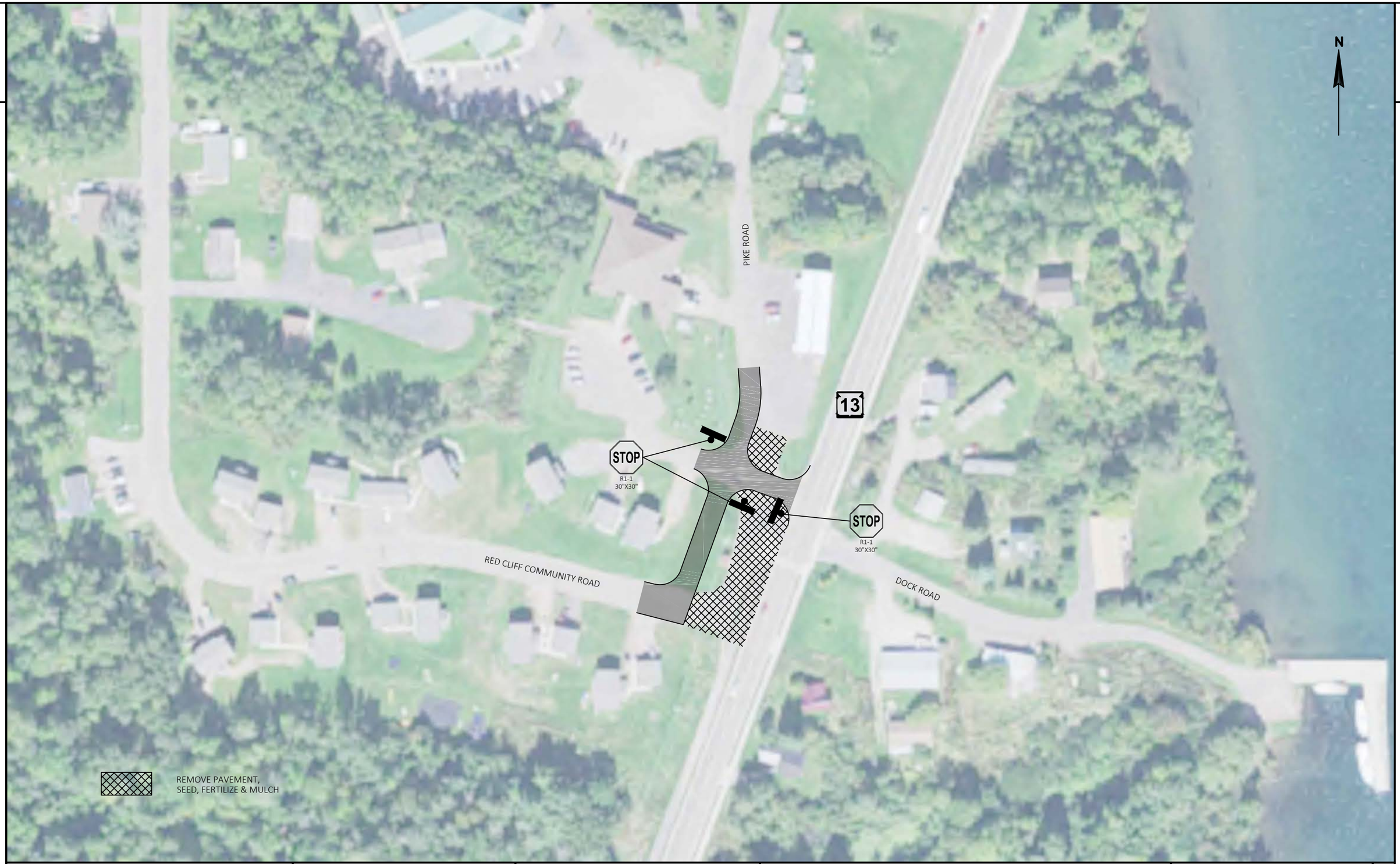
| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | LEGENDARY WATERS RESORT AND CASINO ACCESS - ALTERNATIVE 2 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_ALTERNATIVES.DWG
LAYOUT NAME - Casino-Alt 2

PLOT DATE : 6/23/2017 1:14 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | TRIBAL OFFICES - PIKE ROAD, ALTERNATIVE 1 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_ALTERNATIVES.DWG
LAYOUT NAME - Tribal Office-Alt 1

PLOT DATE : 5/16/2017 10:38 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

PIKE ROAD

STOP
R1-1
30"X30"

13

STOP
R1-1
30"X30"

RED CLIFF COMMUNITY ROAD

DOCK ROAD

REMOVE PAVEMENT,
SEED, FERTILIZE & MULCH

| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | TRIBAL OFFICES - PIKE ROAD, ALTERNATIVE 2 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

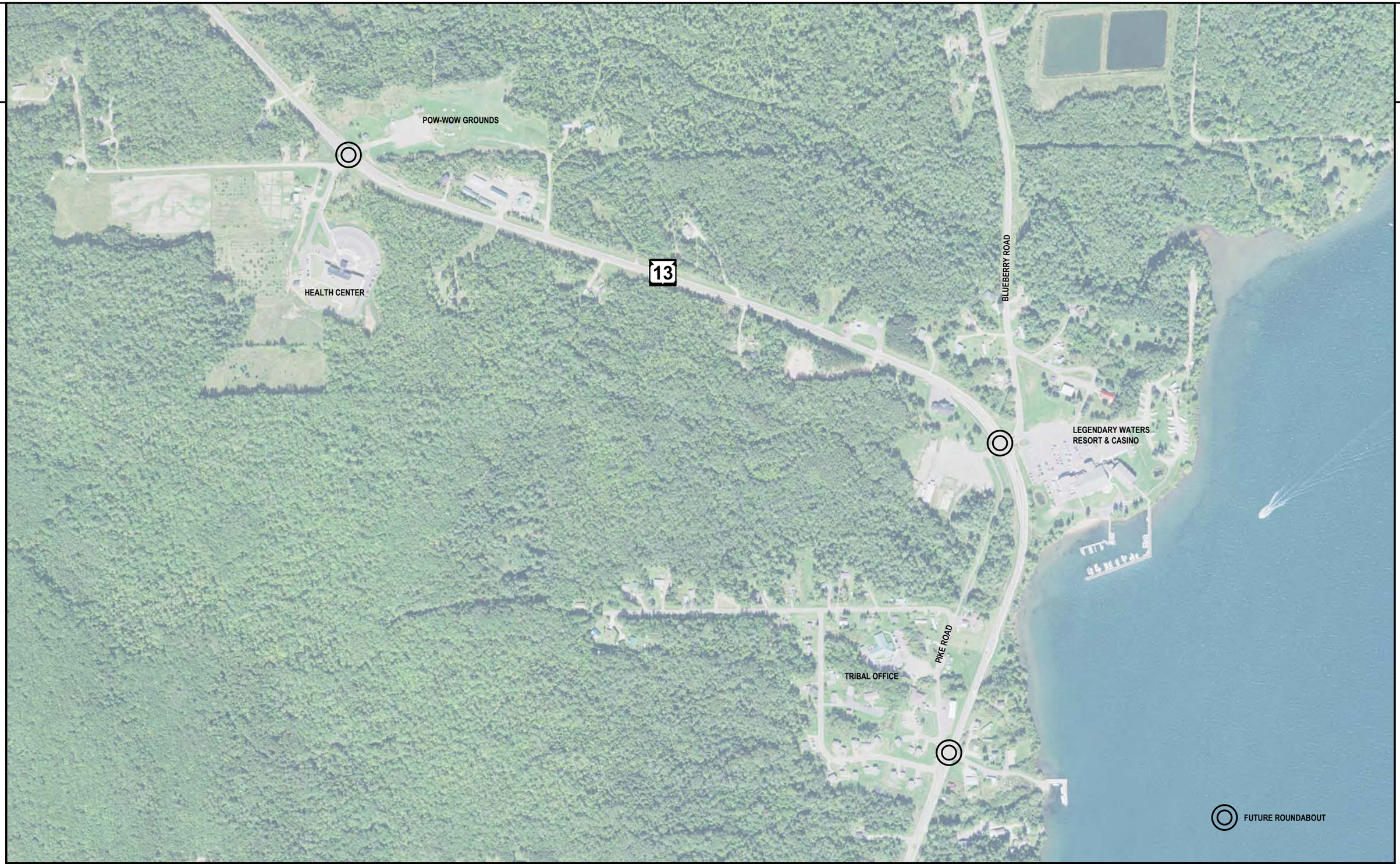
FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_ALTERNATIVES.DWG
LAYOUT NAME - Tribal Office-Alt 2

PLOT DATE : 5/16/2017 10:39 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2




| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | POTENTIAL ROUNDABOUTS | SCALE, FEET 0 250 500 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_ALTERNATIVES.DWG
LAYOUT NAME - Roundabouts

PLOT DATE : 6/25/2018 2:25 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | STH 13 - MULTI-USE PATH | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_ALTERNATIVES.DWG
LAYOUT NAME - Multiuse Path-STH13-1

PLOT DATE : 6/23/2017 1:15 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




2

| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | STH 13 - MULTI-USE PATH | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_ALTERNATIVES.DWG
LAYOUT NAME - Multiuse Path-STH13-2

PLOT DATE : 5/15/2017 10:04 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2




| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | BLUEBERRY ROAD - MULTI-USE PATH | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_ALTERNATIVES.DWG
LAYOUT NAME - Multiuse Path-Residential-1

PLOT DATE : 5/16/2017 10:39 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

BLUEBERRY ROAD

MULTI-USE PATH

BISHOP LANE

NEW HOUSING ROAD

| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | BLUEBERRY ROAD - MULTI-USE PATH | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_ALTERNATIVES.DWG
LAYOUT NAME - Multiuse Path-Residential-2

PLOT DATE : 5/16/2017 10:39 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




2

| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | BLUEBERRY ROAD - MULTI-USE PATH | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_ALTERNATIVES.DWG
LAYOUT NAME - Multiuse Path-Residential-3

PLOT DATE : 5/16/2017 10:40 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | BLUEBERRY ROAD - MULTI-USE PATH | SCALE, FEET 0 100 200 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_ALTERNATIVES.DWG
LAYOUT NAME - Multiuse Path-Residential-4

PLOT DATE : 5/16/2017 10:40 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

2

2

LEGENDARY WATERS
RESORT & CASINO

13

TRIBAL OFFICE

BRESETTE HILL ROAD

W11-2

W11-2

S16-7R
24"X12"

S16-7L

| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | PEDESTRIAN CROSSING IMPROVEMENTS | SCALE, FEET 0 250 500 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_ALTERNATIVES.DWG
LAYOUT NAME - Ped Xing

PLOT DATE : 6/28/2018 2:59 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42




| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | BLUEBERRY ROAD - OVERVIEW | SCALE, FEET 0 1000 2000 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_CURVES.DWG
LAYOUT NAME - 01 - Overview

PLOT DATE : 5/16/2017 10:31 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

BLUEBERRY ROAD

FROG BAY ROAD

N

W1-2R
30"X30"

125'

1

2

1

2

1

1

W1-8
18"X24"

2

W1-8
18"X24"

2

125'

W1-2L
30"X30"

| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | BLUEBERRY ROAD - CURVE 1 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_CURVES.DWG
LAYOUT NAME - 02 - Curve 1

PLOT DATE : 5/16/2017 10:32 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

W1-2L
30"X30"

125'

1

2

W1-8
18"X24"

1

2

W1-8
18"X24"

1

2

1

2

1

2

1

125'

BLUEBERRY ROAD

W1-2R
30"X30"

| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | BLUEBERRY ROAD - CURVE 2 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_CURVES.DWG
LAYOUT NAME - 03 - Curve 2

PLOT DATE : 5/16/2017 10:32 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

2

2

BLUEBERRY ROAD

N

125'

W1-2R
30"X30"

W1-8
18"X24"

W1-8
18"X24"

125'

W1-2L

| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | BLUEBERRY ROAD - CURVE 3 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_CURVES.DWG
LAYOUT NAME - 04 - Curve 3

PLOT DATE : 5/16/2017 10:33 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

2

N

W1-2L
30"X30"

125'

W1-8
18"X24"

W1-8
18"X24"

W1-2R
30"X30"

125'

ROWLEY ROAD

BLUEBERRY ROAD

| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | BLUEBERRY ROAD - CURVE 4 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_CURVES.DWG
LAYOUT NAME - 05 - Curve 4

PLOT DATE : 5/16/2017 10:34 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

2




| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | BLUEBERRY ROAD - CURVE 5 | SCALE, FEET 0 50 100 | E |
|---|---|---|---|---|---|

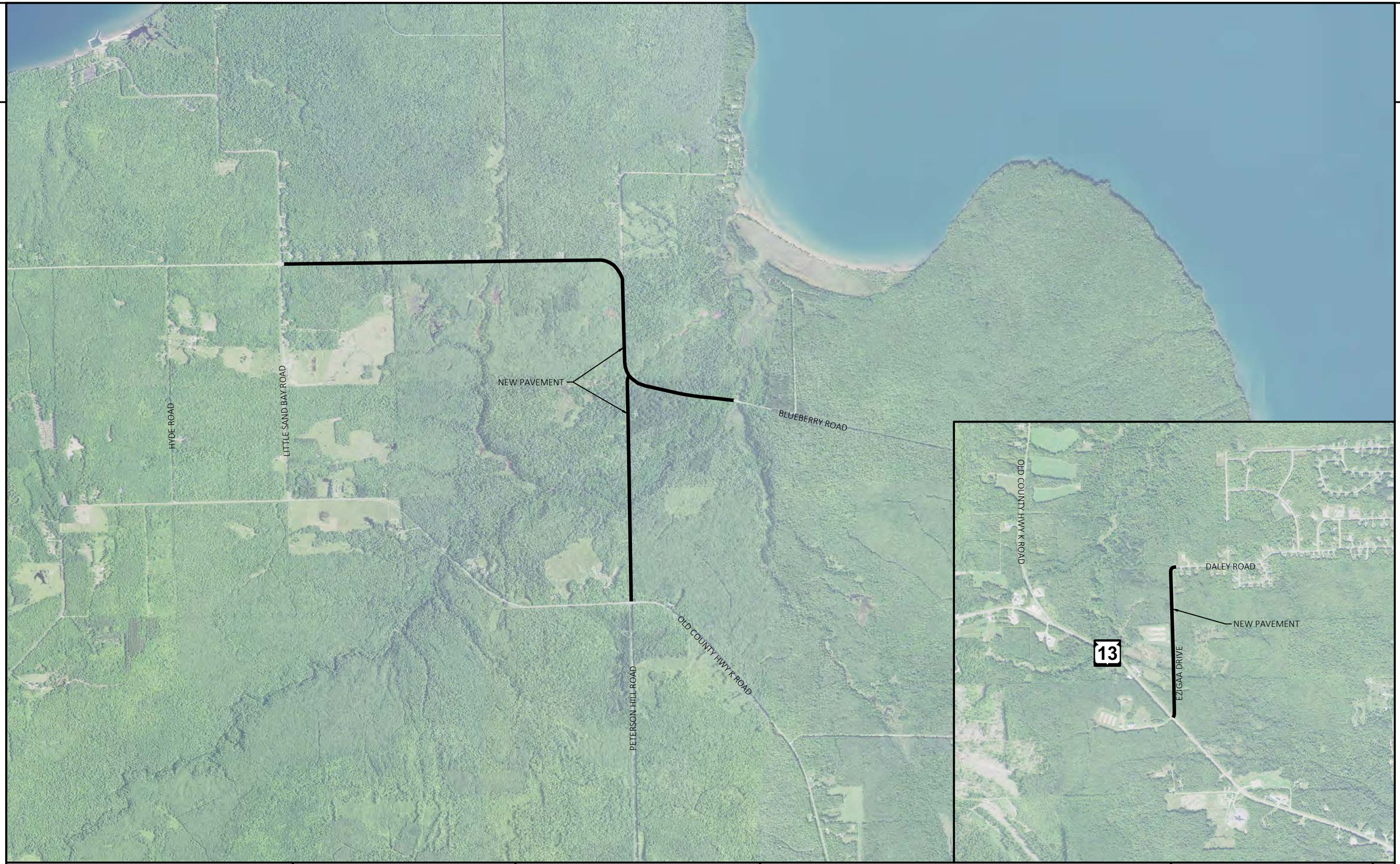
FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_CURVES.DWG
LAYOUT NAME - 06 - Curve 5

PLOT DATE : 5/16/2017 10:34 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2




| PROJECT NO: 2016097 | RED CLIFF BAND | COUNTY: BAYFIELD | NEW PAVEMENT | SCALE, FEET 0 1000 2000 | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\RED CLIFF_ALTERNATIVES.DWG
LAYOUT NAME - New Pavement

PLOT DATE : 8/4/2017 1:25 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

# Appendix H:
# Sokaogon Chippewa Community Mole Lake Band, Safety Improvement Concepts


**H-1: Ackley Circle and Subdivision Roadway**

**H-2: County M/Ackley Circle Intersection**

**H-3: WIS 55/Sand Lake Road Intersection**

**H-4: Pedestrian Crossing on WIS 55**

**H-5: Pedestrian Accommodations and Access Modifications for Tribal Facilities**

**H-6: Trail Connection between John K Drive and Ackley Circle**

**H-7: ATV Trail Crossing on WIS 55**

2

2

N

MCGESHICK LANE

W3-1
36"X36"

8 %

W7-1
30"X30"

W1-2L
30"X30"

ACKLEY CIRCLE

STOP

R1-1
30"X30"
(FLASHING
RED)

W1-8
18"X24"

W1-8
18"X24"

EVALUATE USE OF HIGH FRICTION
SURFACE TREATMENT

W1-2R
30"X30"

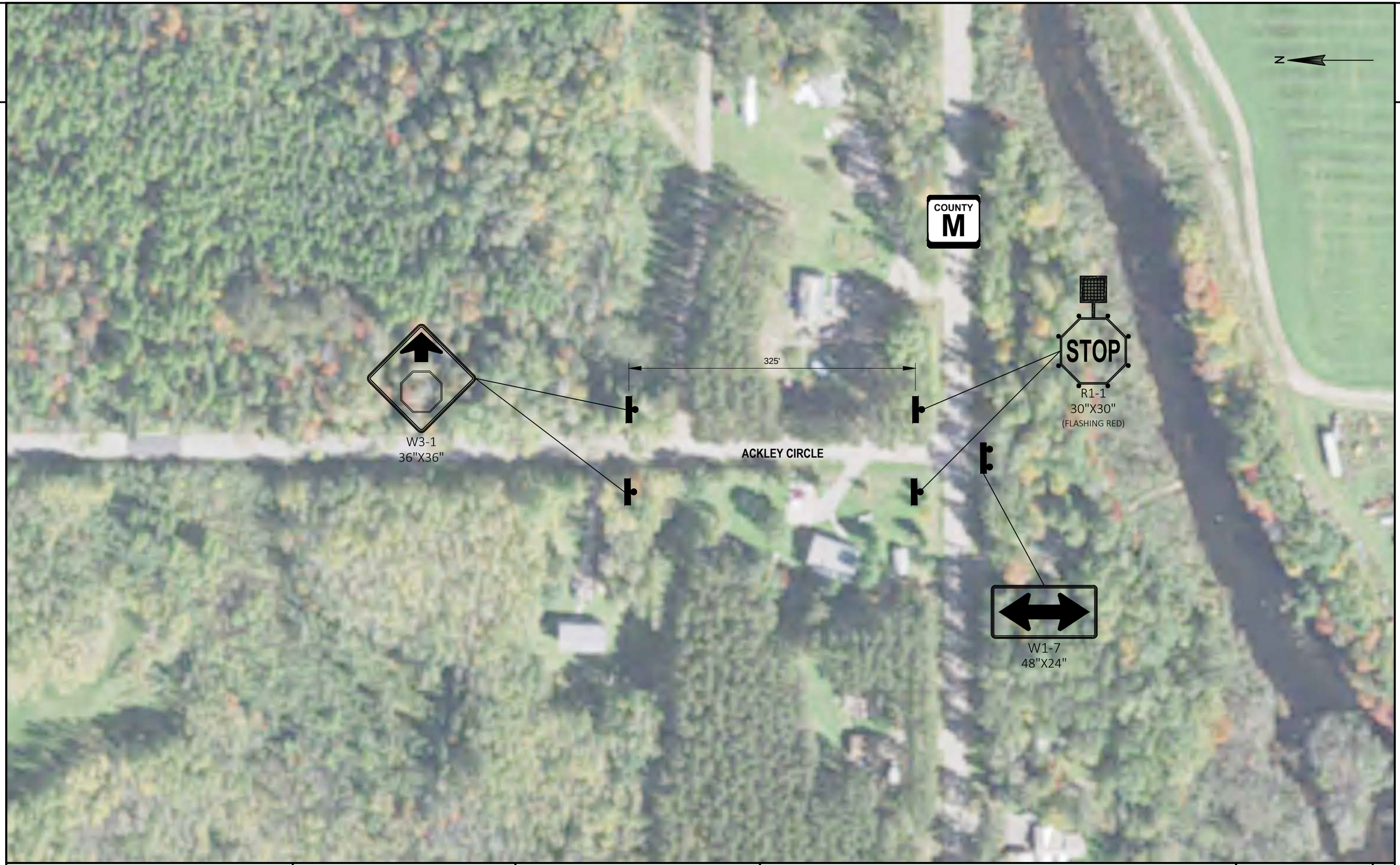
| PROJECT NO: 2016097 | SOKAOGON CHIPPEWA COMMUNITY | COUNTY: FOREST | ACKLEY CIRCLE | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MOLE LAKE BAND_ALTERNATIVES.DWG
LAYOUT NAME - AckleyCircle

PLOT DATE : 4/18/2018 8:10 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | SOKAOGON CHIPPEWA COMMUNITY | COUNTY: FOREST | CTH M / ACKLEY CIRCLE INTERSECTION | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MOLE LAKE BAND_ALTERNATIVES.DWG
LAYOUT NAME - CTHM-Ackley

PLOT DATE : 4/4/2018 8:41 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | SOKAOGON CHIPPEWA COMMUNITY | COUNTY: FOREST | STH 55 / SAND LAKE ROAD INTERSECTION | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MOLE LAKE BAND_ALTERNATIVES.DWG
LAYOUT NAME - STH55-SandLakeRd

PLOT DATE : 4/18/2018 9:29 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

W11-2
30"X30"
W16-7R

W11-2
30"X30"
W16-7L

EVALUATE NEED FOR
FLASHING BEACONS

W11-2
30"X30"
AHEAD
W16-9P
24"X12"

55

W11-2
30"X30"
AHEAD
W16-9P
24"X12"

BP STATION

W11-2
30"X30"
W16-7L

W11-2
30"X30"
W16-7R

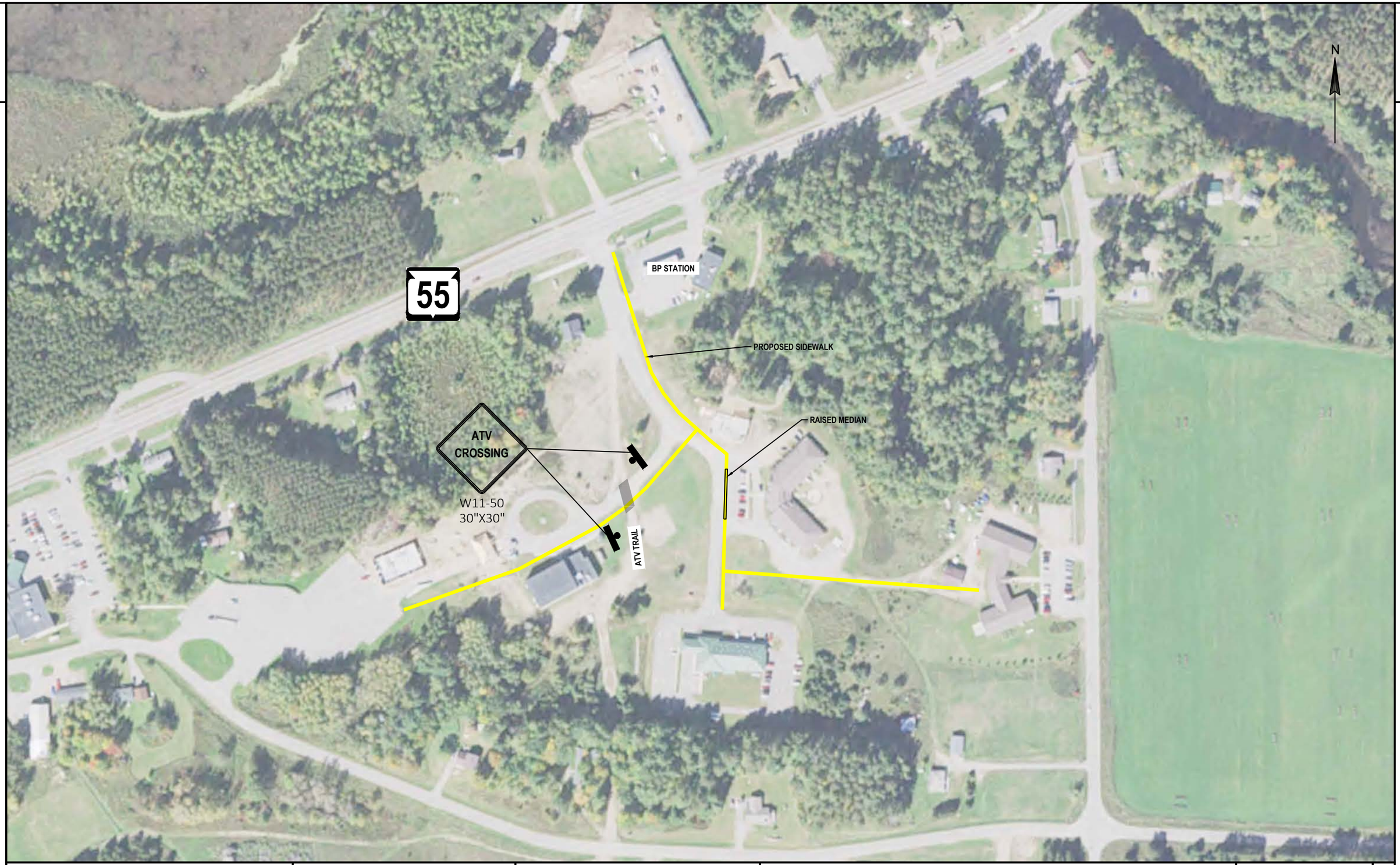
| PROJECT NO: 2016097 | SOKAOGON CHIPPEWA COMMUNITY | COUNTY: FOREST | STH 55 PEDESTRIAN CROSSING | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MOLE LAKE BAND_ALTERNATIVES.DWG
LAYOUT NAME - PedCrossing

PLOT DATE : 4/18/2018 8:43 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | SOKAOGON CHIPPEWA COMMUNITY | COUNTY: FOREST | BUSINESS PARK SIDEWALK | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MOLE LAKE BAND_ALTERNATIVES.DWG
LAYOUT NAME - Business Park

PLOT DATE : 4/18/2018 8:35 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42




| PROJECT NO: 2016097 | SOKAOGON CHIPPEWA COMMUNITY | COUNTY: FOREST | TRAIL CONNECTION | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MOLE LAKE BAND_ALTERNATIVES.DWG
LAYOUT NAME - TrailConnection

PLOT DATE : 8/17/2018 1:02 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

2

2

N

SOKAOGON DRIVE

TRAIL CROSSING

W11-15A
30"X30"

TRAIL CROSSING

W11-15A
30"X30"

55

N MOLE LAKE ROAD

| PROJECT NO: 2016097 | SOKAOGON CHIPPEWA COMMUNITY | COUNTY: FOREST | SNOWMOBILE / ATV TRAIL CROSSING at STH 55 | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\MOLE LAKE BAND_ALTERNATIVES.DWG
LAYOUT NAME - TrailCrossing

PLOT DATE : 4/3/2018 10:39 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

# Appendix I:
# St. Croix Band Chippewa Indians of Wisconsin, Safety Improvement Concepts

**I-1: Danbury Path Route**

**I-2: New Access to Gaslyn**

**I-3: Hertel Frontage Road**

**I-4: New Access for Head Start Facility**

2

2




| PROJECT NO: 2016097 | ST. CROIX CHIPPEWA | COUNTY: BURNETT | MULTI-USE PATH | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\ST CROIX_ALTERNATIVES.DWG
LAYOUT NAME - Path

PLOT DATE : 12/13/2017 1:33 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

2




2

| PROJECT NO: 2016097 | ST. CROIX CHIPPEWA | COUNTY: BURNETT | BEARHART DRIVE | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\ST CROIX_ALTERNATIVES.DWG
LAYOUT NAME - BearhartDr

PLOT DATE : 12/13/2017 9:40 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

2

2



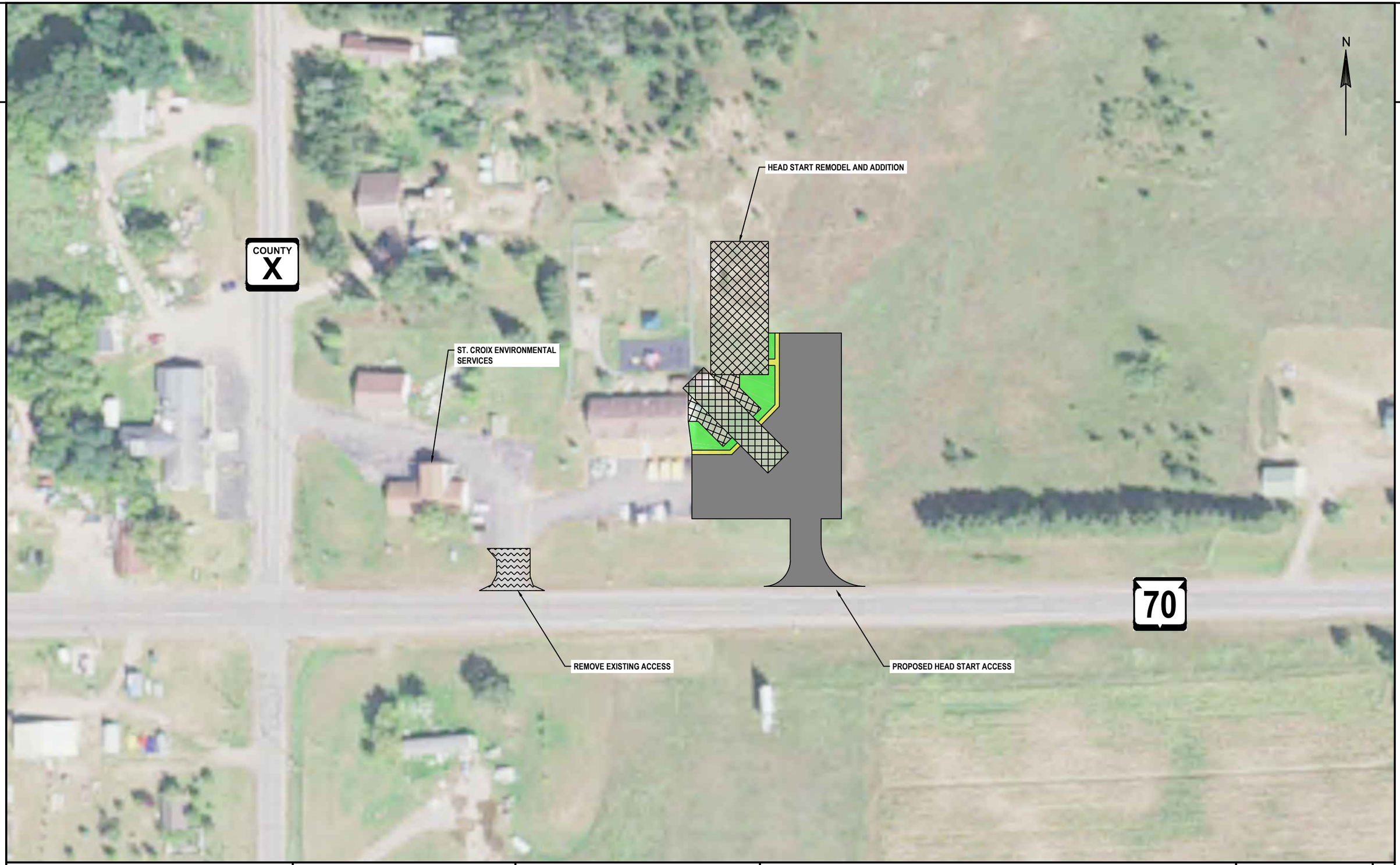

| PROJECT NO: 2016097 | ST. CROIX CHIPPEWA | COUNTY: BURNETT | CASINO CAMPUS FRONTAGE ROAD | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\ST CROIX_ALTERNATIVES.DWG
LAYOUT NAME - FrontageRd

PLOT DATE : 8/17/2018 11:05 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | ST. CROIX CHIPPEWA | COUNTY: BURNETT | HEAD START ACCESS | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\ST CROIX_ALTERNATIVES.DWG
LAYOUT NAME - Head Start

PLOT DATE : 8/17/2018 11:11 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

# Appendix J:
# Stockbridge-Munsee Community, Safety Improvement Concepts


**J-1 to J-2: County A/Casino/Gas Station Entrances**

**J-3: County A/Maple Road Intersection**

**J-4: County A/MoHeConNuck Road Intersection**

**J-5: County A/Healing Way Intersection**

**J-6 to J-13: Camp Road 14 Improvements**

**J-14 to J-18: Potential Multi-Use Path Alignments and Typical Section**

2




| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | CASINO/LITTLE STAR ACCESS | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - CasinoAccess
PLOT DATE : 9/7/2017 1:29 PM
PLOT BY : PATRICK SMITH
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | CASINO/LITTLE STAR ACCESS - ALTERNATIVE 2 | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - CasinoAccess02

PLOT DATE : 12/7/2017 8:07 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | CTH A CURVE IMPROVEMENT | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - CTH A-Curves

PLOT DATE : 9/7/2017 8:52 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42




| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | CTH A CURVE IMPROVEMENT | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - CTH A-Curves2

PLOT DATE : 12/11/2017 2:31 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

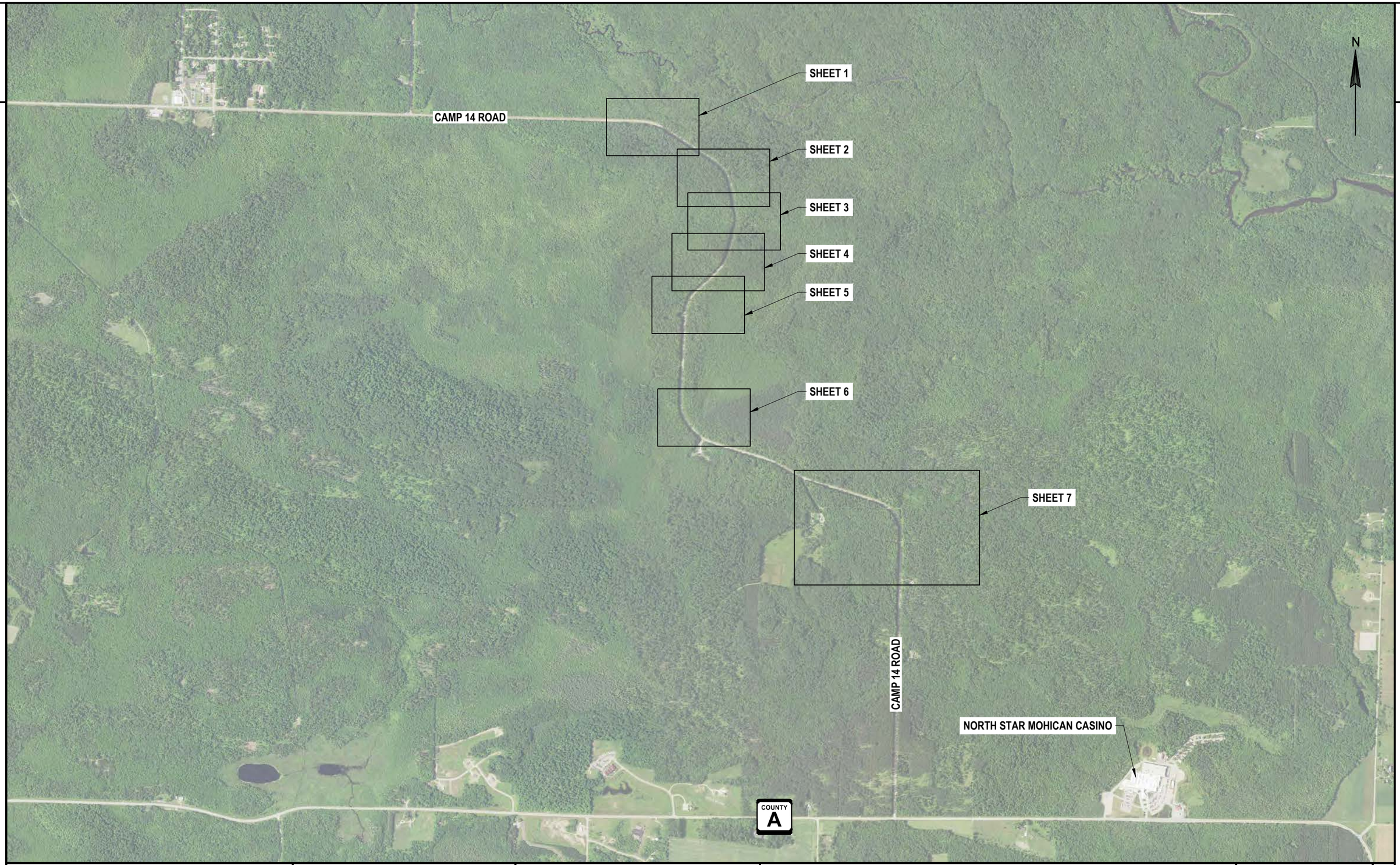



| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | CTH A/HEALING WAY INTERSECTION | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - HealingWay

PLOT DATE : 9/8/2017 1:11 PM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42




| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | CAMP 14 ROAD - OVERVIEW | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - Camp14Rd_Overview

PLOT DATE : 12/7/2017 10:07 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : Custom

WISDOT/CADDS SHEET 42

2

2

N

CAMP 14 ROAD

1

2

1

2

1

2

1

2

1

W1-2R
30"X30"

1

W1-8
18"X24"

2

W1-8
18"X24"

W1-2L
30"X30"

| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | CAMP 14 ROAD - SHEET 1 | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - Camp14Rd01

PLOT DATE : 12/7/2017 10:08 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

CAMP 14 ROAD

N

1

2

1

2

1

2

1

W1-2R
30"X30"

40
MPH

S13-1
18"X18"

1

W1-8
18"X24"

2

W1-8
18"X24"

2

W1-2L
30"X30"

40
MPH

S13-1
18"X18"

| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | CAMP 14 ROAD - SHEET 2 | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - Camp14Rd02

PLOT DATE : 12/7/2017 10:09 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

CAMP 14 ROAD

W1-2R
30"X30"

35
MPH

S13-1
18"X18"

1

W1-8
18"X24"

2

W1-8
18"X24"

2

1

2

1

2

W1-2L
30"X30"

35
MPH

S13-1
18"X18"

| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | CAMP 14 ROAD - SHEET 3 | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - Camp14Rd03

PLOT DATE : 12/7/2017 10:09 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

W1-2R
30"X30"

40
MPH
S13-1
18"X18"

1

1

W1-8
18"X24"

2

1

2

W1-8
18"X24"

2

1

2

1

2

CAMP 14 ROAD

W1-2L
30"X30"

40
MPH
S13-1
18"X18"

| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | CAMP 14 ROAD - SHEET 4 | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - Camp14Rd04

PLOT DATE : 12/7/2017 10:09 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

CAMP 14 ROAD

W1-2L
30"X30"

35
MPH
S13-1
18"X18"

W1-8
18"X24"

W1-8
18"X24"

W1-2R
30"X30"

35
MPH
S13-1
18"X18"

| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | CAMP 14 ROAD - SHEET 5 | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - Camp14Rd05

PLOT DATE : 12/7/2017 10:10 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

W1-2L
30"X30"

W1-8
18"X24"

W1-8
18"X24"

W1-2R
30"X30"

CAMP 14 ROAD

| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | CAMP 14 ROAD - SHEET 6 | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - Camp14Rd06

PLOT DATE : 12/7/2017 10:10 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:100 FT

2




| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | CAMP 14 ROAD - SHEET 7 | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - Camp14Rd07

PLOT DATE : 12/7/2017 10:11 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

N

HEALTH & WELLNESS CENTER

HEALING WAY

PROPOSED SIDEWALK

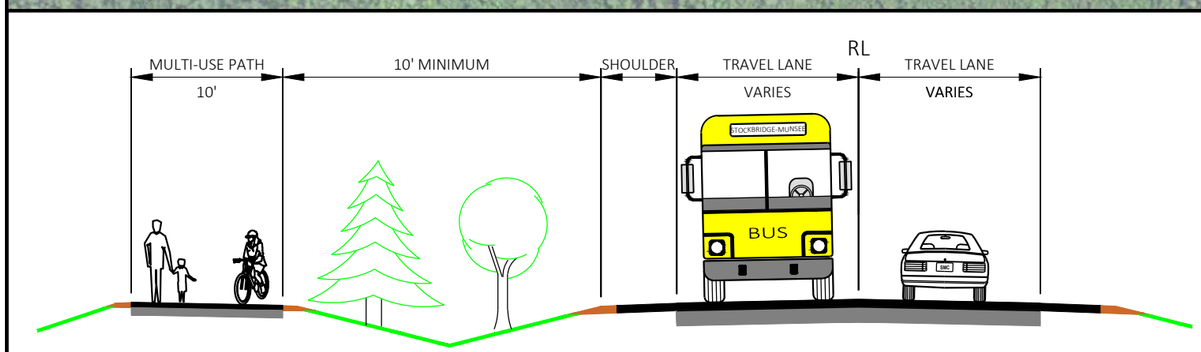
COUNTY A

W11-2
30"X30"

AH-TOH-WUK CIRCLE

ELM ROAD

AH-TOH-WUK DRIVE




| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | SIDEWALK - AH-TOH-WUK CIRCLE, HEALTH & WELLNESS CENTER | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - Sidewalk 01

PLOT DATE : 1/30/2018 9:34 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

2

2

N

CHERRY STREET

ELM STREET

POPLAR STREET

OAK STREET

MAPLEWOOD STREET

MOHICAN FAMILY CENTER

W11-2

W11-2

CAMP 14 ROAD

FIRE DEPARTMENT

| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | SIDEWALK - OAK STREET, CHERRY STREET, MOHICAN FAMILY CENTER | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - Sidewalk 02

PLOT DATE : 12/7/2017 10:46 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2




| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | SIDEWALK - MO HE CON NUCK ROAD | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - Sidewalk 03
PLOT DATE : 12/12/2017 8:11 AM
PLOT BY : PATRICK SMITH
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2




2

| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | SIDEWALK - MO HE CON NUCK ROAD | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - Sidewalk 04

PLOT DATE : 12/12/2017 8:12 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2




2

| PROJECT NO: 2016097 | STOCKBRIDGE-MUNSEE COMMUNITY | COUNTY: SHAWANO | SIDEWALK - MO HE CON NUCK ROAD | SHEET | E |
|---|---|---|---|---|---|

FILE NAME : Q:\2016 PROJECTS\2016097 - STATEWIDE TTSP\CIVIL3D\DESIGN\STOCKBRIDGE_ALTERNATIVES.DWG
LAYOUT NAME - Sidewalk 05

PLOT DATE : 12/12/2017 8:12 AM PLOT BY : PATRICK SMITH PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42