DNR / DOT PROJECT REVIEW

State of Wisconsin – Department of Natural Resources (DNR) and Department of Transportation (WisDOT)
DTNR0002 12/2012

DNR Internet: http://dnr.wi.gov/	WisDOT Internet: http://www.dot.wisconsin.gov/
SHAWN HASELEU WISCONSIN DEPARTMENT OF NATURAL RESOURCES NORTHERN REGION HDQRS 810 W. MAPLE ST. SPOONER, WI 54801	**Wisconsin Department of Transportation** **Division of Transportation Systems Development** NORTHWEST REGION- SUPERIOR OFFICES 1701 N. 4TH ST. SUPERIOR, WI 54880-1068

Inform WisDOT Regional Environmental Coordinator, if more than 45 days is needed.

Design Project ID	Project Highway	Review Submittal Date (m/d/yy)
1560-02-01	USH 63	12/11/17
Construction Project ID	**Estimated Project Cost (range)**	**Construction Year (yyyy)**
1560-02-70	$4,000,000.00 to $5,000,000.00	2019

Project Name	Project Limits
HAYWARD - DRUMMOND	STH 27 - LARSEN RD
County	**Project on Tribal Land**
SAWYER	☐ Yes ☒ No
Contact Name	**Contact (Area Code) Phone Number**
MATT DICKENSON	(715) 395-3022

Section/Township/Range
14,15,22 &23, T.35N. - R 12W

Type of Review Requested
- ☐ Initial Review
- ☒ Final Concurrence
- ☐ Scope Change
- ☐ Other:

Document Type
- ☐ Environmental Assessment (EA)
- ☐ Environmental Report (ER)
- ☒ Programmatic Environmental Report (pER)

WisDOT Project Classification
- ☐ Bridge Rehabilitation, FDM 3-5-2
- ☐ Bridge Replacement , FDM 3-5-2
- ☐ Expansion, FDM 3-5-2
- ☒ Pavement Replacement, FDM 3-5-2
- ☐ Preventive Maintenance, FDM 3-1-5
- ☐ SHRM (State Hwy Rehab/Maint), Maintenance Manual 13.08
- ☐ Recondition, FDM 3-5-2
- ☐ Reconstruction, FDM 3-5-2
- ☐ Resurface, FDM 3-5-2
- ☐ Safety (HSIP), PMM 4-1-10
- ☐ Other:

Work Involved
- ☒ Beam Guard Replacement
- ☐ Borrow and/or Waste Site Required
- ☐ Channel Change/Stream Relocation
- ☒ Clearing and Grubbing
- ☒ Culvert Replacement or Extensions
- ☐ Dredging
- ☒ Grading
- ☒ Fill Outside Toe of Slope
- ☒ Intersection Improvement
- ☒ Right of Way Acquisition
- ☐ Shoulder Work
- ☐ Storm Sewer
- ☐ Other:

Storm Water Management (check all that apply)

- ☒ Trans 401 post construction requirements
- ☐ NPDES MS4/Urbanized Area
- ☐ TMDL Implementation Area

Project Description and Reason for Project:
(include project location map with limits and necessary attachments; attach additional sheets if needed)

See Attachment 1.

Division of Transportation
System Development
Northwest Region – Superior Office
1701 North 4th Street
Superior, WI 54880

Scott Walker, Governor
Mark Gottlieb, P.E., Secretary
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Attachment 1: Description & Need

June 5, 2017

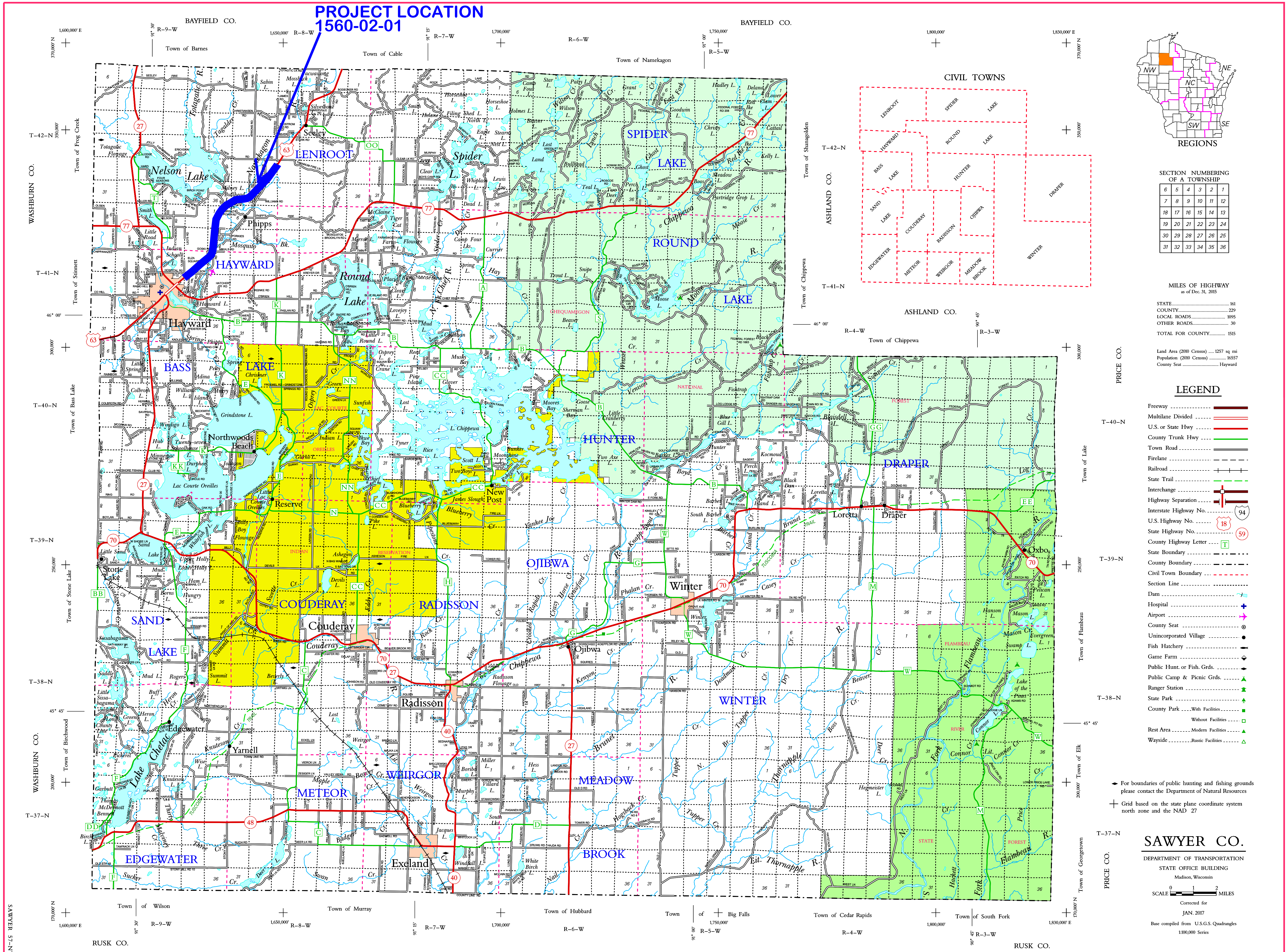
RE: WISDOT Project 1560-02-01, (Sawyer County)
USH 63, Hayward - Drummond; STH 27 – Larsen Rd

Project Description:
This pavement replacement project involves removing the existing concrete pavement, crushing it, and relaying it as aggregate base. It will then be overlaid with asphaltic HMA pavement. Select culverts will be replaced, permanent signing will be replaced, select beam guard will be replaced, and the intersection of USH 63 and Hospital Road will be improved due to existing crash history at this intersection. All real estate and permits will be acquired before the start of construction. A total of 0.75 acres of wetland impacts are expected during construction and will be mitigated at an approved wetland bank site. This project is scheduled to be let on November 13, 2018 and will be constructed under detour during the summer of 2019.

Purpose & Need:
The purpose of this project is to replace the existing deteriorated concrete, rehabilitate highway culverts, and reconstruct an intersection to improve safety. The existing pavement is at the end of its life and needs to be replaced for the safety of the traveling public.

Travis Jensen, E.I.T.
Project Leader

Attachments:
Attachment 1: Description & Need
Attachment 2: Project Location Map
Attachment 3: Wetland Delineation Report
Attachment 4: Special Provisions
Attachment 5: Plan Set


PROJECT LOCATION
1560-02-01
BAYFIELD CO.
WASHBURN CO.
ASHLAND CO.
PRICE CO.
RUSK CO.
LENROOT
SPIDER LAKE
HAYWARD
ROUND LAKE
BASS LAKE
HUNTER
DRAPER
OJIBWA
COUDERAY
RADISSON
SAND LAKE
WINTER
WEIRGOR
METEOR
MEADOW BROOK
EDGEWATER
Hayward
Seeley
Phipps
Northwoods Beach
Reserve
New Post
Couderay
Radisson
Ojibwa
Winter
Loretta
Draper
Oxbo
Edgewater
Yarnell
Exeland
Stone Lake
CIVIL TOWNS
REGIONS
SECTION NUMBERING OF A TOWNSHIP
MILES OF HIGHWAY
as of Dec. 31, 2015
STATE 161
COUNTY 229
LOCAL ROADS 1095
OTHER ROADS 30
TOTAL FOR COUNTY 1515
Land Area (2010 Census) 1257 sq mi
Population (2010 Census) 16557
County Seat Hayward
LEGEND
Freeway
Multilane Divided
U.S. or State Hwy
County Trunk Hwy
Town Road
Fire lane
Railroad
State Trail
Interchange
Highway Separation
Interstate Highway No.
U.S. Highway No.
State Highway No.
County Highway Letter
State Boundary
County Boundary
Civil Town Boundary
Section Line
Dam
Hospital
Airport
County Seat
Unincorporated Village
Fish Hatchery
Game Farm
Public Hunt. or Fish. Grds.
Public Camp & Picnic Grds.
Ranger Station
State Park
County Park With Facilities
Without Facilities
Rest Area Modern Facilities
Wayside Rustic Facilities
For boundaries of public hunting and fishing grounds please contact the Department of Natural Resources
Grid based on the state plane coordinate system north zone and the NAD 27
SAWYER CO.
DEPARTMENT OF TRANSPORTATION
STATE OFFICE BUILDING
Madison, Wisconsin
SCALE MILES
Corrected for
JAN. 2017
Base compiled from U.S.G.S. Quadrangles
1:100,000 Series
SAWYER 57-NW

Wetland Delineation Report

Project ID# 1560-02-01/70

Hayward – Drummond
STH 27 to Larsen Rd.
USH 63
Sawyer County

Prepared by the Wisconsin Department of Transportation
Northwest Region
Daniel Fuller
1701 N 4th Street
Superior, WI 54880
October 2017

Contents

Project Summary

The Wisconsin Department of Transportation (WisDOT) has proposed a resurfacing project along with an intersection realignment between Hayward and Drummond in Sawyer County. As part of the resurfacing project. The intersection of USH 63, Hospital rd. and Airport will be realigned.

There are unavoidable wetland impacts associated with this project. The area surrounding construction has been delineated according to the US Army Corps of Engineers 1987 Wetland Delineation Manual and the US Army Corps of Engineers 2012 Northcentral and Northeast Supplement and the impacted wetland type and acreage have been determined based on three criteria—vegetation, hydrology, and soils.

Wetland Delineators

The delineation for project 1560-02-01/70 was conducted on 6/15/2017 by Dave Runquist and Daniel Fuller. Mr. Runquist was an intern with WisDOT and attended the University of Wisconsin-Superior. He graduated with a BS majoring in biology with a plant emphasis and a minor in Earth sciences in May 17. He attended the basic and advanced wetland delineation training in July 2015. Mr. Fuller is currently an intern with the WisDOT and is attending the University of Wisconsin – Superior, majoring in broad field science and biology education. He will graduate with a B.S. in May 2018. In 2013, Mr. Fuller graduated from UW-Superior with a B.S. in biology and continued his education at Royal Botanic Garden in Edinburgh, receiving a M.S. in biodiversity and taxonomy of plants. He attended the basic and advanced wetland delineation training in June 2017.

Equipment

In order to conduct the delineation, several pieces of field equipment were used, including:

- Trimble Geo XH Global Positioning System Unit 6000 Series
- Munsell® Soil Color Chart 2010 edition
-20 inch WSA soil boring tool
- Field identification books:
  - "Wetland Plants and Plant Communities of Minnesota and Wisconsin" 2nd Ed.
  - "Wildflowers of Wisconsin and the Great Lakes Region; A Comprehensive Field Guide" 2nd Ed.
  - "A Great Lakes Wetland Flora" 3rd Ed.

In the office, software programs were used, including:

-GPS Pathfinder Office Software version 4.10
-Microstation V8i 2010 Edition
- Microsoft Office Series 2007

Pre-Delineation Resources

- *United States Agriculture Department- Natural Resource Conservation Service*
  - Web Soil Survey

    Hydric soil map

- *Department of Natural Resources*
  -Surface Water Data Viewer
    WI Wetland Inventory Map

Delineation Methods

Wetlands are delineated by examining an area for the presence of wetland indicators. There are three categories of indicators used to determine if an area is a wetland: vegetation, hydrology, and soils. Samples and observations of these wetland indicators are necessary for proper delineation. First, a site walk of the project area is completed in order to identify areas that may fit the wetland criteria. Second, transects are set up perpendicular to the proposed wetland boundary and data plots are taken. Data plots are usually taken in reference to obvious changes in topography and/or vegetation. At each of the data plots, criteria for hydrophytic vegetation, hydric soils, and hydrology is checked for.

A list of the most prevalent plant species is made and then compared to the *National List of Plant Species that Occur in Wetlands*, published by the U.S. Fish and Wildlife Service, in order to determine the likelihood of that species occurring in a wetland by defining their wetland indicator status.

Soil samples are collected using a soil probe or shovel to collect the first 20 inches of soil. Examination of the sample is then conducted for evidence of saturation, as well as other soil indicators listed in the US Army Corps of Engineers 1987 Wetland Delineation Manual. This manual is used as a reference guide to compare our methods, observations, and data with proper delineation techniques and information.

Field observation of the soils, vegetation, and the general area are used determine the presence of hydrology indicators.

After soil samples, lists of vegetation, and on-site hydrology observations are made and recorded, in conjunction with using reference materials and on site observations, wetland areas are confirmed. After verifying the wetland area, the wetland boundary is delineated between upland and wetland plots.

The resurfacing and intersection realignment will permanently impact nine wetland areas. The area surrounding construction has been delineated and the impacted wetland type and acreage have been determined.

Vegetation:

- It is stated in the US Army Corps of Engineers 1987 Wetland Delineation Manual that “hydrophytic species, due to morphological, physiological, and/or reproductive adaptation(s), have the ability to grow, effectively compete, reproduce, and/or persist in anaerobic soil conditions”. These species are labeled FAC, FACW, and/or OBL. Accordingly, if an area is dominated by ≥50% of these species, it meets the wetland vegetation requirement.
- Through species identification, the impacted wetlands were all determined to have hydrophytic dominance in proportions ≥50%. Dominant species include Slender

willow *(Salix petiolaris)*, Red-osier dogwood *(Cornus alba)*, Lake sedge *(Carex lacustris)*, Quaking aspen *(Populus tremuloides)*, Speckled alder *(Alnus incana)*, Woodland horsetail *(Equisetum sylvaticum)*, and Barren strawberry *(Waldsteinia fragarioides)*, Meadow sweet *(Spirea alba)*, Reed canary grass *(Phalaris arundinacea)*, Canada Bluejoint *(Calamagrostis canadensis)*, Hummock sedge *(Carex stricta)*, Tamarack *(Larix laricina)*, Red maple *(Acer rubrum)*, Winterberry *(Ilex verticillata)*, Bunchberry *(Cornus canadensis)*, and Low-bush blueberry *(Vaccinium angustifolium).* The hydrophytic vegetation present at these plots is similar to common species found among Wet Meadow (M), Shrub Scrub (SS), and Riparian Forest (RPF) wetland environments. The species found in these plots are listed in the vegetation section of the Routine Wetland Delineation Forms located in Appendix B.

Hydrology:

- Paragraph 55 of the US Army Corps of Engineers 1987 Wetland Delineation Manual states, "an area has wetland hydrology if it is inundated or saturated to the surface continuously for at least 5% of the growing season in most years (50% probability of recurrence)." The growing season for this definition is determined based on the number of frost-free days for a certain area.
- Hydrology of the impacted wetland areas was determined using several indicators. Primary indicators of observed were Surface water (A1), High water table (A2), and Saturation (A3). Secondary indicators observed were Moss trim line (B16), Geomorphic position (D2), Microtopographic relief (D4), and FAC-neutral test (D5).

Soils:

- According to the U.S.D.A Natural Resources Conservation Service (NRCS) a hydric soil is, "A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part."
- The Soil Survey and the Hydric Soils List for Sawyer County were obtained from the United States Department of Agriculture (USDA). The soil type listed for the areas impacted by this project is muck and sandy soils. This soil is listed on the USDA Hydric Soils List as soils that are very poorly drained to moderately well drained.

1. Wetlands 1,2,5-9

Seelyeville and Markey soils: Soils are listed on the NRCS Web Soil Survey as having a very poorly drained drainage class, with frequent ponding. Depth to water table is about 0 inches.
Map unit symbol: 407A
Wetland type: Wet Meadow (M), Shrub Scrub (SS), Riparian Forest (RPF)

2. Wetland 3 & 4

Lenroot loamy sand: Soils are listed on the NRCS Web Soil Survey as having a moderately well drained drainage class, with no frequency to ponding or flooding. Depth to the water table is about 24 inches.
Map unit symbol: 711A
Wetland type: Wet Meadow (M) & Riparian Forest (RPF)

- Soil samples were taken at all data plots to 20 inches or to an unavoidable resistance. Hydric soil indicators present throughout this project were Sandy mucky mineral (S1), Redox dark surface (F6), Coast prairie redox (A16) Dark surface (S7) were the hydric soil indicators present. Full soil profiles are included in the Routine Wetland Delineation Forms in Appendix B.

Delineation

Nine different wetlands have been determined to be within the limits of the project. The delineation of the wetlands included the establishment of six upland monitoring sites as well as nine wetland sites. All sites will be affected by the proposed project. Below is the summary for the wetlands that will be impacted.

- Wetland 1- Wet Meadow (M) (Monitoring Forms 1-2)
  - Monitoring form 1 (Wetland 1): This wetland lies on the east side of USH 63 and north of Airport rd. and is associated with a Wet Meadow (M) wetland type. Dominant hydrophytic species in this area was Slender willow *(Salix petiolaris)*, Red-osier dogwood *(Cornus alba)*, and Lake sedge *(Carex lacustris)*; non-dominant species include Quaking aspen *(Populus tremuloides)*, Meadow sweet *(Spirea alba)*, Blue-flagged iris *(Iris versicolor)*, and Bristly-dew berry *(Rubus hispidus)*. At this site, sandy soil was found. The soils were completely saturated and the hydric soil indicators found were Sandy mucky mineral (S1), Redox dark surface (F6), and Coast prairie redox (A16). 1 ¾ inches of surface water was found at this site.
  - Monitoring form 2 (Upland 1): The upland portion of this site was dominated by Poverty oats grass *(Danthonia spicata)* and red fescue *(Festuca rubra)*. Soils were not obtained due to refusal at the surface.
- Wetland 2- Shrub Scrub (SS) (Monitoring Forms 3-4)
  - Monitoring form 3 (Wetland 2): This wetland lies on the east side of USH 63 and north of Airport rd. and is associated with a Shrub Scrub (SS) wetland type. Dominant hydrophytic species in this area were Slender willow *(Salix petiolaris)* and Lake sedge *(Carex lacustris)*; non-dominant species include Speckled alder *(Alnus incana)* and Hummock sedge *(Carex stricta)*. At this site, sandy soil was found. The soils were completely saturated and the hydric soil indicator found was Sandy mucky mineral (S1). Ten inches of surface water was found at this site.
  - Monitoring form 4 (Upland 2): The upland portion of this site was dominated by Quaking aspen *(Populus tremuloides)*, Paper birch *(Betula papyrifera)*, Bracken fern *(Pteridium aquilinum)*, and Bristly dewberry *(Rubus hispidus)*. Soils were not obtained due to refusal at the surface.
- Wetland 3- Riparian Forest (RPF) (Monitoring Forms 5-6)

- Monitoring form 5 (Wetland 3): This wetland lies on the north and south sides of Airport rd. and is associated with a Riparian Forest (RPF) wetland type. Dominant hydrophytic species in this area were Quaking aspen *(Populus tremuloides)*, Speckled alder *(Alnus incana)*, Woodland horsetail *(Equisetum sylvaticum)*, and Barren strawberry *(Waldsteinia fragarioides)*; non-dominant species include Red maple *(Acer rubrum)*, Boxelder *(Acer negundo)*, Meadow sweet *(Spirea alba)*, Beaked hazel *(Corylus cornuta)*, Canada Bluejoint *(Calamagrostis canadensis)*, Quill sedge *(Carex tenera)*, Velvet-leaf blueberry *(Vaccinium myrtilloides)*, Bristly-dew berry *(Rubus hispidus)*, Common sow thistle *(Sonchus oleraceus)*, and Early-meadow rue *(Thalictrum dioicum)*. At this site, sandy soil was found. The soils were saturated at a depth of 2 ½ inches. No hydric soil indicator was found here.
- Monitoring form 6 (Upland 3): The upland portion of this site was dominated by Kentucky bluegrass *(Poa pratensis)* and Sheep sorrel *(Rumex acetosella)*. Soils were not obtained due to refusal at the surface.

- Wetland 4- Wet Meadow (M) (Monitoring Forms 7-8)
  - Monitoring form 7 (Wetland 4): This wetland lies on the south side of Airport rd. and is associated with a Wet Meadow (M) wetland type. Dominant hydrophytic species in this area were Meadow sweet *(Spirea alba)*, Speckled alder *(Alnus incana)*, and Reed canary grass *(Phalaris arundinacea)*; non-dominant species include Sensitive fern *(Onoclea sensibilis)*, Raspberry *(Rubus idaeus)*, Lake sedge *(Carex lacustris)*, and Canada Bluejoint *(Calamagrostis canadensis)*. At this site, sandy soil was found. The soils were saturated at a depth of 5 inches and the hydric soil indicator found was Sandy mucky mineral (S1).
  - Monitoring form 8 (Upland 4): The upland portion of this site was dominated by Red maple *(Acer rubrum)*, Jack pine *(Pinus banksiana)*, Quaking aspen *(Populus tremuloides)*, Bush honeysuckle *(Diervilla lonicera)*, Kentucky bluegrass *(Poa pratensis)*, and Bracken fern *(Pteridium aquilinum)*. Soils were not obtained due to refusal at the surface
- Wetland 5- Wet Meadow (M) (Monitoring Forms 9-10)
  - Monitoring form 9 (Wetland 5): This wetland lies on the south side of Airport rd. and is associated with a Wet Meadow (M) wetland type. Dominant hydrophytic species in this area was Reed canary grass *(Phalaris arundinacea)*, Lake sedge *(Carex lacustris)*, and Canada Bluejoint *(Calamagrostis canadensis)*; there were no non-dominant species at this site. At this site, sandy soil was found. The soils were completely saturated and the hydric soil indicator found was Sandy mucky mineral (S1).
  - Monitoring form 10 (Upland 5): The upland portion of this site was dominated by Kentucky bluegrass *(Poa pratensis)*. Soils were not obtained due to refusal at the surface
- Wetland 6- Wet Meadow (M) (Monitoring Forms 11-12)
  - Monitoring form 11 (Wetland 6): This wetland lies on the north side of USH 63 and on the north side of Hospital rd. and is associated with a Wet Meadow (M) wetland type. Dominant hydrophytic species in this area were Hummock sedge *(Carex stricta)* and Lake sedge *(Carex lacustris)*; non-dominant species include Canada goldenrod *(Solidago canadensis)*. At this site, sandy soil was found. The

soils were completely saturated and the hydric soil indicator found was Dark surface (S7).

- Monitoring form 12 (Upland 6): The upland portion of this site was dominated by Kentucky bluegrass *(Poa pratensis)* and Smooth brome *(Bromus inermis)*. Soils were not obtained due to refusal at the surface

- Wetland 7- Shrub Scrub (SS) (Monitoring Forms 13-14)
  - Monitoring form 13 (Wetland 7): This wetland lies on the north side of USH 63 and on the north side of Hospital rd. and is associated with a shrub scrub (SS) wetland type. Dominant hydrophytic species in this area were Slender willow *(Salix petiolaris)*, Lake sedge *(Carex lacustris)*, and Hummock sedge *(Carex stricta)*; non-dominant species include Meadowsweet *(Spirea alba)*, Slender willow *(Salix petiolaris)*, Field horsetail *(Equisetum arvense)*, and Flat-leaf bladderwort *(Utricularia intermedia)*. No soil was obtained due to 16" of surface water.
  - Monitoring form 14 (Upland 7): The upland portion of this site was dominated by Kentucky bluegrass *(Poa pratensis)*. Soils were not obtained due to refusal at the surface.
- Wetland 8- Wet Meadow (M) (Monitoring Form 15)
  - Monitoring form 15 (Wetland 8): This wetland lies on the north side of USH 63 and on the south side of Hospital rd. and is associated with a Wet Meadow (M) wetland type. Dominant hydrophytic species in this area were Hummock sedge *(Carex stricta)*; non-dominant species include Lake sedge *(Carex lacustris)*, Canada thistle *(Cirsium arvense)*, Purple-stemmed aster *(Symphyotrichum puniceum)*. At this site, clay soil was found. The soils were saturated at a depth of 11 inches and the hydric soil indicator found was Redox dark surface (F6). No surface water was found at this site.
- Wetland 9- Riparian Forest (RPF) (Monitoring Form 16)
  - Monitoring form 16 (Wetland 9): This wetland lies on the south side of Hospital rd. and is associated with a Riparian Forest (RPF) wetland type. Dominant hydrophytic species in this area were Tamarack *(Larix laricina)*, Red maple *(Acer rubrum)*, Winterberry *(Ilex verticillata)*, Bunchberry *(Cornus canadensis)*, and Low-bush blueberry *(Vaccinium angustifolium)*; non-dominant species include Quaking aspen *(Populus tremuloides)*, Paper birch *(Betula papyrifera)*, Beaked hazel *(Corylus cornuta)*, Speckled alder *(Alnus incana)*, Cinnamon fern *(Osmundastrum cinnamomeum)*, Canada Bluejoint *(Calamagrostis canadensis)*, Stalked-grained sedge *(Carex stipata)*, Quill sedge *(Carex tenera)*, Canada mayflower *(Maianthemum canadense)*, and Red maple *(Acer rubrum)*. At this site, sandy soils were found. The soils were completely saturate. No hydric soil was found.

Wetland Impacts

The cumulative **permanent** wetland impacts for the USH 63 project in Sawyer County are 0.750 acres. The impacted acreage consists of:

- 0.120 acres of Shrub Scrub (SS) from the resurfacing and realignment on USH 63.
- 0.490 acres of Riparian Forest (RPF) from the resurfacing and realignment on USH 63.

- 0.140 acres of Wet Meadow (M) from the resurfacing and realignment on USH 63.

The permanent losses will be mitigated according to and at a ratio consistent with the Wisconsin DOT Wetland Mitigation Banking Technical Guideline (2002 revision). Delineation monitoring forms demonstrating wetland criteria in each sampling area can be found in Appendix B of this report. Photos of the delineated areas for these projects are located in Appendix C (Photos 1-16).

Wetland Mitigation

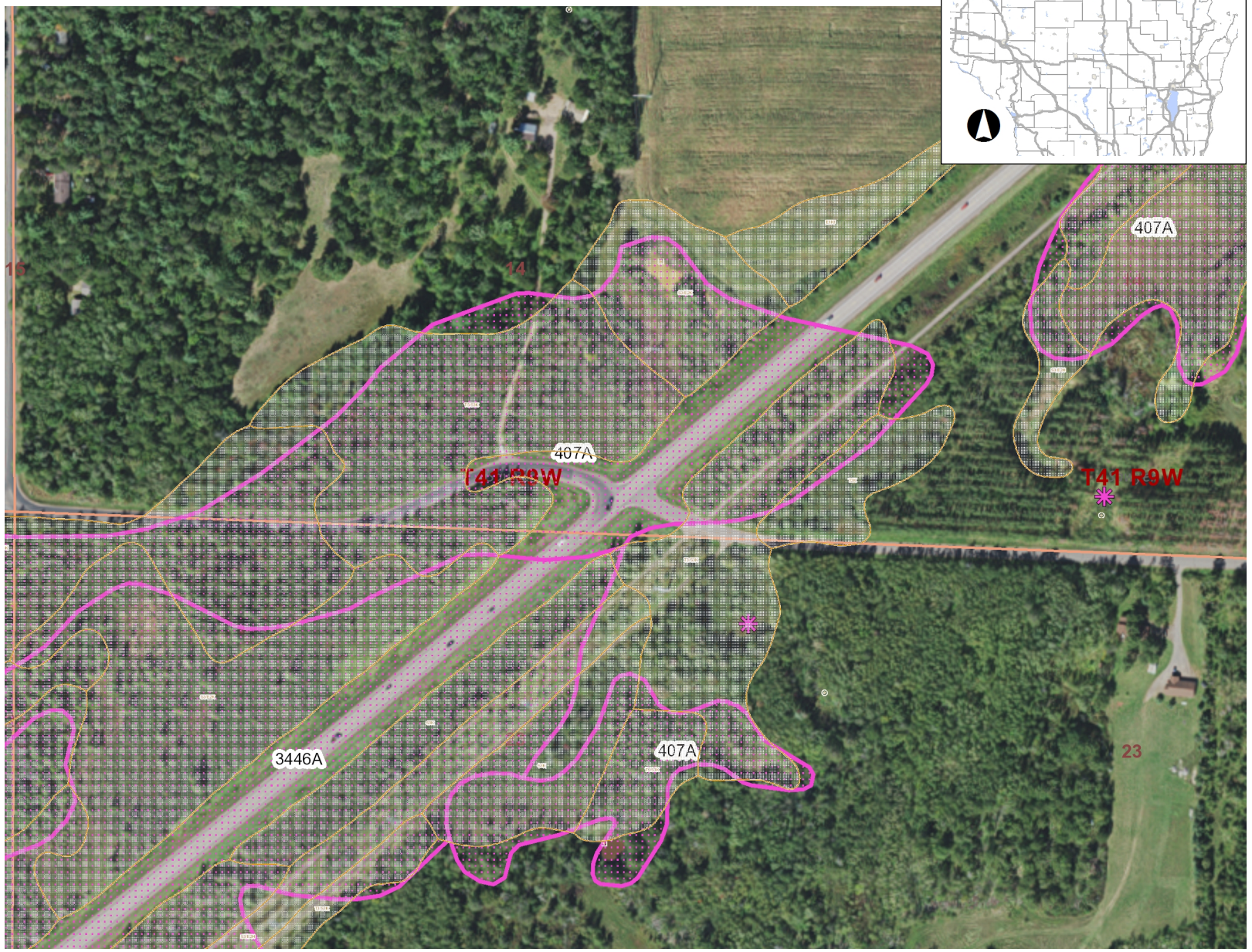
According to the NRCS, "mitigation is compensation through wetland restoration, enhancement, or creation for functions and values that are lost on a converted wetland". The total permanent wetland impact for the USH 63 project located in Sawyer County is 0.750 acres. The permanent losses will be mitigated by debiting them to the WisDOT Eitenmiller Wetland Mitigation Bank Site in Rusk County at a ratio consistent with the Wisconsin DOT Wetland Mitigation Banking Technical Guideline (2002 revision). The 0.120 acres of Shrub Scrub (SS) wetland will be mitigated at a 1:1.2 compensation ratio to Shallow Marsh (SM) totaling 0.145 acres; the 0.490 acres of Riparian Forest (RPF) wetland will be mitigated at a 1:1.5 compensation ratio to Shallow Marsh (SM) totaling 0.745 acres; the 0.140 acres of Wet Meadow (M) wetland will be mitigated at a 1:1 compensation ratio to Wet Meadow (M) totaling 0.140 acres. A Wetland Impact Tracking Form (WITF) is included at the end of Appendix A, summarizing the wetland losses and mitigation plans.

Appendix A

Tables and Figures

Project Location Map

1560-02-01



Legend

- Wetland Class Points
  - Dammed pond
  - Excavated pond
  - Filled excavated pond
  - Filled/drained wetland
  - Wetland too small to delineate
- Filled Points
- Wetland Class Areas
  - Wetland
  - Upland
- Filled Areas
- NRCS Wetspots
- Wetland Indicators
- Township
- Section
- County Boundary
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water

Notes

North of Hospital rd. - T41N R9W S14
South of Hospital rd. - T41N R9W S 23

0.1 0 0.06 0.1 Miles

NAD_1983_HARN_Wisconsin_TM

1: 3,960

Soil Map—Sawyer County, Wisconsin
(1560-02-01)

Map Scale: 1:3,970 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sawyer County, Wisconsin
Survey Area Data: Version 14, Sep 27, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 9, 2011—Oct 2, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Sawyer County, Wisconsin (WI113)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
383B	Mahtomedi loamy sand, 0 to 6 percent slopes	7.3	11.6%
383C	Mahtomedi loamy sand, 6 to 12 percent slopes	1.0	1.6%
407A	Seelyeville and Markey soils, 0 to 1 percent slopes	20.0	31.9%
771A	Lenroot loamy sand, 0 to 3 percent slopes	24.6	39.3%
3446A	Newson muck, 0 to 2 percent slopes	9.8	15.6%
Totals for Area of Interest		**62.7**	**100.0%**

1560-02-01

USH 63
Hayward - Drummond
STH 27 to Larson Road
Sawyer County

Legend

- Plots
- Wetland Boundary

Wetland 6 - Wet Meadow
Wetland 1 - Wet Meadow
Up Plot 1
Wet Plot 1
Wetland 7 - Shrub Scrub
Wet Plot 7
Wet Plot 6
Up Plot 6
Wetland 9 - RPF
Hwy 63
Wetland 2 - Shrub Scrub
Wetland 2 - Shrub Scrub
Wet Plot 2
Wetland 3 - RPF
Wet Plot 3
Wetland 8 - Wet Meadow
Wet Plot 9
Wet Plot 8
Up Plot 8
Wetland 5 - Wet Meadow
Up Plot 5
Wet Plot 5
Up Plot 2
Up Plot 3
Wetland 9 - RPF
W Hospital Rd
Wetland 4 - Wet Meadow
Up Plot 4
Wet Plot 4
Wetland 3 - RPF

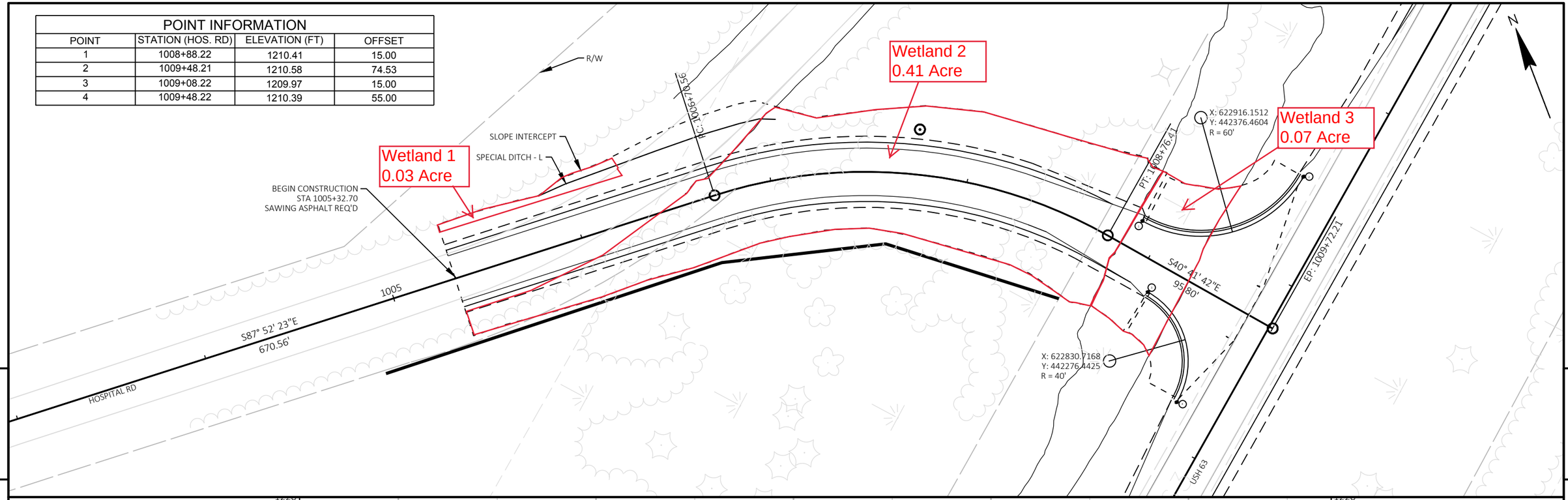
Google earth
© 2017 Google

N

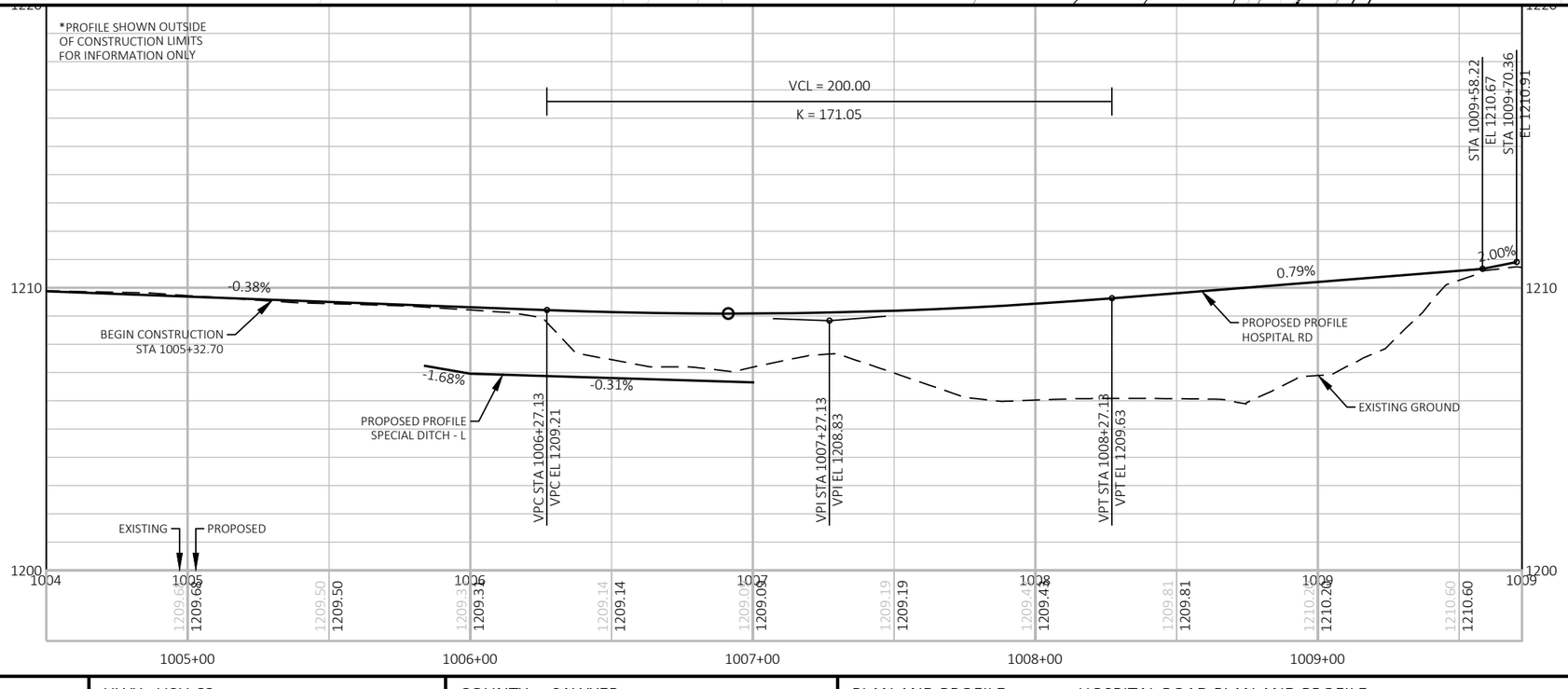
200 ft

Wetland Impact Map

POINT INFORMATION			
POINT	STATION (HOS. RD)	ELEVATION (FT)	OFFSET
1	1008+88.22	1210.41	15.00
2	1009+48.21	1210.58	74.53
3	1009+08.22	1209.97	15.00
4	1009+48.22	1210.39	55.00



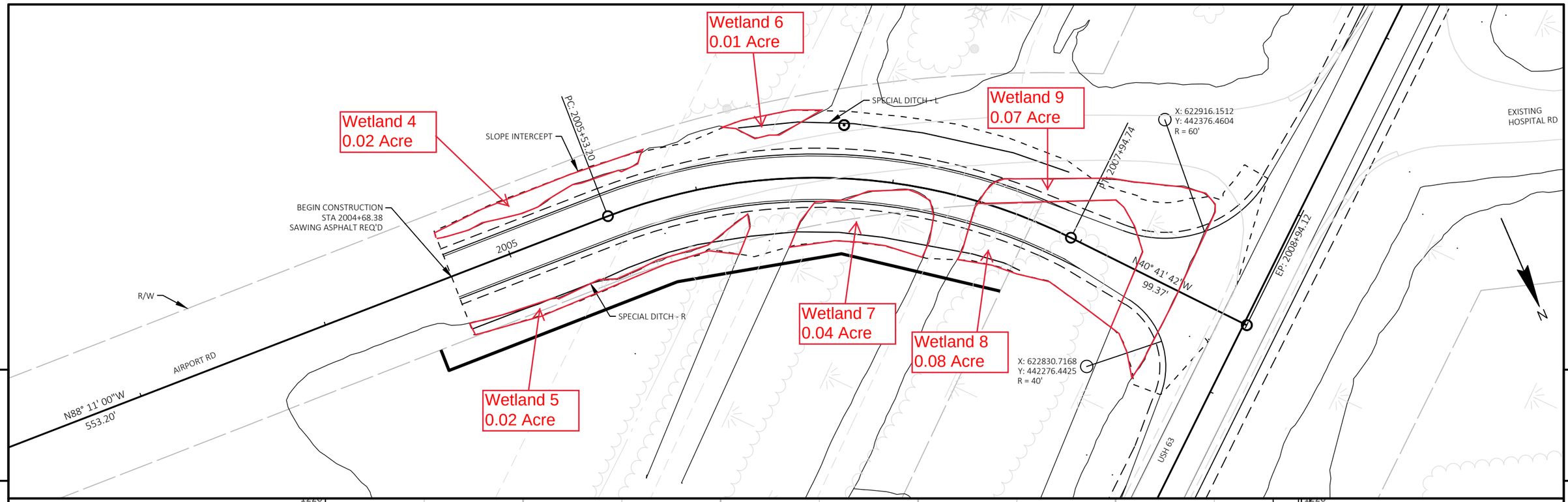
SPECIAL DITCH - L	
STATION	ELEVATION (FT)
1005+83.64	1207.24
1006+00.06	1206.96
1007+00.50	1206.65

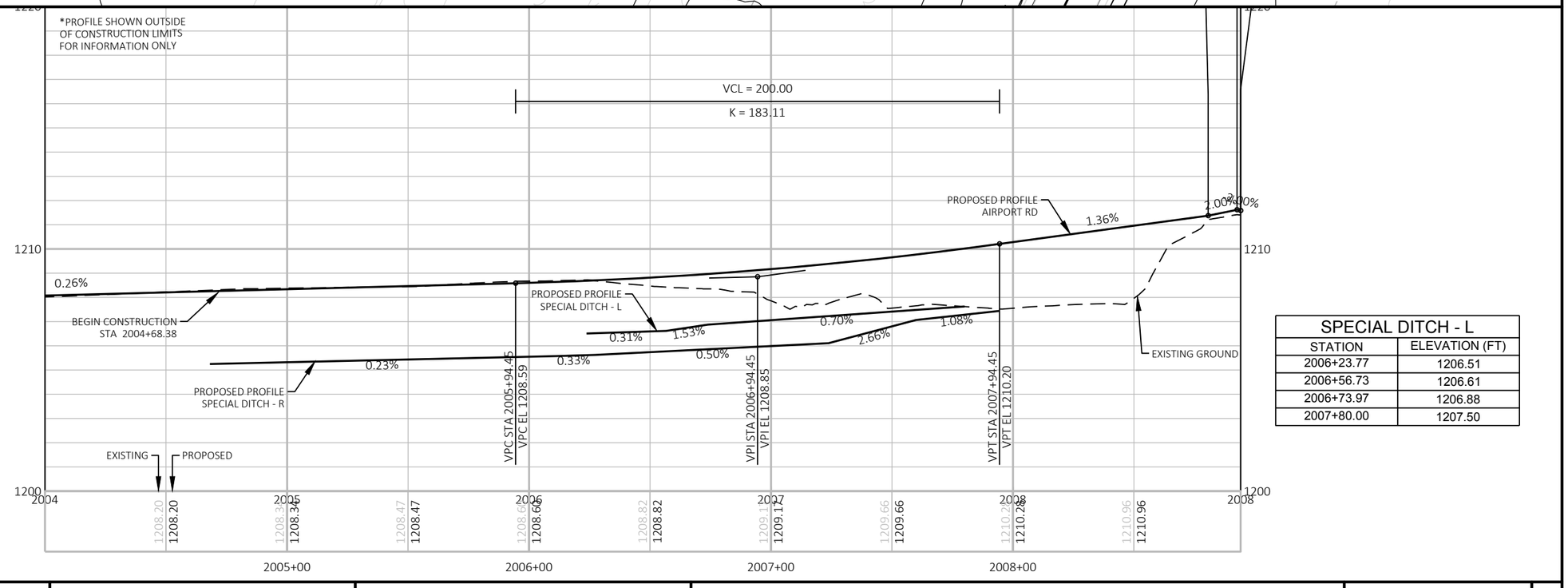


PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: HOSPITAL ROAD PLAN AND PROFILE	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP-HOSPITAL RD.DWG
LAYOUT NAME - HOSPITAL RD

PLOT DATE : 9/21/2017 11:25 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:50 FT





SPECIAL DITCH - R	
STATION	ELEVATION (FT)
2004+68.38	1205.25
2006+11.04	1205.57
2006+27.34	1205.63
2007+23.77	1206.11
2007+59.91	1207.07
2007+94.45	1207.44

SPECIAL DITCH - L	
STATION	ELEVATION (FT)
2006+23.77	1206.51
2006+56.73	1206.61
2006+73.97	1206.88
2007+80.00	1207.50

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: AIRPORT ROAD PLAN AND PROFILE	SHEET	E

Wisconsin Department of Transportation
Division of Transportation System Development
Northwest Region

WETLAND IMPACT TRACKING FORM

This form must be filled out for all projects.

Return This Completed Form to:

Amy Adrihan
Environmental Coordinator
WisDOT - NW Region
1701 N. 4th St
Superior, WI 54880
Phone: (715)-392-7972
amy.adrihan@dot.wi.gov

Please Complete All Information Highlighted In Yellow

WisDOT Regional Environmental Coordinator (REC) Will Complete Sections Highlighted In Green

Project Design I.D. #:	1560-02-01
Project Construction I.D. #:	1560-02-70
Hwy/ Project Title :	Hayward - Drummond
	STH 27 - Larsen Rd
County :	Sawyer
Construction Year :	2019
Date this form is completed:	09/21/2017
Date this form is approved:	10/3/2017

	NAME	PHONE	EMAIL
This Form Prepared by:	Travis Jensen	715-395-3025	travis.jensen@dot.wi.gov
This Form Approved by:	Amy Adrihan	715-392-7972	amy.adrihan@dot.wi.gov

Is a discharge of dredged or fill material into wetlands anticipated?

NO ☐ ➡ **Form complete; no further information is required (RETURN FORM TO REC).**

YES ☐ ➡ **1. Complete remainder of form:**

- After final wetland impacts are determined, complete yellow portions on both pages of this form and submit to REC for finalization and approval.

2. Include this final APPROVED form with DNR 401 and USACE 404 permit applications.

3. After receiving USACE 404 permit and DNR 401 final concurrence, return this final APPROVED form to REC along with copy of USACE 404 permit, DNR 401 final concurrence letter, and D size plan sheet showing wetland impact areas.

Wetland Delineation/ Determination completed by:

David Runquist
NAME

Basic and Advanced Wetland Delineation Course, UW-La Crosse
QUALIFICATIONS

Describe methods used to avoid and minimize impacts to wetlands:

Wetland impacts were discussed and considered during alternatives analysis. Wetlands will be protected by silt fence to prevent disturbance beyond what is required.

Was professional discretion used to determine debit ratio?

No ☐
Yes ☐ ➡ Describe discretionary rationale below:

WETLAND IMPACT / REPLACEMENT SUMMARY

Type Impacted	Area Impacted	Type Mitigated	Area Mitigated
AB	-	AB	-
BOG	-	BOG	-
DM	-	DM	-
M	0.14	M	0.14
RPE	-	RPE	-
RPF	0.49	RPF	-
SM	-	SM	0.88
SS	0.12	SS	-
WS	-	WS	-
AB(D)	-	**TOTAL**	**1.02**
DM(D)	-		
M(D)	-		
RPE(D)	-		
RPF(D)	-		
SM(D)	-		
SS(D)	-		
WS(D)	-		
TOTAL	**0.75**		

Wisconsin Department of Transportation Project Design ID #: 1560-02-01

Division of Transportation System Development
Northwest Region

WETLAND IMPACT TRACKING FORM - PAGE 2
DETAILED TABLE OF WETLAND IMPACTS

Directions to complete Page 2:

1. One location may be made up of several different wetland types. List each type of wetland impacted from each location on the project corridor separately in the table below.
2. The Environmental Coordinator will enter the appropriate ratio and bank information.
3. Use Department of Transportation Wetland Classification System:
   http://roadwaystandards.dot.wi.gov/standards/fdm/24-05-010att.pdf#fd24-5a10.2
4. **Total areas should be reported to the nearest 0.01 acre. Any impacts less than 0.01 acre should be rounded up to 0.01 acre.**

						DOT REC will provide this information.		
Point #	Wetland ID	Impact Location (project station)	Lat/Long	Type Impacted	Area Impacted	Debit Ratio	Type Mitigated	Area Mitigated
1	Wetland 1	HOSPITAL RD 1005+33 - 1006+25	Lat: 46.026685 Long: -94.464713	RPF	0.030	1.500	SM	0.045
2	Wetland 2	HOSPITAL RD 1005+33 - 1008+84	Lat: 46.026491 Long: -91.463964	RPF	0.410	1.500	SM	0.615
3	Wetland 3	HOSPITAL RD 1008+84 - 1009+24	Lat: 46.026285 Long: -91.463672	M	0.070	1.000	M	0.070
4	Wetland 4	AIRPORT RD 2004+68 - 2006+25	Lat: 46.026604 Long: -91.460788	RPF	0.020	1.500	SM	0.030
5	Wetland 5	AIRPORT RD 2004+68 - 2005+80	Lat: 46.026631 Long: -91.460980	RPF	0.020	1.500	SM	0.030
6	Wetland 6	AIRPORT RD 2006+19 - 2006+64	Lat: 46.026489 Long: -91.460902	RPF	0.010	1.500	SM	0.015
7	Wetland 7	AIRPORT RD 2006+46 - 2007+24	Lat: 46.026509 Long: -91.461290	SS	0.040	1.200	SM	0.048
8	Wetland 8	AIRPORT RD 2007+42 - 2008+33	Lat: 46.026846 Long: -91.461732	SS	0.080	1.200	SM	0.096
9	Wetland 9	AIRPORT RD 2007+43 - 2008+55	Lat: 46.026892 Long: -91.461846	M	0.070	1.000	M	0.070
			Lat: Long:					0.000
			Lat: Long:					0.000
			Lat: Long:					0.000
			Lat: Long:					0.000
			Lat: Long:					0.000
			Lat: Long:					0.000
			Lat: Long:					0.000

Is there potential for onsite mitigation? If unknown, check with the REC.

YES ☐ Where is it located? (T/R, station, map)

NO ☐ List bank site to be used. **(Determined by REC)** Eitenmiller Wetland Mitigation Bank Site

Please attach another sheet if the space provided is not adequate for all impacts or to add any additional comments.

Appendix B

Monitoring Forms

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/15/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Wet 1

Investigator(s): Dave Runquist Section, Township, Range: T14N R9W S14

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope %: 0-1

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'37.68"N Long: 91°27'41.81"W Datum: WCCS-Sawyer

Soil Map Unit Name: 407A Seelyeville and Markey soils NWI classification: T3/S3K

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 1.75
Water Table Present?	Yes X	No ____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: Wet 1

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. *Salix petiolaris*	25	Yes	FACW
2. *Populus tremuloides*	10	No	FAC
3. *Cornus alba*	50	Yes	FACW
4. *Spiraea alba*	10	No	FACW
5.			
6.			
7.			
	95 =Total Cover		
Herb Stratum (Plot size: 5')			
1. *Carex lacustris*	95	Yes	OBL
2. *Iris versicolor*	5	No	OBL
3. *Rubus hispidus*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	100	x 1 =	100
FACW species	90	x 2 =	180
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	200 (A)		310 (B)

Prevalence Index = B/A = 1.55

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Wet 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10yr 2/2	100					Mucky Sand	
5-13	10yr 2/1	88	7.5yr 4/6	2	C	M	Loamy/Clayey	Prominent redox concentrations
			10yr 5/6	3	C	M		Prominent redox concentrations
			10yr 4/6	3	C	PL		Prominent redox concentrations
			10yr 6/8	2	C	M		Prominent redox concentrations
			10yr 3/2	2	D	M		
13-19	10yr 2/2	100					Mucky Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- X Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- X Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/15/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Up 1

Investigator(s): Dave Runquist Section, Township, Range: T14N R9W S14

Landform (hillside, terrace, etc.): Shoulder Local relief (concave, convex, none): Convex Slope %: 0-1

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'37.70"N Long: 91°21'41.76"W Datum: WCCS-Sawyer

Soil Map Unit Name: 407A Seelyville & Markey Soils NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: Up 1

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5')			
1. *Danthonia spicata*	80	Yes	UPL
2. *Bromus inermis*	20	No	UPL
3. *Festuca rubra*	40	Yes	FACU
4. *Elymus repens*	10	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	150 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	50	x 4 =	200
UPL species	100	x 5 =	500
Column Totals:	150 (A)		700 (B)

Prevalence Index = B/A = 4.67

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

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Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Up 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

Unable to dig due to refusal at surface

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/15/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Wet

Investigator(s): Dave Runquist Section, Township, Range: T41N R9W S14

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope %: 0-1

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'36.42"N Long: 91°27'41.85"W Datum: WCCS-Sawyer

Soil Map Unit Name: 407A Seelyeville and Markey Soils NWI classification: T3/S3K

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 10
Water Table Present?	Yes X	No ____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Wet

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. *Salix petiolaris*	90	Yes	FACW
2. *Alnus incana*	10	No	FACW
3.			
4.			
5.			
6.			
7.			
	100 =Total Cover		
Herb Stratum (Plot size: 5')			
1. *Carex lacustris*	75	Yes	OBL
2. *Carex stricta*	15	No	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	90	x 1 =	90
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	190 (A)		290 (B)

Prevalence Index = B/A = 1.53

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10yr 2/2	100					Mucky Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- X Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

>5" too wet

Soil sample obtained from soil probe. Unable to get full soil profile with a soil pit.

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/15/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Up 2

Investigator(s): Dave Runquist Section, Township, Range: T41N R9W S14

Landform (hillside, terrace, etc.): Shoulder Local relief (concave, convex, none): Convex Slope %: 0-3

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'35.95"N Long: 91°27'40.18"W Datum: WCCS-Sawyer

Soil Map Unit Name: 771A Lenroot Loamy Sand NWI classification: T3S3k

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: Up 2

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus tremuloides*	25	Yes	FAC
2. *Betula papyrifera*	60	Yes	FACU
3. *Pinus banksiana*	10	No	FACU
4. *Picea glauca*	5	No	FACU
5. *Prunus virginiana*	5	No	FACU
6. *Acer rubrum*	10	No	FAC
7.			
	115	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Betula papyrifera*	20	Yes	FACU
2. *Populus tremuloides*	20	Yes	FAC
3. *Prunus virginiana*	5	No	FACU
4. *Alnus incana*	5	No	FACW
5. *Acer rubrum*	5	No	FAC
6. *Pinus strobus*	2	No	FACU
7.			
	57	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Pteridium aquilinum*	75	Yes	FACU
2. *Rubus hispidus*	20	Yes	FACW
3. *Hieracium spp.*	15	No	UPL
4. *Diervilla lonicera*	15	No	UPL
5. *Vaccinium myrtilloides*	10	No	FACW
6. *Fragaria virginiana*	10	No	FACU
7. *Equisetum sylvaticum*	10	No	FACW
8. *Galium triflorum*	5	No	FACU
9. *Maianthemum canadense*	2	No	FACU
10.			
11.			
12.			
	162	=Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	45	x 2 =	90
FAC species	60	x 3 =	180
FACU species	199	x 4 =	796
UPL species	30	x 5 =	150
Column Totals:	334 (A)		1216 (B)

Prevalence Index = B/A = 3.64

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Up 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

Unable to dig due to refusal at surface

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/15/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Wet 3

Investigator(s): Dave Runquist Section, Township, Range: T41N R9W S14

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope %: 0-3

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'36.20"N Long: 91°27'38.98"W Datum: WCCS-Sawyer

Soil Map Unit Name: 771A Lenroot Loamy Sand NWI classification: T3K

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 9.5
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 2.5

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: Wet 3

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus tremuloides*	60	Yes	FAC
2. *Acer rubrum*	10	No	FAC
3.			
4.			
5.			
6.			
7.			
	70	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Acer negundo*	5	No	FAC
2. *Populus tremuloides*	50	Yes	FAC
3. *Spiraea alba*	20	No	FACW
4. *Alnus incana*	40	Yes	FACW
5. *Corylus cornuta*	2	No	FACU
6.			
7.			
	117	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Calamagrostis canadensis*	15	No	OBL
2. *Carex tenera*	20	No	FAC
3. *Vaccinium myrtilloides*	10	No	FACW
4. *Rubus hispidus*	15	No	FACW
5. *Equisetum sylvaticum*	30	Yes	FACW
6. *Waldsteinia fragarioides*	80	Yes	UPL
7. *Sonchus oleraceus*	2	No	FACU
8. *Thalictrum dioicum*	20	No	FACU
9.			
10.			
11.			
12.			
	192	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	115	x 2 =	230
FAC species	145	x 3 =	435
FACU species	24	x 4 =	96
UPL species	80	x 5 =	400
Column Totals:	379 (A)		1176 (B)

Prevalence Index = B/A = 3.10

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Wet 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10yr 2/2	100					Sandy	
8-16	10yr 2/2	87	5yr 5/8	7	C	M	Sandy	Prominent redox concentrations
			5yr 3/3	3	C	M		Distinct redox concentrations
			10yr 4/6	3	C	M		Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

>16" too wet

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/15/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Up 3

Investigator(s): Dave Runquist Section, Township, Range: T41N R9W S14

Landform (hillside, terrace, etc.): Shoulder Local relief (concave, convex, none): Convex Slope %: 0-3

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'35.71"N Long: 91°27'39.51"W Datum: WCCS-Sawyer

Soil Map Unit Name: 771A Lenroot Loam Sand NWI classification: T3K

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Up 3

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5')			
1. *Poa pratensis*	80	Yes	FACU
2. *Phalaris arundinacea*	20	No	FACW
3. *Rumex acetosella*	25	Yes	FACU
4. *Lotus corniculatus*	15	No	FACU
5. *Barbarea vulgaris*	10	No	FAC
6. *Leucanthemum vulgare*	5	No	UPL
7. *Plantago major*	5	No	FACU
8. *Matricaria discoidea*	20	No	FACU
9.			
10.			
11.			
12.			
	180 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	10	x 3 =	30
FACU species	145	x 4 =	580
UPL species	5	x 5 =	25
Column Totals:	180 (A)		675 (B)

Prevalence Index = B/A = 3.75

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Up 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

Unable to dig due to refusal at surface

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/15/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Wet 4

Investigator(s): Dave Runquist Section, Township, Range: T41N R9W S23

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Convex Slope %: 0-3

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'35.01"N Long: 91°27'43.40"W Datum: WCCS-Sawyer

Soil Map Unit Name: 771A Lenroot Loamy Sand NWI classification: T3/S3K

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Sparsely Vegetated Concave Surface (B8)
- ____ Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ____ Shallow Aquitard (D3)
- ____ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 2
Water Table Present?	Yes X	No ____	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 5

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: Wet 4

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. *Spiraea alba*	25	Yes	FACW
2. *Alnus incana*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	35 =Total Cover		
Herb Stratum (Plot size: 5')			
1. *Phalaris arundinacea*	90	Yes	FACW
2. *Onoclea sensibilis*	10	No	FACW
3. *Rubus idaeus*	25	No	FAC
4. *Carex lacustris*	25	No	OBL
5. *Calamagrostis canadensis*	15	No	OBL
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	165 =Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	135	x 2 =	270
FAC species	25	x 3 =	75
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	200 (A)		385 (B)

Prevalence Index = B/A = 1.93

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Wet 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10yr 2/2	100					Mucky Sand	
5-9.5	10yr 2/2	100					Sandy	
9.5-19	10yr 4/2	70	7.5yr 5/6	25	C	M	Sandy	Prominent redox concentrations
			10yr 3/6	5	C	M		Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- X Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

>19" too wet

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/15/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Up 4

Investigator(s): Dave Runquist Section, Township, Range: T41N R9W S23

Landform (hillside, terrace, etc.): Summit Local relief (concave, convex, none): None Slope %: 0-3

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'35.03"N Long: 91°27'43.50"W Datum: WCCS-Sawyer

Soil Map Unit Name: 771A Lenroot Loamy Sand NWI classification: T3/S3K

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: Up 4

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	15	Yes	FAC
2. *Pinus banksiana*	10	Yes	FACU
3. *Populus tremuloides*	20	Yes	FAC
4.			
5.			
6.			
7.			
	45	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Alnus incana*	2	No	FACW
2. *Diervilla lonicera*	40	Yes	UPL
3.			
4.			
5.			
6.			
7.			
	42	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Poa pratensis*	80	Yes	FACU
2. *Pteridium aquilinum*	40	Yes	FACU
3. *Rubus hispidus*	25	No	FACW
4. *Lotus corniculatus*	5	No	FACU
5. *Comptonia peregrina*	15	No	UPL
6. *Fragaria virginiana*	2	No	FACU
7. *Equisetum arvense*	10	No	FAC
8. *Onoclea sensibilis*	2	No	FACW
9.			
10.			
11.			
12.			
	179	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	29	x 2 =	58
FAC species	45	x 3 =	135
FACU species	137	x 4 =	548
UPL species	55	x 5 =	275
Column Totals:	266 (A)		1016 (B)

Prevalence Index = B/A = 3.82

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Up 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

Unable to dig due to refusal at surface

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/15/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Wet 5

Investigator(s): Dave Runquist Section, Township, Range: T41N R9W S23

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope %: 0-3

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'35.72" Long: 91°27'44.28" Datum: WCCS-Sawyer

Soil Map Unit Name: 771A Lenroot Loamy Sand NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Wet 5

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5')			
1. *Phalaris arundinacea*	50	Yes	FACW
2. *Carex lacustris*	25	Yes	OBL
3. *Calamagrostis canadensis*	30	Yes	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	55	x 1 =	55
FACW species	50	x 2 =	100
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	105 (A)		155 (B)

Prevalence Index = B/A = 1.48

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Wet 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10yr 2/2	100					Mucky Sand	
2-26	10yr 2/1	95	10yr 5/1	5	D	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- X Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/15/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Up 5

Investigator(s): Dave Runquist Section, Township, Range: T41N R9W S23

Landform (hillside, terrace, etc.): Shoulder Local relief (concave, convex, none): Convex Slope %: 0-1

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'35.83"N Long: 91°27'44.61"W Datum: WCCS-Sawyer

Soil Map Unit Name: 407A Seelyeville and markey soils NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Up 5

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5')			
1. *Poa pratensis*	45	Yes	FACU
2. *Hieracium aurantiacum*	5	No	UPL
3. *Cirsium arvense*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	55 =Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	50	x 4 =	200
UPL species	5	x 5 =	25
Column Totals:	55 (A)		225 (B)

Prevalence Index = B/A = 4.09

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Up 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

Unable to dig due to refusal at surface

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/15/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Wet 6

Investigator(s): Dave Runquist Section, Township, Range: T41N R9W S14

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope %: 0-1

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'37.08"N Long: 90°27'44.58"W Datum: WCCS-Sawyer

Soil Map Unit Name: 407A Seelyeville and Markey soil NWI classification: T5/S3K

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 5
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: Wet 6

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5')			
1. *Carex stricta*	60	Yes	OBL
2. *Carex lacustris*	40	Yes	OBL
3. *Solidago canadensis*	2	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	102 =Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	100	x 1 =	100
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	2	x 4 =	8
UPL species	0	x 5 =	0
Column Totals:	102 (A)		108 (B)

Prevalence Index = B/A = 1.06

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Wet 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10yr 2/1	100					Sandy	
10-14	10yr 4/2	100					Sandy	
14-25	10yr 2/1	87	7.5yr 3/3	3	C	M	Mucky Loam/Clay	Distinct redox concentrations
			10yr 4/2	10	D	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- X Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/19/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Up 6

Investigator(s): Dave Runquist Section, Township, Range: T14N R9W S14

Landform (hillside, terrace, etc.): Shoulder Local relief (concave, convex, none): Convex Slope %: 0-1

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'36.82"N Long: 91°27'46.13"W Datum: WCCS-Sawyer

Soil Map Unit Name: 407A Seelyville & Markey Soil NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: Up 6

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5')			
1. *Poa pratensis*	65	Yes	FACU
2. *Bromus inermis*	25	Yes	UPL
3. *Centaurea stoebe*	10	No	UPL
4. *Phalaris arundinacea*	2	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	102 =Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	2	x 2 =	4
FAC species	0	x 3 =	0
FACU species	65	x 4 =	260
UPL species	35	x 5 =	175
Column Totals:	102 (A)		439 (B)

Prevalence Index = B/A = 4.30

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Up 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

Unable to dig due to refusal at surface

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/15/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Wet 7

Investigator(s): Dave Runquist Section, Township, Range: T41N R9W S14

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope %: 0-1

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'37.30"N Long: 91°27'44.71"W Datum: WCCS-Sawyer

Soil Map Unit Name: 407A Seelyeville and Markey Soils NWI classification: T5/S3K

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Sparsely Vegetated Concave Surface (B8)
- ____ Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ____ Shallow Aquitard (D3)
- ____ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 16
Water Table Present?	Yes X	No ____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: Wet 7

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. *Salix petiolaris*	75	Yes	FACW
2. *Spiraea alba*	5	No	FACW
3.			
4.			
5.			
6.			
7.			
	80 =Total Cover		
Herb Stratum (Plot size: 5')			
1. *Carex lacustris*	40	Yes	OBL
2. *Carex stricta*	30	Yes	OBL
3. *Salix petiolaris*	20	No	FACW
4. *Spiraea alba*	5	No	FACW
5. *Equisetum arvense*	1	No	FAC
6. *Utricularia intermedia*	5	No	OBL
7.			
8.			
9.			
10.			
11.			
12.			
	101 =Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	75	x 1 =	75
FACW species	105	x 2 =	210
FAC species	1	x 3 =	3
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	181 (A)		288 (B)

Prevalence Index = B/A = 1.59

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Wet 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

Unable to dig soil pit due to standing water. Too wet for soil probe sample.

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/19/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Up 7

Investigator(s): Dave Runquist Section, Township, Range: T41N R9W S14

Landform (hillside, terrace, etc.): Shoulder Local relief (concave, convex, none): Convex Slope %: 0-1

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'36.30"N Long: 91°27'45.50"W Datum: WCCS-Sawyer

Soil Map Unit Name: 407A Seelyeville and Markey soils NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Up 7

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5')			
1. *Poa pratensis*	85	Yes	FACU
2. *Carex lacustris*	5	No	OBL
3. *Lotus corniculatus*	5	No	FACU
4. *Phalaris arundinacea*	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	100 (A)		375 (B)

Prevalence Index = B/A = 3.75

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Up 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

Unable to dig due to refusal at surface

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/15/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Wet 8

Investigator(s): Dave Runquist Section, Township, Range: T41N R9W S14

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope %: 0-1

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'36.32"N Long: 91°27'45.68"W Datum: WCCS-Sawyer

Soil Map Unit Name: 407A Seeleyville and Markey soils NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ? Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 13
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 11

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Wet 8

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5')			
1. *Carex stricta*	80	Yes	OBL
2. *Carex lacustris*	20	No	OBL
3. *Cirsium arvense*	10	No	FACU
4. *Symphyotrichum puniceum*	10	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	120 =Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	110	x 1 =	110
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	120 (A)		150 (B)

Prevalence Index = B/A = 1.25

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Wet 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10yr 2/2	100					Loamy/Clayey	
7-13	10yr 2/2	93	7.5yr 4/6	3	C	M	Loamy/Clayey	Prominent redox concentrations
			7.5yr 5/8	2	C	M		Prominent redox concentrations
			5yr 4/6	2	C	M		Prominent redox concentrations
13-23	10yr 2/1	80	7.5yr 5/8	3	C	M	Loamy/Clayey	Prominent redox concentrations
			10yr 5/2	15	D	M		
			7.5yr 5/6	2	C	M		Prominent redox concentrations
23-25	10yr 2/1	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

Project/Site: 1560-02-01 City/County: Sawyer Sampling Date: 06/15/2017

Applicant/Owner: WisDOT State: WI Sampling Point: Wet 9

Investigator(s): Dave Runquist Section, Township, Range: T41N R9W S14

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave Slope %: 0-1

Subregion (LRR or MLRA): LRR K, MLRA 90A Lat: 46°01'36.34"N Long: 91°27'48.40"W Datum: WCCS-Sawyer

Soil Map Unit Name: 407A Seelyeville and Markey soils NWI classification: T5/S3K

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Sparsely Vegetated Concave Surface (B8)
- ____ Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Drainage Patterns (B10)
- X Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ____ Shallow Aquitard (D3)
- X Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 8.5
Water Table Present?	Yes X	No ____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: Wet 9

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Larix laricina*	40	Yes	FACW
2. *Populus tremuloides*	5	No	FAC
3. *Acer rubrum*	15	Yes	FAC
4. *Betula papyrifera*	5	No	FACU
5.			
6.			
7.			
	65	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Ilex verticillata*	80	Yes	FACW
2. *Corylus cornuta*	5	No	FACU
3. *Alnus incana*	5	No	FACW
4.			
5.			
6.			
7.			
	90	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Osmundastrum cinnamomeum*	5	No	FACW
2. *Calamagrostis canadensis*	10	No	OBL
3. *Carex stipata*	5	No	OBL
4. *Cornus canadensis*	40	Yes	FAC
5. *Carex tenera*	5	No	FAC
6. *Maianthemum canadense*	15	No	FACU
7. *Acer rubrum*	5	No	FAC
8. *Vaccinium angustifolium*	20	Yes	FACU
9.			
10.			
11.			
12.			
	105	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	130	x 2 =	260
FAC species	70	x 3 =	210
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals:	260 (A)		665 (B)

Prevalence Index = B/A = 2.56

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Wet 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10yr 5/2	100					Sandy	
3-6	10yr 2/2	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data sheet is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.

>6" too wet. Sample obtained with soil probe. Unable to view soil profile with soil pit.

Appendix C

Photos

Photo 1- Wetland Plot 1

Photo 2 - Upland Plot 1

Photo 3 - Wetland Plot 2

Photo 4 - Upland Plot 2

Photo 5 - Wetland Plot 3

Photo 6 - Upland Plot 3

Photo 7 - Wetland Plot 4

Photo 8 - Upland Plot 4

Photo 9 - Wetland Plot 5

Photo 10 - Upland Plot 5

Photo 11 - Wetland Plot 6

Photo 12 - Upland Plot 6

Photo 13 - Wetland Plot 7

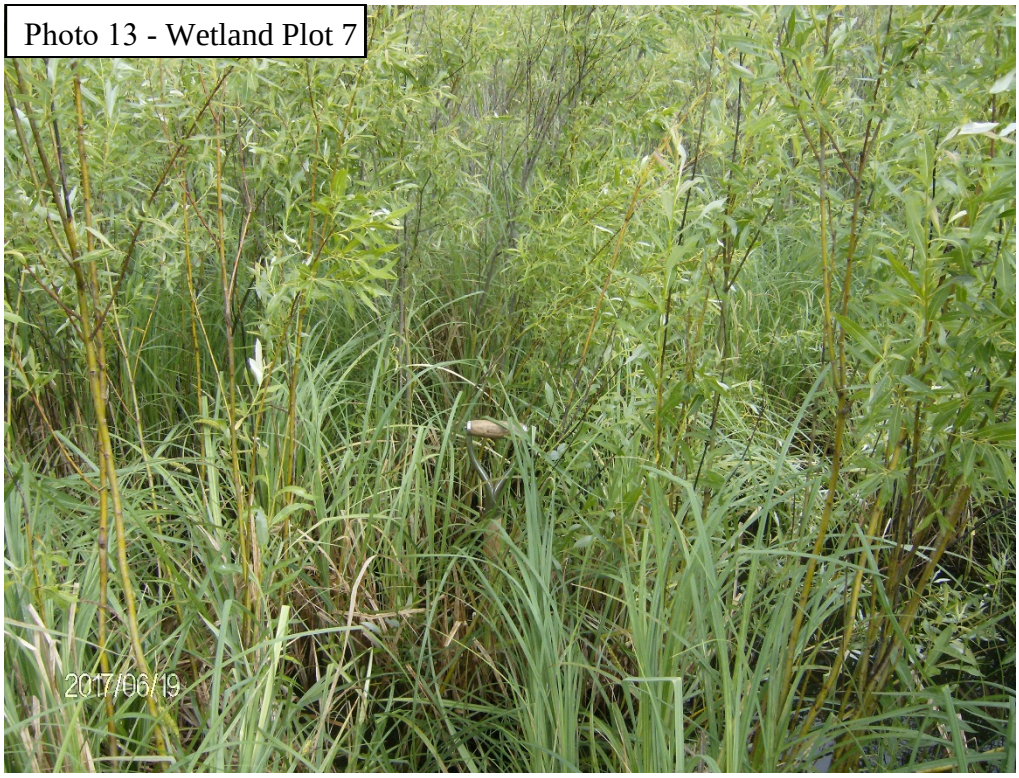


Photo 14 - Upland Plot 7

Photo 15 - Wetland Plot 8

Photo 16 - Wetland Plot 9

Special Provisions

Table of Contents

SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 1560-02-70; Hayward – Drummond; STH 27 – Larsen Road, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2018 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.
100-005 (20170615)

2. Scope of Work.

The work under this contract shall consist of pavement removal, base aggregate dense, HMA pavement, pavement marking, permanent signing, culvert replacement, beam guard replacement, borrow, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.
104-005 (20090901)

3. Prosecution and Progress.

Begin work within ten calendar days after the engineer issues a written notice to do so.

Provide the time frame for construction of the project within the 2018 construction season to the engineer in writing within a month of executing the contract but at least 14 calendar days before the preconstruction meeting. Assure that the construction time frame is consistent with the contract completion time. Upon approval, the engineer will issue the notice to proceed within 10 calendar days from the beginning of the approved time frame.

To revise the start date, submit a written request to the engineer at least two weeks before the intended start date. The engineer will approve or deny that request based on the conditions cited in the request and its effect on the department's scheduled resources.

Construction shall begin on April 1, 2019. The detour shall be put in effect no later than 6:00 AM, Monday April 8, 2019. Removal of concrete pavement, placing base aggregate dense, paving HMA binder layer, and construction of the Hospital Rd / USH 63 intersection shall be completed prior to removal of detour. The Detour shall be discontinued and through traffic restored on the HMA Binder Layer to USH 63 by June 12, 2019. Paving HMA

surface layer under flagging operation shall be completed by June 26, 2019. All project work shall be complete by July 12, 2019.

Contractor shall coordinate work so that the culvert replacement occurring in McDermott Creek (STA: 600+85) shall be completed prior to paving HMA Pavement binder layer on USH 63.

Fish Spawning
There shall be no instream disturbance of McDermott Creek as a result of construction activity under or for this contract, prior to May 15, in order to avoid adverse impacts upon the spawning of trout.

Any change to this limitation will require submitting a written request by the contractor to the engineer, subsequent review and concurrence by the Department of Natural Resources in the request, and final approval by the engineer. The approval will include all conditions to the request as mutually agreed upon by WisDOT and DNR.
Fish (20090901)

Northern Long-eared Bat (*Myotis septentrionalis*)
Northern Long-eared Bats (NLEB) have the potential to inhabit the project limits because they roost in trees. Roosts may not have been observed on this project, but conditions to support the species exist. The species and all active roosts are protected by the Federal Endangered Species Act. If an individual bat or active roost is encountered during construction operations, stop work and notify the engineer and the WisDOT Regional Environmental Coordinator (REC).

In accordance to the final 4(d) rule issued for the NLEB, the department has determined that the proposed activity may affect, but will not result in prohibited take of the NLEB. The activity involves tree removal, but will not occur within 0.25 miles of a known hibernacula, nor will the activity remove a known maternity roost tree or any other tree within 150 feet of a known maternity roost tree.

If additional trees need to be removed, no Clearing shall occur without prior approval from the engineer, following coordination with the WisDOT REC. Additional tree removal beyond the area originally specified will require consultation with the United States Fish and Wildlife Service (USFWS) and may require a bat presence/absence survey. Notify the engineer if additional Clearing cannot be avoided to begin coordination with the WisDOT REC. The WisDOT REC will initiate consultation with the USFWS and determine if a survey is necessary.

Submit a schedule and description of Clearing operations with the ECIP 14 days prior to any Clearing operations. The department will determine, based on schedule and scope of work, what additional erosion control measures shall be implemented prior to the start of Clearing operations, and list those additional measures in the ECIP.

4. Traffic.

USH 63 will be detoured to through traffic during a portion of the project's construction. Access will be maintained for local traffic and emergency vehicles only. The proposed detour route will follow STH 77 easterly for 12 miles and then northerly on CTH OO for 6.6 miles. The proposed truck detour route will follow STH 77 westerly for 3.9 miles, then northerly on STH 27 for 39 miles. Maintain all detour signs.

After the detour is complete and traffic is rerouted to USH 63, traffic shall be controlled utilizing temporary single lane closures controlled through flagging operations.

Notify the following organizations and departments at least 48 hours before the detour on USH 63 takes affect:

- Sawyer County Sheriff's Department
- Wisconsin State Patrol
- Sawyer County Highway Department
- Hayward Post Office

The Sawyer County Sheriff's Department 911 Communications Center dispatches all area police, fire, and ambulance services, and will relay any notification given by the contractor.

Wisconsin Lane Closure System Advance Notification
Provide the following advance notification to the engineer for incorporation into the Wisconsin Lane Closure System (LCS).

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction < 16')	MINIMUM NOTIFICATION
Lane and shoulder closures	7 calendar days
Full roadway closures	7 calendar days
Ramp closures	7 calendar days
Detours	7 calendar days
Closure type without height, weight, or width restrictions (available width, all lanes in one direction ≥16')	MINIMUM NOTIFICATION
Lane and shoulder closures	3 business days
Ramp closures	3 business days
Modifying all closure types	3 business days

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date. The contractor shall notify the engineer 14 calendar days prior to implementing the detour route.
stp-108-057 (20161130)

5. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying USH 63 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, May 24th to 6:00 AM Tuesday, May 28th;
- From noon Wednesday, July 3rd, to 6:00 AM Friday, July 4th;
- From noon Friday, August 30th to 6:00 AM Tuesday, September 3rd.

stp-107-005 (20050502)

6. Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.

The department has obtained a U.S. Army Corps of Engineers Section 404 permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit is available from the regional office by contacting Enter name of contact at Enter phone number.
stp-107-054 (20080901)

7. Environmental Protection, Aquatic Exotic Species Control.

Exotic invasive organisms such as VHS, zebra mussels, purple loosestrife, and Eurasian water milfoil are becoming more prolific in Wisconsin and pose adverse effects to waters of the state. Wisconsin State Statutes 30.07, “Transportation of Aquatic Plants and Animals; Placement of Objects in Navigable Waters”, details the state law that requires the removal of aquatic plants and zebra mussels each time equipment is put into state waters.

At construction sites that involve navigable water or wetlands, use the follow cleaning procedures to minimize the chance of exotic invasive species infestation. Use these procedures for all equipment that comes in contact with waters of the state and/or infested water or potentially infested water in other states.

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels prior to being used in other waters of the state. Before using equipment on this project, thoroughly disinfect all equipment that has come into contact with potentially

infested waters. Use the following inspection and removal procedures (guidelines from the Wisconsin Department of Natural Resources http://dnr.wi.gov/topic/fishing/documents/vhs/disinfection_protocols.pdf for disinfection:

1. Prior to leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species;
2. Drain all water from boats, trailers, bilges, live wells, coolers, bait buckets, engine compartments, and any other area where water may be trapped;
3. Inspect boat hulls, propellers, trailers and other surfaces. Scrape off any attached mussels, remove any aquatic plant materials (fragments, stems, leaves, seeds, or roots), and dispose of removed mussels and plant materials in a garbage can prior to leaving the area or invested waters; and
4. Disinfect your boat, equipment and gear by either:
    a. Washing with ~212º F water (steam clean), or
    b. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or
    c. Disinfecting with either 200 ppm (0.5 oz per gallon or 1 Tablespoon per gallon) Chlorine for 10-minute contact time or 1:100 solution (38 grams per gallon) of Virkon Aquatic for 20- to 30-minute contact time. Note: Virkon is not registered to kill zebra mussel veligers nor invertebrates like spiny water flea. Therefore this disinfect should be used in conjunction with a hot water (>104º F) application.

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.
stp-107-055 (20130615)

8. QMP Base Aggregate.

A Description

A.1 General

(1) This special provision describes contractor quality control (QC) sampling and testing for base aggregates, documenting those test results, and documenting related production and placement process changes. This special provision also describes department quality verification (QV), independent assurance (IA), and dispute resolution.

(2) Conform to standard spec 301, standard spec 305, and standard spec 310 as modified here in this special provision. Apply this special provision to material placed under all of the Base Aggregate Dense and Base Aggregate Open Graded bid items, except do not apply this special provision to material classified as reclaimed asphaltic pavement placed under the Base Aggregate Dense bid items.

(3) Do not apply this special provision to material placed and paid for under the Aggregate Detours, Breaker Run, Select Crushed, Pit Run, Subbase, or Riprap bid items.

(4) Provide and maintain a quality control program, defined as all activities related to and documentation of the following:
1. Production and placement control and inspection.
2. Material sampling and testing.

(5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at: http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/default.aspx

A.2 Small Quantities

(1) The department defines a small quantity, for each individual Base Aggregate bid item, as a contract quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.

(2) The requirements under this special provision apply equally to a small quantity for an individual bid item except as follows:

A.2.1 Quality Control Plan

(1) Submit an abbreviated quality control plan consisting of the following:
1. Organizational chart including names, telephone numbers, current certification(s) with HTCP number(s) and expiration date(s), and roles and responsibilities of all persons involved in the quality control program for material under affected bid items.

A.2.2 Contractor Testing

1.

Contract Quantity	Minimum Required Testing per source
≤ 6000 tons	One stockpile test prior to placement, and two production or one loadout test.[1] [2]
> 6000 tons and ≤ 9000 tons	One stockpile and Three placement tests[3] [4] [5]

[1] Submit production test results to the engineer for review prior to incorporating the material into the work. Production test results are valid for a period of 3 years.

[2] If the actual quantity overruns 6,000 tons, on the next day of placement perform one randomly selected placement test for each 3000 tons, or fraction of 3000 tons, of overrun.

[3] If the actual quantity overruns 9000 tons, on the next day of placement perform one randomly selected placement test for each 3000 tons, or fraction of 3000 tons, of overrun.

[4] For 3-inch material or lift thickness of 3-inch or less, obtain samples at load-out.

[5] Divide the aggregate into uniformly sized sublots for testing

2. Stockpile testing for concrete pavement recycled in place will be sampled on the first day of production.

3. Until a four point running average is established, individual placement tests will be used for acceptance. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.
4. Material represented by a sublot with any property outside the specification limits is nonconforming. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

A.2.3 Department Testing

(1) The department will perform testing as specified in B.8 except as follows:

- Department stockpile verification testing prior to placement is optional for contract quantities of 500 tons or less.

B Materials

B.1 Quality Control Plan

(1) Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not place base before the engineer reviews and comments on the plan. Construct the project as that plan provides.

(2) Do not change the quality control plan without the engineer's review. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in each of the contractor's laboratories as changes are adopted. Ensure that the plan provides the following elements:

1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
3. A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
4. Test results for wear, sodium sulfate soundness, freeze/thaw soundness, and plasticity index of all aggregates requiring QC testing. Obtain this information from the region materials unit or from the engineer.
5. Descriptions of stockpiling and hauling methods.
6. Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.
7. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.

B.2 Personnel

(1) Have personnel certified under the department's highway technician certification program (HTCP) perform sampling, testing, and documentation as follows:

Required Certification Level:	Sampling or Testing Roles:

Transportation Materials Sampling Technician (TMS) Aggregate Technician I (AGGTEC-I) Aggregate Assistant Certified Technician (ACT-AGG)	Aggregate Sampling[1]
Aggregate Technician I (AGGTEC-I) Aggregate Assistant Certified Technician (ACT-AGG)	Aggregate Gradation Testing, Aggregate Fractured Particle Testing, Aggregate Liquid Limit and Plasticity Index Testing

[1] Plant personnel under the direct observation of an aggregate technician certified at level one or higher may operate equipment to obtain samples.

(2) A certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

B.3 Laboratory

(1) Perform QC testing at a department-qualified laboratory. Obtain information on the Wisconsin laboratory qualification program from:

Materials Management Section
3502 Kinsman Blvd.
Madison, WI 53704
Telephone: (608) 246-5388

http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/qual-labs.aspx

B.4 Quality Control Documentation

B.4.1 General

(1) Submit base aggregate placement documentation to the engineer within 10 business days after completing base placement. Ensure that the submittal is complete, neatly organized, and includes applicable project records and control charts.

B.4.2 Records

(1) Document all placement observations, inspection records, and control adjustments daily in a permanent field record. Also include all test results in the project records. Provide test results to the engineer within one business day after obtaining a sample. Post or distribute tabulated results using a method mutually agreeable to the engineer and contractor.

B.4.3 Control Charts

(1) Plot gradation and fracture on the appropriate control chart as soon as test results are available. Format control charts according to CMM 8.30. Include the project number on base placement control charts. Maintain separate control charts for each base aggregate size, source or classification, and type.

(2) Provide control charts to the engineer within one business day after obtaining a sample. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:
   1. Contractor individual QC tests.
   2. Department QV tests.
   3. Department IA tests.
   4. Four-point running average of the QC tests.

(3) Except as specified under B.8.2.1 for nonconforming QV placement tests, include only QC placement tests in the running average. The contractor may plot process control or informational tests on control charts, but do not include these tests, conforming QV tests, or IA tests in the running average.

B.5 Contractor Testing

(1) Test gradation, fracture, liquid limit and plasticity index during placement for each base aggregate size, source or classification, and type.

(2) Perform one stockpile test from each source prior to placement.

(3) Test gradation once per 3000 tons of material placed or fraction thereof. Determine random sample locations and provide those sample locations to the engineer. Obtain samples after the material has been bladed, mixed, and shaped but before compacting; except collect 3-inch samples or lift thickness of 3-inch or less from the stockpile at load-out. Do not sample from material used to maintain local traffic or from areas of temporary base that will not have an overlying pavement. On days when placing only material used to maintain local traffic or only temporary base that will not have an overlying pavement, no placement testing is required.

(4) Split each contractor QC sample and identify it according to CMM 8.30. Retain the split for seven calendar days in a dry, protected location. If requested for department comparison testing, deliver the split to the engineer within one business day.

(5) The engineer may require additional sampling and testing to evaluate suspect material or the technician's sampling and testing procedures.

(6) Test fracture for each gradation test until the fracture running average is above the lower warning limit. Subsequently, the contractor may reduce the frequency to one test per 10 gradation tests if the fracture running average remains above the warning limit.

(7) Test the liquid limit and plasticity index for the first gradation test. Subsequently, test the liquid limit and plasticity index a minimum of once per 10 gradation tests.

B.6 Test Methods

B.6.1 Gradation

(1) Test gradation using a washed analysis conforming to the following as modified in CMM 8.60:

Gradation..... AASHTO T 27
Material finer than the No. 200 sieve..... AASHTO T 11

(2) For 3-inch base, if 3 consecutive running average points for the percent passing the No. 200 sieve are 8.5 percent or less, the contractor may use an unwashed analysis. Wash at least one sample out of 10. If a single running average for the percent passing the No. 200 sieve exceeds 8.5 percent, resume washed analyses until 3 consecutive running average points are again 8.5 percent passing or less.

(3) Maintain a separate control chart for each sieve size specified in standard spec 305 or standard spec 310 for each base aggregate size, source or classification, and type. Set control and warning limits based on the standard specification gradation limits as follows:

1. Control limits are at the upper and lower specification limits.
2. There are no upper warning limits for sieves allowing 100 percent passing and no lower control limits for sieves allowing 0 percent passing.
3. Dense graded warning limits, except for the No. 200 sieve, are 2 percent within the upper and lower control limits. Warning limits for the No. 200 sieve are set 0.5 percent within the upper and lower control limits.
4. Open graded warning limits for the 1-inch, 3/8-inch, and No. 4 sieves are 2 percent within the upper and lower control limits. Upper warning limits for the No. 10, No. 40, and No. 200 sieves are 1 percent inside the upper control limit.

B.6.2 Fracture

(1) Test fracture conforming to CMM 8.60. The engineer will waive fractured particle testing on quarried stone.

(2) Maintain a separate fracture control chart for each base aggregate size, source or classification, and type. Set the lower control limit at the contract specification limit, either specified in another special provision or in table 301-2 of standard spec 301.2.4.5. Set the lower warning limit 2 percent above the lower control limit. There are no upper limits.

B.6.3 Liquid Limit and Plasticity

(1) Test the liquid limit and plasticity according to AASHTO T 89 and T 90.

(2) Ensure the material conforms to the limits specified in standard spec table 301-2.

B.7 Corrective Action

B.7.1 General

(1) Consider corrective action when the running average trends toward a warning limit. Take corrective action if an individual test exceeds the contract specification limit. Document all corrective actions both in the project records and on the appropriate control chart.

B.7.2 Placement Corrective Action

(1) Do not blend additional material on the roadbed to correct gradation problems.

(2) Notify the engineer whenever the running average exceeds a warning limit. When two consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:
   1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
   2. For fracture, increase the QC testing frequency to at least one test per gradation test.

(3) If corrective action improves the property in question such that the running average after four additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after four additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.

(4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.

(5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:
   1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
   2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
   3. The fracture control limit is exceeded by more than 10.0 percent.

B.8 Department Testing

B.8.1 General

(1) The department will conduct verification testing to validate the quality of the product and independent assurance testing to evaluate the sampling and testing. The department will provide the contractor with a listing of names and telephone numbers of all QV and IA personnel for the project, and provide test results to the contractor within two business days after the department obtains the sample.

B.8.2 Verification Testing

B.8.2.1 General

(1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.

(2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:
1. Perform one stockpile test from each source prior to placement.
2. At least one random test per 30,000 tons, or fraction of 30,000 tons, placed.

(3) The department will sample randomly, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will collect QV samples after the material has been bladed, mixed, and shaped but before compacting; except, for 3-inch aggregates or for a lift thickness of 3-inch or less, the department will collect samples at load-out. The department will split each sample, test half for QV, and retain half.

(4) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.

(5) The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to the specification, the department will take no further action. If QV test results are nonconforming, add the QV to the QC test results as if it were an additional QC test.

B.8.3 Independent Assurance

(1) Independence assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform an IA review according to the department's independent assurance program. That review may include one or more of the following:
1. Split sample testing.
2. Proficiency sample testing.
3. Witnessing sampling and testing.
4. Test equipment calibration checks.
5. Reviewing required worksheets and control charts.
6. Requesting that testing personnel perform additional sampling and testing.

(2) If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in B.9.

B.9 Dispute Resolution

(1) The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor may review the data, examine data reduction and analysis methods, evaluate

sampling and testing procedures, and perform additional testing. Use ASTM E 178 to evaluate potential statistically outlying data.

(2) Production test results, and results from other process control testing, may be considered when resolving a dispute.

(3) If the project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product, the department will use third party testing to resolve the dispute. The department's central office laboratory, or a mutually agreed on independent testing laboratory, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent laboratory. The department may use third party test results to evaluate the quality of questionable materials and determine the appropriate payment. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

C (Vacant)

D (Vacant)

E Payment

(1) Costs for all sampling, testing, and documentation required under this special provision are incidental to this work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the non-performance of QMP administrative item.

(2) For material represented by a running average exceeding a control limit, the department will reduce pay according to CMM 8-10.5.2 for the affected Base Aggregate bid items listed in subsection A. The department will administer pay reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2.

stp-301-010 (20170615)

9. Reheating HMA Pavement Longitudinal Joints, Item 460.4110.S.

A Description

This special provision describes reheating the abutting edge of the previously compacted layer in the adjacent lane while paving mainline asphalt pavements.

B (Vacant)

C Construction

C.1 Equipment

Provide a self-contained heating unit that heats by convection only. Do not use forced air to enhance the flame. Provide a fireproof barrier between the flame and the heater's fuel source. The heater must produce a uniform distribution of heat within the heat box. Provide automatic controls to regulate the heater output and shutoff the heater when the paver stops or the heater control system loses power.

Mount the heater on the paver inside the paver's automatic leveling device.

C.2 Reheating Joints
Evenly reheat at least an 8 inch (200 mm) wide strip of the previously compacted layer in the adjacent lane as follows:

- Reheat the joint to within 60 degrees F (15 degrees C) of the mix temperature at the paver auger. Measure joint temperature immediately behind the heater.

The engineer may allow the required joint reheat temperatures to be cooler than specified to adjust for weather, wind, and other field conditions. Coordinate the heater output and paver speed to achieve the required joint reheat temperature without visible smoke emission.

D Measurement
The department will measure Reheating HMA Pavement Longitudinal Joints by the linear foot acceptably completed as measured along each joint for each layer of asphalt placed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF

Payment is full compensation for all the work required under this bid item.
stp-460-015 (20140630)

10. QMP HMA Pavement Nuclear Density.

A Description
Replace standard spec 460.3.3.2 (1) and standard spec 460.3.3.2 (4) with the following:

(1) This special provision describes density testing of in-place HMA pavement with the use of nuclear density gauges. Conform to standard spec 460 as modified in this special provision.

(2) Provide and maintain a quality control program defined as all activities and documentation of the following:
1. Selection of test sites.

2. Testing.
3. Necessary adjustments in the process.
4. Process control inspection.

(3) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required procedures. Obtain the CMM from the department's web site at:

http://roadwaystandards.dot.wi.gov/standards/cmm/index.htm

(4) The department's Materials Reporting System (MRS) software allows contractors to submit data to the department electronically, estimate pay adjustments, and print selected reports. Qualified personnel may obtain MRS software from the department's web site at:

http://www.atwoodsystems.com/mrs

B Materials

B.1 Personnel

(1) Perform HMA pavement density (QC, QV) testing using a HTCP certified nuclear technician I, or a nuclear assistant certified technician (ACT-NUC) working under a certified technician.

(2) If an ACT is performing sampling or testing, a certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

B.2 Testing

(1) Conform to ASTM D2950 and CMM 8.15 for density testing and gauge monitoring methods. Perform nuclear gauge measurements using gamma radiation in the backscatter position. Perform each test for 4 minutes of nuclear gauge count time.

B.3 Equipment

B.3.1 General

(1) Furnish nuclear gauges from the department's approved product list at http://www.dot.wisconsin.gov/business/engrserv/approvedprod.htm.

(2) Have the gauge calibrated by the manufacturer or an approved calibration service within 12 months of its use on the project. Retain a copy of the manufacturer's calibration certificate with the gauge.

(3) Prior to each construction season, and following any calibration of the gauge, the contractor must perform calibration verification for each gauge using the reference blocks located in the department's central office materials laboratory. To obtain information or schedule a time to perform calibration verification, contact the department's Radiation Safety Officer at:

Materials Management Section

3502 Kinsman Blvd.
Madison, Wisconsin 53704
Telephone: (608) 243-5998

B.3.2 Comparison of Nuclear Gauges

B.3.2.1 Comparison of QC and QV Nuclear Gauges

(1) Select a representative section of the compacted pavement prior to or on the first day of paving for the comparison process. The section does not have to be the same mix design.

(2) Compare the 2 or more gauges used for density measurement (QC, QV). The QC and QV gauge operators will perform the comparison on 5 test sites jointly located. Record each density measurement of each test site for the QC, QV and back up gauges.

(3) Calculate the average of the difference in density of the 5 test sites between the QC and QV gauges. Locate an additional 5 test sites if the average difference exceeds 1.0 lb/ft^3. Measure and record the density on the 5 additional test sites for each gauge.

(4) Calculate the average of the difference in density of the 10 test sites between the QC and QV gauges. Replace one or both gauges if the average difference of the 10 tests exceeds 1.0 lb/ft^3 and repeat comparison process from B.3.2.1 (2).

(5) Furnish one of the QC gauges passing the allowable comparison tolerances to perform density testing on the project.

B.3.2.2 Comparison Monitoring

(1) After performing the gauge comparison specified in B.3.2.1, establish a project reference site approved by the department. Clearly mark a flat surface of concrete or asphalt or other material that will not be disturbed during the duration of the project. Perform comparison monitoring of the QC, QV, and all back-up gauges at the project reference site.

(2) Conduct an initial 10 density tests with each gauge on the project reference site and calculate the average value for each gauge to establish the gauge's reference value. Use the gauge's reference value as a control to monitor the calibration of the gauge for the duration of the project.

(3) Check each gauge on the project reference site a minimum of one test per day if paving on the project. Calculate the difference between the gauge's daily test result and its reference value. Investigate if a daily test result is not within 1.5 lb/ft^3 of its reference value. Conduct 5 additional tests at the reference site once the cause of deviation is corrected. Calculate and record the average of the 5 additional tests. Remove the gauge from the project if the 5-test average is not within 1.5 lb/ft^3 of its reference value established in B.3.2.2(2).

(4) Maintain the reference site test data for each gauge at an agreed location.

B.4 Quality Control Testing and Documentation

B.4.1 Lot and Sublot Requirements

B.4.1.1 Mainline Traffic Lanes, Shoulders, and Appurtenances

(1) A lot consists of the tonnage placed each day for each layer and target density specified in standard spec 460.3.3.1. A lot may include partial sublots.

(2) Divide the roadway into sublots. A sublot is 1500 lane feet for each layer and target density.

(3) A sublot may include HMA placed on more than one day of paving. Test sublots at the pre-determined random locations regardless of when the HMA is placed. No additional testing is required for partial sublots at the beginning or end of a day's paving.

(4) If a resulting partial quantity at the end of the project is less than 750 lane feet, include that partial quantity with the last full sublot of the lane. If a resulting partial quantity at the end of the project is 750 lane feet or more, create a separate sublot for that partial quantity.

(5) Randomly select test locations for each sublot as specified in CMM 8.15 prior to paving and provide a copy to the engineer. Locate and mark QC density test sites when performing the tests. Perform density tests prior to opening the roadway to traffic.

(6) Use Table 1 to determine the number of tests required at each station, depending on the width of the lane being tested. When more than one test is required at a station, offset the tests 10 feet longitudinally from one another to form a diagonal testing row across the lane.

Lane Width	No. of Tests	Transverse Location
5 ft or less	1	Random
Greater than 5 ft to 9 ft	2	Random within 2 equal widths
Greater than 9 ft	3	Random within 3 equal widths

Table 1

B.4.1.2 Side Roads, Crossovers, Turn Lanes, Ramps, and Roundabouts

(1) A lot represents a combination of the total daily tonnage for each layer and target density.

(2) Each side road, crossover, turn lane, ramp, and roundabout must contain at least one sublot for each layer.

(3) If a side road, crossover, turn lane, or ramp is 1500 feet or longer, determine sublots and random test locations as specified in B.4.1.1.

(4) If a side road, crossover, turn lane, or ramp is less than 1500 feet long, determine sublots using a maximum of 750 tons per sublot and perform the number of random tests as specified in Table 2.

Side Roads, Turn Lanes, Crossovers, Ramps, Roundabouts: Sublot/Layer tonnage	Minimum Number of Tests Required

25 to 100 tons	1
101 to 250 tons	3
251 to 500 tons	5
501 to 750 tons	7

Table 2

B.4.2 Pavement Density Determination

B.4.2.1 Mainline Traffic Lanes and Appurtenances

(1) Calculate the average sublot densities using the individual test results in each sublot.

(2) If all sublot averages are no more than one percent below the target density, calculate the daily lot density by averaging the results of each random QC test taken on that day's material.

(3) If any sublot average is more than one percent below the target density, do not include the individual test results from that sublot when computing the lot average density and remove that sublot's tonnage from the daily quantity for incentive. The tonnage from any such sublot is subject to disincentive pay according to standard spec 460.5.2.2.

B.4.2.2 Mainline Shoulders

B.4.2.2.1 Width Greater Than 5 Feet

(1) Determine the pavement density as specified in B.4.2.1.

B.4.2.2.2 Width of 5 Feet or Less

(1) If all sublot test results are no more than 3.0 percent below the minimum target density, calculate the daily lot density by averaging all individual test results for the day.

(2) If a sublot test result is more than 3.0 percent below the target density, the engineer may require the unacceptable material to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine the limits of the unacceptable material according to B.4.3.

B.4.2.3 Side Roads, Crossovers, Turn Lanes, Ramps, and Roundabouts

(1) Determine the pavement density as specified in B.4.2.1.

B.4.2.4 Documentation

(1) Document QC density test data as specified in CMM 8.15. Provide the engineer with the data for each lot within 24 hours of completing the QC testing for the lot.

B.4.3 Corrective Action

(1) Notify the engineer immediately when an individual test is more than 3.0 percent below the specified minimum in standard spec 460.3.3.1. Investigate and determine the cause of the unacceptable test result.

(2) The engineer may require unacceptable material specified in B.4.3(1) to be removed and replaced with acceptable material or allow the nonconforming material to remain in

place with a 50 percent pay reduction. Determine limits of the unacceptable area by measuring density of the layer at 50-foot increments both ahead and behind the point of unacceptable density and at the same offset as the original test site. Continue testing at 50-foot increments until a point of acceptable density is found as specified in standard spec 460.5.2.2(1). Removal and replacement of material may be required if extended testing is in a previously accepted sublot. Testing in a previously accepted sublot will not be used to recalculate a new lot density.

(3) Compute unacceptable pavement area using the product of the longitudinal limits of the unacceptable density and the full sublot width within the traffic lanes or shoulders.

(4) Retesting and acceptance of replaced pavement will be according to standard spec 105.3.

(5) Tests indicating density more than 3.0 percent below the specified minimum, and further tests taken to determine the limits of unacceptable area, are excluded from the computations of the sublot and lot densities.

(6) If 2 consecutive sublot averages within the same paving pass and same target density are more than one percent below the specified target density, notify the engineer and take necessary corrective action. Document the locations of such sublots and the corrective action that was taken.

B.5 Department Testing

B.5.1 Verification Testing

(1) The department will have a HTCP certified technician, or ACT working under a certified technician, perform verification testing. The department will test randomly at locations independent of the contractor's QC work. The department will perform verification testing at a minimum frequency of 10 percent of the sublots and a minimum of one sublot per mix design. The sublots selected will be within the active work zone. The contractor will supply the necessary traffic control for the department's testing activities.

(2) The QV tester will test each selected sublot using the same testing requirements and frequencies as the QC tester.

(3) If the verification sublot average is not more than one percent below the specified minimum target density, use the QC tests for acceptance.

(4) If the verification sublot average is more than one percent below the specified target density, compare the QC and QV sublot averages. If the QV sublot average is within 1.0 lb/ft^3 of the QC sublot average, use the QC tests for acceptance.

(5) If the first QV/QC sublot average comparison shows a difference of more than 1.0 lb/ft^3 each tester will perform an additional set of tests within that sublot. Combine the additional tests with the original set of tests to compute a new sublot average for each tester. If the new QV and QC sublot averages compare to within 1.0 lb/ft^3, use the original QC tests for acceptance.

(6) If the QV and QC sublot averages differ by more than 1.0 lb/ft^3 after a second set of tests, resolve the difference with dispute resolution specified in B.6. The engineer will notify the contractor immediately when density deficiencies or testing precision exceeding the allowable differences are observed.

B.5.2 Independent Assurance Testing

(1) Independent assurance is unbiased testing the department performs to evaluate the department's verification and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform the independent assurance review according to the department's independent assurance program.

B.6 Dispute Resolution

(1) The testers may perform investigation in the work zone by analyzing the testing, calculation, and documentation procedures. The testers may perform gauge comparison according to B.3.2.1.

(2) The testers may use comparison monitoring according to B.3.2.2 to determine if one of the gauges is out of tolerance. If a gauge is found to be out of tolerance with its reference value, remove the gauge from the project and use the other gauge's test results for acceptance.

(3) If the testing discrepancy cannot be identified, the contractor may elect to accept the QV sublot density test results or retesting of the sublot in dispute within 48 hours of paving. Traffic control costs will be split between the department and the contractor.

(4) If investigation finds that both gauges are in error, the contractor and engineer will reach a decision on resolution through mutual agreement.

B.7 Acceptance

(1) The department will not accept QMP HMA Pavement Nuclear Density if a non-compared gauge is used for contractor QC tests.

C (Vacant)

D (Vacant)

E Payment

E.1 QMP Testing

(1) Costs for all sampling, testing, and documentation required under this special provision are incidental to the work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the Non-performance of QMP administrative item.

E.2 Disincentive for HMA Pavement Density

(1) The department will administer density disincentives according to standard spec 460.5.2.2.

E.3 Incentive for HMA Pavement Density

(1) The department will administer density incentives according to standard spec 460.5.2.3.

stp-460-020 (20161130)

11. Select Borrow, Item 208.1100

This work shall be according to the pertinent requirements of standard spec 208 and as provided here.

Select borrow material shall conform to requirements of standard spec 209.2.2 for Grade 2 material.

12. Base Aggregate Dense 1 ¼-Inch, Item 305.0120

This work shall be according to the pertinent requirements of standard spec 305 and as provided here.

Base Aggregate Dense 1 ¼" (B.A.D. 1 ¼") may be supplied by mobile track crushing, stationary crushing and hauling, or by virgin pit aggregate. Regardless of the method, the item of removing pavement (204.0100) for existing asphaltic and concrete pavements will apply and be paid.

Measurement for B.A.D. 1 ¼" under this contract will be based on converting the square yards of removed pavement to a volume using the depths noted on the plans. The Engineer will verify Pavement depths throughout the operation and adjust if necessary. Cubic yard volumes of B.A.D. 1 ¼" will be converted to tons by a factors of 1.75 tons / cy.

13. Adjusting Steel Plate Beam Guard, Item 614.0400

This work shall be according to the pertinent requirements of standard spec 614 and as provided here.

The steel plate beam guard and offset blocks shall be removed from the posts and stockpiled during the pavement removal and base aggregate dense construction operations. Steel plate beam guard and offset blocks shall be stockpiled at least 30 feet from the edge of traveled way. Removal, stockpiling, and reinstallation of steel plate beam guard and offset blocks is incidental to this item.

14. Traffic Control Signs PCMS, Item 643.1050

This work shall be according to the pertinent requirements of standard spec 638 and as provided here.

Place two portable changeable message signs as shown on the plans starting April 1, 2019 until the detour is complete and traffic is rerouted to USH 63. From April 1, 2019 until the detour begins, display the following two-frame message:

Frame 1:	HWY 63 DETOUR	Frame 2:	STARTS [MONTH DAY]

Once the detour on USH 63 has begun, the contractor shall update each PCMS at 3:00 PM of each work day to update local motorists as to the progress of their work. The contractor shall display the following two-frame message:

Frame 1:	HWY 63 OPEN TO	Frame 2:	[SIDEROAD NAME]

15. Locating No-Passing Zones, Item 648.0100

For this project, the spotting sight distance in areas with a 55 mph posted speed limits is 0.21 miles (1108 feet).
648-005 (20060512)

16. Material Transfer Vehicle, Item SPV.0105.01

A Description

This special provision describes furnishing Material Transfer Vehicle (MTV) and an operator for use on this project during HMA upper layer paving operations, as shown in the plans or as directed by the engineer, and as hereinafter provided.

B Materials

The MTV shall be self-propelled, remix and maintain constant temperature, and continually feed the paver hopper. The storage capacity shall be adequate to provide continuous forward movement of the paver. The paver speed shall be coordinated to match the delivery of material and capacity of the MTV to limit stopping of the paver.

C Construction

An operator shall remain with the vehicle at all times during moving operations and the paver's hopper shall remain full at all times to avoid segregation of coarse aggregates. No placement of HMA upper layer pavement shall be allowed without the use of the MTV.

D Measurement

The department will measure Material Transfer Vehicle by the lump sum for each material transfer vehicle, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Material Transfer Vehicle	LS

Payment is full compensation for deploying the equipment and its operator; and for furnishing all labor, tools, materials, equipment and incidentals necessary to complete the contract work.

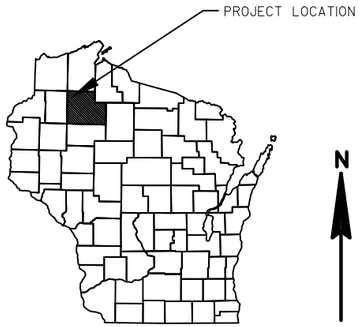
PROJECT ID: 1560-02-70

WITH:

COUNTY: SAWYER

ORDER OF SHEETS

TOTAL SHEETS =



DESIGN DESIGNATION

A.A.D.T.	2017	=	4200
A.A.D.T.	2037	=	4650
D.H.V.		=	6.0%
D.D.		=	59/41
T.		=	7.0%
DESIGN SPEED		=	45/55 MPH
ESALS		=	640,000

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

HAYWARD - DRUMMOND

STH 27 TO LARSEN ROAD

USH 63

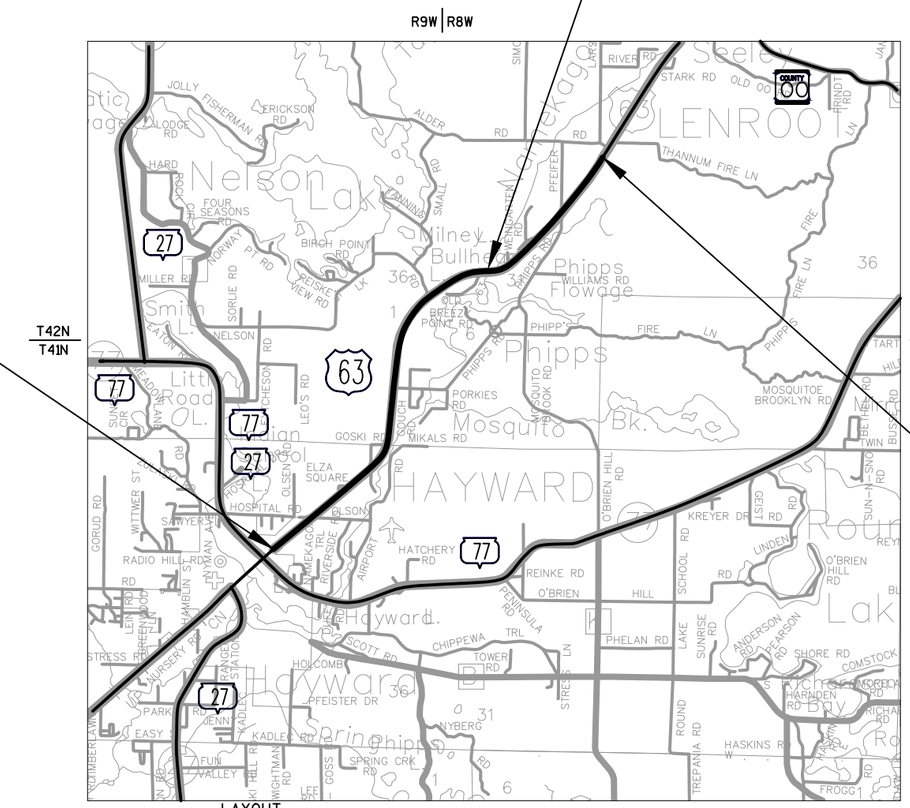
SAWYER COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1560-02-70		

STATE PROJECT NUMBER
1560-02-70

BEGIN PROJECT 1560-02-70
STA. 314+53.82
Y=620736.4303
X=467495.6392

STRUCTURE B-57-0019
STA 574+73.13 - STA 576+50.65
EXCEPTION TO NET CENTERLINE LENGTH



END PROJECT 1560-02-70
STA. 687+65.44
Y=642810.6256
X=467495.6392

TOTAL NET LENGTH OF CENTERLINE = 7.033 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, SAWYER COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	COOPER ENG. & COLEMAN ENG.
Designer	TRAVIS JENSEN
Project Manager	MATT DICKENSON
Regional Examiner	JENNIFER OLDENBURG
Regional Supervisor	DAVID OSTROWSKI

APPROVED FOR THE DEPARTMENT

DATE:_____ _____
(Signature)

E

LIST OF STANDARD ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
APPROX.	APPROXIMATE
A.E.W.	APRON ENDWALL
ASPH.	ASPHALTIC
A.D.T.	AVERAGE DAILY TRAFFIC
AZ.	AZIMUTH
BK.	BACK
BEG.	BEGIN
B.M.	BENCH MARK
C/L	CENTER LINE
CONC.	CONCRETE
CONST.	CONSTRUCTION
CO.	COUNTY
C.T.H.	COUNTY TRUNK HIGHWAY
X-SEC.	CROSS SECTION
CR.	CRUSHED
CFS	CUBIC FEET/SECOND
C.Y., CU. YD.	CUBIC YARD
CULV.	CULVERT
C.P.	CULVERT PIPE
D.O.T.	DEPARTMENT OF TRANSPORTATION
D.H.V.	DESIGN HOUR VOLUME
DIA.	DIAMETER
D.	DIRECTIONAL DISTRIBUTION
DISCH. OR DIS.	DISCHARGE
EA.	EACH
ELECT.	ELECTRIC
EL. OR ELEV.	ELEVATION
EMB.	EMBANKMENT
E.B.S.	EXCAVATION BELOW SUBGRADE
EXIST.	EXISTING
FERT.	FERTILIZE
F.E.	FIELD ENTRANCE
FIN.	FINISHED
FT.	FOOT
F.L.	FLOW LINE
GA.	GAUGE
HORIZ.	HORIZONTAL
CWT.	HUNDREDWEIGHT
INL.	INLET
LT.	LEFT
L.H.F.	LEFT-HAND FORWARD
LIN.	LINEAR
LIN. FT.	LINEAR FOOT
L.S.	LUMP SUM
MAX.	MAXIMUM
MI.	MILE
MISC.	MISCELLANEOUS
N.E.	NORTH EAST
N.W.	NORTH WEST
PAV'T	PAVEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
P.O.T.	POINT ON TANGENT
LB.	POUND
P.E.	PRIVATE ENTRANCE
PROJ.	PROJECT
R.	RANGE
REQ'D	REQUIRED
RT.	RIGHT
R.H.F.	RIGHT-HAND FORWARD
R/W	RIGHT OF WAY
RD.	ROAD
SHR.	SHRINKAGE
SL.	SLOPE
STD.	STANDARD
S.D.D.	STANDARD DETAIL DRAWINGS
S.T.H.	STATE TRUNK HIGHWAY
STA.	STATION
S.P.P.A.	STRUCTURAL PLATE PIPE ARCH
STRUCT.	STRUCTURE
SURF.	SURFACE
TEL.	TELEPHONE
TN.	TOWN
T.	TRUCKS (PERCENT OF)
UNCL.	UNCLASSIFIED
U.G.	UNDERGROUND
V.	VELOCITY OR DESIGN SPEED
V.C.	VERTICAL CURVE

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY FACILITIES AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

WHEN THE QUANTITY OF BASE AGGREGATE DENSE AND ASPHALTIC PAVEMENT ARE MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS AS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND UPON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

ALL RADII ARE MEASURED TO EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.

CURB HEIGHTS AT THE END OF CURB AND GUTTER SHALL BE TAPERED FROM 0 TO 6 INCHES IN 6 FEET.

CURVE DATA SHOWN ON THE PLAN IS "ARC DEFINITION".

CONTROL POINTS ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM SAWYER COUNTY. BENCHMARK ELEVATIONS ARE REFERENCED TO NAVD 88.

PRIOR TO THE PLACEMENT OF STEEL PLATE BEAM GUARD, THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED UNLESS SHOWN OTHERWISE.

AREA CONTACTS

COUNTY

SAWYER COUNTY HWY COMMISSIONER
GARY GEDART
14688W COUNTY ROAD B
HAYWARD, WI 54843
PHONE: (715) 634-2691

TOWNS

TOWN OF HAYWARD
JEFF HOMUTH
TOWN CHAIR
15460W STH 77 E
HAYWARD, WI 54843
PHONE: (715) 634-4123

TOWN OF LENROOT
GORDON CHRISTIANS
TOWN CHAIR
12153 N WAGNER CIRCLE
HAYWARD, WI 54843
PHONE: (715) 634-3156

WISDOT

DESIGN CONTACT
TRAVIS JENSEN
WISDOT NWR SUPERIOR
1701 N. 4TH STREET
SUPERIOR WI, 54880
PHONE: (715) 395-3025

WISDNR

DNR LIAISON
SHAWN HASELEU
WDNR - NORTHWEST DISTRICT HEADQUARTERS
810 WEST MAPLE STREET
SPOONER, WI 54801
PHONE: (715) 635-4228

UTILITIES

WE ENERGIES
LEWIS KNAPP
104 W SOUTH ST
RICE LAKE, WI 54868
(715) 234-9605

CENTURYLINK
BRIAN HUHN
400 W 9TH ST N, STE 5A
LADYSMITH, WI 54848
(715) 532-0023

XCEL ENERGY - TRANSMISSION
CHARLES DIENGER
8710 MONTICELLO LANE
MAPLE GROVE, MN 55369
(651) 955-1089

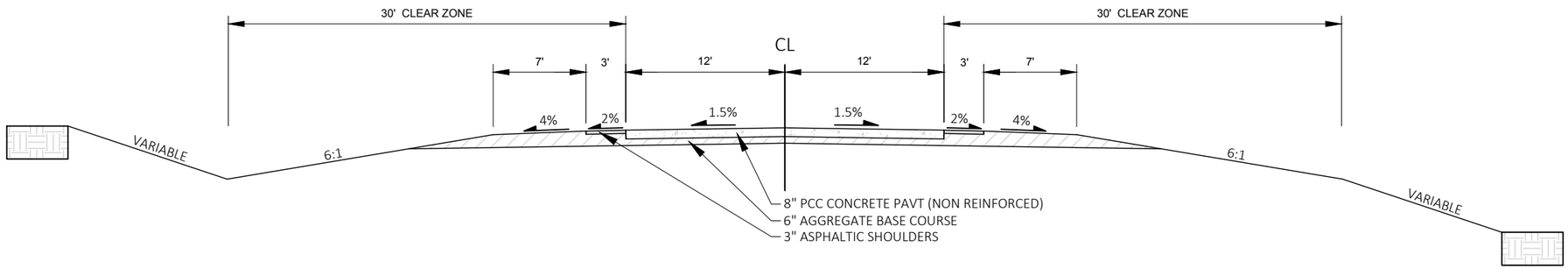
XCEL ENERGY - DISTRIBUTION
KEN DISHER
16048 ELECTRICAL AVE
HAYWARD, WI 54843
(715) 577-0613

NORVADO
JAMES RONDEAU
15818 RAILROAD ST
HAYWARD, WI 54843
(715) 934-3303

WISCONSIN DOT RWIS PROGRAM
MIKE ADAMS
RM 501
P.O. BOX 7986
MADISON, WI 53707-7986
(608) 266-5004
MICHAEL.ADAMS@DOT.WI.GOV

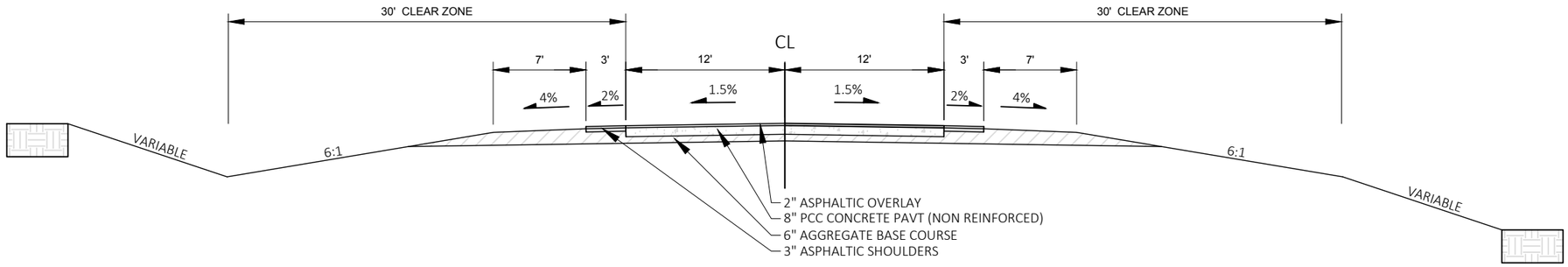
DIGGERS HOTLINE

Call 811 3 Work Days Before You Dig
or Toll Free (800) 242–8511
Hearing Impaired TDD (800) 542–2289
www.DiggersHotline.com



TYPICAL EXISTING SECTION - USH 63

STA: 314+54 - 544+00
STA: 576+50 - 687+65

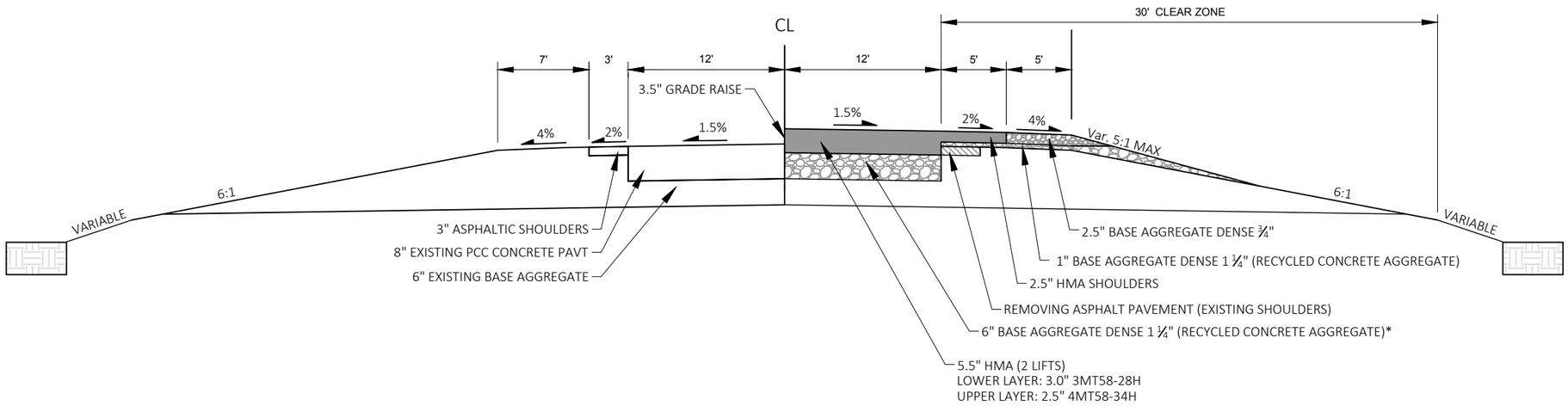


TYPICAL EXISTING SECTION - USH 63

STA: 544+00 - 576+50

NTS

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	TYPICAL SECTIONS	SHEET	E



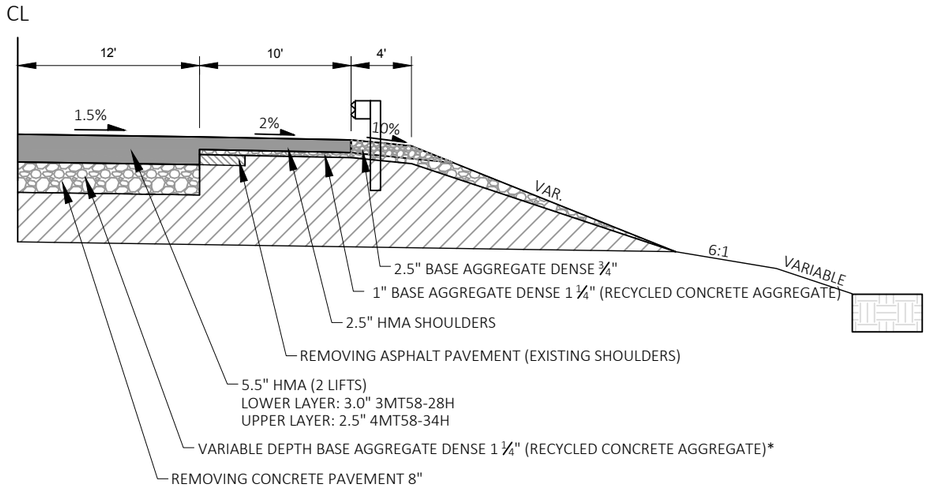
NTS

TYPICAL FINISHED HALF SECTION - USH 63

STA: 314+54 - 687+65

* NOTE: ML BAD DEPTH WILL VARY TO MATCH BEGINNING, END, AND BRIDGE DECK PROFILES AT THE FO

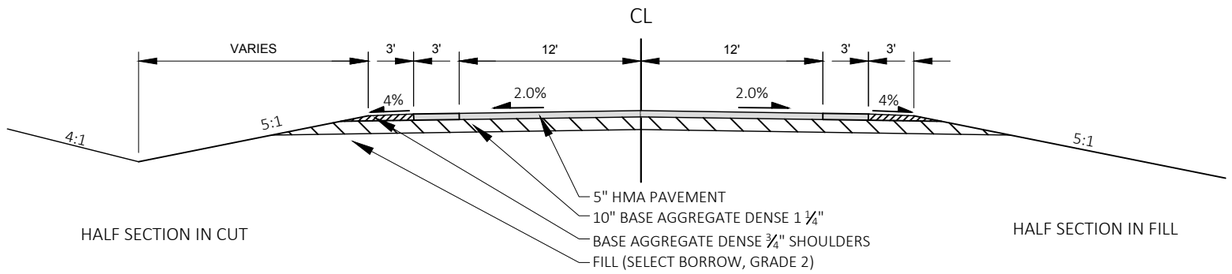
STA 314+53.82	(BEGIN PROJECT)
STA 574+73.13	(SOUTH BRIDGE APPROACH)
STA 576+50.65	(NORTH BRIDGE APPROACH)
STA 687+65.44	(END PROJECT)



TYPICAL FINISHED HALF SECTION - USH 63

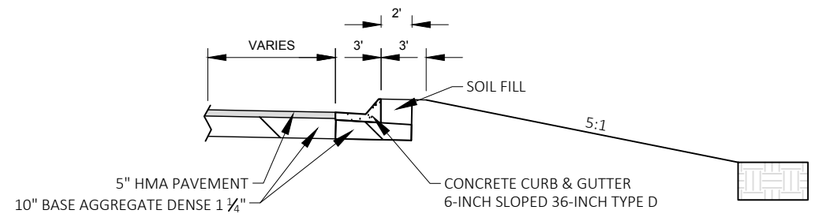
STA: 523+47 - 533+63*
STA: 570+18 - 577+68*

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	TYPICAL SECTIONS	SHEET	E



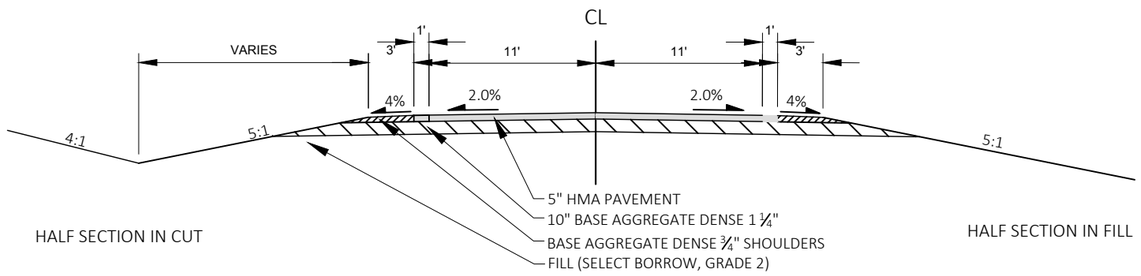
TYPICAL FINISHED SECTION - HOSPITAL ROAD

STA: 1005+32.70 - 1009+72.21



TYPICAL FINISHED RADIUS SECTION - HOSPITAL ROAD

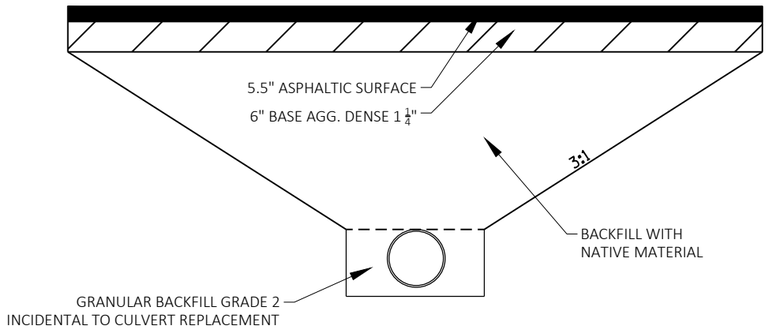
CURB AND GUTTER SECTION
NW & NE RADIUS



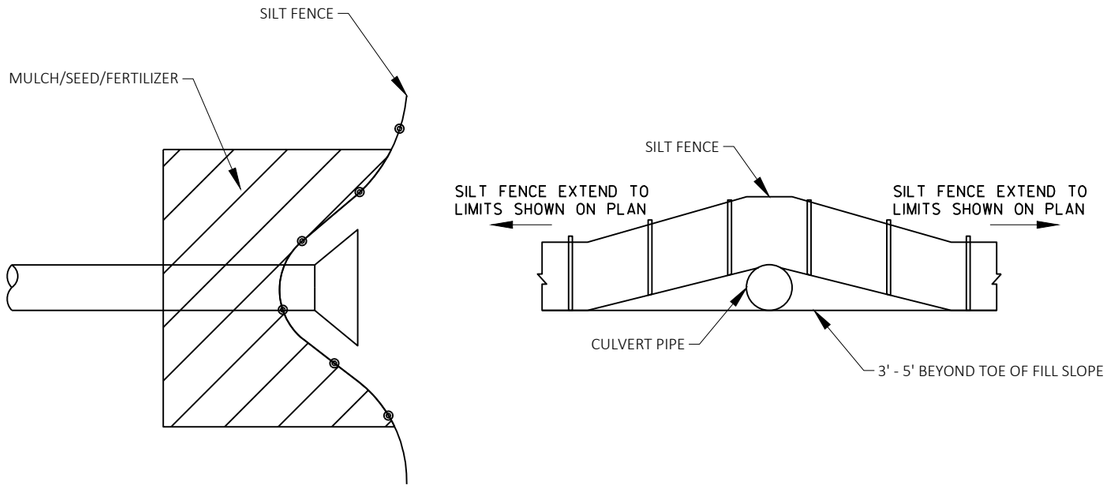
TYPICAL FINISHED SECTION - AIRPORT ROAD

STA: 2004+68.38 - 2008+94.12

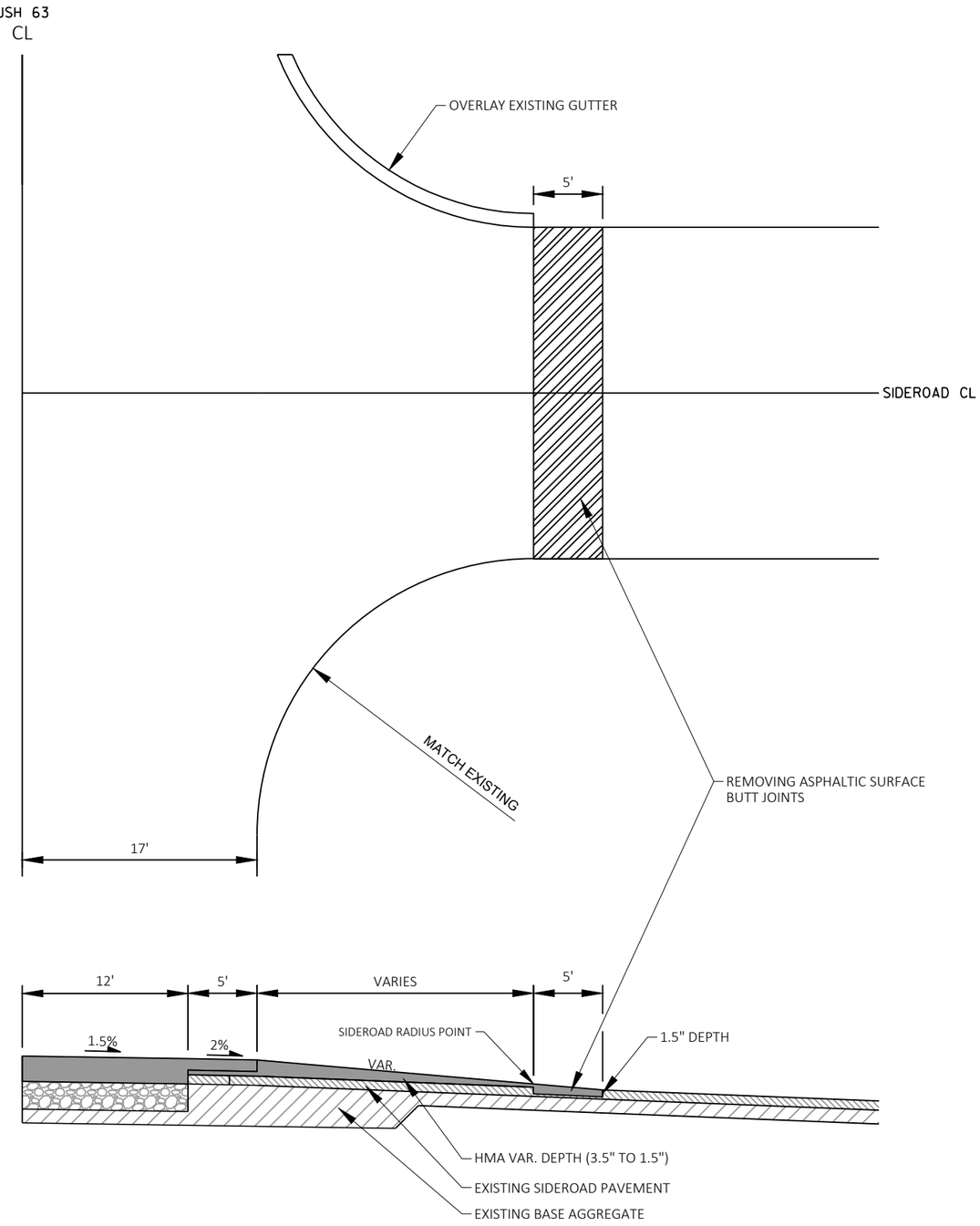
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN: TYPICAL SECTIONS	SHEET	E



CROSS DRAIN INSTALLATION DETAIL



CROSS DRAIN EROSION CONTROL DETAIL



TYPICAL FINISHED HALF SECTION - USH 63 AT SIDEROAD

PROJECT NO:1560-02-70	HWY:USH 63	COUNTY:SAWYER	CONSTRUCTION DETAIL	SHEET	E

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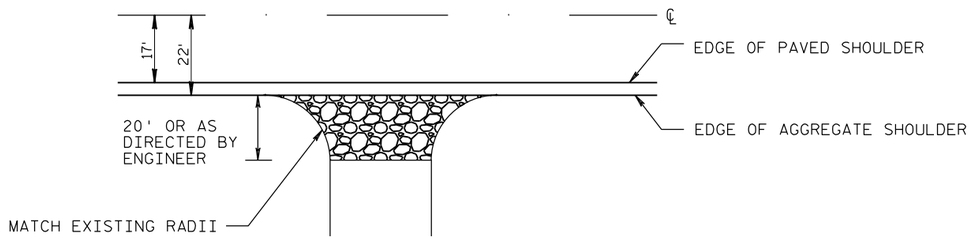
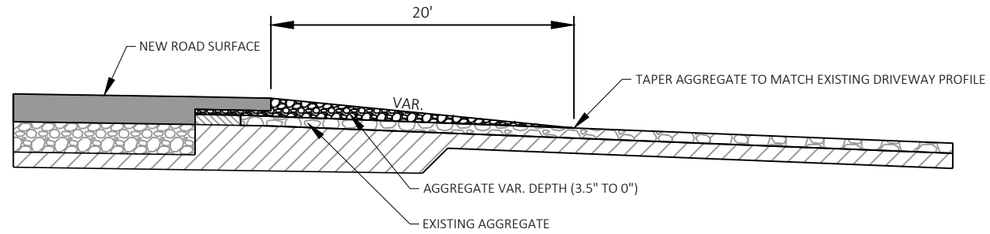
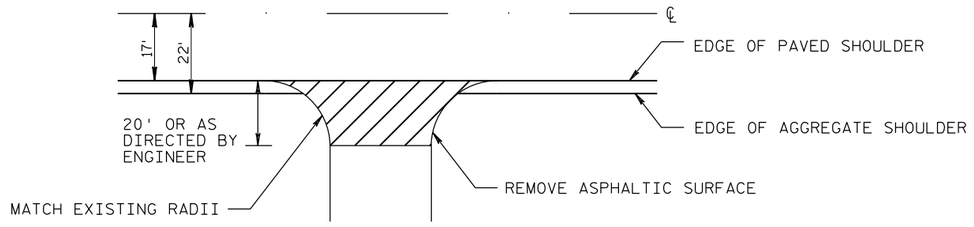
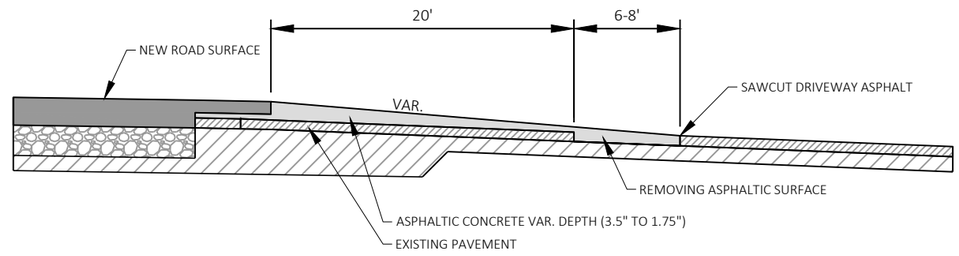
PROJECTSHEETDATA - CD-1
PLOT DATE : 10/24/2017 8:16 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42





RURAL DRIVEWAY DETAIL - GRAVEL





RURAL DRIVEWAY DETAIL - ASPHALT

PROJECT NO:1560-02-70	HWY:USH 63	COUNTY:SAWYER	CONSTRUCTION DETAIL	SHEET	E

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PROJECTSHEETDATA - CD-2
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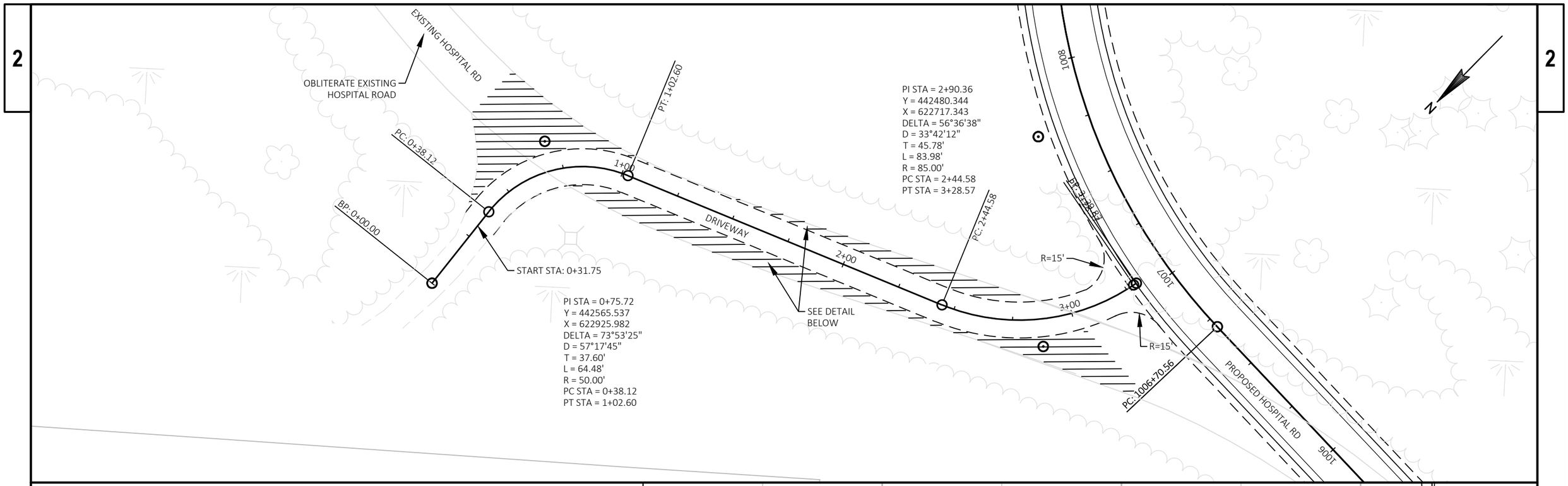
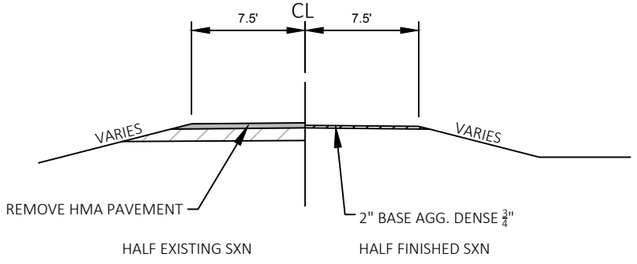
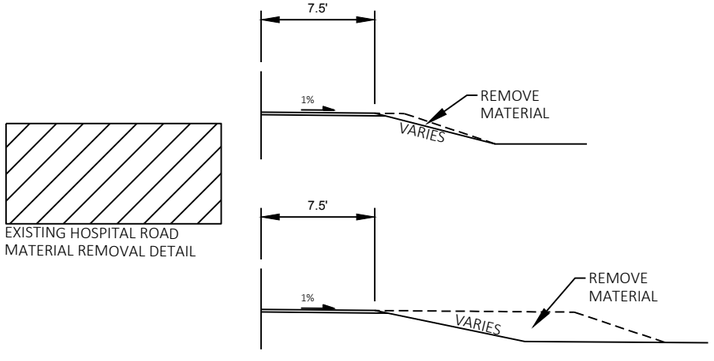
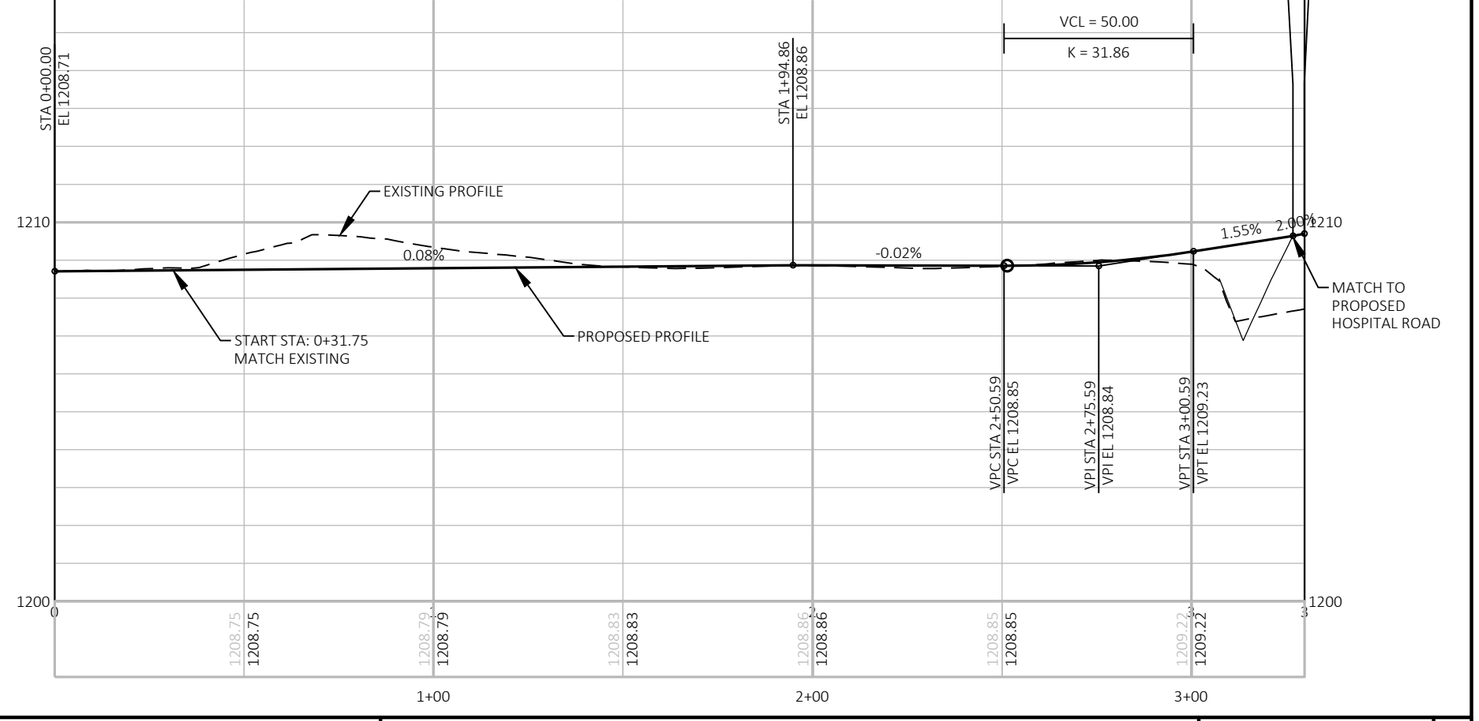
WISDOT/CADDS SHEET 42







DRIVEWAY DETAIL - HOSPITAL ROAD



PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	CONSTRUCTION DETAILS - HOSPITAL ROAD DRIVEWAY	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_CD-DRIVEWAY.DWG
LAYOUT NAME - CD-DRIVEWAY
PLOT DATE : 10/24/2017 8:17 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

N

350

EP: 2008+94.12

PT: 2007+98.74

AIRPORT RD

2005

PC: 2005+53.20

345

1005

1006

HOSPITAL RD

1007

1008

PT: 1008+76.41

1009

EP: 1009+72.21

DRIVEWAY

PC: 1006+70.56

PT: 340+67.72

USH 63

340

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- SEED, FERTILIZE, & MULCH

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	EROSION CONTROL - HOSPITAL ROAD	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_EC-HOSPITAL RD.DWG
LAYOUT NAME - EC-HOSPITAL

PLOT DATE : 10/24/2017 11:41 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : Custom

WISDOT/CADDS SHEET 42

2

TRAFFIC CONTROL - STAGE 1

- CONSTRUCT HOSPITAL RD UP TO GRAVEL FROM XX+XX TO YY+YY
- TWO-WAY TRAFFIC SHALL CONTINUE ON EXISTING HOSPITAL ROAD.

N

HOSPITAL RD

ADVANCE TRAFFIC CONTROL SIGNING PER SDD 15C4 "ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

ROAD CLOSED
R11-2
48"X30"

1005

TRAFFIC CONTROL SIGNING PER SDD 15D28 "WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY."

TRAFFIC CONTROL SIGNING PER SDD 15D28 "WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY."

345

ROAD CLOSED
R11-2
48"X30"

USH 63

LEGEND

- TRAFFIC CONTROL DRUM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	TRAFFIC CONTROL - HOSPITAL RD STAGE 1	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_TC.DWG
LAYOUT NAME - TC-HOSP-1

PLOT DATE : 10/9/2017 10:33 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : Custom

2

TRAFFIC CONTROL - STAGE 2

- CONSTRUCT CONNECTION AREA ON HOSPITAL RD UP TO GRAVEL FROM XX+XX TO YY+YY
- TWO-WAY TRAFFIC SHALL CONTINUE ON EXISTING HOSPITAL ROAD. TEMPORARY SINGLE LANE CLOSURES CONTROLLED BY FLAGGERS SHALL BE EMPLOYED WHILE CONNECTION IS CONSTRUCTED.

N

TRAFFIC CONTROL SIGNING PER SDD 15C12 "LANE CLOSURE WITH FLAGGING OPERATION"

TRAFFIC CONTROL SIGNING PER SDD 15D28 "WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY."

HOSPITAL RD

ADVANCE TRAFFIC CONTROL SIGNING PER SDD 15C4 "ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

ROAD CLOSED
R11-2
48"X30"

1005

345

TRAFFIC CONTROL SIGNING PER SDD 15C12 "LANE CLOSURE WITH FLAGGING OPERATION"

ROAD CLOSED
R11-2
48"X30"

USH 63

LEGEND

- TRAFFIC CONTROL DRUM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	TRAFFIC CONTROL - HOSPITAL RD STAGE 2	SHEET	E

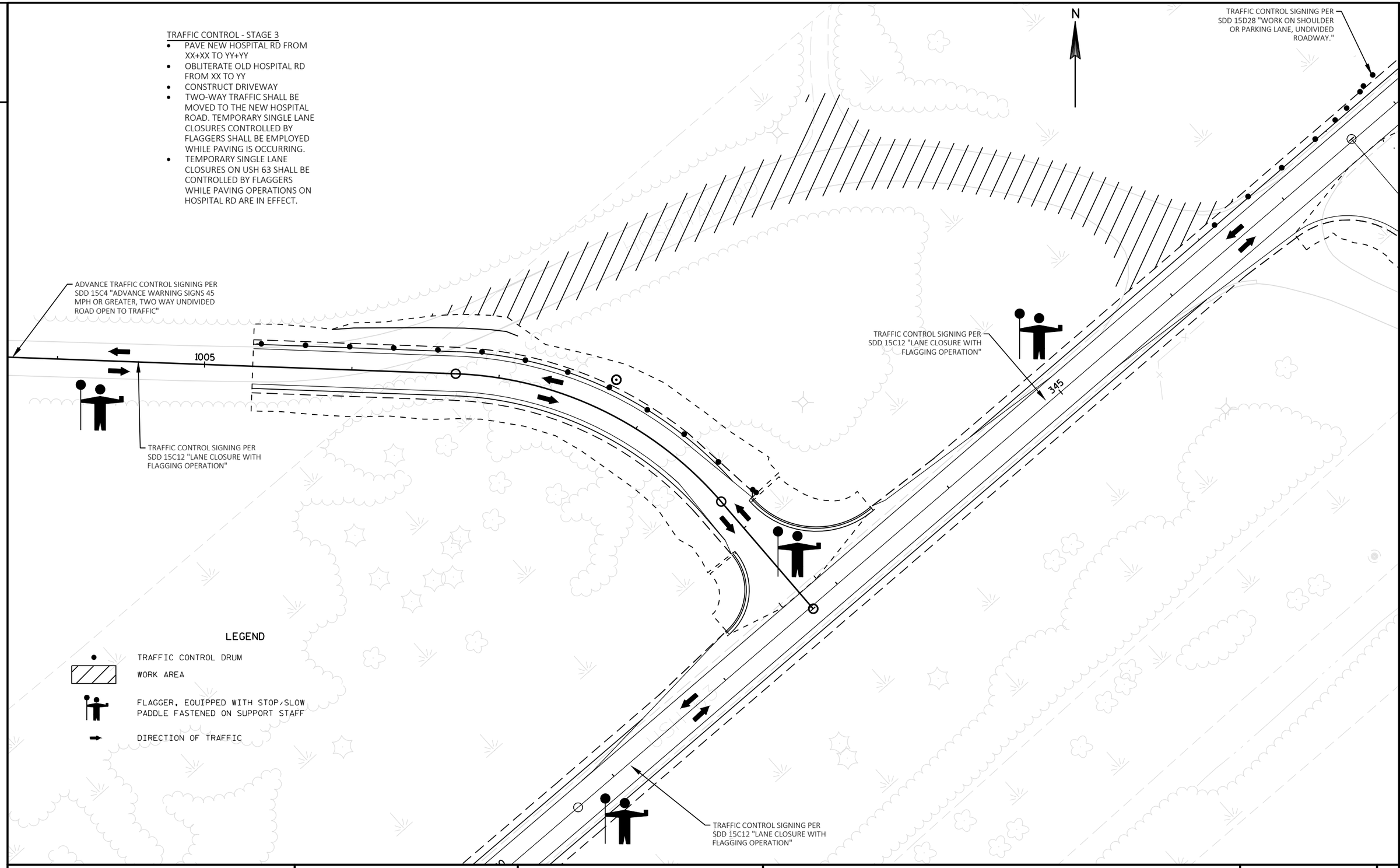
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_TC.DWG
LAYOUT NAME - TC-HOSP-2

PLOT DATE : 10/9/2017 10:33 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : Custom

2

TRAFFIC CONTROL - STAGE 3

- PAVE NEW HOSPITAL RD FROM XX+XX TO YY+YY
- OBLITERATE OLD HOSPITAL RD FROM XX TO YY
- CONSTRUCT DRIVEWAY
- TWO-WAY TRAFFIC SHALL BE MOVED TO THE NEW HOSPITAL ROAD. TEMPORARY SINGLE LANE CLOSURES CONTROLLED BY FLAGGERS SHALL BE EMPLOYED WHILE PAVING IS OCCURRING.
- TEMPORARY SINGLE LANE CLOSURES ON USH 63 SHALL BE CONTROLLED BY FLAGGERS WHILE PAVING OPERATIONS ON HOSPITAL RD ARE IN EFFECT.



LEGEND

- TRAFFIC CONTROL DRUM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- DIRECTION OF TRAFFIC

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	TRAFFIC CONTROL - HOSPITAL RD STAGE 3	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_TC.DWG
LAYOUT NAME - TC-HOSP-3

PLOT DATE : 10/9/2017 10:33 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : Custom

2

2

TRAFFIC CONTROL - STAGE 1

- CONSTRUCT AIRPORT RD UP TO GRAVEL FROM XX+XX TO YY+YY
- TWO-WAY TRAFFIC SHALL CONTINUE ON EXISTING AIRPORT ROAD.

N

350

ROAD CLOSED
R11-2
48"X30"

345

USH 63

HOSPITAL RD

2005

TRAFFIC CONTROL SIGNING PER SDD 15D28 "WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY."

TRAFFIC CONTROL SIGNING PER SDD 15D28 "WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY."

ADVANCE TRAFFIC CONTROL SIGNING PER SDD 15C4 "ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

LEGEND

- TRAFFIC CONTROL DRUM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	TRAFFIC CONTROL - AIRPORT RD STAGE 1	SHEET	E

2

2

TRAFFIC CONTROL - STAGE 2

- CONSTRUCT CONNECTION AREA ON AIRPORT RD UP TO GRAVEL FROM XX+XX TO YY+YY
- TWO-WAY TRAFFIC SHALL CONTINUE ON EXISTING HOSPITAL ROAD. TEMPORARY SINGLE LANE CLOSURES CONTROLLED BY FLAGGERS SHALL BE EMPLOYED WHILE CONNECTION IS CONSTRUCTED.

N

350

ROAD CLOSED
R11-2
48"X30"

345

USH 63

2005

HOSPITAL RD

TRAFFIC CONTROL SIGNING PER SDD 15C12 "LANE CLOSURE WITH FLAGGING OPERATION"

TRAFFIC CONTROL SIGNING PER SDD 15C12 "LANE CLOSURE WITH FLAGGING OPERATION"

TRAFFIC CONTROL SIGNING PER SDD 15D28 "WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY."

ADVANCE TRAFFIC CONTROL SIGNING PER SDD 15C4 "ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

LEGEND

- TRAFFIC CONTROL DRUM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- DIRECTION OF TRAFFIC

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	TRAFFIC CONTROL - AIRPORT RD STAGE 2	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_TC.DWG
LAYOUT NAME - TC-AIR-2

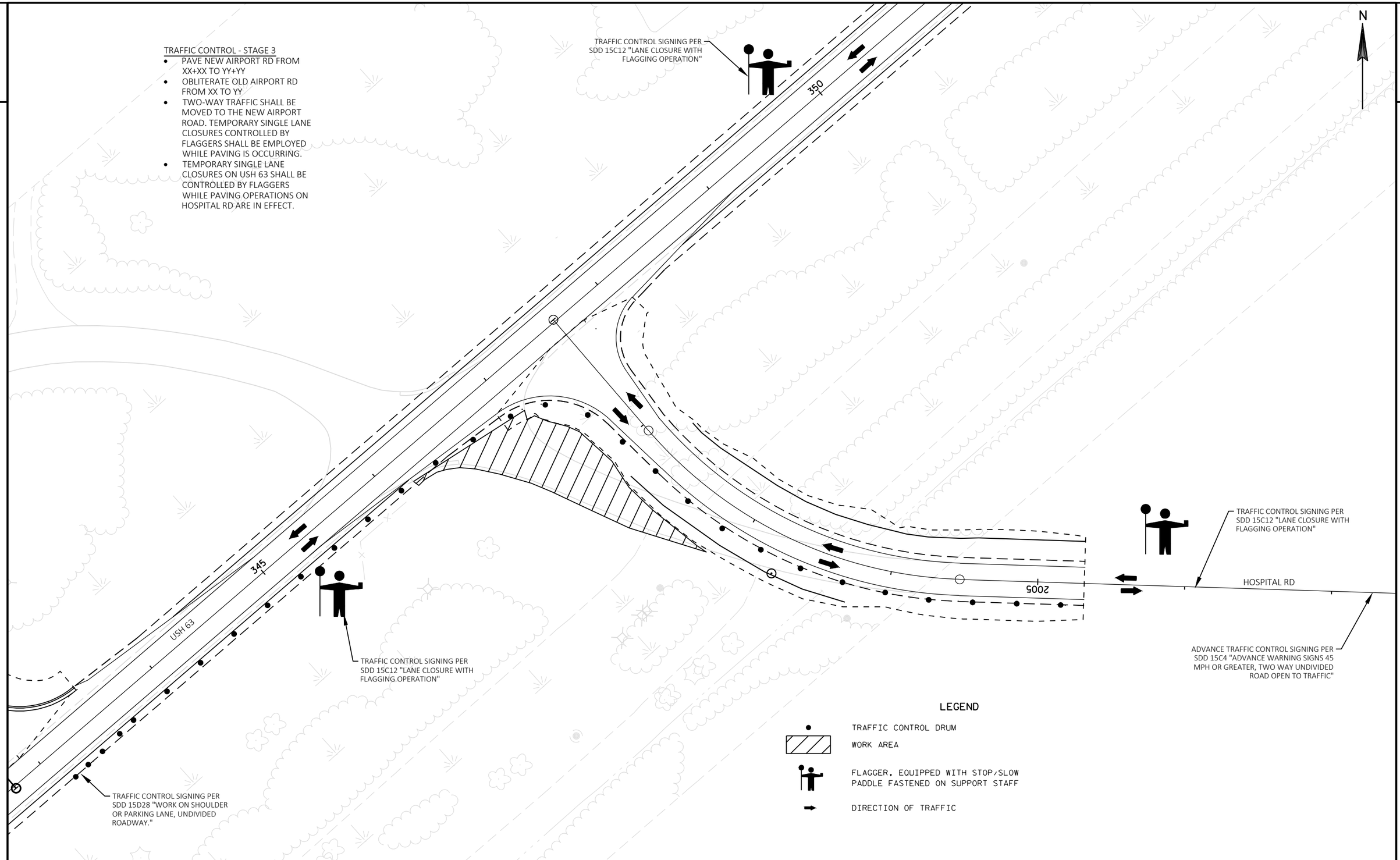
PLOT DATE : 10/9/2017 10:34 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : Custom

2

2

TRAFFIC CONTROL - STAGE 3

- PAVE NEW AIRPORT RD FROM XX+XX TO YY+YY
- OBLITERATE OLD AIRPORT RD FROM XX TO YY
- TWO-WAY TRAFFIC SHALL BE MOVED TO THE NEW AIRPORT ROAD. TEMPORARY SINGLE LANE CLOSURES CONTROLLED BY FLAGGERS SHALL BE EMPLOYED WHILE PAVING IS OCCURRING.
- TEMPORARY SINGLE LANE CLOSURES ON USH 63 SHALL BE CONTROLLED BY FLAGGERS WHILE PAVING OPERATIONS ON HOSPITAL RD ARE IN EFFECT.



LEGEND

- TRAFFIC CONTROL DRUM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- DIRECTION OF TRAFFIC

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	TRAFFIC CONTROL - AIRPORT RD STAGE 3	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_TC.DWG
LAYOUT NAME - TC-AIR-3

PLOT DATE : 10/9/2017 10:34 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : Custom

BEGIN PROJECT 1560-02-70
STA 314+54

BP: 314+53.82

1 — STOP R1-1 30"X30"

2+00 WINDROSE LN

3 — M2-1 21"X15" / M1-6 24"X24" / JCT JCT 27 77 / JI-2 48"X39" / M1-6 24"X24" / M2-1 21"X15"

4 — SPEED LIMIT 45 R2-1 24"X30"

5 — Hayward POPULATION 2318 SP 60"X24"

8 — Hayward POPULATION 2318 REMOVE

9 — NO ENGINE BRAKING EXCEPT IN EMERGENCY R10-64 30"X36"

11 — SPEED LIMIT 45 W3-5 36"X36"

316+00 318+00 320+00 N 50°40'47.28" E 322+00 324+00

PAVEMENT MARKING EPOXY 4-INCH
SOLID YELLOW LT
DASHED YELLOW RT

PAVEMENT MARKING EPOXY 8-INCH CHANNELIZING

PAVEMENT MARKING EPOXY 4-INCH
BEGIN DASHED YELLOW LT

2 — STOP R1-1 30"X30"

2+00 PARK LN

6 — SPEED LIMIT 55 R2-1 24"X30"

7 — NO PASSING ZONE W14-3 48"X36"

10 — BUCKLE UP IT'S THE LAW REMOVE

NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE, ACTUAL LOCATIONS TO BE DETERMINED AFTER THE SURVEY OF LOCATING NO PASSING ZONES HAS BEEN PHYSICALLY COMPLETED IN THE FIELD.

11 — SPEED LIMIT 45 REMOVE

CURVE DATA
A = 1°22'29"
D = 1°20'00"
T = 549.90 FT
L = 549.91 FT
R = 4297.08 FT
PC: 335+17.81
PI: 337+92.76
PT: 340+67.72
SE = 2.4%

PC: 335+17.81

326+00 328+00 N 50°40'47.28" E 330+00 332+00 334+00 336+00 338+00 340+00

12 — REMOVE

Hospital Rd SP 66"X24" Hospital Rd REMOVE

13 — 16 — D9-2 24"X24" / M6-1 21"X21" / JH-1

PROJECT NO:1560-02-70	HWY: USH 63	COUNTY: SAWYER	PERMANENT SIGNING & MARKING: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PS.DWG
LAYOUT NAME - 0501001
PLOT DATE : 10/10/2017 11:47 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT

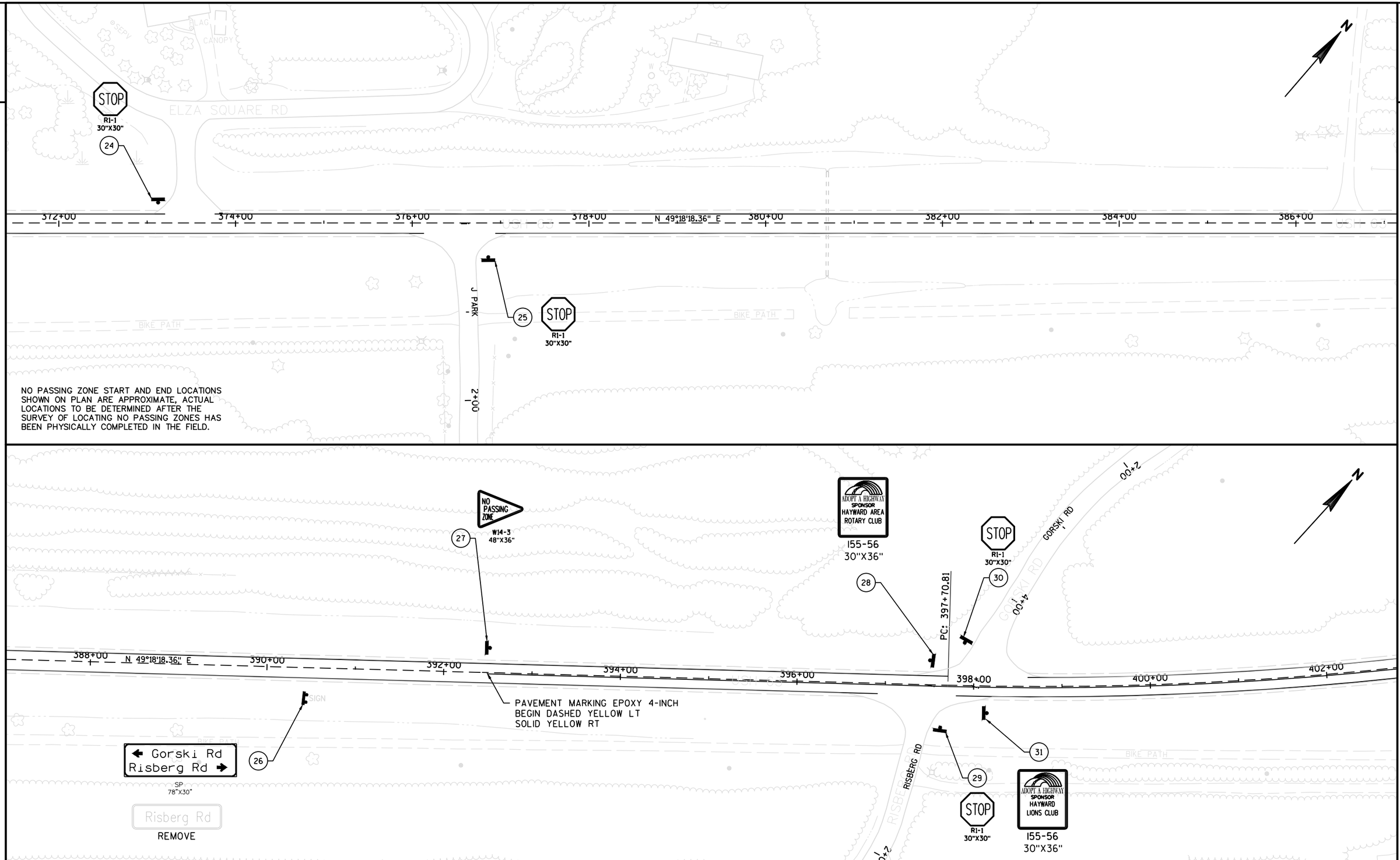
NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE, ACTUAL LOCATIONS TO BE DETERMINED AFTER THE SURVEY OF LOCATING NO PASSING ZONES HAS BEEN PHYSICALLY COMPLETED IN THE FIELD.

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PERMANENT SIGNING & MARKING: USH 63	SHEET E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PS.DWG
LAYOUT NAME - 0501002

PLOT DATE : 10/10/2017 11:47 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT

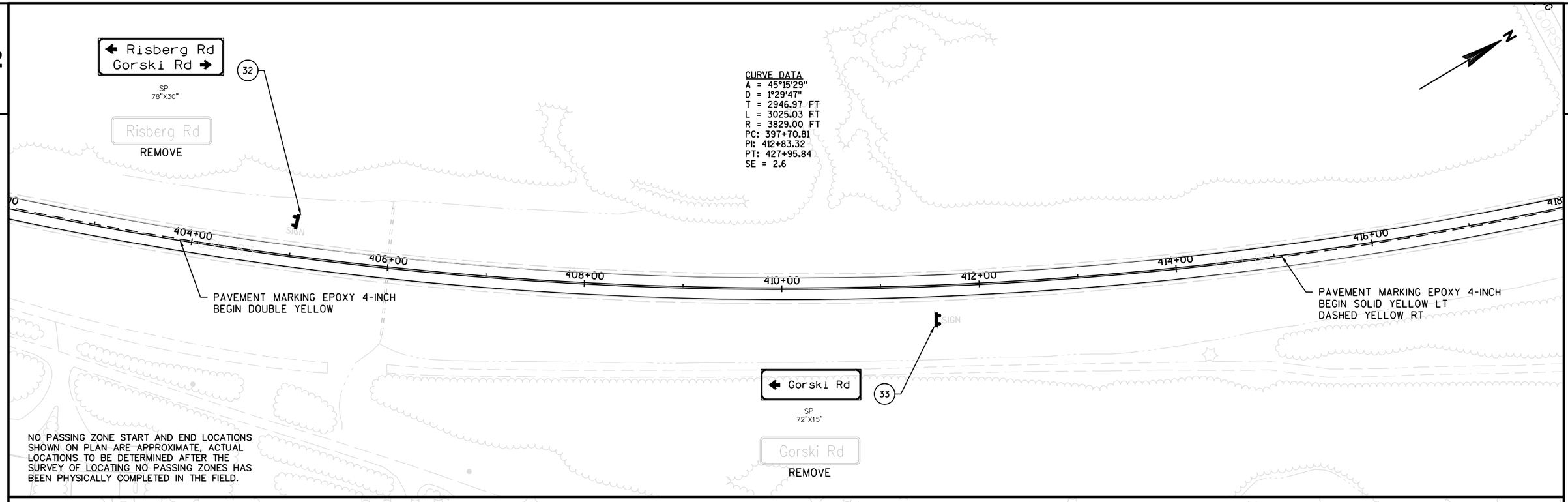
2

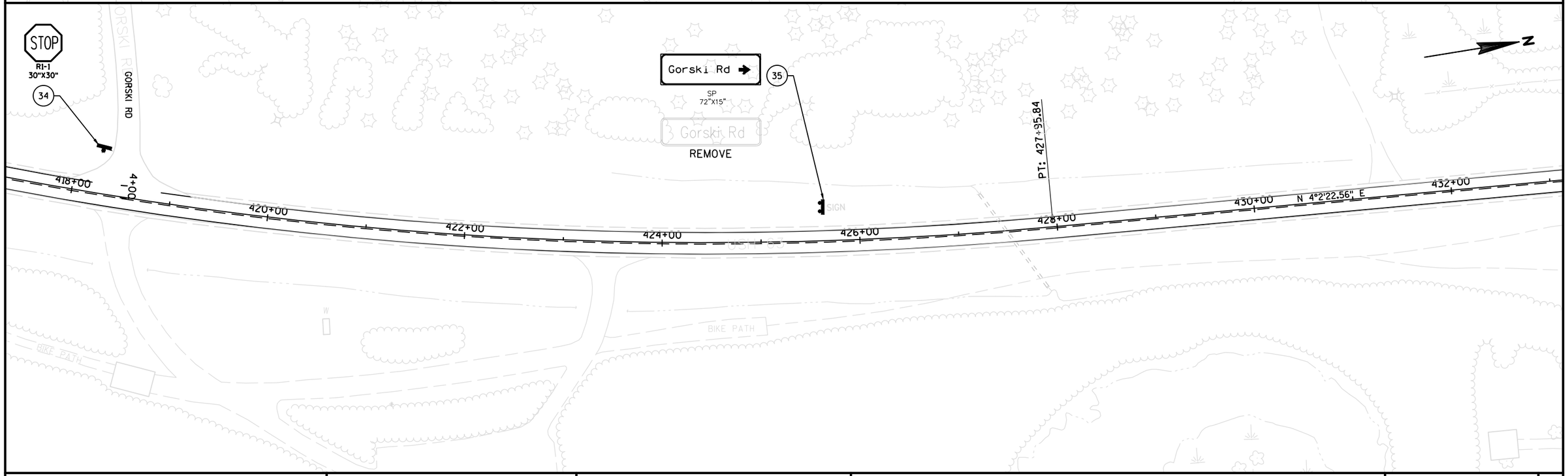


NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE, ACTUAL LOCATIONS TO BE DETERMINED AFTER THE SURVEY OF LOCATING NO PASSING ZONES HAS BEEN PHYSICALLY COMPLETED IN THE FIELD.

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PERMANENT SIGNING & MARKING: USH 63	SHEET	E

2





PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PERMANENT SIGNING & MARKING: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PS.DWG
LAYOUT NAME - 0501004
PLOT DATE : 10/10/2017 11:48 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

434+00 436+00 438+00 440+00 N 4°2'22.56" E 442+00 444+00 446+00 448+00

PAVEMENT MARKING EPOXY 4-INCH
BEGIN DASHED YELLOW LT

36

NO PASSING ZONE
W14-3
48"X36"

NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE, ACTUAL LOCATIONS TO BE DETERMINED AFTER THE SURVEY OF LOCATING NO PASSING ZONES HAS BEEN PHYSICALLY COMPLETED IN THE FIELD.

N

38

Sawyer Co
Skiing/Hiking
Trail

REMOVE

450+00 452+00 454+00 456+00 N 4°2'22.56" E 458+00 460+00 462+00 464+00

SIGN

37

Phipps Rd

SP
72"X15"

Phipps Rd

REMOVE

POSTS

POOL

WATER PARK

SEPV

PLAYGROUND

CAMPGROUND

PHIPPS RD

39

STOP
R1-1
30"X30"

2+00

PROJECT NO:1560-02-70	HWY: USH 63	COUNTY: SAWYER	PERMANENT SIGNING & MARKING: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PS.DWG
LAYOUT NAME - 0501005

PLOT DATE : 10/10/2017 11:48 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

41 Phipps Rd

SP
72"X15"

Phipps Rd
REMOVE

SIGN

STOP
R1-1
30"X30"

42

STONE RD

STOP
R1-1
30"X30"

43

N

466+00 468+00 470+00 472+00 N 4°2'22.56" E 474+00 476+00 478+00

SIGN

40 Stone Rd

SP
72"X15"

Stone Rd
REMOVE

NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE, ACTUAL LOCATIONS TO BE DETERMINED AFTER THE SURVEY OF LOCATING NO PASSING ZONES HAS BEEN PHYSICALLY COMPLETED IN THE FIELD.

Stone Rd

SP
72"X15"

44

Stone Rd
REMOVE

SIGN

NO PASSING ZONE
W14-3
48"X36"

45

PC: 481+17.77

480+00 482+00 484+00 486+00 488+00 490+00 492+00 494+00

PAVEMENT MARKING EPOXY 4-INCH
BEGIN DASHED YELLOW LT
SOLID YELLOW RT

N

46

W11-6
30"X30"

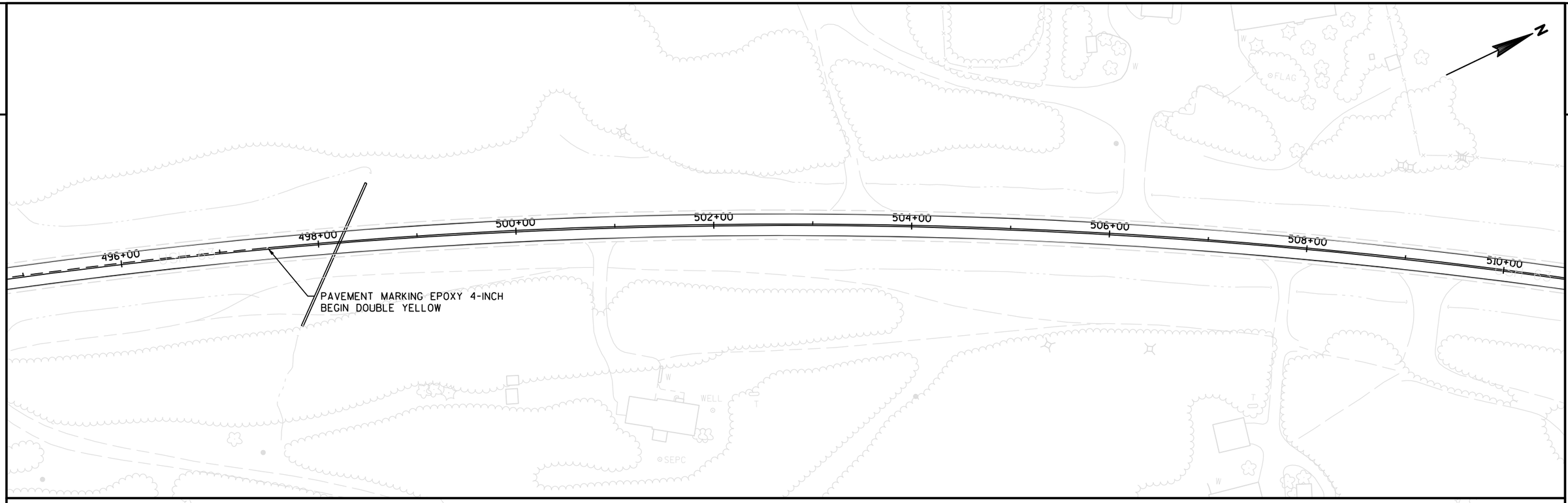
CURVE DATA
A = 50°17'56"
D = 0°59'59"
T = 487.13 FT
L = 503.14 FT
R = 5731.00 FT
PC: 481+17.77
PI: 506+33.34
PT: 531+48.91
SE = 2.0 %

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PERMANENT SIGNING & MARKING: USH 63	SHEET	E

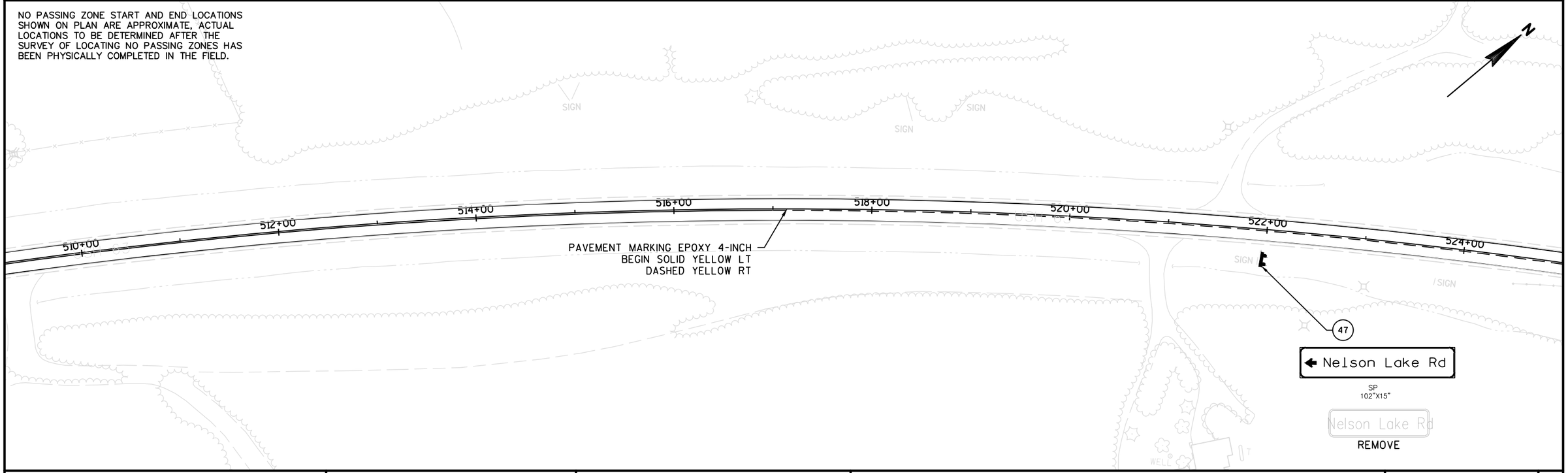
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PS.DWG
LAYOUT NAME - 0501006

PLOT DATE : 10/10/2017 11:48 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



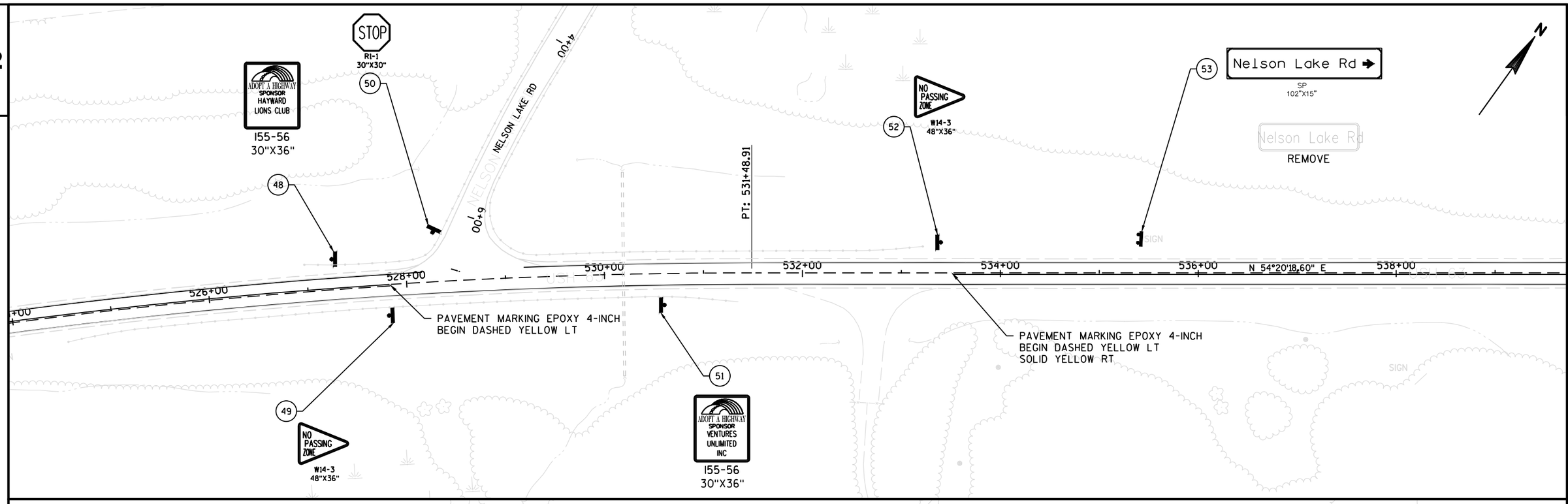
NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE, ACTUAL LOCATIONS TO BE DETERMINED AFTER THE SURVEY OF LOCATING NO PASSING ZONES HAS BEEN PHYSICALLY COMPLETED IN THE FIELD.



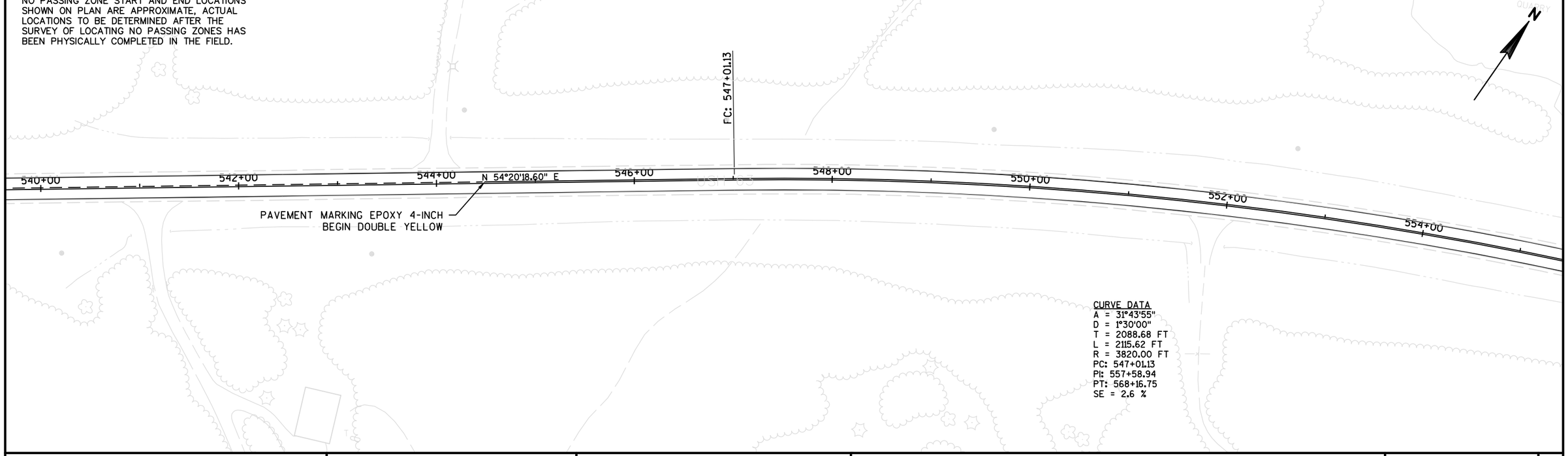
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PERMANENT SIGNING & MARKING: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PS.DWG
LAYOUT NAME - 0501007

PLOT DATE : 10/10/2017 11:49 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT



NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE, ACTUAL LOCATIONS TO BE DETERMINED AFTER THE SURVEY OF LOCATING NO PASSING ZONES HAS BEEN PHYSICALLY COMPLETED IN THE FIELD.



CURVE DATA
A = 31°43'55"
D = 1°30'00"
T = 2088.68 FT
L = 2115.62 FT
R = 3820.00 FT
PC: 547+01.13
PI: 557+58.94
PT: 568+16.75
SE = 2.6 %

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PERMANENT SIGNING & MARKING: USH 63	SHEET	E

2

N

PAVEMENT MARKING EPOXY 4-INCH
BEGIN SOLID YELLOW LT
DASHED YELLOW RT

556+00 558+00 560+00 562+00 564+00 566+00 568+00 570+00

PT: 568+16.75

N 86°04'13.44" E

54 Phipps Landing

55 W11-6 30"X30"

56 S3-1 36"X36"

NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE, ACTUAL LOCATIONS TO BE DETERMINED AFTER THE SURVEY OF LOCATING NO PASSING ZONES HAS BEEN PHYSICALLY COMPLETED IN THE FIELD.

OLD HWY 63

57 STOP R1-1 30"X30"

N

ADOPT A HIGHWAY SPONSOR VENTURES UNLIMITED INC
155-56
30"X36"

59

60 NO PASSING ZONE W14-3 48"X36"

61 W5-52L 12"X36"

63 W5-52R 12"X36"

64B Namekagon River SP 102"X15"

CURVE DATA
A = 40°37'45"
D = 2°29'59"
T = 1591.45 FT
L = 1625.29 FT
R = 2292.00 FT
PC: 577+92.34
PI: 586+04.98
PT: 594+17.63
SE = 3.3%

PC: 577+92.34

PAVEMENT MARKING EPOXY 4-INCH
BEGIN DASHED YELLOW LT
SOLID YELLOW RT

572+00 574+00 576+00 578+00 580+00 582+00 584+00

N 86°04'13.44" E

PAVEMENT MARKING EPOXY 4-INCH
BEGIN DOUBLE YELLOW

PAVEMENT MARKING EPOXY 4-INCH
BEGIN DASHED YELLOW LT

58 NO PASSING ZONE W14-3 48"X36"

Namekagon River SP 102"X15"

60B

62 W5-52R 12"X36"

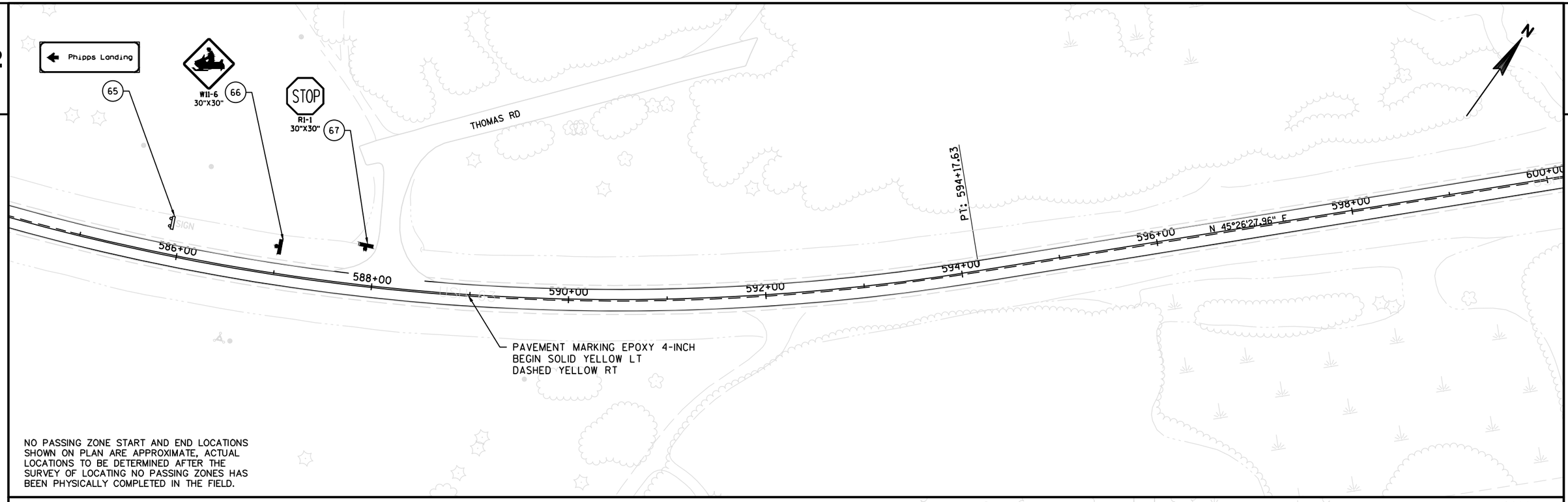
64 W5-52L 12"X36"

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PERMANENT SIGNING & MARKING: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PS.DWG
LAYOUT NAME - 0501009

PLOT DATE : 10/10/2017 11:49 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PERMANENT SIGNING & MARKING: USH 63	SHEET	E

2

Weingarten Rd →

SP
96"X15"

71

Weingarten Rd

REMOVE

616+00 618+00 620+00 N 45°26'27.96" E 622+00 624+00 626+00 628+00 630+00

PC: 629+14.52

NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE, ACTUAL LOCATIONS TO BE DETERMINED AFTER THE SURVEY OF LOCATING NO PASSING ZONES HAS BEEN PHYSICALLY COMPLETED IN THE FIELD.

CURVE DATA
A = 7°48'59"
D = 1°00'00"
T = 781.10 FT
L = 781.70 FT
R = 5730.00 FT
PC: 629+14.52
PI: 633+05.37
PT: 636+96.22
SE = 2.0%

STOP
R1-1
30"X30"
72

STOP
R1-1
30"X30"
74

PT: 636+96.22

632+00 634+00 636+00 638+00 640+00 N 37°37'28.92" E 642+00 644+00 646+00

STOP
R1-1
30"X30"
75

PFEIFER RD 4+00

6+00

← Pfeifer Rd
Mosquito Brook Rd →

73

SP
120"X30"

EXISTING TO REMAIN

77

STOP
R1-1
30"X30"
76

ADOPT A HIGHWAY
SPONSOR
CALVARY
BAPTIST CHURCH
OF THE NORTHWOODS

155-56
30"X36"

MOSQUITO BROOK RD 0+00

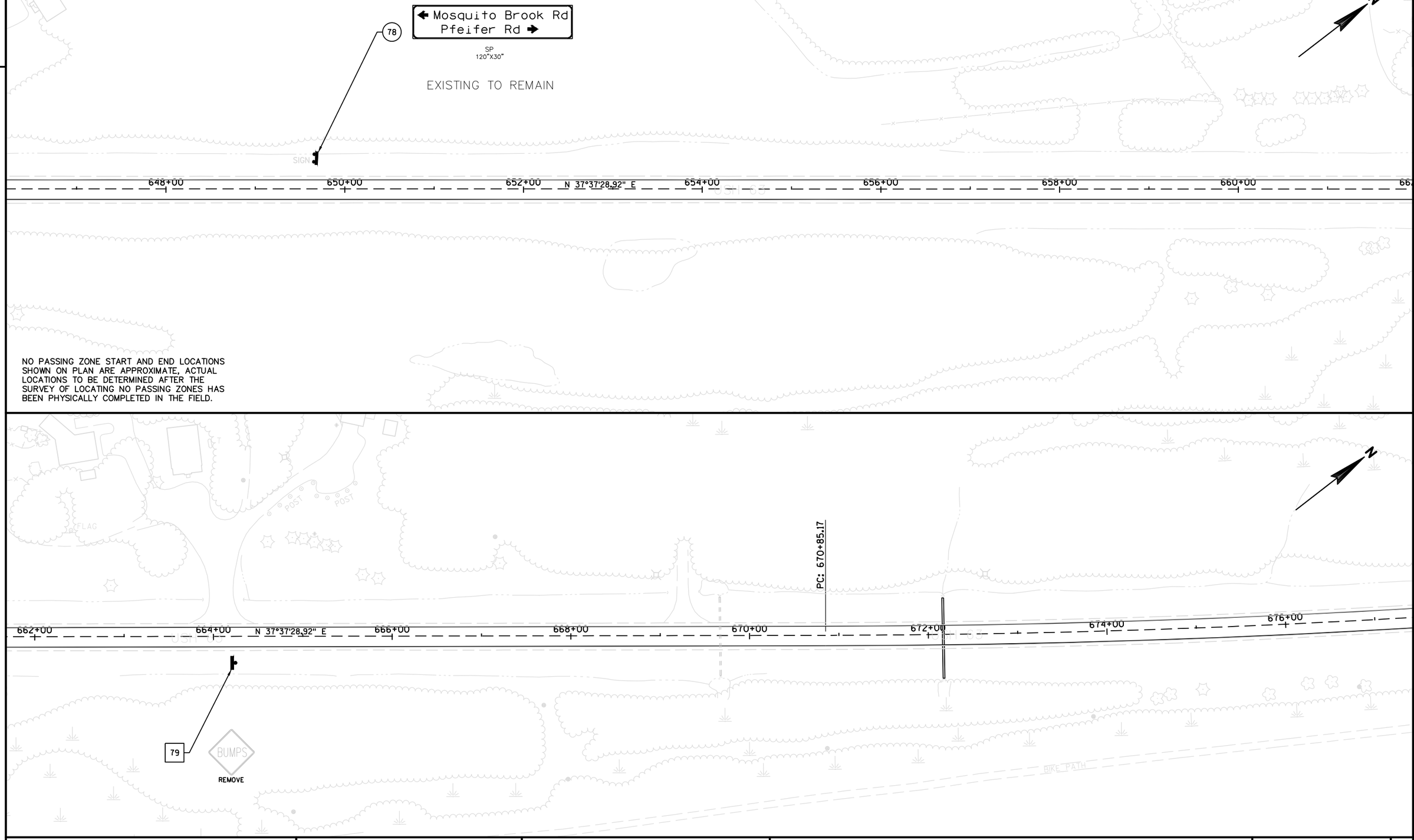
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PERMANENT SIGNING & MARKING: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PS.DWG
LAYOUT NAME - 0501011

PLOT DATE : 10/10/2017 11:50 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2



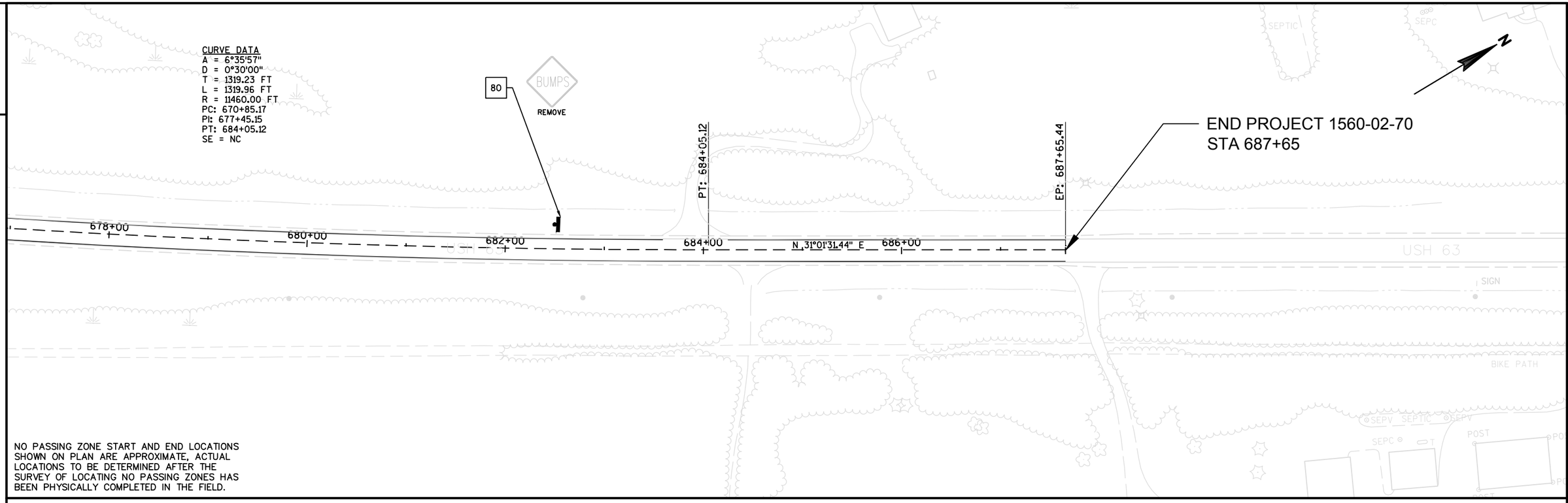
NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE, ACTUAL LOCATIONS TO BE DETERMINED AFTER THE SURVEY OF LOCATING NO PASSING ZONES HAS BEEN PHYSICALLY COMPLETED IN THE FIELD.

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PERMANENT SIGNING & MARKING: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PS.DWG
LAYOUT NAME - 0501012
PLOT DATE : 10/10/2017 11:50 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

CURVE DATA
A = 6°35'57"
D = 0°30'00"
T = 1319.23 FT
L = 1319.96 FT
R = 11460.00 FT
PC: 670+85.17
PI: 677+45.15
PT: 684+05.12
SE = NC



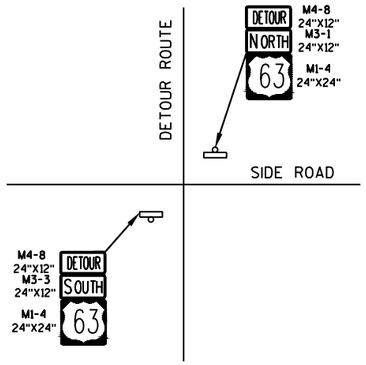
NO PASSING ZONE START AND END LOCATIONS SHOWN ON PLAN ARE APPROXIMATE, ACTUAL LOCATIONS TO BE DETERMINED AFTER THE SURVEY OF LOCATING NO PASSING ZONES HAS BEEN PHYSICALLY COMPLETED IN THE FIELD.

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PERMANENT SIGNING & MARKING: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PS.DWG
LAYOUT NAME - 0501013
PLOT DATE : 10/10/2017 11:50 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

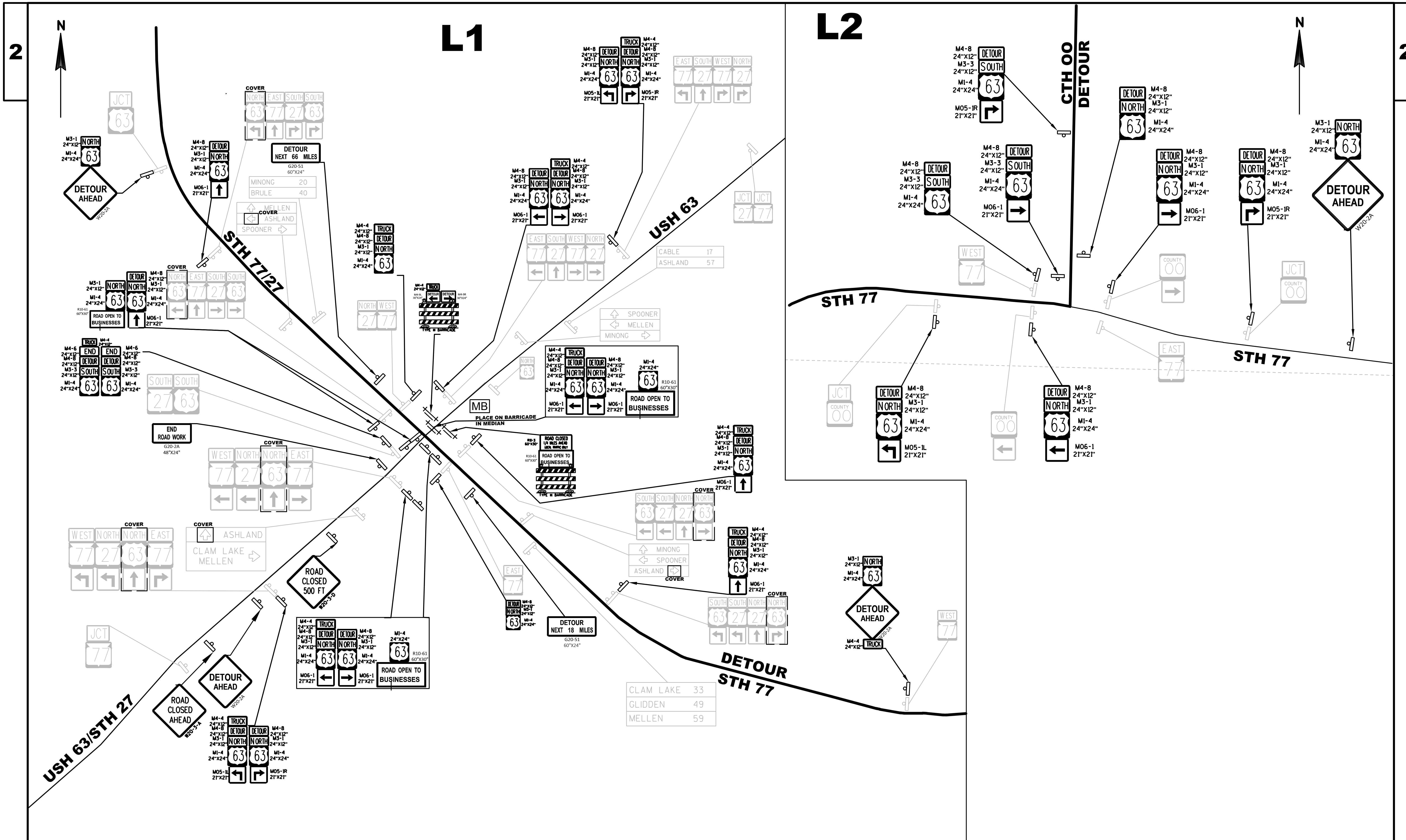
REASSURANCES TO BE PLACED AT THE FOLLOWING INTERSECTIONS:

- AIRPORT RD
- CTH K
- TWIN LAKE RD
- PHIPPS FIRE LANE RD
- JANET RD
- NORTHERN LIGHTS RD



POST ON ALL SIDE ROADS 500' BEFORE THE INTERSECTION.

PROJECT NO:1560-02-70	HWY: USH 63	COUNTY: SAWYER	DETOUR SIGNING PLAN	SHEET	E



PROJECT NO:1560-02-70	HWY:USH 63	COUNTY:SAWYER	DETOUR SIGNING PLAN	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_DETOUR.DWG
LAYOUT NAME - L1-L2
PLOT DATE : 11/9/2017 10:08 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

2

L3

N

CTH 00
DETOUR

TELEMARK
RD 1

CLEAR
LAKE RD

CTH 00
DETOUR

PEDERSON RD

CTH 00
DETOUR

M4-8 24"X12" DETOUR
M3-3 24"X12" SOUTH
M1-4 24"X24" 63
M05-1L 21"X21"

M4-8 24"X12" DETOUR
M3-1 24"X12" NORTH
M1-4 24"X24" 63
M06-1 21"X21"

M4-8 24"X12" DETOUR
M3-1 24"X12" NORTH
M1-4 24"X24" 63
M05-1R 21"X21"

M4-8 24"X12" DETOUR
M3-1 24"X12" NORTH
M1-4 24"X24" 63

M4-8 24"X12" DETOUR
M3-3 24"X12" SOUTH
M1-4 24"X24" 63
M06-1 21"X21"

M4-8 24"X12" DETOUR
M3-3 24"X12" SOUTH
M1-4 24"X24" 63

M4-8 24"X12" DETOUR
M3-3 24"X12" SOUTH
M1-4 24"X24" 63
M05-1R 21"X21"

M4-8 24"X12" DETOUR
M3-3 24"X12" SOUTH
M1-4 24"X24" 63
M06-1 21"X21"

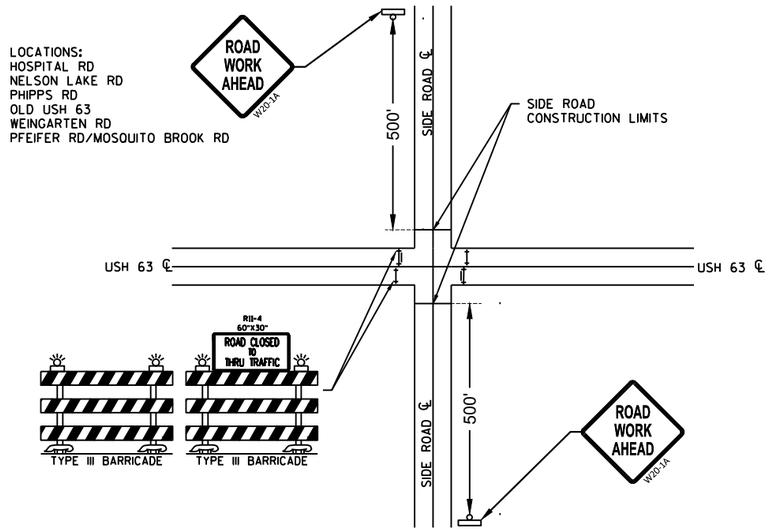
M4-8 24"X12" DETOUR
M3-3 24"X12" SOUTH
M1-4 24"X24" 63

M4-8 24"X12" DETOUR
M3-1 24"X12" NORTH
M1-4 24"X24" 63
M06-1 21"X21"

M4-8 24"X12" DETOUR
M3-1 24"X12" NORTH
M1-4 24"X24" 63
M05-1L 21"X21"

TYPICAL SIDEROAD CONSTRUCTION SIGNING DETAIL

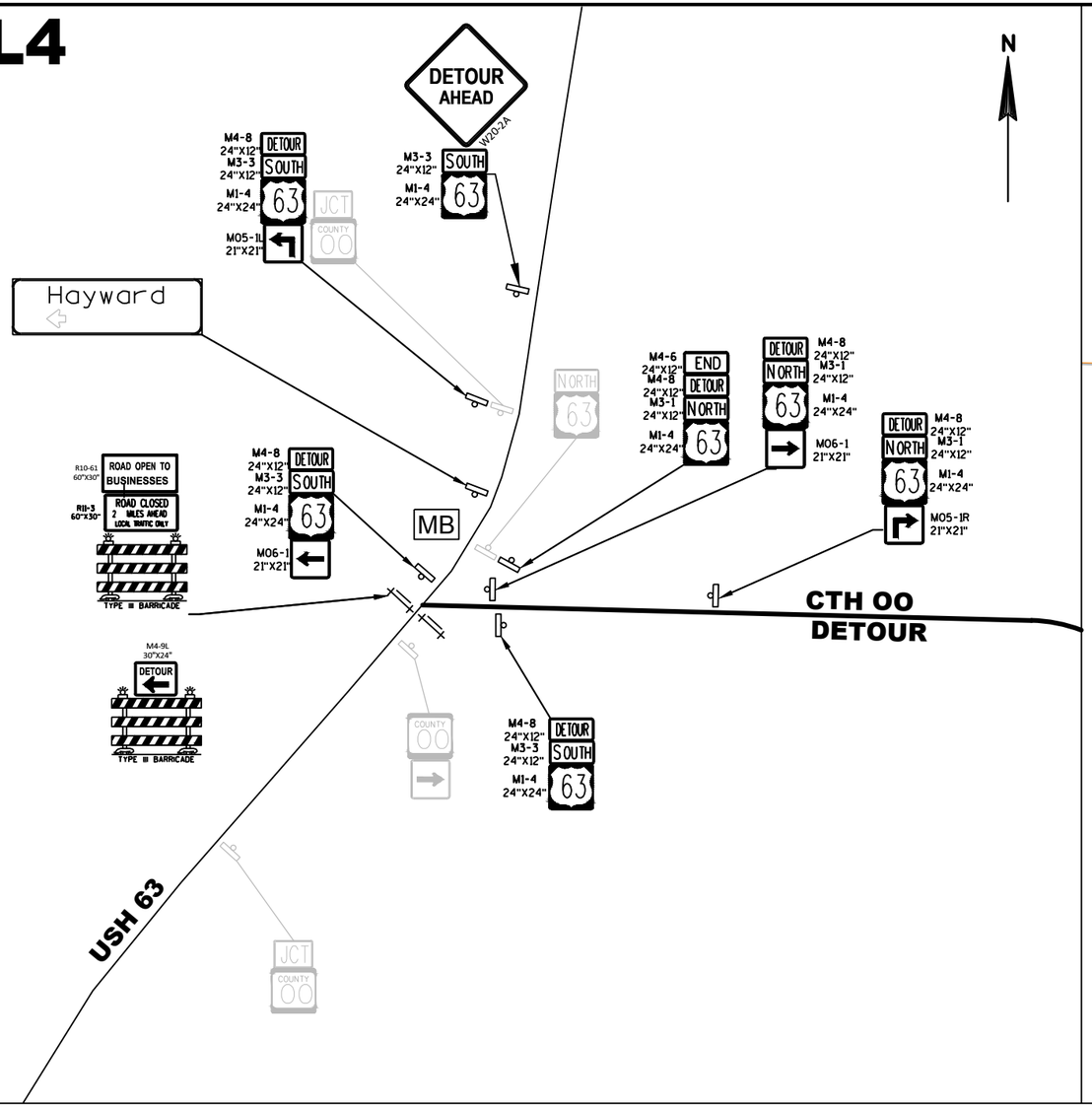
LOCATIONS:
HOSPITAL RD
NELSON LAKE RD
PHIPPS RD
OLD USH 63
WEINGARTEN RD
PFEIFER RD/MOSQUITO BROOK RD



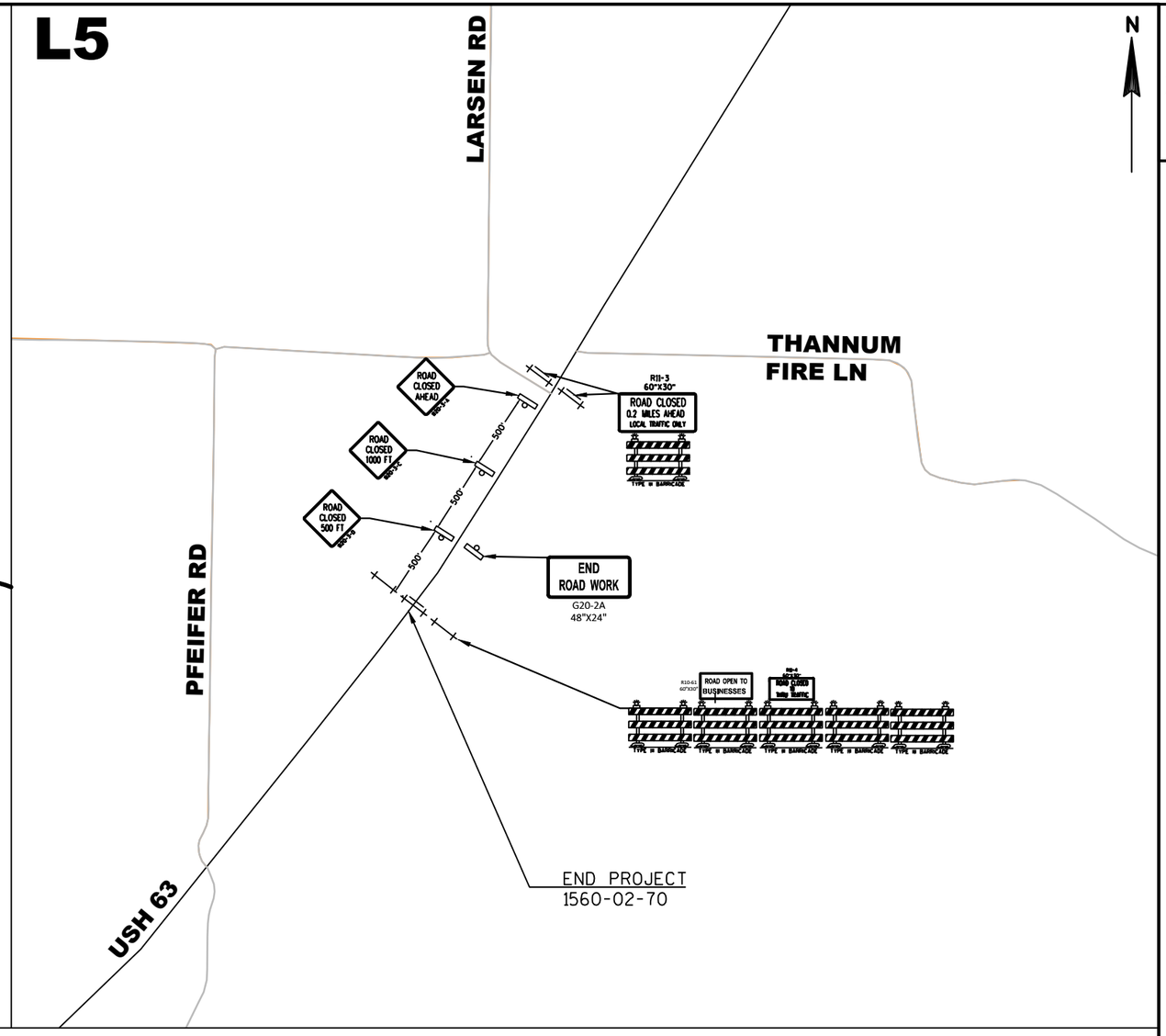
2

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	DETOUR SIGNING PLAN	SHEET	E

L4

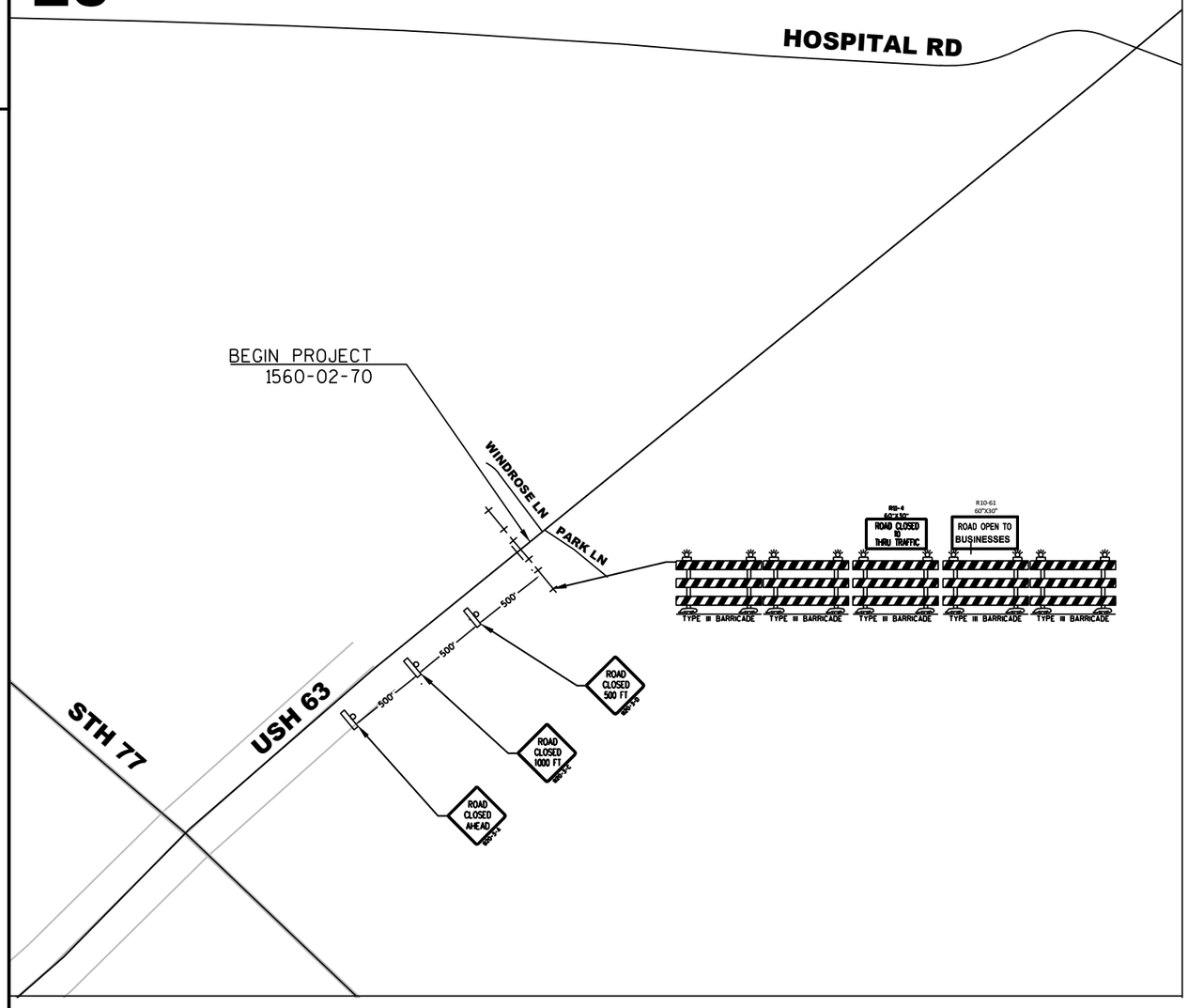


L5



PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	DETOUR SIGNING PLAN	SHEET	E

L6



NOTES:

ACCESS TO WINDROSE LN AND PARK LN IS TO BE MAINTAINED AT ALL TIMES THROUGHOUT THE PROJECT.

THE BARRICADES WILL BE MOVED TO THE NORTH SIDE OF THE INTERSECTION OF USH 63 AND WINDROSE LN / PAR LN AFTER EXISTING CONCRETE HAS BEEN REMOVED AND BASE AGGREGATE DENSE PUT BACK DOWN. "BUMP AHEAD" AND "BUMP" SIGNS SHALL BE ADDED WHEN BARRICADES ARE MOVED NORTH OF THIS INTERSECTION. GRAVEL SHALL BE SHAPED TO PROVIDE A SMOOTH RAMP AT THE PROJECT START LOCATION.

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	DETOUR SIGNING PLAN	SHEET	E

2

N

Middle River
Hines
Maple
Blueberry
Bellwood
Brule
Lake Nebagamon
Winneboujou
Hawthorne
Bennett
Solon Springs
Gordon
Wascott
Chittamo
Stanberry
Lampson
Iron River
Moquah
Ino
Benoit
Delta
Mason
Grandview
Drummond
Cable
Namekagon
Phipps
Seeley
Hayward
Richardson's Bay
CHEQUAMEGON
Cayuga
Morse
Clam Lake
Shanagolden

L4-T
L3-T
L5-T
L2-T
SEE L1

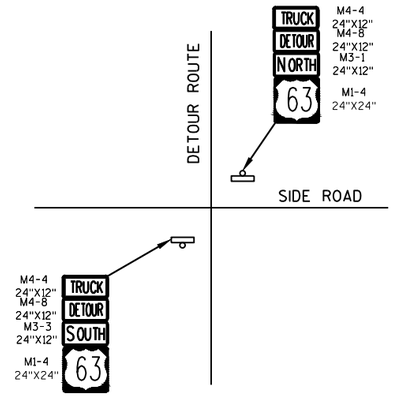
USH 2 TRUCK DETOUR
USH 2
TRUCK DETOUR STH 27
TRUCK DETOUR STH 27
TRUCK DETOUR

END PROJECT 1560-02-70
BEGIN PROJECT 1560-02-70

BAYFIELD COUNTY
DOUGLAS COUNTY
BAYFIELD COUNTY
SAWYER COUNTY
ASHLAND COUNTY
BAYFIELD COUNTY
ASHLAND COUNTY
SAWYER COUNTY

REASSURANCES TO BE PLACED AT THE FOLLOWING INTERSECTIONS:

- NYMAN AVE/HOSPITAL RD
- CTH T
- CTH N
- CTH A
- CTH S



2

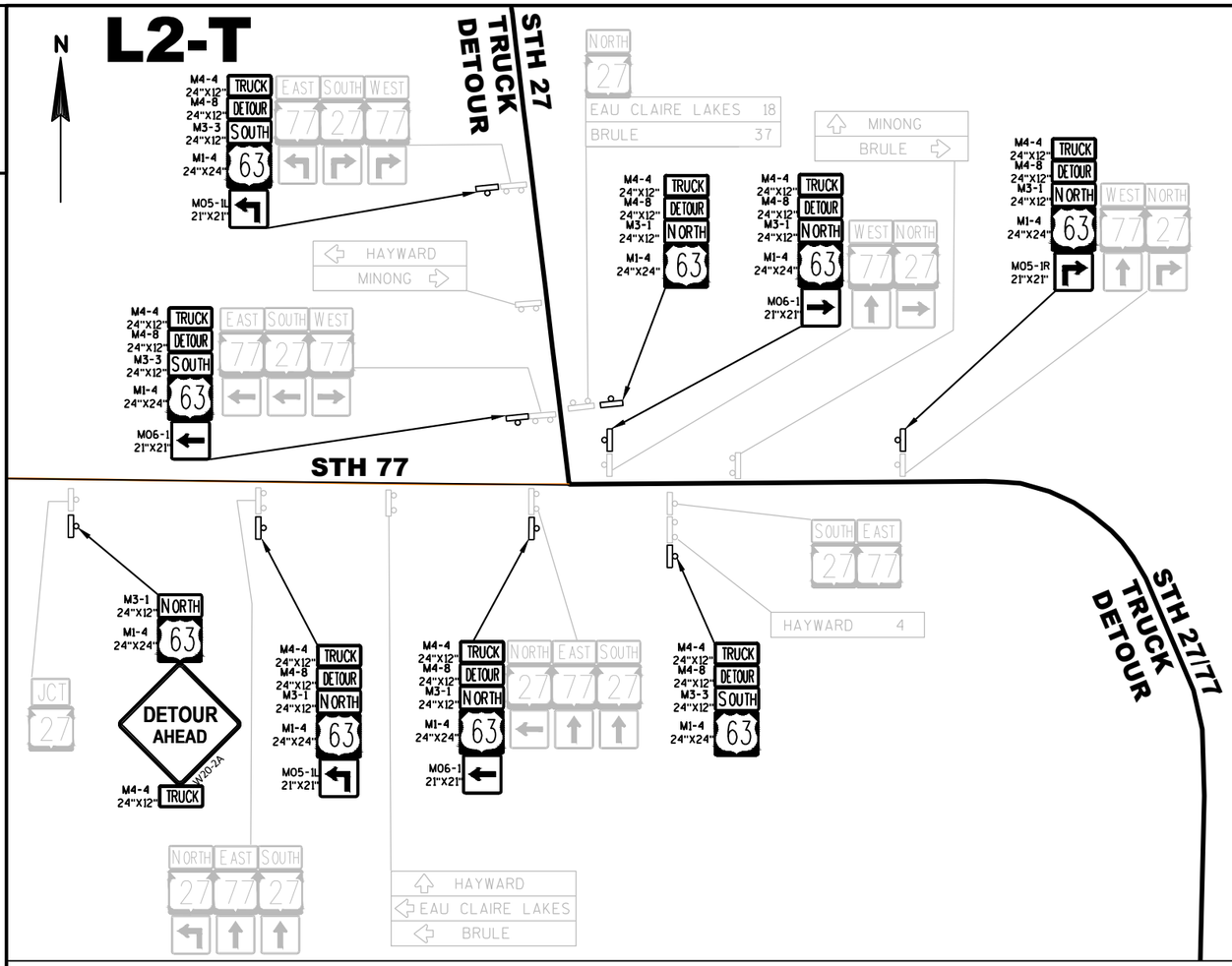
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	TRUCK DETOUR SIGNING PLAN	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_DETOUR.DWG
LAYOUT NAME - DET-TRUCK

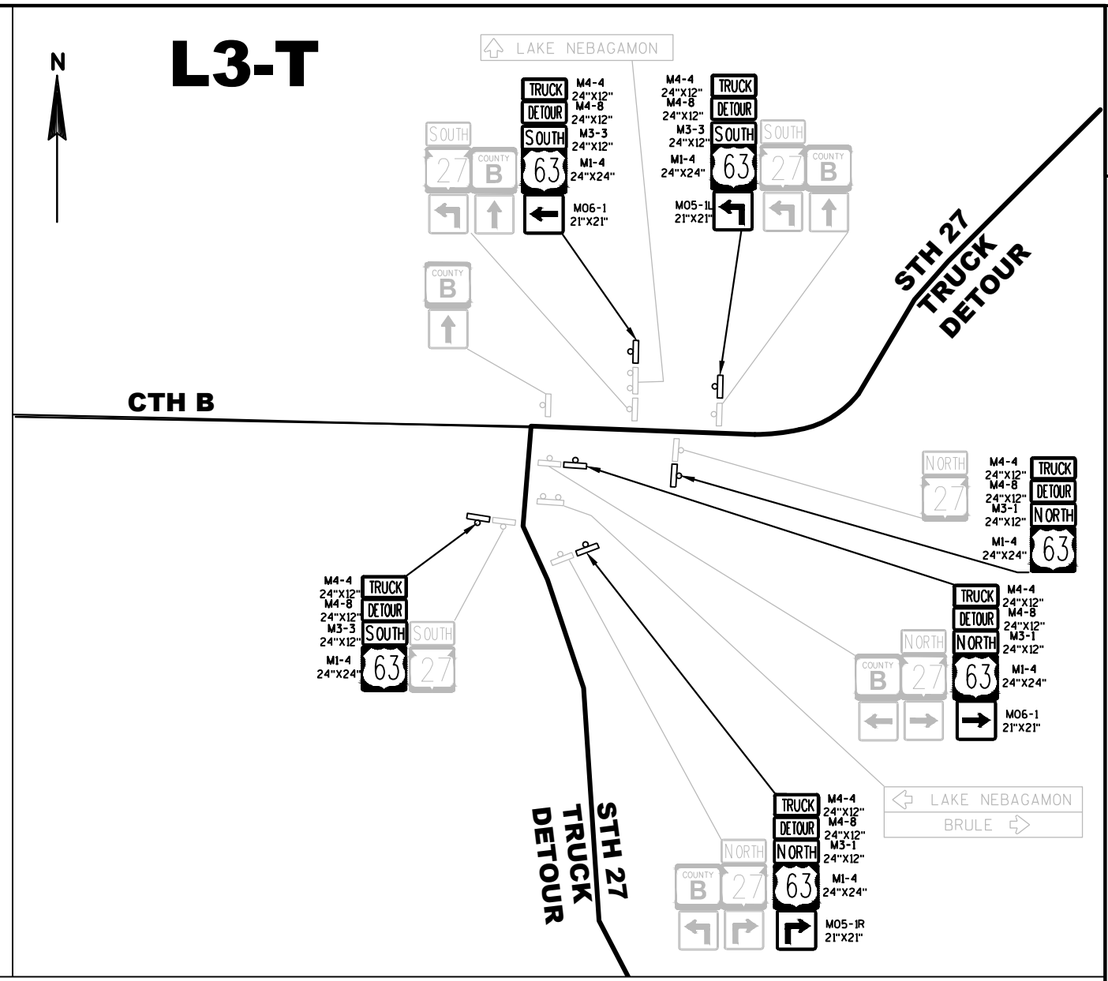
PLOT DATE : 11/9/2017 10:08 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 42

L2-T



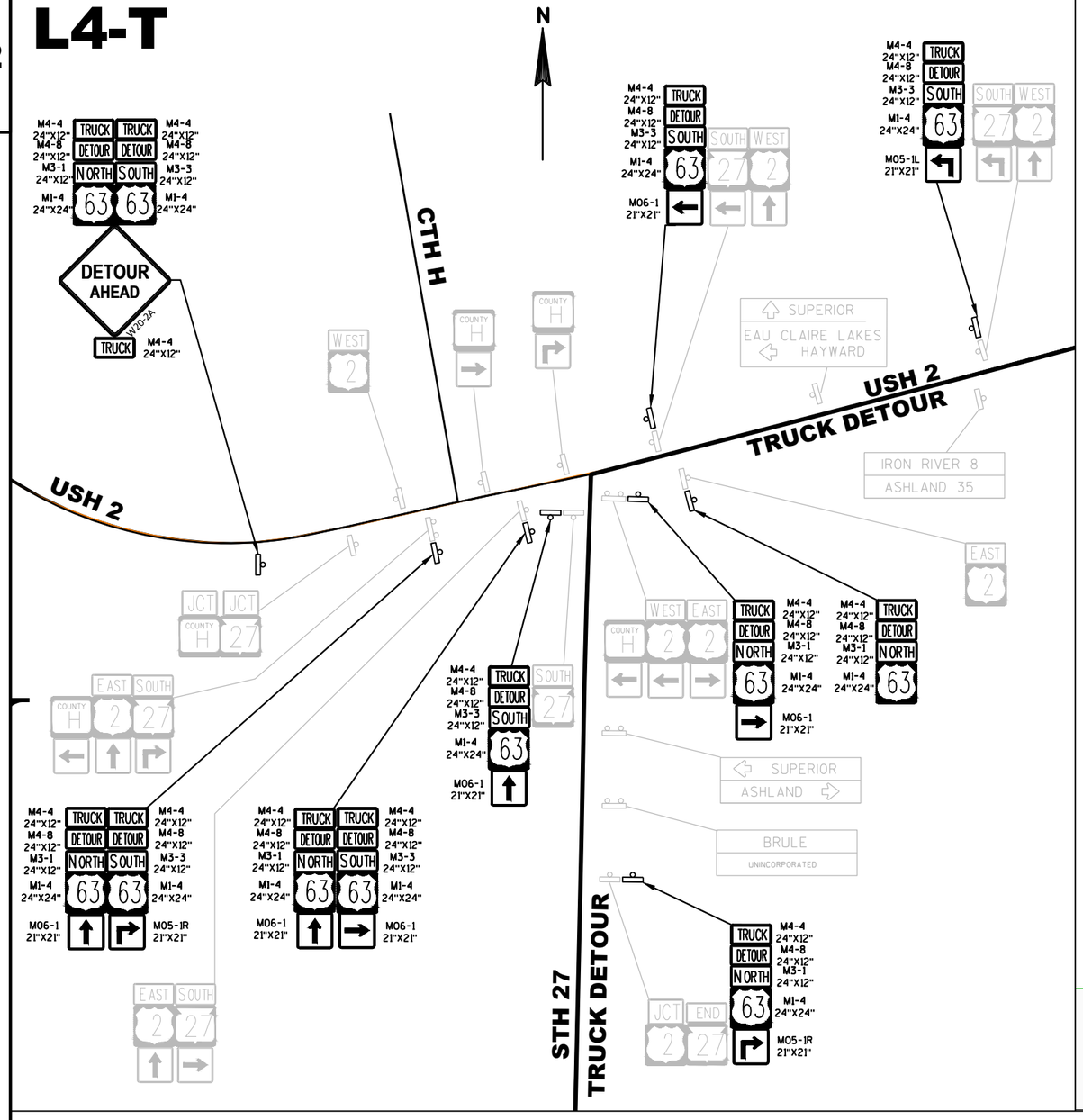
L3-T



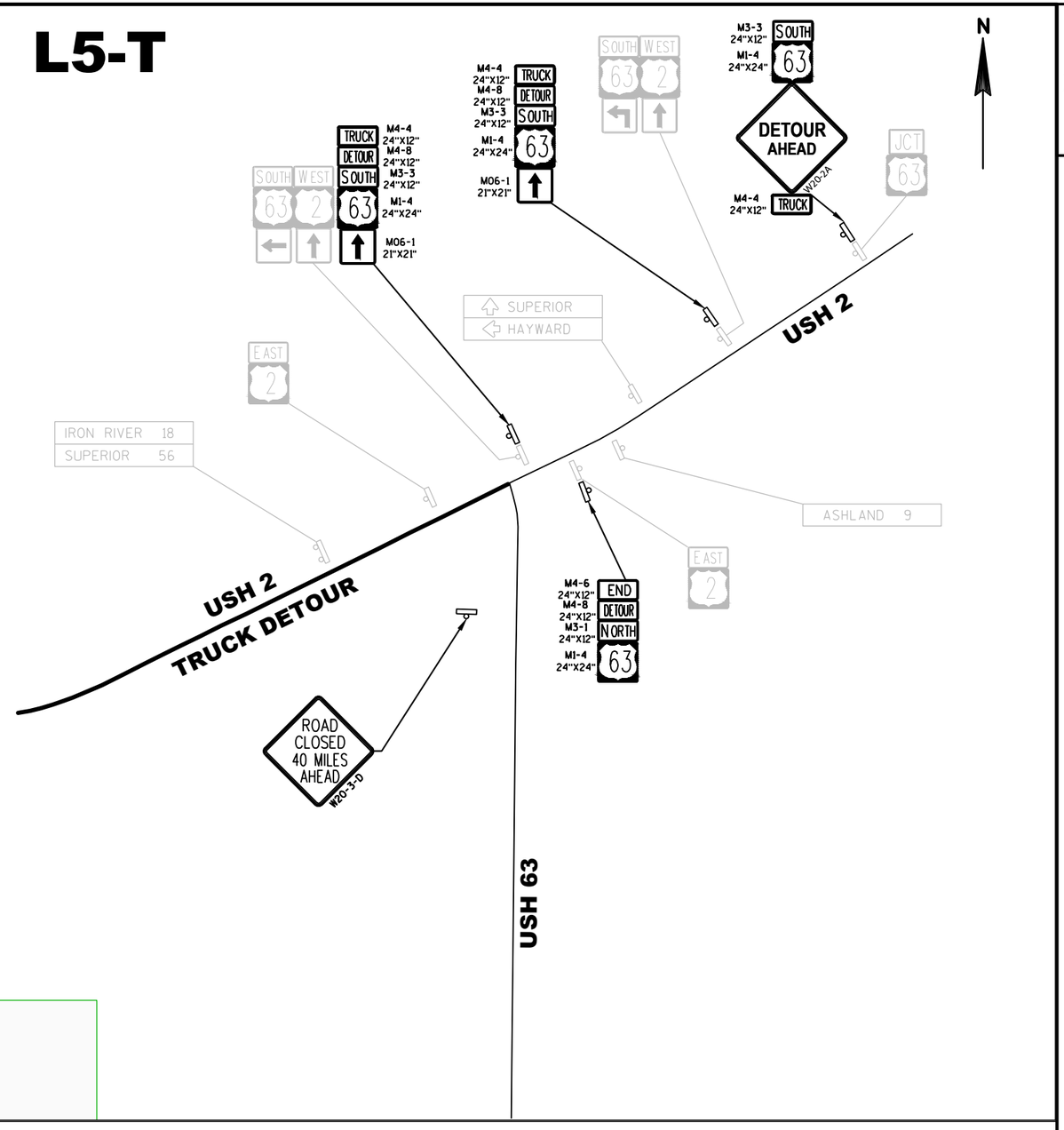
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	TRUCK DETOUR SIGNING PLAN	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_DETOUR.DWG
LAYOUT NAME - L2T-L3T
PLOT DATE : 11/9/2017 10:08 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : **********

L4-T



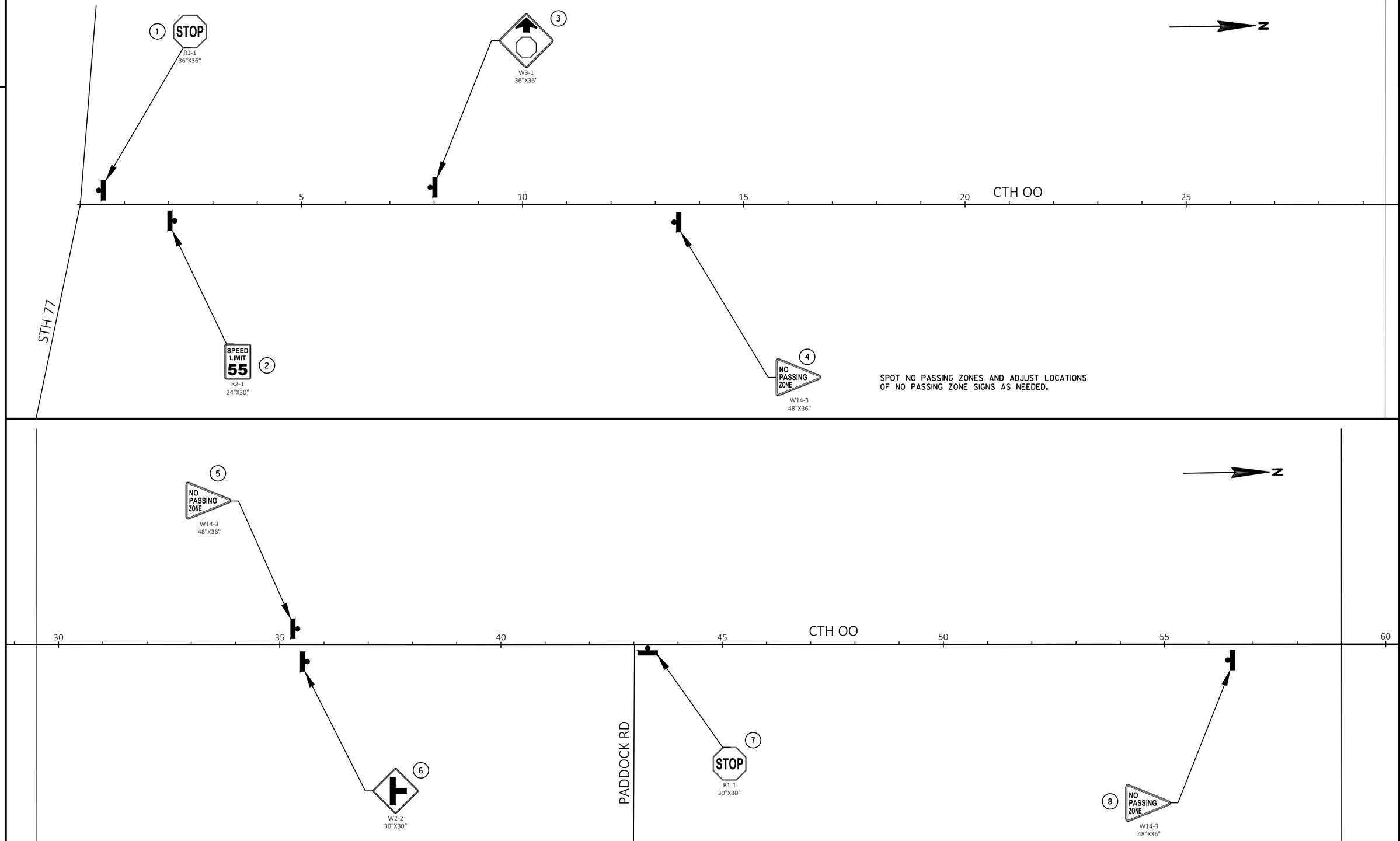
L5-T



2

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	TRUCK DETOUR SIGNING PLAN	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_DETOUR.DWG
LAYOUT NAME - L4T-L5T
PLOT DATE : 11/9/2017 10:08 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 42



SPOT NO PASSING ZONES AND ADJUST LOCATIONS OF NO PASSING ZONE SIGNS AS NEEDED.

2

PROJECT NO: 1560-02-71	HWY: USH 63	COUNTY: SAWYER	CTH OO DETOUR PERMANENT SIGNING	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_DETOUR-SIGNING-OO.DWG
LAYOUT NAME - 1
PLOT DATE : 10/10/2017 9:56 AM
PLOT BY : JENSEN, TRAVIS G
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

N

80 85 90 95

CTH OO

CTH OO

100

R1-1
36"X36"
15 STOP
16 EXCEPT RIGHT TURN
REMOVE

14 STOP
R1-1
36"X36"

TELEMARK RD

9
W3-1
36"X36"

10
REMOVE

15 MPH
11
REMOVE

12 STOP
R1-1
36"X36"

CLEAR LAKE RD

STOP 13
R1-1
36"X36"

17
REMOVE

20
W3-1
36"X36"

N

100 105 110 115 120

CTH OO

PEDERSON RD

27 STOP R1-1
30"X30"

W1-8
18"X24"

28
29
30
31

W11-2
30"X30" 18

AHEAD
W16-9P
24"X12"
19

21
W1-1R
36"X36"

22 15 MPH
W13-1
18"X18"

23 24 25 26
W1-8
18"X24"

CTH OO

PROJECT NO: 1560-02-71	HWY: USH 63	COUNTY: SAWYER	CTH OO DETOUR PERMANENT SIGNING	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_DETOUR-SIGNING-OO.DWG
LAYOUT NAME - 2

PLOT DATE : 10/10/2017 9:56 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

N

(32) W1-1L 36"X36"

(33) 15 MPH W13-1 18"X18"

125 130 135 140 145 150 155

CTH OO

CTH OO

(34) W1-5L 30"X30"

(35) NEXT 2 MILES W57-51 30"X15"

(36) W1-4L 30"X30"

(37) 30 MPH W13-1 18"X18"

(38) (39) (40) (41) (42) (43) W1-8 18"X24"

(50) REMOVE

(51) 30 MPH REMOVE

(44) (45) (46) (47) (48) (49) W1-8 18"X24"

N

(52) W1-6 48"X24"

(53) W1-6 48"X24"

(54) W1-4L 30"X30"

(55) 30 MPH W13-1 18"X18"

(57) CAUTION SKI TRAIL EXISTING TO REMAIN

155 160 165 170 175 180 185

BIRKIE TRAIL

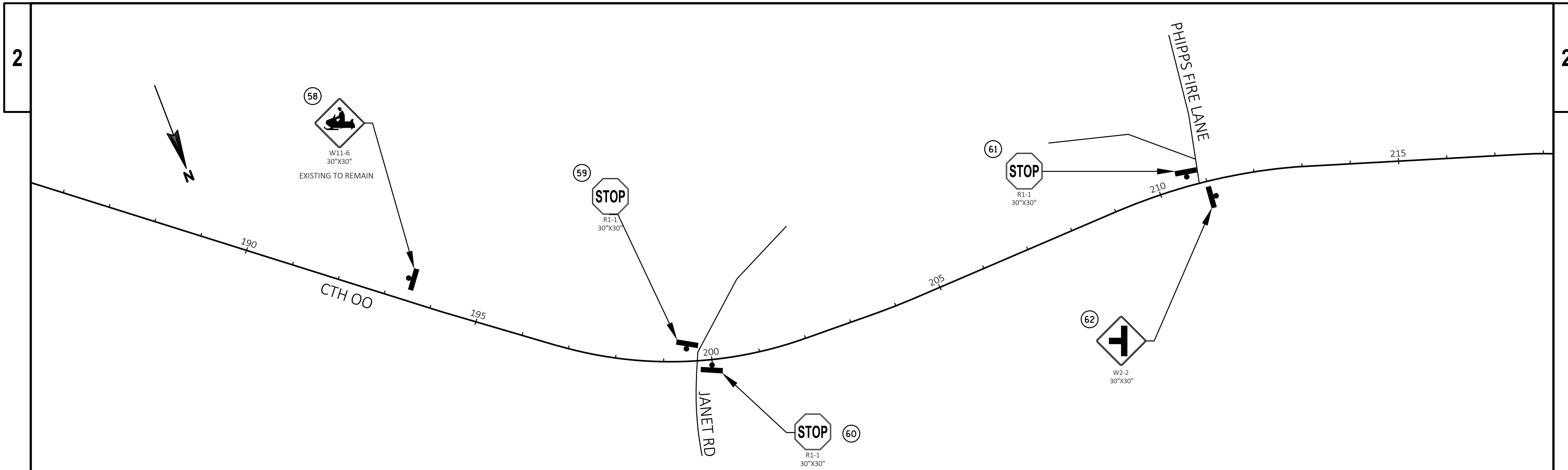
CTH OO

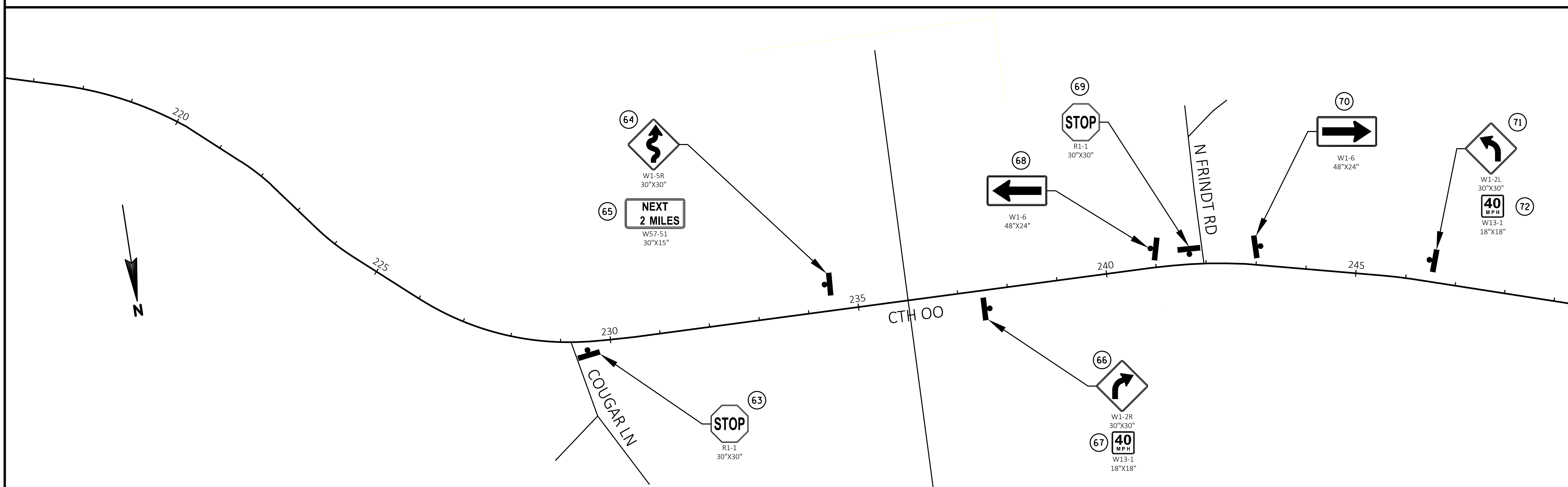
(56) EXISTING TO REMAIN CAUTION SKI TRAIL

PROJECT NO: 1560-02-71	HWY: USH 63	COUNTY: SAWYER	CTH OO DETOUR PERMANENT SIGNING	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_DETOUR-SIGNING-OO.DWG
LAYOUT NAME - 3

PLOT DATE : 10/10/2017 9:56 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:200 FT

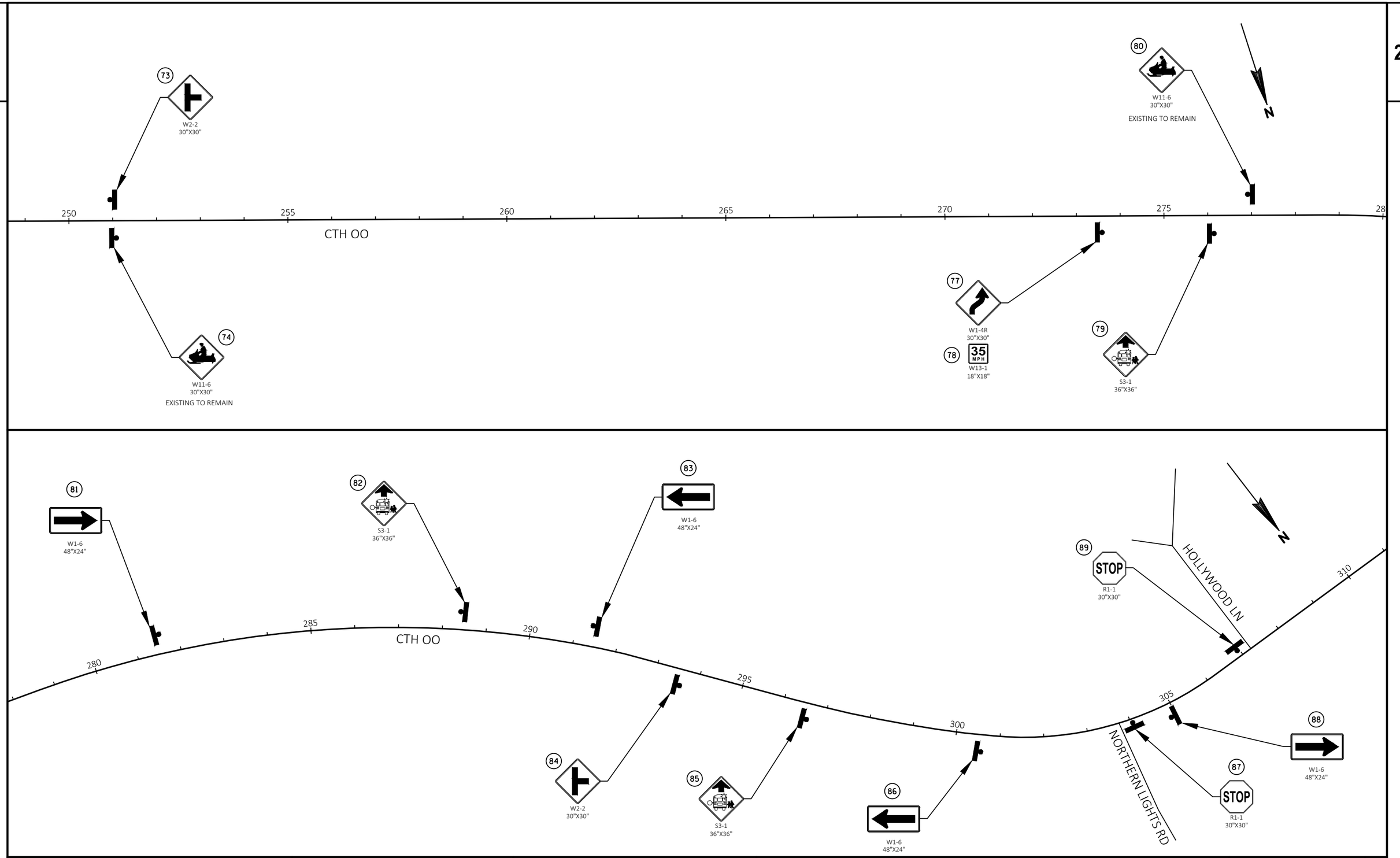




PROJECT NO: 1560-02-71	HWY: USH 63	COUNTY: SAWYER	CTH OO DETOUR PERMANENT SIGNING	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_DETOUR-SIGNING-OO.DWG
LAYOUT NAME - 4
PLOT DATE : 10/10/2017 9:56 AM
PLOT BY : JENSEN, TRAVIS G
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

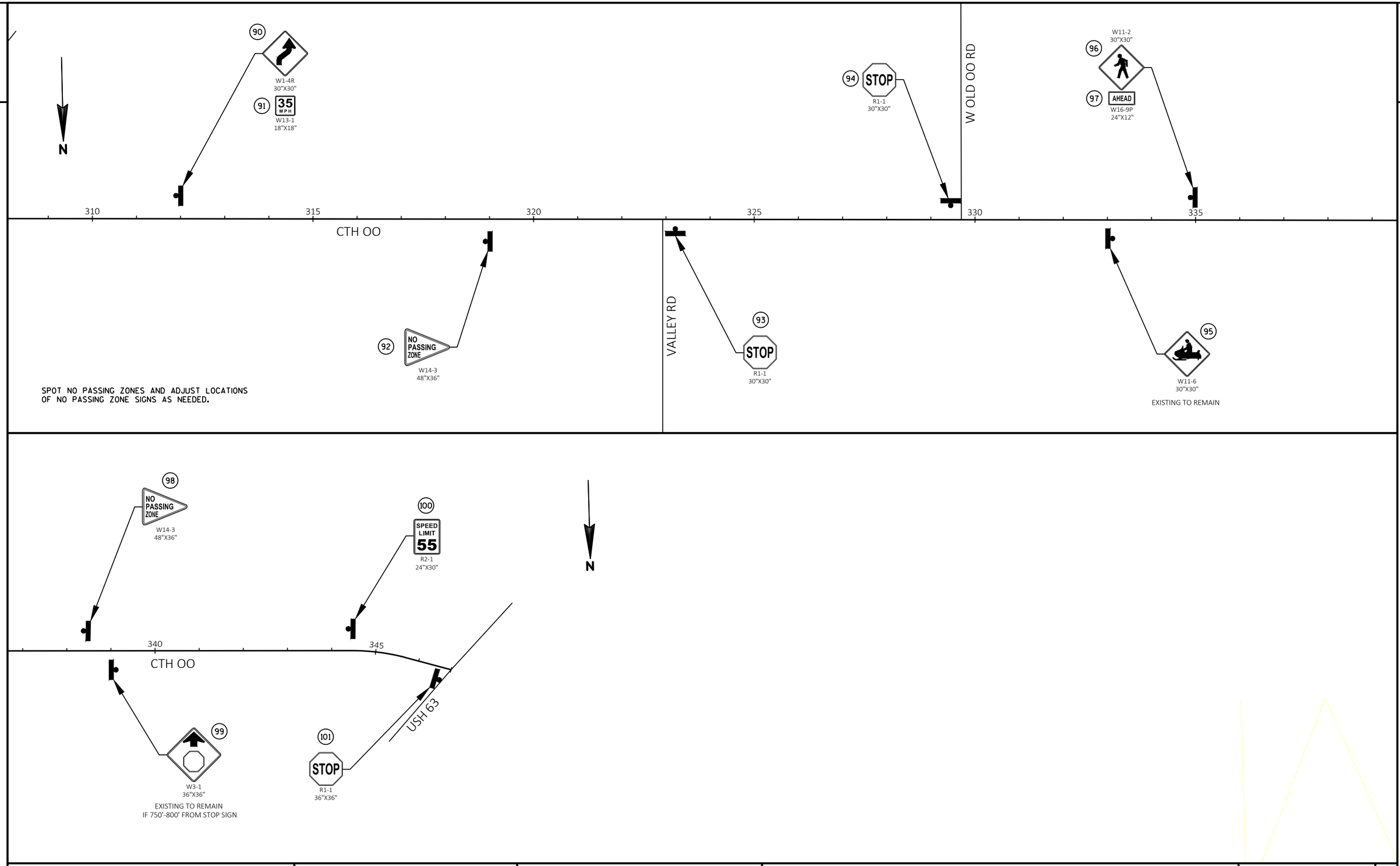
2



PROJECT NO: 1560-02-71	HWY: USH 63	COUNTY: SAWYER	CTH OO DETOUR PERMANENT SIGNING	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_DETOUR-SIGNING-OO.DWG
LAYOUT NAME - 5

PLOT DATE : 10/10/2017 9:56 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:200 FT



SPOT NO PASSING ZONES AND ADJUST LOCATIONS
OF NO PASSING ZONE SIGNS AS NEEDED.

PROJECT NO: 1560-02-71	HWY: USH 63	COUNTY: SAWYER	CTH OO DETOUR PERMANENT SIGNING	SHEET	E

CLEARING & GRUBBING

CATEGORY	STATION	TO	STATION	LOCATION	Clearing 201.0105 STA	Grubbing 201.0205 STA
0020	1005+75	-	1009+25	HOSPITAL RD	5	5
0020	2005+50	-	2008+50	AIRPORT RD	4	4
				TOTAL 0020	9	9

REMOVING ASPHALTIC SURFACE

CATEGORY	STATION	TO	STATION	LOCATION		204.0110 SY
0010	314+54	-	568+76	USH 63	28	16948
0010	417+94	-	419+08	USH 63	28	16
0010	423+01	-	423+87	USH 63	28	16
0010	488+71	-	489+37	USH 63	17	9
0010	508+79	-	509+72	USH 63	33	18
0010	544+00	-	574+73	USH 63	27	8195
0010	559+34	-	560+17	USH 63	27	15
0010	568+76	-	574+73	USH 63	27	1051
0010	576+51	-	578+32	USH 63	27	360
0010	578+32	-	687+65	USH 63	27	7289
0010	632+43	-	633+25	USH 63	27	15
0010	636+50	-	637+39	USH 63	57	32
				TOTAL 0010		33963
0020	1005+25	-	1006+90	HOSPITAL RD		550
0020	2005+55	-	2007+83	AIRPORT RD		608
				TOTAL 0020		1158

REMOVING CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	204.0150 LF
0010	34618	-	34650	RT	35
0010	34649	-	34682	LT	36
0010	52884	-	52931	LT	63
				TOTAL 0010	134

REMOVING PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	204.0100 SY
0010	314+54	-	574+73	USH 63	69384
0010	576+51	-	687+65	USH 63	29637
				TOTAL 0010	99021

REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	STATION	TO	STATION	LOCATION	204.0115 SY
0010	314+54	-	317+56	USH 63	30
0010	373+03	-	373+83	USH 63	13
0010	376+04	-	377+03	USH 63	13
0010	395+93	-	398+73	USH 63	29
0010	417+94	-	419+08	USH 63	13
0010	457+85	-	459+31	USH 63	16
0010	471+63	-	472+33	USH 63	11
0010	477+85	-	478+58	USH 63	13
0010	508+79	-	509+72	USH 63	18
0010	527+95	-	529+35	USH 63	14
0010	568+76	-	570+18	USH 63	14
0010	587+71	-	588+60	USH 63	12
0010	610+63	-	611+57	USH 63	13
0010	641+49	-	643+36	USH 63	29
				TOTAL 0010	240
0020	1005+33	-	1005+33	HOSPITAL RD	13
0020	2004+68	-	2004+68	AIRPORT RD	13
				TOTAL 0020	26

REMOVING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 LF
0010	52701	-	52824	LT	181
0010	52450	-	53129	RT	679
0010	52900	-	53324	LT	520
				TOTAL 0010	1380

EARTHWORK

CATEGORY	STATION	TO	STATION	LOCATION	EXCAVATION COMMON 205.0100 CY	SELECT BORROW 208.1100 CY
0020	1005+33	-	1009+72	HOSPITAL RD	240	865
0020	2004+68	-	2008+94	AIRPORT RD	505	240
				TOTAL 0020	745	1105

OBLITERATING OLD ROAD

CATEGORY	STATION	TO	STATION	LOCATION	214.0100 STA
0020	1006+50	-	1012+06	HOSPITAL RD	5
0020	2007+50	-	2009+00	AIRPORT RD	2
				TOTAL 0020	7

ASPHALT CENTER LINE RUMBLE STRIPS 2-LANE RURAL

CATEGORY	STATION	TO	STATION	LOCATION	465.0475 LF
0010	314+54	-	574+73		26019
0010	576+51	-	687+65		11114
				TOTAL 0010	37133

CONCRETE CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	CONCRETE C&G 6-INCH SLOPED 36-INCH TYPE D 601.0557 LF	CONCRETE C&G CURE & SEAL TREATMENT SPV.0090.01 LF
0010	342+21	-	342+62	LT	83	83
0010	342+92	-	343+52	LT	116	116
				TOTAL 0010	199	199

CULVERT SUMMARY

CATEGORY	STATION	LOCATION	REMOVING SMALL CULVERT PIPES 203.0100 EACH	RCCP CLASS III 24-INCH 522.0124 LF	RCCP CLASS III 30-INCH 522.0130 LF	AEW RCCP 24-INCH 522.1024 EACH	AEW RCCP 30-INCH 522.1030 EACH	MARKERS CULVERT END 633.5200 EACH
0010	361+00	ML	1	64		2		2
0010	366+00	ML	1	100		2		2
0010	435+90	ML	1		140		2	2
0010	437+22	ML	1	130		2		2
0010	498+21	ML	1	158		2		2
0010	607+15	ML	1	100		2		2
0010	612+15	ML	1	100		2		2
0010	625+65	ML	1	90		2		2
0010	639+68	ML	1		112		2	2
0010	672+17	ML	1	90		2		2
		TOTAL 0010	10	832	252	16	4	20

BASE COURSE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	BASE AGG. DENSE 3/4-IN 305.0110 TON	BASE AGG. DENSE 1 1/4-INCH 305.0120 TON
0010	314+54	-	317+56	USH 63	59	406
0010	317+56	-	342+20	USH 63	420	2795
0010	342+20	-	344+32	USH 63	14	240
0010	344+32	-	346+18	USH 63	32	211
0010	346+18	-	348+62	USH 63	21	277
0010	348+62	-	373+03	USH 63	422	2769
0010	373+03	-	373+83	USH 63	18	91
0010	373+83	-	376+04	USH 63	38	251
0010	376+04	-	377+03	USH 63	19	112
0010	377+03	-	395+93	USH 63	324	2144
0010	395+93	-	398+73	USH 63	54	318
0010	398+73	-	417+94	USH 63	327	2179
0010	417+94	-	419+08	USH 63	21	129
0010	419+08	-	423+01	USH 63	67	446
0010	423+01	-	423+87	USH 63	14	98
0010	423+87	-	457+85	USH 63	591	3854
0010	457+85	-	459+31	USH 63	25	166
0010	459+31	-	471+63	USH 63	210	1397
0010	471+63	-	472+33	USH 63	14	79
0010	472+33	-	477+85	USH 63	96	626
0010	477+85	-	478+58	USH 63	13	83
0010	478+58	-	488+71	USH 63	178	1149
0010	488+71	-	489+37	USH 63	11	75
0010	489+37	-	508+79	USH 63	348	2203
0010	508+79	-	509+72	USH 63	14	105
0010	509+72	-	527+96	USH 63	317	2069
0010	527+95	-	529+35	USH 63	30	159
0010	529+35	-	559+34	USH 63	520	3402
0010	559+34	-	560+17	USH 63	13	94
0010	560+17	-	568+76	USH 63	146	974
0010	568+76	-	570+18	USH 63	32	161
0010	570+18	-	574+73	USH 63	79	595
0010	576+50	-	578+43	USH 63	35	253
0010	578+43	-	587+71	USH 63	158	1053
0010	587+71	-	588+60	USH 63	17	101
0010	588+60	-	610+63	USH 63	378	2499
0010	610+63	-	611+57	USH 63	18	107
0010	611+57	-	632+25	USH 63	352	2346
0010	632+43	-	633+25	USH 63	17	93
0010	633+25	-	636+50	USH 63	55	369
0010	636+50	-	637+39	USH 63	16	101
0010	637+39	-	641+49	USH 63	70	465
0010	641+49	-	643+36	USH 63	39	212
0010	643+36	-	687+65	USH 63	763	5024
				TOTAL 0010	6406	42276
0020	1005+33	-	1009+53	HOSPITAL RD	82	1012
0020	2004+68	-	2008+76	AIRPORT RD	96	971
				TOTAL 0020	177	1983

ASPHALTIC CONCRETE PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	TACK COAT 455.0605 GAL	HMA PAVT 3 MT 58-28 S 460.6223 TON	HMA PAVT MT 58-34 S 460.6444 TON	ASPH. SURFACE DETOURS 465.0115 TON	ASPH. SURFACE DRIVEWAYS AND FIELD ENTRANCES 465.0120 TON
0010	0+00	-	347+00	CTH OO				6500	
0010	314+54	-	317+56	USH 63	95	208	220		
0010	317+56	-	342+20	USH 63	394	1104	1303		
0010	342+20	-	344+32	USH 63	34	95	112		
0010	344+32	-	346+18	USH 63	30	83	98		
0010	346+18	-	348+62	USH 63	39	109	129		
0010	348+62	-	373+03	USH 63	391	1094	1291		
0010	373+03	-	373+83	USH 63	27	49	52		
0010	373+83	-	376+04	USH 63	35	99	117		
0010	376+04	-	377+03	USH 63	30	58	63		
0010	377+03	-	395+93	USH 63	302	847	1000		
0010	395+93	-	398+73	USH 63	83	161	176		
0010	398+73	-	417+94	USH 63	307	861	1016		
0010	417+94	-	419+08	USH 63	42	66	72		15
0010	419+08	-	423+01	USH 63	63	176	208		
0010	423+01	-	423+87	USH 63	23	39	45		16
0010	423+87	-	457+85	USH 63	544	1522	1797		
0010	457+85	-	459+31	USH 63	44	84	93		
0010	459+31	-	471+63	USH 63	197	552	652		
0010	471+63	-	472+33	USH 63	19	39	42		
0010	472+33	-	477+85	USH 63	88	247	292		
0010	477+85	-	478+58	USH 63	20	41	44		
0010	478+58	-	488+71	USH 63	162	454	536		
0010	488+71	-	489+37	USH 63	17	30	35		11
0010	489+37	-	508+79	USH 63	311	870	1027		
0010	508+79	-	509+72	USH 63	25	42	49		18
0010	509+72	-	527+96	USH 63	292	817	965		
0010	527+95	-	529+35	USH 63	53	91	98		
0010	529+35	-	559+34	USH 63	480	1344	1586		
0010	559+34	-	560+17	USH 63	22	37	44		16
0010	560+17	-	568+76	USH 63	137	385	454		
0010	568+76	-	570+18	USH 63	53	92	103		
0010	570+18	-	574+73	USH 63	73	204	294		
0010	576+50	-	578+43	USH 63	31	86	123		
0010	578+43	-	587+71	USH 63	148	416	491		
0010	587+71	-	588+60	USH 63	26	51	56		
0010	588+60	-	610+63	USH 63	352	987	1165		
0010	610+63	-	611+57	USH 63	28	54	59		
0010	611+57	-	632+25	USH 63	331	926	1094		
0010	632+43	-	633+25	USH 63	22	37	43		15
0010	633+25	-	636+50	USH 63	52	146	172		
0010	636+50	-	637+39	USH 63	25	40	47		20
0010	637+39	-	641+49	USH 63	66	184	217		
0010	641+49	-	643+36	USH 63	79	130	136		
0010	643+36	-	687+65	USH 63	709	1984	2342		
				TOTAL 0010	6301	16939	19958	6500	110
0020	1005+33	-	1009+53	HOSPITAL RD	100	227	263		
0020	2004+68	-	2008+76	AIRPORT RD	83	187	179		
				TOTAL 0020	182	414	442	0	0

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LANDSCAPING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	SALVAGED TOPSOIL 625.0500 SY	MULCHING 627.0200 SY	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE NO. 20 630.0120 LB
0020	1005+33	-	1009+45	HOSPITAL RD RT	745	745	47	20
0020	1005+33	-	1009+45	HOSPITAL RD LT	3554	3554	224	96
0020	2004+68	-	2008+68	AIRPORT RD RT	768	768	48	21
0020	2004+68	-	2008+68	AIRPORT RD LT	1388	1388	87	37
				TOTAL 0020	6455	6455	407	174

SILT FENCE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	SILT FENCE 628.1504 LF	SILT FENCE MAINTENANCE 628.1520 LF
0020	1005+30	-	1009+27	HOSPTIAL RD RT	377	377
0020	1005+32	-	1006+62	HOSPTIAL RD LT	136	136
0020	1007+09	-	1009+23	HOSPTIAL RD LT	270	270
0020	2004+67	-	2008+60	AIRPORT RD RT	379	379
0020	2004+67	-	2008+62	AIRPORT RD LT	470	470
				TOTAL 0020	1632	1632

PAVEMENT MARKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	MARKING LINE EPOXY 4-INCH 646.1020 LF	MARKING LINE GROOVED WET REF EPOXY 4-INCH 646.1040 LF	MARKING LINE EPOXY 8-INCH 646.3020 LF	PAVT MARKING SAME DAY EPOXY 4-INCH 646.4520 LF	LOCATING NO PASSING ZONE 648.0100 MI
0010	574+73	-	576+50	RT & LT	354				
0010	314+54	-	315+33	RT		79			
0010	316+16	-	347+10	RT		3094			
0010	348+14	-	376+13	RT		2799			
0010	376+94	-	396+92	RT		1998			
0010	397+80	-	458+20	RT		6040			
0010	459+15	-	569+05	RT		10990			
0010	570+08	-	574+73	RT		465			
0010	576+50		641+58	RT		6508			
0010	642+68	-	687+65	RT		4497			
0010	314+54	-	342+36	LT		2782			
0010	343+44	-	373+20	LT		2976			
0010	373+76	-	397+71	LT		2395			
0010	398+61	-	418+20	LT		1959			
0010	418+90	-	471+78	LT		5288			
0010	472+18	-	477+96	LT		578			
0010	478+43	-	528+16	LT		4973			
0010	529+19	-	574+73	LT		4554			
0010	576+50	-	587+76	LT		1126			
0010	588+53	-	610+79	LT		2226			
0010	611+39	-	642+26	LT		3087			
0010	643+13	-	683+59	LT		4046			
0010	684+25	-	687+65	LT		340			
0010	314+54	-	687+65	CL				52618	
0010	314+54	-	315+33	RT			80		
0010	314+54	-	687+65	USH 63					7.03
0010	0+00	-	347+00	CTH OO					6.57
				TOTAL 0010	354	72801	80	52618	14

TEMPORARY MARKING LINE PAINT 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	649.0105 LF
0010	314+54	-	687+65	CENTERLINE	37310
				TOTAL 0010	37310

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MGS GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	MGS GUARDRAIL 3K 614.2330 LF	MGS GUARDRAIL SHORT RADIUS 614.2350 LF	MGS GUARDRAIL EAT 614.2610 EACH
0010	524+00	-	531+56	RT	756		
0010	523+47	-	524+00	RT			1
0010	531+56	-	532+09	RT			1
0010	524+29	-	524+82	LT			1
0010	533+10	-	533+63	LT			1
0010	524+82	-	527+82	LT	300		
0010	527+82	-	528+53	LT		100	
0010	528+87	-	529+65	LT		160	
0010	529+65	-	533+10	LT	345		
				TOTAL 0010	1401	260	4

CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	SUBGRADE 650.4500 LF	BASE 650.5000 LF	RESURFACING REFERENCE 650.8000 LF	SLOPE STAKES 650.9920 LF
0010	314+54	-	574+73	ML		26019	26019	
0010	576+51	-	687+65	ML		11114	11114	
				TOTAL 0010	0	37133	37133	0
0020	1005+25	-	1009+72	HOSPITAL RD	447	447		447
0020	2004+65	-	2008+94	AIRPORT RD	429	429		429
				TOTAL 0020	876	876	0	876

SAWING CONCRETE

CATEGORY	STATION	TO	STATION	LOCATION	690.0250 LF
0010	314+54	-	314+54	ML	43
				TOTAL 0010	43

CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	650.5500 LF
0010	342+21	-	342+62	LT	83
0010	342+92	-	343+52	LT	116
				TOTAL 0010	199

CONSTRUCTION STAKING PIPE CULVERTS

CATEGORY	STATION	LOCATION	650.6000 EACH
0010	361+00	USH 63	1
0010	366+00	USH 63	1
0010	435+90	USH 63	1
0010	437+22	USH 63	1
0010	498+21	USH 63	1
0010	607+15	USH 63	1
0010	612+15	USH 63	1
0010	625+65	USH 63	1
0010	639+68	USH 63	1
0010	672+17	USH 63	1
		TOTAL 0010	10

SAWING ASPHALT

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 LF
0010	418+39	-	418+67	RT PE	28
0010	423+29	-	423+56	RT PE	28
0010	488+96	-	489+13	LT PE	17
0010	509+10	-	509+44	RT PE	33
0010	559+62	-	559+89	LT PE	27
0010	632+89	-	633+12	LT PE	27
0010	636+33	-	636+90	LT PE	57
				TOTAL 0010	217

PERMANENT SIGNING

CATEGORY		STATION	LOCATION	SIGN CODE	POSTS WOOD 4X6-INCH X 16-FT 634.0616 EACH	SIGNS TYPE II REFLECTIVE H 637.2210 SF	SIGNS TYPE II REFLECTIVE F 637.2230 SF	SIZE	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH	MESSAGE	REMARKS
MAINLINE PERMAMENT SIGNING												
0010	1	315+00	LT	R1-1	1	5.18		30"X30"	1	1	STOP	ON WINDROSE LN
0010	2	316+00	RT	R1-1	1	5.18		30"X30"	1	1	STOP	ON PARK LN
0010	3&4	317+00	LT	J1-2	1	13.00		48"X39"	1	1	LINE 1: JCT JCT	
0010											LINE 2: STH 27 STH 77	
0010	5	319+00	LT	R2-1	1	5.00		24"X30"	1	1	SPEED LIMIT 45	
0010	6	319+95	RT	R2-1	1	5.00		24"X30"	1	1	SPEED LIMIT 55	
0010	7	319+95	RT	W14-3			5.56	48"X36"	1		NO PASSING ZONE	
0010	8	320+25	LT	SPECIAL	2	10.00		60"X24"	1	2	HAYWARD POPULATION 2318	
0010	9	321+50	LT	R10-64	1	7.50		30"X36"	1	1	NO ENGINE BREAKING EXCEPT IN EMERGENCY	
0010	10	321+85	RT	R5-53-A	1	3.00		18"X24"	1	1	BUCKLE UP IT'S THE LAW	
0010	11	325+80	LT	W3-5	1		9.00	36"X36"	1	1	SPEED LIMIT 45 AHEAD	
0010	12	335+65	RT	J13-1	1	7.50		24"X45"	1	1	HOSPITAL LEFT TURN ARROW	
0010	13	339+70	RT	SPECIAL	2	11.00		66"X24"	1	2	HOSPITAL RD LEFT/RIGHT ARROWS	REMOVE EXISTING HOSPITAL RD
0010	14	342+00	RT	J13-1	1	7.50		24"X45"	1	1	AIRPORT RIGHT ARROW	
0010	15	344+00	LT	J4-1	1	6.00		24"X36"	1	1	SOUTH USH 63	
0010	16	345+50	LT	R1-1	1	5.18		30"X30"	1	1	STOP	ON HOSPITAL RD
0010	17	345+60	RT	J13-1	1	7.50		24"X45"	1	1	HOSPITAL RD LEFT ARROW	
0010	18	346+35	RT	R1-1	1	5.18		30"X30"	1	1	STOP	ON HOSPITAL RD
0010	19	346+55	LT	J13-1	1	7.50		24"X45"	1	1	HOSPITAL RD RIGHT ARROW	
0010	20	349+00	RT	J4-1	1	6.00		24"X36"	1	1	NORTH USH 63	
0010	21	351+95	LT	SPECIAL	2	11.00		66"X24"	1	2	HOSPITAL RD LEFT/RIGHT ARROWS	REMOVE EXISTING HOSPITAL RD
0010	22	354+00	LT	J13-1	1	7.50		24"X45"	1	1	AIRPORT LEFT ARROW	
0010	23	360+50	LT	J13-1	1	7.50		24"X45"	1	1	HOSPITAL RD RIGHT TURN ARROW	
0010	24	373+15	LT	R1-1	1	5.18		30"X30"	1	1	STOP	ON ELZA SQUARE RD
0010	25	376+85	RT	R1-1	1	5.18		30"X30"	1	1	STOP	ON J PARK
0010	26	390+45	RT	SPECIAL	2	16.25		78"X30"	1	2	LINE 1: LEFT ARROW GORSKI RD	REMOVE EXISTING RISBERG RD
0010											LINE 2: RISBER RD RIGHT ARROW	
0010	27	392+50	LT	W14-3	1		5.56	48"X36"	1	1	NO PASSING ZONE	
0010	28	397+50	LT	I55-56	1	7.50		30"X36"	1	1	ADOPT A HIGHWAY HAYWARD AREA ROTARY CLUB	
0010	29	397+65	RT	R1-1	1	5.18		30"X30"	1	1	STOP	ON RISBERG RD
0010	30	397+90	LT	R1-1	1	5.18		30"X30"	1	1	STOP	ON GORSKI RD
0010	31	398+15	RT	I55-56	1	7.50		30"X36"	1	1	ADOPT A HIGHWAY HAYWARD LIONS CLUB	
0010	32	405+00	LT	SPECIAL	2	16.25		78"X30"	1	2	LINE 1: LEFT ARROW RISBERG RD	
0010											LINE 2: GORSKI RD RIGHT ARROW	
0010	33	411+55	RT	SP	2	7.50		72"X15"	1	2	LEFT ARROW GORSKI RD	
0010	34	418+30	LT	R1-1	1	5.18		30"X30"	1	1	STOP	ON GORSKI RD
0010	35	425+60	LT	SPECIAL	2	7.50		72"X15"	1	2	GORSKI RD RIGHT ARROW	
0010	36	436+10	RT	W14-3	1		5.56	48"X36"	1	1	NO PASSING ZONE	
0010	37	452+45	RT	SPECIAL	2	7.50		72"X15"	1	2	PHIPPS RD RIGHT ARROW	
0010	38	458+65	LT	SPECIAL					1	1	SAWYER CO SKIING/HIKING TRAIL LEFT ARROW	REMOVE EXISTING
		SUBTOTAL 0010			43	239	26		37	44		

PERMANENT SIGNING

CATEGORY		STATION	LOCATION	SIGN CODE	POSTS WOOD 4X6-INCH X 16-FT 634.0616 EACH	SIGNS TYPE II REFLECTIVE H 637.2210 SF	SIGNS TYPE II REFLECTIVE F 637.2230 SF	SIZE	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH	MESSAGE	REMARKS
MAINLINE PERMANENT SIGNING CONTINUED												
0010	39	459+00	RT	R1-1	1	5.18		30"X30"	1	1	STOP	ON PHIPPS RD
0010	40	465+00	RT	SPECIAL	2	7.50		72"X15"	1	2	LEFT ARROW STONE RD	
0010	41	465+65	LT	SPECIAL	2	7.50		72"X15"	1	2	LEFT ARROW PHIPPS RD	
0010	42	471+65	LT	R1-1	1	5.18		30"X30"	1	1	STOP	ON STONE RD
0010	43	477+85	LT	R1-1	1	5.18		30"X30"	1	1	STOP	ON STONE RD
0010	44	485+15	LT	SPECIAL	2	7.50		72"X15"	1	2	STONE RD RIGHT ARROW	
0010	45	486+60	LT	W14-3	1		5.56	48"X36"	1	1	NO PASSING ZONE	
0010	46	493+00	RT	W11-6	1		6.25	30"X30"	1	1	SNOWMOBILE CROSSING	
0010	47	522+00	RT	SPECIAL	2	10.63		102"X15"	1	2	LEFT ARROW NELSON LAKE RD	
0010	48	527+25	LT	I55-56	1	7.50		30"X36"	1	1	ADOPT A HIGHWAY HAYWARD LIONS CLUB	
0010	49	527+70	RT	W14-3	1		5.56	48"X36"	1	1	NO PASSING ZONE	
0010	50	528+25	LT	R1-1	1	5.18		30"X30"	1	1	STOP	ON NELSON LAKE RD
0010	51	530+60	RT	I55-56	1	7.50		30"X36"	1	1	ADOPT A HIGHWAY VENTURES UNLIMITED INC	
0010	52	533+40	LT	W14-3	1		5.56	48"X36"	1	1	NO PASSING ZONE	
0010	53	535+40	LT	SPECIAL	2	10.63		102"X15"	1	1	NELSON LAKE RD RIGHT ARROW	
0010	54	556+30	RT	SPECIAL					1	2	PHIPPS LANDING RIGHT ARROW	REMOVE EXISTING
0010	55	558+50	RT	W11-6	1	6.25		30"X30"	1	1	SNOWMOBILE CROSSING	
0010	56	560+00	RT	S3-1	1		6.25	30"X30"	1	1	SCHOOL BUS STOP AHEAD	
0010	57	569+85	RT	R1-1	1	6.25		30"X30"	1	1	STOP	ON OLD HWY 63
0010	58	570+45	RT	W14-3	1		5.56	48"X36"	1	1	NO PASSING ZONE	
0010	59	571+50	LT	I55-56	1	7.50		30"X36"	1	1	ADOPT A HIGHWAY VENTURES UNLIMITED INC	
0010	60	573+80	LT	W14-3	1		5.56	48"X36"	1	1	NO PASSING ZONE	
0010	61	574+90	LT	W5-52L	1		3.00	12"X36"	1	1	BRIDGE HASH MARKS	
0010	62	574+95	RT	W5-52R	1		3.00	12"X36"	1	1	BRIDGE HASH MARKS	
0010	63	576+25	LT	W5-52R	1		3.00	12"X36"	1	1	BRIDGE HASH MARKS	
0010	64	576+35	RT	W5-52L	1		3.00	12"X36"	1	1	BRIDGE HASH MARKS	
0010	65	585+90	LT	SPECIAL					1	2	LEFT ARROW PHIPPS LANDING	REMOVE EXISTING
0010	66	587+00	LT	W11-6	1		6.25	30"X30"	1	1	SNOWMOBILE CROSSING	
0010	67	587+90	LT	R1-1	1	6.25		30"X30"	1	1	STOP	ON THOMAS RD
0010	68	600+70	RT	W14-3	1		5.56	48"X36"	1	1	NO PASSING ZONE	
0010	69	604+00	RT	SPECIAL	2	10.00		96"X15"	1	2	LEFT ARROW WEINGARTEN RD	
0010	70	610+95	LT	R1-1	1	6.25		30"X30"	1	1	STOP	ON WEINGARTEN RD
0010	71	618+15	LT	SPECIAL	2	10.00		96"X15"	1	2	WEINGARTEN RD RIGHT ARROW	
0010	72	632+75	LT	R1-1	1	6.25		30"X30"	1	1	STOP	ON WAYSIDE INN DRIVEWAY
0010	73	635+30	RT	SPECIAL	2			120"X30"			LINE 1: LEFT ARROW PFEIFER RD	
			SUBTOTAL 0010		45	161	64		38	46		

PERMANENT SIGNING

CATEGORY		STATION	LOCATION	SIGN CODE	POSTS WOOD 4X6-INCH X 16-FT 634.0616 EACH	SIGNS TYPE II REFLECTIVE H 637.2210 SF	SIGNS TYPE II REFLECTIVE F 637.2230 SF	SIZE	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH	MESSAGE	REMARKS
MAINLINE PERMANENT SIGNING CONTINUED												
0010											LINE 2: MOSQUITO BROOK RD RIGHT ARROW	
0010	74	636+50	LT	R1-1	1	5.18		30"X30"	1	1	STOP	ON WAYSIDE INN DRIVEWAY
0010	75	642+35	LT	R1-1	1	5.18		30"X30"	1	1	STOP	ON PFEIFER RD
0010	76	642+40	RT	R1-1	1	5.18		30"X30"	1	1	STOP	ON MOSQUITO BROOK RD
0010	77	643+05	RT	I55-56	1	7.50		30"X36"	1	1	ADOPT A HIGHWAY CALVARY BAPTIST CHURCH OF THE NORTHWOODS	
0010	78	649+65	LT	SPECIAL	2	25.00		120"X30"	1	2	LINE 1: RIGHT ARROW MOSQUITO BROOK RD	
0010											LINE 2: PFEIFER RD LEFT ARROW	
0010	79	664+20	RT	W8-1-A					1	1	BUMPS	
0010	80	682+50	LT	W8-1-A					1	1	BUMPS	
0010												
DETOUR ROUTE PERMANENT SIGNING												
0010	1	0+50	LT	R1-1	1	7.46		36"X36"	1	1	STOP	
0010	2	2+00	RT	R2-1	1	5.00		24"X30"	1	1	SPEED LIMIT 55	
0010	3	8+00	LT	W3-1	1		9.00	36"X36"	1	1	STOP AHEAD	
0010	4	13+35	RT	W14-3	1		5.56	48"X36"	1	1	NO PASSING ZONE	
0010	5	35+35	LT	W14-3	1		5.56	48"X36"	1	1	NO PASSING ZONE	
0010	6	35+60	RT	W2-2	1		6.25	30"X30"	1	1	SIDE ROAD RIGHT ANGLE	
0010	7	43+30	RT	R1-1	1	6.25		30"X30"	1	1	STOP	ON PADDOCK RD
0010	8	56+50	RT	W14-3	1		5.56	48"X36"	1	1	NO PASSING ZONE	
0010	9	89+60	RT	W3-1	1		9.00	36"X36"			STOP AHEAD	
0010	10&11	89+60	RT	W1-1L & W13-1					2	1	ROAD TURNS LEFT, 15 MPH	REMOVE EXISTING
0010	12	96+60	RT	R1-1	1	7.46		36"X36"	1	1	STOP	
0010	13	97+10	RT	R1-1	1	7.46		36"X36"	1	1	STOP	ON CLEAR LAKE RD
0010	14	97+60	RT	R1-1	1	7.46		36"X36"	1	1	STOP	ON TELEMARK RD
0010	15	97+60	LT	R1-1	1	7.46		36"X36"	1	1	STOP	
0010	16	97+60	LT	R1-10-P					1		EXCEPT RIGHT TURN	REMOVE EXISTING
0010	17	102+00	LT	W1-1R					1	1	ROAD TURNS RIGHT	REMOVE EXISTING
0010	18	103+10	RT	W11-2	1		6.25	30"X30"	1	1	PEDESTRIAN CROSSING	
0010	19	103+10	RT	W16-9P			2.00	24"X12"			AHEAD	
0010	20	104+60	LT	W3-1	1		9.00	36"X36"	1	1	STOP AHEAD	
0010	21	118+10	RT	W1-1R	1		9.00	36"X36"	1	1	ROAD TURNS RIGHT	
0010	22	118+10	RT	W13-1			2.25	18"X18"			15 MPH	
0010	23&28	123+30	LT	(2) W1-8	1		6.00	18"X24"	2	1	CHEVRON	
0010	24&29	123+80	LT	(2) W1-8	1		6.00	18"X24"	2	1	CHEVRON	
0010	27	124+15	LT	R1-1	1	6.25		30"X30"	1	1	STOP	ON PEDERSON RD
0010	25&30	124+50	LT	(2) W1-8	1		6.00	18"X24"	2	1	CHEVRON	
			SUBTOTAL 0010		26	103	87		33	29		

PERMANENT SIGNING

CATEGORY	STATION	LOCATION	SIGN CODE	POSTS WOOD 4X6-INCH X 16-FT 634.0616 EACH	SIGNS TYPE II REFLECTIVE H 637.2210 SF	SIGNS TYPE II REFLECTIVE F 637.2230 SF	SIZE	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH	MESSAGE	REMARKS
DETOUR ROUTE PERMANENT SIGNING CONTINUED											
0010	26&31	125+00	LT	(2) W1-8	1		6.00	18"X24"	2	1	CHEVRON	
0010	32	129+50	LT	W1-1L	1		9.00	36"X36"	1	1	ROAD TURNS LEFT	
0010	33	129+50	LT	W13-1			2.25	18"X18"			15 MPH	
0010	34	136+60	RT	W1-5L	1		6.25	30"X30"	1	1	ROAD SHARP CURVES	
0010	35	136+60	RT	W57-51			3.13	30"X15"			NEXT 2 MILES	
0010	36	141+60	RT	W1-4L	1		6.25	30"X30"	1	1	ROAD CURVES AHEAD	
0010	37	141+60	RT	W13-1			2.25	18"X18"			30 MPH	
0010	38&44	148+00	RT	(2) W1-8	1		6.00	18"X24"	2	1	CHEVRON	
0010	39&45	148+80	RT	(2) W1-8	1		6.00	18"X24"	2	1	CHEVRON	
0010	40&46	149+60	RT	(2) W1-8	1		6.00	18"X24"	2	1	CHEVRON	
0010	41&47	150+40	RT	(2) W1-8	1		6.00	18"X24"	2	1	CHEVRON	
0010	42&48	151+20	RT	(2) W1-8	1		6.00	18"X24"	2	1	CHEVRON	
0010	43&49	152+10	RT	(2) W1-8	1		6.00	18"X24"	2	1	CHEVRON	
0010	50&51	155+00	LT	W1-2R & W13-1					2	1	ROAD CURVES RIGHT, 30MPH	REMOVE EXISTING
0010	52	156+50	LT	W1-6	1		8.00	48"X24"	1	1	ONE-DIRECTION LARGE ARROW	
0010	53	158+50	LT	W1-6	1		8.00	48"X24"	1	1	ONE-DIRECTION LARGE ARROW	
0010	54	163+40	LT	W1-4R	1		6.25	30"X30"	1	1	ROAD CURVES AHEAD	
0010	55	163+40	LT	W13-1			2.25	18"X18"	1		30 MPH	
0010	56	166+00	RT	SPECIAL							CAUTION SKI TRAIL	EXISTING TO REMAIN
0010	57	166+80	LT	SPECIAL							CAUTION SKI TRAIL	EXISTING TO REMAIN
0010	58	193+40	LT	W11-6				30"X30"			SNOWMOBILE CROSSING	EXISTING TO REMAIN
0010	59	199+50	LT	R1-1	1	6.25		30"X30"	1	1	STOP	ON JANET RD
0010	60	200+00	RT	R1-1	1	6.25		30"X30"	1	1	STOP	ON JANET RD
0010	61	210+60	LT	R1-1	1	6.25		30"X30"	1	1	STOP	PHIPPS FIRE LN
0010	62	211+00	RT	W2-2	1		6.25	30"X30"	1	1	SIDE ROAD RIGHT ANGLE	
0010	63	229+50	RT	R1-1	1	6.25		30"X30"	1	1	STOP	ON COUGAR LN
0010	64	234+40	LT	W1-5R	1		6.25	30"X30"	1	1	ROAD SHARP CURVES	
0010	65	234+40	LT	W57-51	1		3.13	30"X15"	1	1	NEXT 2 MILES	
0010	66	237+60	RT	W1-2R	1		6.25	30"X30"	1	1	ROAD CURVES RIGHT	
0010	67	237+60	RT	W13-1			2.25	18"X18"			40 MPH	
0010	68	241+00	LT	W1-6	1		8.00	48"X24"	1	1	ONE-DIRECTION LARGE ARROW	
0010	69	241+70	LT	R1-1	1	6.25		30"X30"	1	1	STOP	ON N FRINDT RD
0010	70	243+00	LT	W1-6	1		8.00	48"X24"	1	1	ONE-DIRECTION LARGE ARROW	
0010	71	246+50	LT	W1-2L	1		6.25	30"X30"	1	1	ROAD CURVES LEFT	
0010	72	246+50	LT	W13-1			2.25	18"X18"			40 MPH	
			SUBTOTAL 0010		25	31	144		35	26		

PERMANENT SIGNING

CATEGORY		STATION	LOCATION	SIGN CODE	POSTS WOOD 4X6-INCH X 16-FT 634.0616 EACH	SIGNS TYPE II REFLECTIVE H 637.2210 SF	SIGNS TYPE II REFLECTIVE F 637.2230 SF	SIZE	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH	MESSAGE	REMARKS
DETOUR ROUTE PERMANENT SIGNING CONTINUED												
0010	73	251+00	RT	W11-6				30"X30"			SNOWMOBILE CROSSING	EXISTING TO REMAIN
0010	74	251+00	LT	W2-2	1		6.25	30"X30"	1	1	SIDE ROAD RIGHT ANGLE	
0010	77	273+50	RT	W1-4R	1		6.25	30"X30"	1	1	ROAD CURVES AHEAD	
0010	78	273+50	RT	W13-1			2.25	18"X18"			35 MPH	
0010	79	275+10	RT	S3-1	1		9.00	36"X36"	1	1	SCHOOL BUS STOP AHEAD	
0010	80	277+00	LT	W11-6				30"X30"			SNOWMOBILE CROSSING	EXISTING TO REMAIN
0010	81	281+50	LT	W1-6	1		8.00	48"X24"	1	1	ONE-DIRECTION LARGE ARROW	
0010	82	288+50	LT	S3-1	1		9.00	36"X36"	1	1	SCHOOL BUS STOP AHEAD	
0010	83	291+40	LT	W1-6	1		8.00	48"X24"	1	1	ONE-DIRECTION LARGE ARROW	
0010	84	293+60	RT	W2-2	1		6.25	30"X30"	1	1	SIDE ROAD RIGHT ANGLE	
0010	85	296+60	RT	S3-1	1		9.00	36"X36"	1	1	SCHOOL BUS STOP AHEAD	
0010	86	300+50	RT	W1-6	1		8.00	48"X24"	1	1	ONE-DIRECTION LARGE ARROW	
0010	87	304+00	RT	R1-1	1	6.25		30"X30"	1	1	STOP	ON NORTHERN LIGHTS RD
0010	88	304+90	RT	W1-6	1		8.00	48"X24"	1	1	ONE-DIRECTION LARGE ARROW	
0010	89	306+90	LT	R1-1	1	6.25		30"X30"	1	1	STOP	ON HOLLYWOOD LN
0010	90	312+00	LT	W1-4R	1		6.25	30"X30"	1	1	ROAD CURVES AHEAD	
0010	91	312+00	LT	W13-1			2.25	18"X18"			35 MPH	
0010	92	319+00	RT	W14-3	1		5.56	48"X36"	1	1	NO PASSING ZONE	
0010	93	323+20	RT	R1-1	1	6.25		30"X30"	1	1	STOP	ON VALLEY RD
0010	94	329+40	LT	R1-1	1	6.25		30"X30"	1	1	STOP	ON W OLD OO RD
0010	95	333+00	RT	W11-6				30"X30"			SNOWMOBILE CROSSING	EXISTING TO REMAIN
0010	96	335+00	LT	W11-2	1		6.25	30"X30"	1	1	PEDESTRIAN CROSSING	
0010	97	335+00	LT	W16-9P			2.00	24"X12"			AHEAD	
0010	98	338+40	LT	W14-3	1		5.56	48"X36"	1	1	NO PASSING ZONE	
0010	99	339+10	RT	W3-1				36"X36"			STOP AHEAD	EXISTING TO REMAIN IF 750'-800' FROM STOP SIGN
0010	100	344+50	LT	R2-1	1	5.00		24"X30"	1	1	SPEED LIMIT 55	
0010	101	346+70	RT	R1-1	1	7.46		36"X36"	1	1	STOP	
SUBTOTAL 0010					20	37	108		20	20		
TOTAL 0010					155	549	429		159	161		

TRAFFIC CONTROL SUMMARY

CATEGORY	NO.	STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 EACH	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 EACH	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY	TRAFFIC CONTROL WARNING LIGHTS 643.0705 EACH	TRAFFIC CONTROL WARNING LIGHTS 643.0705 DAY	TRAFFIC CONTROL SIGNS 643.0900 EACH	TRAFFIC CONTROL SIGNS 643.0900 DAY	SIGN CODE	MESSAGE	SIZE
0010			SIDE ROADS, 500' FROM INT							18	1620	W20-1A	ROAD WORK AHEAD	30"X30"
0010	TC1		SW OF INT USH 63/STH 77							1	90	W20-3A	ROAD CLOSED AHEAD	36"X36"
0010	TC2		SW OF INT USH 63/STH 77							1	90	W20-3D	ROAD CLOSED 500 FT	36"X36"
0010	TC3		SW OF INT USH 63/STH 77							1	90	G20-2A	END ROAD WORK	48"X24"
0010	TC4		NE OF INT USH 63/STH 77			1	90	2	180	1	90	M4-4	TRUCK	24"X12"
0010												M4-9L	DETOUR (LEFT ARROW)	30"X24"
0010	TC5		NE OF INT USH 63/STH 77			1	90	2	180	1	90	R11-3	ROAD CLOSED 1/4 MILES AHEAD LOCAL TRAFFIC ONLY	60"X30"
0010	TC6		NE OF INT USH 63/STH 77			1	90	2	180	1	90	M4-9R	DETOUR (RIGHT ARROW)	30"X24"
0010	TC7		S OF INT USH 63/CTH OO			1	90	2	180	1	90	R11-3	ROAD CLOSED 2 MILES AHEAD LOCAL TRAFFIC ONLY	60"X30"
0010	TC8		S OF INT USH 63/CTH OO			1	90	2	180	1	90	M4-9L	DETOUR (LEFT ARROW)	30"X24"
0010	TC9	346+50	ML FOR HOSPITAL RD			4	360	8	720	2	180	R11-4	ROAD CLOSED TO THRU TRAFFIC	60"X30"
0010		346+50	ML FOR HOSPITAL RD							2	180	W20-1A	ROAD WORK AHEAD	30"X30"
0010	TC10	346+50	ML FOR AIRPORT RD			4	360	8	720	2	180	R11-4	ROAD CLOSED TO THRU TRAFFIC	60"X30"
0010		346+50	ML FOR AIRPORT RD							2	180	W20-1A	ROAD WORK AHEAD	30"X30"
0010	TC11	458+72	ML FOR PHIPPS RD			4	360	8	720	1	90	R11-4	ROAD CLOSED TO THRU TRAFFIC	60"X30"
0010		458+72	ML FOR PHIPPS RD							1	90	W20-1A	ROAD WORK AHEAD	30"X30"
0010	TC12	528+33	ML FOR NELSON LAKE RD			4	360	8	720	1	90	R11-4	ROAD CLOSED TO THRU TRAFFIC	60"X30"
0010		528+33	ML FOR NELSON LAKE RD							1	90	W20-1A	ROAD WORK AHEAD	30"X30"
0010	TC13	569+68	ML FOR OLD HWY 63			4	360	8	720	1	90	R11-4	ROAD CLOSED TO THRU TRAFFIC	60"X30"
0010		569+68	ML FOR OLD HWY 63							1	90	W20-1A	ROAD WORK AHEAD	30"X30"
0010	TC14	611+13	ML FOR WEINGARTEN RD			4	360	8	720	1	90	R11-4	ROAD CLOSED TO THRU TRAFFIC	60"X30"
0010		611+13	ML FOR WEINGARTEN RD							1	90	W20-1A	ROAD WORK AHEAD	30"X30"
0010	TC15	642+35	ML FOR PFEIFER RD			2	180	4	360	1	90	R11-4	ROAD CLOSED TO THRU TRAFFIC	60"X30"
0010		642+35	ML FOR PFEIFER RD							1	90	W20-1A	ROAD WORK AHEAD	30"X30"
0010	TC16	642+51	ML FOR MOSQUITO BROOK RD			2	180	4	360	1	90	R11-4	ROAD CLOSED TO THRU TRAFFIC	60"X30"
0010		642+51	ML FOR MOSQUITO BROOK RD							1	90	W20-1A	ROAD WORK AHEAD	30"X30"
0010	TC17	702+70	N OF INT USH 63/LARSEN RD							1	90	W20-3A	ROAD CLOSED AHEAD	36"X36"
0010	TC18	702+72	N OF INT USH 63/LARSEN RD							1	90	G20-2A	END ROAD WORK	48"X24"
0010	TC19	698+70	N OF INT USH 63/LARSEN RD			2	180	4	360	2	180	R11-3	ROAD CLOSED 0.2 MILES AHEAD LOCAL TRAFFIC ONLY	60"X30"
0010	TC20	697+70	S OF INT USH 63/LARSEN RD							1	90	W20-3C	ROAD CLOSED 1000 FT	36"X36"
0010	TC21	692+70	S OF INT USH 63/LARSEN RD							1	90	W20-3D	ROAD CLOSED 500 FT	36"X36"
0010	TC22	687+70	S OF INT USH 63/LARSEN RD			5	450	10	900	1	90	R11-4	ROAD CLOSED TO THRU TRAFFIC	60"X30"
0010	TC23		S OF INT USH 2/USH 63							1	90	W20-3D	ROAD CLOSED 40 MILES AHEAD	36"X36"
0010	TC24		W OF INT USH 63/HOSPITAL RD	14	210					1	15	W21-5	SHOULDER WORK	48"X48"
0010	TC25		W OF INT USH 63/HOSPITAL RD							1	29	G20-2A	END ROAD WORK	48"X24"
0010	TC26		W OF INT USH 63/HOSPITAL RD							1	29	W20-1A	ROAD WORK AHEAD	48"X48"
0010	TC27		W OF INT USH 63/HOSPITAL RD							1	29	W20-1C	ROAD WORK 1000 FT	48"X48"
0010	TC28		W OF INT USH 63/HOSPITAL RD							1	29	W20-1D	ROAD WORK 500 FT	48"X48"
0010	TC29		ML AT HOSPTIAL RD	23	506					1	22	W21-5	SHOULDER WORK	48"X48"
0010	TC30		W OF INT USH 63/HOSPITAL RD	11	77					1	7	W21-65	RUMBLE STRIPS AHEAD	48"X48"
			SUBTOTAL 0010	48	793	40	3600	80	7200	61	5020			

TRAFFIC CONTROL SUMMARY

CATEGORY	NO.	STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 EACH	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 EACH	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY	TRAFFIC CONTROL WARNING LIGHTS 643.0705 EACH	TRAFFIC CONTROL WARNING LIGHTS 643.0705 DAY	TRAFFIC CONTROL SIGNS 643.0900 EACH	TRAFFIC CONTROL SIGNS 643.0900 DAY	SIGN CODE	MESSAGE	SIZE
0010	TC31		W OF INT USH 63/HOSPITAL RD							2	14	W20-4A	ONE LANE ROAD AHEAD	48"X48"
0010	TC32		W OF INT USH 63/HOSPITAL RD							2	14	W20-7A	FLAGGER AHEAD	48"X48"
0010	TC33		W OF INT USH 63/HOSPITAL RD	14	98					1	7	W21-65	RUMBLE STRIPS AHEAD	48"X48"
0010	TC34		W OF INT USH 63/HOSPITAL RD							1	7	W20-4A	ONE LANE ROAD AHEAD	48"X48"
0010	TC35		W OF INT USH 63/HOSPITAL RD							1	7	W20-7A	FLAGGER AHEAD	48"X48"
0010	TC36		ML AT HOSPITAL RD							2	14	W21-65	RUMBLE STRIPS AHEAD	48"X48"
0010	TC37		ML AT HOSPITAL RD							2	14	W20-4A	ONE LANE ROAD AHEAD	48"X48"
0010	TC38		ML AT HOSPITAL RD							2	14	W20-7A	FLAGGER AHEAD	48"X48"
0010	TC39		ML AT HOSPITAL RD	9	63					1	7	W21-5	SHOULDER WORK	48"X48"
0010	TC40		E OF INT USH 63/AIRPORT RD	19	285					1	15	W21-5	SHOULDER WORK	48"X48"
0010	TC41		E OF INT USH 63/AIRPORT RD							1	29	G20-2A	END ROAD WORK	48"X24"
0010	TC42		E OF INT USH 63/AIRPORT RD							1	29	W20-1A	ROAD WORK AHEAD	48"X48"
0010	TC43		E OF INT USH 63/AIRPORT RD							1	29	W20-1C	ROAD WORK 1000 FT	48"X48"
0010	TC44		E OF INT USH 63/AIRPORT RD							1	29	W20-1D	ROAD WORK 500 FT	48"X48"
0010	TC45		ML AT AIRPORT RD	27	594					1	22	W21-5	SHOULDER WORK	48"X48"
0010	TC46		E OF INT USH 63/AIRPORT RD	15	105					1	7	W21-65	RUMBLE STRIPS AHEAD	48"X48"
0010	TC47		E OF INT USH 63/AIRPORT RD							2	14	W20-4A	ONE LANE ROAD AHEAD	48"X48"
0010	TC48		E OF INT USH 63/AIRPORT RD							2	14	W20-7A	FLAGGER AHEAD	48"X48"
0010	TC49		E OF INT USH 63/AIRPORT RD	14	98					1	7	W21-65	RUMBLE STRIPS AHEAD	48"X48"
0010	TC50		E OF INT USH 63/AIRPORT RD							1	7	W20-4A	ONE LANE ROAD AHEAD	48"X48"
0010	TC51		E OF INT USH 63/AIRPORT RD							1	7	W20-7A	FLAGGER AHEAD	48"X48"
0010	TC52		ML AT AIRPORT RD							2	14	W21-65	RUMBLE STRIPS AHEAD	48"X48"
0010	TC53		ML AT AIRPORT RD							2	14	W20-4A	ONE LANE ROAD AHEAD	48"X48"
0010	TC54		ML AT AIRPORT RD							2	14	W20-7A	FLAGGER AHEAD	48"X48"
0010	TC55		ML AT AIRPORT RD	16	112					1	7	W21-5	SHOULDER WORK	48"X48"
0010			INT DETOUR ROUTE/SIDE RD							36	3240	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	D1		NW OF INT USH 63/STH 77							3	270	M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												W20-2A	DETOUR AHEAD	36"X36"
0010	D2		NW OF INT USH 63/STH 77							4	360	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	UP ARROW	21"X21"
0010	D3		NW OF INT USH 63/STH 77							4	360	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
			SUBTOTAL 0010	114	1355	0	0	0	0	82	4586			

TRAFFIC CONTROL SUMMARY

CATEGORY	NO.	STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 EACH	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 EACH	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY	TRAFFIC CONTROL WARNING LIGHTS 643.0705 EACH	TRAFFIC CONTROL WARNING LIGHTS 643.0705 DAY	TRAFFIC CONTROL SIGNS 643.0900 EACH	TRAFFIC CONTROL SIGNS 643.0900 DAY	SIGN CODE	MESSAGE	SIZE
0010												M1-4	USH 63	24"X12"
0010												M6-1	UP ARROW	21"X21"
0010	D4		SW OF INT USH 63/STH 77							4	360	M4-6	END	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	D5		SW OF INT USH 63/STH 77							1	90	W20-2A	DETOUR AHEAD	36"X36"
0010	D6		SW OF INT USH 63/STH 77							5	450	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1L	LEFT TURN ARROW	21"X21"
0010	D7		SW OF INT USH 63/STH 77							5	450	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	LEFT ARROW	21"X21"
0010	D8		SE OF INT USH 63/STH 77							3	270	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	D9		SE OF INT USH 63/STH 77							1	90	G20-51	DETOUR NEXT 18 MILES	60"X24"
0010	D10		N OF INT STH 77/CTH OO							4	360	M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1R	RIGHT TURN ARROW	21"X21"
0010	D11		N OF INT STH 77/CTH OO							4	360	M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	RIGHT ARROW	21"X21"
0010	D12		W OF INT STH 77/CTH OO							3	270	M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	D13		W OF INT STH 77/CTH OO							4	360	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1L	LEFT TURN ARROW	21"X21"
0010	D14		W OF INT STH 77/CTH OO							4	360	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	LEFT ARROW	21"X21"
0010	D15		E OF INT STH 77/CTH OO							3	270	M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
			SUBTOTAL 0010	0	0	0	0	0	0	41	3690			

TRAFFIC CONTROL SUMMARY

CATEGORY	NO.	STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 EACH	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 EACH	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY	TRAFFIC CONTROL WARNING LIGHTS 643.0705 EACH	TRAFFIC CONTROL WARNING LIGHTS 643.0705 DAY	TRAFFIC CONTROL SIGNS 643.0900 EACH	TRAFFIC CONTROL SIGNS 643.0900 DAY	SIGN CODE	MESSAGE	SIZE
0010												W20-2A	DETOUR AHEAD	36"X36"
0010	D16		E OF INT STH 77/CTH OO							4	360	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1R	RIGHT TURN ARROW	21"X21"
0010	D17		E OF INT STH 77/CTH OO							4	360	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	RIGHT ARROW	21"X21"
0010	D18		N OF INT STH 77/CTH OO							3	270	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	D19		N OF INT CTH OO/PEDERSON RD							4	360	M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1L	LEFT TURN ARROW	21"X21"
0010	D20		N OF INT CTH OO/PEDERSON RD							4	360	M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	LEFT ARROW	21"X21"
0010	D21		E OF INT CTH OO/PEDERSON RD							3	270	M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	D22		W OF INT CTH OO/TELEMARK RD							4	360	M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1R	RIGHT TURN ARROW	21"X21"
0010	D23		W OF INT CTH OO/TELEMARK RD							4	360	M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	RIGHT ARROW	21"X21"
0010	D24		S OF INT CTH OO/TELEMARK RD							3	270	M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	D25		S OF INT CTH OO/TELEMARK RD							4	360	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1L	LEFT TURN ARROW	21"X21"
0010	D26		S OF INT CTH OO/TELEMARK RD							4	360	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
			SUBTOTAL 0010	0	0	0	0	0	0	41	3690			

TRAFFIC CONTROL SUMMARY

CATEGORY	NO.	STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 EACH	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 EACH	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY	TRAFFIC CONTROL WARNING LIGHTS 643.0705 EACH	TRAFFIC CONTROL WARNING LIGHTS 643.0705 DAY	TRAFFIC CONTROL SIGNS 643.0900 EACH	TRAFFIC CONTROL SIGNS 643.0900 DAY	SIGN CODE	MESSAGE	SIZE
0010												M1-4	USH 63	24"X24"
0010												M6-1	LEFT ARROW	21"X21"
0010	D27		W OF INT CTH OO/TELEMARK RD							3	270	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	D28		E OF INT CTH OO/PEDERSON RD							4	360	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1R	RIGHT TURN ARROW	21"X21"
0010	D29		E OF INT CTH OO/PEDERSON RD							4	360	M4-8	DETOUR	24"X12"
0010														
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	RIGHT ARROW	21"X21"
0010	D30		N OF INT CTH OO/PEDERSON RD							3	270	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	D31		N OF INT USH 63/CTH OO							1	90	W20-2A	DETOUR AHEAD	36"X36"
0010	D32		N OF INT USH 63/CTH OO							4	360	M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1L	LEFT TURN ARROW	21"X21"
0010	D33		N OF INT USH 63/CTH OO							1	90	SPECIAL	HAYWARD (LEFT ARROW)	
0010	D34		N OF INT USH 63/CTH OO							4	360	M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	LEFT ARROW	21"X21"
0010	D35		E OF INT USH 63/CTH OO							3	270	M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	D36		E OF INT USH 63/CTH OO							4	360	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1R	RIGHT TURN ARROW	21"X21"
0010	D37		E OF INT USH 63/CTH OO							4	360	M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	RIGHT ARROW	21"X21"
0010	D38		N OF INT USH 63/CTH OO							4	360	M4-6	END	24"X12"
0010												M4-8	DETOUR	24"X12"
			SUBTOTAL 0010	0	0	0	0	0	0	39	3510			

TRAFFIC CONTROL SUMMARY

CATEGORY	NO.	STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 EACH	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 EACH	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY	TRAFFIC CONTROL WARNING LIGHTS 643.0705 EACH	TRAFFIC CONTROL WARNING LIGHTS 643.0705 DAY	TRAFFIC CONTROL SIGNS 643.0900 EACH	TRAFFIC CONTROL SIGNS 643.0900 DAY	SIGN CODE	MESSAGE	SIZE
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010														
0010			INT OF TRUCK DETOUR/SIDE RD							40	3600	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	T1		NW OF INT USH 63/STH 77							5	450	M4-6	END	24"X12"
0010												M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	T2		SW OF INT USH 63/STH 77							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1L	LEFT TURN ARROW	21"X21"
0010	T3		SW OF INT USH 63/STH 77							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	LEFT ARROW	21"X21"
0010	T4		SE OF INT USH 63/STH 77							4	360	M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												W20-2A	DETOUR AHEAD	36"X36"
0010												M4-4	TRUCK	24"X12"
0010	T5		SE OF INT USH 63/STH 77							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	UP ARROW	21"X21"
0010	T6		SE OF INT USH 63/STH 77							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	UP ARROW	21"X21"
			SUBTOTAL 0010	0	0	0	0	0	0	69	6210			

TRAFFIC CONTROL SUMMARY

CATEGORY	NO.	STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 EACH	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 EACH	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY	TRAFFIC CONTROL WARNING LIGHTS 643.0705 EACH	TRAFFIC CONTROL WARNING LIGHTS 643.0705 DAY	TRAFFIC CONTROL SIGNS 643.0900 EACH	TRAFFIC CONTROL SIGNS 643.0900 DAY	SIGN CODE	MESSAGE	SIZE
0010	T7		NW OF INT USH 63/STH 77							4	360	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	T8		NW OF INT USH 63/STH 77							1	90	G20-51	DETOUR NEXT 66 MILES	60"X24"
0010	T9		N OF INT STH 77/STH 27							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1L	LEFT TURN ARROW	21"X21"
0010	T10		N OF INT STH 77/STH 27							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	LEFT ARROW	21"X21"
0010	T11		W OF INT STH 77/STH 27							4	360	M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												W20-2A	DETOUR AHEAD	36"X36"
0010												M4-4	TRUCK	24"X12"
0010	T12		W OF INT STH 77/STH 27							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1L	LEFT TURN ARROW	21"X21"
0010	T13		W OF INT STH 77/STH 27							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	LEFT ARROW	21"X21"
0010	T14		E OF INT STH 77/STH 27							4	360	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	T15		E OF INT STH 77/STH 27							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1L	RIGHT TURN ARROW	21"X21"
0010	T16		E OF INT STH 77/STH 27							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
			SUBTOTAL 0010	0	0	0	0	0	0	43	3870			

TRAFFIC CONTROL SUMMARY

CATEGORY	NO.	STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 EACH	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 EACH	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY	TRAFFIC CONTROL WARNING LIGHTS 643.0705 EACH	TRAFFIC CONTROL WARNING LIGHTS 643.0705 DAY	TRAFFIC CONTROL SIGNS 643.0900 EACH	TRAFFIC CONTROL SIGNS 643.0900 DAY	SIGN CODE	MESSAGE	SIZE
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	RIGHT ARROW	21"X21"
0010	T17		N OF INT STH 77/STH 27							4	360	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	T18		S OF INT STH 27/CTH B							4	360	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	T19		S OF INT STH 27/CTH B							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1R	RIGHT TURN ARROW	21"X21"
0010	T20		S OF INT STH 27/CTH B							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	RIGHT ARROW	21"X21"
0010	T21		E OF INT STH 27/CTH B							4	360	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	T22		E OF INT STH 27/CTH B							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1L	LEFT TURN ARROW	21"X21"
0010	T23		E OF INT STH 27/CTH B							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	LEFT ARROW	21"X21"
0010	T24		W OF INT USH 2/STH 27							10	900	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M4-4	TRUCK	24"X12"
			SUBTOTAL 0010	0	0	0	0	0	0	42	3780			

TRAFFIC CONTROL SUMMARY

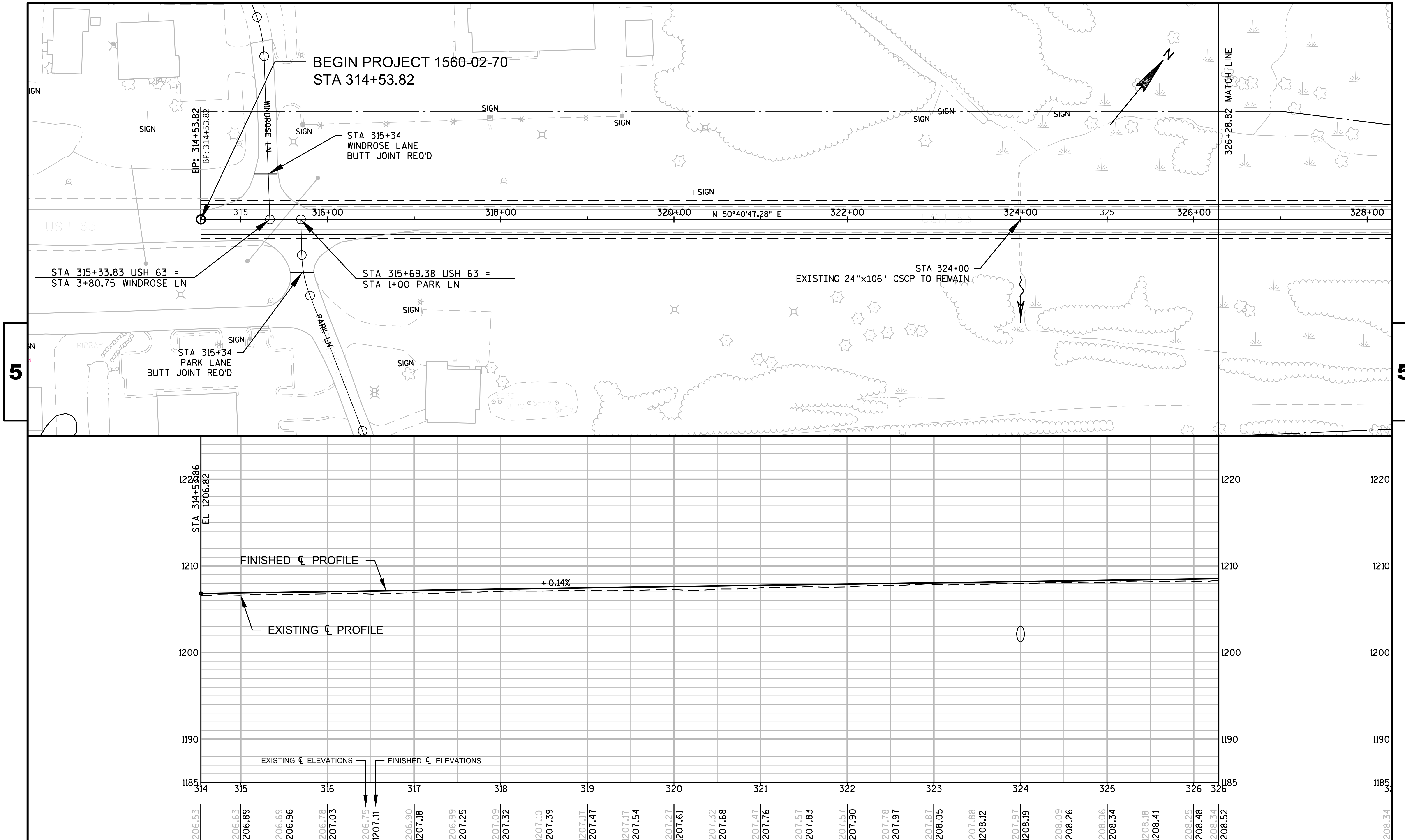
CATEGORY	NO.	STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 EACH	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 EACH	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY	TRAFFIC CONTROL WARNING LIGHTS 643.0705 EACH	TRAFFIC CONTROL WARNING LIGHTS 643.0705 DAY	TRAFFIC CONTROL SIGNS 643.0900 EACH	TRAFFIC CONTROL SIGNS 643.0900 DAY	SIGN CODE	MESSAGE	SIZE
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												W20-2A	DETOUR AHEAD	36"X36"
0010												M4-4	TRUCK	24"X12"
0010	T25		W OF INT USH 2/STH 27							10	900	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	UP ARROW	21"X21"
0010												M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1R	RIGHT TURN ARROW	21"X21"
0010	T26		W OF INT USH 2/STH 27							10	900	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	UP ARROW	21"X21"
0010												M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	RIGHT ARROW	21"X21"
0010	T27		S OF INT USH 2/STH 27							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1R	RIGHT TURN ARROW	21"X21"
0010	T28		S OF INT USH 2/STH 27							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	RIGHT ARROW	21"X21"
0010	T29		E OF INT USH 2/STH 27							4	360	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	T30		E OF INT USH 2/STH 27							5	450	M4-4	TRUCK	24"X12"
			SUBTOTAL 0010	0	0	0	0	0	0	39	3510			

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	MISCELLANEOUS QUANTITIES	SHEET: E

FILE NAME : N:\PDS\...\030200_mq.pptx PLOT DATE : June 14, 1911 PLOT BY : A.R.H. PLOT NAME : PLOT SCALE : 1:1

TRAFFIC CONTROL SUMMARY

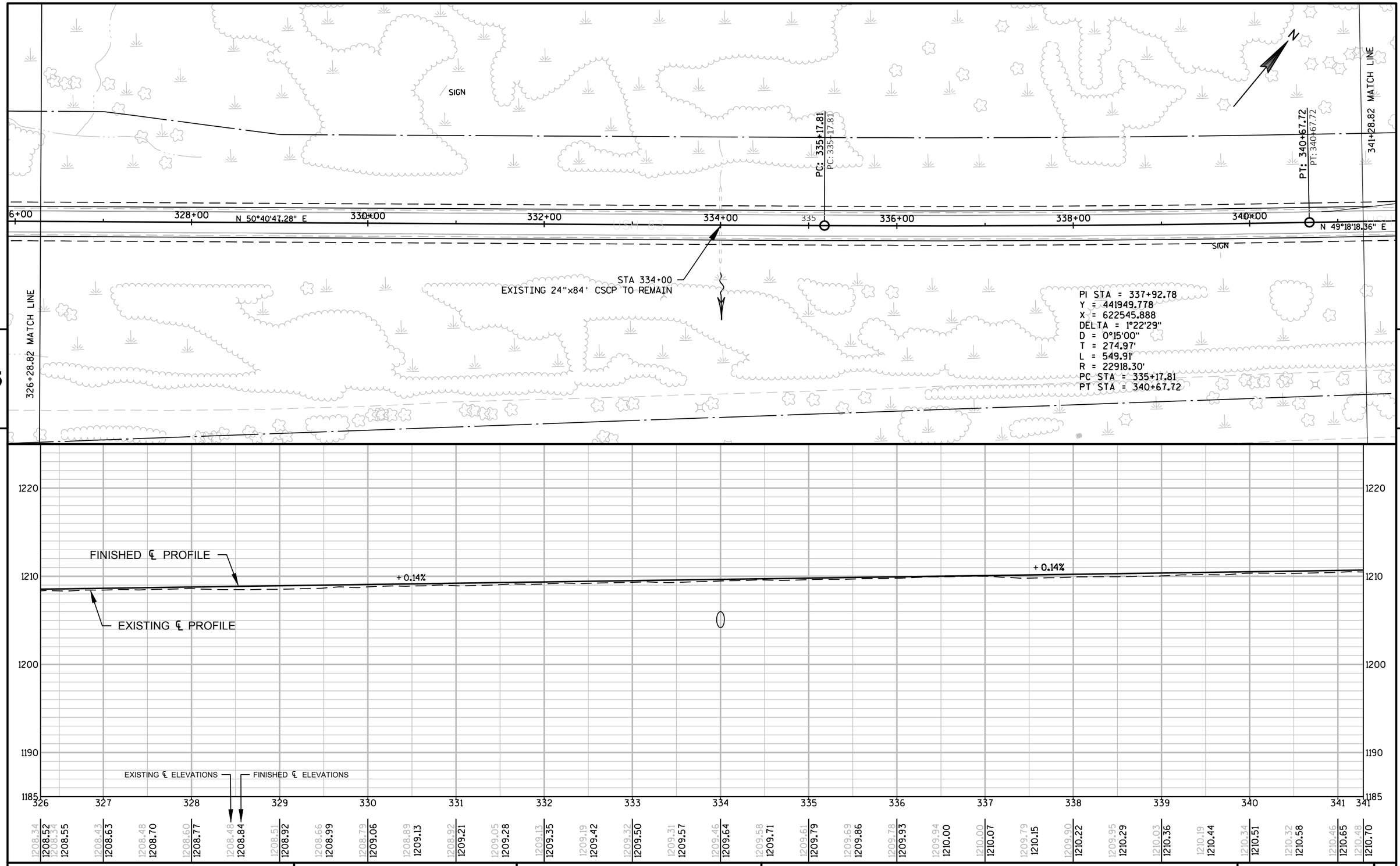
CATEGORY	NO.	STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 EACH	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 EACH	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY	TRAFFIC CONTROL WARNING LIGHTS 643.0705 EACH	TRAFFIC CONTROL WARNING LIGHTS 643.0705 DAY	TRAFFIC CONTROL SIGNS 643.0900 EACH	TRAFFIC CONTROL SIGNS 643.0900 DAY	SIGN CODE	MESSAGE	SIZE
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M5-1L	LEFT TURN ARROW	21"X21"
0010	T31		E OF INT USH 2/STH 27							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	LEFT ARROW	21"X21"
0010	T32		E OF INT USH 2/USH 63							4	360	M4-6	END	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-1	NORTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010	T33		E OF INT USH 2/USH 63							4	360	M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X12"
0010												W20-2A	DETOUR AHEAD	36"X36"
0010												M4-4	TRUCK	24"X12"
0010	T34		E OF INT USH 2/USH 63							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	UP ARROW	21"X21"
0010	T35		E OF INT USH 2/USH 63							5	450	M4-4	TRUCK	24"X12"
0010												M4-8	DETOUR	24"X12"
0010												M3-3	SOUTH	24"X12"
0010												M1-4	USH 63	24"X24"
0010												M6-1	UP ARROW	21"X21"
			SUBTOTAL 0010	0	0	0	0	0	0	23	2070			
			TOTAL 0010	162	2148	3640	3600	80	7200	480	39936			



PROJECT NO:1560-02-70	HWY:USH 63	COUNTY:SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-1

PLOT DATE : 12/5/2017 9:08 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT



5

5

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-2

PLOT DATE : 12/5/2017 9:08 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME :

PLOT SCALE : 1 IN:100 FT

HOSPITAL RD

HOSPITAL ROAD
STA 342+80
CONSTRUCT INTERSECTION, TYPE D LT
SEE HOSPITAL ROAD PLAN/PROFILE
FOR DETAILS

1008+00

PT: 1008+76.41
PT: 1008+76.41

1009+00

CONCRETE C&G
6-INCH SLOPED
36-INCH TYPE D

OBLITERATE OLD
HOSPITAL RD

STA 347+61.65 USH 63 =
STA 2008+92.46 AIRPORT RD

CP 302

STA 348+00
EXISTING 24"x84' CSCP TO REMAIN

SIGN

N

356+28.82 MATCH LINE

342+00 | 344+00 | 345 | 346+00 | 348+00 | 350+00 | 352+00 | 354+00 | 355 | 356+00

EP: 1009+72.21
EP: 1009+72.21

EP: 2008+94.12
EP: 2008+94.12

USH 63

N 49°18'18.36" E

AIRPORT ROAD
STA 347+62
CONSTRUCT INTERSECTION, TYPE C RT
SEE AIRPORT ROAD PLAN/PROFILE
FOR DETAILS

AIRPORT RD

PT: 2007+94.74
PT: 2007+94.74

2008+00

STA 342+76.57 USH 63 =
STA 1009+70.36 HOSPITAL RD

OBLITERATE OLD
AIRPORT RD

2007+00

341+28.82 MATCH LINE

5

5

BENCH MARKS AND CONTROL POINTS

NO.	STA./OFFSET	DESCRIPTION	NORTHING	EASTING	ELEV.
CP 302	346+40 67' LT	REBAR W/CAP	442552.68	623144.88	1209.35

1250

1220

1210

1200

1190

FINISHED ℄ PROFILE

+0.14%

EXISTING ℄ PROFILE

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	356
1210.48	1210.70	1210.73	1210.57	1210.80	1210.64	1210.87	1210.75	1210.94	1210.79	1211.02	1210.84	1211.09	1210.91	1211.16	1211.01	1211.23	1211.11	1211.31	1211.13	1211.38	1211.21	1211.45	1211.19	1211.52	1210.83	1211.60	1211.32	1211.67	1211.54	1211.74	1211.61	1211.81	1211.62	1211.89	1211.71	1211.96	1211.72	1212.03	1211.86	1212.10	1211.92	1212.18	1211.94	1212.25	1212.07	1212.32	1212.12	1212.39	1212.19	1212.46	1212.28	1212.54	1212.28	1212.61	1212.33	1212.68	1212.32	1212.75	1212.38	1212.83	1212.52	1212.87

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-3

PLOT DATE : 12/5/2017 9:09 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT

STA 363+95
MAINTAIN AGGREGATE P.E. LT
SEE ENTRANCE DETAIL

N

356+28.82 MATCH LINE

371+28.82 MATCH LINE

356+00 358+00 360+00 362+00 N 49°18'18.36" E 364+00 365 366+00 368+00 370+00

USH 63

USH 63

STA 361+00
REMOVE EXISTING 24"x64' CSCP

STA 366+00
REMOVE EXISTING 24"x104' CSCP

5

5

STA 361+00.00
EL 1213.55

FINISHED ℄ PROFILE

+ 0.14%

EXISTING ℄ PROFILE

INSTALL: 1-24"x64' RCCP
2 AEWs REQ'D

INSTALL: 1-24"x100' RCCP
2 AEWs REQ'D

1220
1210
1200
1190

EXISTING ℄ ELEVATIONS

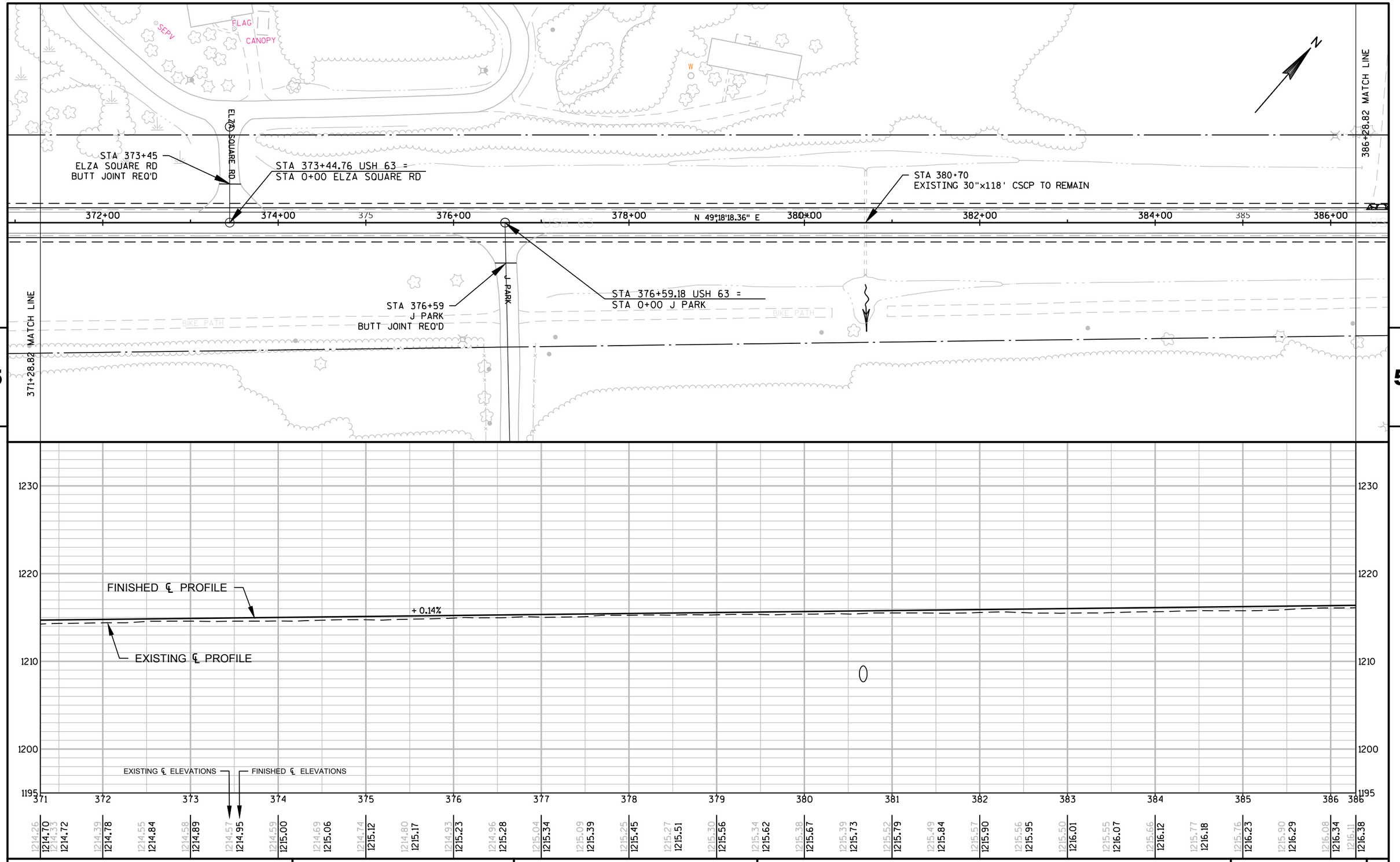
FINISHED ℄ ELEVATIONS

356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	371
1212.52	1212.82	1212.87	1212.90	1212.59	1212.97	1212.71	1213.04	1212.74	1213.12	1212.87	1213.19	1212.96	1213.26	1213.15	1213.33	1213.18	1213.41	1213.20	1213.48	1213.26	1213.55	1213.31	1213.61	1213.35	1213.66	1213.42	1213.72	1213.50	1213.77	1213.60	1213.83	1213.66	1213.89	1213.59	1213.94	1213.64	1214.00	1213.70	1214.05	1213.76	1214.11	1213.80	1214.17	1213.80	1214.22	1213.99	1214.28	1214.00	1214.33	1214.01	1214.39	1214.14	1214.45	1214.19	1214.50	1214.27	1214.56	1214.25	1214.61	1214.35	1214.67	1214.26	1214.70

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

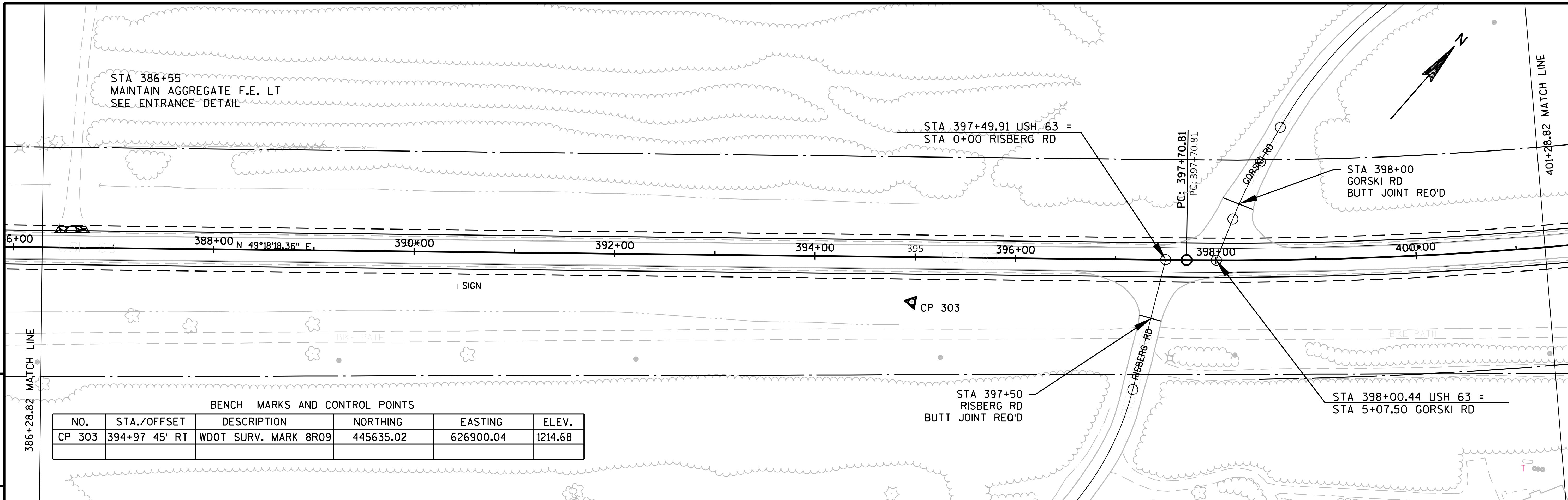
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-4

PLOT DATE : 12/5/2017 9:09 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT



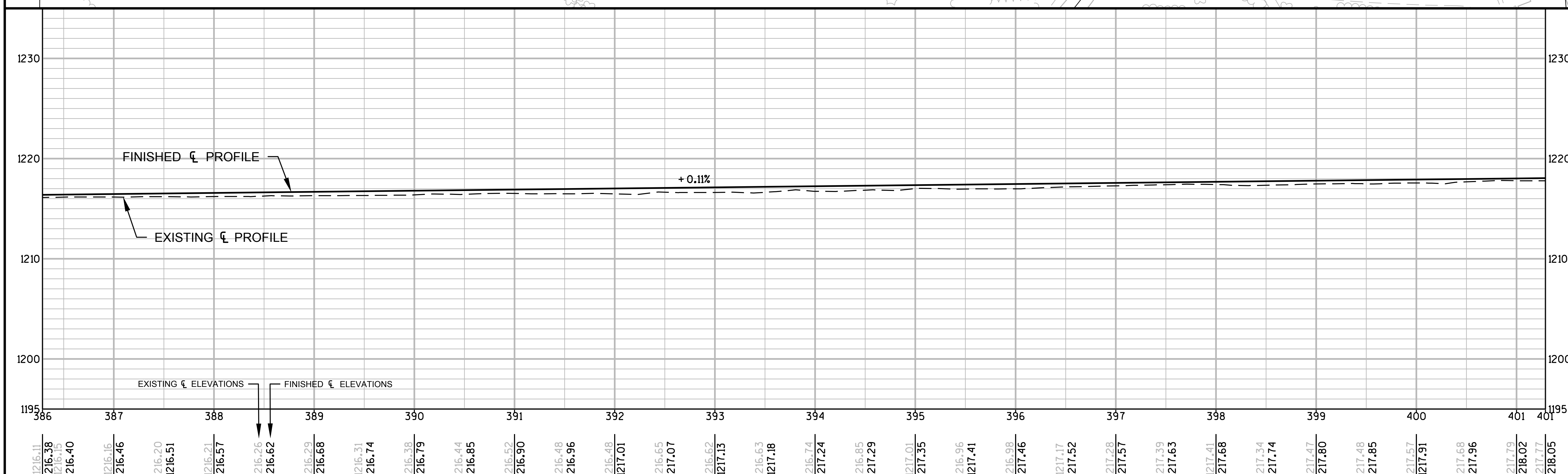
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-5
PLOT DATE : 12/5/2017 9:09 AM
PLOT BY : JENSEN, TRAVIS G
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



BENCH MARKS AND CONTROL POINTS

NO.	STA./OFFSET	DESCRIPTION	NORTHING	EASTING	ELEV.
CP 303	394+97 45' RT	WDOT SURV. MARK 8R09	445635.02	626900.04	1214.68

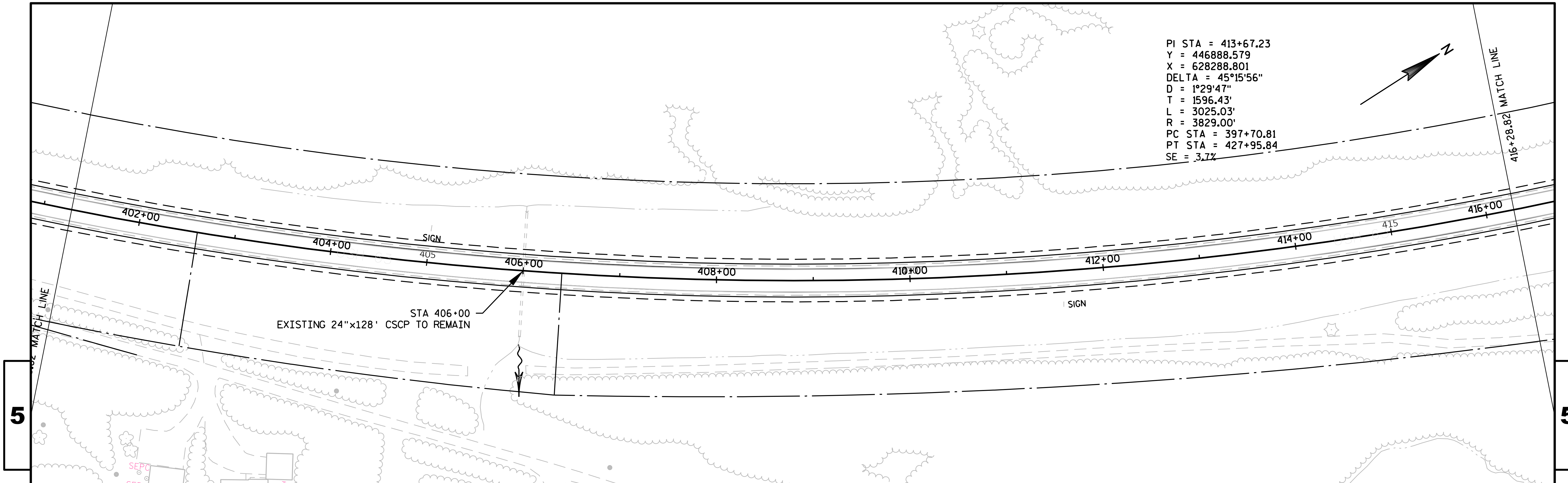


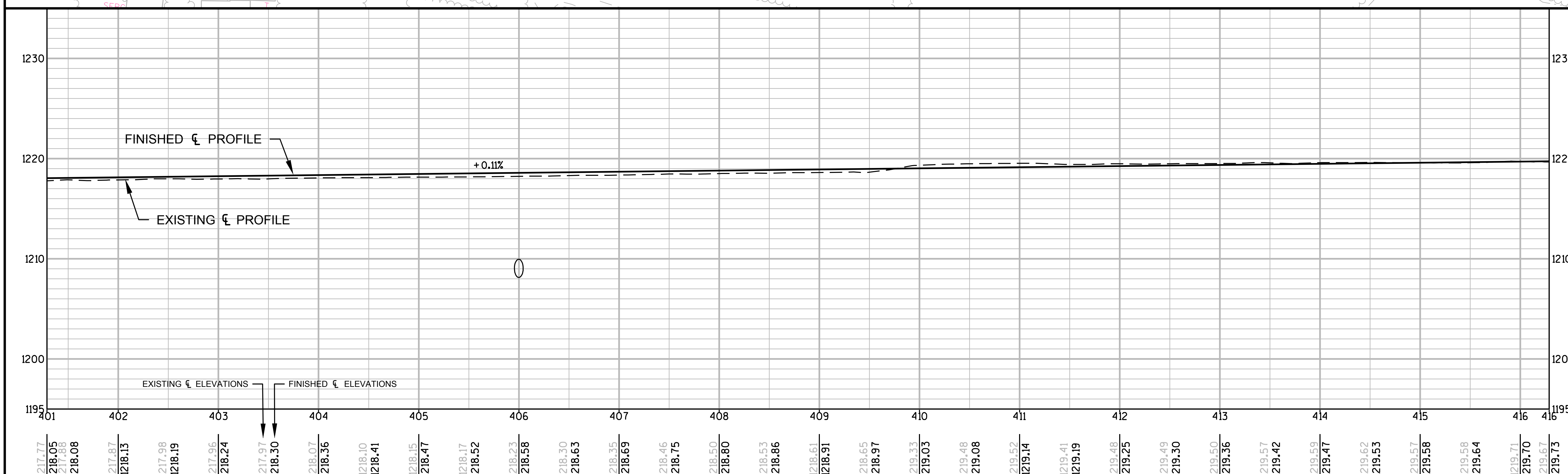
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-6

PLOT DATE : 12/5/2017 9:09 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44





PROJECT NO:1560-02-70	HWY:USH 63	COUNTY:SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-7
PLOT DATE : 12/5/2017 9:09 AM
PLOT BY : JENSEN, TRAVIS G
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

STA 418+53
GORSKI RD
BUTT JOINT REQ'D

GORSKI RD

STA 418+52.74 USH 63 =
STA 4+12.40 GORSKI RD

STA 418+50
MAINTAIN ASPHALT P.E. RT
SEE ENTRANCE DETAIL

STA 423+45
REMOVE EXISTING ALT. ACCESS RT

STA 427+50
EXISTING 30"x116' CSCP TO REMAIN

PT: 427+95.84
PT: 427195.84

STA 431+40
REMOVE EXISTING ALT. ACCESS LT

431+28.82 MATCH LINE

416+28.82 MATCH LINE

N 4°2'22.56" E

SIGN

BIKE PATH

STA 424+67.45
EL 1220.66

FINISHED ℄ PROFILE

EXISTING ℄ PROFILE

+ 0.11%

+ 0.11%

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

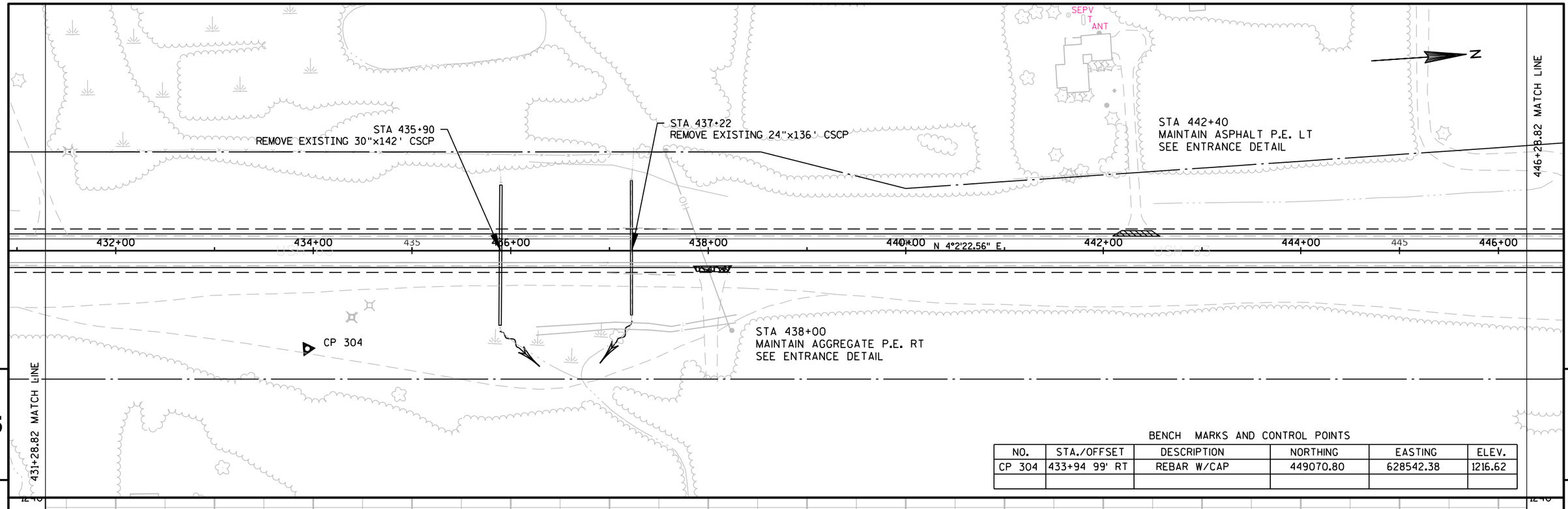
416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	431
1219.67	1219.73	1219.78	1219.74	1219.87	1219.95	1220.07	1219.87	1219.92	1220.07	1220.23	1220.32	1220.36	1220.52	1220.66	1220.76	1220.73	1220.73	1220.95	1221.16	1221.09	1221.18	1221.35	1221.43	1221.44	1221.48	1221.63	1221.66	1221.66
1219.65	1219.75	1219.98	1220.03	1220.09	1220.14	1220.20	1220.25	1220.31	1220.37	1220.42	1220.48	1220.53	1220.59	1220.65	1220.70	1220.76	1220.81	1220.87	1220.92	1220.98	1221.03	1221.09	1221.14	1221.20	1221.25	1221.31	1221.36	1221.40

1240	1230	1220	1210	1200

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-8

PLOT DATE : 12/5/2017 9:09 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT



5

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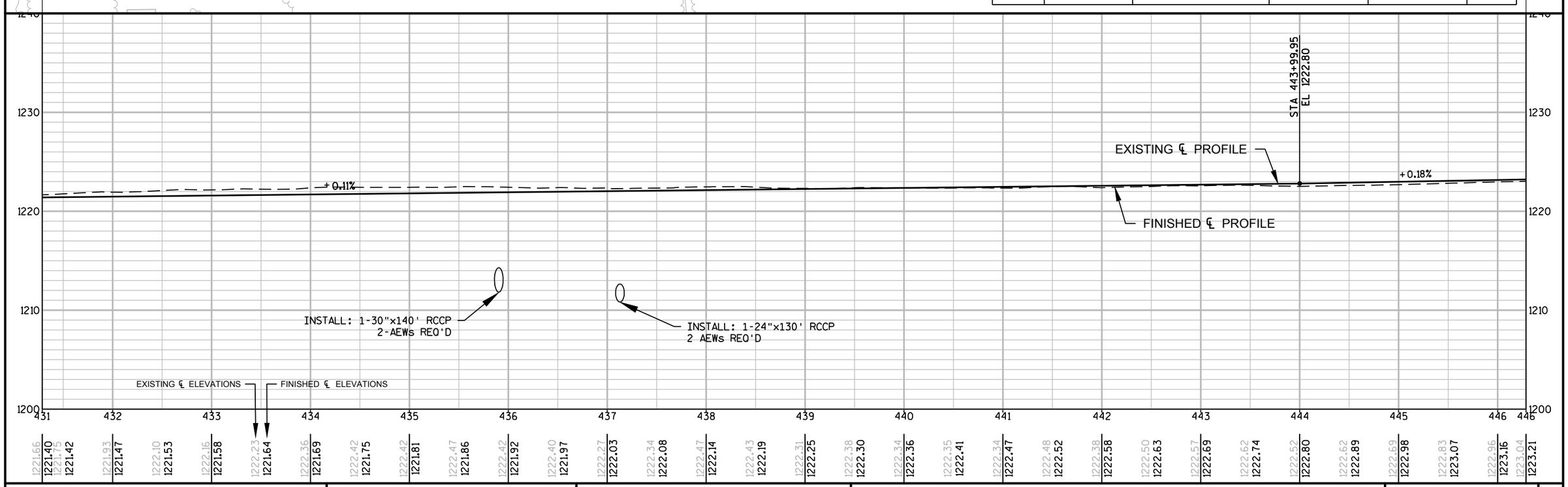
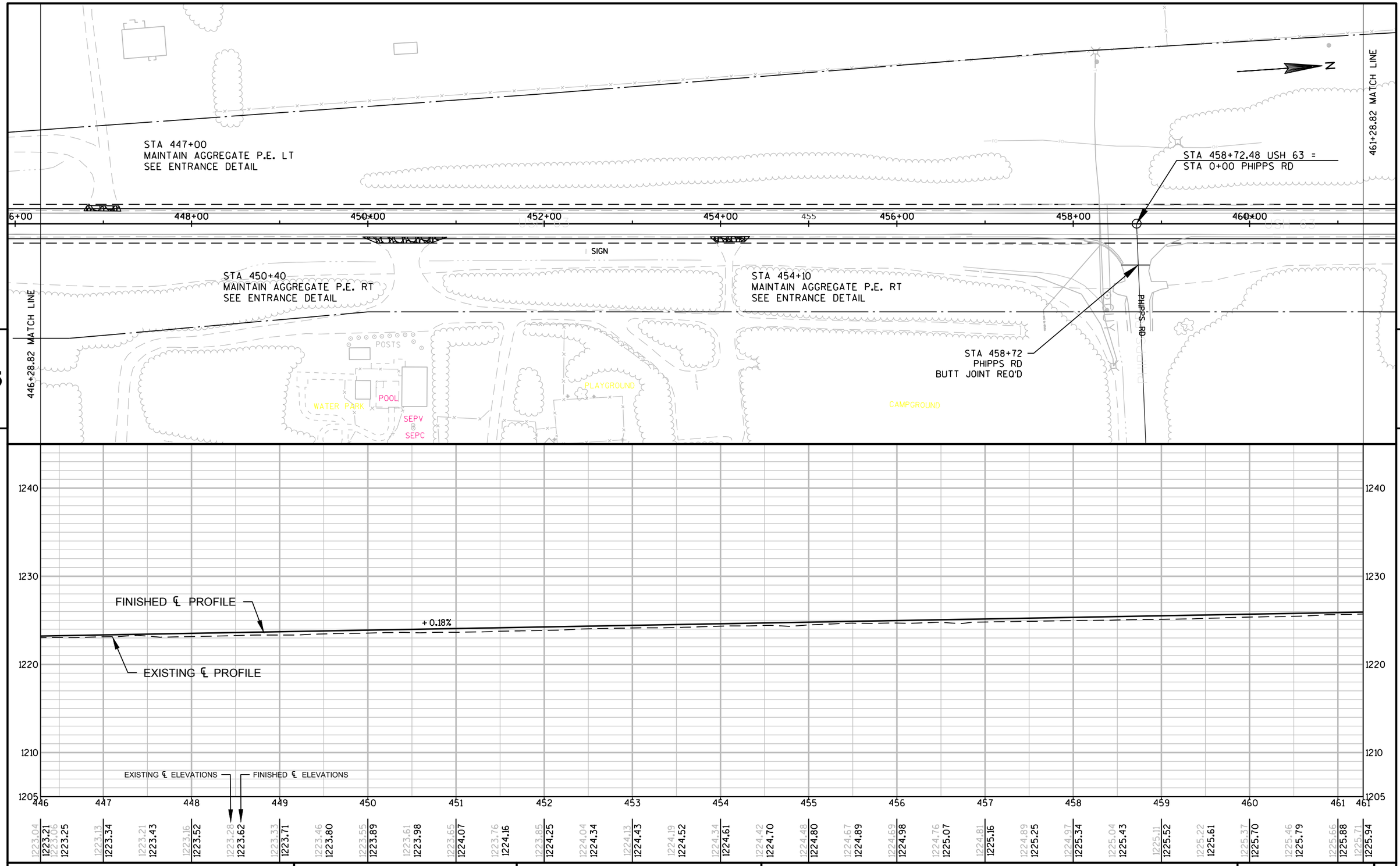
BENCH MARKS AND CONTROL POINTS

NO.	STA./OFFSET	DESCRIPTION	NORTHING	EASTING	ELEV.
CP 304	433+94 99' RT	REBAR W/CAP	449070.80	628542.38	1216.62



PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

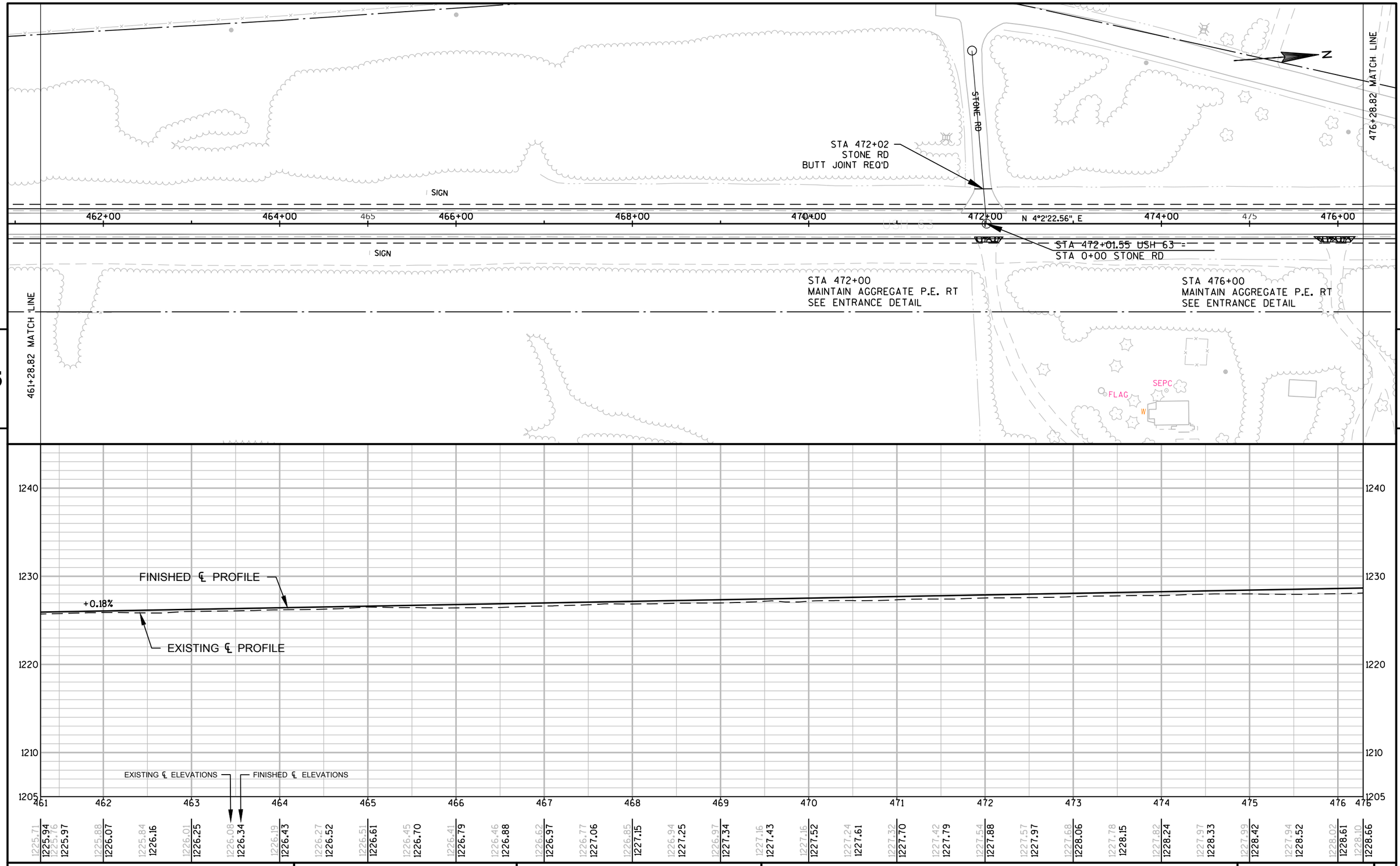
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-9
PLOT DATE : 12/5/2017 9:09 AM
PLOT BY : JENSEN, TRAVIS G
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

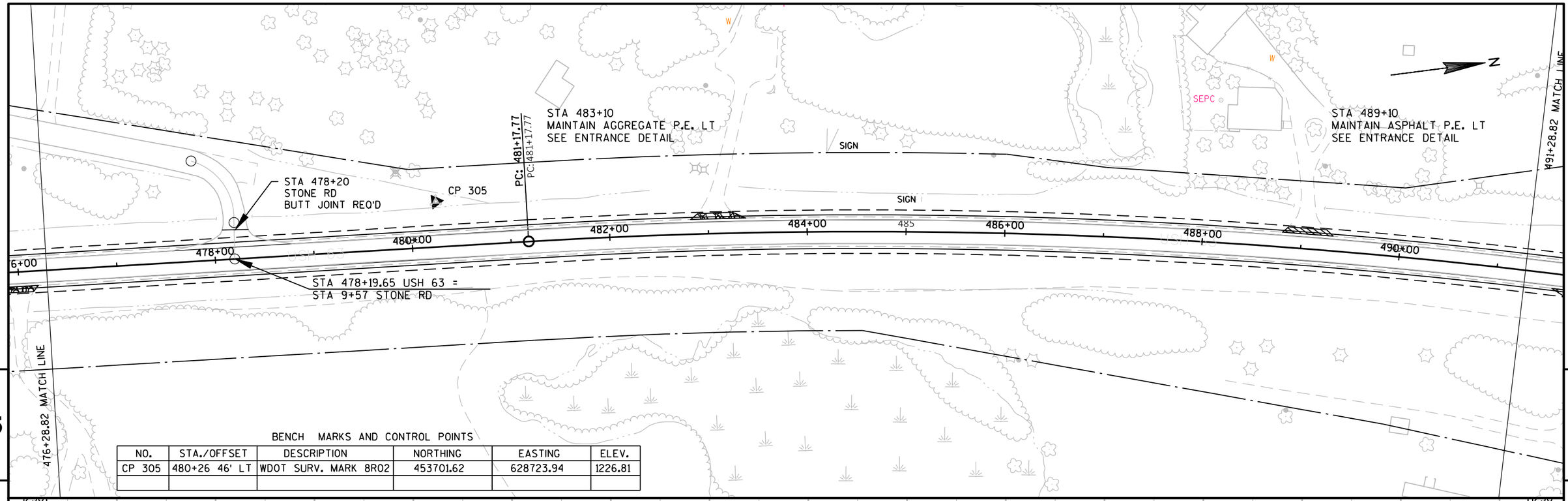
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-10

PLOT DATE : 12/5/2017 9:10 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT



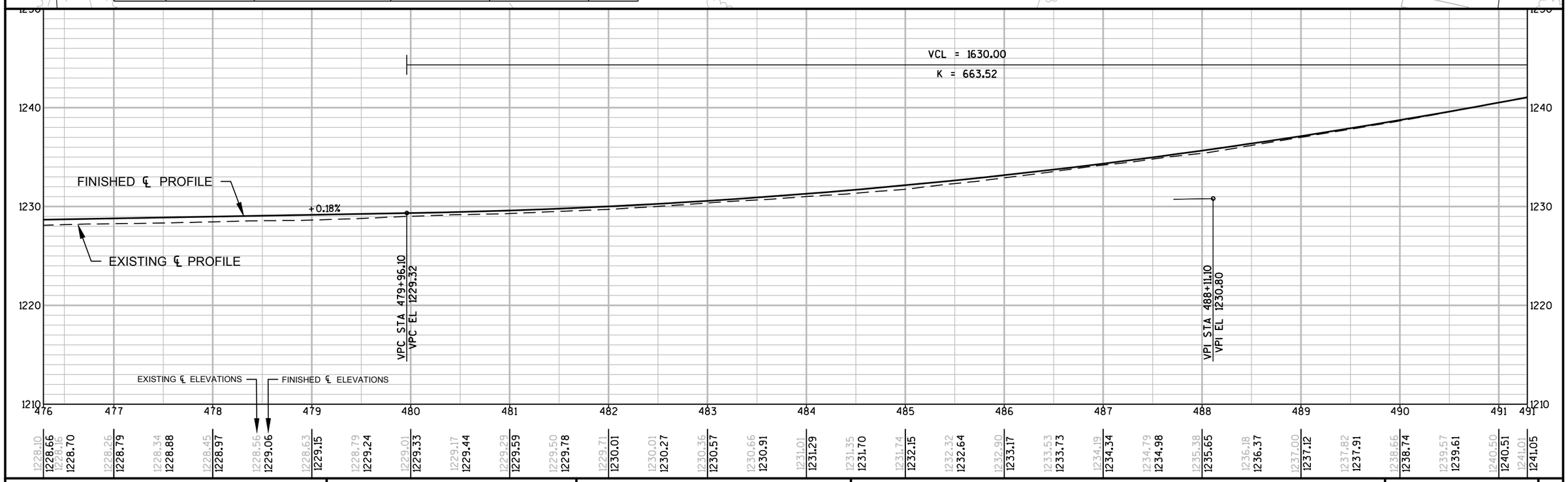
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-11
PLOT DATE : 12/5/2017 9:10 AM
PLOT BY : JENSEN, TRAVIS G
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

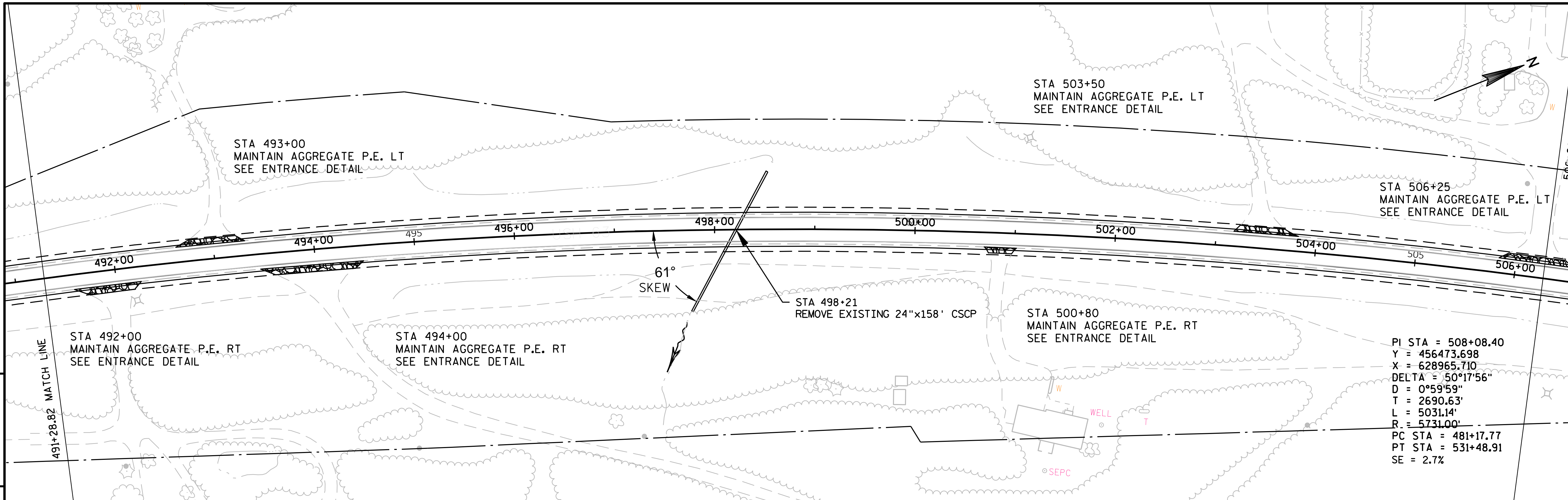


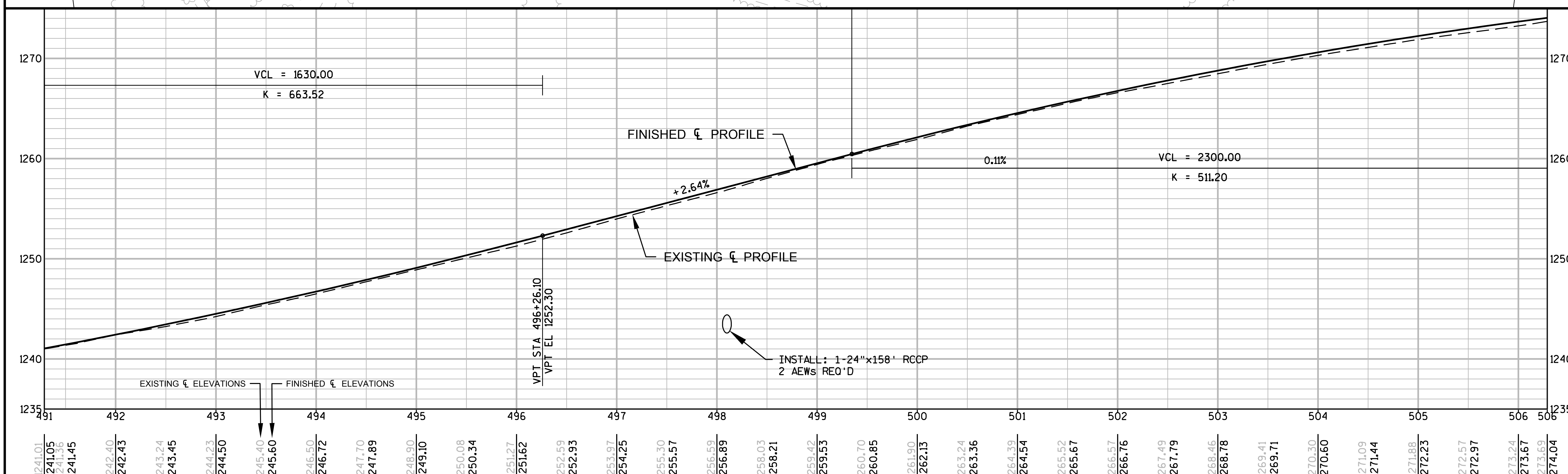
BENCH MARKS AND CONTROL POINTS

NO.	STA./OFFSET	DESCRIPTION	NORTHING	EASTING	ELEV.
CP 305	480+26 46' LT	WDOT SURV. MARK 8R02	453701.62	628723.94	1226.81



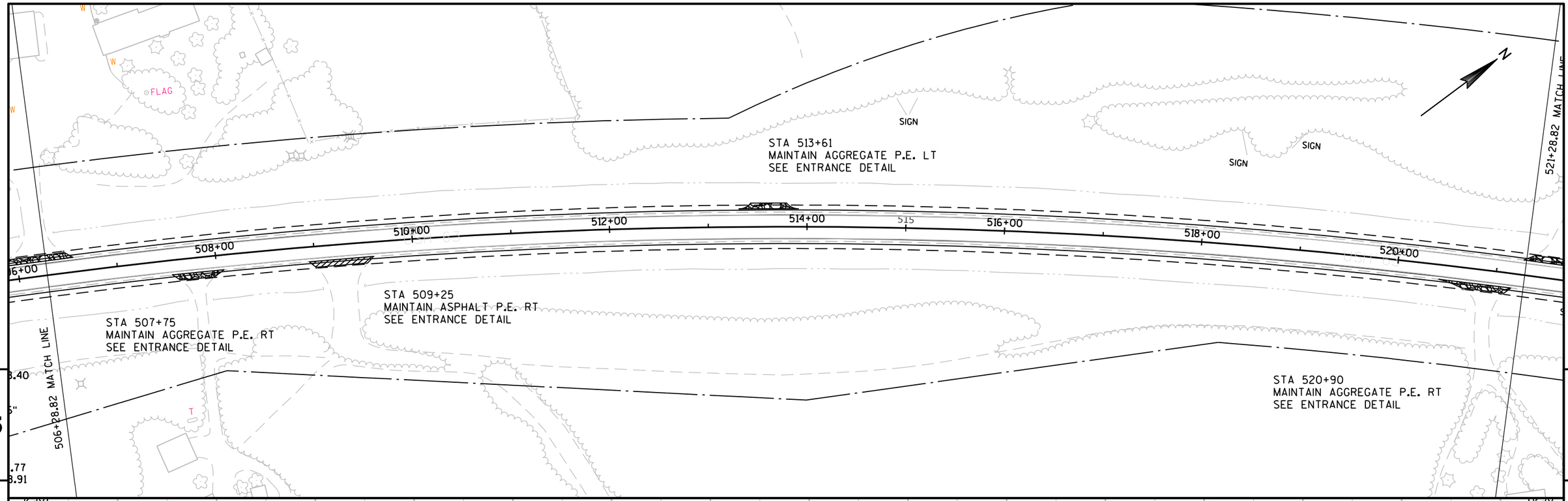
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

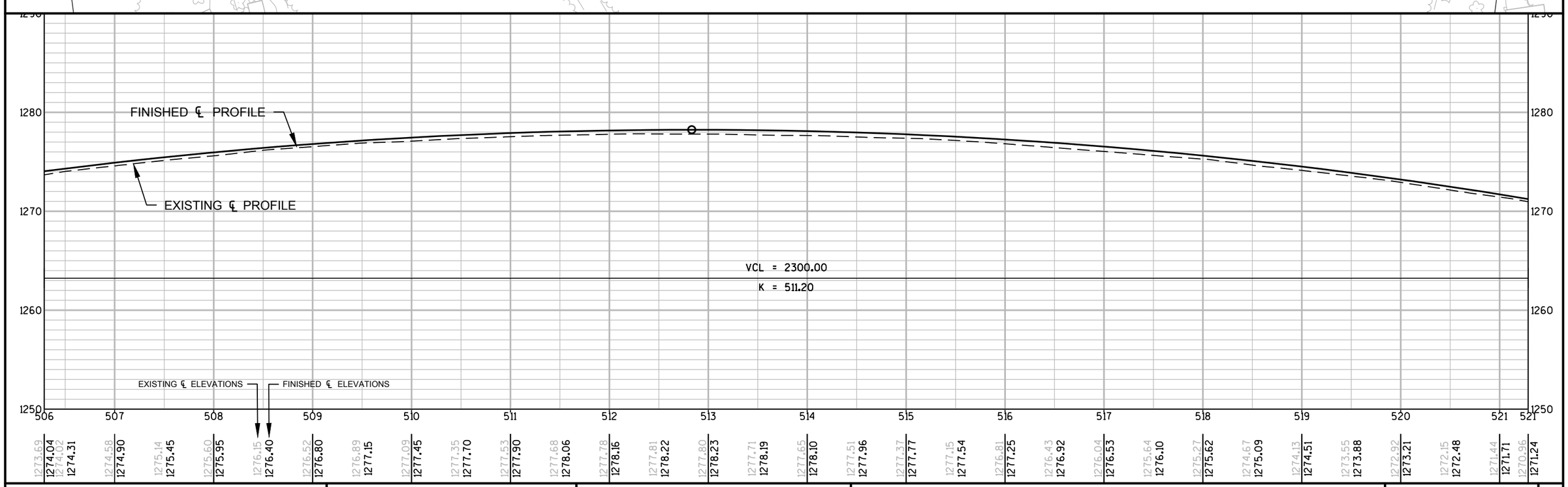




PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-13
PLOT DATE : 12/5/2017 9:10 AM
PLOT BY : JENSEN, TRAVIS G
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



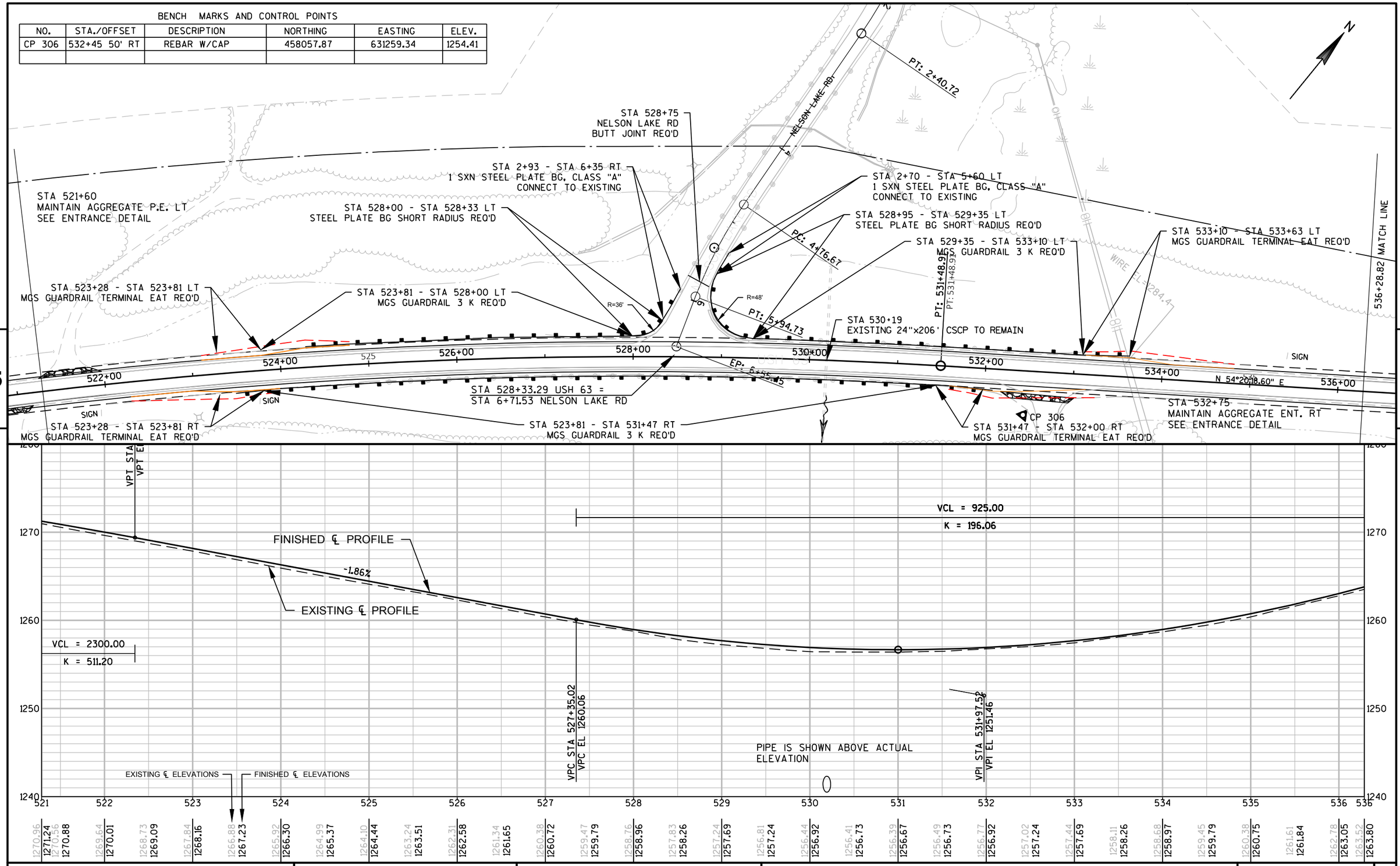


PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-14
PLOT DATE : 12/5/2017 9:10 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME :
PLOT SCALE : 1 IN:100 FT

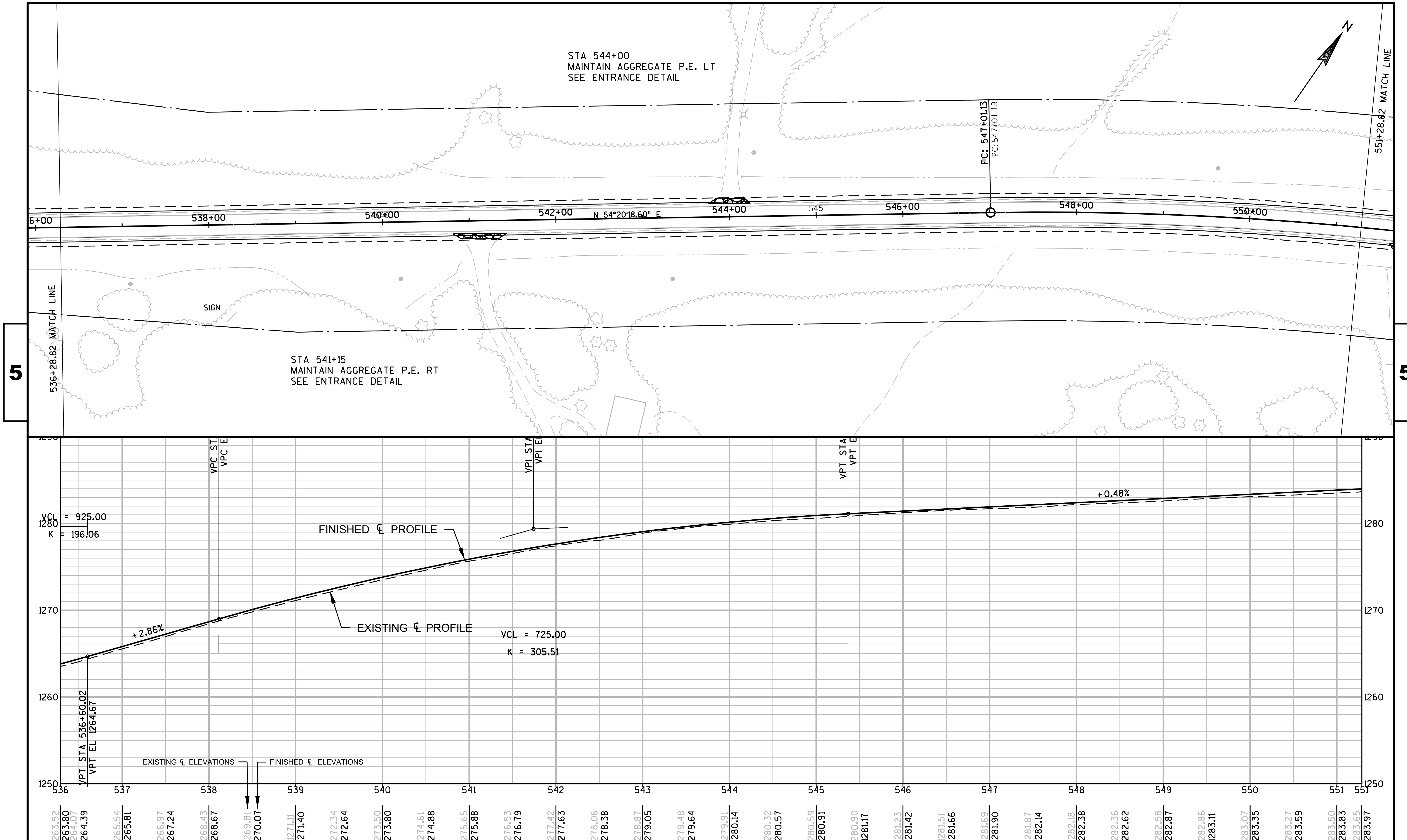
BENCH MARKS AND CONTROL POINTS

NO.	STA./OFFSET	DESCRIPTION	NORTHING	EASTING	ELEV.
CP 306	532+45 50' RT	REBAR W/CAP	458057.87	631259.34	1254.41



PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

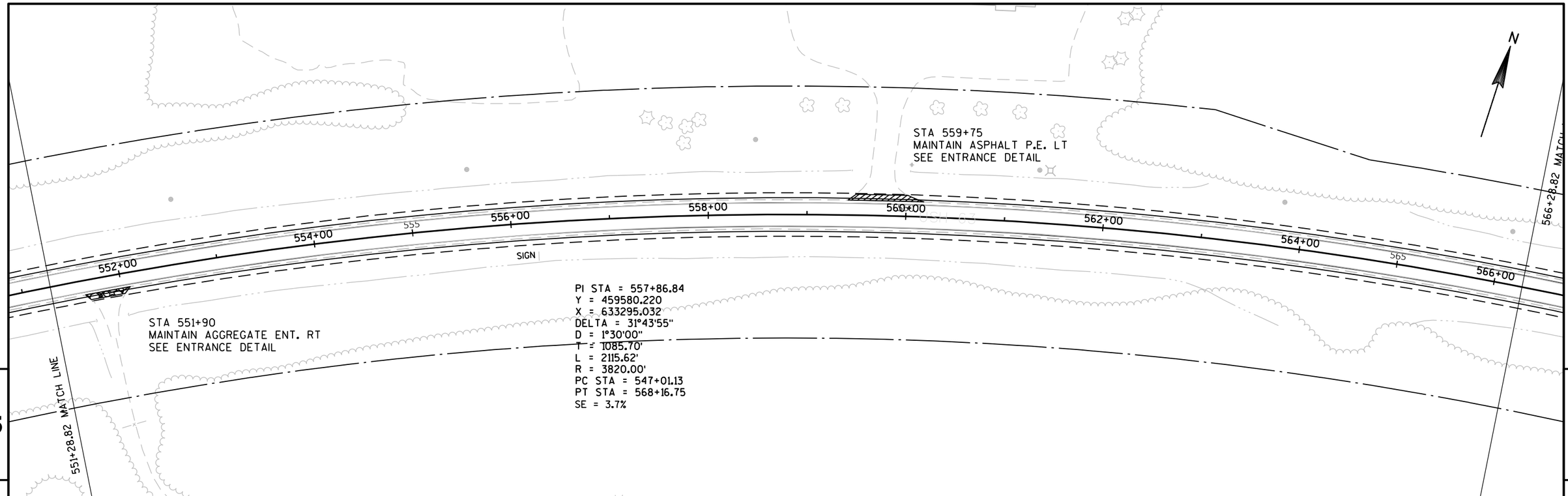
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-15
PLOT DATE : 12/5/2017 9:10 AM
PLOT BY : JENSEN, TRAVIS G
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

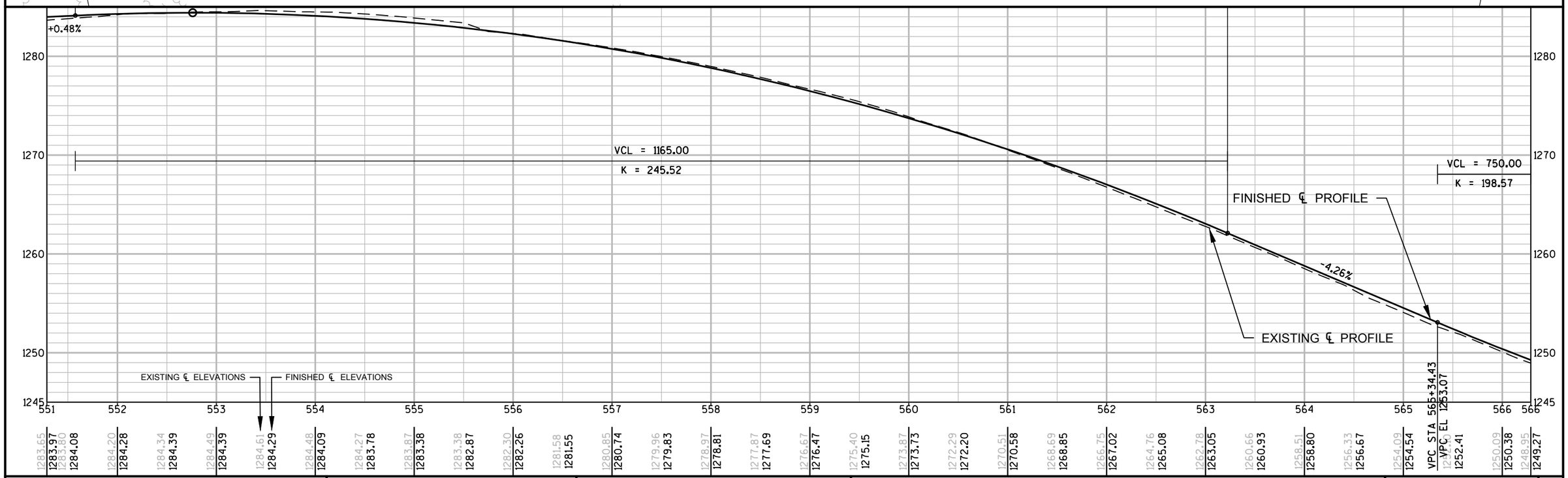


PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-16

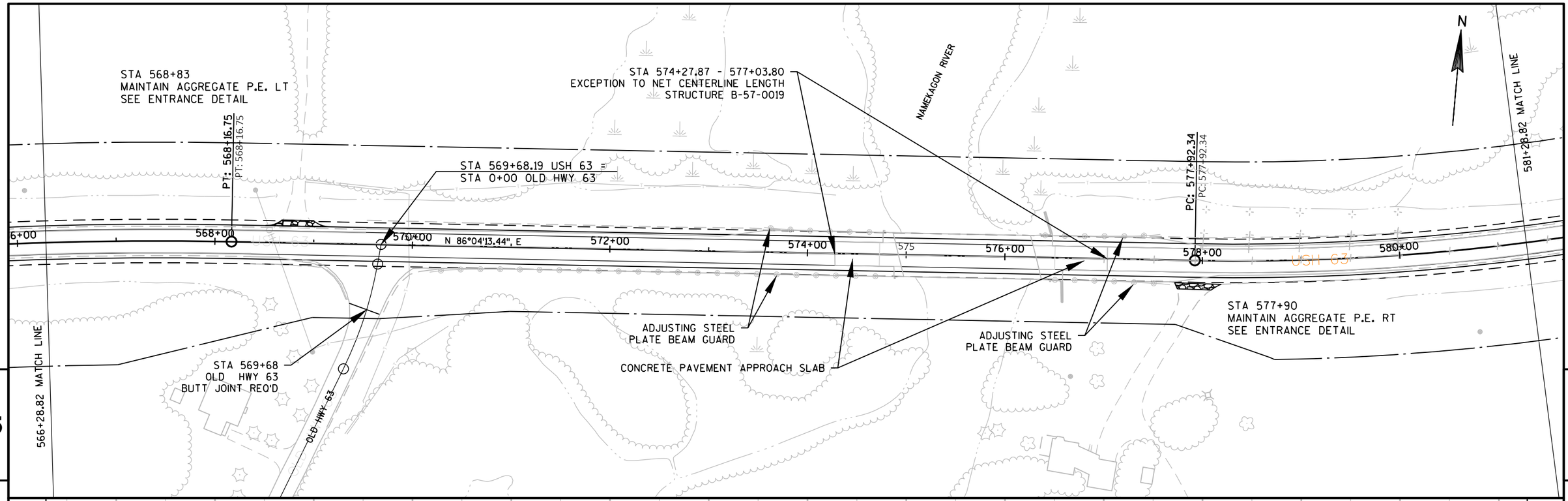
PLOT DATE : 12/5/2017 9:11 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT

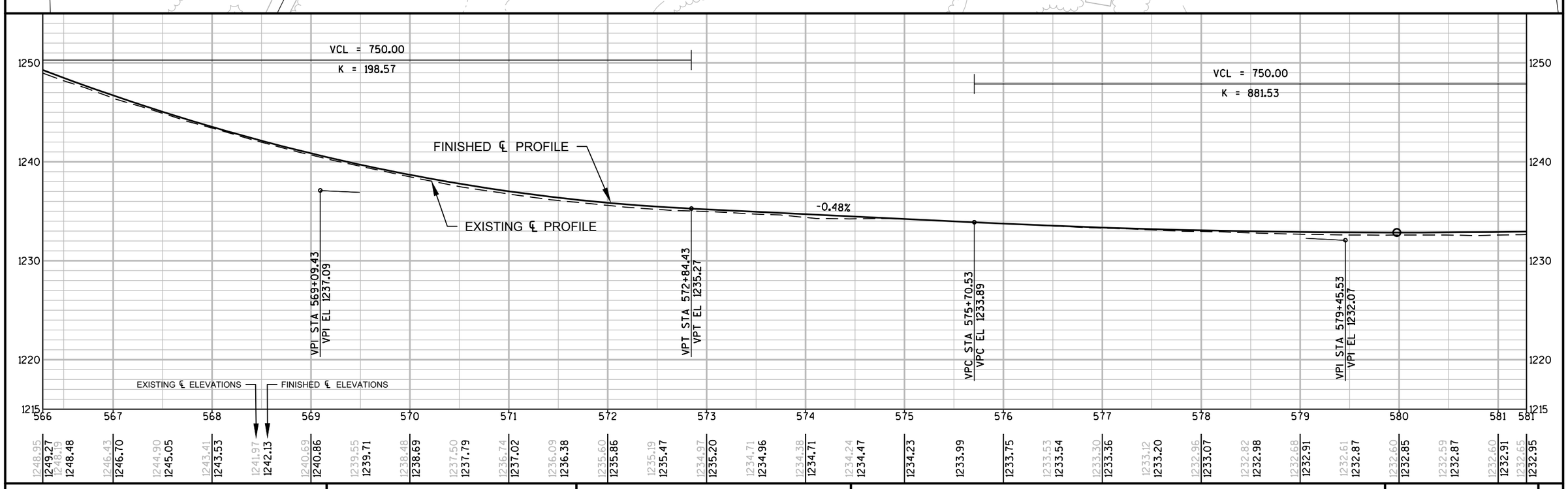




PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

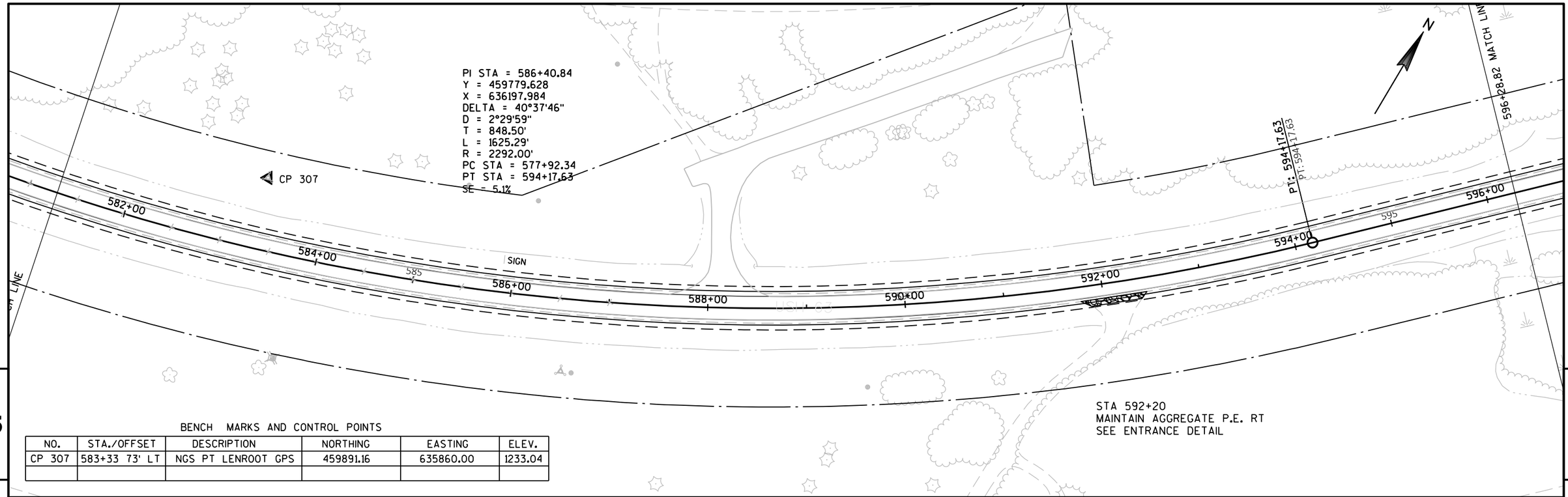
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-17
PLOT DATE : 12/5/2017 9:11 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44





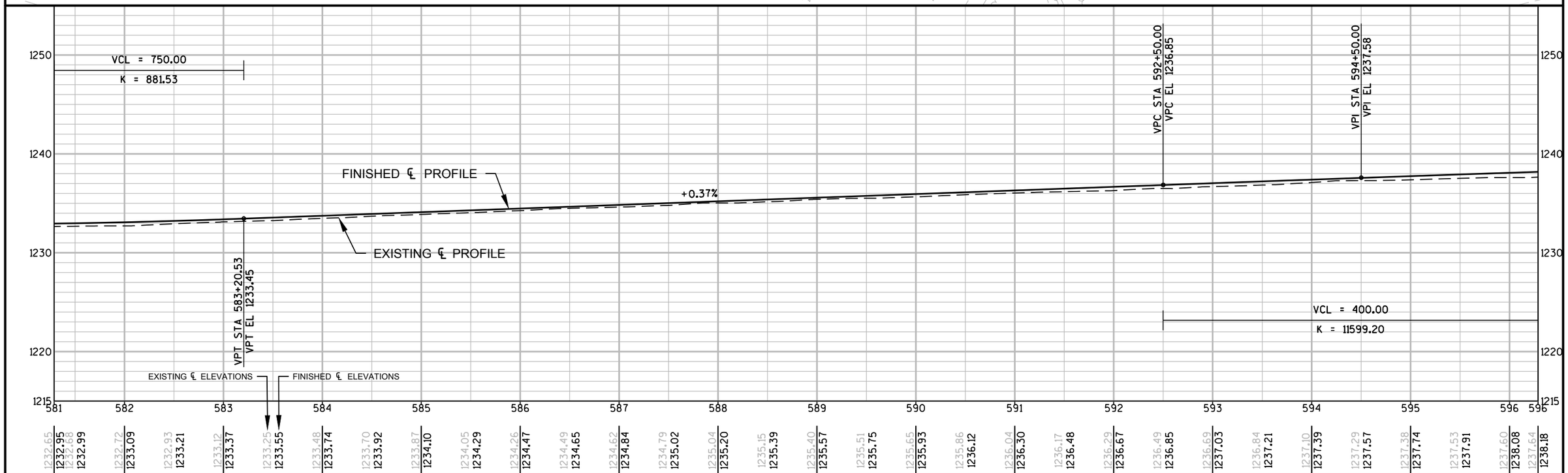
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-18
PLOT DATE : 12/5/2017 9:11 AM
PLOT BY : JENSEN, TRAVIS G
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



BENCH MARKS AND CONTROL POINTS

NO.	STA./OFFSET	DESCRIPTION	NORTHING	EASTING	ELEV.
CP 307	583+33 73' LT	NGS PT LENROOT GPS	459891.16	635860.00	1233.04



PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

MCDERMOTT CREEK

STA 607+15
REMOVE EXISTING 24"x100' CSCP

STA 611+13
WEINGARTEN RD
BUTT JOINT REQ'D

611+28.82 MATCH LINE

WEINGARTEN RD

STA 600+85
REMOVING OLD STRUCTURE
(8'x8'x104' PLATE PIPE ARCH)

6+00 598+00 600+00 602+00 604+00 605 606+00 N 45°26'27.96"E 608+00 610+00

USH 63 USH 63

STA 611+12.81 USH 63 =
STA 4+00 WEINGARTEN RD

596+28.82 MATCH LINE

5 5

VPT STA 596+50.00
VPT EL 1238.25

FINISHED ℄ PROFILE

+0.33%

EXISTING ℄ PROFILE

INSTALL: 2-60"x105' RCCP
4 AEWs REQ'D

INSTALL: 1-24"x100' RCCP
2 AEWs REQ'D

VCL = 400.00
K = 11599.20

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

1250 1240 1230 1220 1215

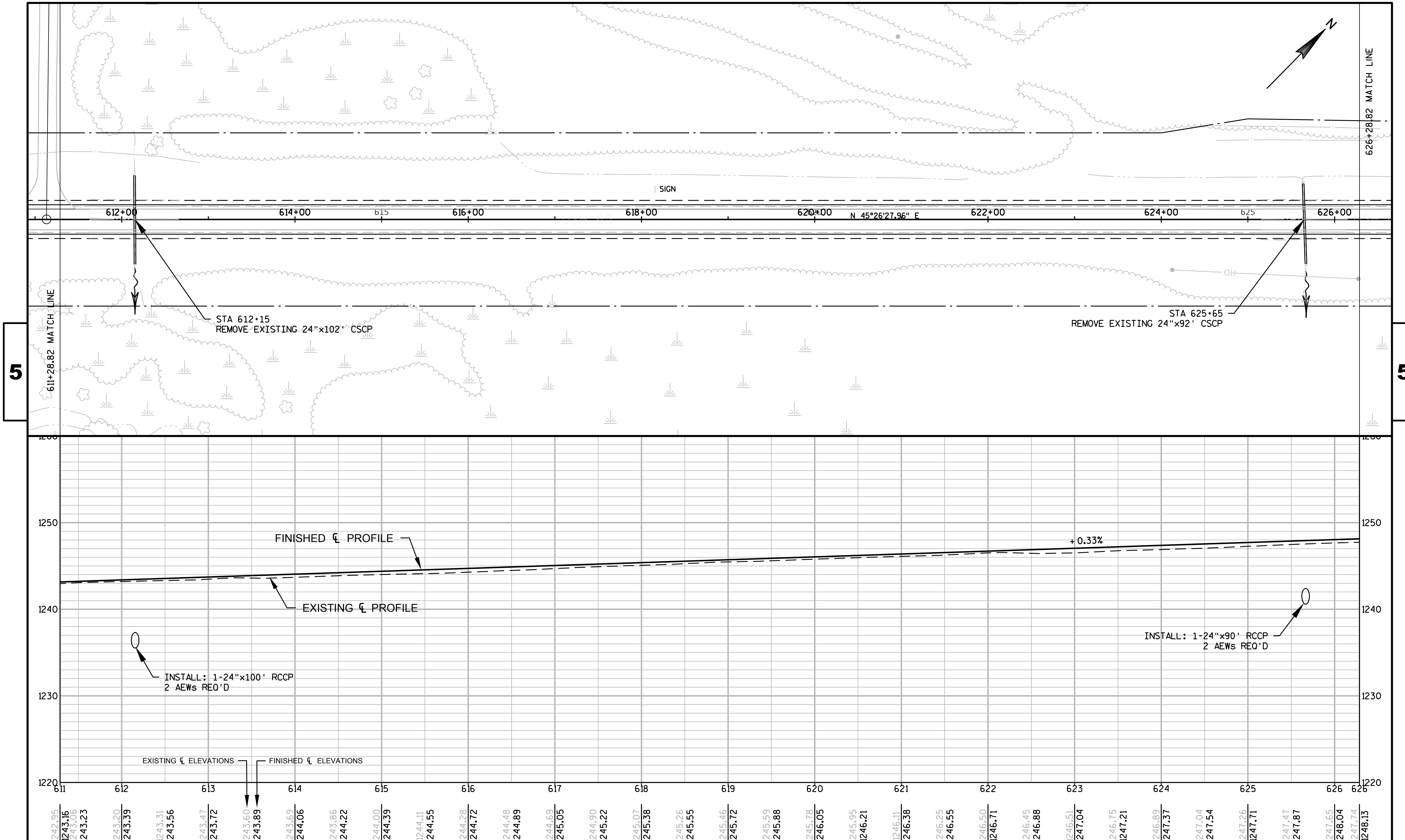
596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 611

1237.64 1238.18 1237.76 1238.25 1237.98 1238.41 1238.17 1238.58 1238.34 1238.75 1238.51 1238.91 1238.66 1239.08 1238.85 1239.24 1239.02 1239.41 1239.22 1239.57 1239.50 1239.74 1239.63 1239.91 1239.84 1240.07 1240.02 1240.24 1240.18 1240.40 1240.41 1240.57 1240.60 1240.74 1240.77 1240.90 1240.84 1241.07 1240.89 1241.23 1241.04 1241.40 1241.17 1241.57 1241.36 1241.73 1241.52 1241.90 1241.66 1242.06 1241.82 1242.23 1242.01 1242.40 1242.26 1242.56 1242.50 1242.73 1242.68 1242.89 1242.79 1243.06 1242.95 1243.16

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-20

PLOT DATE : 12/5/2017 9:11 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO:1560-02-70	HWY:USH 63	COUNTY:SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-21
PLOT DATE : 12/5/2017 9:11 AM
PLOT BY : JENSEN, TRAVIS G
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

PI STA = 633+05.98
Y = 463103.202
X = 639573.133
DELTA = 7°48'59"
D = 1°00'00"
T = 391.46'
L = 781.70'
R = 5730.00'
PC STA = 629+14.52
PT STA = 636+96.22
SE = 2.7%

PC: 629+14.52
PC: 629+14.52

PT: 636+96.22
PT: 636+96.22

STA 633+00
MAINTAIN ASPHALT C.E. LT
SEE ENTRANCE DETAIL

STA 636+75
MAINTAIN ASPHALT C.E. LT
SEE ENTRANCE DETAIL

CP 308

SIGN

SIGN

STA 633+00
MAINTAIN AGGREGATE P.E. RT
SEE ENTRANCE DETAIL

STA 636+75
MAINTAIN AGGREGATE TRAIL ENT. RT
SEE ENTRANCE DETAIL

STA 639+68
REMOVE EXISTING 30"x112' CSCP

626+28.82 MATCH LINE

641+28.82 MATCH LINE

N 37°37'28.92" E

VOLLEYBALL COURTS

WELL

SEPC

FOOTBRIDGE

FLAG

BENCH MARKS AND CONTROL POINTS

NO.	STA./OFFSET	DESCRIPTION	NORTHING	EASTING	ELEV.
CP 308	634+59 46' LT	REBAR W/CAP	463258.13	639627.97	1246.51

FINISHED ℄ PROFILE

EXISTING ℄ PROFILE

+0.33%

INSTALL: 1-30"x112' RCCP
2 AEWs REQ'D

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

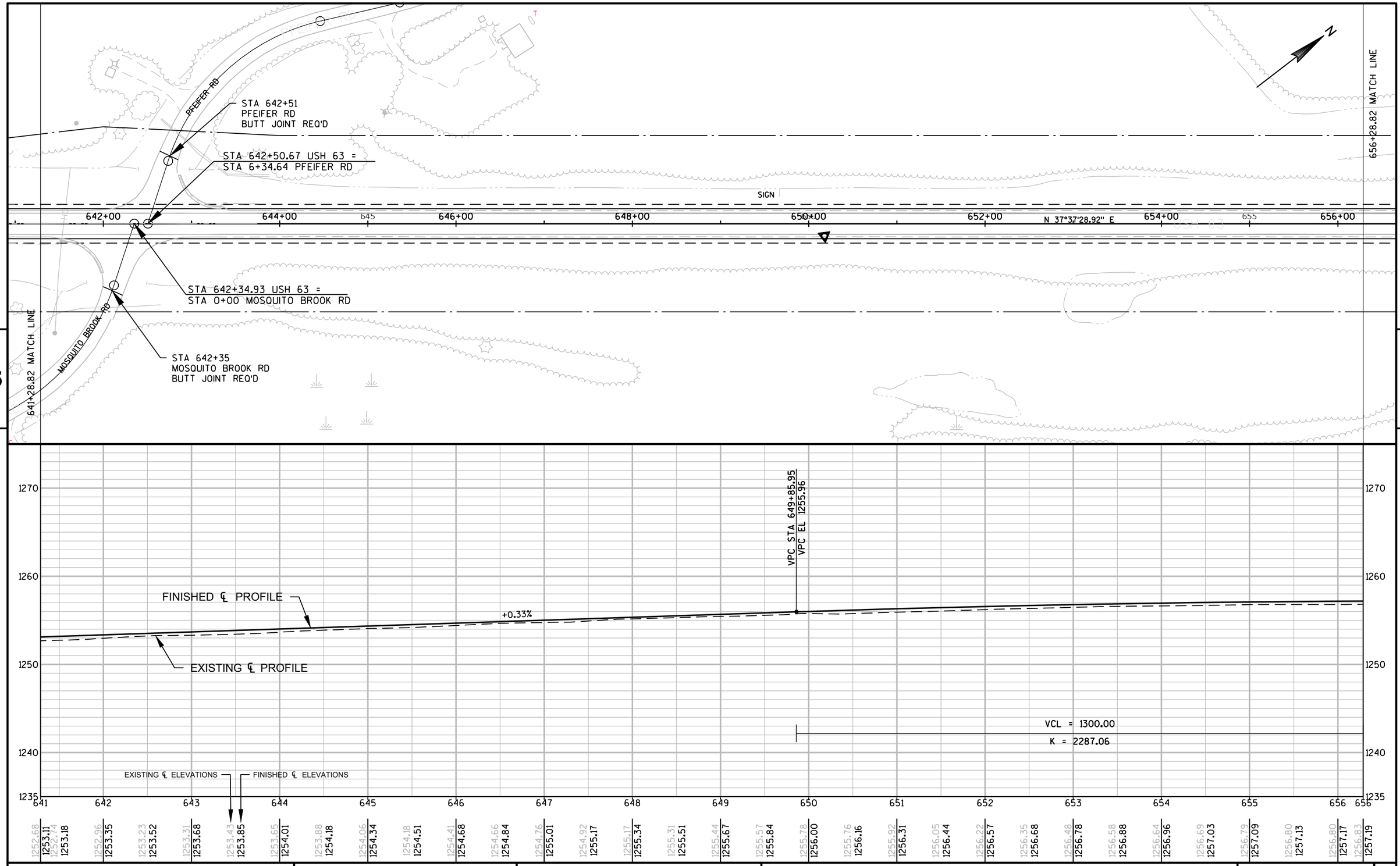
626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	641
1247.74	1247.98	1248.21	1248.36	1248.54	1248.71	1248.96	1249.09	1249.29	1249.44	1249.59	1249.76	1250.15	1250.32	1250.50	1250.66	1250.77	1250.92	1251.16	1251.32	1251.47	1251.63	1251.85	1252.04	1252.21	1252.33	1252.36	1252.55	1252.67	1252.56	1252.68
1248.13	1248.37	1248.54	1248.70	1248.87	1249.03	1249.20	1249.37	1249.53	1249.70	1249.86	1250.03	1250.20	1250.36	1250.53	1250.69	1250.86	1251.03	1251.19	1251.36	1251.52	1251.69	1251.86	1252.02	1252.19	1252.35	1252.52	1252.69	1252.85	1253.02	1253.11

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-22

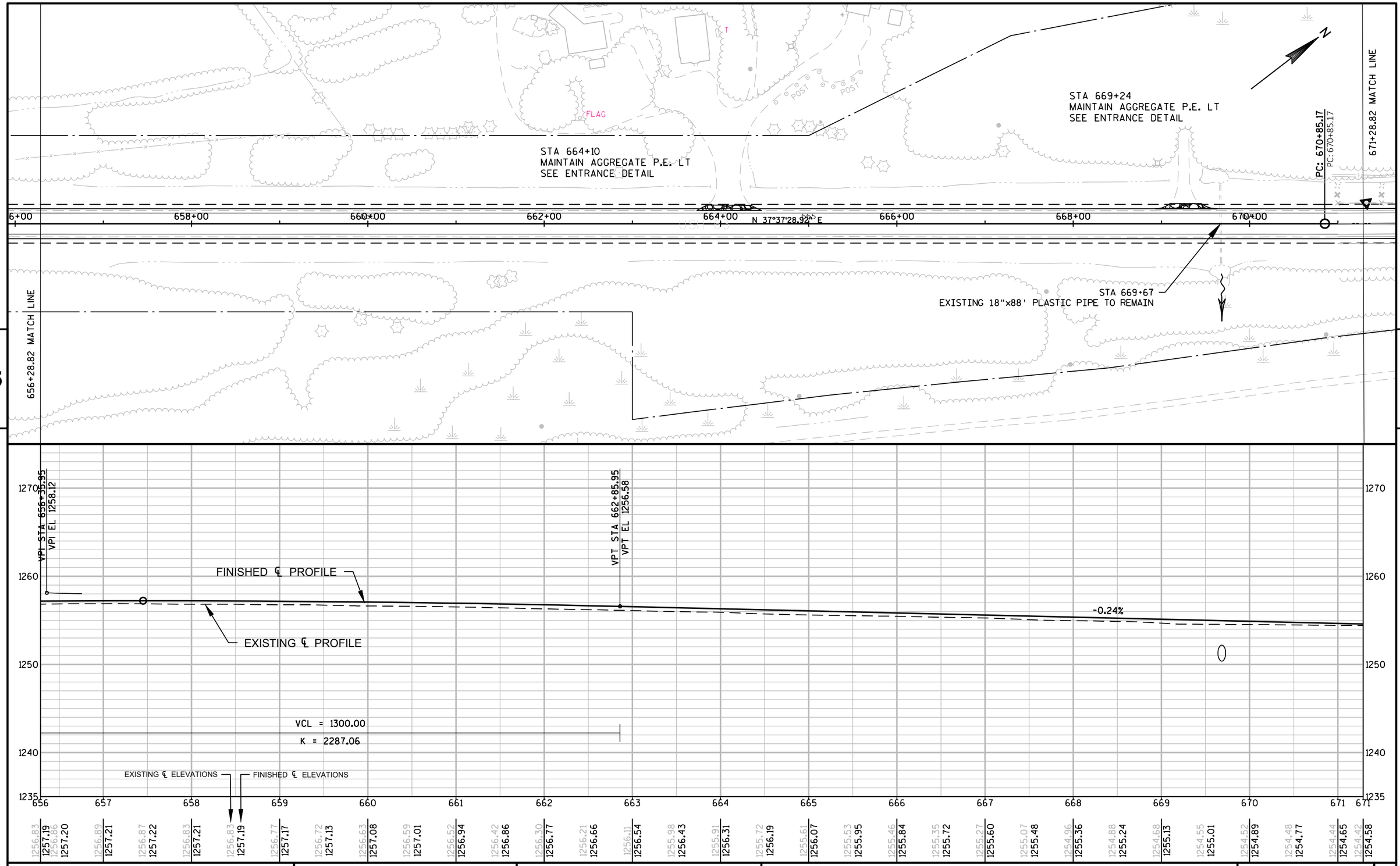
PLOT DATE : 12/5/2017 9:12 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME :

PLOT SCALE : 1 IN:100 FT



PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-23
PLOT DATE : 12/5/2017 9:12 AM
PLOT BY : JENSEN, TRAVIS G
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



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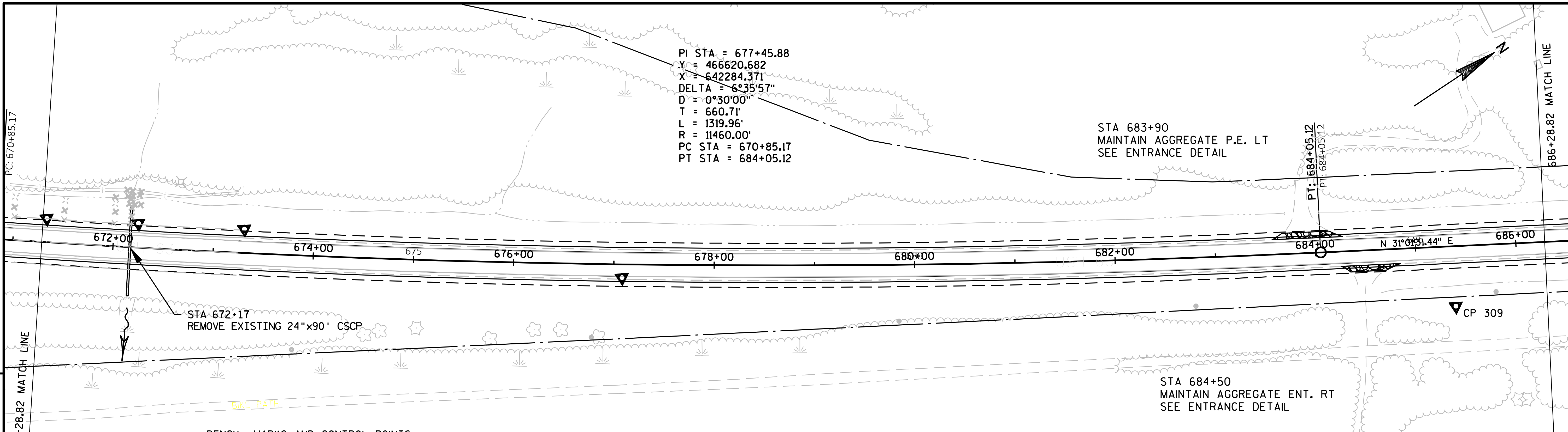
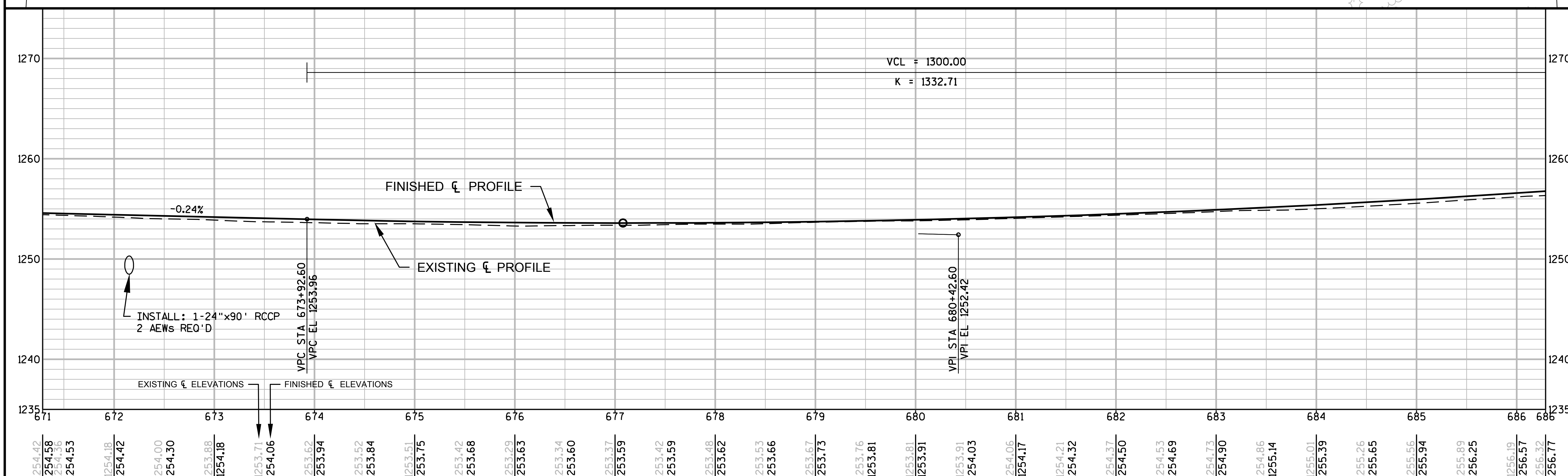
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-24
PLOT DATE : 12/5/2017 9:12 AM
PLOT BY : JENSEN, TRAVIS G
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



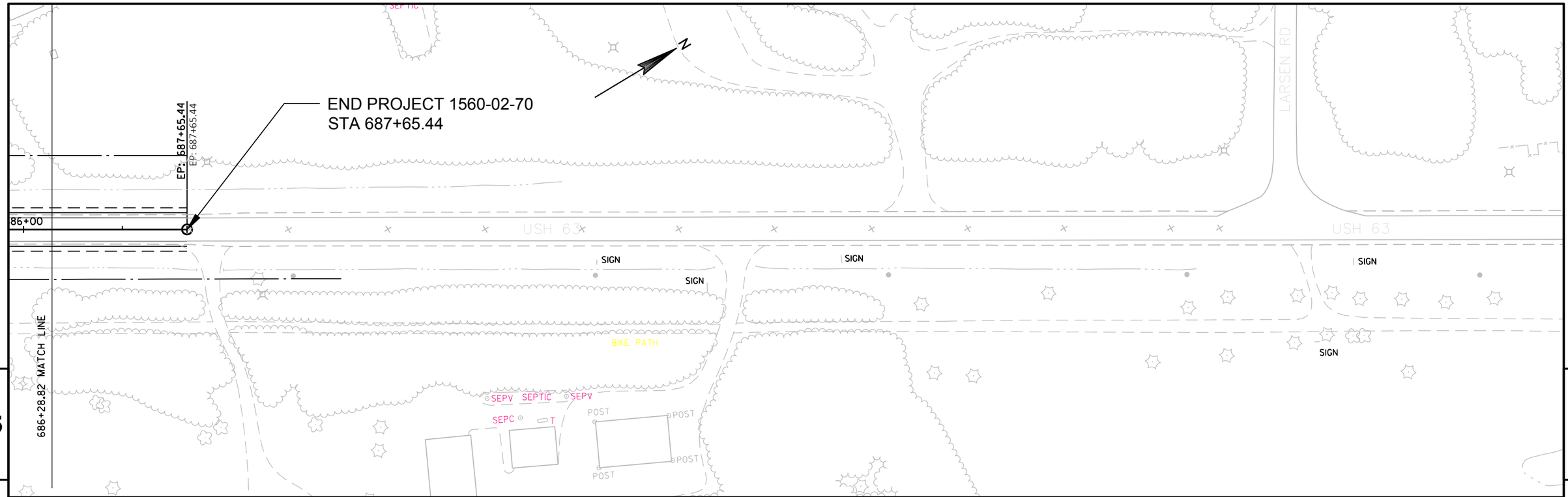
BENCH MARKS AND CONTROL POINTS

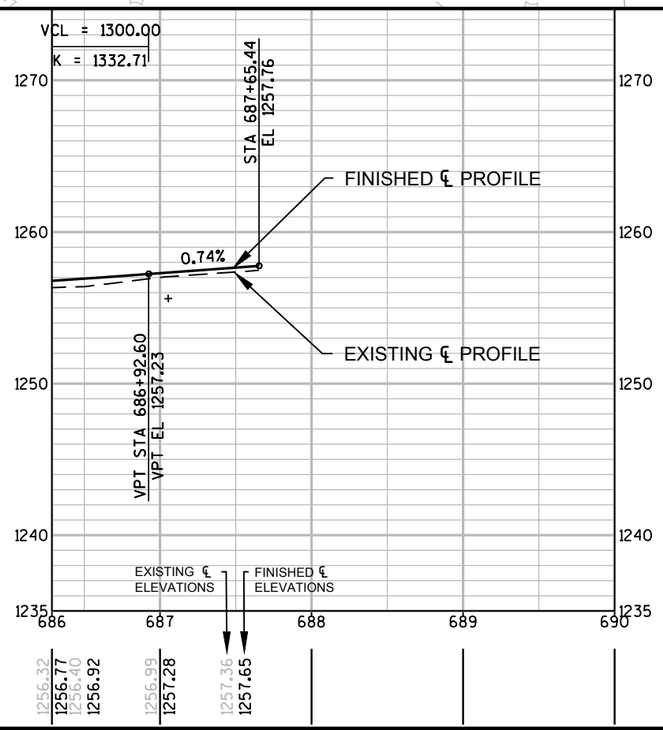
NO.	STA./OFFSET	DESCRIPTION	NORTHING	EASTING	ELEV.
CP 309	685+37 60' RT	REBAR W/CAP	467269.26	642744.45	1254.90



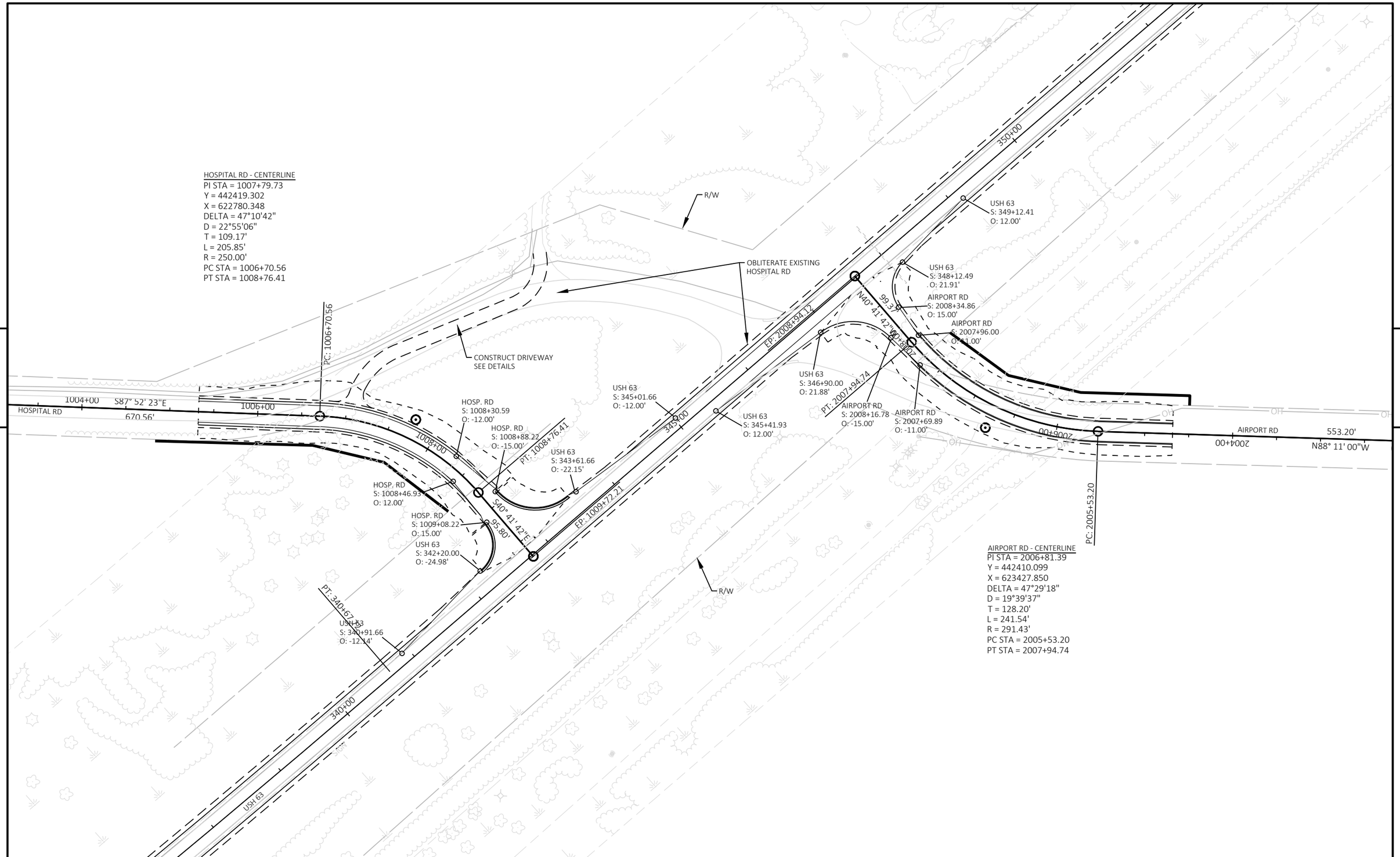
PROJECT NO:1560-02-70	HWY:USH 63	COUNTY:SAWYER	PLAN AND PROFILE: USH 63	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP.DWG
LAYOUT NAME - P&P-25
PLOT DATE : 12/5/2017 9:12 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT





PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: USH 63	SHEET	E



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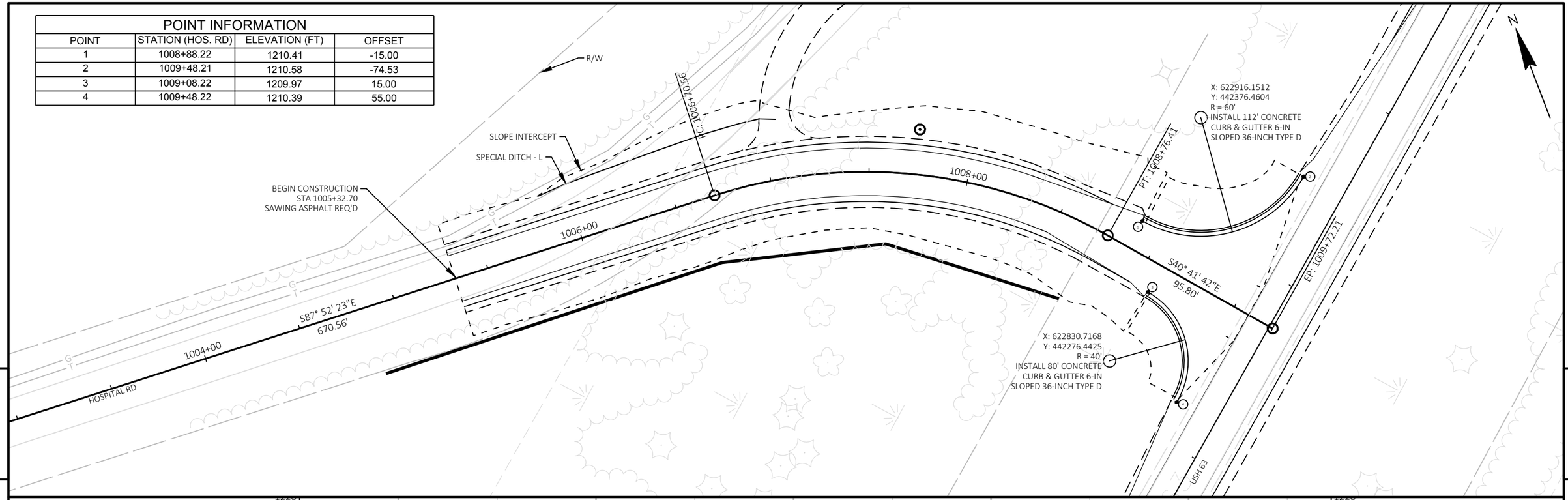
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	HOSPITAL ROAD & AIRPORT ROAD ALIGNMENT OVERVIEW	SHEET	E

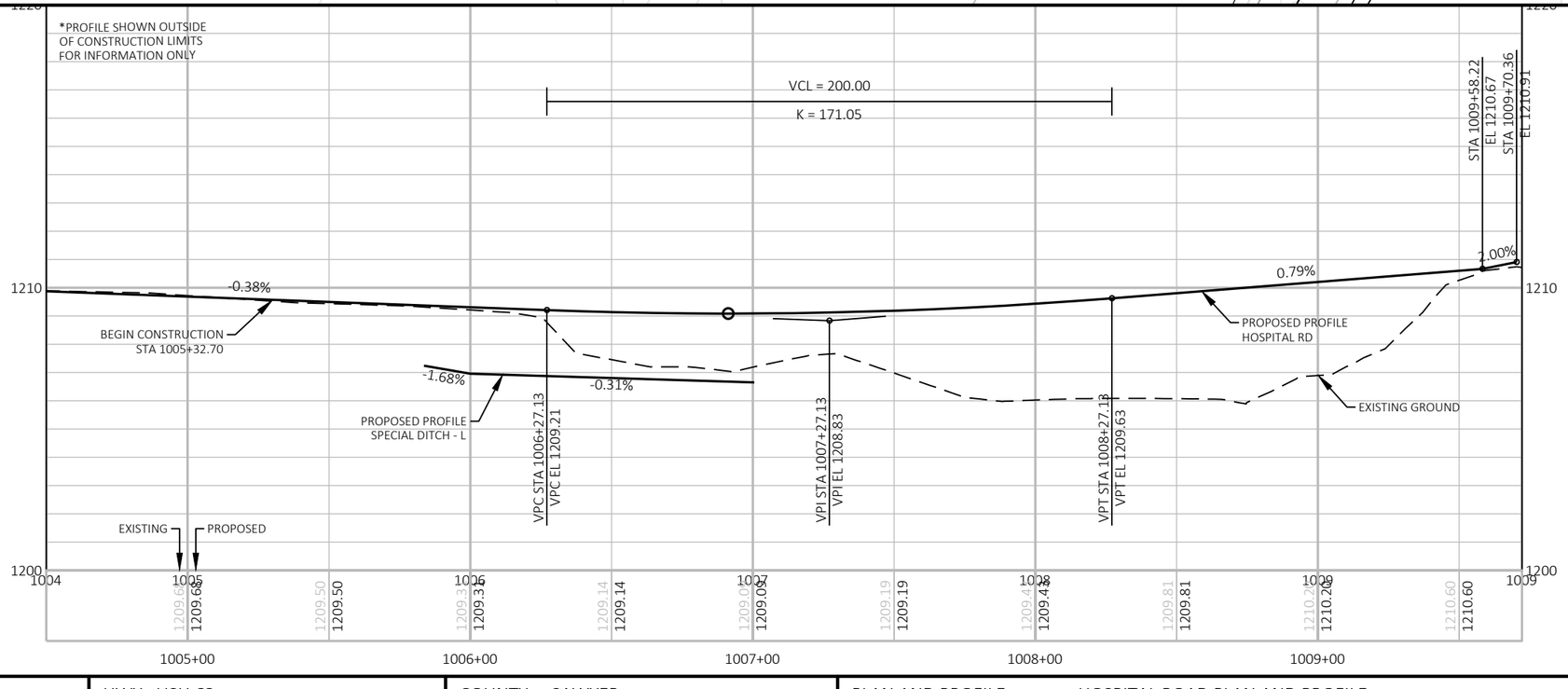
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP-HOSPITAL RD.DWG
LAYOUT NAME - OVERVIEW

PLOT DATE : 11/7/2017 1:20 PM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:100 FT

POINT INFORMATION			
POINT	STATION (HOS. RD)	ELEVATION (FT)	OFFSET
1	1008+88.22	1210.41	-15.00
2	1009+48.21	1210.58	-74.53
3	1009+08.22	1209.97	15.00
4	1009+48.22	1210.39	55.00



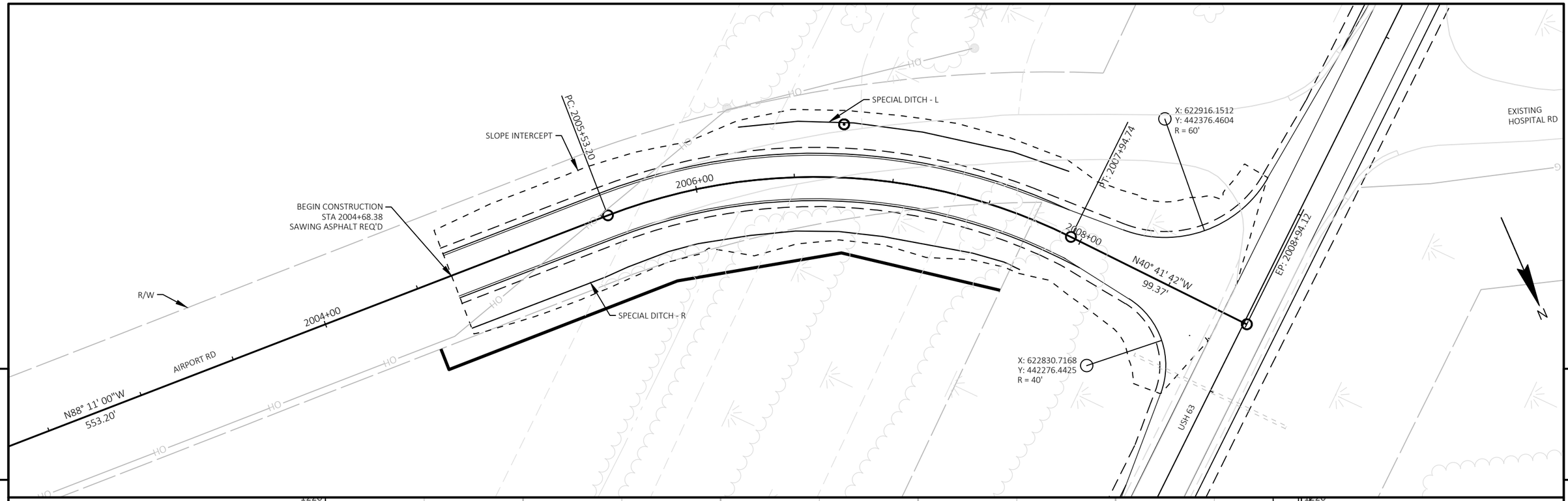
SPECIAL DITCH - L	
STATION	ELEVATION (FT)
1005+83.64	1207.24
1006+00.06	1206.96
1007+00.50	1206.65

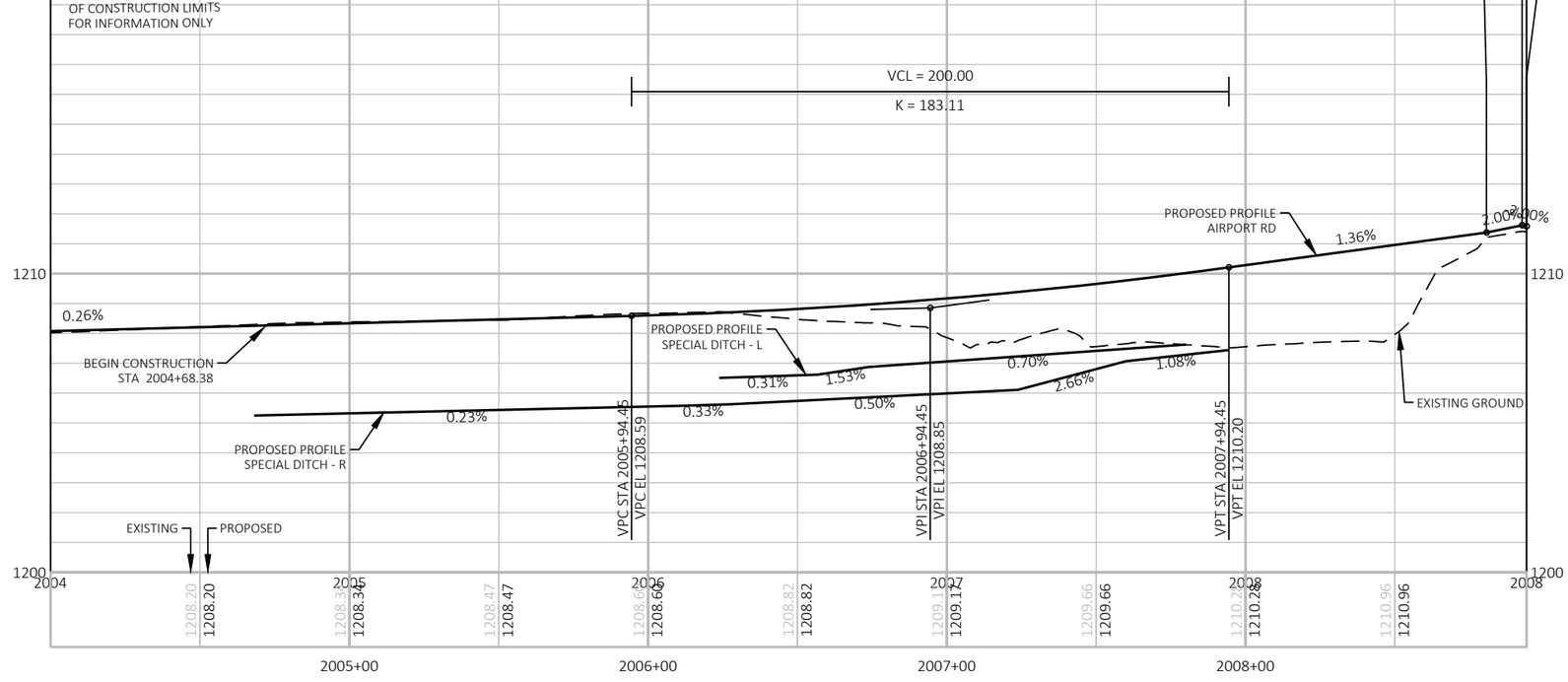


PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: HOSPITAL ROAD PLAN AND PROFILE	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_PP-HOSPITAL RD.DWG
LAYOUT NAME - HOSPITAL RD

PLOT DATE : 11/7/2017 1:20 PM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:50 FT





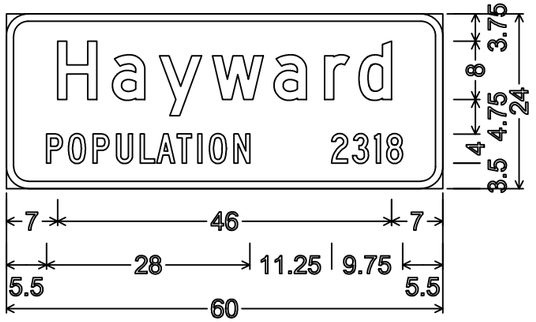
SPECIAL DITCH - R	
STATION	ELEVATION (FT)
2004+68.38	1205.25
2006+11.04	1205.57
2006+27.34	1205.63
2007+23.77	1206.11
2007+59.91	1207.07
2007+94.45	1207.44

SPECIAL DITCH - L	
STATION	ELEVATION (FT)
2006+23.77	1206.51
2006+56.73	1206.61
2006+73.97	1206.88
2007+80.00	1207.50

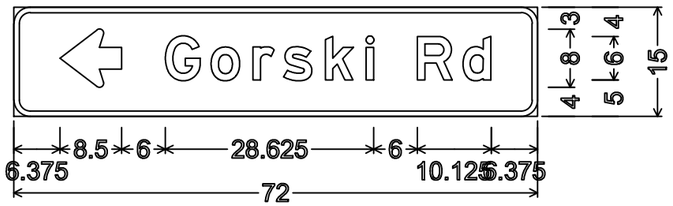
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	PLAN AND PROFILE: AIRPORT ROAD PLAN AND PROFILE	SHEET	E

NOTES

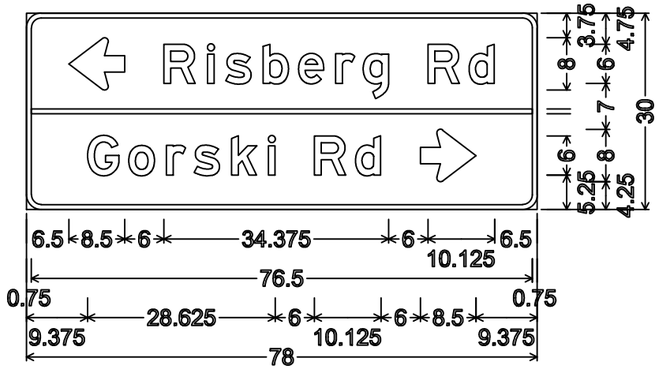
1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E except as Shown



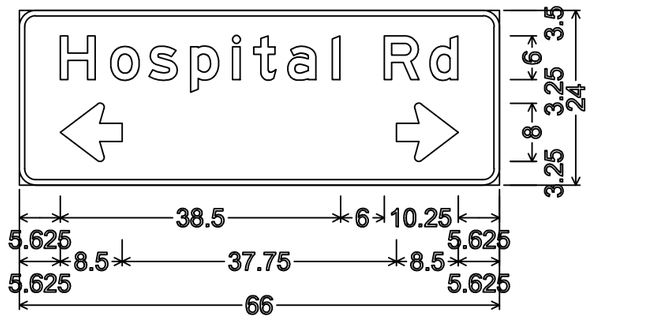
3.000" Radius, 1.000" Border, White on Green;
"Hayward" D;
"POPULATION" C 125% spacing;
"2318" C;



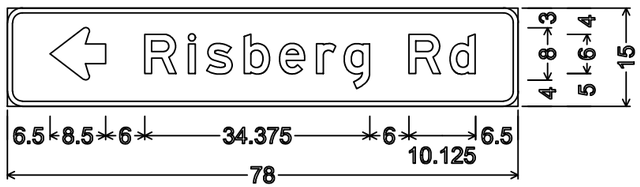
2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°;
"Gorski" E; "Rd" E;



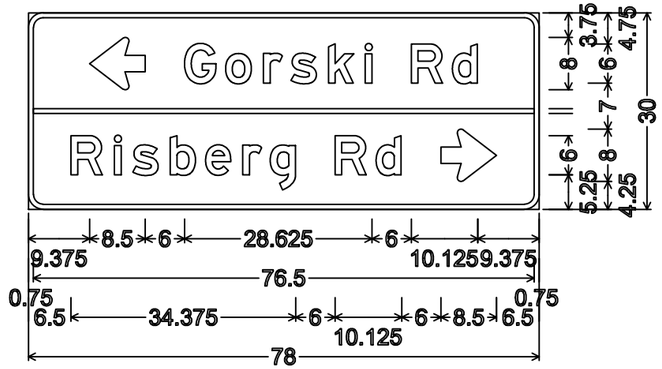
2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°;
"Risberg" E; "Rd" E; "Gorski" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;



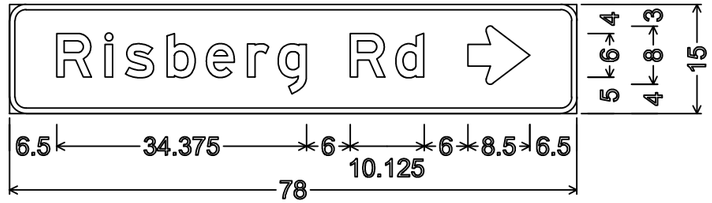
2.250" Radius, 0.750" Border, White on Green;
"Hospital" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 180°;
Standard Arrow Custom 8.500" X 8.000" 0°;



2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°;
"Risberg" E; "Rd" E;



2.250" Radius, 0.750" Border, White on Green;
"Gorski" E; "Rd" E; "Risberg" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;



2.250" Radius, 0.750" Border, White on Green;
"Risberg" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;

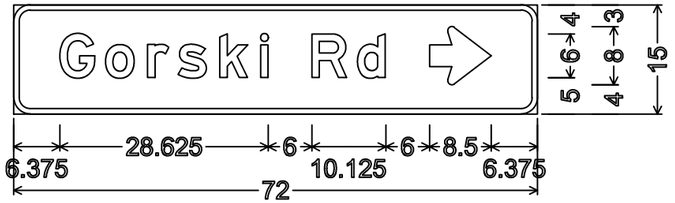
7

7

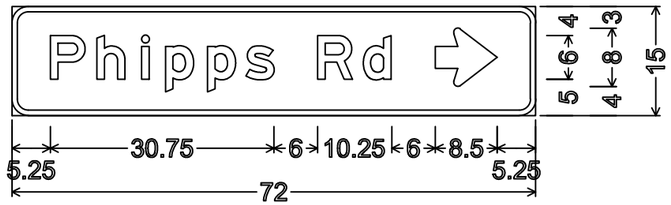
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	SIGN PLATES	SHEET	E

NOTES

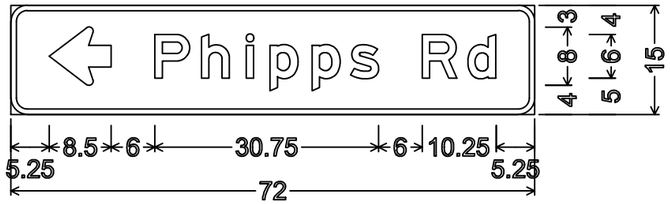
1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E



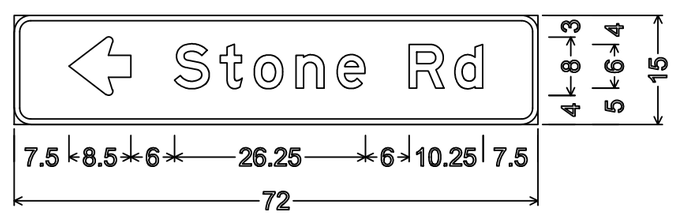
2.250" Radius, 0.750" Border, White on Green;
"Gorski" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;



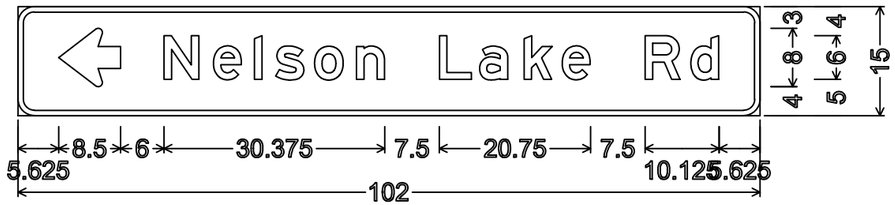
2.250" Radius, 0.750" Border, White on Green;
"Phipps" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;



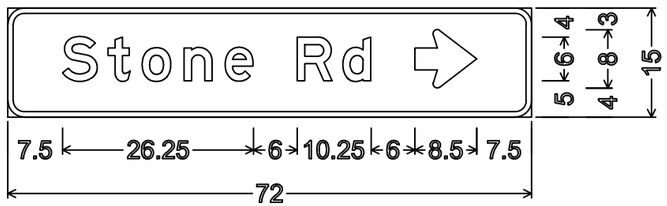
2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°;
"Phipps" E; "Rd" E;



2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°;
"Stone" E; "Rd" E;



2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°; "Nelson" E;
"Lake" E; "Rd" E;



2.250" Radius, 0.750" Border, White on Green;
"Stone" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;

7

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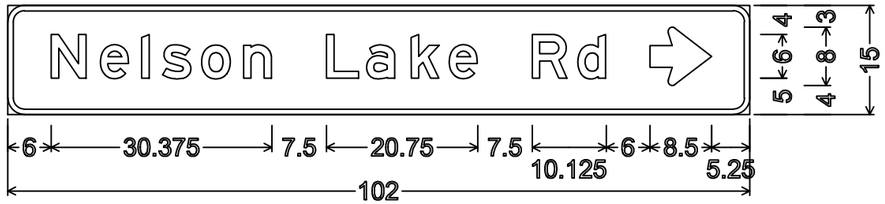
PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	SIGN PLATES	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_SIGNING PLATES.DWG
LAYOUT NAME - Sign Plates-2
PLOT DATE : 9/27/2017 10:24 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:10 FT

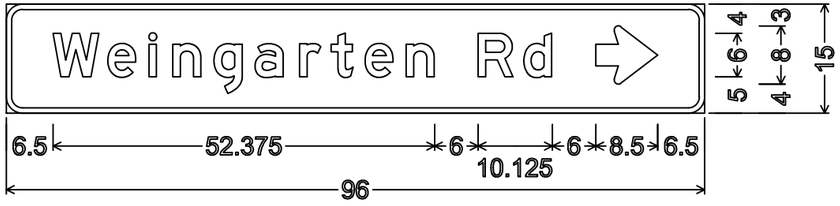
NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E



2.250" Radius, 0.750" Border, White on Green;
"Nelson" E; "Lake" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;

2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°;
"Weingarten" E; "Rd" E;



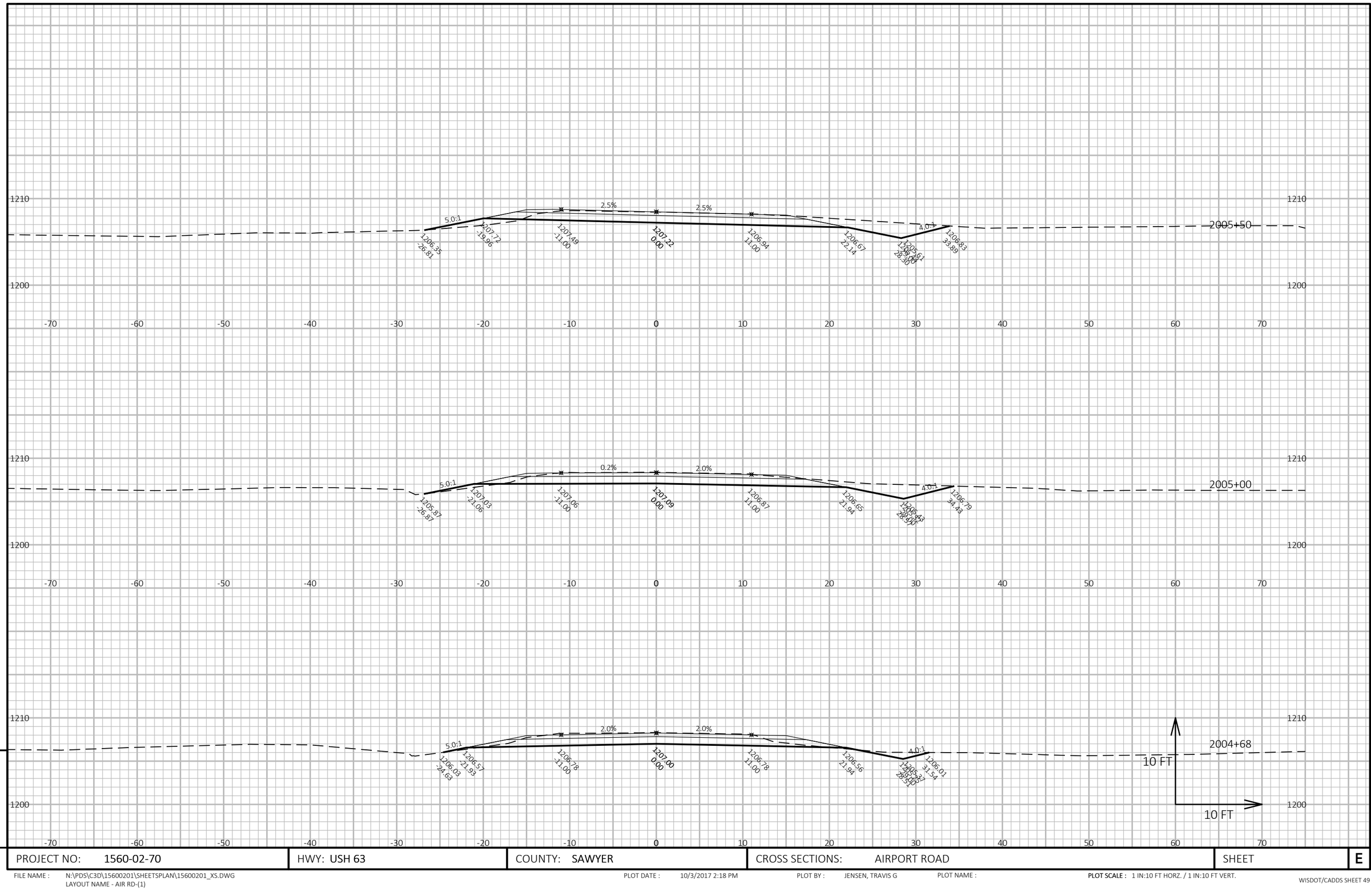
2.250" Radius, 0.750" Border, White on Green;
"Weingarten" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;

7

7

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	SIGN PLATES	SHEET	E

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_SIGNING PLATES.DWG
LAYOUT NAME - Sign Plates-3
PLOT DATE : 9/27/2017 10:24 AM PLOT BY : JENSEN, TRAVIS G PLOT NAME : PLOT SCALE : 1 IN:10 FT



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9

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	CROSS SECTIONS: AIRPORT ROAD	SHEET	E

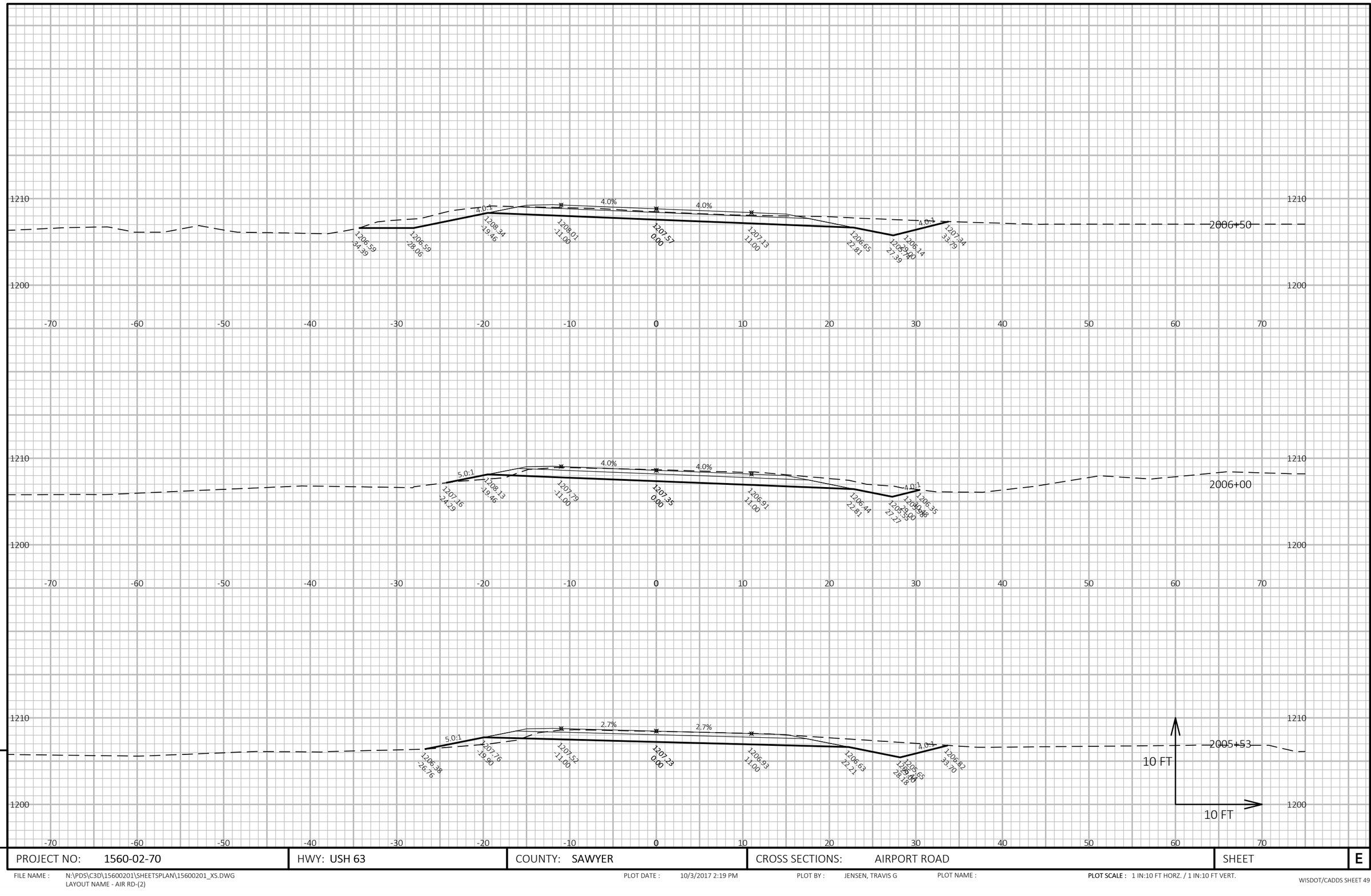
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_XS.DWG
LAYOUT NAME - AIR RD-(1)

PLOT DATE : 10/3/2017 2:18 PM

PLOT BY : JENSEN, TRAVIS G

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	CROSS SECTIONS: AIRPORT ROAD	SHEET	E

9

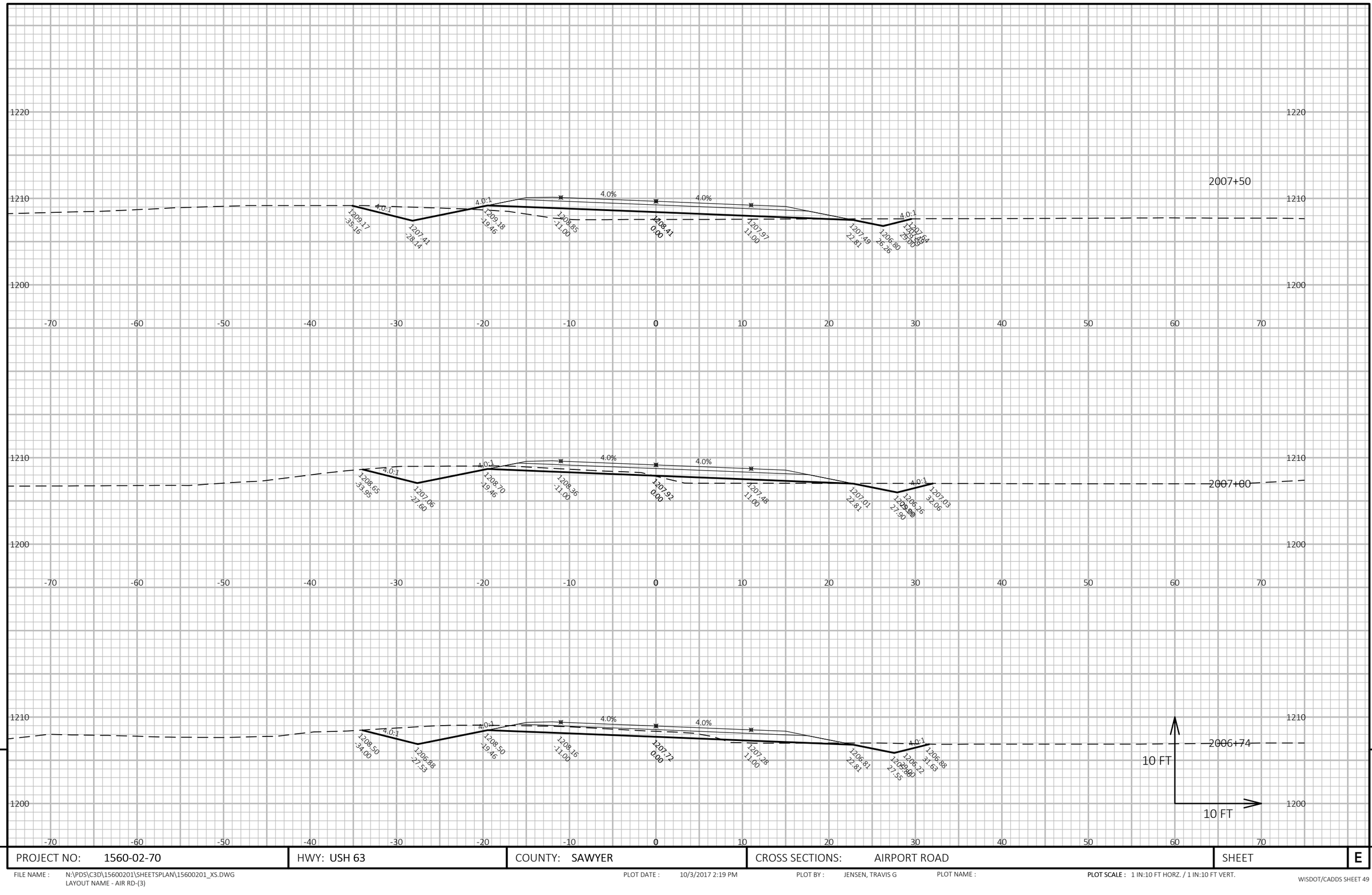
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_XS.DWG
LAYOUT NAME - AIR RD-(2)

PLOT DATE : 10/3/2017 2:19 PM

PLOT BY : JENSEN, TRAVIS G

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	CROSS SECTIONS: AIRPORT ROAD	SHEET	E

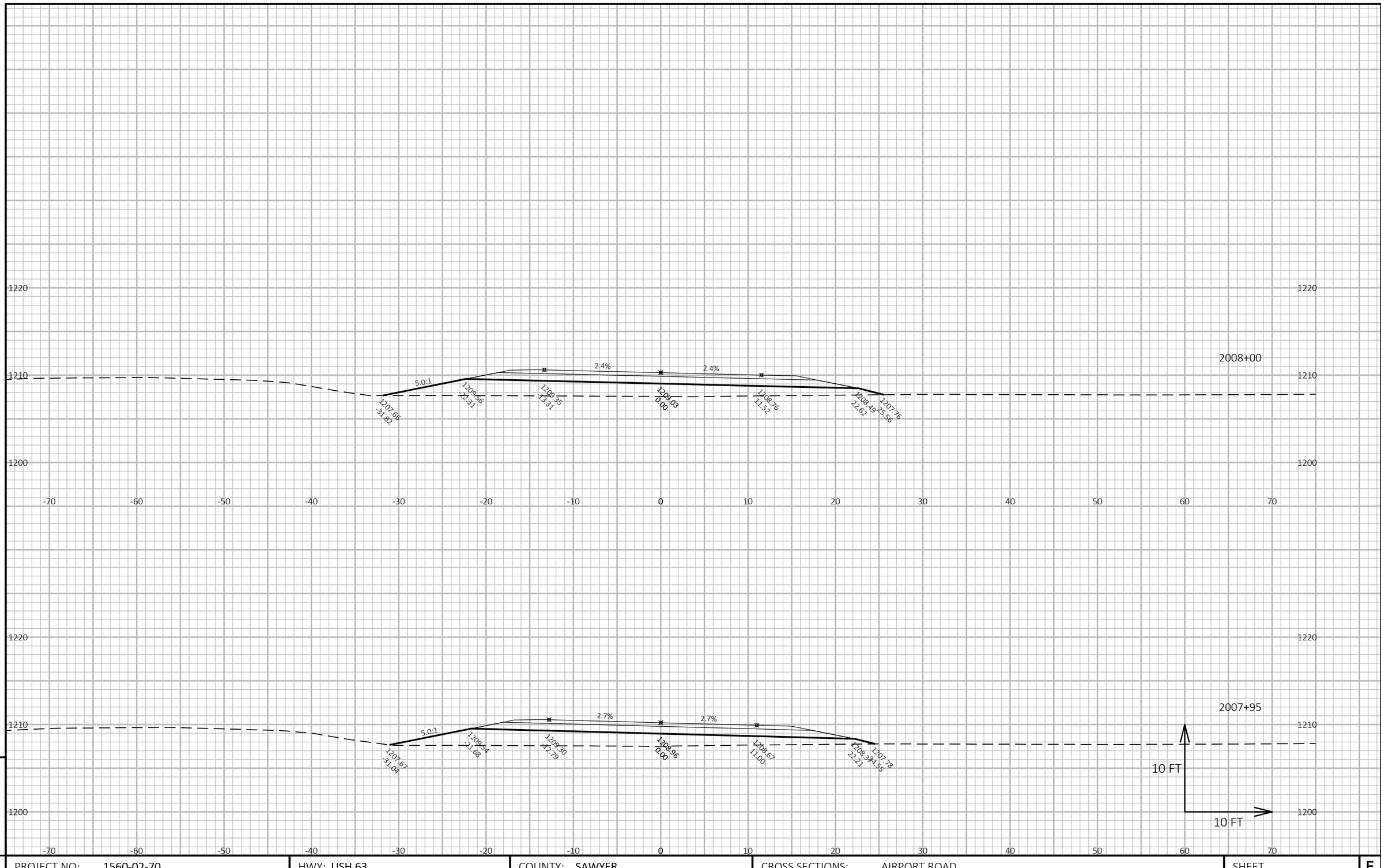
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_XS.DWG
LAYOUT NAME - AIR RD-(3)

PLOT DATE : 10/3/2017 2:19 PM

PLOT BY : JENSEN, TRAVIS G

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	CROSS SECTIONS: AIRPORT ROAD	SHEET	E

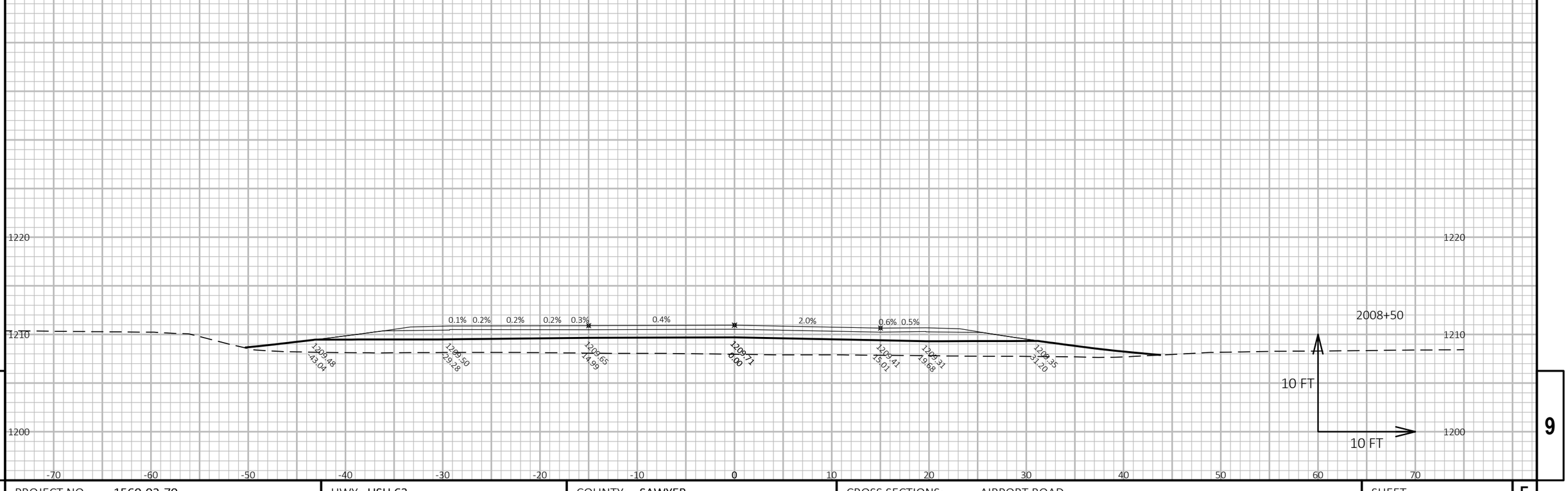
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_XS.DWG
LAYOUT NAME - AIR RD-(4)

PLOT DATE : 10/3/2017 2:19 PM

PLOT BY : JENSEN, TRAVIS G

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	CROSS SECTIONS: AIRPORT ROAD	SHEET	E

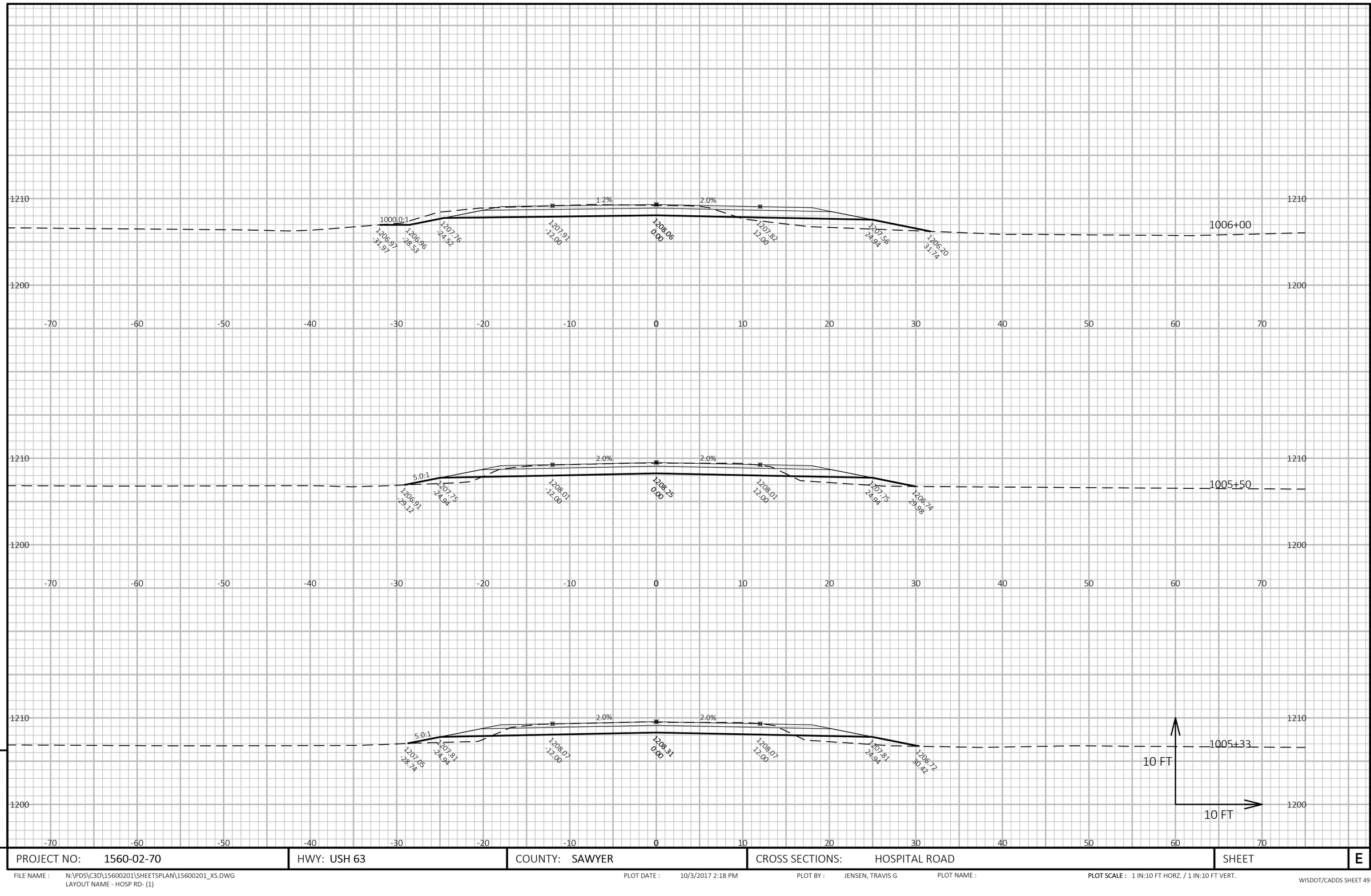
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_XS.DWG
LAYOUT NAME - AIR RD-(5)

PLOT DATE : 10/3/2017 2:19 PM

PLOT BY : JENSEN, TRAVIS G

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	CROSS SECTIONS: HOSPITAL ROAD	SHEET	E

9

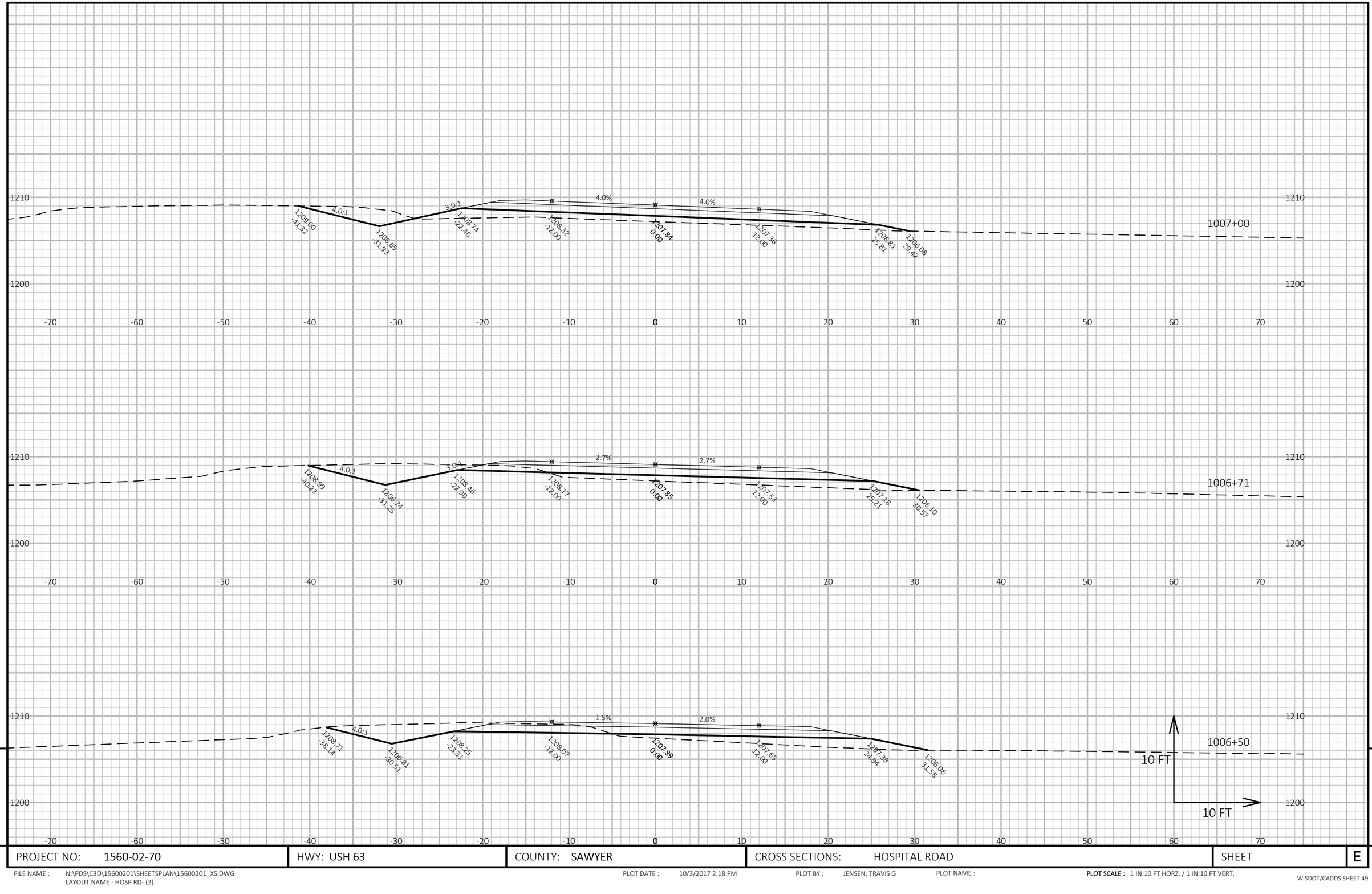
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_XS.DWG
LAYOUT NAME - HOSP RD- (1)

PLOT DATE : 10/3/2017 2:18 PM

PLOT BY : JENSEN, TRAVIS G

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	CROSS SECTIONS: HOSPITAL ROAD	SHEET	E

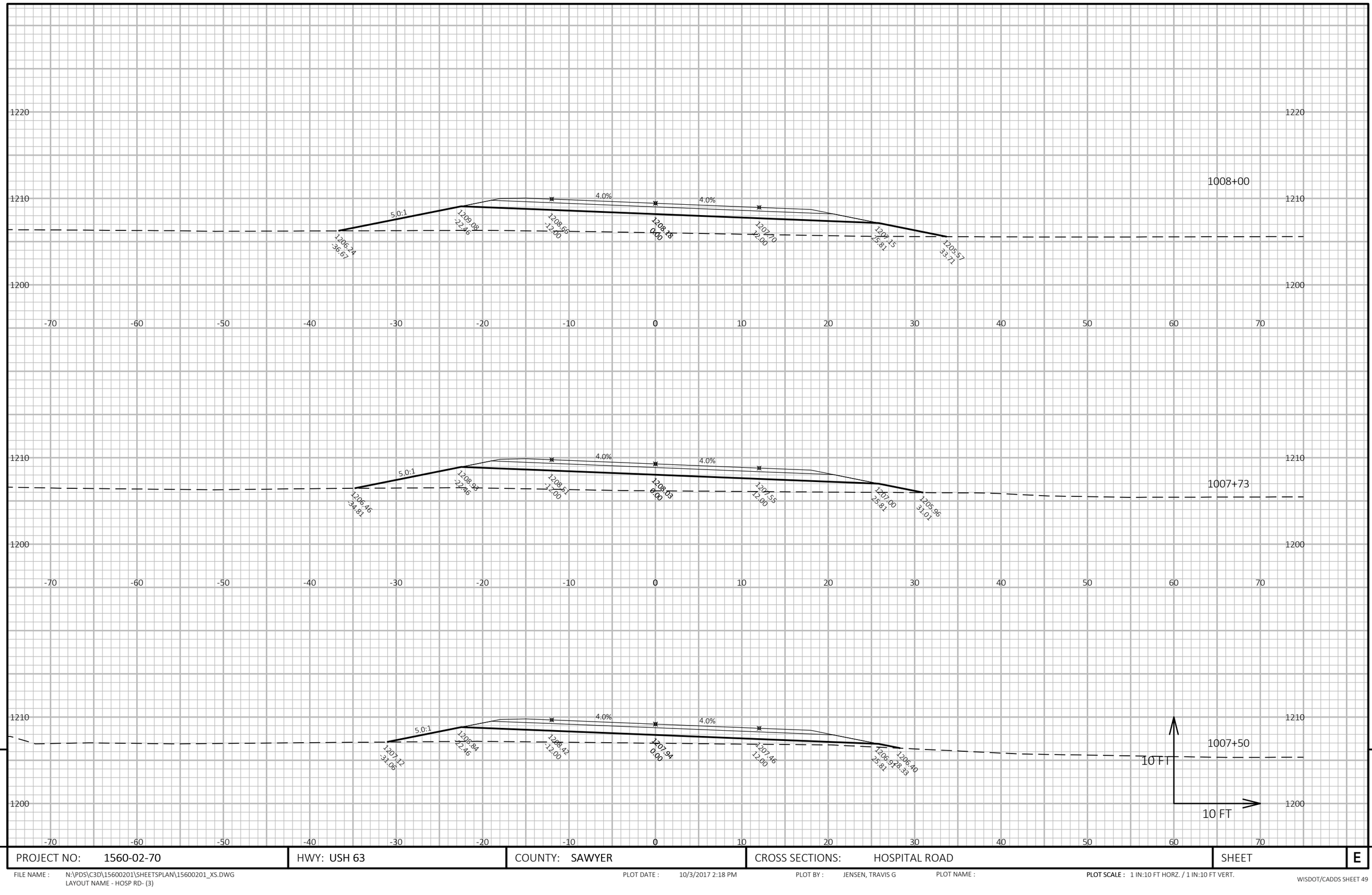
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_XS.DWG
LAYOUT NAME - HOSP RD- (2)

PLOT DATE : 10/3/2017 2:18 PM

PLOT BY : JENSEN, TRAVIS G

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	CROSS SECTIONS: HOSPITAL ROAD	SHEET	E

9

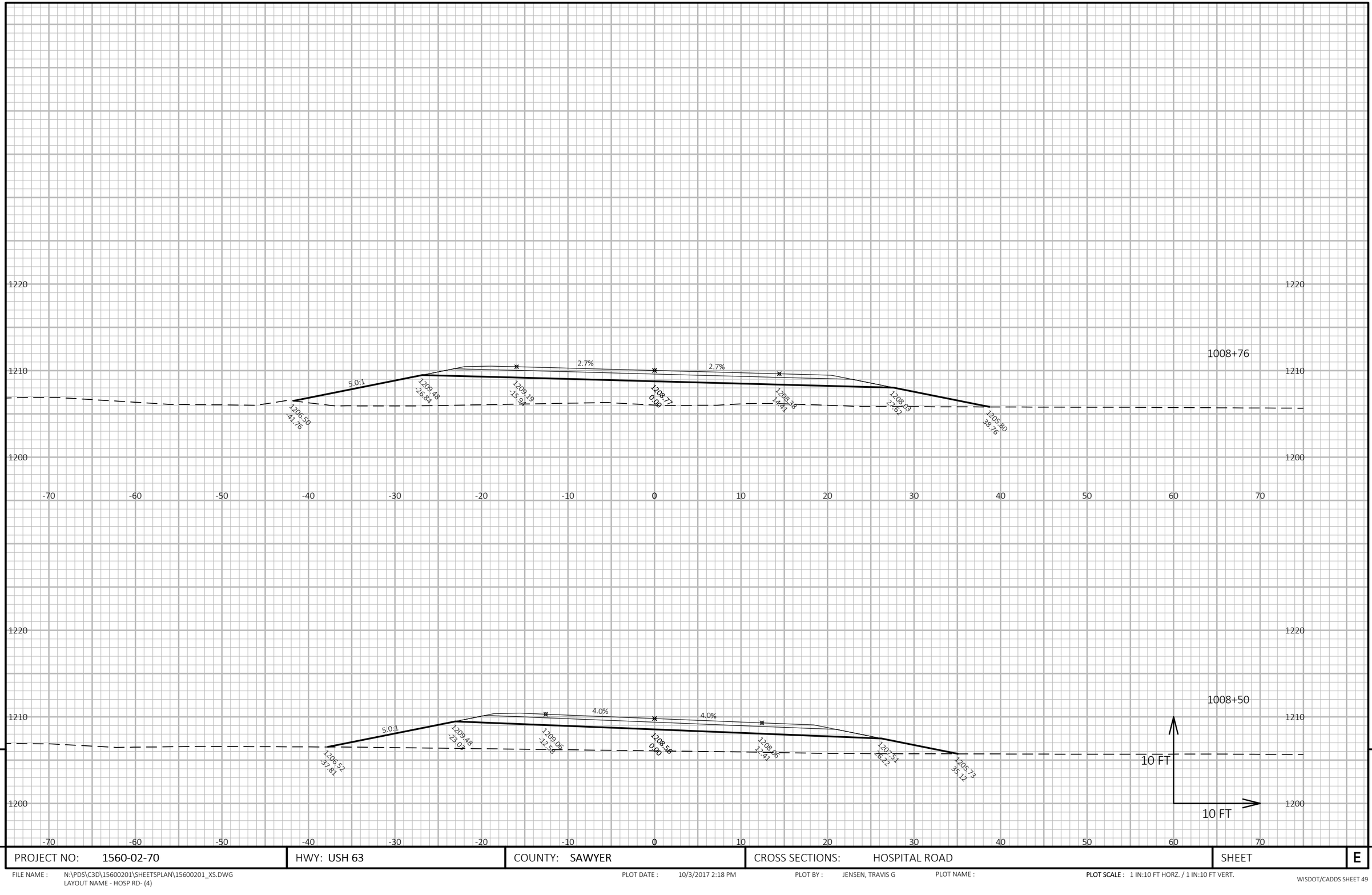
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_XS.DWG
LAYOUT NAME - HOSP RD- (3)

PLOT DATE : 10/3/2017 2:18 PM

PLOT BY : JENSEN, TRAVIS G

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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9

PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	CROSS SECTIONS: HOSPITAL ROAD	SHEET	E

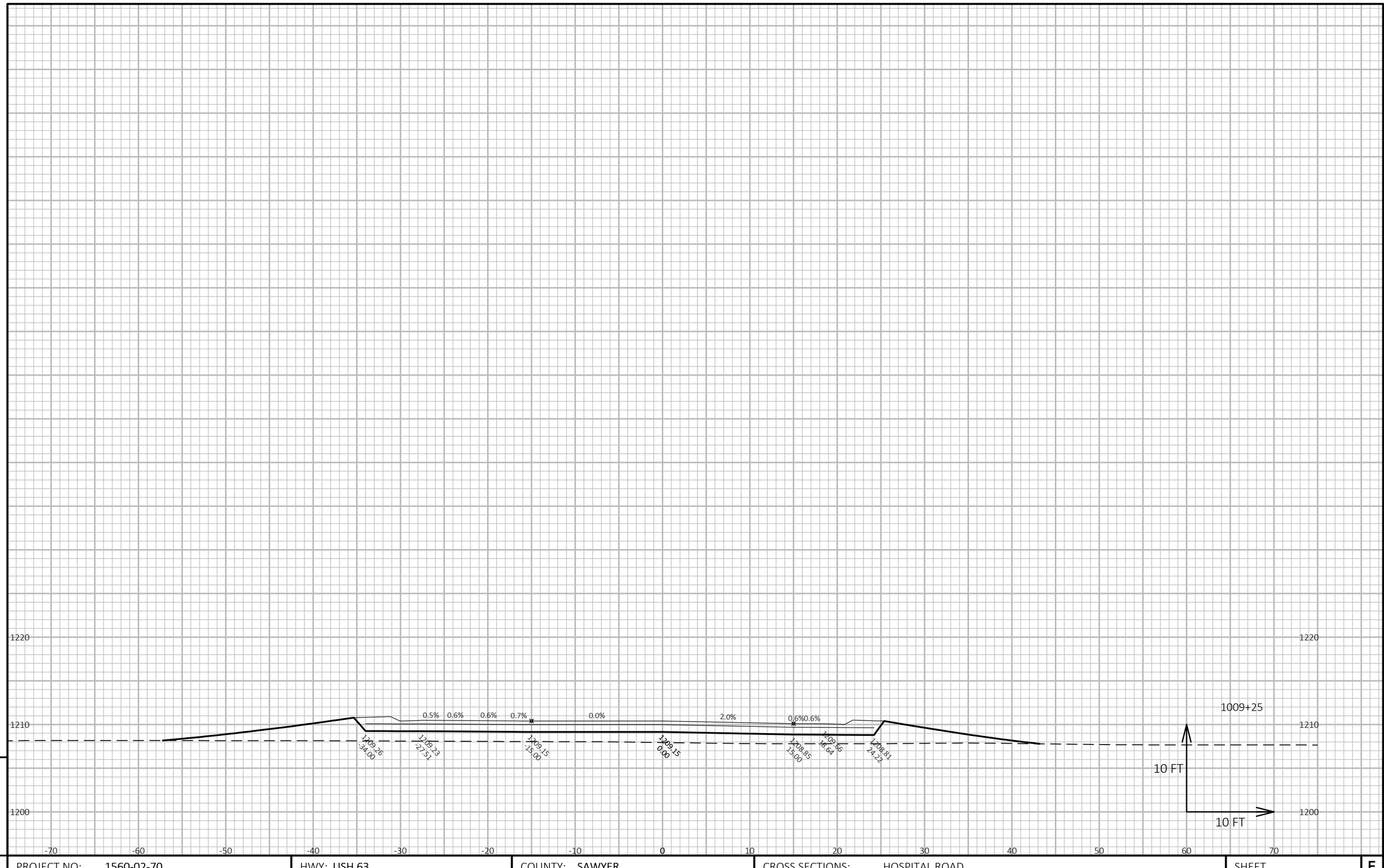
FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_XS.DWG
LAYOUT NAME - HOSP RD- (4)

PLOT DATE : 10/3/2017 2:18 PM

PLOT BY : JENSEN, TRAVIS G

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1560-02-70	HWY: USH 63	COUNTY: SAWYER	CROSS SECTIONS: HOSPITAL ROAD	SHEET	E

9

FILE NAME : N:\PDS\C3D\15600201\SHEETSPLAN\15600201_XS.DWG
LAYOUT NAME - HOSP RD- (5)

PLOT DATE : 10/3/2017 2:18 PM

PLOT BY : JENSEN, TRAVIS G

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.