# **Supplemental Supporting Information for a Finding of Effect**

Project: T3 Indian Purchase 23236.00

Scope: Bridge Replacement

Finding of Effect: Adverse Effect

## **Purpose and Need**

The purpose of the project is to address the structural deficiency and the substandard geometry (sight, width, and height) of the current bridge over the West Branch of Penobscot River to provide a safe crossing for passenger, commercial, recreational, and pedestrian traffic.

The need is because the Detective Benjamin Campbell Bridge #3666 has a substandard width of 24' between curbs, truss portals that have been damaged by heavy truck traffic, and a current weight restriction to one truck or school bus at a time and does not hold sidewalks. Additionally, both approaches to the bridge are blind corners.

## **Project Background**

The Detective Benjamin Campbell Bridge #3666 is located in T3 Indian Township, connecting Millinocket with the Brownville/Milo area. The bridge is the last example of a Parker through truss in the Maine Department of Transportation (MaineDOT) system. It carries Route 11 which is a Corridor Priority 3 Major Collector providing critical access to forestlands which are vital to Maine's forest industry. The forest industry remains a driver for the state's economy and provides approximately 33,538 jobs and adds \$8.5 billion of economic impact to a state with a \$60 billion gross domestic product (GDP). The bridge currently carries a Heavy Truck Annual Average Daily Traffic (AADT) of 161 crossings and the AADT for all vehicles is 1,240. Additionally, the project area contains Maine Interconnected Trail System Routes 82/83 and 85/86 managed by the Maine Snowmobile Association and the Maine Bureau of Parks and Lands. Stakeholders report that the width of the recreational bridge nearby is not adequate for newer, wider recreational vehicles and the Detective Benjamin Campbell Bridge is used for recreational vehicle crossing with increasing frequency. Stakeholder informed MaineDOT of at least two fatal single vehicle accidents at the crossing. The speed limit posting for this section is 55 miles per hour (MPH), leaving little reaction time at the approaches. MaineDOT has estimated the shortest detour for this crossing would be approximately 98 miles/2 hours, resulting in an estimated daily user cost of \$28,000. The project is being funded, in part, by the Penquis Region Rural Bridges TIGER Grant (Penguis TIGER).

## **Proposed Action**

The proposed action is Alternative 2: Replacement on Alignment. The bridge would be comprised of two-190' girder spans and 34' wide curb to curb to match the proposed approach roadway and to accommodate recreational vehicle traffic. The deck would be composite concrete with 3" of asphalt over waterproof membrane. Standard 3-bar traffic/bicycle rail is proposed on a concrete brush curb. The roadway would consist of two 11' lanes with 6' shoulders or a 10' raised trail on the downstream side (to be determined, alternate plans attached at the end of document) that would transition to match existing conditions at each end.

# **Federal Action**

Federal funding.

# **Definition of Area of Potential Effect (APE)**

The proposed project is located in T3 Indian Purchase. The map below shows the APE.

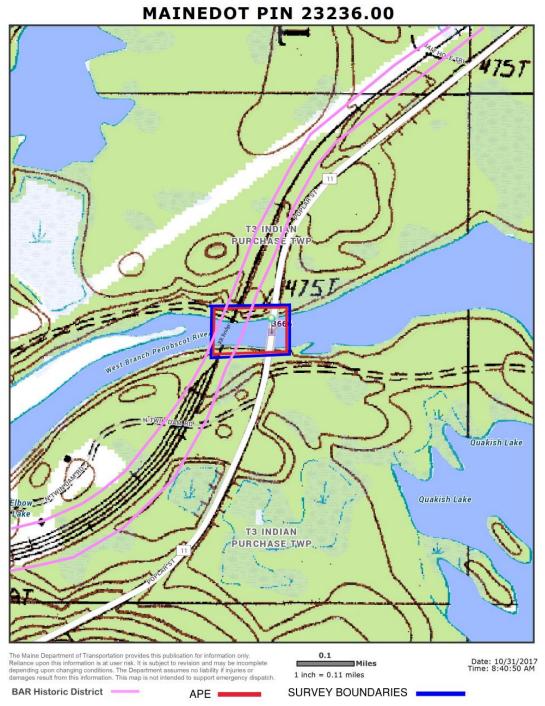


Figure 1. T3 Indian Purchase 23236.00 Area of Potential Effect

## **Historic Properties**

The proposed project is located in T3 Indian Purchase. The following descriptions of historic properties found within the project area are based on Maine Historic Preservation Commission (MHPC) survey forms.

<u>Detective Benjamin Campbell Bridge #3666, Route 11 over West Branch Penobscot River</u> *National Register-Eligible* 

Criterion A & C, Transportation, Engineering

The Detective Benjamin Campbell Bridge #3666 (formerly known as the West Branch Bridge) is a 369' bridge with a concrete substructure on two piers. The crossing is comprised of a 241' Parker through truss with two stringer approach spans. The truss chords consist of built-up sections composed of channels and plates and the verticals and diagonals are rolled sections. The bridge is the last example of a Parker through truss in the MaineDOT system. The bridge was constructed as part of an extensive construction project to improve a vehicle route between Brownville/Milo and Millinocket that resulted in Route 11. The route was needed during a period of great economic expansion, particularly associated with Maine's lumber industry and its transition from rail to truck traffic. The period of significance is 1948.

## Bangor & Aroostook Railroad Historic District

National Register-Eligible

Criterion A & C, Industry, Transportation

Within the project area, the Bangor & Aroostook Railroad consists of a three-span girder bridge built in 1929. Survey for the Bangor and Aroostook Railroad was completed in 1891 and 1892. In 1893 Albert Burleigh and his investors leased the Bangor and Piscataquis Railroad with service to Greenville, Old Town, Bangor, and Katahdin Iron Works. Burleigh soon looked to connect the extant Brownville Junction to Houlton and points north. The main line of the Bangor and Aroostook Railroad reached Van Buren in 1899. The railroad's success is attributed to the need for reliable infrastructure for shipping lumber, paper, and agricultural goods from Aroostook County south. Its period of significance is 1893 to circa 1960.

## <u>Archeological Resources</u>

There are no archaeological resources in the project area.

## **Impacts to Property**

The following addresses potential impacts to properties as a result of the proposed action.

<u>Detective Benjamin Campbell Bridge #3666, Route 11 over West Branch Penobscot River</u> National Register-Eligible

Criterion A & C, Transportation, Engineering

The proposed action would result in an **Adverse Effect** to the Detective Benjamin Campbell Bridge #3666. The proposed action would result in the removal of the bridge from its original location.

# Bangor & Aroostook Railroad Historic District

## National Register-Eligible

Criterion A & C, Industry, Transportation

The proposed action would result in **No Adverse Effect** to the Bangor & Aroostook Railroad Historic District. No physical impacts are proposed to or near the contributing bridge and the changes in the roadway alignment would not affect any of the character defining features of the historic district.

# Archaeological Resources

No archaeological properties would be affected by the proposed undertaking.

#### **Avoidance and Minimization Efforts**

The MaineDOT completed all possible planning efforts related to avoidance and minimization, including evaluating alternatives that would avoid taking the Detective Benjamin Campbell Bridge #3666. However, alternatives analysis revealed that no avoidance alternative would successfully meet the project's purpose and need. The project also avoids adverse impacts to the nearby National Register-eligible Bangor & Aroostook Railroad Historic District.

#### **Dismissed Alternatives**

No Build

The No Build alternative takes no action and does not meet the purpose and need of the project and was, therefore, removed from further consideration.

## Rehabilitation

The rehabilitation alternatives (Alternative 1a and Alternative 1b) would rehabilitate the existing bridge with either a 7" concrete deck or an 8" concrete deck. The 7" concrete deck would require replacement of select gusset and cover plates within the truss. Additionally, select rivets would be replaced with high strength bolts. A crash worthy railing would be installed. These alternatives would require a temporary bridge for traffic maintenance during construction. Rehabilitation would maintain the substandard 24' width, would not allow for 6' shoulders (pedestrian/bicycle use), and would not address the deficient portal height likely resulting in future damage. Additionally, it would not address the sight geometry at the approaches and would retain blind corners. Thus, these alternatives were dismissed from further consideration because they do not meet the purpose and need.

## Alternative 3

Alternative 3 would replace the Detective Benjamin Campbell Bridge #3666 with a parallel structure built approximately 82' upstream the existing bridge. It would carry 3' shoulders with a dedicated, raised 10' recreational trail on the downstream side of the bridge. This alternative would require a temporary bridge for crossing the river during the two-season construction effort. This

option was dismissed because it would result in substantial impacts to private property and the adjacent boat ramp, and because it requires removal of the existing recreational vehicle bridge. Additionally, the off-alignment alternative requires construction of new approach roadway, as well as recreational vehicle pathways on each side of the roadway to provide connectivity through the project limits. In addition to these factors this alternative has the highest initial construction cost of all of the alternatives evaluated and was therefore dismissed from further consideration.

## **Public Involvement**

MaineDOT contacted the four federally-recognized Native American tribes in Maine. The Penobscot Tribe, Passamaquoddy Tribe, and the Houlton Band of Maliseets replied with no concerns about the undertaking. The Aroostook Band of Micmacs did not respond to the request. All Tribes were notified in January 2020 of the proposed replacement. The Houlton Band of Maliseets and Passamaquoddy Tribe replied with no concerns to the updated information.

No official Section 106 consulting parties were received for this project. The Penobscot County Office was notified of the project and asked to provide any information on historic resources within the project area in 2017. A preliminary public meeting was held on April 23, 2018. At that time the Detective Benjamin Campbell Bridge was not considered to be eligible for listing in the National Register of Historic Places. It was subsequently determined to be eligible for listing during MaineDOT's Metal Truss Reevaluation of 2019, which serves as a supplement to the MaineDOT Historic Bridge Survey of 2004.

The public was informed of the bridge's status as a National Register-eligible resource – as well as its status as the last remaining Parker Truss in the MaineDOT system – during an informational public meeting held on August 6, 2019. Rehabilitation and replacement options were discussed in detail at that time. Members of the public expressed concern over various components of the existing bridge, including the narrow width that poses a risk to vehicles – especially pulp trucks and tractor trailers – when they meet on the bridge, as well as oversized loads striking the truss portals. Members of the public also expressed concern over the blind corners at the northern and southern approaches. Many demonstrated a desire for a new bridge that could provide safe crossing for operators of snowmobiles and ATVs, both of whom feel unsafe when traveling over the adjacent multi-use bridge due to its narrow width and instability from bouncing and swinging. Many also emphasized that maintaining and expanding recreational access in the area is critical to their economic viability.

A public notice was placed and the Determination of Eligibility and Effects was sent to the County Office and posted on the MaineDOT website. No comments were received during the comment period.

# **Proposed Materials**

Steel plate girders, concrete, hot mix asphalt, steel railing.

#### **Plans**

T3 Indian Purchase Twp, Penobscot County, Detective Benjamin Campbell Bridge over West Branch Penobscot River, Federal Aid Project No. 23236.00, MaineDOT, October 9, 2019 (without 10' raised trail)

T3 Indian Purchase Twp, Penobscot County, Detective Benjamin Campbell Bridge over West Branch Penobscot River, Federal Aid Project No. 23236.00, MaineDOT, January 27, 2020(with 10' raised trail)

#### Attachments

Art Spiess, MHPC, to Julie Senk, MaineDOT, July 16, 2018 Kirk Mohney, MHPC, to Julie Senk, MaineDOT, August 21, 2019

## STATE OF MAINE

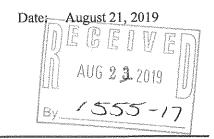
#### Memorandum

To: Kirk F. Mohney, MHPC

From: Julie Senk, Maine DOT/ENV

Subject: Section 106 request for concurrence Project: T3 Indian Purchase Township 23236.00

Scope: Bridge Improvements



The Maine DOT has reviewed this project pursuant to the Maine Programmatic Agreement (PA) and Section 106 of the National Historic Preservation Act of 1966, as amended.

The project consists of bridge improvements to the West Branch Bridge #3666 that carries poplar Street/Route 11 over the West Branch Penobscot River in T3 Indian Purchase Township. This is a continuing project that addresses changes to eligibility since the original 2017 survey effort.

In accordance with 36 CFR Part 800.4, the following identification efforts of historic properties were made:

- 800.4(a) (1) The Area of Potential Effect (APE) includes properties/structures adjacent to the bridge and within the project limits. The project limits are defined by the structure and the immediately adjacent area. Properties/structures adjacent to this project limit are considered to be within the APE. The APE is shown as a defined polygon on the attached map.
- 800.4(a) (2) Review of existing information consisted of researching the National Register and MHPC survey databases. The Maine Historic Preservation Commission Archaeological staff has reviewed the undertaking.
- 800.4(a) (3) The County Office of Penobscot County was contacted via letter and asked to comment on knowledge of, or concerns with, historic properties in the area, and any issues with the undertaking's effect on historic properties. The County Office was also requested to provide information regarding local historic societies or groups. The County Office has not replied to date.
- 800.4(a) (4) Letters outlining project location and scope were sent to the 4 federally recognized Tribes in Maine. The Houlton Band of Maliseets, Penobscot Nation, and Passamaquoddy Tribes have replied with no concern.
- 800.4(c) The Maine DOT conducted historic architectural surveys within the APE to determine if properties met National Register criteria. Maine Historic Preservation Commission Archaeological staff has recommended a finding of "no archaeological properties affected by the proposed undertaking." The MaineDOT has determined that three historic properties within the APE are eligible for the National Register of Historic Places.

In accordance with the PA and 36 CFR Part 800, please reply with your concurrence or objection to the determinations of eligibility for listing in the National Register of Historic Places within 30 days.

Please contact me at Julie.Senk@maine.gov or 592-3486 if you have any questions. Thank you.

cc:

CPD e-file

enc:

Survey Package

CONCUR

Viel E Mohney.

State Historic Preservation Officer

Doto

Date



# MAINE HISTORIC PRESERVATION COMMISSION 55 CAPITOL STREET 65 STATE HOUSE STATION AUGUSTA, MAINE 04333

KIRK F. MOHNEY
DIRECTOR

July 16, 2018

To: Ms. Julie Senk, MDOT/ESD

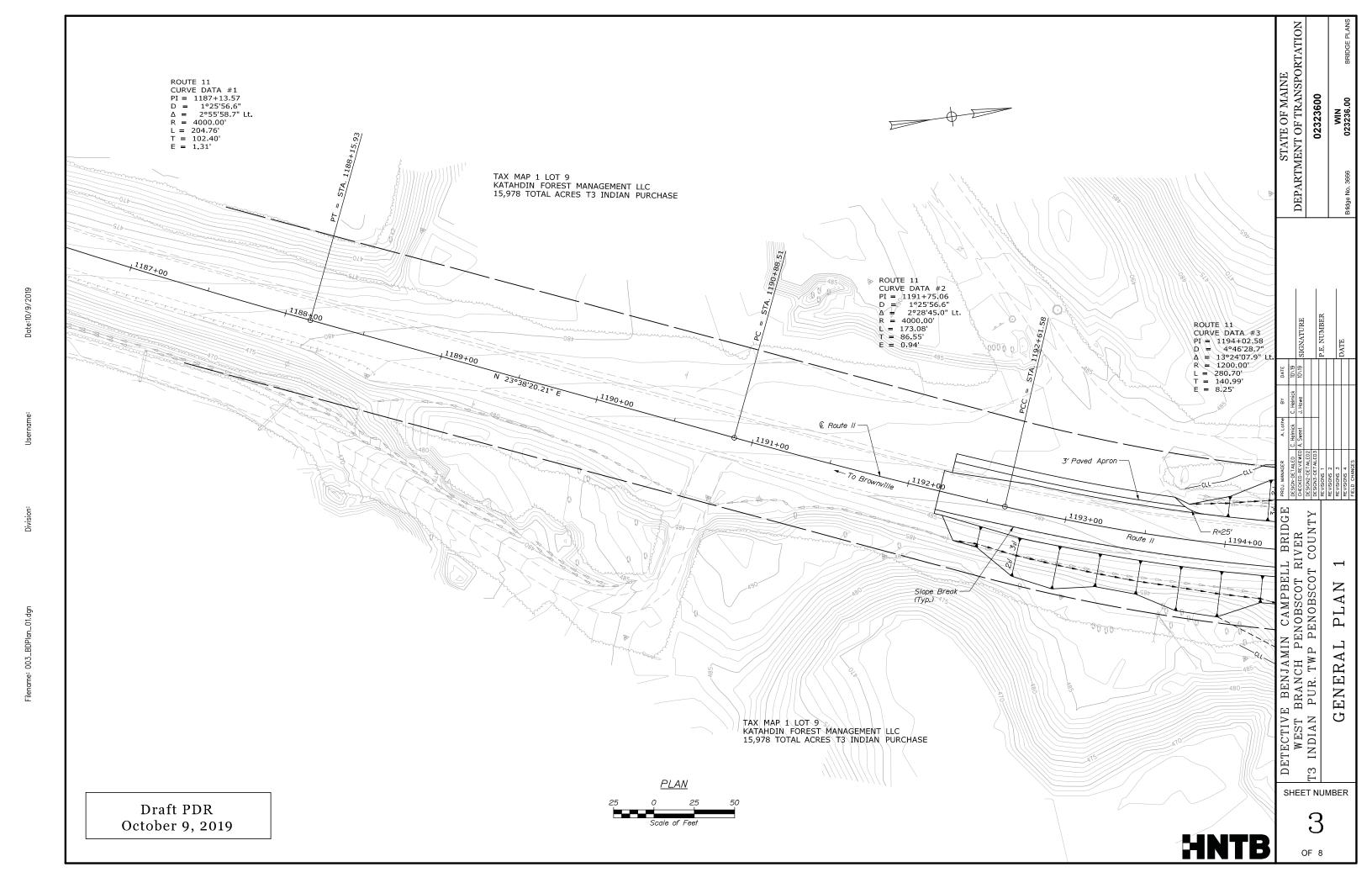
From: Arthur Spiess, Senior Archaeologist

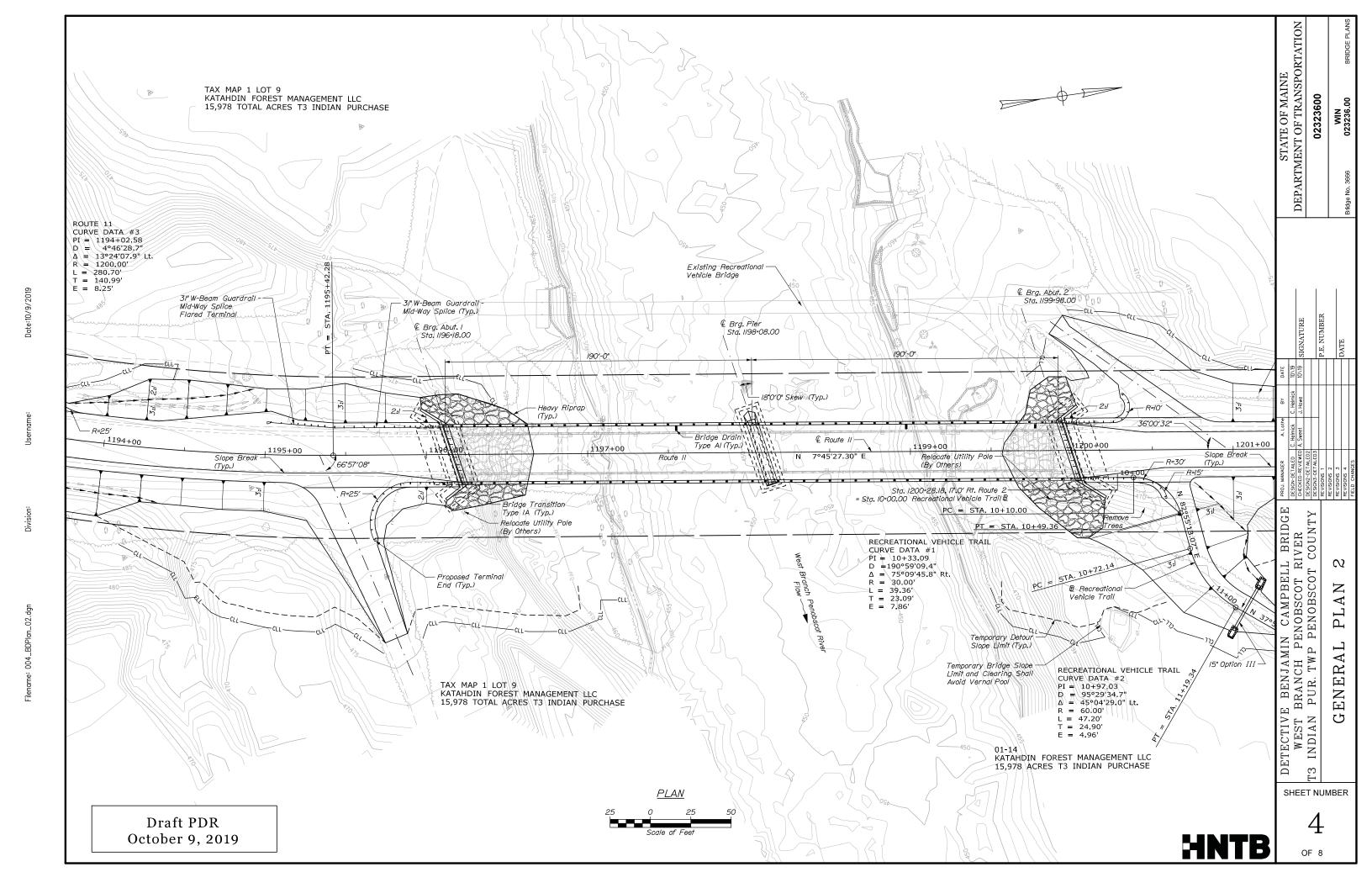
Subject: WIN 23236.00, West Branch bridge #3666, T3 Indian Purchase, bridge improvement/replacement, MHPC # 1555-17

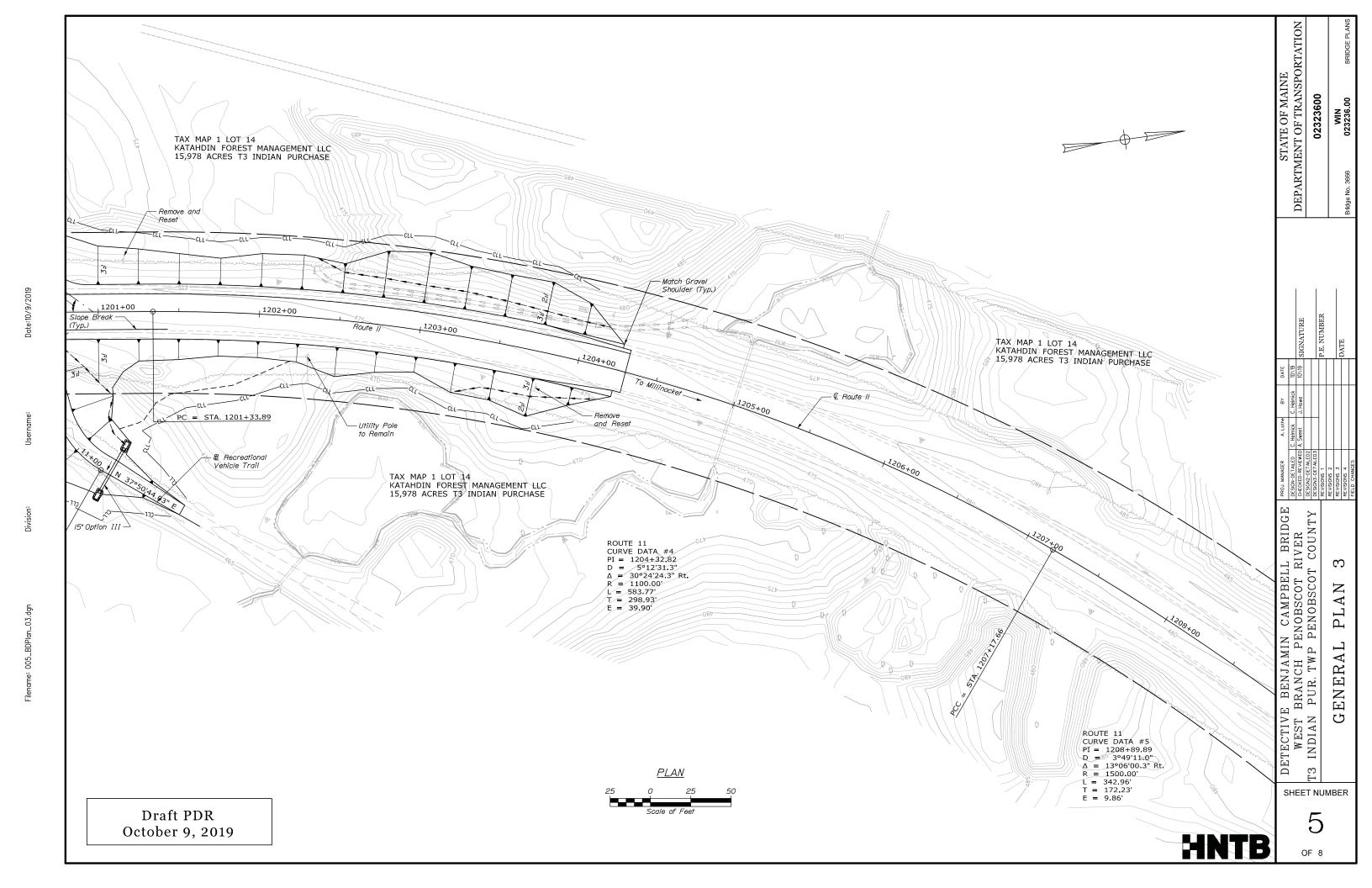
After reviewing our archaeological survey records and maps, including historic maps and surficial geology maps, we conducted an archaeological field check (intensive walkover) of the project area, based on the preliminary set of plans for bridge replacement received here last winter. The topsoil of the project area has been extensively disturbed and much of it removed, with extensive ground exposure. Based on the field check, no further archaeological work is necessary, and there are no sites in the project APE. It is extremely unlikely that an archaeological site would be affected by this project, in our opinion.

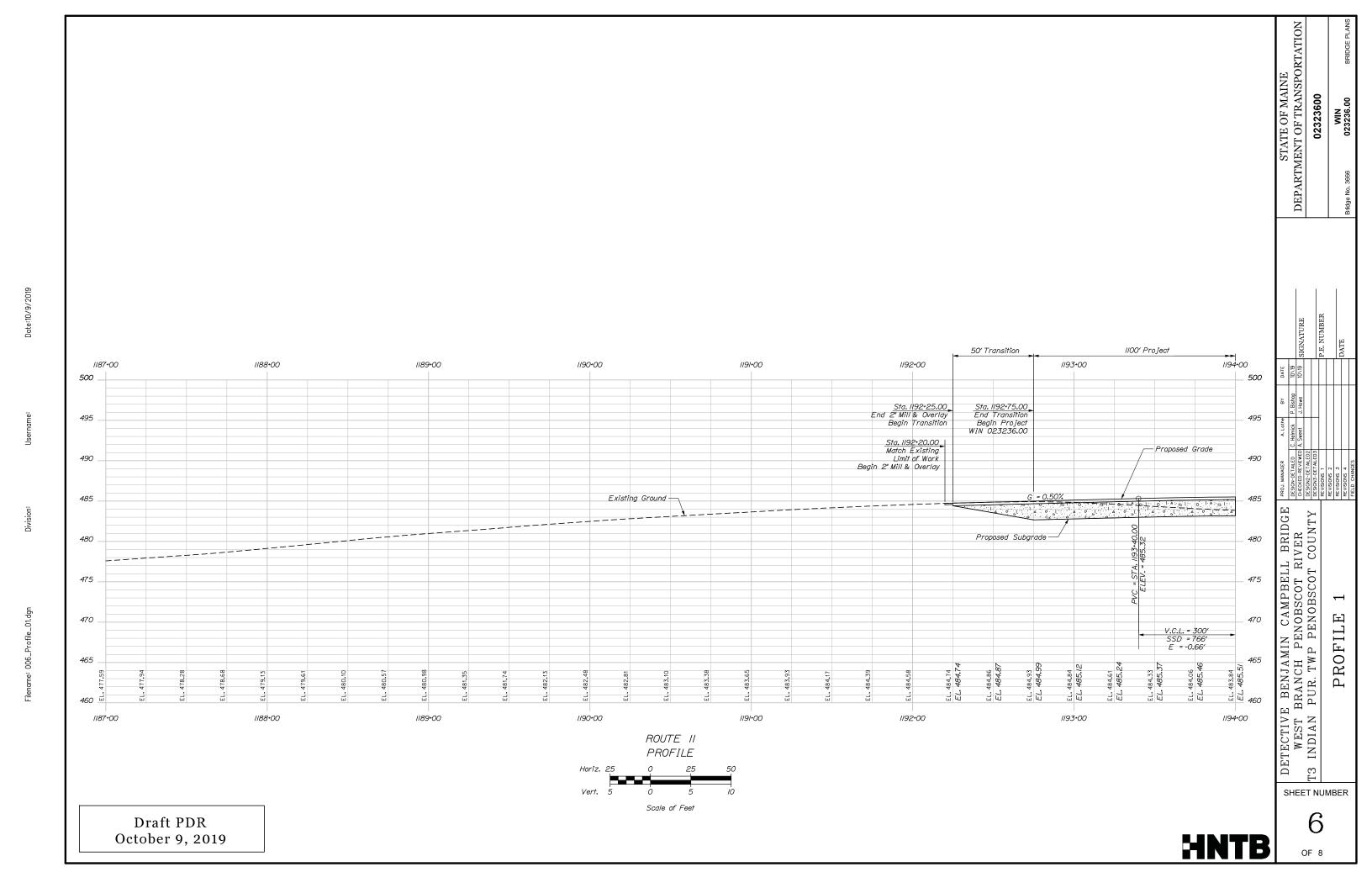
It is extremely unlikely that a significant archaeological site would be affected by this project, in our opinion. In following the procedures specified in the Federal Highway/MHPC/MDOT programmatic agreement, we recommend a finding "that there will be no archaeological properties affected by the proposed undertaking."

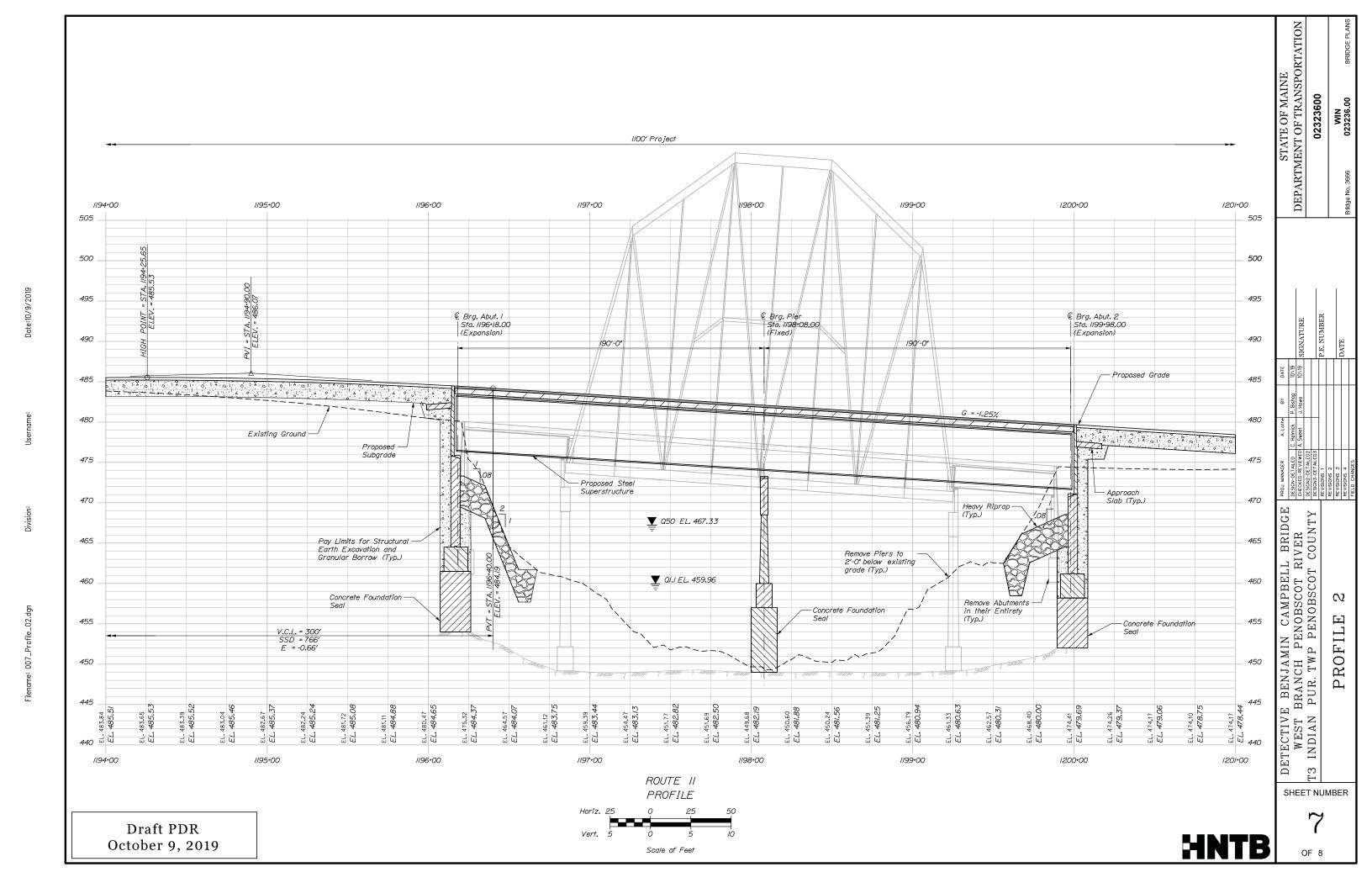
FAX: (207) 287-2335

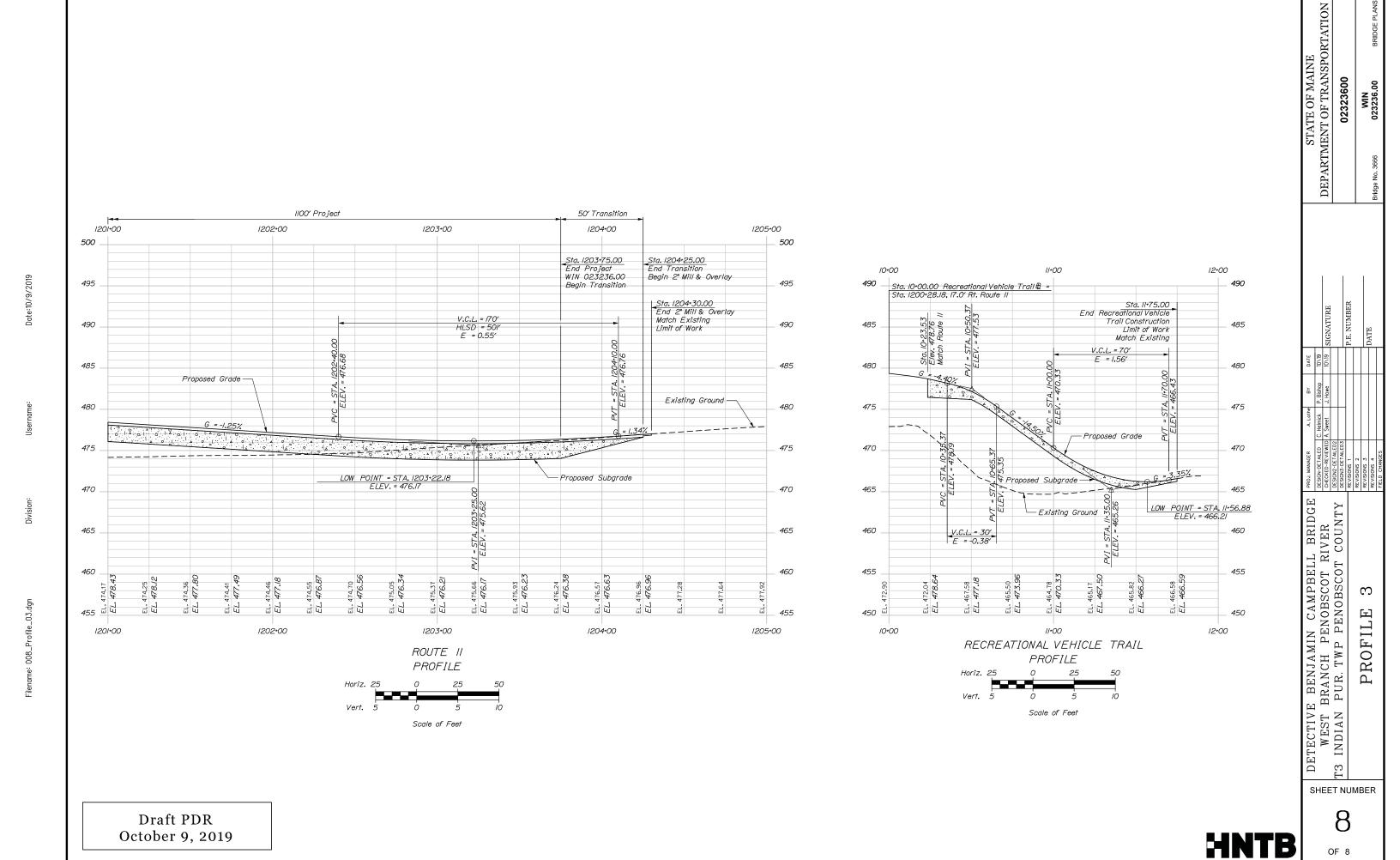


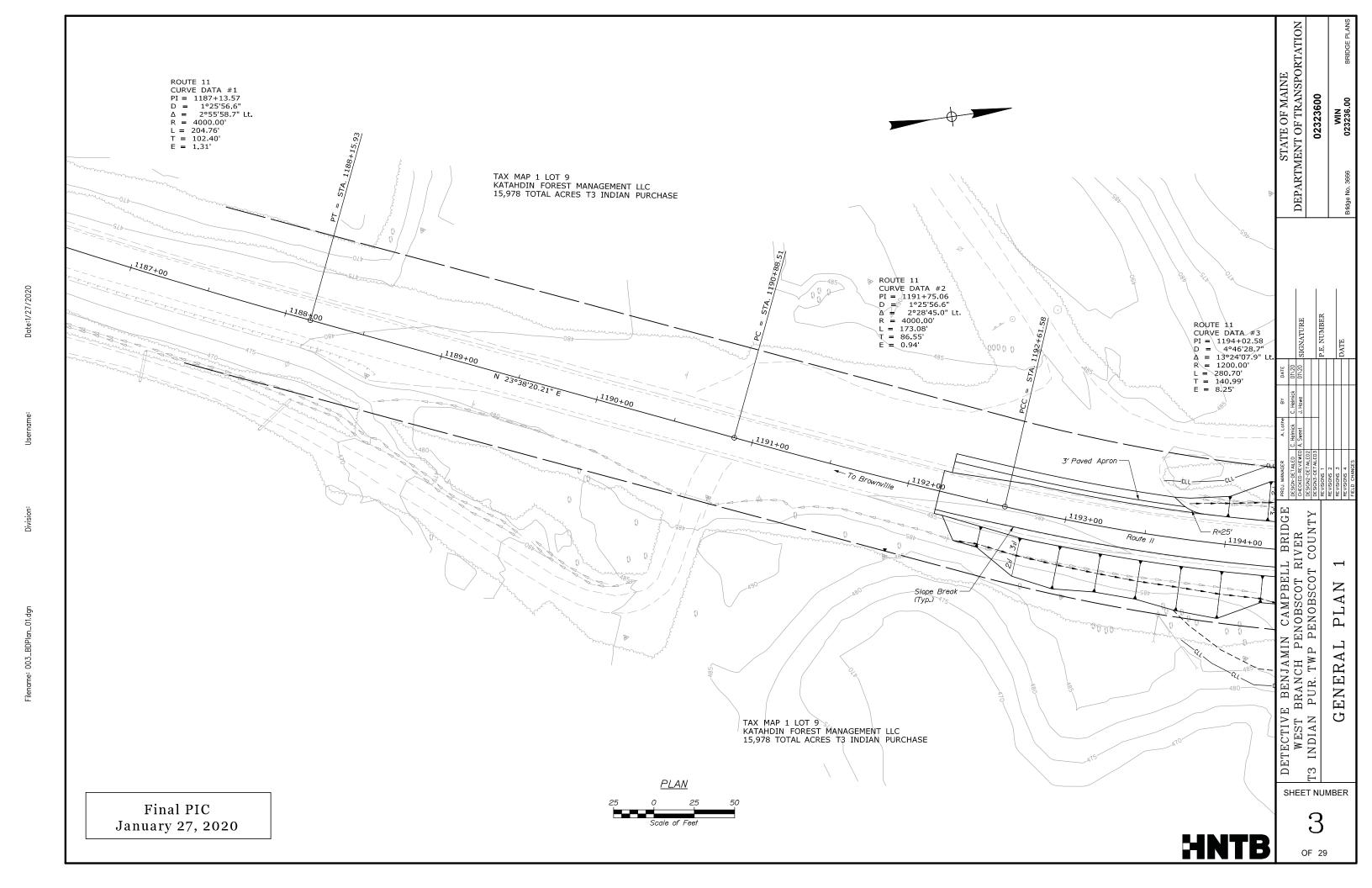


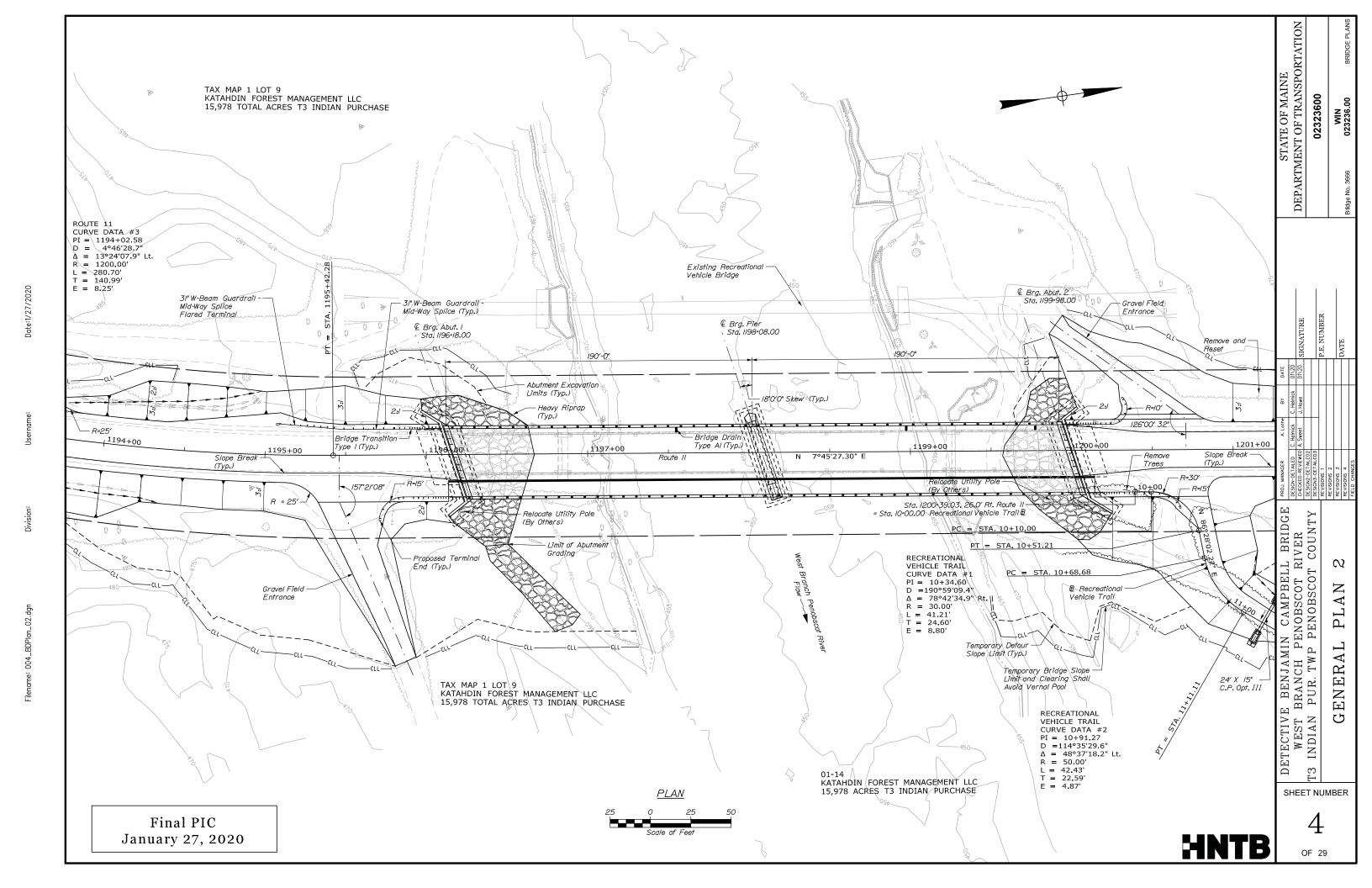


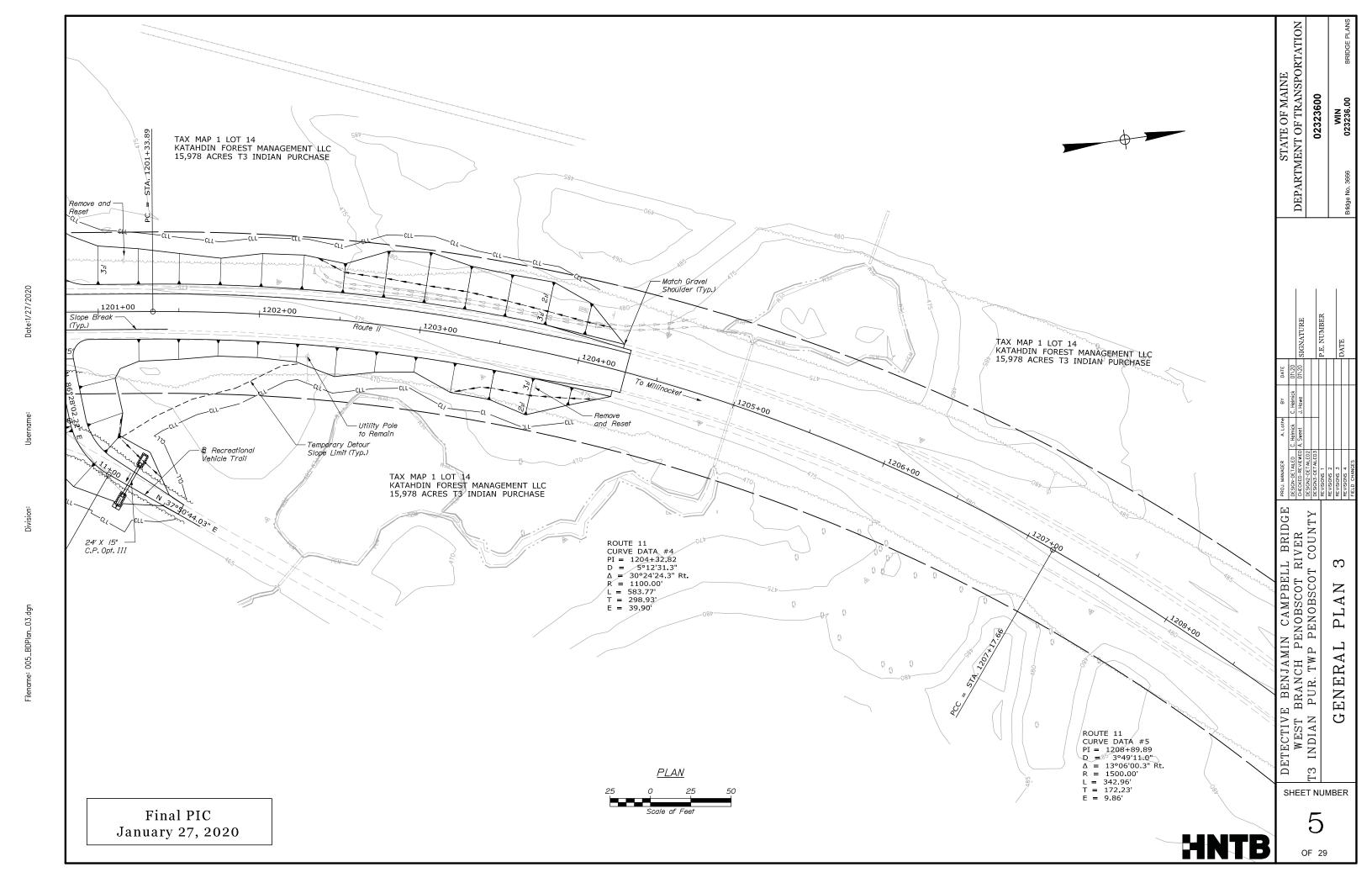


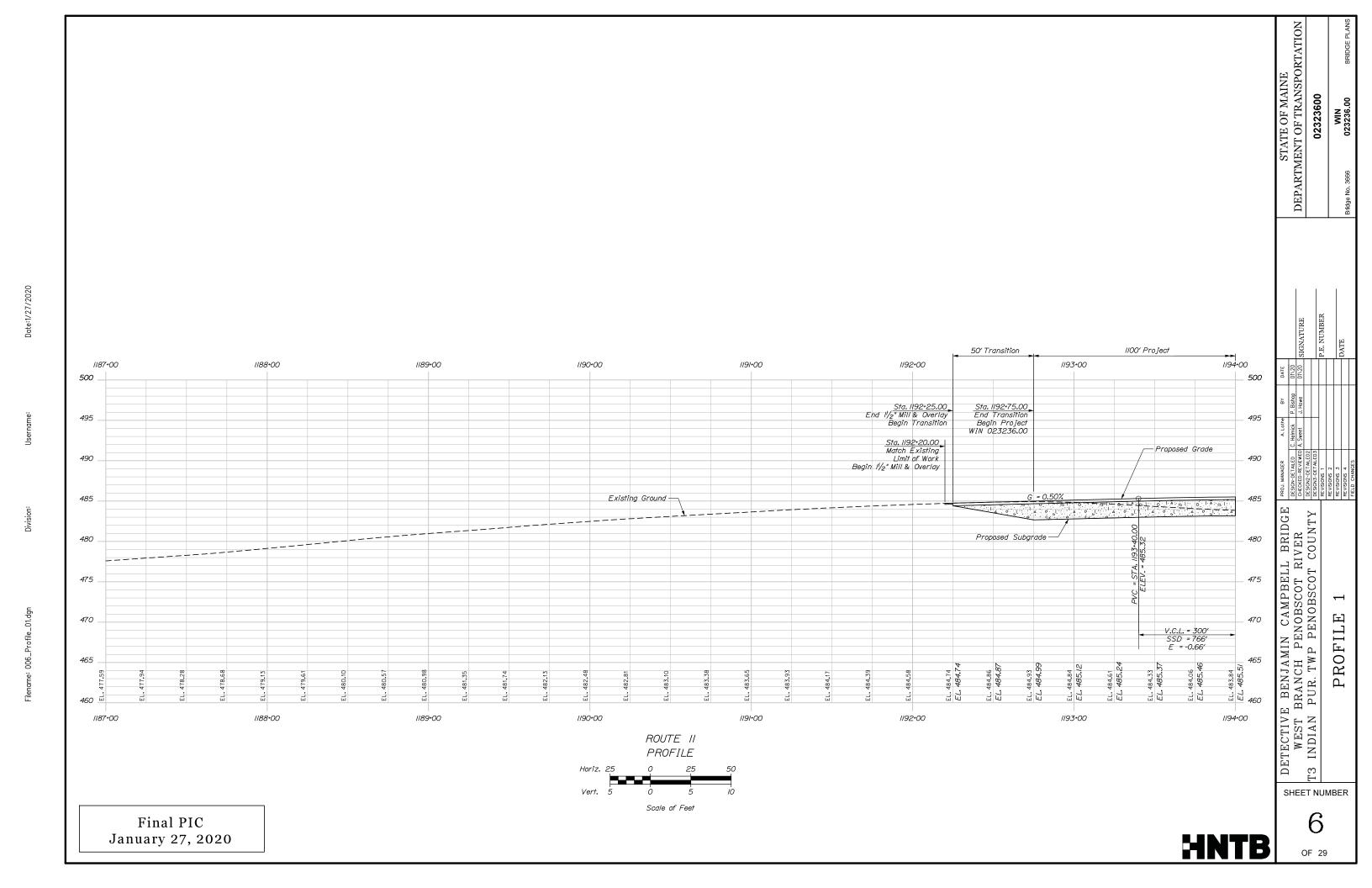


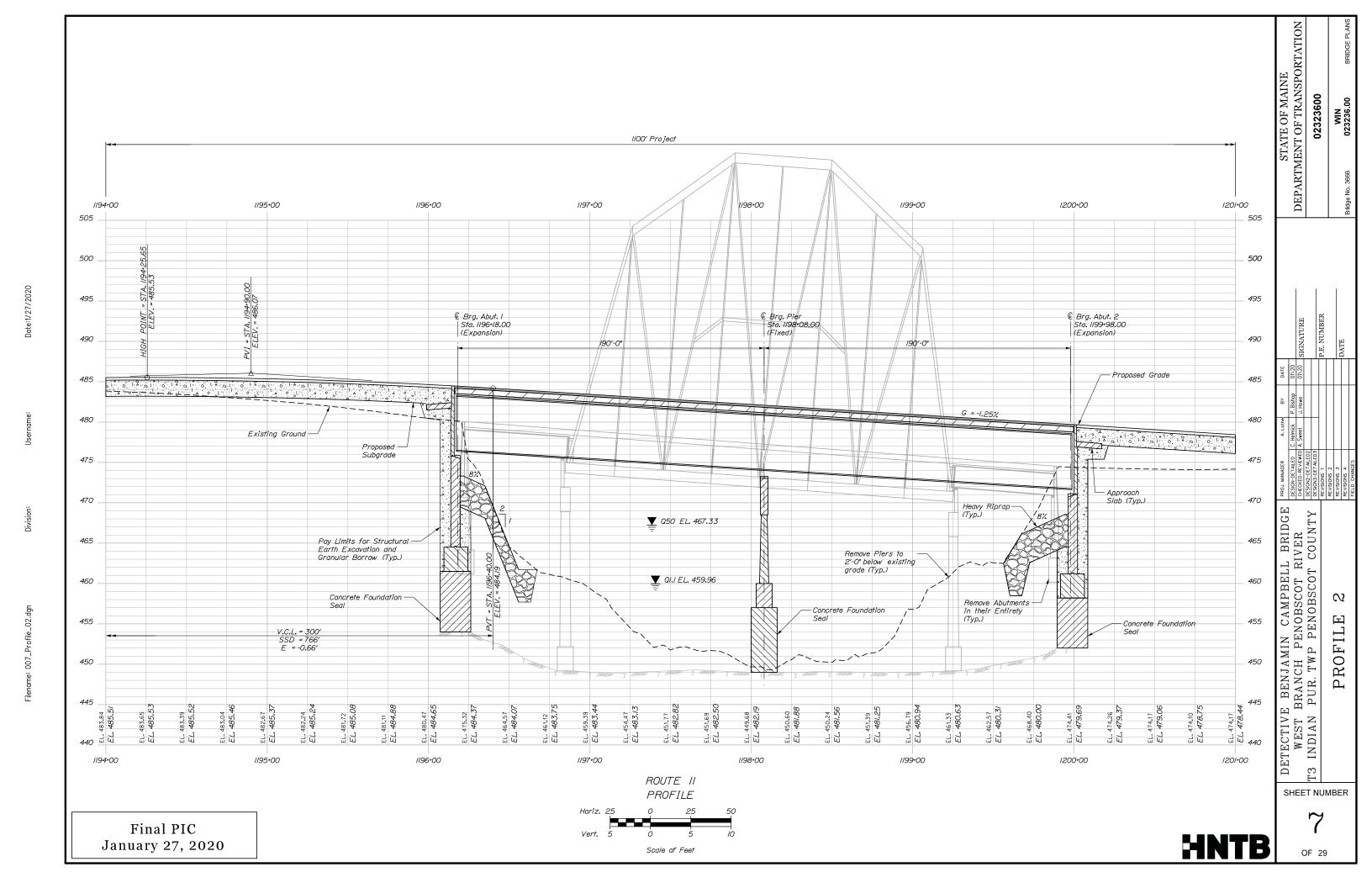


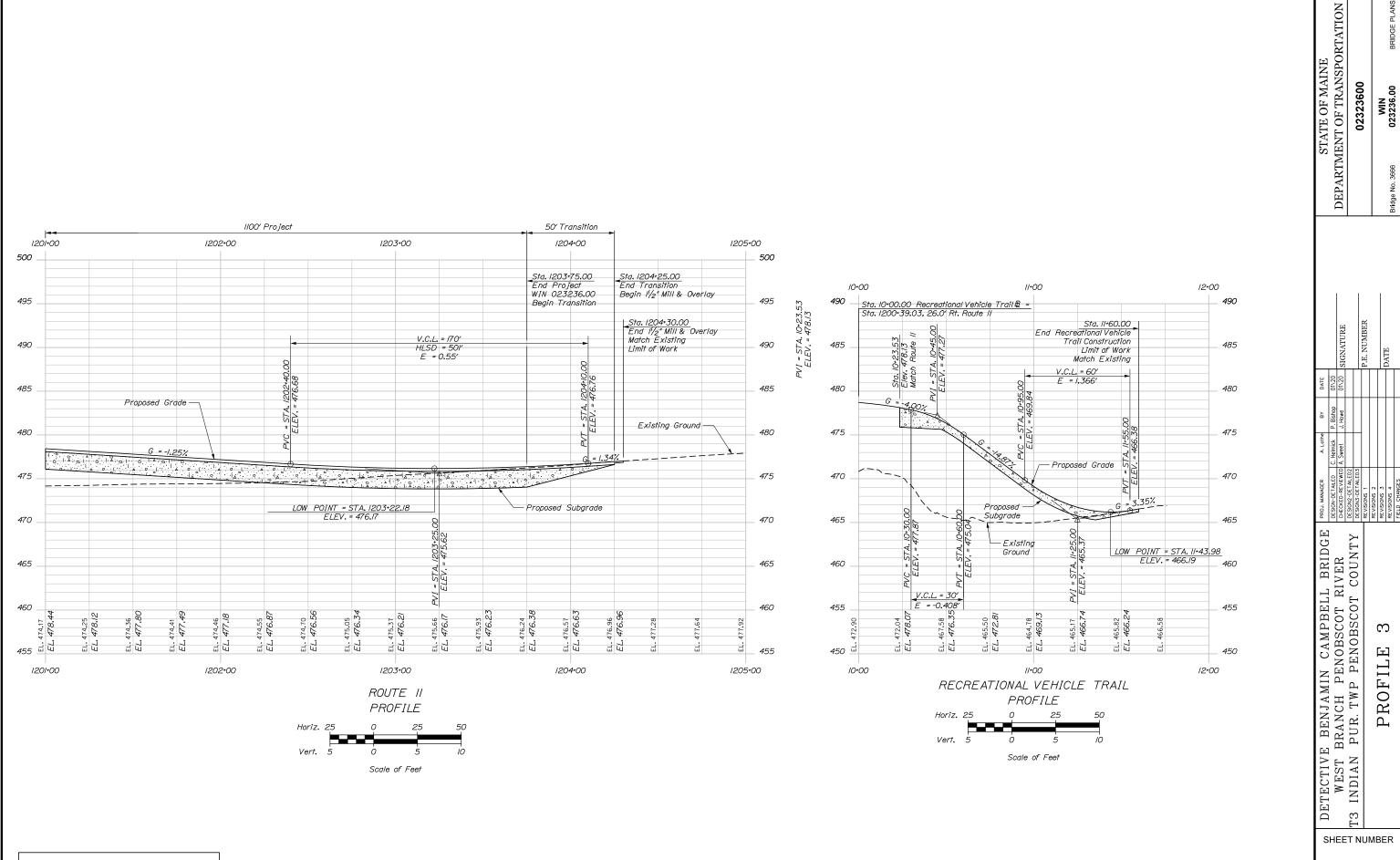












Final PIC January 27, 2020

HNTB

INTE 8

