

STATE OF MAINE DEPARTMENT OF TRANSPORTATION

PLANS PREPARED BY:

 600 Southborough Drive, Suite 100
 South Portland, Maine 04106

| Description | Sheet No. |
|------------------------------------|-----------|
| Title Sheet | 1 |
| Arch Culvert Details | 2 |
| South Headwall and Wingwalls | 3 |
| North Headwall and Wingwalls | 4 |

| PLAN LEGEND | |
|----------------------------|-----------------------------|
| Town, County, State | Centerline-Existing |
| Property Lines | Centerline-Proposed |
| R/W Lines-Existing | Travelway-Existing |
| R/W Lines-Proposed | Travelway-Proposed |
| Culvert-Existing | Railroad |
| Culvert Proposed | Catch Basins |
| Curbing Existing | Manholes |
| Type 1 | Proposed Underdrain |
| Type 3 | Proposed Ditch |
| Type 5 | Existing Ditch |
| Outline of Bodies of Water | Utility Poles |
| Boring | Fire Hydrants |
| Pavement Core | Existing Water Line |
| Test Pit | Existing San. Sewer |
| Probe | Existing San. Sewer Manhole |
| | Guardrail-Existing |
| | Guardrail-Proposed |
| | Guardrail-Cable, Other |
| | Exposed Bedrock |
| | Buildings |
| | Trees |
| | Tree Line |
| | Clearing Limit Line |



CARIBOU AROOSTOOK COUNTY PRESTILE HILL BRIDGE ROUTE 164 (MAIN STREET) BRIDGE NO. 6599 FEDERAL PROJECT NO. 022845.11 PROJECT LENGTH : 0.14 MILES

SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Ninth Edition 2020 with Interims.

DESIGN LOADING

Live Load HL - 93 Modified for Strength I

MATERIALS

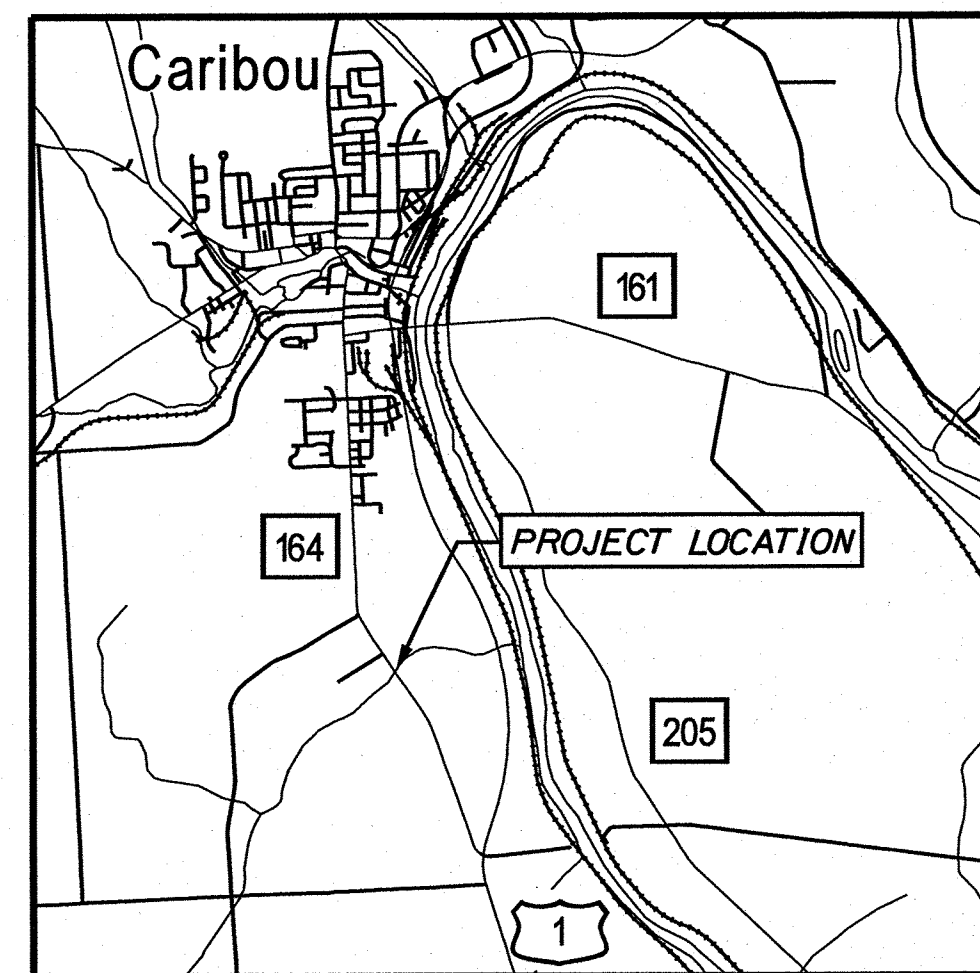
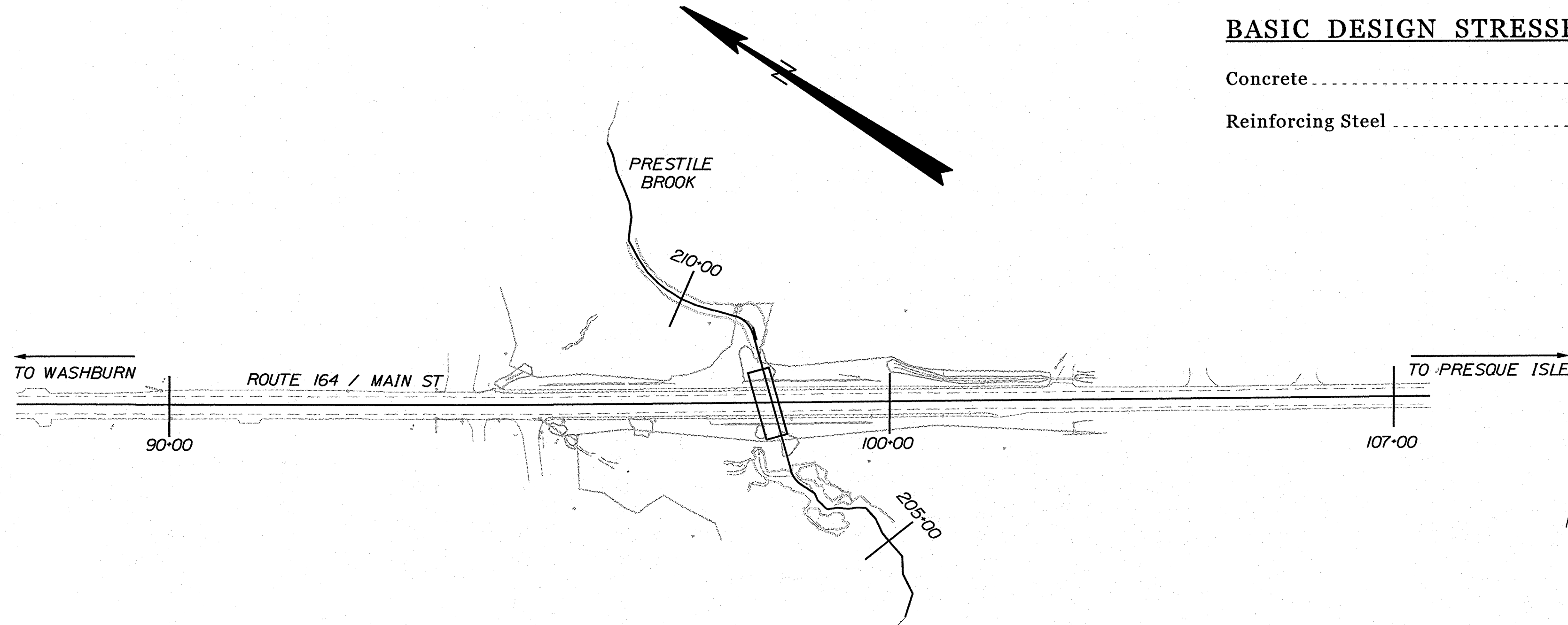
Concrete:
Precast Class "P"

Reinforcing Steel:
Plain Reinforcing Steel ASTM A 615/A 615M, Grade 60

BASIC DESIGN STRESSES

Concrete $f'c = 5,000$ psi

Reinforcing Steel $f_y = 60,000$ psi

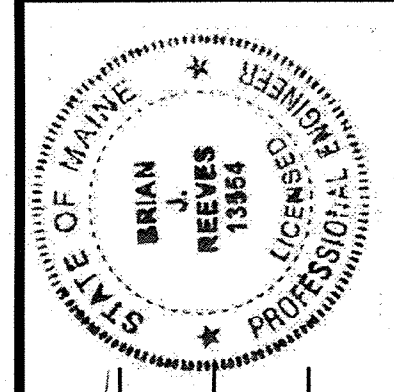


Scale in Miles
0 1 2
LOCATION MAP

| TRAFFIC DATA | |
|--------------------------------------|-----------------|
| Current (2026) AADT | 2080 |
| Future (2046) AADT | 2290 |
| DHV - % of AADT | 10% |
| Design Hour Volume | 229 |
| % Heavy Trucks (AADT) | 10% |
| % Heavy Trucks (DHV) | 22% |
| Directional Distribution (DHV) | 58% |
| 18 kip Equivalent P 2.0 | 74 |
| 18 kip Equivalent P 2.5 | 70 |
| Design Speed (mph) | 50 |
| Functional Class: | Major Collector |
| Corridor Priority | Priority 4 |

| | |
|--------------------------|--|
| PROJECT LOCATION: | LOCATED ON RT. 164, 1.10 MILES NORTH OF THE RT. 1 INTERSECTION |
| PROGRAM AREA: | HIGHWAY |
| SCOPE OF WORK: | FABRICATION AND DELIVERY OF PRECAST CONCRETE CULVERT & WINGWALLS |

| | |
|--|---|
| STATE OF MAINE DEPARTMENT OF TRANSPORTATION | DATE 12-3-25 |
| APPROVED | ACTING COMMISSIONER: <i>[Signature]</i> |
| CHIEF ENGINEER: <i>[Signature]</i> | 12-3-25 |



| | |
|--------------------|-----------|
| <i>[Signature]</i> | SIGNATURE |
| P.E. NUMBER | DATE |

| PROJECT INFORMATION | |
|-------------------------|----------|
| PROGRAM | HIGHWAY |
| PROJECT MANAGER | R. SOUCY |
| DESIGNER | AG |
| CONSULTANT | VHB |
| PROJECT RESIDENT | |
| CONTRACTOR | |
| PROJECT COMPLETION DATE | |

| | |
|---------------------------------|-------------|
| CARIBOU PRESTILE HILL BRIDGE | TITLE SHEET |
|---------------------------------|-------------|

| |
|-----------------------------------|
| SHEET NUMBER 1 OF 4 |
|-----------------------------------|

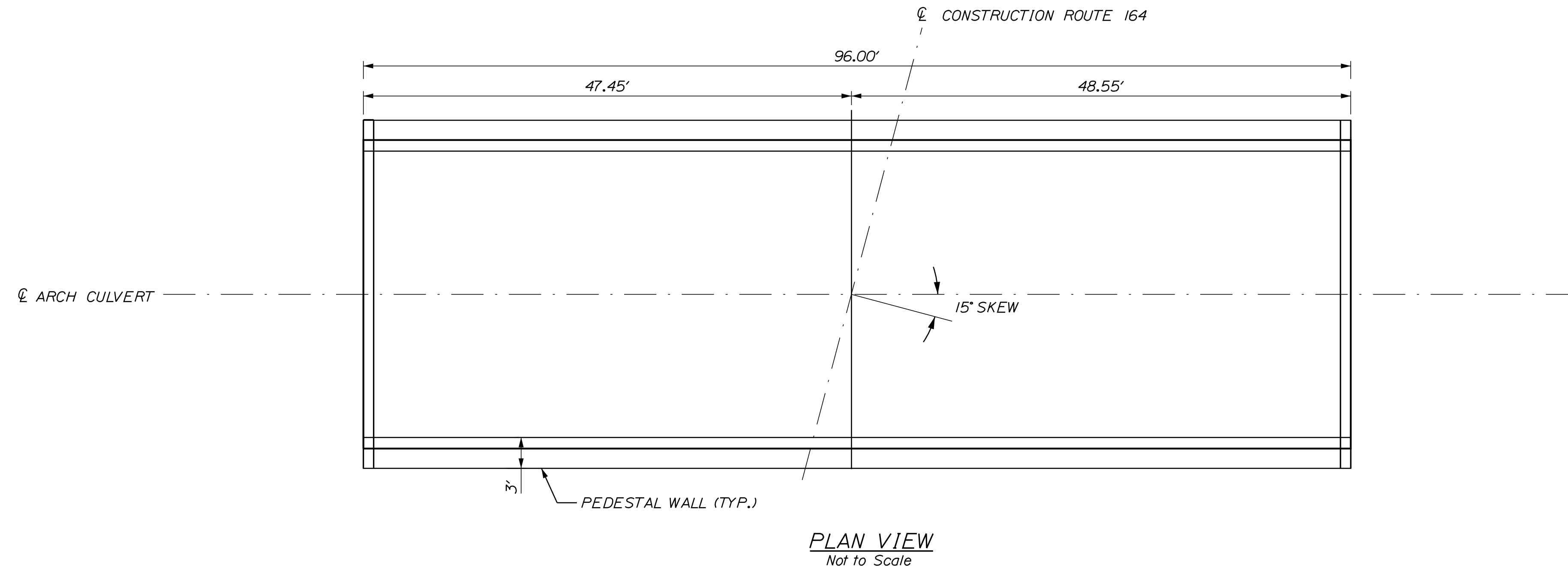
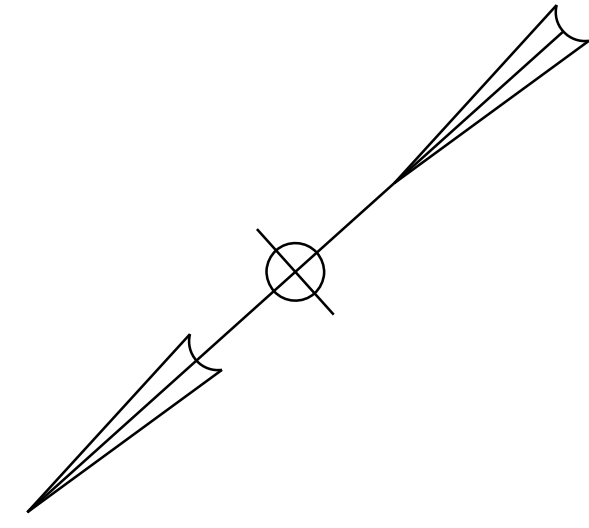
WIN 022845.11 FEDERAL PROJECT NO. 2284500

Date: 08/29/2025

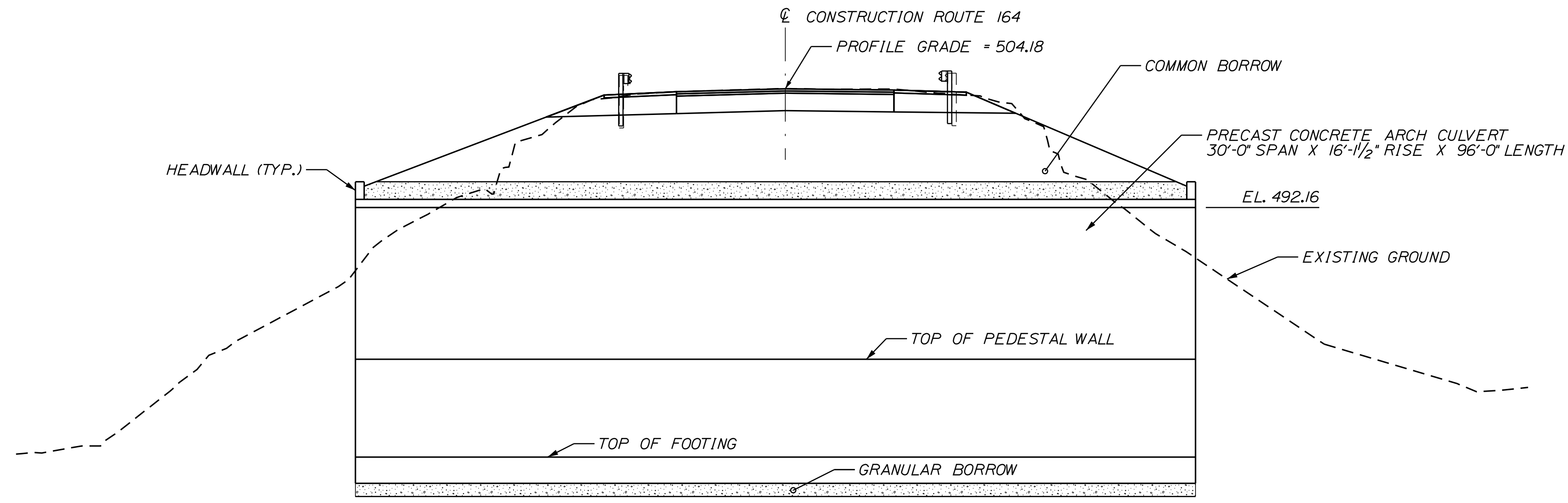
Username: jharris

Division: HIGHWAY

Filename: ... \MSTAP\Prebid\001_Title.dgn



PLAN VIEW
Not to Scale



LONGITUDINAL ARCH SECTION
(15° SKEW ALONG CENTERLINE OF CONCRETE ARCH)
Not to Scale

PRECAST CONCRETE ARCH CULVERT NOTES:

1. THE CONSTRUCTION, HANDLING, AND ASSEMBLY OF THE PRECAST UNITS SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION 534 PRECAST STRUCTURAL CONCRETE AND WITH THE MANUFACTURER'S SPECIFICATIONS AS APPLICABLE.
2. THE PRECAST UNITS SHALL BE DESIGNED TO CARRY CONSTRUCTION LOADINGS WITH A MINIMUM FILL COVER OF 36 INCHES OVER THE TOP OF THE UNITS.

| |
|------------------------------|
| STATE OF MAINE |
| DEPARTMENT OF TRANSPORTATION |
| FEDERAL PROJECT NO. 2284500 |
| BRIDGE NO. 6599 |
| WIN 22845.00 |
| HIGHWAY PLANS |



| PROJ. MANAGER | R. SOURCE | BY | DATE |
|--------------------------------------|----------------------|----------------------|-------|
| DESIGN DETAILED JAH | JAH | JAH | 10/25 |
| CHECKED/REVIEWED ELW | ELW | ELW | 10/25 |
| DESIGN DETAILED/DESIGNED/REVISIONS 1 | DESIGNED/REVISIONS 1 | DESIGNED/REVISIONS 1 | 10/25 |
| DESIGN DETAILED/DESIGNED/REVISIONS 2 | DESIGNED/REVISIONS 2 | DESIGNED/REVISIONS 2 | 10/25 |
| DESIGN DETAILED/DESIGNED/REVISIONS 3 | DESIGNED/REVISIONS 3 | DESIGNED/REVISIONS 3 | 10/25 |
| DESIGN DETAILED/DESIGNED/REVISIONS 4 | DESIGNED/REVISIONS 4 | DESIGNED/REVISIONS 4 | 10/25 |
| FIELD CHANGES | FIELD CHANGES | FIELD CHANGES | 10/25 |

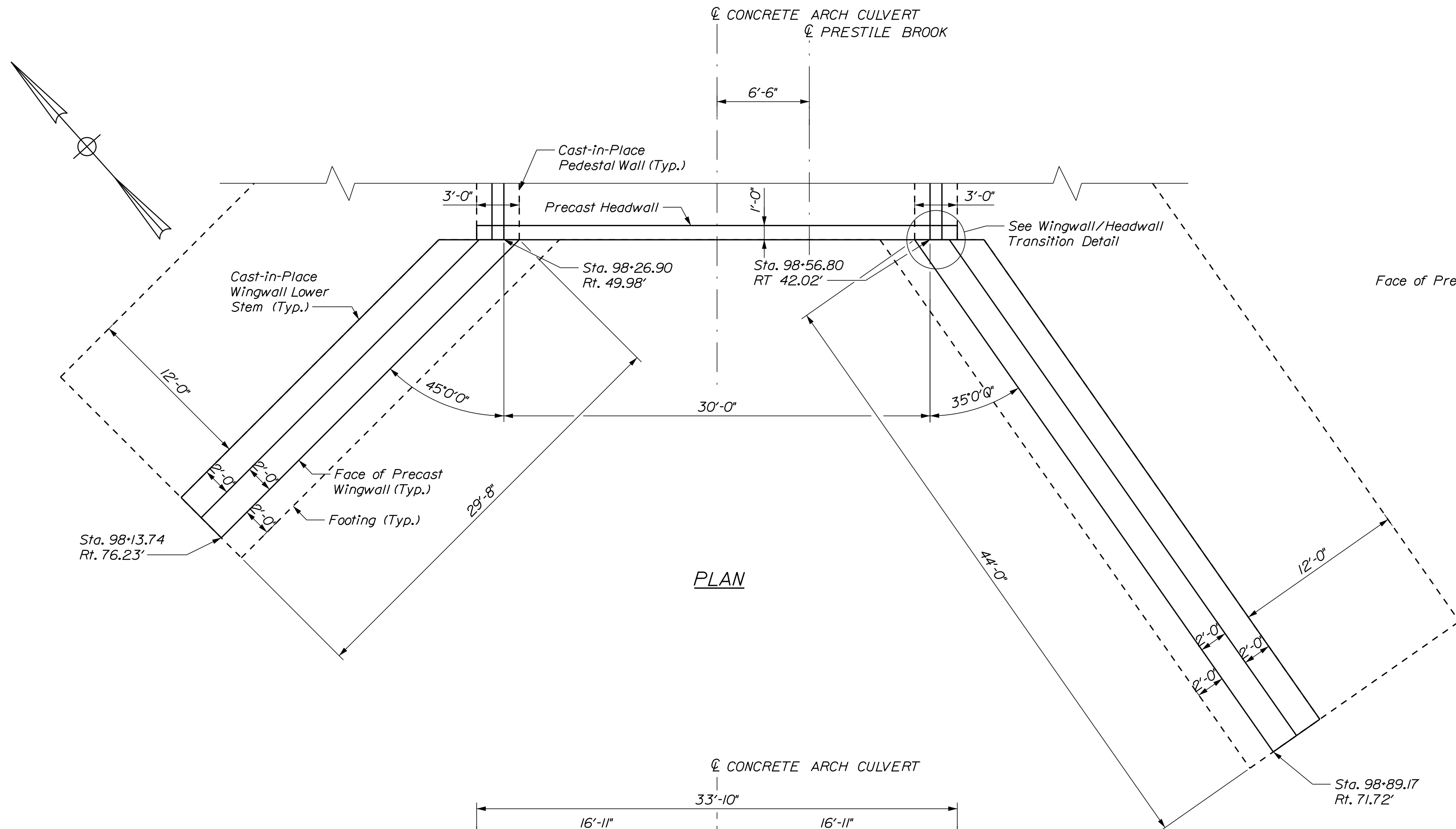
**CARIBOU
PRESTILE HILL BRIDGE
ARCH CULVERT DETAILS**

Date: 08/29/2025

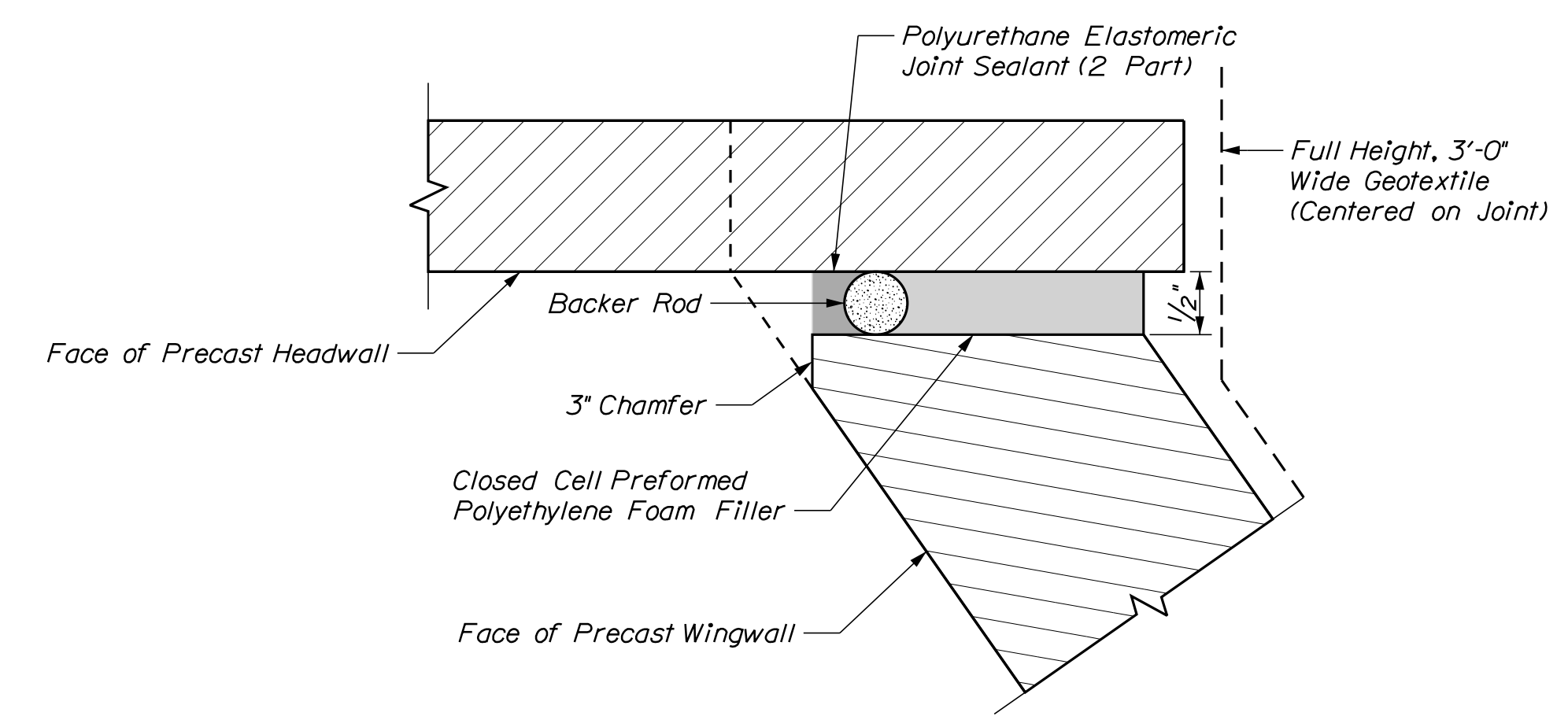
Username: jharris

Division: HIGHWAY

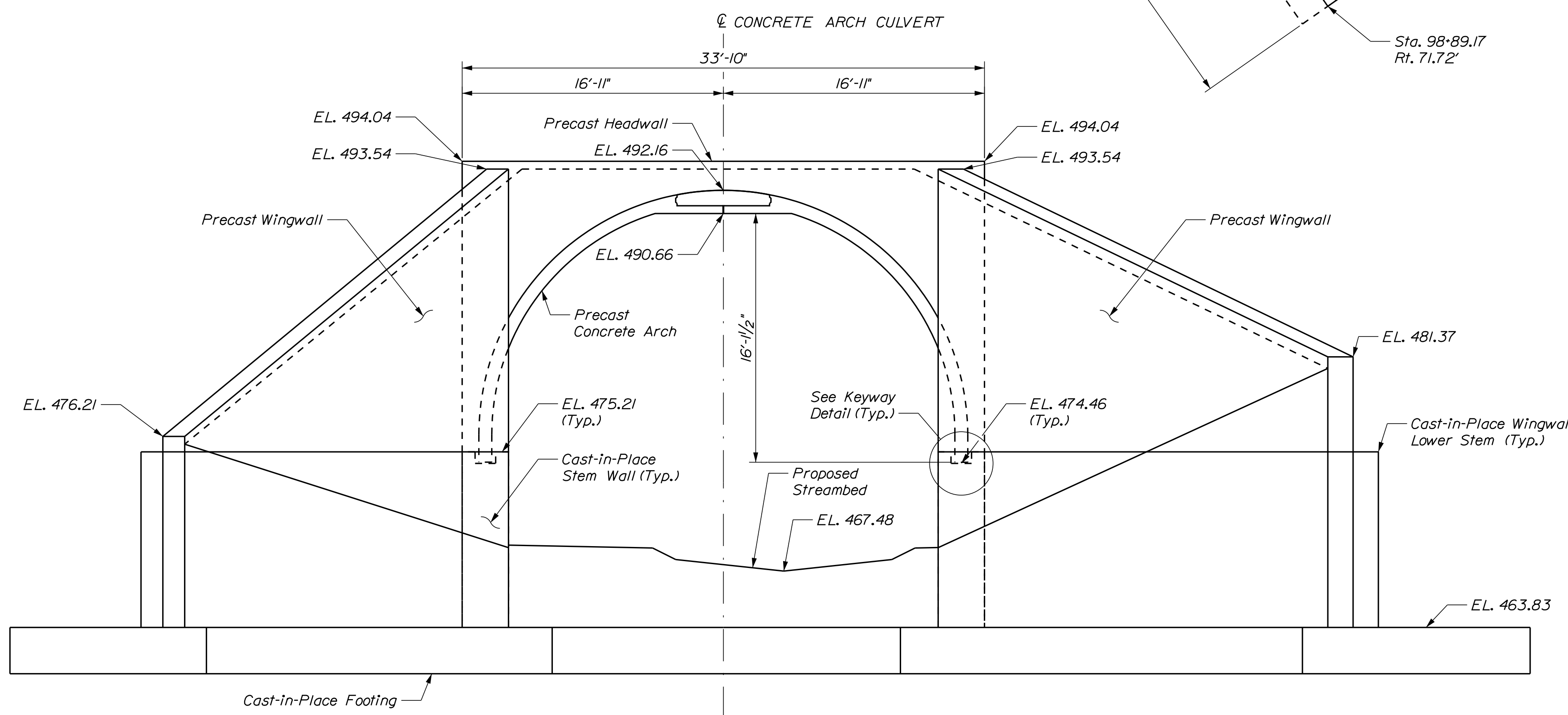
Filename: ... \005_Culv_Headwall_01.dgn



PLAN



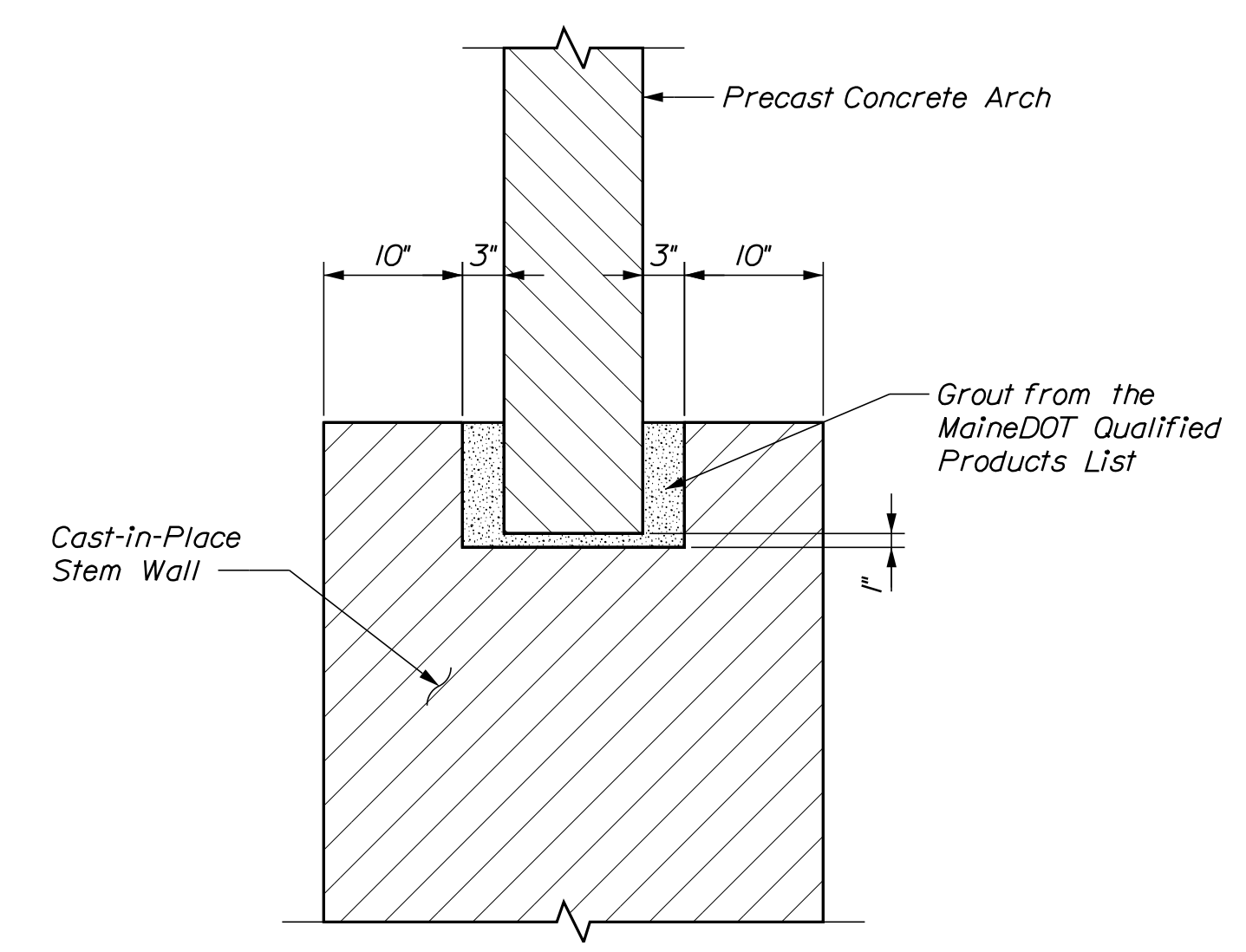
WINGWALL/HEADWALL TRANSITION DETAIL
(Not to Scale)



SOUTHWEST WINGWALL ELEVATION

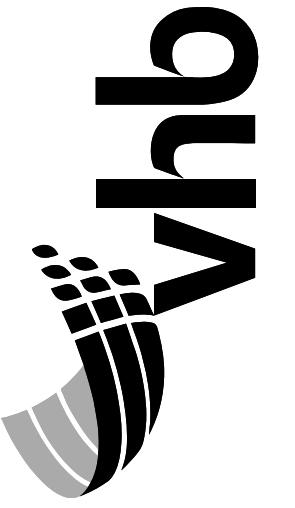
SOUTH HEADWALL ELEVATION

SOUTHEAST WINGWALL ELEVATION



KEYWAY DETAIL
(Not to Scale)
(Concrete Reinforcing Not Shown)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
FEDERAL PROJECT NO. 2284500
WIN
BRIDGE NO. 6599 22845.00
HIGHWAY PLANS



| PROJ. MANAGER | R. SOURCE | BY | DATE |
|------------------|-------------|-------------|-------------|
| DESIGN DETAILED | JAH | JAH | 10/25 |
| CHECKED/REVIEWED | ELW | BAR | 10/25 |
| DESIGNS DETAILED | DESIGNER 25 | DESIGNER 25 | 10/25 |
| DESIGNS DETAILED | DESIGNER 33 | DESIGNER 33 | 10/25 |
| REVISIONS 1 | | | REVISION 18 |
| REVISIONS 2 | | | REVISION 25 |
| REVISIONS 3 | | | REVISION 35 |
| REVISIONS 4 | | | REVISION 45 |
| FIELD CHANGES | | | REVISION 45 |

CARIBOU
PRESTILE HILL BRIDGE
SOUTH HEADWALL
AND WINGWALLS

SHEET NUMBER

3

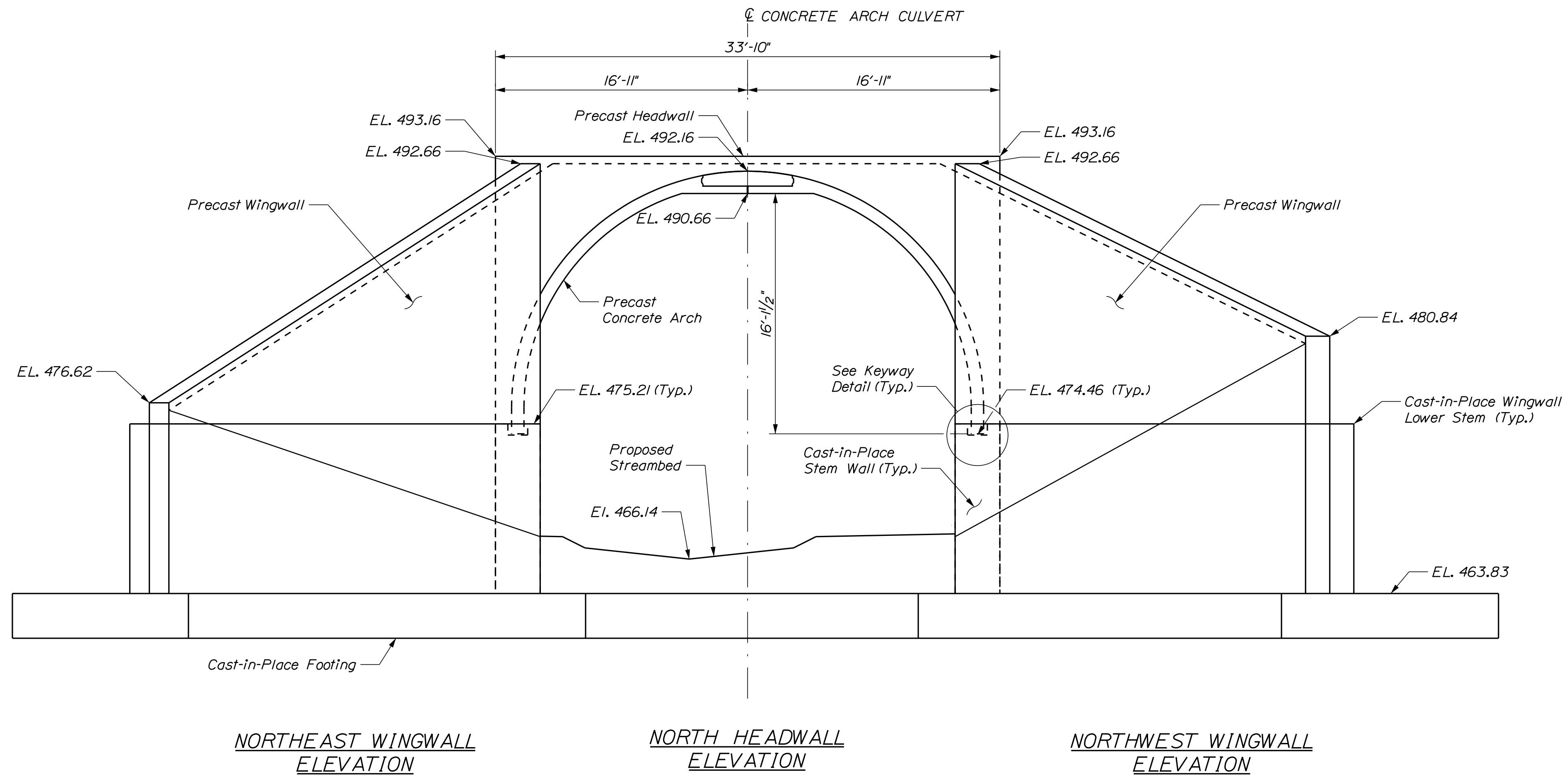
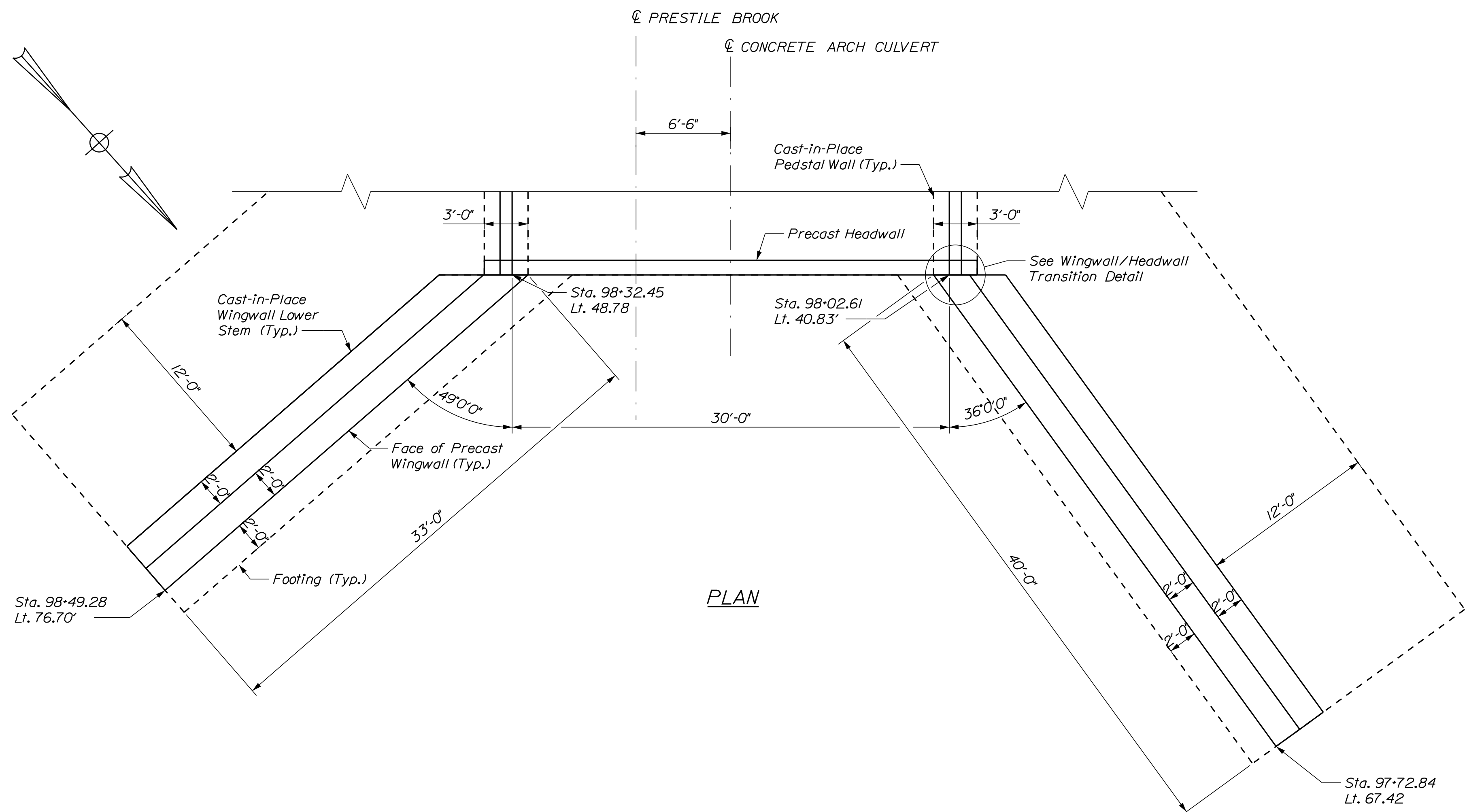
OF 4

Date: 08/29/2025

Username: jharris

Division: HIGHWAY

Filename: ... \006_Culv_Headwall_02.dgn



STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 FEDERAL PROJECT NO. 2284500
 BRIDGE NO. 6599 WIN 22845.00 HIGHWAY PLANS



| PROJ. MANAGER | R. SOURCE | BY | DATE |
|------------------|-------------|-------------|-------|
| DESIGN DETAILED | JAH | JAH | 10/25 |
| CHECKED-REVIEWED | ELW | BAR | 10/25 |
| DESIGN DETAILED | DESIGNER 25 | DESIGNER 25 | 10/25 |
| DESIGN DETAILED | DESIGNER 33 | DESIGNER 33 | 10/25 |
| REVISIONS 1 | | | |
| REVISIONS 2 | | | |
| REVISIONS 3 | | | |
| REVISIONS 4 | | | |
| FIELD CHANGES | | | |

CARIBOU
 PRESTILE HILL BRIDGE
 NORTH HEADWALL
 AND WINGWALLS

SHEET NUMBER
 4
 OF 4