

City of Biddeford
Finance Committee

March 01, 2022 5:30 PM Council Chambers and via Zoom

Please click the link below to join the webinar:

<https://biddeford.zoom.us/j/94377638060?pwd=Y09ReXRpbUxPallGSWJ6clk1ZVcrdz09>

Passcode: 642780

Or One tap mobile :

US: +13126266799,,94377638060# or +16465588656,,94377638060#

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

US: +1 312 626 6799 or +1 646 558 8656 or +1 301 715 8592 or +1 346 248 7799 or +1 669 900 9128 or +1 253 215 8782

Webinar ID: 943 7763 8060

International numbers available: <https://biddeford.zoom.us/u/aedlEJvkuR>

Zoom Meeting Link

Please click the link below to join the webinar:

<https://biddeford.zoom.us/j/94377638060?pwd=Y09ReXRpbUxPallGSWJ6clk1ZVcrdz09>

Passcode: 642780

Or One tap mobile :

US: +13126266799,,94377638060# or +16465588656,,94377638060#

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

US: +1 312 626 6799 or +1 646 558 8656 or +1 301 715 8592 or +1 346 248 7799 or +1 669 900 9128 or +1 253 215 8782

Webinar ID: 943 7763 8060

International numbers available: <https://biddeford.zoom.us/u/aedlEJvkuR>

- 1. Call to order**
- 2. Approval of the Minutes**
 - 2.1. February 15, 2022 Finance Committee Meeting Minutes
[2-15-2022 Finance Committee Minutes.pdf](#)
- 3. Signing of the expenditure warrant**
- 4. Discussion/Approval**
 - 4.1. Recommendation: Award of Contract for Horrigan Court Pump Station/Gordon Contracting, Inc. of Sangerville, Maine
[3-01-2022 Horrigan Court Pump Station-MEMO.docx](#)
[3-01-2022 Horrigan Court Pump Station - Gordon Bid Package.pdf](#)
[3-01-2022 Horrigan Court Pump Station - Bid Recommendation Letter-Wright](#)

[Pierce.pdf](#)

[3-01-2022 Horrigan Court Pump Station - Construction Drawings.pdf](#)

[3-01-2022 Horrigan Court Pump Station - GIS Sewer Map.pdf](#)

- 4.2. Recommendation: Authorization/Additional Funds for Main, Hill, Water Street Intersection Improvements Project

[3-01-2022 Main Hill Water Project-Additional Funding-MEMO.docx](#)

[3-01-2022 Main Hill Water Project-Additional Funding Request.pdf](#)

[3-01-2022 Main Hill Water Project-Notice to contractors.pdf](#)

[3-01-2022 Main Hill Water Project - D.O.T Bid Tab.pdf](#)

[3-01-2022 Main Hill Water Project - Plan Set.pdf](#)

[3-01-2022 Main Hill Water Project - VHB General Plan.pdf](#)

5. Other Business

6. Adjournment

City of Biddeford
Finance Committee Meeting Minutes
February 15, 2022

The meeting was called to order at 5:31 p.m. by Councilor Belanger.

Present: Mayor Alan Casavant; Councilor Norman Belanger; Councilor William Emhiser; Councilor Marc Lessard; City Manager, James Bennett; City Clerk, Carmen Morris; and Finance Director, Nichole Wood.

Adjustment to the Agenda
No adjustment to the agenda.

Approval of Minutes of February 1, 2022

Motion by Councilor Emhiser to accept the minutes as printed, seconded by Councilor Lessard.

Vote: unanimous.
Motion carries.

Expenditure Warrants:
The Warrants were available for review.

Discussion/Approval

Recommendation: Aeration Basin Painting at Wastewater Treatment Plant

Motion by Councilor Emhiser to recommend the award of contract for Aeration Basin Painting at the Wastewater Treatment Plant to Apex Construction, Inc., seconded by Councilor Lessard.

Public Works Director, Jeff Demers, presented the item. Jeff offered assurances with going with Apex Construction since they have done work for the City in the past.

Vote: unanimous.
Motion carries.

Other Business

December 2021 Financials

The December 2021 Financials were included in the Finance Committee meeting packet.

Finance Director, Nichole Wood, gave an overview of where the City stands at the halfway mark of the fiscal year. The budget is in good standing, on both the expense and revenue sides.

Motion to adjourn made by Councilor Emhiser, seconded by Councilor Lessard.
Vote: unanimous.
Motion carries.
Adjourned at 5:49 p.m.



Finance Committee / City Council

Meeting Date: March 1st, 2022
Meeting Time: 5:00 PM/6:00 PM

Agenda Item No: 2022.12
Item Description: Horrigan Court Pump Station Replacement – Bid Acceptance

Submitted by: Jeff Demers (Public Works Director)
Alex Buechner (Wastewater Superintendent)
Tom Milligan, PE (City Engineer)
Craig Chekan, PE (Deputy Engineer)

Supporting Information/Documentation:

1. GIS Sewer Map
2. Construction Drawings
3. Wright-Pierce Bid Recommendation Letter
4. Recommended Bidder (Gordon Contracting) Bid Package

Executive Summary:

- a) The existing wastewater pump station at Horrigan Court serves the western portion of the city and is in emergency need of replacement.
- b) Over the past couple of years, construction documents for the pump station replacement have been created and approved by the required permitting agencies (DEP, Saco River Corridor Commission, and City of Biddeford Planning Board).

Detailed Review:

- a) Wright-Pierce, the design engineer, advertised this project to bid on December 17th, 2021.
- b) A public open-bid process was held on January 27th, 2022 in the City's Council Chambers.
- c) Three construction bids were received:
 - i. Doten's Construction: \$3,960,565
 - ii. Gordon Contracting: \$4,326,285
 - iii. T. Buck Construction: \$4,328,127
- d) Per Wright-Pierce's detailed review and Bid Recommendation Letter, Doten's and T. Buck's bids were determined to be non-responsive:
 - i. Doten's omitted necessary information and lacked the required project qualifications
 - ii. T. Buck's original bid included mathematical tabular errors resulting in an actual higher bid value. Once informed of this error, T. Buck declined entering the contract for the corrected bid amount
- e) Gordon's bid package and qualifications have been reviewed, compared against the bid documents, and deemed acceptable.
- f) Possible added expenses for this size project:
 - I. Change orders 5% - 6% \$250,000
 - II. Inspections Wright/Pierce and BH2M \$150,000
 - III. Administration \$50,000
 - IV. Total \$450,000

Funding Source:

This project will be funded from:

- American Rescue Plan Act (ARPA) Funds \$3,776,285
- Department Environmental Protection Grant \$1,000,000

Staff Recommendation:

Staff recommends to accept Gordon Contracting's 'Horrigan Court Pump Station Replacement' bid of \$4,326,285.

Staff recommends \$450,000 For Change orders, Inspections and Administration fee's

Total of \$4,776,285.00

SECTION 00410BID FORM FOR CONSTRUCTION CONTRACT

The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 1—OWNER AND BIDDER

- 1.01 This Bid is submitted to:
 City of Biddeford, P.O. Box 586, Biddeford, ME 04005
 Horrigan Court Pump Station Upgrade
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

- 2.01 The following documents are submitted with and made a condition of this Bid:
- A. Required Bid security; ✓
 - B. List of Proposed Subcontractors; ✓
 - C. List of Proposed Suppliers; ✓
 - D. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids; ✓
 - E. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids; N/A
 - F. Required Bidder Qualification Statement with supporting data; ✓
 - G. Signed Compliance Statement (Section 00406). ✓
 - H. Signed Certification of Non-Segregated Facilities (SC-40). ✓
 - I. Signed Labor Union Notice (SC-41). ✓
 - J. Maine DEP Form 6100-4, "DBE Subcontractor Utilization Form" ✓
 - K. Maine DEP Form 6100-3, "DBE Subcontractor Performance Form" for each proposed DBE subcontractor. ✓

ARTICLE 3—BASIS OF BID—LUMP SUM BID AND UNIT PRICES

- 3.01 *Base Bid Items*
- A. Bidder will complete the Work in accordance with the Contract Documents for the following lump sum, unit price and allowance items.
 - B. Bidder acknowledges that:

1. each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and
2. estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents (estimated "***").

Item No.	Description	Unit	Quantity	Bid Unit Price	Bid Amount
1	Mobilization/Demobilization	LS	1	216,300	\$ 216,300
2	Pump Station Installation	LS	1	2,541,000.00	\$ 2,541,000.00
3	Aggregate Base Course (MDOT "A" Gravel)	CY	150	50.00	\$ 7,500
4	Aggregate Subbase Course (MDOT "D" Gravel)	CY	455	40.00	\$ 18,200.00
5	12-Inch Gravity Sewer Pipe	LF	15	150.00	\$ 2,250.00
6	14-Inch Gravity Sewer Pipe	LF	70	195.00	\$ 13,650.00
7	24-Inch Gravity Sewer Pipe	LF	260	200.00	\$ 52,000.00
8	Sewer-Granite Culvert Crossing	LS	1	7,500.00	\$ 7,500.00
9	12-Inch RCP Culvert	LF	35	130.00	\$ 455.00 4,550.00
10	4-foot Diameter Sanitary Sewer Manholes	VF	6.5	1,000.00	\$ 6,500.00
11	5-foot Diameter Sanitary Sewer Manholes	VF	27	1,200.00	\$ 32,400.00
12	12-Inch Force Main Pipe	LF	60	580.00	\$ 34,800.00
13	2-Inch Copper Service Pipe	LF	240	75.00	\$ 18,000.00
14	2-Inch Curb Stops	EA	2	1,400.00	\$ 2,800.00
15	Yard Hydrant Assembly	LS	1	5,000.00	\$ 5,000.00
16	Water Meter Pit	LS	1	12,000.00	\$ 12,000.00
17	Ledge Excavation and Disposal	CY	350	455.00	\$ 159,250.00
18	Test Pit Excavation	EA	2	750.00	\$ 1,500.00
19	Additional Earthwork Materials – Compacted Structural Fill*	CY	100	45.00	\$ 4,500.00
20	Additional Earthwork Materials – Compacted Screened Stone*	CY	100	50.00	\$ 5,000.00
21	Additional Earthwork Materials – Common Borrow*	CY	100	25.00	\$ 2,500.00
22	Additional Earthwork – Excavation and Disposal*	CY	100	25.00	\$ 2,500.00
23	Handling and Disposal of Contaminated Soils*	TON	100	50.00	\$ 5,000.00
24	Loaming and Seeding	LS	1	18,000.00	\$ 18,000.00
25	Chain Link Fence and Gates	LF	370	88.00	\$ 32,560.00
26	Bollards	EA	7	1700.00	\$ 11,900.00
27	Initial Pavement (Binder Course)	Ton	80	200.00	\$ 16,000.00
28	Final Pavement (Surface Course)	Ton	65	200.00	\$ 13,000.00
29	Tapered Shiplap Joint from Existing to New Pavement	SF	160	15.00	\$ 2,400.00
30	Mill, Shim and Overlay with 1.5" Wearing Course	SY	850	35.00	\$ 2,9750.00 29,750.00
31	Sidewalk Construction	SY	15	175.00	\$ 2,625.00
32	Vertical Granite Curb	LF	55	70.00	\$ 3,850.00
33	Stormwater BMPs	LS	1	40,000.00	\$ 40,000.00
34	Electrical and Instrumentation Subcontract	LS	1	859,000.00	\$ 859,000.00
35	As-Built Survey	LS	1	7,500.00	\$ 7,500.00
36	Demolition of the Existing Pump Station	LS	1	30,000.00	\$ 30,000.00
37	Handling and Disposal of Contaminated Groundwater	AL	1	\$30,000	\$30,000
38	Electrical Service Allowance	AL	1	\$75,000	\$75,000
Total Base Bid					\$ 4,316,285.00

3.02 *Total Bid*

Total Bid (Total of all Lump Sum and Unit Price Bids)	\$ 4,326,285.00
---	-----------------

ARTICLE 4—DELETED

ARTICLE 5—DELETED

ARTICLE 6—TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Deleted.
- 6.03 Deleted.
- 6.04 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

7.01 *Bid Acceptance Period*

- A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

7.02 *Instructions to Bidders*

- A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

7.03 *Receipt of Addenda*

- A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date
No. 1	1/13/22
No. 2	1/18/22
No. 3	1/21/22
No.4	1/26/22

ARTICLE 8—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

8.01 *Bidder's Representations*

- A. In submitting this Bid, Bidder represents the following:
1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
 2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work, including all American Iron and Steel requirements.
4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.
7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

8.02 *Bidder's Certifications*

- A. The Bidder certifies the following:
 1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
 2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
 3. Bidder has not solicited or induced any individual or entity to refrain from bidding.

4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
- a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

BIDDER hereby submits this Bid as set forth above:

Bidder:

Gordon Contracting, Inc

(typed or printed name of organization)

By:

(individual's signature)

Name: Brian Howard

(typed or printed)

Title: President

(typed or printed)

Date: 1/27/2022

(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest:

(individual's signature)

Name:

(typed or printed)

Title:

(typed or printed)

Date:

(typed or printed)

Address for giving notices:

627 North Dexter Road Sangerville, ME 04479

Bidder's Contact:

Name: Brian Howard

(typed or printed)

Title: President

(typed or printed)

Phone: 207.876.3798

Email: brian@gcmaine.com

Address:

627 North Dexter Road Sangerville, ME 04479

Bidder's Contractor License No.: (if applicable)

END OF SECTION

February 9, 2022
W-P Project No. 12223G

Jeff Demers
Public Works Director
City of Biddeford
371 Hill Street
Biddeford, ME 04005

Subject: Horrigan Court Pump Station Upgrade
Evaluation of Bids

Dear Jeff:

We have completed our review of the construction bids received for the Horrigan Court Pump Station Upgrade project on January 27, 2022. This letter represents a summary of our findings.

Three bids were received and reviewed. A tabulation of the bids received is enclosed. Doten's Construction, Inc (DC) submitted the lowest Total Bid of \$3,960,565. DC's bid is approximately 8.9% less than the engineer's estimate for the project. The remaining two base bids were approximately 4.6% and 9.2% higher than DC's bid. These bids are evidence of competitive pricing and reasonable bids. In reviewing the three bid packages, several deficiencies were noted.

In reviewing DC's bid package, it was discovered they did not submit the following items:

- List of Proposed Subcontractors
- List of Proposed Suppliers
- Evidence of Authority to do business in the state
- Contractor's license number
- Signed Certificate of Non-Segregated Facilities (SC-40)
- Signed Labor Union Notice (SC-41)
- Maine DEP Form 6100-4, "DBE Subcontractor Utilization Form"
- Maine DEP Form 6100-3, "DBE Subcontractor Performance Form"

Some of these omissions are considered minor informalities while others are of greater concern. The following items represent our analysis of DC's qualifications based on information provided in their bid:

- DC is a small corporation that has been in business since 1982 but indicated on the Qualifications Statement that they have acted as a general contractor for similar projects for only 5 years.
- DC did not provide evidence of experience with any wastewater projects or any similar type of project with significant earthwork/excavation complexities like those in the Horrigan Court Pump station project.
- DC only listed one project with the scope of utility work. The listed project is an ongoing Wright-Pierce project for a water booster pump station upgrade with a total project cost of \$805,000. We

have reviewed the plans for this project and do not consider it to be similar in magnitude or complexity.

- Based on the project list provided in the bid package, DC has never completed a wastewater pump station related project of any size and did not provide 3 to 6 examples of projects similar in type and cost of construction to the Horrigan Court Pump Station project as required in Section 00450 – Qualifications Statement.
- DC appears to be a general contractor with a focus on building construction and renovation. Based on their work history, much of this project would need to be subcontracted, however a list of subcontractors was not submitted.

Based on the above information, Wright-Pierce has determined that DC submitted a non-responsive bid by omitting the items noted above. In addition, DC does not have documented experience proving they are capable of succeeding on a project of this type and magnitude. As such, they are considered a not-responsible bidder for this project, and we do not recommend their selection for award. Wright-Pierce has consulted with Maine DEP on this matter, and they are in agreement with our recommendation.

Ultimately, the decision to not award the contract to DC lies with the City of Biddeford. Should the City decide to award the contract to DC, it is possible that other Bidders could file a protest because DC did not submit a responsive bid.

The second lowest bidder on the project is T. Buck Construction with a Total Bid of \$4,328,127 (as totaled on the bid form) which has been corrected to be \$4,146,687 based on errors in the bid form noted below:

Item No.	Description	Unit	Quantity	Bid Unit Price	Submitted Bid Amount	Corrected Bid Amount
6	14-Inch Gravity Sewer Pipe	LF	70	\$28.00	\$19,600.00	\$1,960.00
17	Ledge Excavation and Disposal	CY	350	\$52.00	\$182,000.00	\$18,200.00
23	Handling and Disposal of Contaminated Soils*	Ton	100	\$400.00	\$4,000.00	\$40,000.00

Per Specification section 00200 Instructions to Bidders, Article 13.01 C, discrepancies between the multiplication of units of work and unit prices will be resolved in favor of the unit prices. As such, T. Buck's bid has moved to be the second low bidder. Conversations with T-Buck indicate the submitted bid amount is the value they intended for items 6 and 17 while the corrected bid amount is the value they intended for item 23. T. Buck recognizes Article 13.01 C, but does not wish to enter the contract for the corrected bid amount. As such, T. Buck's bid is considered non-responsive.

The third bidder on the project is Gordon Contracting, Inc. (GC) with a Total Base Bid of \$4,326,285. In reviewing GC's bid package, it appears that all requested items were submitted. GC's list of work experience shows they have complete projects with values over \$8,000,000 and have highlighted three wastewater/pump station projects completed since 2019. GC submitted Financial Statements and supplementary information for 2019 and 2020. Based on the documentation provided, it appears that they are in good financial standing.

Wright-Pierce has followed up on GC's references for three recent projects deemed to be similar in nature. In each case, the project engineer was contacted, and asked questions related to quality, workmanship, safety and the contractor's ability to perform the project. Each reference provided a positive outlook on working with GC. Based on the responses received, it is apparent that GC does have experience with wastewater pump stations.

Based on the above, Wright-Pierce is not aware of any reason why this contract should not be awarded to GC as the lowest responsive and responsible bidder.

If the City decides to proceed with the project based on the lowest responsive bid, the City should issue a letter to Gordon Contracting stating the City's intention to award the contract. Suggested language for this letter is attached. We would be happy to assist you with submitting the necessary documentation to Maine DEP for approval, awarding the contract, requesting the required bonds and insurance information, and executing the Contract Documents.

Very truly yours,

WRIGHT-PIERCE



Ryan T. Wingard, PE
Vice President



Charles A. Daigle, PE
Project Engineer

Enclosures

- Bid Tabulation
- Draft Notice of Intent to Award Letter

cc: Thomas Milligan, Biddeford
Alex Buechner, Biddeford
Craig Chekan, Biddeford
Brandy Piers, MaineDEP



BID TABULATION

Project Name: Horrigan Court Pump Station Upgrade

Issuing Office:

75 Washington Ave., Suite 202, Portland, ME 04101 Tel: (207) 761-2991

Project No.: 12223G

Location: Biddeford, ME

Bid Date: January 27, 2022

ENG/PM: C. Daigle

Engineers Estimate: \$4,350,000

				T. Buck Construction		Doten's Construction		Gordon Contracting, Inc.	
BID QUANTITIES				UNIT AMT	BID	UNIT AMT	BID	UNIT AMT	BID
Item		Qty.	UNIT						
1	Mobilization / Demobilization	1	LS	\$300,000.00	\$300,000.00	\$165,000.00	\$165,000.00	\$216,300.00	\$216,300.00
2	Pump Station Installation	1	LS	\$2,799,255.00	\$2,799,255.00	\$2,300,000.00	\$2,300,000.00	\$2,541,000.00	\$2,541,000.00
3	Aggregate Base Course (MDOT "A" Gravel)	150	CY	\$35.00	\$5,250.00	\$36.00	\$5,400.00	\$50.00	\$7,500.00
4	Aggregate Subbase Course (MDOT "D" Gravel)	455	CY	\$30.00	\$13,650.00	\$36.00	\$16,380.00	\$40.00	\$18,200.00
5	12-inch Gravity Sewer Pipe	15	LF	\$425.00	\$6,375.00	\$300.00	\$4,500.00	\$150.00	\$2,250.00
6	14-inch Gravity Sewer Pipe	70	LF	\$28.00	\$1,960.00	\$300.00	\$21,000.00	\$195.00	\$13,650.00
7	24-inch Gravity Sewer Pipe	260	LF	\$380.00	\$98,800.00	\$360.00	\$93,600.00	\$200.00	\$52,000.00
8	Sewer-Granite Culvert Crossing	1	LS	\$297,777.00	\$297,777.00	\$36,000.00	\$36,000.00	\$7,500.00	\$7,500.00
9	12-inch RCP Culvert	35	LF	\$195.00	\$6,825.00	\$300.00	\$10,500.00	\$130.00	\$4,550.00
10	4-foot Diameter Sanitary Sewer Manholes	6.5	VF	\$770.00	\$5,005.00	\$1,800.00	\$11,700.00	\$1,000.00	\$6,500.00
11	5-foot Diameter Sanitary Sewer Manholes	27	VF	\$850.00	\$22,950.00	\$1,800.00	\$48,600.00	\$1,200.00	\$32,400.00
12	12-inch Force Main Pipe	60	LF	\$314.00	\$18,840.00	\$276.00	\$16,560.00	\$580.00	\$34,800.00
13	2-inch Copper Service Pipe	240	LF	\$127.00	\$30,480.00	\$276.00	\$66,240.00	\$75.00	\$18,000.00
14	2-inch Curb Stops	2	EA	\$950.00	\$1,900.00	\$1,440.00	\$2,880.00	\$1,400.00	\$2,800.00
15	Yard Hydrant Assembly	1	LS	\$3,800.00	\$3,800.00	\$4,200.00	\$4,200.00	\$5,000.00	\$5,000.00
16	Water Meter Pit	1	LS	\$6,000.00	\$6,000.00	\$6,000.00	\$6,000.00	\$12,000.00	\$12,000.00
17	Ledge Excavation and Disposal	350	CY	\$52.00	\$18,200.00	\$360.00	\$126,000.00	\$455.00	\$159,250.00
18	Test Pit Excavation	2	EA	\$1,800.00	\$3,600.00	\$600.00	\$1,200.00	\$750.00	\$1,500.00
19	Additional Earthwork Materials - Compacted Structural Fill*	100	CY	\$45.00	\$4,500.00	\$60.00	\$6,000.00	\$45.00	\$4,500.00
20	Additional Earthwork Materials - Compacted Screened Stone*	100	CY	\$55.00	\$5,500.00	\$60.00	\$6,000.00	\$50.00	\$5,000.00
21	Additional Earthwork Materials - Common Borrow*	100	CY	\$35.00	\$3,500.00	\$60.00	\$6,000.00	\$25.00	\$2,500.00
22	Additional Earthwork - Excavation and Disposal*	100	CY	\$45.00	\$4,500.00	\$60.00	\$6,000.00	\$25.00	\$2,500.00
23	Handling and Disposal of Contaminated Soils*	100	TON	\$400.00	\$40,000.00	\$240.00	\$24,000.00	\$50.00	\$5,000.00
24	Loaming and Seeding	1	LS	\$15,000.00	\$15,000.00	\$24,000.00	\$24,000.00	\$18,000.00	\$18,000.00
25	Chain Link Fence and Gates	370	LF	\$90.00	\$33,300.00	\$57.00	\$21,090.00	\$88.00	\$32,560.00
26	Bollards	7	EA	\$1,155.00	\$8,085.00	\$600.00	\$4,200.00	\$1,700.00	\$11,900.00
27	Initial Pavement (Binder Course)	80	TON	\$224.00	\$17,920.00	\$180.00	\$14,400.00	\$200.00	\$16,000.00
28	Final Pavement (Surface Course)	65	TON	\$180.00	\$11,700.00	\$180.00	\$11,700.00	\$200.00	\$13,000.00
29	Tapered Shiplap Joint from Existing New Pavement	160	SF	\$16.00	\$2,560.00	\$12.00	\$1,920.00	\$15.00	\$2,400.00
30	Mill, Shim, and Overlay with 1.5" Wearing Course	850	SY	\$31.00	\$26,350.00	\$33.00	\$28,050.00	\$35.00	\$29,750.00
31	Sidewalk Construction	15	SY	\$114.00	\$1,710.00	\$180.00	\$2,700.00	\$175.00	\$2,625.00
32	Vertical Granite Curb	55	LF	\$110.00	\$6,050.00	\$60.00	\$3,300.00	\$70.00	\$3,850.00
33	Stormwater BMPs	1	LS	\$7,400.00	\$7,400.00	\$6,000.00	\$6,000.00	\$40,000.00	\$40,000.00
34	Electrical and Instrumental Subcontract	1	LS	\$197,445.00	\$197,445.00	\$682,445.00	\$682,445.00	\$859,000.00	\$859,000.00
35	As-Built Survey	1	LS	\$500.00	\$500.00	\$12,000.00	\$12,000.00	\$7,500.00	\$7,500.00
36	Demolition of Existing Pump Station	1	LS	\$15,000.00	\$15,000.00	\$60,000.00	\$60,000.00	\$30,000.00	\$30,000.00
37	Handling and Disposal of Contaminated Groundwater	1	AL	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00
38	Electrical Service Allowance	1	AL	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00
TOTAL BASE BID AMOUNT				\$4,146,687.00	\$4,328,127.00	\$3,960,565.00		\$4,326,285.00	

Note: T. Buck Construction's bid contained calculation errors for items 6, 17 and 23 as noted above. Per specification section 00200 Instructions to Bidders, Article 13.01C, discrepancies between multiplication of units of work and unit prices will be resolved in favor of the unit prices. As such, T. Bucks Total bid has been corrected above.

February 9, 2022

Brian Howard, President
Gordon Contracting, Inc.
627 North Dexter Road
Sangerville, ME 04479

Subject: Horrigan Court Pump Station Upgrade
 Notice of Intent to Award

Gentlemen:

It is the intention of the City of Biddeford to award a contract for the above referenced project to Gordon Contracting, Inc. on the basis of the Total Base Bid in the amount of \$4,326,285 as received on January 27, 2022. Award of this contract is contingent upon review and approval by the Maine Department of Environmental Protection (DEP) of your documentation of compliance with the Disadvantaged Business Enterprise (DBE) regulations as well as approval by DEP to award the contract.

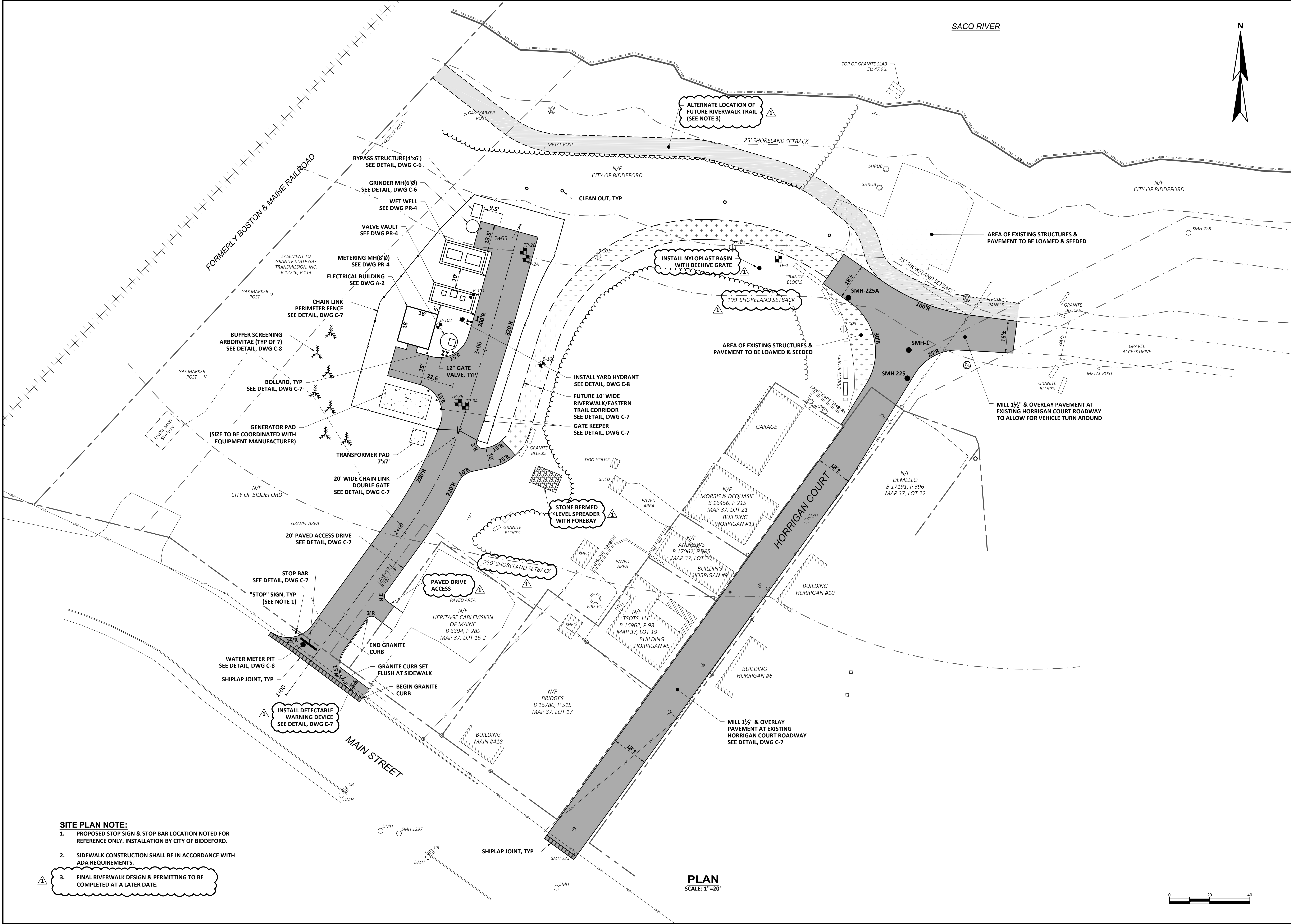
Please feel free to contact me or Ryan Wingard, of Wright-Pierce, if you have any questions regarding this notice.

Very truly yours,

Jeff Demers
Superintendent

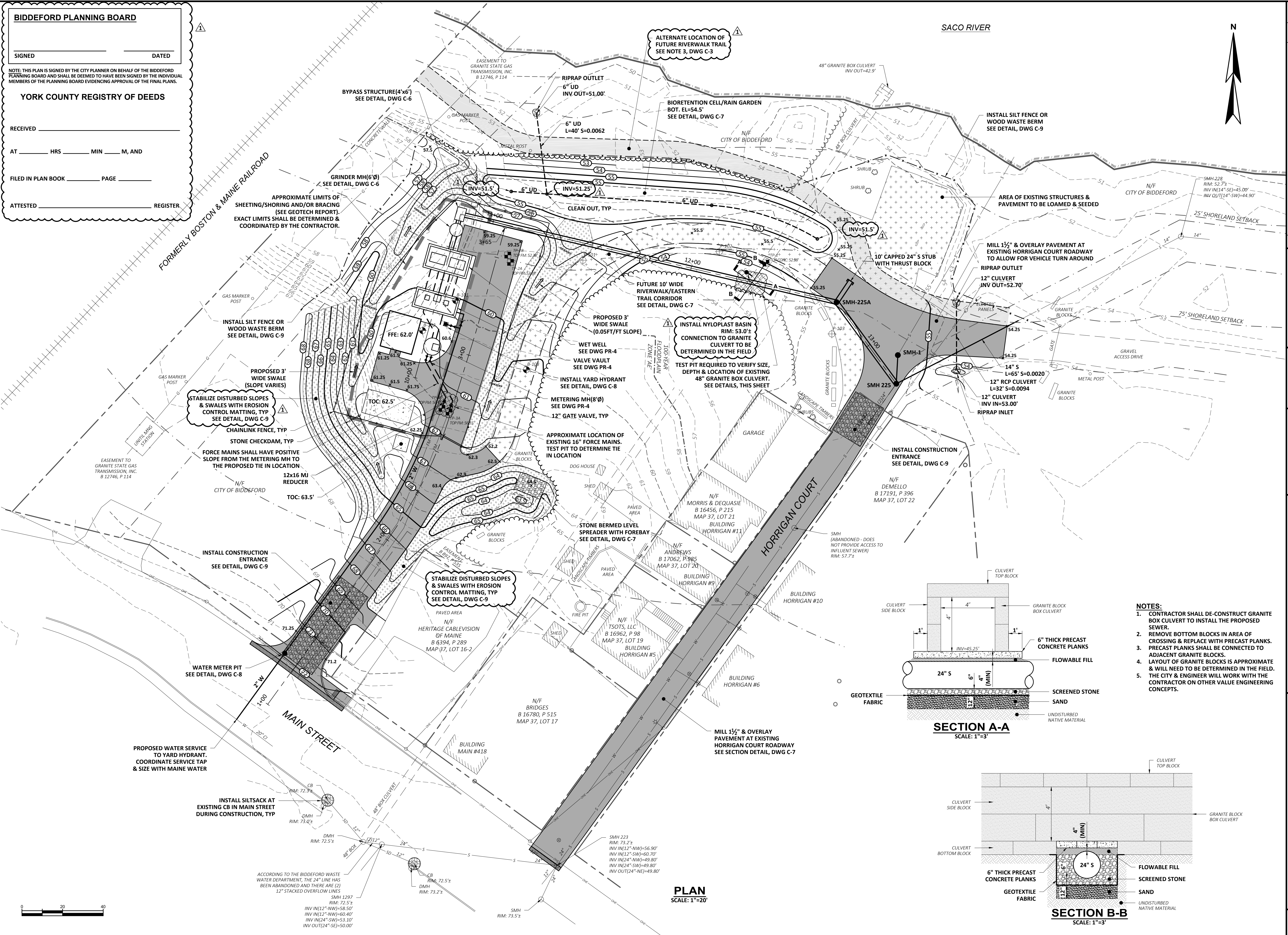
cc: Ryan Wingard, PE – Wright-Pierce

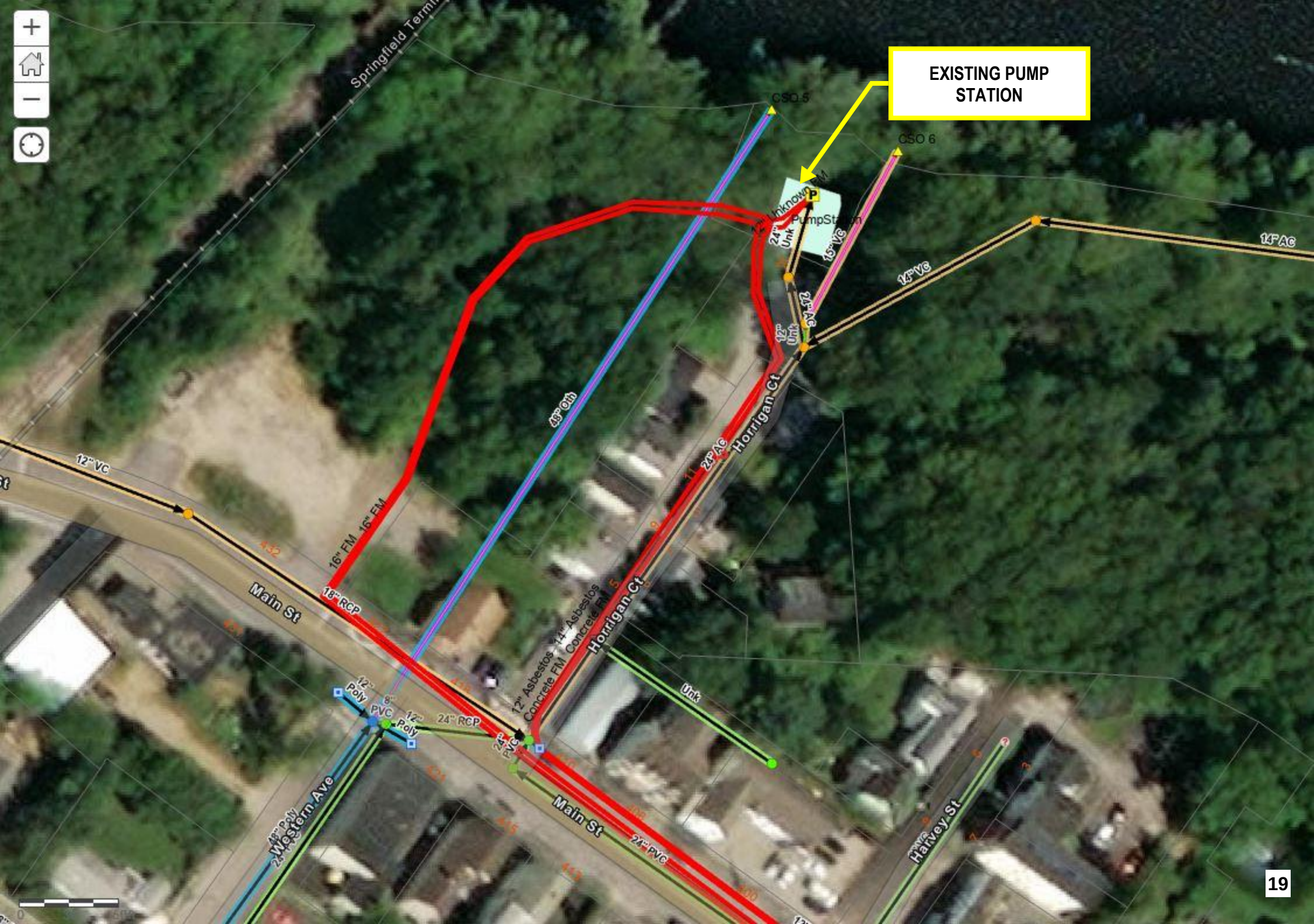
LAST SAVED BY: RYAN.BESAW 1/2/2023 12:15 PM
A:\ENGINE\BIDDEFORD\12233-DIAMOND\MATCH\LOT\12233-C-3-SITE\Layout\Plan.DWG | 12233-C-3-Site\Layout\Plan | 1:2.585 | 1/2/2023 12:27:12 PM | RYAN.BESAW



CITY OF BIDDEFORD HORRIGAN COURT PUMP STATION UPGRADE BIDDEFORD, MAINE		WRIGHT-PIERCE 207.725.8721 www.wright-pierce.com 11 BOWDOIN MILL ISLAND, SUITE 140, TOPSHAM, ME 04086				PROJECT NO: 12236 DESIGNED: C.DAIGLE CAD COORD: R.BESAW CAD: R.BESAW CHECKED: C.DAIGLE DATE: 11-2021 APPROVED: R.WINGARD DATE: 12-2021 SUBMISSION: CONTRACT DRAWINGS	NO	REVISIONS	APPD	DATE
							Δ	PLANNING BOARD REVISIONS	C.DAI	2-22
							Δ			
							Δ			
							Δ			
							Δ			
							Δ			
DRAWING		SITE LAYOUT PLAN								
C-3										

<u>BIDDEFORD PLANNING BOARD</u>	
_____ SIGNED	_____ DATED
NOTE: THIS PLAN IS SIGNED BY THE CITY PLANNER ON BEHALF OF THE BIDDEFORD PLANNING BOARD AND SHALL BE DEEMED TO HAVE BEEN SIGNED BY THE INDIVIDUAL MEMBERS OF THE PLANNING BOARD EVIDENCING APPROVAL OF THE FINAL PLANS. YORK COUNTY REGISTRY OF DEEDS	
RECEIVED _____ AT _____ HRS _____ MIN _____ M, AND FILED IN PLAN BOOK _____ PAGE _____ ATTESTED _____ REGISTER _____	

[illegible]



EXISTING PUMP
STATION



Finance Committee / City Council

Meeting Date: March 1st, 2022

Meeting Time: 5:00 PM

Agenda Item No: 2022.17

Item Description: Main/Hill/Water Intersection Improvements – Bid Acceptance

Submitted by: Jeff Demers (Public Works Director)

Tom Milligan, PE (City Engineer)

Supporting Information/Documentation:

1. City Managers letter dated February 17, 2022
2. Department of Transportation (D.O.T) VHB Drawings
3. D.O.T Bid Tab 1/19/2022
4. Notice to contractors from D.O.T
5. D.O.T plan set

Executive Summary:

- a) City staff has been working on this project for the last 6 plus years with the Department of transportation.
- b) Over the past two years, construction documents and bid documents have been completed.

Detailed Review:

- a) The Department of Transportation along with VHB the design engineer, advertised this project for bid the second time on January 19, 2022. The city decided in October the first attempt of bid came in much higher than expected. City staff and the D.O.T decided to modify the plans and re submit the bid.
- b) A public open-bid process was held on 2/9/2022
- c) Two construction bids were received:
 - i. Shaw Bro. Construction: \$2,272,836.90
 - ii. Pratt & Sons, Contracting: \$2,452,186.75
- d) Per the Department of Transportation's bid review Shaw brothers bid document is complete and satisfies all the requirements requested for bid.

Funding Source:

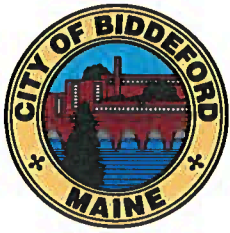
The city share will be \$637,012.00

This project will be funded from:

- FY 2022 Operational Surplus
- Contingency from Prior year funding

Staff Recommendation:

Staff recommends to move forward with Shaw Brothers Inc. recommended by the D.O.T



City of Biddeford, Maine

*The Office of
City Manager James A. Bennett*

Email: James.Bennett@biddefordmaine.org

February 17, 2022

Elizabeth Roberts
Transportation Engineer
970 Baxter Boulevard
Suite 201
Portland, ME 04103

RE: Funding for Biddeford Hill, Main and Water St Intersection Improvements #18574

Dear Ms. Roberts,

This letter is to formally ask for additional funding for the above-mentioned project. The project has a long and unusual history. As a precursor to the request, I will provide you a recap of the history, as I understand it.

The project was initially submitted as a complex project for initial planning prior to 2015. As the project went through its review and design process, the status of the intersection changed. At the time of the initial review, the data supported the necessary 'warrants' to declare the intersection to be a high crash location. Signalization was justified and appropriate safety modifications were needed. At some point prior to 2019, the warrants changed. The intersection no longer was deemed a high crash location. By 2019, the warrants again changed as it regained the high crash designation. Since that time, the number of and severity of the incidents have increased. The non-signalized location has only become more dangerous, especially to pedestrian activity.

It is my understanding this change in the warrant determination resulted in changes in prioritization level by the project team. As a result, delays and redesigns occurred.

With over a half decade of project work, it was finally ready to go to bid in 2020. The project was then put on hold, along with many other projects because of funding challenges with MDOT. In 2021, the project was finally authorized to be released for bidding. The initial bids were significantly higher than the bidding environment in 2019/2020. The first bids were rejected. A limited amount of changes were done to the bids as well as clarity regarding the timing that work could be achieved. On February 9, bids were reopened. The apparent low bidder was thankfully in the neighborhood of \$500,000 less than the previous bids. Yet, it was a million above the expected prices if the project had not been delayed.

205 Main Street, Biddeford, ME 04005 P: 207.284.9313 F: 207.571.0678 www.biddefordmaine.org

*The City of Biddeford is an equal opportunity provider. To file a complaint, write to
Diana Depaolo, Human Resource Director, 205 Main Street Biddeford, ME 04005, or call (207) 286-0593.*

As PACTS members are very aware, the additional project cost (\$1,025,012) over the 2019 estimate now becomes 100% of the total responsibility of Biddeford property taxpayers. Yet, the delays in getting the project to bid is anything but in total control of the City of Biddeford.

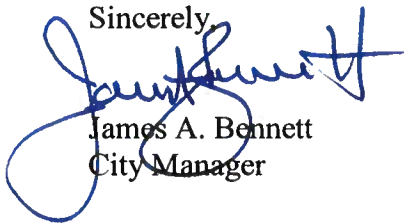
Today, the collective parties are facing a project that needs to be done for safety reason. The intersection is considered a high crash location. Pedestrians have been hurt at that location. The factors that have contributed to these is increasing (conversion of vacant mill space in Biddeford and Saco Island, more commercial activity and traffic). There is no single party that is responsible for the history of the project. No single party should be totally responsible for the increase in costs because of the delays that contributed to the cost increases.

Notwithstanding current policies and funding, I am asking for additional funding because of the unusual history on this project and the current safety issues. I am requesting PACTS contribute \$340,000 additional funding to the project. The City is also requesting that MDOT contribute the same to the project as well. If agreed, the City will contribute the balance of \$345,012 to the project. If approved, the total that the City of Biddeford would contribute to the project is \$637,012.

The bids are good until March 11. The City Council will consider this item on March 1, 2022.

I appreciate the consideration. Given the short period of time to prepare this communication, I apologize for the lack of more specific information with the letter.

Sincerely,

A handwritten signature in blue ink, appearing to read "James A. Bennett", is written over the typed name and title.

James A. Bennett
City Manager

CC: Dale Doughty, MDOT

STATE OF MAINE DEPARTMENT OF TRANSPORTATION NOTICE TO CONTRACTORS

Sealed Bids addressed to the Maine Department of Transportation, Augusta, Maine 04333 and endorsed on the wrapper "Bids for **Highway Safety Improvements** in the city of **Biddeford**" will be received from contractors at the Reception Desk, MaineDOT Building, Capitol Street, Augusta, Maine, until 11:00 o'clock A.M. (prevailing time) on **February 9, 2022** and at that time and place, publicly opened and read. Bids will be accepted from all bidders. The lowest responsive bidder must have completed, or successfully complete, a **Highway Construction prequalification**, or project specific prequalification to be considered for the award of this contract. **We now accept electronic bids for bid packages posted on the bidx.com website. Electronic bids do not have to be accompanied by paper bids. Please note: The Department will accept a facsimile of the bid bond; however, the original bid bond must then be received at the MDOT Contract Section within 72 hours of the bid opening.** Until further notice, dual bids (one paper, one electronic) will be accepted, with the paper copy taking precedence.

Description: Maine Federal Aid Project No. STP-1857(400) WIN. 018574.00

Location: In York County, project is located at the intersection of Rte.9 / Water Street / and North Dam Mill Entrance.

Outline of Work: Highway Safety Improvements and other incidental work.

For general information regarding Bidding and Contracting procedures, contact George Macdougall at (207) 624-3410. Our webpage at <http://www.maine.gov/mdot/contractors/> contains a copy of the Schedule of Items, Plan Holders List, written portions of bid amendments, drawings, bid results and an electronic form for RFI submittal. For Project-specific information fax all questions to Project Manager Brian Keezer at (207) 624-3431, use electronic RFI form or email questions to RFI-Contracts.MDOT@maine.gov, project name and identification number should be in the subject line. Questions received after 12:00 noon of Monday (or if that Monday is a state holiday, Friday) prior to bid date will not be answered. Bidders shall not contact any other Departmental staff for clarification of Contract provisions, and the Department will not be responsible for any interpretations so obtained. TTY users call Maine Relay 711.

Plans, specifications and bid forms may be seen at the MaineDOT Building in Augusta, Maine, and at the Department of Transportation's Regional Office in Scarborough. They may be purchased from the Department between the hours of 8:00 a.m. to 4:30 p.m. by cash, credit card (Visa/Mastercard) or check payable to Treasurer, State of Maine sent to Maine Department of Transportation, Attn: Mailroom, 16 State House Station, Augusta, Maine 04333-0016. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Full size plans \$32.00 (\$36.50 by mail). Half size plans \$16.00 (\$19.00 by mail), Bid Book \$10 (\$13 by mail), Single Sheets \$2, payment in advance, all non-refundable.

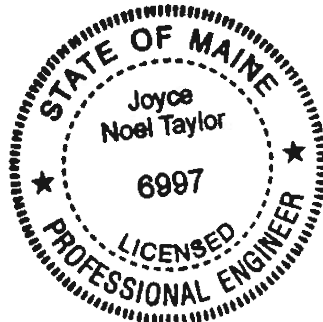
Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of 5% of the bid amount, payable to Treasurer, State of Maine as a Bid guarantee. A Contract Performance Surety Bond and a Contract Payment Surety Bond, each in the amount of 100 percent of the Contract price, will be required of the successful Bidder.

This Contract is subject to all applicable Federal Laws. This contract is subject to compliance with the Disadvantaged Business Enterprise program requirements as set forth by the Maine Department of Transportation.

All work shall be governed by *State of Maine, Department of Transportation, Standard Specifications, March 2020 Edition*, price \$10 [\$15 by mail], and *Standard Details, March 2020 Edition*, price \$10 [\$15 by mail]. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. *Standard Detail* updates can be found at <http://www.maine.gov/mdot/contractors/publications/>.

The right is hereby reserved to the MaineDOT to reject any or all bids.

Augusta, Maine
January 19, 2022



JOYCE NOEL TAYLOR P. E.
CHIEF ENGINEER

Tabulation of Bids

Contract ID: 018574.00 **Counties:** CUMBERLAND
Letting Date: February 09, 2022 **District(s):** SOUTHERN REGION
Call Order: 1 **Project(s):** STP-1857(400)
Contract Time: 12/30/22 COMPLETION DATE
Contract Description: BIDDEFORD, INTERSECTION IMPROVEMENTS, RTE.9.

Maine Department of Transportation

A True Copy: _____

Title : _____

Attest: _____

Notary Public

Line No / Item ID Item Description				(1) SHAW BROTHERS CONSTRUCTION, INC.		(2) PRATT & SONS, INC.			
Alt Set / Alt Member				Quantity and Units		Unit Price		Ext Amount	
						Unit Price		Ext Amount	
SECTION: 1 Project items				Cat Alt Set:		Cat Alt Member:		LCC:	
0010	202.202	2,600.000	2,600.000			12.00000		31,200.00	
REMOVING PAVEMENT SURFACE SY SY									
0020	203.20	1,700.000	1,700.000			44.00000		74,800.00	
COMMON EXCAVATION CY CY									
0030	203.2312	(1)	(1)			5,500.00000		5,500.00	
HEALTH AND SAFETY PLAN LS LS									
0040	203.233	1.000	1.000			2,000.00000		2,000.00	
DISPOSAL OF SPECIAL EXCAVATION CY CY									
0050	304.10	1,750.000	1,750.000			45.00000		78,750.00	
AGGREGATE SUBBASE COURSE - GRAVEL CY CY									
0060	403.2081	350.000	350.000			150.00000		52,500.00	
12.5 MM POLYMER MODIFIED HOT MIX ASPHALT T T									
0070	403.209	22.000	22.000			185.00000		4,070.00	
HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, INCIDENTALS) T T									
0080	403.211	150.000	150.000			165.00000		24,750.00	
HOT MIX ASPHALT (SHIMMING) T T									
0090	403.213	480.000	480.000			135.00000		64,800.00	
HOT MIX ASPHALT 12.5 MM BASE T T									

Tabulation of Bids

Contract ID: 018574.00 **Counties:** CUMBERLAND Maine Department of Transportation
Letting Date: February 09, 2022 **District(s):** SOUTHERN REGION A True Copy: _____
Call Order: 1 **Project(s):** STP-1857(400) Title : _____
Contract Time: 12/30/22 COMPLETION DATE Attest: _____
Contract Description: BIDDEFORD, INTERSECTION IMPROVEMENTS, RTE.9. Notary Public

Line No / Item ID Item Description				(1) SHAW BROTHERS CONSTRUCTION, INC.		(2) PRATT & SONS, INC.			
Alt Set / Alt Member		Quantity and Units		Unit Price	Ext Amount	Unit Price	Ext Amount	Unit Price	Ext Amount
SECTION: 1 Project items				Cat Alt Set:		Cat Alt Member:		LCC:	
0100	409.15	560.000	560.000	20.00000	11,200.00	20.00000	11,200.00		
BITUMINOUS TACK COAT - APPLIED		G	G						
0110	603.159	103.000	103.000	240.00000	24,720.00	225.00000	23,175.00		
12 INCH CULVERT PIPE OPTION III		LF	LF						
0120	604.072	2.000	2.000	6,000.00000	12,000.00	6,000.00000	12,000.00		
CATCH BASIN TYPE A1-C		EA	EA						
0130	604.092	3.000	3.000	6,000.00000	18,000.00	6,000.00000	18,000.00		
CATCH BASIN TYPE B1-C		EA	EA						
0140	604.16	3.000	3.000	2,175.00000	6,525.00	2,000.00000	6,000.00		
ALTERING CATCH BASIN TO MANHOLES		EA	EA						
0150	604.161	5.000	5.000	2,175.00000	10,875.00	2,000.00000	10,000.00		
ALTERING CATCH BASIN		EA	EA						
0160	604.164	1.000	1.000	2,750.00000	2,750.00	3,500.00000	3,500.00		
REBUILDING CATCH BASIN		EA	EA						
0170	604.166	5.000	5.000	2,750.00000	13,750.00	3,500.00000	17,500.00		
REBUILDING MANHOLE		EA	EA						
0180	604.18	8.000	8.000	1,800.00000	14,400.00	1,750.00000	14,000.00		
ADJUSTING MANHOLE OR CATCH BASIN TO GRADE		EA	EA						
0190	605.13	45.000	45.000	250.00000	11,250.00	200.00000	9,000.00		
18 INCH UNDERDRAIN TYPE C		LF	LF						

Tabulation of Bids

Contract ID: 018574.00 **Counties:** CUMBERLAND
Letting Date: February 09, 2022 **District(s):** SOUTHERN REGION
Call Order: 1 **Project(s):** STP-1857(400)
Contract Time: 12/30/22 COMPLETION DATE
Contract Description: BIDDEFORD, INTERSECTION IMPROVEMENTS, RTE.9.

Maine Department of Transportation
A True Copy: _____
Title : _____
Attest: _____
Notary Public

Line No / Item ID Item Description				(1) SHAW BROTHERS CONSTRUCTION, INC.		(2) PRATT & SONS, INC.			
Alt Set / Alt Member		Quantity and Units		Unit Price	Ext Amount	Unit Price	Ext Amount	Unit Price	Ext Amount
SECTION: 1 Project items				Cat Alt Set:		Cat Alt Member:		LCC:	
0200	608.08	420.000	420.000	122.00000	51,240.00	200.00000	84,000.00		
REINFORCED CONCRETE SIDEWALK		SY	SY						
0210	608.10	39.000	39.000	120.00000	4,680.00	200.00000	7,800.00		
BRICK SIDEWALK, REMOVE AND REBUILD		SY	SY						
0220	608.26	350.000	350.000	70.00000	24,500.00	175.00000	61,250.00		
CURB RAMP DETECTABLE WARNING FIELD		SF	SF						
0230	609.11	470.000	470.000	75.00000	35,250.00	100.00000	47,000.00		
VERTICAL CURB TYPE 1		LF	LF						
0240	609.12	95.000	95.000	110.00000	10,450.00	120.00000	11,400.00		
VERTICAL CURB TYPE 1 - CIRCULAR		LF	LF						
0250	609.221	290.000	290.000	75.00000	21,750.00	110.00000	31,900.00		
TERMINAL CURB TYPE 1		LF	LF						
0260	609.222	45.000	45.000	120.00000	5,400.00	125.00000	5,625.00		
TERMINAL CURB TYPE 1 - CIRCULAR		LF	LF						
0270	609.34	120.000	120.000	45.00000	5,400.00	90.00000	10,800.00		
CURB TYPE 5		LF	LF						
0280	609.35	30.000	30.000	100.00000	3,000.00	275.00000	8,250.00		
CURB TYPE 5 - CIRCULAR		LF	LF						

Tabulation of Bids

Contract ID: 018574.00 **Counties:** CUMBERLAND
Letting Date: February 09, 2022 **District(s):** SOUTHERN REGION
Call Order: 1 **Project(s):** STP-1857(400)
Contract Time: 12/30/22 COMPLETION DATE
Contract Description: BIDDEFORD, INTERSECTION IMPROVEMENTS, RTE.9.

Maine Department of Transportation

A True Copy: _____

Title : _____

Attest: _____

Notary Public

Line No / Item ID Item Description				(1) SHAW BROTHERS CONSTRUCTION, INC.		(2) PRATT & SONS, INC.			
Alt Set / Alt Member		Quantity and Units		Unit Price	Ext Amount	Unit Price	Ext Amount	Unit Price	Ext Amount
SECTION:	1	Project items		Cat Alt Set:	Cat Alt Member:	LCC:			
0290	615.07	105.000	105.000	75.00000	7,875.00	95.00000	9,975.00		
LOAM		CY	CY						
0300	618.14	9.000	9.000	40.00000	360.00	100.00000	900.00		
SEEDING METHOD NUMBER 2		UN	UN						
0310	619.12	9.000	9.000	40.00000	360.00	100.00000	900.00		
MULCH		UN	UN						
0320	626.11	10.000	10.000	1,100.00000	11,000.00	1,100.00000	11,000.00		
PRECAST CONCRETE JUNCTION BOX		EA	EA						
0330	626.22	435.000	435.000	80.00000	34,800.00	80.00000	34,800.00		
NON-METALLIC CONDUIT		LF	LF						
0340	626.221	40.000	40.000	120.00000	4,800.00	120.00000	4,800.00		
NON-METALLIC CONDUIT CONCRETE ENCASED		LF	LF						
0350	626.251	455.000	455.000	120.00000	54,600.00	120.00000	54,600.00		
NON-METALLIC UNDER PAVEMENT CONDUIT (SCHEDULE 80 OR GREATER RATING)		LF	LF						
0360	626.35	1.000	1.000	3,500.00000	3,500.00	3,500.00000	3,500.00		
CONTROLLER CABINET FOUNDATION		EA	EA						
0370	626.36	1.000	1.000	32,100.00000	32,100.00	5,000.00000	5,000.00		
REMOVE OR MODIFY CONCRETE FOUNDATION		EA	EA						

Tabulation of Bids

Contract ID: 018574.00 **Counties:** CUMBERLAND
Letting Date: February 09, 2022 **District(s):** SOUTHERN REGION
Call Order: 1 **Project(s):** STP-1857(400)
Contract Time: 12/30/22 COMPLETION DATE
Contract Description: BIDDEFORD, INTERSECTION IMPROVEMENTS, RTE.9.

Maine Department of Transportation

A True Copy: _____

Title : _____

Attest: _____

Notary Public

Line No / Item ID Item Description				(1) SHAW BROTHERS CONSTRUCTION, INC.		(2) PRATT & SONS, INC.			
Alt Set / Alt Member		Quantity and Units		Unit Price	Ext Amount	Unit Price	Ext Amount	Unit Price	Ext Amount
SECTION:	1	Project items		Cat Alt Set:	Cat Alt Member:	LCC:			
0380	626.421	84.000	84.000	350.00000	29,400.00	350.00000	29,400.00		
24 INCH DIAMETER FOUNDATION		LF	LF						
0390	626.48	37.000	37.000	1,500.00000	55,500.00	1,500.00000	55,500.00		
60 INCH DIAMETER FOUNDATION		LF	LF						
0400	627.18	353.000	353.000	1.00000	353.00	2.00000	706.00		
12 " SOLID WHITE PAVEMENT MARKING		LF	LF						
0410	627.733	2,683.000	2,683.000	0.30000	804.90	0.25000	670.75		
4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE		LF	LF						
0420	627.75	1,828.000	1,828.000	1.75000	3,199.00	2.50000	4,570.00		
WHITE OR YELLOW PAVEMENT & CURB MARKING		SF	SF						
0430	627.78	9,100.000	9,100.000	0.20000	1,820.00	0.25000	2,275.00		
TEMPORARY 4 INCH PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW		LF	LF						
0440	629.05	50.000	50.000	60.00000	3,000.00	40.00000	2,000.00		
HAND LABOR, STRAIGHT TIME		HR	HR						
0450	631.12	100.000	100.000	245.00000	24,500.00	120.00000	12,000.00		
ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)		HR	HR						
0460	631.172	200.000	200.000	116.00000	23,200.00	65.00000	13,000.00		
TRUCK - LARGE (INCLUDING OPERATOR)		HR	HR						

Tabulation of Bids

Contract ID: 018574.00 **Counties:** CUMBERLAND
Letting Date: February 09, 2022 **District(s):** SOUTHERN REGION
Call Order: 1 **Project(s):** STP-1857(400)
Contract Time: 12/30/22 COMPLETION DATE
Contract Description: BIDDEFORD, INTERSECTION IMPROVEMENTS, RTE.9.

Maine Department of Transportation

A True Copy: _____

Title : _____

Attest: _____

Notary Public

Line No / Item ID Item Description				(1) SHAW BROTHERS CONSTRUCTION, INC.		(2) PRATT & SONS, INC.			
Alt Set / Alt Member				Quantity and Units		Unit Price		Ext Amount	
				Unit Price		Ext Amount		Unit Price	
				Unit Price		Ext Amount		Unit Price	
SECTION: 1 Project items				Cat Alt Set:		Cat Alt Member:		LCC:	
0470	631.32	8.000	8.000	250.00000	2,000.00	250.00000	2,000.00		
CULVERT CLEANER (INCLUDING OPERATOR)									
0480	634.208	1.000	1.000	1,500.00000	1,500.00	600.00000	600.00		
REMOVE AND RESET LIGHT STANDARDS									
0490	639.19	1.000	1.000	26,625.00000	26,625.00	10,000.00000	10,000.00		
FIELD OFFICE TYPE B									
0500	643.62	2.000	2.000	9,000.00000	18,000.00	10,000.00000	20,000.00		
RECTANGULAR RAPID FLASHING BEACON									
0510	643.80	(1)	(1)	140,000.00000	140,000.00	170,000.00000	170,000.00		
TRAFFIC SIGNALS AT Route 9 (Main St) at Water St.									
0520	643.81	(1)	(1)	28,000.00000	28,000.00	35,000.00000	35,000.00		
TRAFFIC SIGNAL CONTROL SYSTEM									
0530	643.83	(1)	(1)	32,000.00000	32,000.00	40,000.00000	40,000.00		
VIDEO DETECTION SYSTEM at Route 9 & Water St.									
0540	643.90	(1)	(1)	25,000.00000	25,000.00	30,000.00000	30,000.00		
INTERCONNECT WIRE BETWEEN Route 9 & Water St. intersection to Fire Department									
0550	643.91	2.000	2.000	24,000.00000	48,000.00	28,000.00000	56,000.00		
MAST ARM POLE w/ 50 ft. arm									

Tabulation of Bids

Contract ID: 018574.00 **Counties:** CUMBERLAND
Letting Date: February 09, 2022 **District(s):** SOUTHERN REGION
Call Order: 1 **Project(s):** STP-1857(400)
Contract Time: 12/30/22 COMPLETION DATE
Contract Description: BIDDEFORD, INTERSECTION IMPROVEMENTS, RTE.9.

Maine Department of Transportation

A True Copy: _____

Title : _____

Attest: _____

Notary Public

Line No / Item ID Item Description				(1) SHAW BROTHERS CONSTRUCTION, INC.		(2) PRATT & SONS, INC.			
Alt Set / Alt Member				Quantity and Units		Unit Price		Ext Amount	
						Unit Price		Ext Amount	
SECTION: 1 Project items				Cat Alt Set:		Cat Alt Member:		LCC:	
0560	643.91	1.000	1.000	26,000.00000	26,000.00	30,000.00000	30,000.00		
MAST ARM POLE w/ 55 ft. arm				EA	EA				
0570	643.92	12.000	12.000	1,200.00000	14,400.00	1,500.00000	18,000.00		
PEDESTAL POLE				EA	EA				
0580	645.106	20.000	20.000	500.00000	10,000.00	300.00000	6,000.00		
DEMOUNT REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN				EA	EA				
0590	645.116	3.000	3.000	500.00000	1,500.00	350.00000	1,050.00		
REINSTALL REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN				EA	EA				
0600	645.271	25.000	25.000	150.00000	3,750.00	200.00000	5,000.00		
REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGNS, TYPE I				SF	SF				
0610	645.512	2.000	2.000	4,800.00000	9,600.00	4,800.00000	9,600.00		
LED BLANK-OUT SIGN, OVERHEAD MOUNT				EA	EA				
0620	652.33	50.000	50.000	70.00000	3,500.00	100.00000	5,000.00		
DRUM				EA	EA				
0630	652.34	50.000	50.000	25.00000	1,250.00	40.00000	2,000.00		
CONE				EA	EA				

Tabulation of Bids

Contract ID: 018574.00	Counties: CUMBERLAND	Maine Department of Transportation
Letting Date: February 09, 2022	District(s): SOUTHERN REGION	A True Copy: _____
Call Order: 1	Project(s): STP-1857(400)	Title : _____
Contract Time: 12/30/22 COMPLETION DATE		Attest: _____
Contract Description: BIDDEFORD, INTERSECTION IMPROVEMENTS, RTE.9.		Notary Public

Line No / Item ID Item Description				(1) SHAW BROTHERS CONSTRUCTION, INC.		(2) PRATT & SONS, INC.			
Alt Set / Alt Member				Quantity and Units		Unit Price		Ext Amount	
						Unit Price		Ext Amount	
SECTION: 1				Project items		Cat Alt Set:		Cat Alt Member:	
								LCC:	
0640	652.35	500.000	500.000			15.00000	7,500.00	30.00000	15,000.00
CONSTRUCTION SIGNS				SF	SF				
0650	652.36	150.000	150.000			695.00000	104,250.00	75.00000	11,250.00
MAINTENANCE OF TRAFFIC CONTROL DEVICES				CD	CD				
0660	652.38	6,000.000	6,000.000			33.00000	198,000.00	32.70000	196,200.00
FLAGGER				HR	HR				
0670	652.381	100.000	100.000			110.00000	11,000.00	120.00000	12,000.00
TRAFFIC OFFICER				HR	HR				
0680	652.41	4.000	4.000			4,500.00000	18,000.00	5,000.00000	20,000.00
PORTABLE CHANGEABLE MESSAGE SIGN				EA	EA				
0690	656.75	(1)	(1)			6,300.00000	6,300.00	300,000.00000	300,000.00
TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL				LS	LS				
0700	658.20	60.000	60.000			18.00000	1,080.00	7.00000	420.00
ACRYLIC LATEX COLOR FINISH, GREEN				SY	SY				
0710	659.10	(1)	(1)			580,000.00000	580,000.00	400,000.00000	400,000.00
MOBILIZATION				LS	LS				
0720	803.01	5.000	5.000			1,500.00000	7,500.00	300.00000	1,500.00
TEST PITS				EA	EA				
0730	812.162	8.000	8.000			1,800.00000	14,400.00	1,750.00000	14,000.00
ADJUSTING SEWER MANHOLE TO				EA	EA				

Tabulation of Bids

Contract ID: 018574.00 **Counties:** CUMBERLAND Maine Department of Transportation
Letting Date: February 09, 2022 **District(s):** SOUTHERN REGION A True Copy: _____
Call Order: 1 **Project(s):** STP-1857(400) Title : _____
Contract Time: 12/30/22 COMPLETION DATE Attest: _____
Contract Description: BIDDEFORD, INTERSECTION IMPROVEMENTS, RTE.9. Notary Public

Line No / Item ID Item Description				(1) SHAW BROTHERS CONSTRUCTION, INC.		(2) PRATT & SONS, INC.			
				Unit Price	Ext Amount	Unit Price	Ext Amount	Unit Price	Ext Amount
Alt Set / Alt Member		Quantity and Units							
SECTION: 1 Project items				Cat Alt Set:		Cat Alt Member:		LCC:	
GRADE									
0740	824.32	1.000	1.000	7,500.00000	7,500.00	4,500.00000	4,500.00		
REMOVE/RESET HYDRANT		EA	EA						
0750	910.301	(1)	(1)	9,500.00000	9,500.00	10,000.00000	10,000.00		
SPECIAL WORK		LS	LS						
Section Totals:				\$2,272,836.90		\$2,452,186.75			
Life Cycle Costs:									
Section Total with LCC:				\$2,272,836.90		\$2,452,186.75			
Contract Item Totals				\$2,272,836.90		\$2,452,186.75			
Contract Time Totals									
Contract Life Cycle Costs Totals				\$0.00		\$0.00			
Contract Grand Totals				\$2,272,836.90		\$2,452,186.75			

() indicates item is bid as Lump Sum

Maine Department of Transportation

2/9/2022

Vendor Ranking

Page 1 of 1

Call Order: 1 **Contract ID:** 018574.00 **Counties:** CUMBERLAND
Letting Date: February 09, 2022 11:00 **District(s):** SOUTHERN REGION
Contract Time: 12/30/22 COMPLETION DATE **Min:** **Max:**

Contract Description: BIDDEFORD, INTERSECTION IMPROVEMENTS, RTE.9. **Project(s):** STP-1857(400)

Rank	Vendor ID/Name	Total Bid	Percent Of Low Bid
1	000116 SHAW BROTHERS CONSTRUCTION, INC.	\$2,272,836.90	100.00%
2	000403 PRATT & SONS, INC.	\$2,452,186.75	107.89%

PLANS PREPARED BY:

 vhb

500 Southborough Drive, Suite 105B
South Portland, Maine 04106

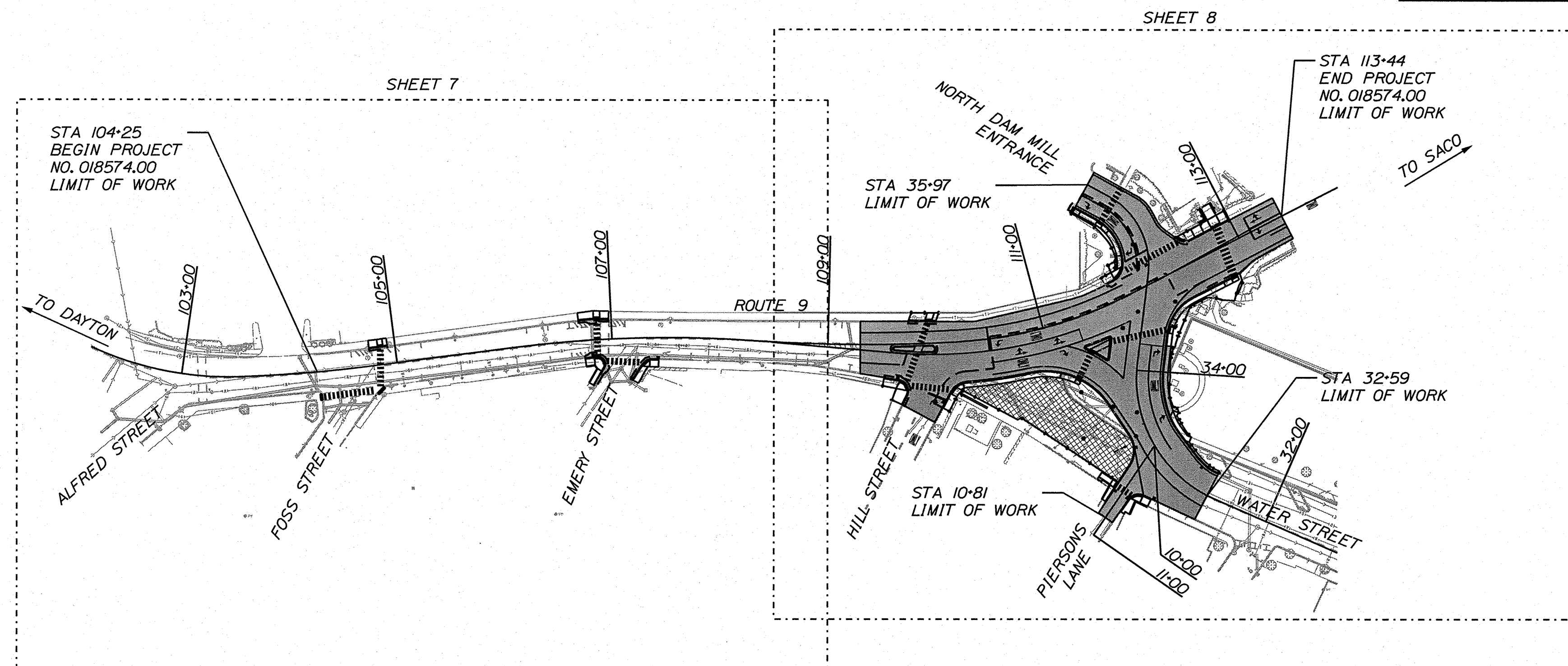


PLAN LEGEND

Town, County, State	_____	Catch Basins	Existing	Proposed
Property Lines	_____	Manholes	Existing	Proposed
R/W Lines-Existing	_____	Proposed Underdrain	_____	
R/W Lines-Proposed	_____	Proposed Ditch	_____	
Culvert-Existing	_____	Existing Ditch	_____	
Culvert Proposed	_____	Utility Poles	Existing	Proposed
Curbing	Existing _____ Proposed _____	Fire Hydrants	Existing	Proposed
Type 1	_____	Existing Water Line	_____	
Type 3	_____	Existing San. Sewer	_____	
Type 5	_____	Existing San. Sewer Manhole		
Outline of Bodies of Water	_____	Guardrail-Existing	_____	
Exposed Bedrock	_____	Guardrail-Proposed	_____	
Buildings	_____	Guardrail-Cable, Other	_____	
Trees	Conifer Deciduous	Centerline-Existing	_____	
Tree Line	_____	Centerline-Proposed	_____ 10+00	
Clearing Limit Line	_____	Travelway-Existing	_____	
Railroad	_____	Travelway-Proposed	_____	

Boring		HB-XXX-###	Probe		P-#,X
			#, # = Depth		
Pavement Core		PC-#	X = W (Weathered Rock)		
			R (Refusal)		
Test Pit		TP-XXX-###	NR (No Refusal)		

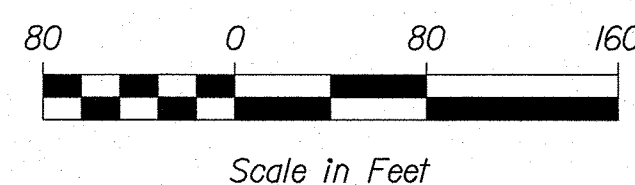
<u>Description</u>	<u>Sheet No.</u>
Title Sheet	1
Typical Sections	2-3
General Notes	4
Superelevation Table & Grading Plan	5
Construction Notes	6
General Plans	7-8
Profiles	9-10
Geometric Curb Layout	11-12
Traffic Signal Plans	13-15
Interconnect Plan	16
Cross Sections	17-27
Sign Summary	28
Signing and Striping Plans	29-30
Foundation & Boring Plans	31
Right of Way Map	32



<u>TRAFFIC DATA</u>	<u>MAIN ST</u>	<u>WATER ST</u>
---------------------	----------------	-----------------

Current (2018) AADT	18,720	6,240
Future (2038) AADT	20,590	6,860
DHV - % of AADT	9%	8%
Design Hour Volume	1,776	558
% Heavy Trucks (AADT)	3%	3%
% Heavy Trucks (DHV)	2%	2%
Directional Distribution (DHV)	54%	56%
18 kip Equivalent P 2.0	368	127
18 kip Equivalent P 2.5	351	121
Design Speed (mph)	25	25
Functional Class	Urban Collector	Local Road
Corridor Priority	2	6

LAYOUT SCALE



PROJECT LOCATION:

LOCATED AT THE INTERSECTION OF MAIN STREET, WATER STREET,
AND NORTH DAM MILL ENTRANCE

PROGRAM AREA:

MULITMODAL PROGRAM

SCOPE OF WORK:

INTERSECTION IMPROVEMENTS WITH SIGNAL INCLUDING PAVEMENT, DRAINAGE, PEDESTRIAN AND SAFETY IMPROVEMENTS

WIN 18574.00 STP-1857(400)

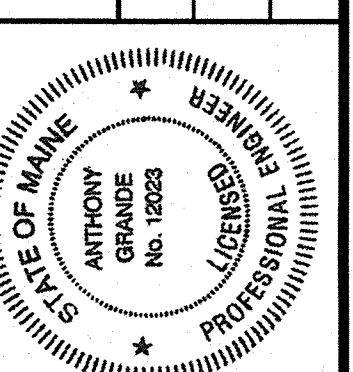
BIDDEFORD
STATE ROUTE 9
TITLE SHEET

SHEET NUMBER

1

DF 32

DEPARTMENT OF TRANSPORTATION STATE OF MAINE	
APPROVED	DATE
COMMISSIONER: <i>[Signature]</i>	1-11-22
CHIEF ENGINEER: <i>[Signature]</i>	1-11-2022

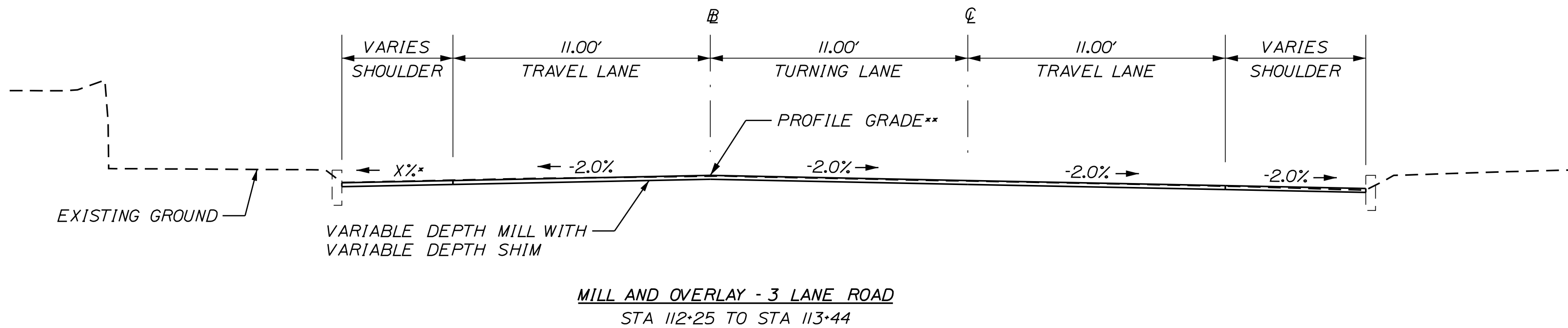
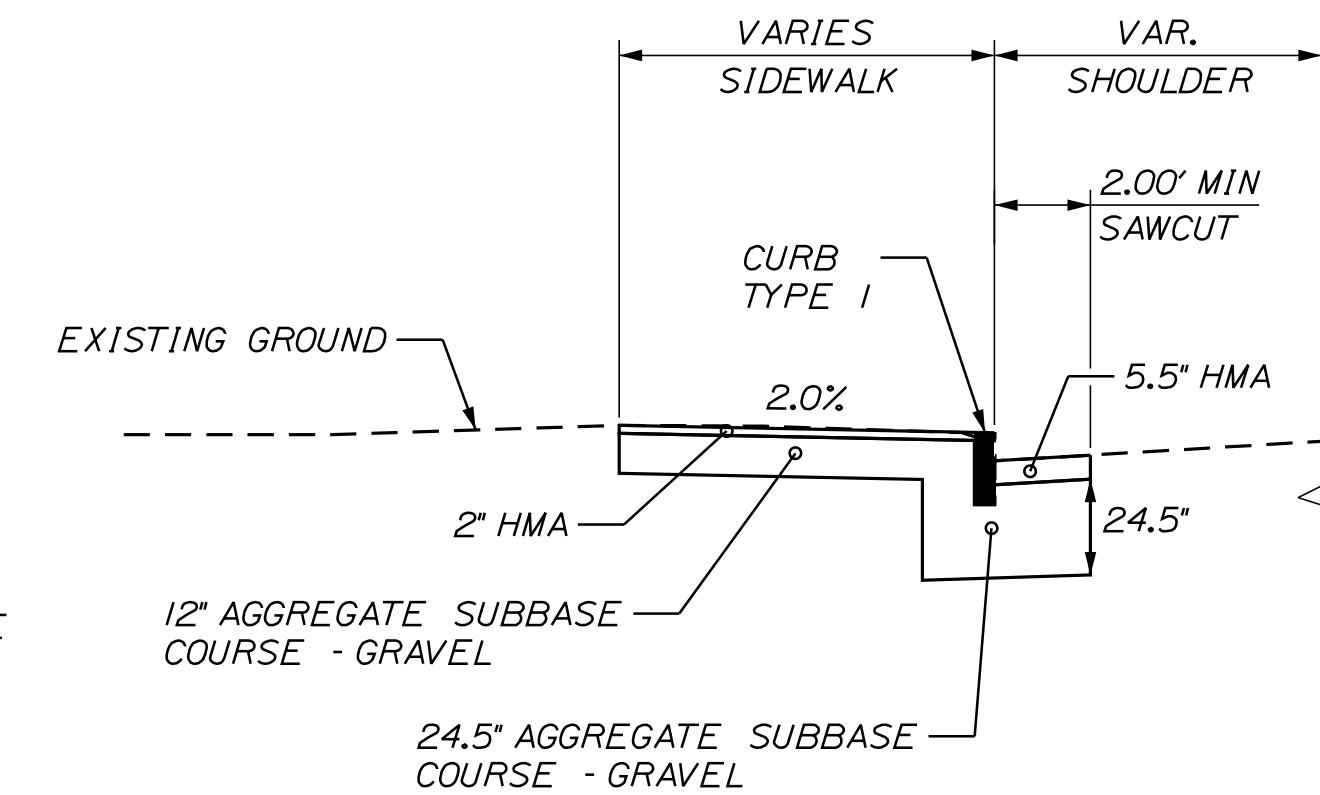
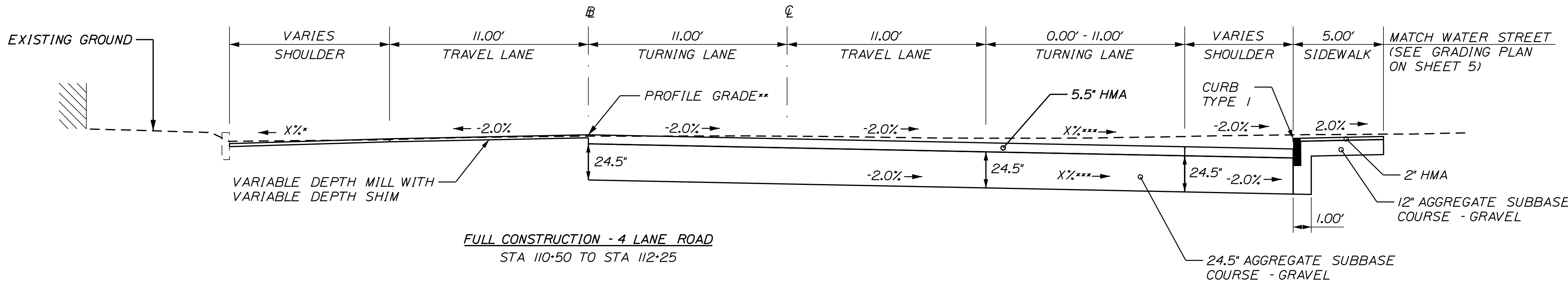
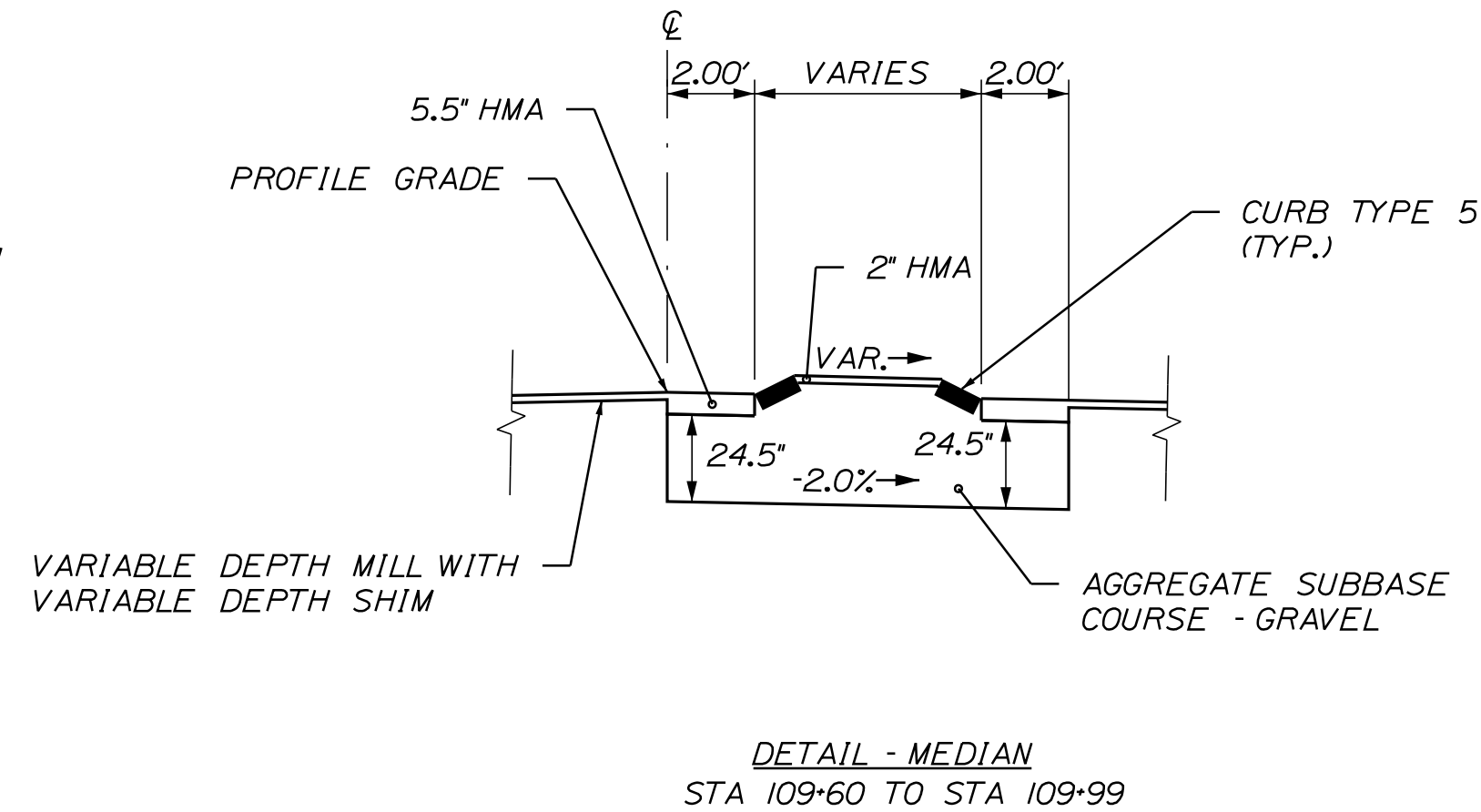
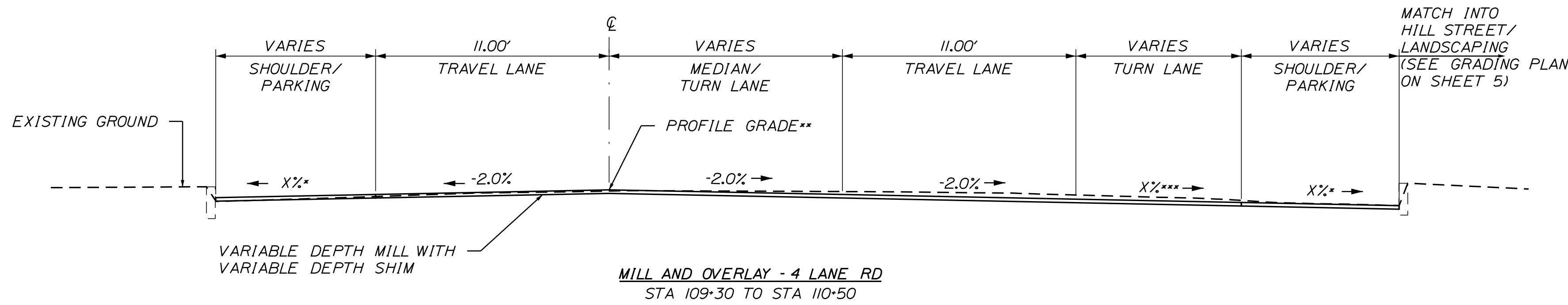


Anthony Gaudin
SIGNATURE

P.E. NUMBER
12023

DATE
1/6/2022

PROGRAM	MUL TIMODAL
PROJECT MANAGER	B. KEEZER
DESIGNER	T. GRANDE
CONSULTANT	VHB
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

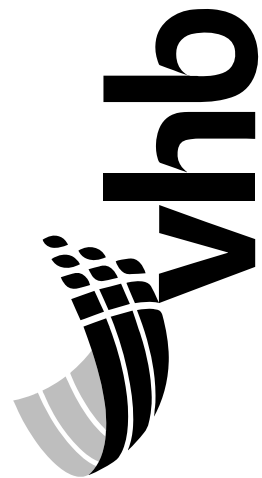


NOTES:

1. THE PAVEMENT, BASE, AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
 2. CROWNS FOR BOTH NORMAL AND SUPERELEVATION SECTIONS FOR ALL COURSES OF SUBBASE AND PAVEMENT SHALL BE STRAIGHT.
 3. THE ALGEBRAIC DIFFERENCE BETWEEN THE SHOULDER AND TRAVELWAY CROSS SLOPES (ROLLOVER) SHALL NOT EXCEED 8%.
 4. THE STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE.
- * SEE SUPERELEVATION TABLE ON SHEET 5 FOR SLOPES.
** THE PROPOSED PROFILE GRADE IS BASED OFF OF THE MILLING DEPTHS SHOWN IN THE SUPERELEVATION TABLE ON SHEET 5.
*** SEE CROSS SECTION AND CONTROL POINT ELEVATIONS FOR TURN LANE GRADING ON SHEET 5.

NOT TO SCALE

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		STP-1857(400)		WIN 18574.00		HIGHWAY PLANS	
BIDDEFORD STATE ROUTE 9		DATE		BY		PROJ. MANAGER	
		12/21	12/21	12/21	12/21	12/21	12/21
TYPICAL SECTIONS		DESIGN-DETAILED		CHECKED-REVIEWED		DESIGN-DETAILED	
		ACC		ECF		ECF	
		12/21		12/21		12/21	
		12/21		12/21		12/21	
SHEET NUMBER 2 OF 32		REVISIONS 1		REVISIONS 2		REVISIONS 3	
		REVISIONS 4		REVISIONS 5		REVISIONS 6	
		REVISIONS 7		REVISIONS 8		REVISIONS 9	
		REVISIONS 10		REVISIONS 11		REVISIONS 12	

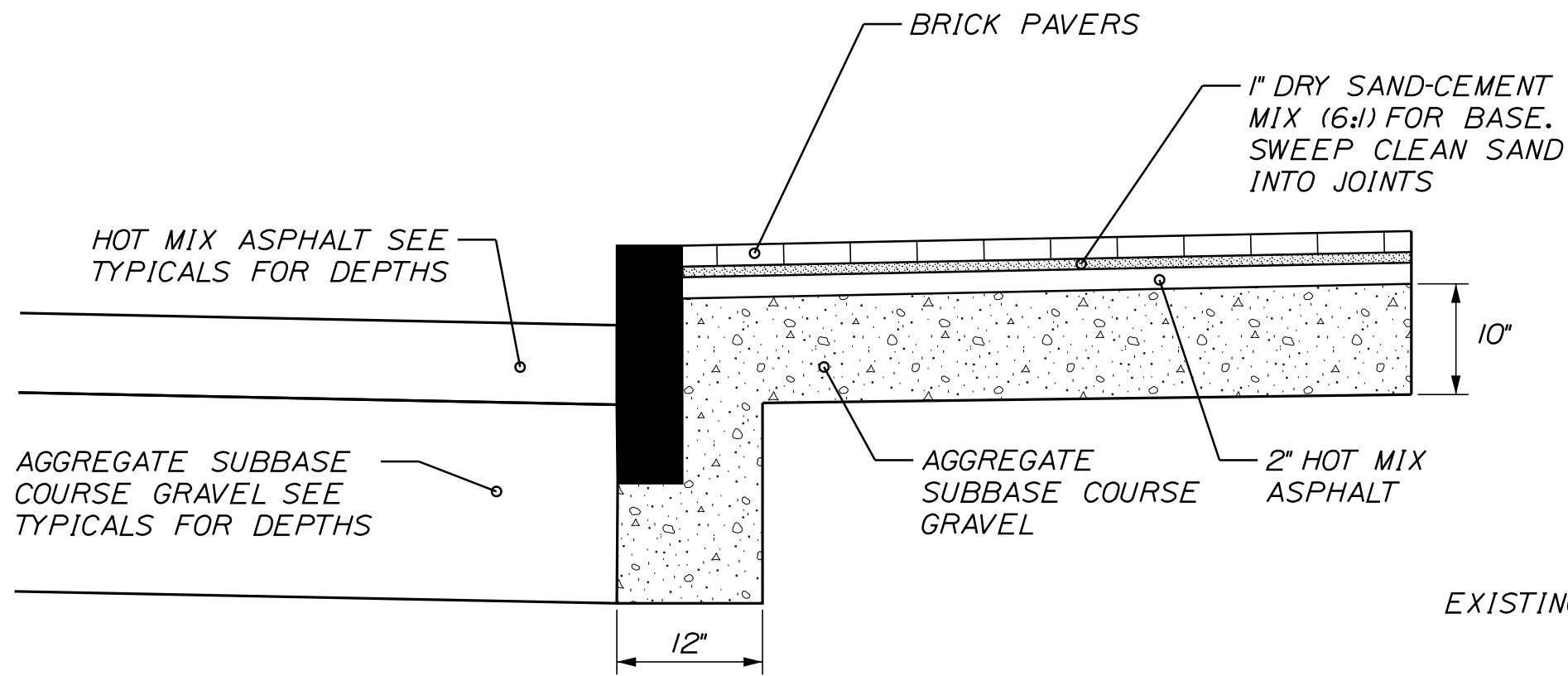


Date:1/6/2022

Username: jomedavis

Division: HIGHWAY

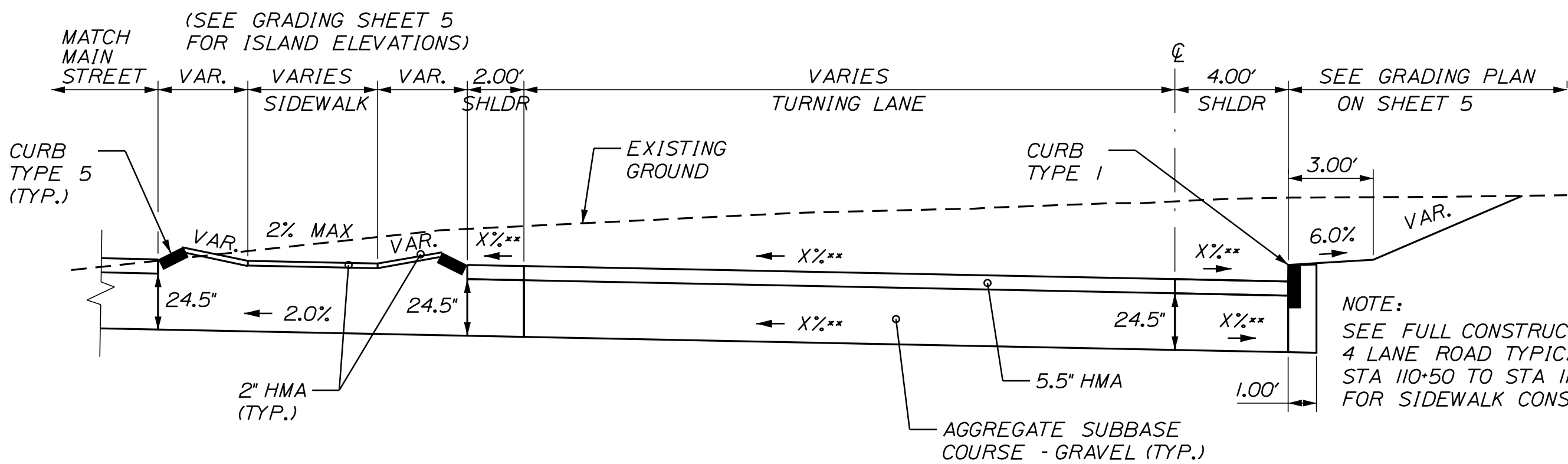
Filename: ... \MSTAD003_Typicals_WaterSt.dgn



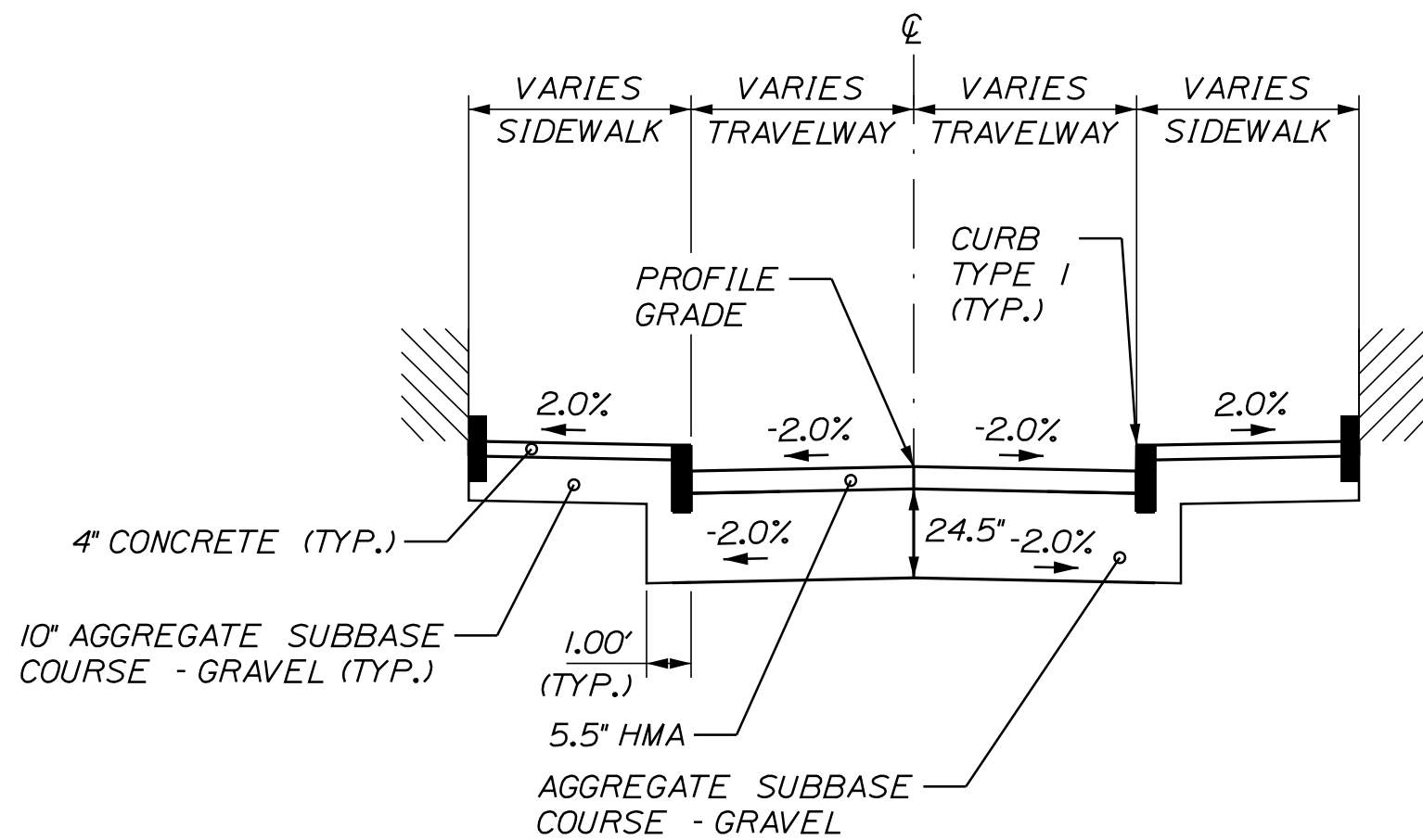
NOTES:

1. INSTALL 4" WIDE X 8.5" HIGH PIECE OF FILTER FABRIC AT BACK OF CURB AT EACH CURB JOINT. PAYMENT WILL BE INCIDENTAL TO CURB.
2. 1/2" PREFORMED EXPANSION JOINT FILLER WITH 5/8" BACK ROD AND JOINT SEALANT TYPICAL AT ALL WALL, STEP, SIDEWALK, AND BUILDING INTERFACES. PAYMENT WILL BE INCIDENTAL TO BRICK SIDEWALK WITH BITUMINOUS BASE, ITEM 608.10.
3. ALL BRICKS SHALL BE CUT WITH PAVER SAW AND CUT-OFF WHEEL.
4. ALL EXISTING BRICKS SHALL BE REMOVED AND REUSED.

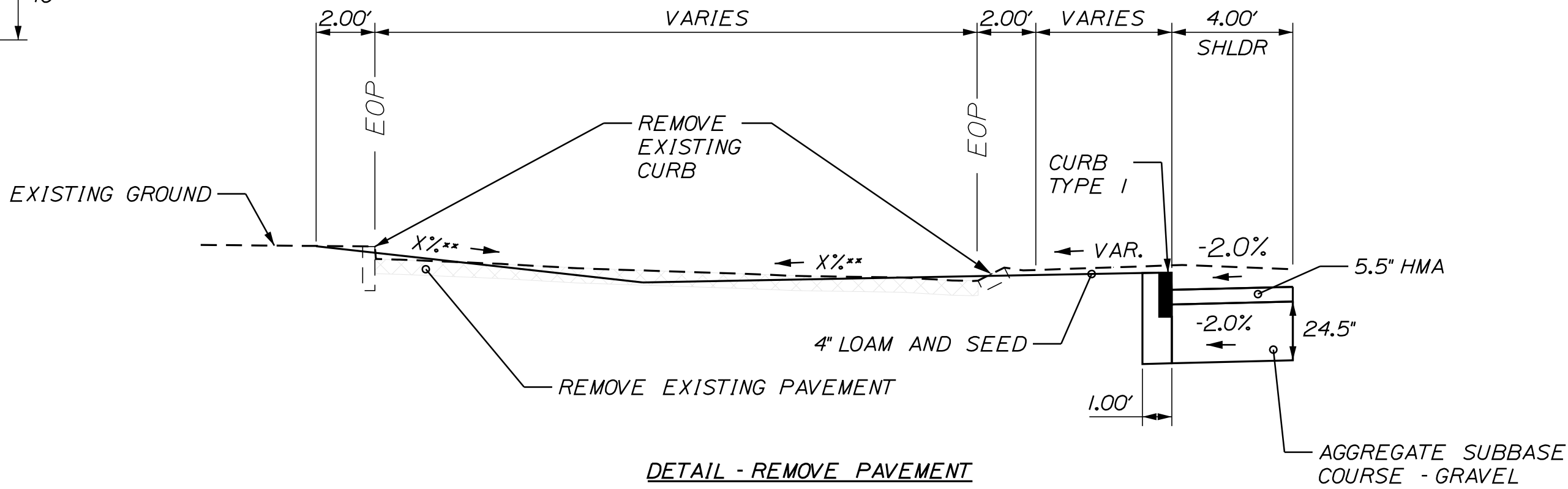
DETAIL - BRICK SIDEWALK
STA 33+50 TO STA 34+25, RT



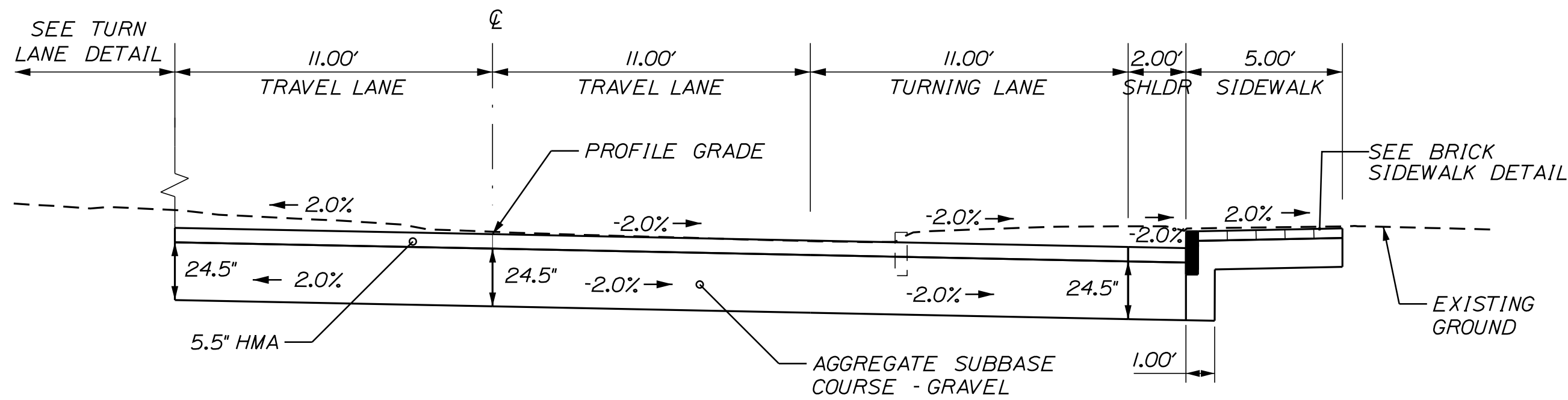
RIGHT TURN LANE DETAIL
FROM MAIN ST TO WATER ST



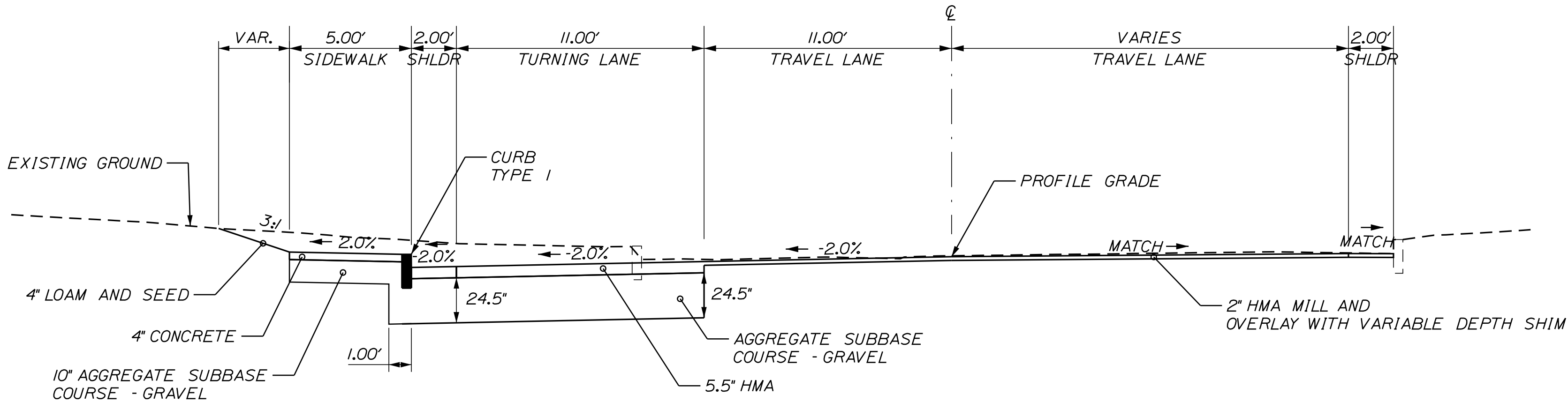
FULL CONSTRUCTION - 1 LANE ROAD
STA 10+53 TO STA 10+80



DETAIL - REMOVE PAVEMENT
STA 33+25 TO STA 33+75, LT



FULL CONSTRUCTION - 3 LANE ROAD
STA 33+44 TO STA 34+03



ROADWAY WIDENING - 3 LANE ROAD
STA 34+96 TO STA 35+98

NOTES:

1. THE PAVEMENT, BASE, AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
 2. CROWNS FOR BOTH NORMAL AND SUPERELEVATION SECTIONS FOR ALL COURSES OF SUBBASE AND PAVEMENT SHALL BE STRAIGHT.
 3. THE ALGEBRAIC DIFFERENCE BETWEEN THE SHOULDER AND TRAVELWAY CROSS SLOPES (ROLLOVER) SHALL NOT EXCEED 8%.
 4. THE STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE.
- * SEE SUPERELEVATION TABLE FOR SLOPES.
** SEE GRADING PLAN ON SHEET 5.

NOT TO SCALE

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		STP-1857(400)		WIN 18574.00		HIGHWAY PLANS																																																																																																					
<table><tr><td>PROJ. MANAGER</td><td>DATE</td><td>BY</td><td>B. KEEZER</td><td>ACC</td><td>12/21</td><td>12/21</td><td></td><td></td><td></td></tr><tr><td>CHECKED-REVIEWED</td><td>12/21</td><td>12/21</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>DESIGN-DETAILED</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>DESIGN-REVIEWED</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>DESIGN-DETAILED</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>REVISIONS 1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>REVISIONS 2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>REVISIONS 3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>REVISIONS 4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>FIELD CHANGES</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										PROJ. MANAGER	DATE	BY	B. KEEZER	ACC	12/21	12/21				CHECKED-REVIEWED	12/21	12/21								DESIGN-DETAILED										DESIGN-REVIEWED										DESIGN-DETAILED										REVISIONS 1										REVISIONS 2										REVISIONS 3										REVISIONS 4										FIELD CHANGES									
PROJ. MANAGER	DATE	BY	B. KEEZER	ACC	12/21	12/21																																																																																																							
CHECKED-REVIEWED	12/21	12/21																																																																																																											
DESIGN-DETAILED																																																																																																													
DESIGN-REVIEWED																																																																																																													
DESIGN-DETAILED																																																																																																													
REVISIONS 1																																																																																																													
REVISIONS 2																																																																																																													
REVISIONS 3																																																																																																													
REVISIONS 4																																																																																																													
FIELD CHANGES																																																																																																													
BIDDEFORD STATE ROUTE 9					TYPICAL SECTIONS																																																																																																								
SHEET NUMBER					3																																																																																																								
					OF 32																																																																																																								

GENERAL NOTES

1. THE UTILITIES INVOLVED IN THIS CONTRACT ARE NOTED IN SPECIAL PROVISION 104.

2. ALL UTILITIES FACILITIES SHALL BE ADJUSTED OR RELOCATED BY THE RESPECTIVE UTILITIES UNLESS OTHERWISE NOTED IN COORDINATION WITH THE WORK OF THE CONTRACTOR.

3. FOR EASEMENTS, CONSTRUCTION LIMITS, AND RIGHT OF WAY LINES, REFER TO RIGHT OF WAY PLANS.

4. FLAT TOPS FOR CATCH BASINS ARE NOT ALLOWED UNLESS NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.

5. THE PROJECT GEOTECHNICAL REPORT TITLED GEOTECHNICAL DESIGN REPORT MAST ARM STRUCTURES, SOILS REPORT 2018-43C, NOVEMBER 5, 2018 CAN BE ACCESSED AT THE MAINEDOT WEBSITE HTTP://WWW.MAINE.GOV/MDOT/CONTRACTORS/.

6. GEOTECHNICAL INFORMATION FURNISHED OR REFERRED TO IN THE BID DOCUMENTS IS FOR THE USE OF THE BIDDERS. NO ASSURANCE IS GIVEN THAT THE INFORMATION OR INTERPRETATIONS WILL BE REPRESENTATIVE OF THE ACTUAL SUBSURFACE CONDITIONS THROUGHOUT THE CONSTRUCTION SITE. MAINEDOT WILL NOT BE RESPONSIBLE FOR ANY INTERPRETATIONS OR CONCLUSION DRAWN FROM THE GEOTECHNICAL INFORMATION. THE BORING LOGS PROVIDED IN THE BID DOCUMENTS (IF ANY) PRESENT FACTUAL AND INTERPRETIVE SUBSURFACE INFORMATION COLLECTED AT DISCRETE LOCATIONS. DATA PROVIDED MAY NOT BE REPRESENTATIVE OF THE SUBSURFACE CONDITIONS BETWEEN BORING LOCATIONS.

7. THE CONTRACTOR IS RESPONSIBLE FOR FINDING EXACT LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT DIG-SAFE AND APPROPRIATE AUTHORITIES PRIOR TO ANY SUBSURFACE ACTIVITIES.

8. THE RESIDENT AND MAINEDOT SHALL HAVE THE RIGHT AND AUTHORITY TO DETERMINE THE ACCEPTABILITY OF WORK AND MATERIALS IN PROGRESS OR COMPLETED AND SHALL HAVE THE RIGHT TO REJECT ANY WORK OR MATERIALS WHICH DO NOT CONFORM, IN ITS SOLE OPINION, TO THE PLANS OR SPECIFICATIONS.

9. ALL SIGNING, SIGNAL AND STRIPING MATERIALS AND PLACEMENT SHALL CONFORM TO THE MAINEDOT STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND STANDARD DETAILS AND WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) DATED 2009, AS AMENDED.

10. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MAINE DEPARTMENT OF TRANSPORTATION'S BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL, FEBRUARY, 2008.

11. PAVEMENT CUT LINE SHALL BE NEAT, CLEAN AND STRAIGHT AS DIRECTED BY THE RESIDENT. PAYMENT FOR CUTTING OF EXISTING PAVEMENT SHALL BE INCIDENTAL TO 403 ITEMS.

12. REMOVAL OF EXISTING CURBING SHALL BE CONSIDERED INCIDENTAL TO ITEM 203.20 COMMON EXCAVATION, UNLESS OTHERWISE NOTED.

13. EXISTING CATCH BASINS WILL BE CLEANED AS DIRECTED BY THE RESIDENT UNDER THE APPROPRIATE PAY ITEMS.

14. THE CONTRACTOR SHALL CONSTRUCT ALL SIDEWALKS, RAMPS AND LANDINGS TO BE ADA COMPLIANT IN ACCORDANCE WITH THE MAINEDOT'S LATEST STANDARD DETAILS AND RELATED NOTES. THE CONTRACTOR SHALL VERIFY THAT ALL GRADES AND SLOPES ARE ADA COMPLIANT PRIOR TO PLACEMENT OF THE SURFACE MATERIAL AND SHALL COORDINATE WITH THE RESIDENT AND THE DEPARTMENT ON ANY NON-COMPLIANT LOCATIONS. FAILURE TO CONSTRUCT SIDEWALKS, LANDINGS AND RAMPS TO BE ADA COMPLIANT MAY RESULT IN REJECTION OF WORK BY THE RESIDENT AND/OR MAINEDOT. THE CONTRACTOR SHALL REBUILD ALL REJECTED WORK AREAS AT NO ADDITIONAL COST TO THE PROJECT. IF THERE IS A CONDITION THAT DOES NOT ALLOW FOR FULL ADA COMPLIANCE, THEN THE CONTRACTOR SHALL NOTIFY THE RESIDENT PRIOR TO PLACING SURFACE MATERIAL.

15. TEST PITS SHALL BE COMPLETED WHERE DIRECTED BY THE RESIDENT. PAYMENT FOR TEST PITS SHALL BE MADE UNDER ITEM 803.01 TEST PITS.

16. WHERE NOTED ON THE PLANS, THE CONTRACTOR SHALL REMOVE AND REPLACE EXISTING COBBLESTONES BEHIND NEW CURB OR SIDEWALK. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
17. ALL WASTE MATERIAL NOT USED ON THE PROJECT SHALL BE DISPOSED OF OFF THE PROJECT IN ACCEPTABLE WASTE AREAS REVIEWED BY THE RESIDENT. GRADING, SEEDING AND MULCHING OF WASTE AREAS SHALL BE CONSIDERED INCIDENTAL.

18. ANY NECESSARY CLEANING OF EXISTING PAVEMENT PRIOR TO PAVING OR MILLING SHALL BE INCIDENTAL TO THE RELATED PAVING OR MILLING ITEMS. THIS INCLUDES KILLING AND REMOVAL OF ALL VEGETATIVE MATTER.

19. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.

20. ANY NECESSARY CUTTING OF EXISTING CATCH BASINS TO ALLOW FOR PROPOSED PIPE CONNECTIONS WILL NOT BE PAID FOR SEPARATELY AND WILL BE CONSIDERED INCIDENTAL TO ITEMS 603 OR 605.

21. THE CULVERT SIZES SHOWN ON THE PLANS AND CROSS SECTIONS ARE FOR SMOOTH-LINED PIPES.

22. EXISTING ABANDONED WATER MAINS BROKEN BY THE CONTRACTOR DURING CONSTRUCTION SHALL HAVE THE ENDS PLUGGED WITH BRICK AND MORTAR. COST FOR ALL LABOR AND MATERIAL SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO DIRECT PAYMENT WILL BE MADE.

23. LOAM SHALL BE PLACED TO A NOMINAL DEPTH OF 4 INCHES UNLESS OTHERWISE NOTED OR DIRECTED.

24. UNLESS OTHERWISE NOTED SEEDING METHOD NO 1 SHALL BE UTILIZED ON ALL DISTURBED AREAS.

25. DURING CONSTRUCTION AT THE MAIN STREET AND WATER STREET INTERSECTION, WATER STREET MAY BE REDUCED TO RIGHT-IN AND RIGHT-OUT ONLY UNTIL THE TRAFFIC SIGNALS AT THIS LOCATION BECOME ACTIVE. THE CONTRACTOR SHALL ADDRESS THIS IN THEIR TRAFFIC CONTROL PLAN.

26. NO SEPARATE PAYMENT FOR SUPERINTENDENT OR FOREMAN WILL BE MADE FOR THE SUPERVISION OF EQUIPMENT AND LAYOUT OF WORK BEING PAID FOR UNDER THE EQUIPMENT RENTAL ITEMS.

27. "UNDETERMINED LOCATIONS" SHALL BE DETERMINED BY THE RESIDENT.

28. FINAL STRIPING FOR THE PROJECT SHALL BE DONE BY THE CONTRACTOR PER THE STRIPING PLANS. PAYMENT SHALL BE MADE UNDER THE APPROPRIATE CONTRACT ITEMS.

29. LIMITS OF FULL CONSTRUCTION SHOWN ON THE PLANS ARE OFFSET FROM ALIGNMENTS AND LANE LINES FOR CLARITY. SEE TYPICAL SECTIONS AND CROSS SECTIONS FOR ACTUAL WIDTHS.

30. ANY GRANITE CURB, COBBLESTONE, OR BRICK PAVERS THAT ARE NOT REUSED AND ARE IN GOOD CONDITION AS DETERMINED BY THE RESIDENT SHALL BECOME PROPERTY OF THE CITY OF BIDDEFORD. THE CONTRACTOR WILL DELIVER THESE MATERIALS TO THE PUBLIC WORKS GARAGE AT 371 HILL STREET AND NO ADDITIONAL PAYMENT WILL BE MADE FOR THE TEMPORARY STORAGE, LOADING, TRANSPORTATION, OR UNLOADING OF THESE MATERIALS.

31. THE CONTRACTOR SHALL REPLACE THE DETECTABLE WARNING FIELDS ON THE PEDESTRIAN RAMPS AT STATIONS 104+25 RT & 104+80 RT. NO OTHER RAMP IS REQUIRED AT THESE LOCATIONS AND THE CONTRACTOR IS NOT RESPONSIBLE FOR MAKING THESE LOCATIONS FULLY ADA COMPLIANT. ALL OTHER PEDESTRIAN RAMPS WHERE PROPOSED WORK IS SHOWN, SHALL BE MADE FULLY ADA COMPLIANT. IF THE CONTRACTOR BELIEVES THEY CAN NOT ACHIEVE THIS WITHIN THE WORK LIMITS SHOWN ON THE PLANS, THEN THE CONTRACTOR SHALL NOTIFY THE RESIDENT IMMEDIATELY BEFORE PROCEEDING.



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-1857(400)
WIN 18574.00
HIGHWAY PLANS

PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	JRD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGNS-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD STATE ROUTE 9
GENERAL NOTES

SHEET NUMBER
4
OF 32

Date:1/6/2022

Username: jomesdavis

Division: HIGHWAY

Filename: ...\\006_Construction_Notes.dgn

CONSTRUCTION NOTES

SIDEWALK - PAVED

LOCATION	OFFSET	QUANTITY (SY)
MAIN ST		
112+13 TO 112+88	RT	72

WATER ST		
33+09 TO 33+44	RT	15
34+28 TO 34+53	RT	14

ITEM 202.202 - REMOVE PAVEMENT SURFACE

LOCATION	OFFSET	QUANTITY (SY)
MAIN ST		
109+30 TO 113+44	LT & RT	2000

WATER ST		
33+18 TO 33+95	LT	600

ITEM 603.159 - 12 INCH CULVERT PIPE OPT III

LOCATION	OFFSET	QUANTITY (LF)
MAIN ST		
111+72 TO 111+78	LT	4
111+78 TO 35+01	LT	18
112+12 TO 112+61	LT	45
112+21 TO 112+31	RT	7

WATER ST		
33+83 TO 33+89	LT	12
35+01 TO 112+12	LT	17

ITEM 604.072 - CATCH BASIN TYPE A-C

LOCATION	OFFSET	QUANTITY (EA)
MAIN ST		
112+30.83	28.4 RT	1

WATER ST		
33+88.63	42.4 LT	1

ITEM 604.092 - CATCH BASIN TYPE B-C

LOCATION	OFFSET	QUANTITY (EA)
MAIN ST		
111+75.95	16.8 LT	1
112+60.66	17.6 LT	1

WATER ST		
35+01.00	23.0 LT	1

ITEM 604.16 - ALTER CB TO MH

LOCATION	OFFSET	QUANTITY (EA)
MAIN ST		
111+67.49	25.0 RT	1
112+20.79	25.2 RT	1

NORTH DAM MILL RD		
35+21.18	11.7 LT	1

ITEM 604.161 - ALTER CB

LOCATION	OFFSET	QUANTITY (EA)
MAIN ST		
112+12.30	17.3 LT	1

WATER ST		
32+93.72	30.4 LT	1
33+06.66	48.7 LT	1
33+15.15	53.4 LT	1
33+33.80	15.9 LT	1

ITEM 604.164 - REBUILD CB

LOCATION	OFFSET	QUANTITY (EA)
WATER ST		
32+78.98	19.5 RT	1

ITEM 604.166 - REBUILD MH

LOCATION	OFFSET	QUANTITY (EA)
WATER ST		
33+42.17	11.5 LT	1
33+61.69	3.4 LT	1
33+54.00	57.6 LT	1
33+70.43	23.5 LT	1
33+83.41	51.5 LT	1

ITEM 604.18 - ADJUST CB OR MH TO GRADE

LOCATION	OFFSET	QUANTITY (EA)
MAIN ST		
106+82.42	16.6 LT	1
106+93.10	26.7 RT	1
109+64.02	31.4 RT	1
110+04.40	54.9 RT	1
110+56.65	16.6 RT	1
111+85.85	17.6 RT	1

WATER ST		
33+73.39	47.4 LT	1
34+58.92	33.5 RT	1

ITEM 608.08 - REINFORCED CONCRETE SIDEWALK

LOCATION	OFFSET	QUANTITY (SY)
MAIN ST		
104+72 TO 104+98	LT	22
106+68 TO 106+91	RT	33
106+70 TO 107+00	LT	23
107+16 TO 107+42	RT	22
109+50 TO 109+74	RT	36
109+75 TO 110+05	LT	22
110+05 TO 111+20	RT	89
112+50 TO 113+00	LT	64

WATER ST		
32+95 TO 33+05	LT	25
33+15 TO 33+30	LT	23

NORTH DAM MILL RD		
34+78 TO 36+00	LT	58

ITEM 608.10 - BRICK SIDEWALK (REMOVE AND REBUILD)

LOCATION	OFFSET	QUANTITY (SY)
WATER ST		
33+47 TO 34+25	RT	39

ITEM 608.26 - CURB RAMP DETECTABLE WARNING FIELD

LOCATION	OFFSET	QUANTITY (SF)
MAIN ST		
104+25	RT	9
104+80	RT	28
104+80	LT	12
106+85	RT	26
106+85	LT	12
107+30	RT	20
109+75	RT	25
109+90	LT	12
110+10	RT	15
111+90	LT	28
112+50	LT	22
112+75	RT	12
112+80	LT	20

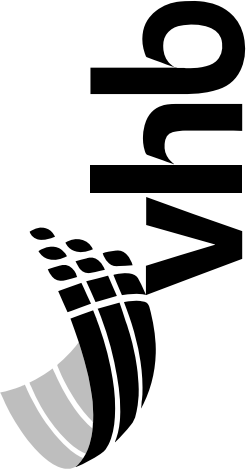
WATER ST		
33+00	LT	25
33+20	LT	13
33+90	LT	10
34+10	LT	12
34+20	LT	10
34+45	RT	13

NORTH DAM MILL RD		
35+75	LT	12
35+98	LT	10

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1857(400)

WIN
18574.00
HIGHWAY PLANS



PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	JRD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

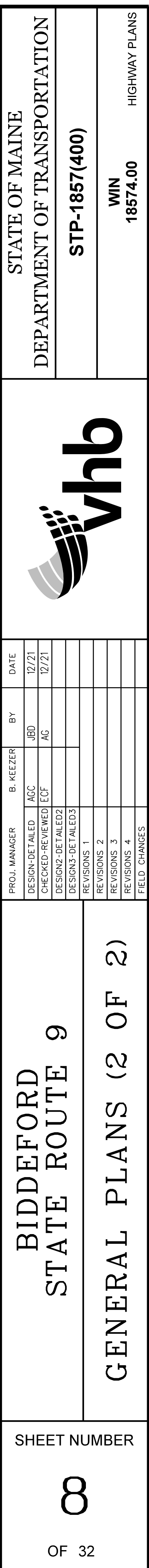
BIDDEFORD
STATE ROUTE 9

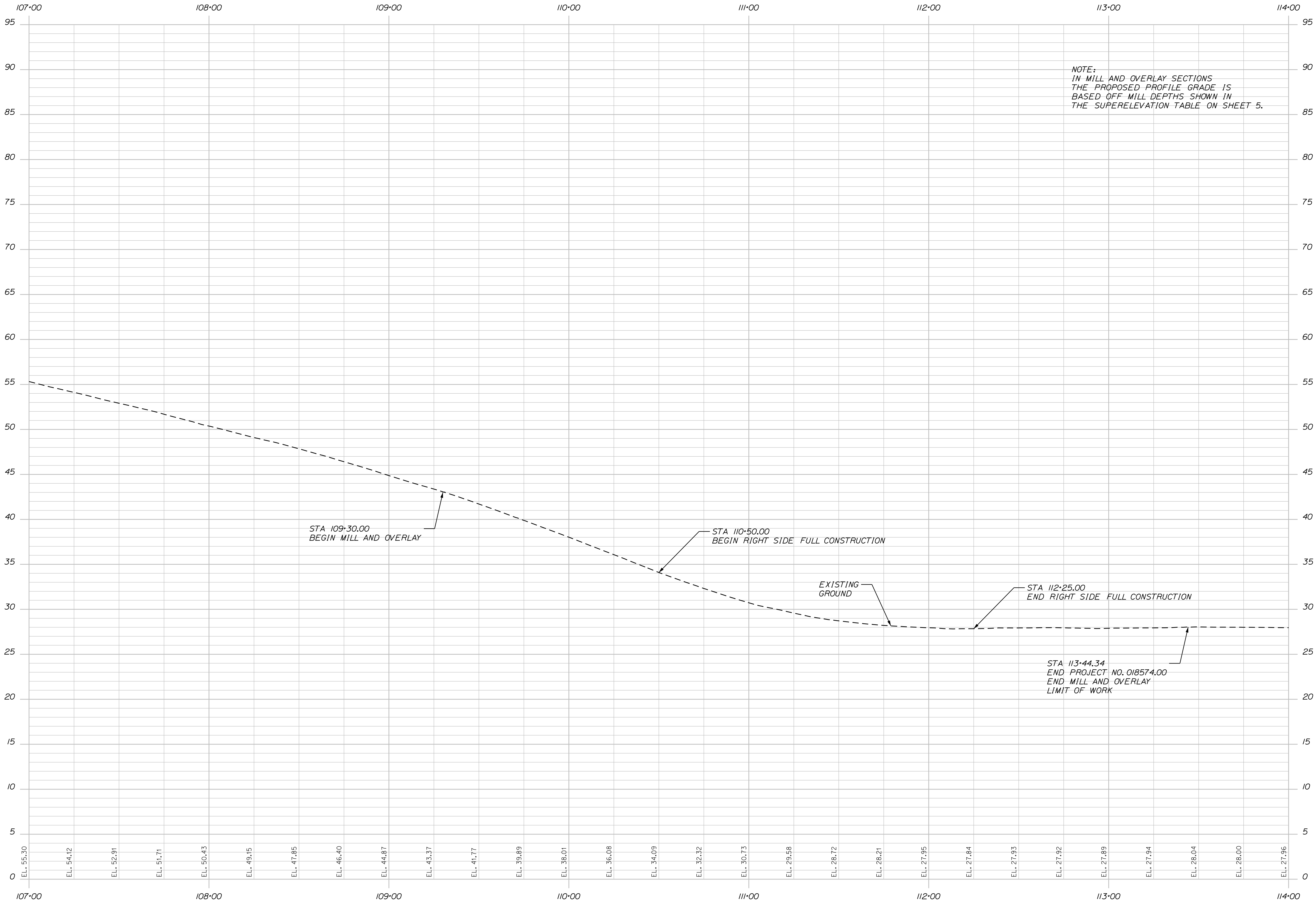
CONSTRUCTION NOTES

SHEET NUMBER

6

OF 32





PROFILE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1857(400)

WIN
18574.00
HIGHWAY PLANS

PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	JRD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

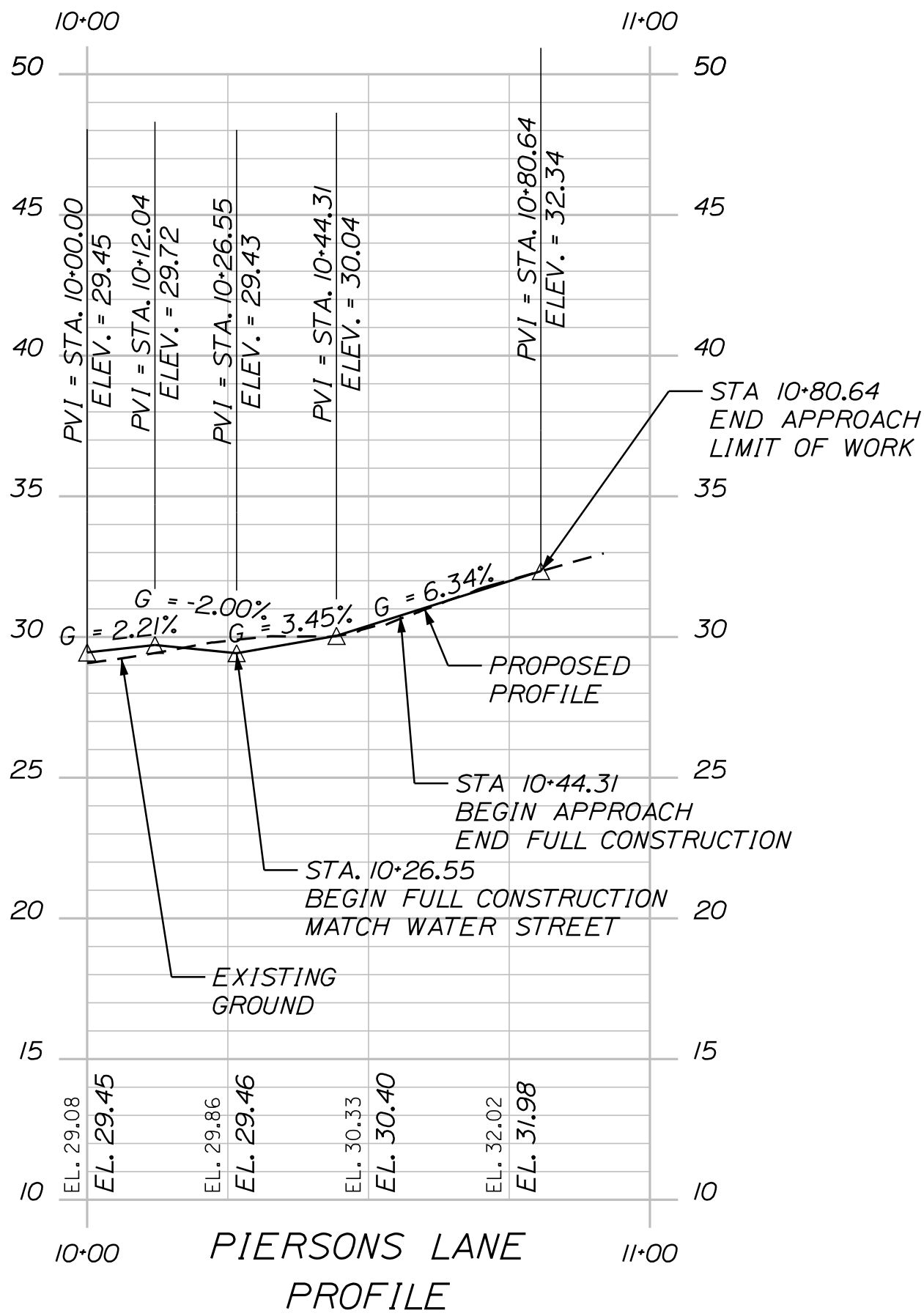
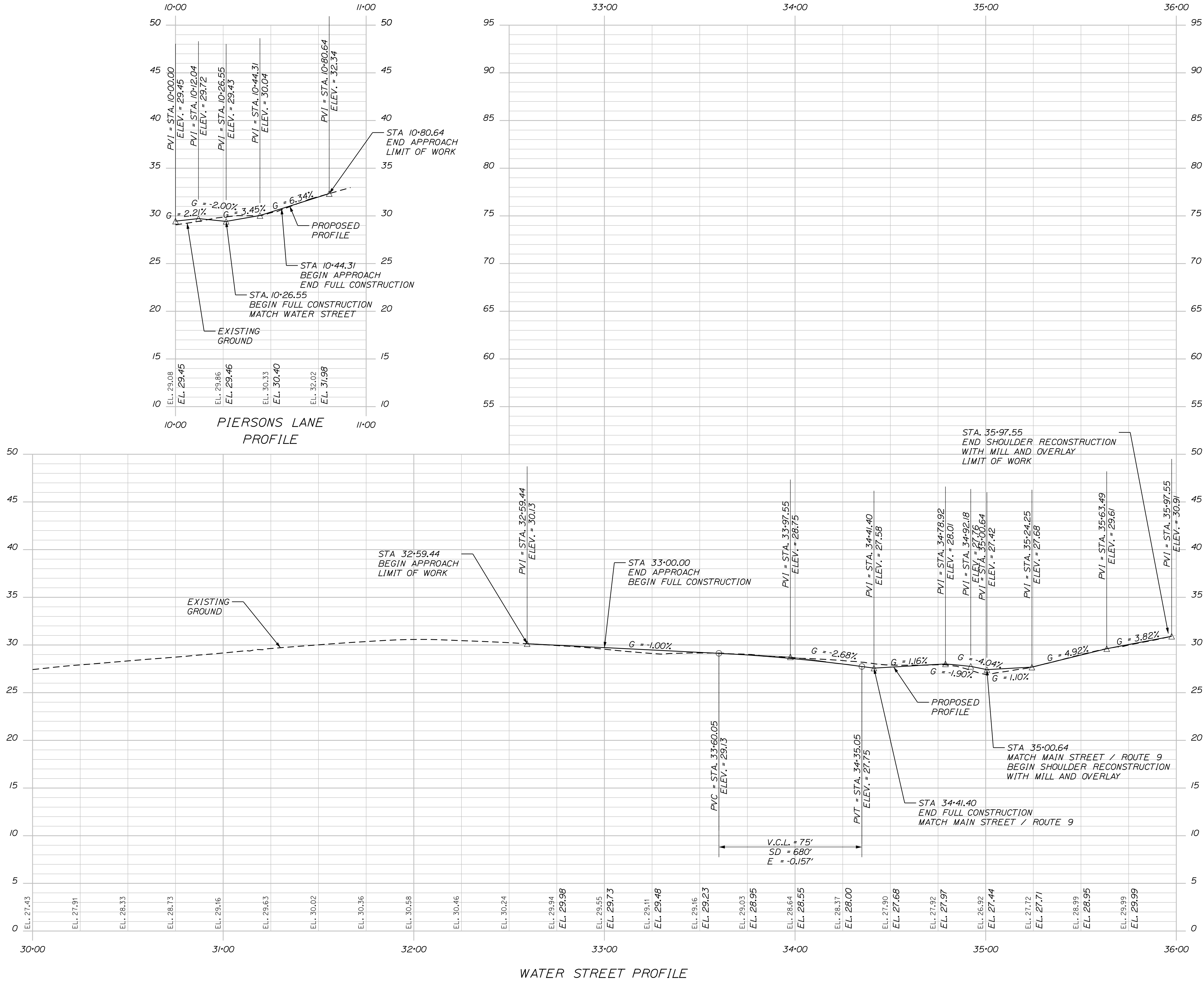
BIDDEFORD
STATE ROUTE 9

PROFILE

SHEET NUMBER

9

OF 32



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1857(400)

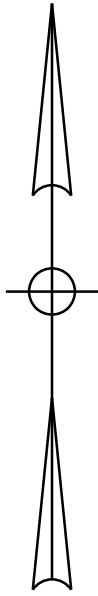
WIN
18574.00
HIGHWAY PLANS

PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	JRD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
WATER ST/PIERSON'S LN

SHEET NUMBER
10
OF 32

PROFILE

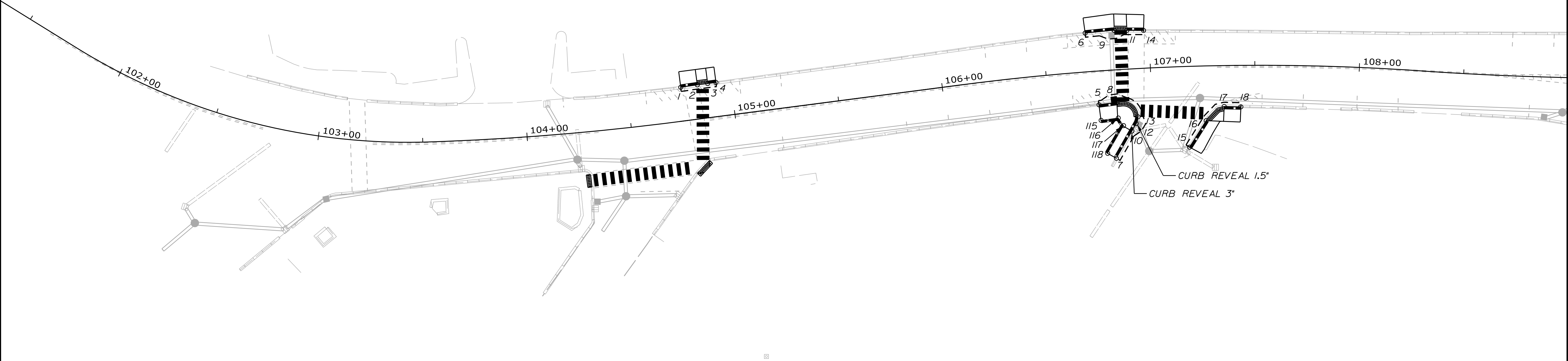


CONTROL POINTS				
POINT	STATION	OFFSET	X. COORD.	Y. COORD
1	104+75.96	16.2 LT.	963666.96	240300.65
2	104+83.96	16.3 LT.	963674.88	240301.81
3	104+88.96	16.3 LT.	963679.83	240302.46
4	104+92.96	16.3 LT.	963683.80	240302.98
5	106+74.24	16.2 RT.	963867.02	240292.26
6	106+70.14	18.6 LT.	963860.38	240326.61
7	106+80.97	42.3 RT.	963875.35	240266.65
8	106+82.97	15.6 RT.	963875.57	240293.39
9	106+83.89	18.9 LT.	963874.32	240327.89
10	106+89.44	29.7 RT.	963882.75	240279.69
11	106+89.79	18.5 LT.	963880.32	240327.88
12	106+91.73	26.2 RT.	963884.78	240283.29
13	106+92.84	23.1 RT.	963885.69	240286.50
14	106+97.64	18.1 LT.	963888.32	240327.87
15	107+17.51	38.7 RT.	963910.32	240271.99
16	107+26.08	26.2 RT.	963918.28	240284.70
17	107+35.00	19.6 RT.	963926.88	240291.46
18	107+43.14	19.9 RT.	963934.88	240291.28
115	106+74.71	23.6 RT.	963868.02	240248.83
116	106+83.18	23.1 RT.	963876.25	240285.95
117	106+85.53	26.9 RT.	963878.78	240282.29
118	106+76.79	39.6 RT.	963871.15	240269.01

ITEM 609.221 - TERMINAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
1 TO 2	-	8.0'
3 TO 4	-	4.0'
5 TO 8	-	8.0'
6 TO 9	-	14.0'
7 to 10	-	15.0'
11 TO 14	-	8.0'
15 TO 16	-	15.0'
17 TO 18	-	8.0'
10 TO 12	-	4.1'

ITEM 609.222 - TERMINAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
12 TO 13	7.0'	3.4'

ITEM 609.11 - VERTICAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
115 TO 116	-	8.3'
116 TO 117	-	3.7'
117 TO 118	-	15.3'



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1857(400)

WIN
18574.00
HIGHWAY PLANS

PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	ABD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
STATE ROUTE 9

GEOMETRIC PLANS (1 OF 2)

SHEET NUMBER

11

OF 32

ITEM 609.12 - VERTICAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
39 TO 40	20.0'	4.9'
56 TO 57	44.0'	19.4'
58 TO 60	44.0'	4.0'
70 TO 73	23.0'	5.4'
85 TO 106	25.5'	15.8'
95 TO 96	48.0'	26.6'
107 TO 86	25.5'	10.1'

ITEM 609.11 - VERTICAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
40 TO 41	-	58.2'
41 TO 42	71.0'	29.3'
60 TO 63	-	31.9'
62 TO 64	-	9.2'
69 TO 70	-	4.3'
71 TO 76	-	12.7'
73 TO 102	75.6'	19.5'
102 TO 103	-	24.0'
103 TO 104	67.6'	21.3'
104 TO 105	98.0'	44.2'
105 TO 93	-	18.9'
74 TO 76	-	13.6'
80 TO 84	-	15.4'
83 TO 85	-	18.4'
86 TO 87	-	33.6'
87 TO 88	71.0'	24.4'
89 TO 90	-	3.1'
99 TO 100	-	2.9'
108 TO 109	-	10.4'
110 TO 111	-	12.6'
111 TO 112	-	7.0'
113 TO 84	-	13.1'
114 TO 83	-	18.3'

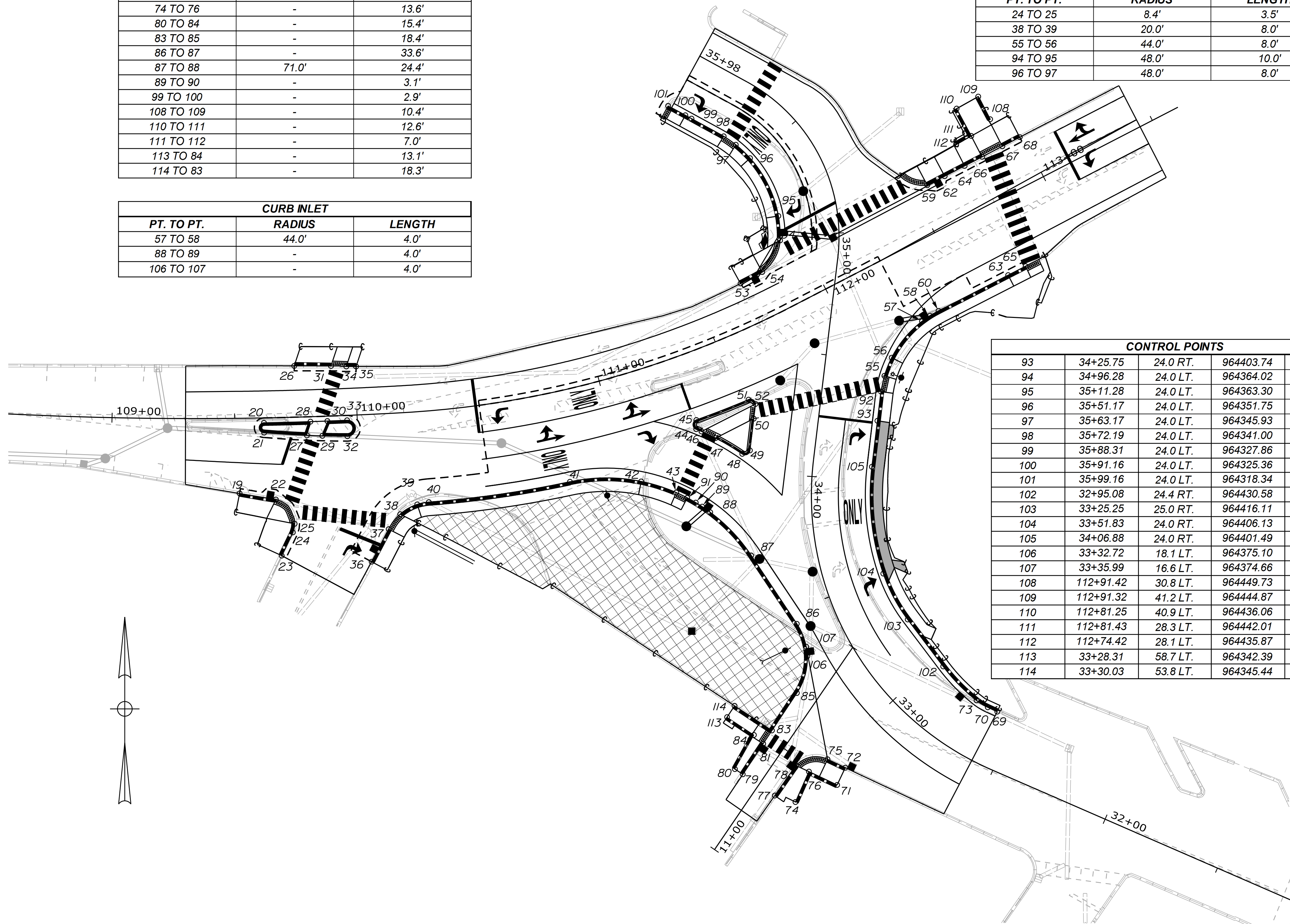
CURB INLET		
PT. TO PT.	RADIUS	LENGTH
57 TO 58	44.0'	4.0'
88 TO 89	-	4.0'
106 TO 107	-	4.0'

ITEM 609.34 - CURB TYPE 5		
PT. TO PT.	RADIUS	LENGTH
20 TO 28	-	19.0'
21 TO 27	-	17.9'
27 TO 28	-	5.8'
29 TO 30	-	6.4'
29 TO 32	-	10.2'
30 TO 33	-	8.0'
44 TO 46	98.0'	2.4'
45 TO 51	421.0'	22.9'
47 TO 48	98.0'	12.6'
49 TO 50	-	13.0'

ITEM 609.35 - CURB TYPE 5 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
20 TO 21	2.0'	6.3'
32 TO 33	3.3'	10.3'
44 TO 45	2.0'	4.8'
48 TO 49	2.0'	4.1'
51 TO 52	2.0'	3.9'

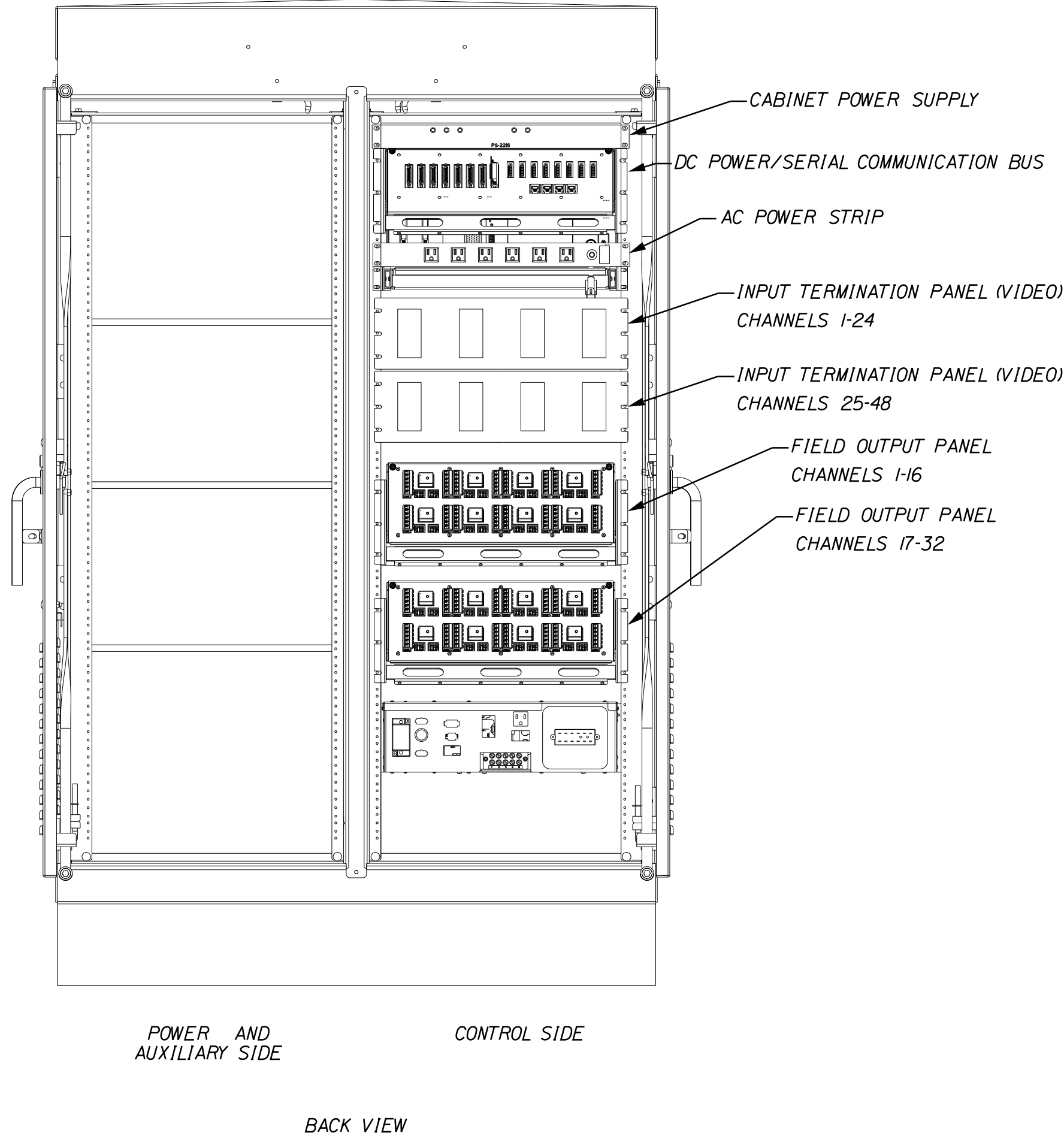
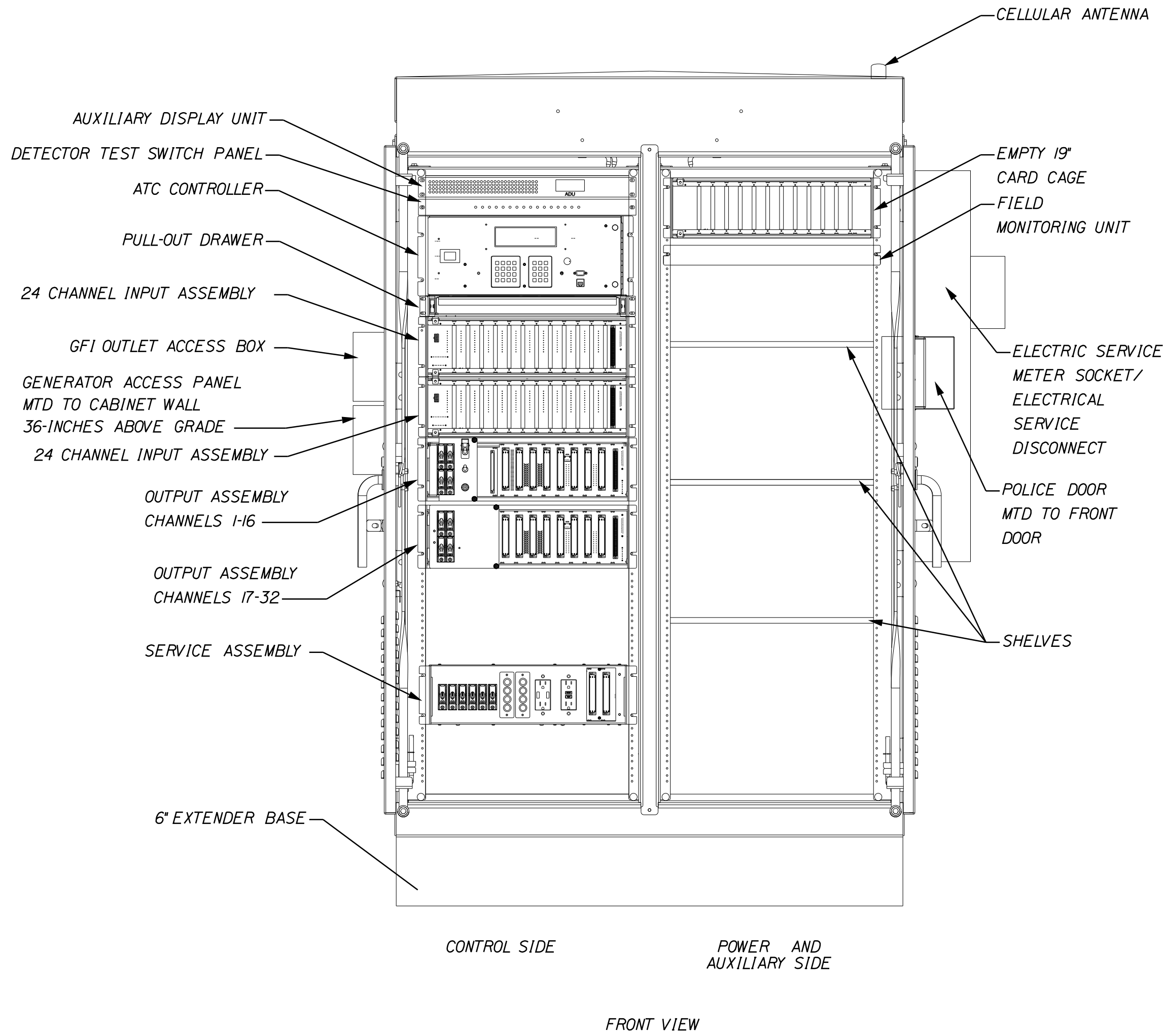
ITEM 609.221 - TERMINAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
19 TO 22	-	15.0'
23 TO 24	-	10.5'
26 TO 31	-	15.0'
34 TO 35	-	4.0'
36 TO 37	-	15.0'
42 TO 43	71.0'	15.0'
53 TO 54	-	10.0'
59 TO 62	-	8.0'
63 TO 65	-	8.0'
64 TO 66	-	8.0'
67 TO 68	-	8.0'
72 TO 75	-	8.0'
77 TO 78	-	15.0'
79 TO 81	-	15.0'
90 TO 91	71.0'	4.0'
93 TO 92	-	12.0'
98 TO 99	-	15.0'
100 TO 101	-	8.0'

ITEM 609.222 - TERMINAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
24 TO 25	8.4'	3.5'
38 TO 39	20.0'	8.0'
55 TO 56	44.0'	8.0'
94 TO 95	48.0'	10.0'
96 TO 97	48.0'	8.0'



CONTROL POINTS				
93	34+25.75	24.0 RT.	964403.74	240303.99
94	34+96.28	24.0 LT.	964364.02	240377.62
95	35+11.28	24.0 LT.	964363.30	240387.57
96	35+51.17	24.0 LT.	964351.75	240411.15
97	35+63.17	24.0 LT.	964345.93	240216.62
98	35+72.19	24.0 LT.	964341.00	240420.06
99	35+88.31	24.0 LT.	964327.86	240427.30
100	35+91.16	24.0 LT.	964325.36	240428.66
101	35+99.16	24.0 LT.	964318.34	240432.50
102	32+95.08	24.4 RT.	964430.58	240203.77
103	33+25.25	25.0 RT.	964416.11	240222.92
104	33+51.83	24.0 RT.	964406.13	240241.65
105	34+06.88	24.0 RT.	964401.49	240285.25
106	33+32.72	18.1 LT.	964375.10	240207.86
107	33+35.99	16.6 LT.	964374.66	240211.83
108	112+91.42	30.8 LT.	964449.73	240427.05
109	112+91.32	41.2 LT.	964444.87	240436.27
110	112+81.25	40.9 LT.	964436.06	240431.37
111	112+81.43	28.3 LT.	964442.01	240420.24
112	112+74.42	28.1 LT.	964435.87	240416.84
113	33+28.31	58.7 LT.	964342.39	240183.08
114	33+30.03	53.8 LT.	964345.44	240187.70

CONTROL POINTS				
POINT	STATION	OFFSET	X. COORD.	Y. COORD
19	109+51.70	3.0 6 RT.	964143.48	240274.38
20	109+61.95	2.0 RT.	964153.41	240303.18
21	109+61.96	6.0 RT.	964153.49	240299.18
22	109+66.13	33.4 RT.	964158.27	240271.88
23	109+67.94	56.3 RT.	964160.65	240248.98
24	109+72.58	47.0 RT.	964165.21	240258.45
25	109+73.36	43.5 RT.	964165.93	240261.97
26	109+74.92	20.9 LT.	964165.75	240326.40
27	109+79.29	7.5 RT.	964170.93	240298.07
28	109+80.90	2.0 RT.	964172.38	240303.66
29	109+85.57	8.0 RT.	964177.25	240297.85
30	109+87.83	2.0 RT.	964179.31	240303.89
31	109+90.12	20.4 LT.	964180.75	240326.37
32	109+95.71	8.5 RT.	964187.47	240297.70
33	109+95.85	2.0 RT.	964187.33	240304.20
34	109+96.44	20.0 LT.	964187.00	240326.15
35	110+00.49	19.8 LT.	964191.00	240326.15
36	110+03.16	60.1 RT.	964197.34	240246.50
37	110+10.51	47.2 RT.	964204.31	240259.79
38	110+15.38	41.3 RT.	964209.01	240265.89
39	110+22.14	38.8 RT.	964215.96	240269.85
40	110+26.51	37.1 RT.	964220.68	240270.80
41	110+79.73	37.1 RT.	964278.28	240279.11
42	111+05.34	44.0 RT.	964307.35	240279.25
43	111+16.40	52.5 RT.	964321.64	240274.72
44	111+30.79	30.5 RT.	964329.79	240300.58
45	111+32.03	27.0 RT.	964329.86	240304.32
46	111+32.43	32.1 RT.	964331.99	240299.66
47	111+36.53	36.6 RT.	964337.72	240296.97
48	111+43.63	46.5 RT.	964348.58	240290.50
49	111+46.69	46.3 RT.	964351.70	240291.91
50	111+52.44	35.0 RT.	964353.25	240304.86
51	111+53.43	27.0 RT.	964351.17	240312.61
52	111+55.17	29.7 RT.	964353.95	240310.83
53	111+69.50	17.7 LT.	964347.88	240360.03
54	111+79.97	18.0 LT.	964356.72	240364.70
55	34+44.32	24.7 RT.	964406.60	240322.34
56	34+52.03	26.7 RT.	964409.58	240329.76
57	112+28.88	29.7 RT.	964421.92	240344.57
58	112+32.84	29.2 RT.	964425.20	240346.86
59	112+56.26	18.6 LT.	964424.07	240400.11
60	34+73.26	43.4 RT.	964428.67	240348.85
62	112+64.26	18.7 LT.	964431.17	240403.80
63	112+68.77	29.1 RT.	964457.09	240363.41
64	112+73.41	18.6 LT.	964439.31	240407.99
65	112+76.77	29.2 RT.	964464.21	240367.06
66	112+81.50	18.7 LT.	964446.48	240411.71
67	112+90.76	18.7 LT.	964454.70	240416.00
68	112+98.80	18.7 LT.	964461.82	240419.73
69	32+59.43	22.4 RT.	964452.65	240185.31
70	32+64.64	22.1 RT.	964448.77	240187.10
71	32+92.96	40.5 LT.	964387.28	240155.42
72	32+94.85	33.1 LT.	964390.61	240162.46
73	32+71.19	22.1 RT.	964444.20	240189.90
74	32+98.11	57.4 LT.	964370.29	240148.45
75	33+00.70	35.9 LT.	964383.38	240165.88
76	33+01.80	44.9 LT.	964375.79	240160.85
77	33+03.27	61.7 LT.	964361.86	240151.09
78	33+05.68	47.1 LT.	964370.53	240163.33
79	33+13.11	66.3 LT.	964348.79	240159.76
80	33+15.46	67.6 LT.	964345.57	240161.88
81	33+16.57	52.2 LT.	964357.10	240172.25
83	33+18.24	46.2 LT.	964360.68	240177.64
84	33+20.10	53.3 LT.	964353.34	240175.81
85	33+23.69	29.2 LT.	964370.85	240192.94
86	33+44.87	16.3 LT.	964370.83	240221.16
87	33+72.10	26.6 LT.	964352.22	240249.08
88	33+87.15	41.4 LT.	964335.50	240266.67
89	33+88.93	44.6 LT.	964332.22	240268.97
90	33+90.17	47.2 LT.	964329.60	240270.61
91	33+91.60	50.7 LT.	964326.11	240272.57
92	34+37.76	24.0 RT.	964405.18	240315.91

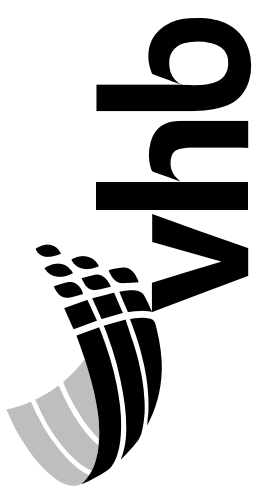


MaineDOT 32/48 ATC CABINET
NOT TO SCALE

- NOTES:
- DRAWING SHOWN IS A SCHEMATIC REPRESENTATION OF THE ATC CABINET DEPICTING THE RELATIVE LOCATION OF VARIOUS IN-CABINET DEVICES AND SUBASSEMBLIES.THE EXACT SIZE OF VARIOUS ELEMENTS MAY VARY PER MANUFACTURER.
 - INPUT TERMINATION PANEL SHOWN IS FOR VIDEO BASED INPUTS.
 - DRAWING DEPICTS TWO INPUT PANELS AND TWO OUTPUT PANELS.THIS QUANTITY MAY BE REDUCED DEPENDING ON APPLICATION;SEE SPECIAL PROVISIONS FOR NUMBER OF PANELS TO BE SUPPLIED.
 - FAN AND THERMOSTAT SHALL BE INSTALLED ON CABINET FRAME ABOVE THE DOOR.
 - LED LIGHT STRIPS SHALL BE INSTALLED ON CABINET FRAME ABOVE THE DOOR AND ON THE UNDERSIDE OF THE LOWER SHELF.
 - THE SIZE OF THE METER SOCKET WILL VARY BASED ON THE LOCAL ELECTRIC UTILITY COMPANY REQUIREMENT.
 - THE METER SHALL BE INSTALLED SUCH THAT THE BOTTOM OF THE METER IS AT LEAST 48 INCHES ABOVE FINAL GRADE.
 - THE LOAD SIDE CABLE SHALL BE ROUTED THROUGH THE INTERIOR OF THE CABINET SUCH THAT IT DOES NOT BLOCK OR ENTER INTO AVAILABLE RACK SPACE.THE CABLE SHALL BE ROUTED BETWEEN THE EDGE OF THE RACK SYSTEM AND THE CABINET SIDE WALL,ALONG THE BOTTOM OF THE CABINET AND BELOW THE BOTTOM OPENING OF THE DOORS.

NOMINAL TERMINAL PANEL SIZE
PER 24 INPUT RACK:
LOOP = 6U HIGH (10.5")
VIDEO = 3U HIGH (5.25")

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	STP-1857(400)	WIN 18574.00	HIGHWAY PLANS
--	---------------	-----------------	---------------

		<table> <tr> <th>PROJ. MANAGER</th> <th>B. KEEZER</th> <th>BY</th> <th>DATE</th> </tr> <tr> <td>DESIGN-DETAILED</td> <td>M.C.</td> <td>JAR</td> <td>12/21</td> </tr> <tr> <td>CHECKED-REVIEWED</td> <td>CMB</td> <td>AC</td> <td>12/21</td> </tr> <tr> <td>DESIGN-DETAILED</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DESIGN-DETAILED</td> <td></td> <td></td> <td></td> </tr> <tr> <td>REVISIONS 1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>REVISIONS 2</td> <td></td> <td></td> <td></td> </tr> <tr> <td>REVISIONS 3</td> <td></td> <td></td> <td></td> </tr> <tr> <td>REVISIONS 4</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="4">FIELD CHANGES</td> </tr> </table>		PROJ. MANAGER	B. KEEZER	BY	DATE	DESIGN-DETAILED	M.C.	JAR	12/21	CHECKED-REVIEWED	CMB	AC	12/21	DESIGN-DETAILED				DESIGN-DETAILED				REVISIONS 1				REVISIONS 2				REVISIONS 3				REVISIONS 4				FIELD CHANGES			
PROJ. MANAGER	B. KEEZER	BY	DATE																																								
DESIGN-DETAILED	M.C.	JAR	12/21																																								
CHECKED-REVIEWED	CMB	AC	12/21																																								
DESIGN-DETAILED																																											
DESIGN-DETAILED																																											
REVISIONS 1																																											
REVISIONS 2																																											
REVISIONS 3																																											
REVISIONS 4																																											
FIELD CHANGES																																											
BIDDEFORD STATE ROUTE 9		TRAFFIC SIGNAL PLAN																																									

SHEET NUMBER
13
OF 32

LIST OF WORK ITEMS

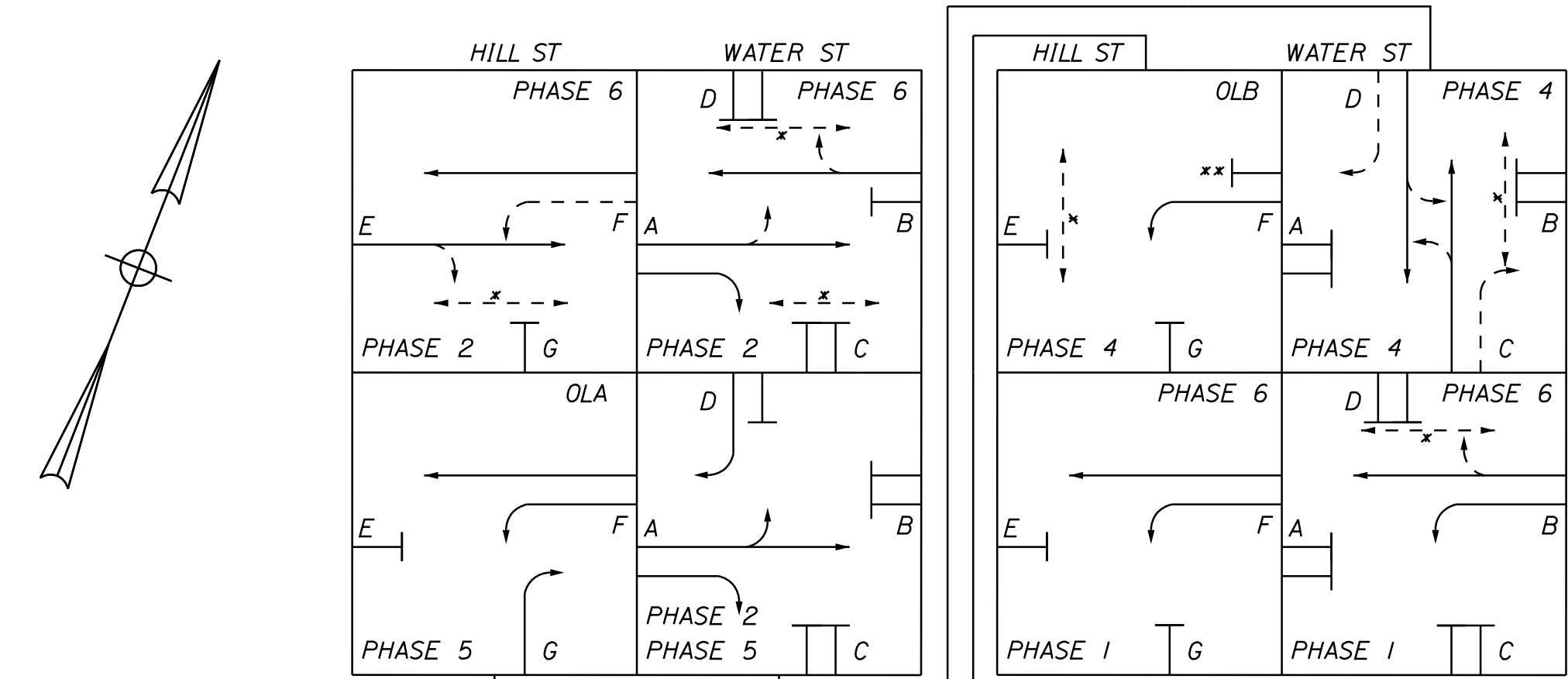
EQUIPMENT AND WORK ITEMS 643.80	QUANTITY
FURNISH AND INSTALL NEW ATCC MAINEDOT 32/48 SPEC GROUND MOUNT CABINET AND ATC CONTROLLER COMPLETE WITH ALL ANCILLARY EQUIPMENT AND WIRING INCLUDING CELL MODEM/FIELD MONITORING UNIT	1
FURNISH AND INSTALL ONE-WAY 3-SECTION 12-INCH TRAFFIC SIGNAL HEADS, WITH LED MODULES, TUNNEL VISORS, AND 5-INCH LOUVERED BACK PLATE WITH 3-INCH RETROREFLECTIVITY MOUNTED ON MAST ARMS WITH ASTRO-BRACKETS	10
FURNISH AND INSTALL ONE-WAY 5-SECTION 12-INCH TRAFFIC SIGNAL HEADS, WITH LED MODULES, TUNNEL VISORS, AND 5-INCH LOUVERED BACK PLATE WITH 3-INCH RETROREFLECTIVITY MOUNTED ON MAST ARMS WITH ASTRO-BRACKETS	2
FURNISH AND INSTALL ONE-WAY 3-SECTION 12-INCH TRAFFIC SIGNAL HEADS, WITH LED MODULES, TUNNEL VISORS, AND 5-INCH LOUVERED BACK PLATE WITH 3-INCH RETROREFLECTIVITY MOUNTED ON MAST ARM UPRIGHTS WITH BRACKETS	3
FURNISH AND INSTALL ONE-WAY 3-SECTION 12-INCH TRAFFIC SIGNAL HEADS, WITH LED MODULES, TUNNEL VISORS, AND 5-INCH LOUVERED BACK PLATE WITH 3-INCH RETROREFLECTIVITY MOUNTED ON PEDESTAL POLES WITH BRACKETS	5
FURNISH AND INSTALL ONE-WAY, 16X18-INCH LED SIDE OF POLE MOUNTED COUNTDOWN PEDESTRIAN SIGNAL HEAD	5
FURNISH AND INSTALL ONE-WAY, 16X18-INCH LED TOP OF POST MOUNTED COUNTDOWN PEDESTRIAN SIGNAL HEAD	5
FURNISH AND INSTALL ADA COMPLIANT ACCESSIBLE PEDESTRIAN SIGNAL (APS) BUTTON WITH 9'X15' RIO-3E INFORMATIONAL SIGN	10
FURNISH AND INSTALL 4-CHANNEL PREEMPTION PHASE SELECTOR	2
FURNISH AND INSTALL LIGHT-BASED PREEMPTION RECEIVERS WITH DETECTOR CABLE	6
FURNISH AND INSTALL PREEMPTION CONFIRMATION RED STROBE WITH CABLE	3
FURNISH AND INSTALL 19-INCH 1RU FIBER OPTIC 12-POSITION PATCH PANEL WITH PIGTAILS	1
FURNISH AND INSTALL ENVIRONMENTALLY HARDENED FIBER OPTIC ETHERNET SWITCH	1
FURNISH AND INSTALL MAST ARM MOUNTED SIGNS	14
FURNISH AND INSTALL NEW SIGNAL CABLE	-
IMPLEMENT LOCAL AND SYSTEM SIGNAL TIMINGS	-

THE LISTED QUANTITIES ARE APPROXIMATE AND ARE FURNISHED FOR INFORMATION ONLY.

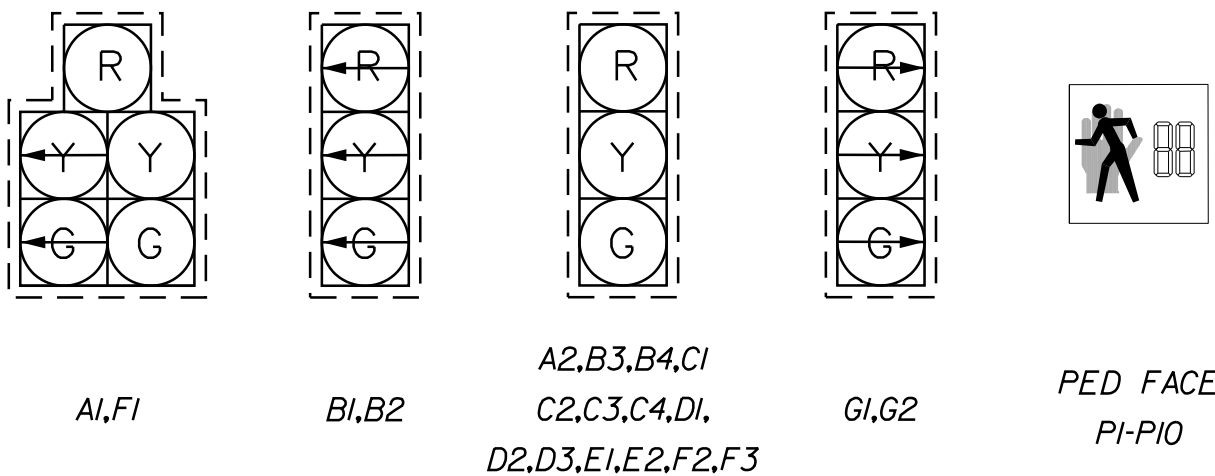
DETECTOR SCHEDULE

DETECTOR ZONE NO.	LOCATION	φ CALLED	φ EXT.	MODE A-ADVANCE B-STOPLINE	DELAY TIME	EXT. TIME
①	MAIN ST WB LEFT	1	1	B	-	-
②	MAIN ST WB THRU-RIGHT	6	6	B	-	-
③	MAIN ST WB LEFT	6	6	B	-	-
④	MAIN ST WB THRU	6	6	B	-	-
⑤	MAIN ST EB THRU-RIGHT	2	2	B	-	-
⑥	MAIN ST EB LEFT-THRU	5	5	B	-	-
⑦	WATER ST NB LEFT-THRU	4	4	B	-	-
⑧	WATER ST NB RIGHT	4	4	B	5	-
⑨	MILL DRIVE SB LEFT-THRU	4	4	B	-	-
⑩	MILL DRIVE SB RIGHT	4	4	B	5	-
⑪	HILL ST NB RIGHT	5	5	B	5	-

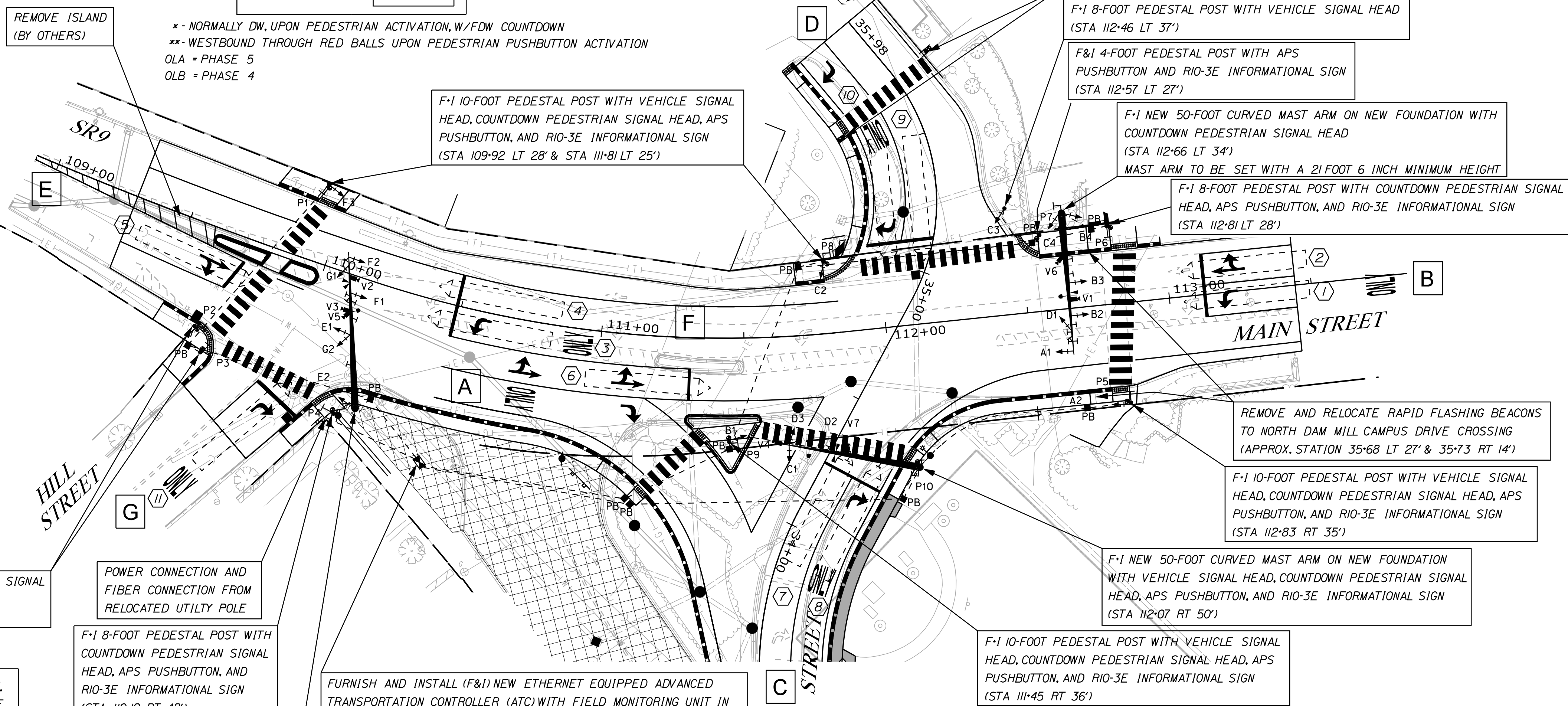
PHASE DIAGRAM



PROPOSED INDICATIONS



NOTE:
ALL INDICATIONS SHALL BE 12' LIGHT EMITTING DIODES (LED'S) WITH 5" LOUVERED RETROREFLECTIVE BACKPLATES



LIST OF WORK ITEMS

EQUIPMENT AND WORK ITEMS xxx.yyyz	QUANTITY
FURNISH AND INSTALL PRECAST CONCRETE JUNCTION BOX (ITEM 626.11)	10 EA
FURNISH AND INSTALL (3-INCH) NON-METALLIC CONDUIT (ITEM 626.22)	435 LF
FURNISH AND INSTALL NON-METALLIC UNDER PAVEMENT CONDUIT (SCHEDULE 80 OR GREATER) (ITEM 626.251)	455 LF
FURNISH AND INSTALL NON-METALLIC CONDUIT, CONCRETE ENCASED (ITEM 626.221)	40 LF
FURNISH AND INSTALL CONTROLLER CABINET FOUNDATION (ITEM 626.35)	1 EA
FURNISH AND INSTALL 24-INCH DIAMETER FOUNDATION (ITEM 626.421)	84 LF
FURNISH AND INSTALL 60-IN DIAMETER FOUNDATIONS (ITEM 626.48)	37 LF
FURNISH AND INSTALL TRAFFIC CONTROL SYSTEM (ITEM 643.81)	1 LS
FURNISH AND INSTALL VIDEO DETECTION SYSTEM FOR 7 APPROACHES, COMPLETE (ITEM 643.83)	1 LS
FURNISH AND INSTALL 50' CURVED MAST ARM POLE (ITEM 643.91)	2 EA
FURNISH AND INSTALL 55' CURVED MAST ARM POLE (ITEM 643.91)	1 EA
FURNISH AND INSTALL 4-FOOT PEDESTAL POLE (ITEM 643.92)	1 EA
FURNISH AND INSTALL 8-FOOT PEDESTAL POLE (ITEM 643.92)	4 EA
FURNISH AND INSTALL 10-FOOT PEDESTAL POLE (ITEM 643.92)	5 EA
FURNISH AND INSTALL 15-FOOT PEDESTAL POLE (RRFB) (ITEM 643.92)	2 EA
FURNISH AND INSTALL LED BLANK OUT SIGN (ITEM 645.512)	2 EA

THE LISTED QUANTITIES ARE APPROXIMATE AND ARE FURNISHED FOR INFORMATION ONLY.

STRUCTURE LIST

STRUCTURE	DESCRIPTION	FOUNDATION
(A-C)	CONTROLLER CABINET	L48"xW36"xH48"
(A-M)	50' MAST ARM	TBD
(A-P)	10' PEDESTAL POLE	24" DIAMETER
(B-M)	50' MAST ARM	TBD
(B-P)	8' PEDESTAL POLE	24" DIAMETER
(B-P2)	10' PEDESTAL POLE	24" DIAMETER
(B-P3)	4' PEDESTAL POLE	24" DIAMETER
(B-P4)	PEDESTAL POLE (RELOCATED/NEW)	24" DIAMETER
(C-P)	10' PEDESTAL POLE	24" DIAMETER
(C-P2)	PEDESTAL POLE (RELOCATED/NEW)	24" DIAMETER
(D-P)	10' PEDESTAL POLE	24" DIAMETER
(E-M)	55' MAST ARM	TBD
(E-P)	8' PEDESTAL POLE	24" DIAMETER
(G-P)	10' PEDESTAL POLE	24" DIAMETER
(H-P)	8' PEDESTAL POLE	24" DIAMETER
(H-P2)	8' PEDESTAL POLE	24" DIAMETER

SIGNAL TIMING SCHEDULE

NEMA RING AND BARRIER DIAGRAM

ITEM / PHASE	1 2 4 6 5					
	φ 1	φ 2	φ 3	φ 4	φ 5	φ 6
MOVEMENT	B (LT)	A, E	-	C, D	F, G	B, F
MINIMUM INITIAL	5	7	-	5	5	7
PASSAGE TIME	3.0	3.0	-	3.0	3.0	3.0
MAXIMUM 1	30	50	-	25	20	50
MAXIMUM 2	-	-	-	-	-	-
YELLOW	3.5	3.5	-	3.5	3.5	3.5
ALL RED	3.0	3.0	-	2.5	3.0	3.0
PED WALK	-	5.0	-	5.0	-	5.0
PED CLEAR	-	14.0	-	15.0	-	14.0
RECALL	OFF	SOFT	-	OFF	OFF	SOFT
DETECTOR	PR	PR	-	PR	PR	PR
PRE-EMPT PRIORITY	3	4	-	6	5	3
FLASH	FR	FY	-	FR	FR	FY
DUAL ENTRY	OFF	ON	-	OFF	OFF	ON

NOTES: S = SOFT RECALL = YELLOW
O = RECALL OFF R = RED
PR = PRESENCE D = DARK

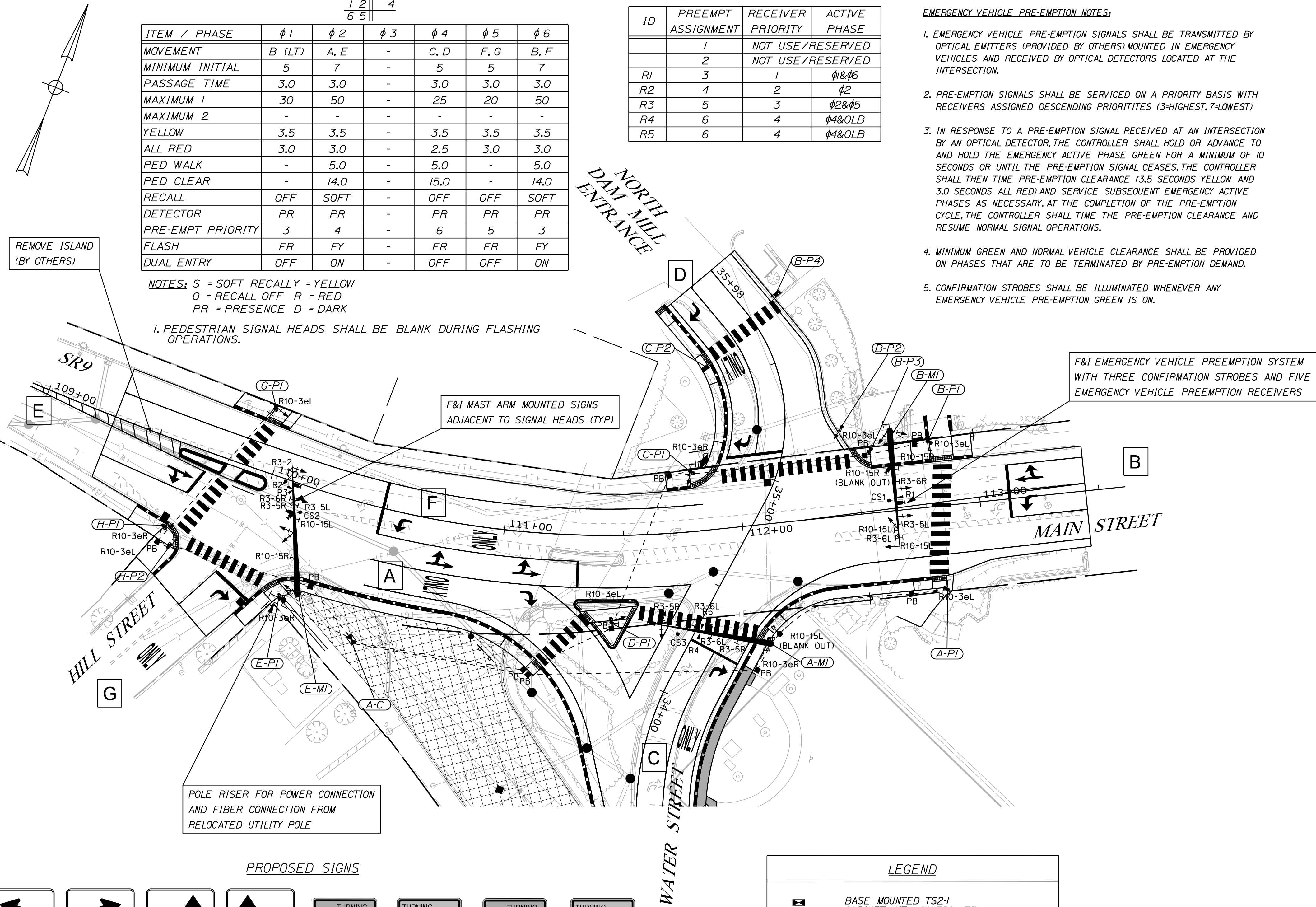
1. PEDESTRIAN SIGNAL HEADS SHALL BE BLANK DURING FLASHING OPERATIONS.

EMERGENCY VEHICLE PRE-EMPTION OPERATION

ID	PREEMPT ASSIGNMENT	RECEIVER PRIORITY	ACTIVE PHASE
	1	NOT USE/RESERVED	
	2	NOT USE/RESERVED	
R1	3	1	φ8φ6
R2	4	2	φ2
R3	5	3	φ2&φ5
R4	6	4	φ4&OLB
R5	6	4	φ4&OLB

EMERGENCY VEHICLE PRE-EMPTION NOTES:

- EMERGENCY VEHICLE PRE-EMPTION SIGNALS SHALL BE TRANSMITTED BY OPTICAL EMITTERS (PROVIDED BY OTHERS) MOUNTED IN EMERGENCY VEHICLES AND RECEIVED BY OPTICAL DETECTORS LOCATED AT THE INTERSECTION.
- PRE-EMPTION SIGNALS SHALL BE SERVICED ON A PRIORITY BASIS WITH RECEIVERS ASSIGNED DESCENDING PRIORITIES (3+HIGHEST, 7+LOWEST)
- IN RESPONSE TO A PRE-EMPTION SIGNAL RECEIVED AT AN INTERSECTION BY AN OPTICAL DETECTOR, THE CONTROLLER SHALL HOLD OR ADVANCE TO AND HOLD THE EMERGENCY ACTIVE PHASE GREEN FOR A MINIMUM OF 10 SECONDS OR UNTIL THE PRE-EMPTION SIGNAL CEASES. THE CONTROLLER SHALL THEN TIME PRE-EMPTION CLEARANCE (3.5 SECONDS YELLOW AND 3.0 SECONDS ALL RED) AND SERVICE SUBSEQUENT EMERGENCY ACTIVE PHASES AS NECESSARY. AT THE COMPLETION OF THE PRE-EMPTION CYCLE, THE CONTROLLER SHALL TIME THE PRE-EMPTION CLEARANCE AND RESUME NORMAL SIGNAL OPERATIONS.
- MINIMUM GREEN AND NORMAL VEHICLE CLEARANCE SHALL BE PROVIDED ON PHASES THAT ARE TO BE TERMINATED BY PRE-EMPTION DEMAND.
- CONFIRMATION STROBES SHALL BE ILLUMINATED WHENEVER ANY EMERGENCY VEHICLE PRE-EMPTION GREEN IS ON.



PROPOSED SIGNS

ONLY

ONLY

R3-5L
30"x36"
2-PROPOSED

R3-5R
30"x36"
3-PROPOSED

R3-6L
30"x36"
2-PROPOSED

R3-6R
30"x36"
2-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

R10-15R
(BLANK OUT)
30x30
1-PROPOSED

R10-15L
30x30
2-PROPOSED

R10-15R
30x30
2-PROPOSED

R10-15L
(BLANK OUT)
30x30
1-PROPOSED

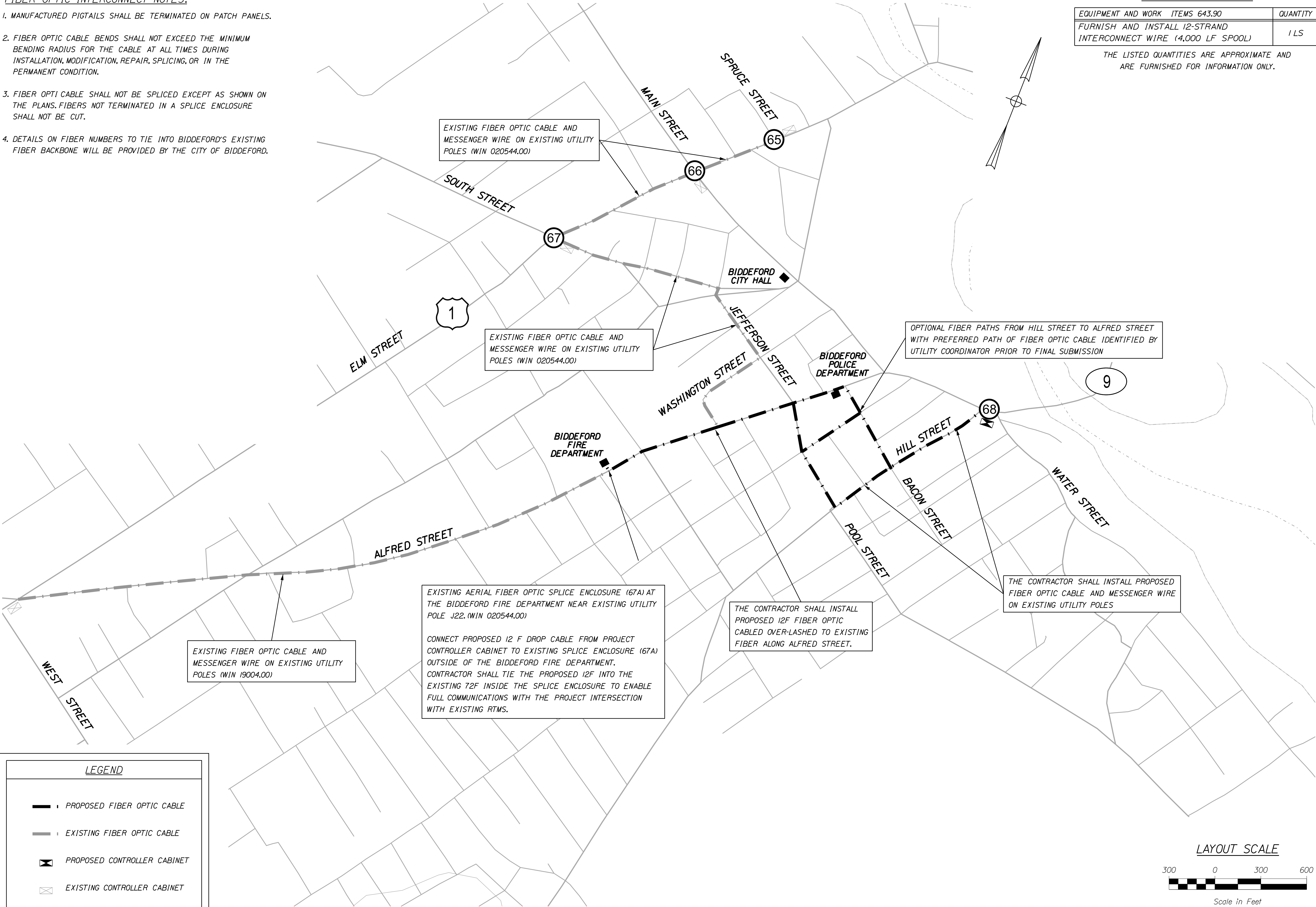
R10-15R

- FIBER OPTIC INTERCONNECT NOTES:
1. MANUFACTURED PIGTAILS SHALL BE TERMINATED ON PATCH PANELS.
 2. FIBER OPTIC CABLE BENDS SHALL NOT EXCEED THE MINIMUM BENDING RADIUS FOR THE CABLE AT ALL TIMES DURING INSTALLATION, MODIFICATION, REPAIR, SPLICING, OR IN THE PERMANENT CONDITION.
 3. FIBER OPTI CABLE SHALL NOT BE SPLICED EXCEPT AS SHOWN ON THE PLANS. FIBERS NOT TERMINATED IN A SPLICE ENCLOSURE SHALL NOT BE CUT.
 4. DETAILS ON FIBER NUMBERS TO TIE INTO BIDDEFORD'S EXISTING FIBER BACKBONE WILL BE PROVIDED BY THE CITY OF BIDDEFORD.

LIST OF MAJOR ITEMS

EQUIPMENT AND WORK	ITEMS	643.90	QUANTITY
FURNISH AND INSTALL 12-STRAND INTERCONNECT WIRE (4,000 LF SPOOL)			1 LS

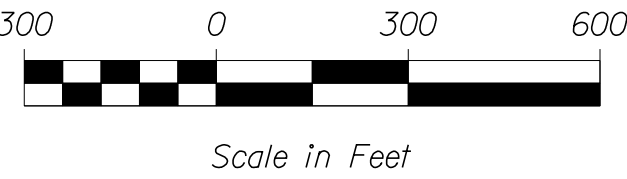
THE LISTED QUANTITIES ARE APPROXIMATE AND ARE FURNISHED FOR INFORMATION ONLY.



LEGEND

- PROPOSED FIBER OPTIC CABLE
- EXISTING FIBER OPTIC CABLE
- PROPOSED CONTROLLER CABINET
- EXISTING CONTROLLER CABINET

LAYOUT SCALE



STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

STP-1857(400)

WIN 18574.00

HIGHWAY PLANS



PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	M.C.	JAR	12/21
CHECKED-REVIEWED	CMB	AC	12/21
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD

STATE ROUTE 9

INTERCONNECT PLAN

SHEET NUMBER

16

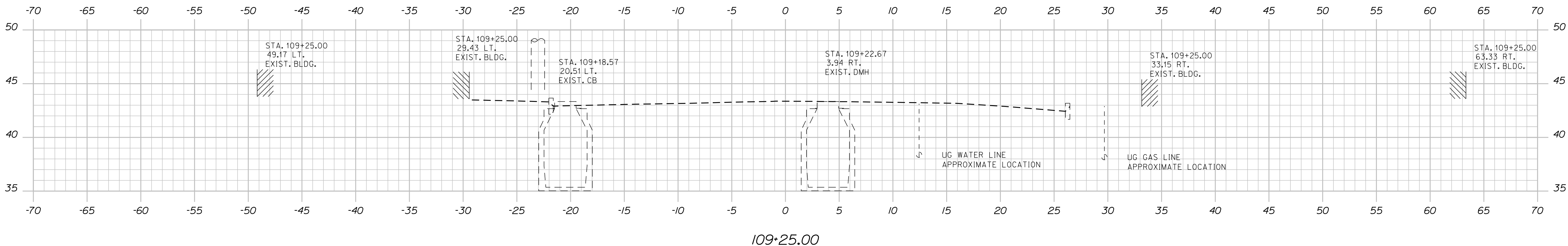
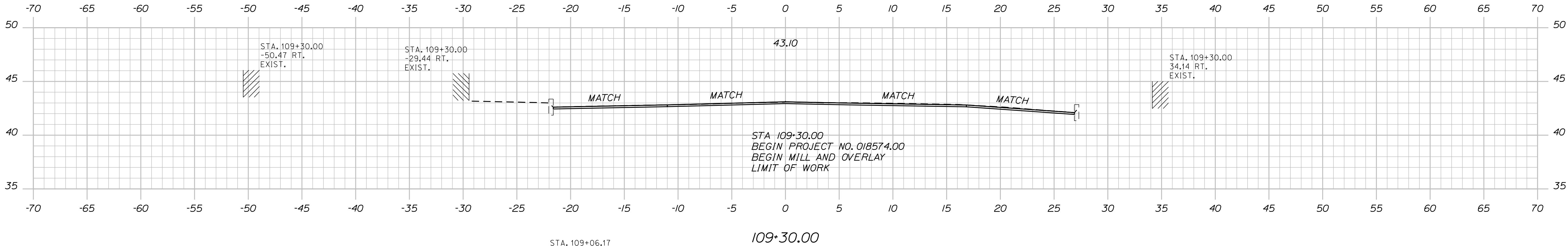
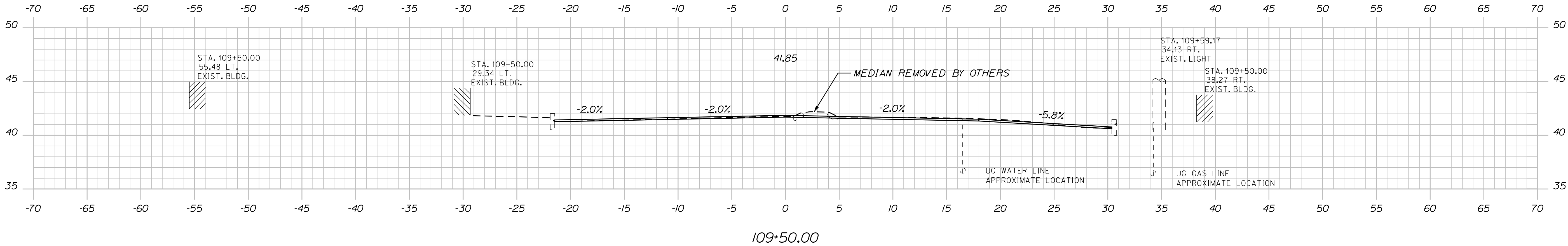
OF 32

Date:1/6/2022

Username: jomedavis

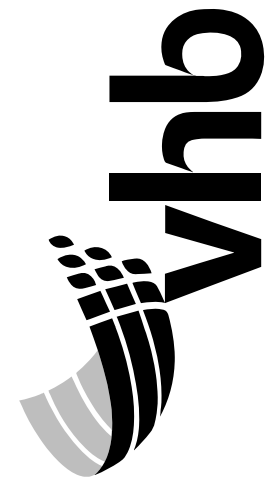
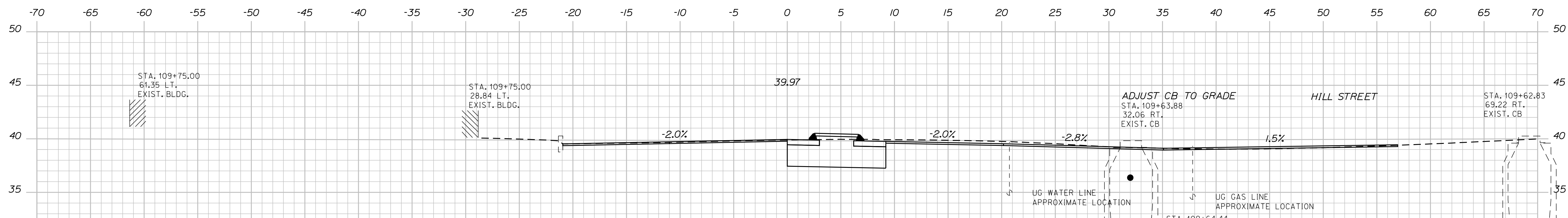
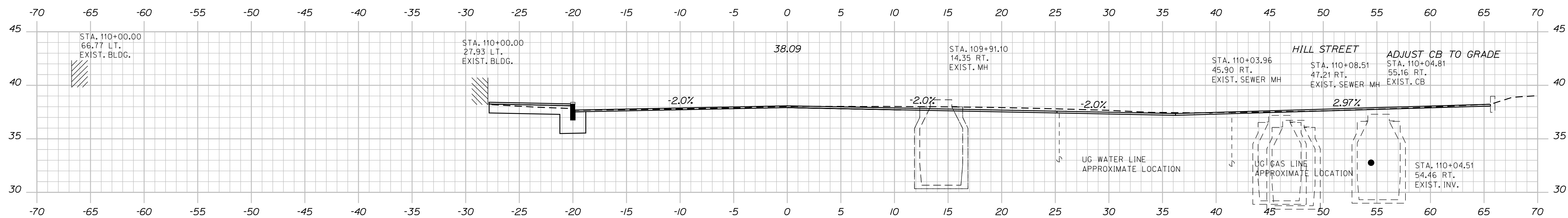
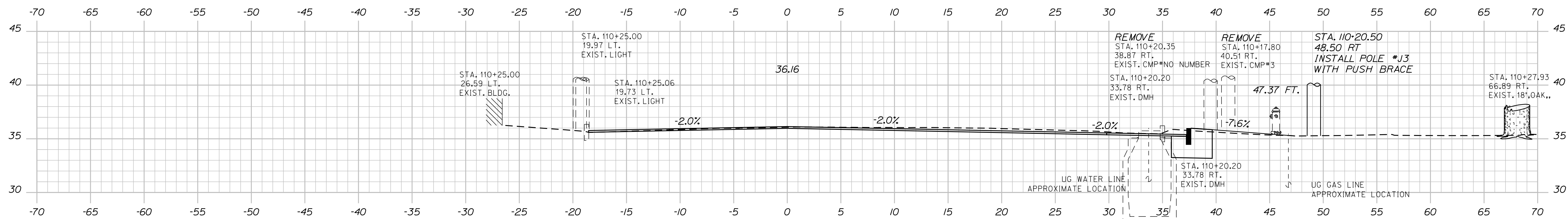
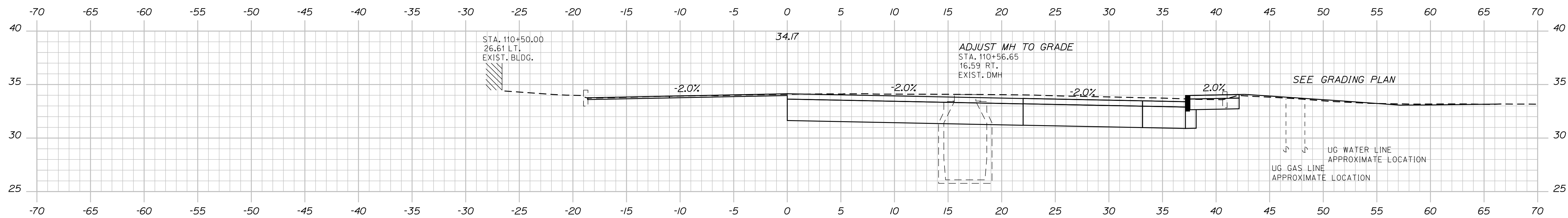
Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\Xsect_Main_St.dgn



PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	ABD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
STATE ROUTE 9
CROSS SECTIONS



PROJ. MANAGER	B. MEERZ	BY	DATE
DESIGN-DETAILED	ACC	JBD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGN-DETAILED2			
DESIGN-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
 STATE ROUTE 9
 CROSS SECTIONS

SHEET NUMBER

18

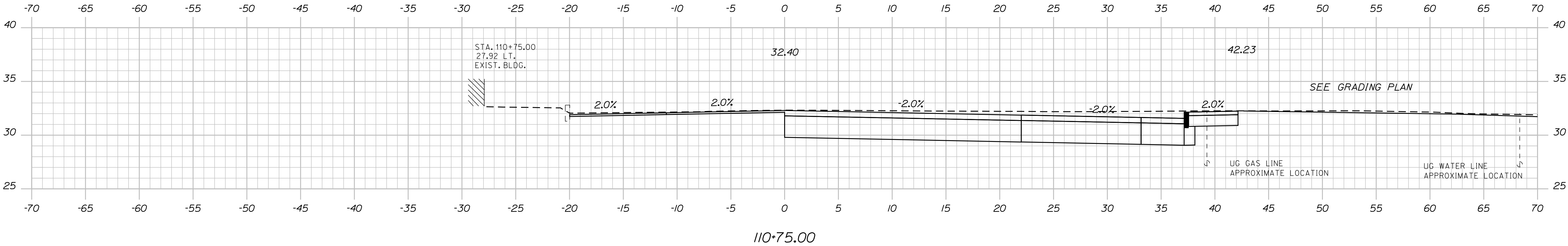
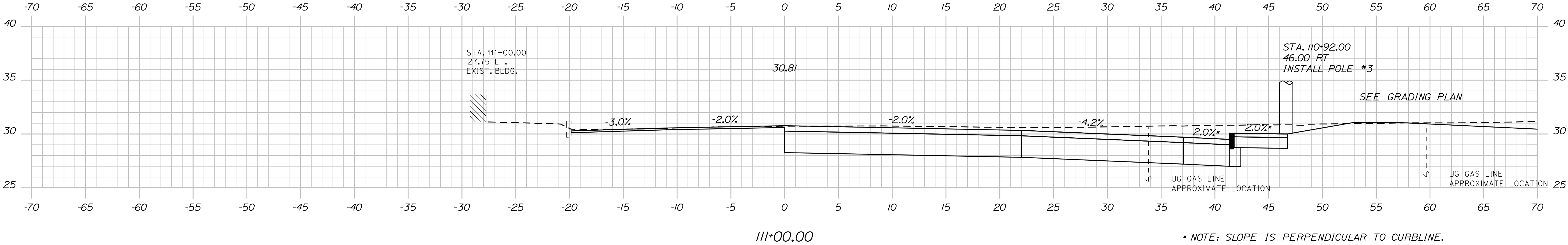
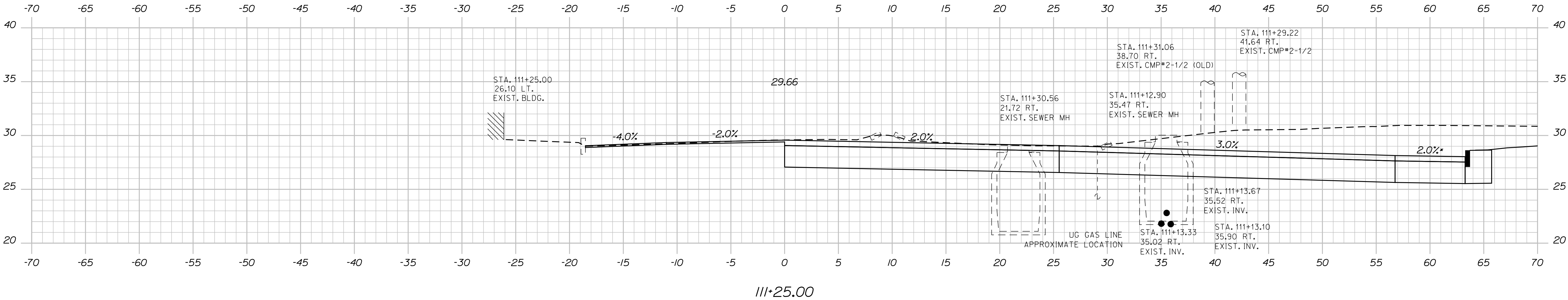
OF 32

Date:1/6/2022

Username: jomesdavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA_Xsect_Main_St.dgn



PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	AG	12/21
CHECKED-REVIEWED	ECF		12/21
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

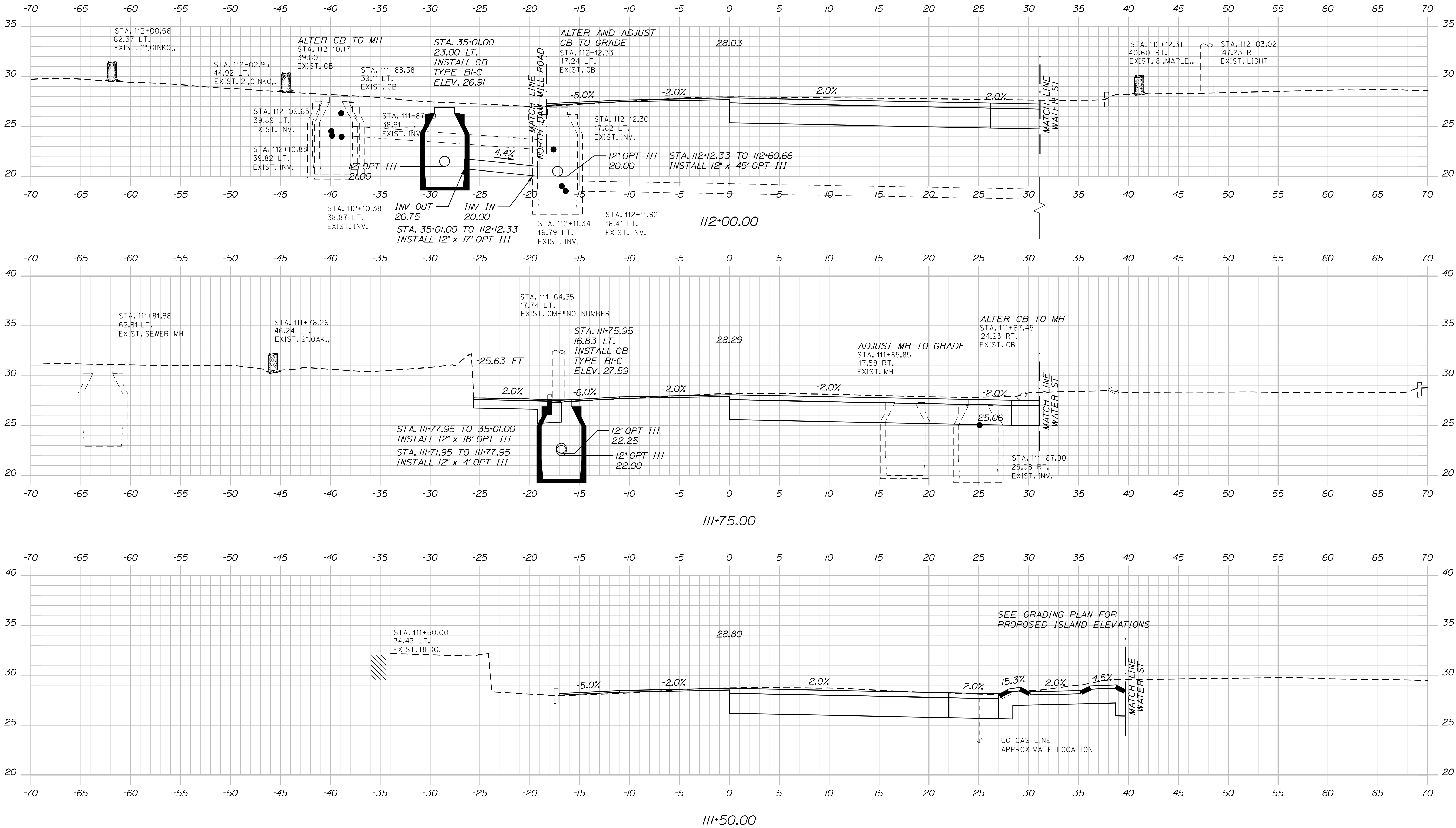
BIDDEFORD
STATE ROUTE 9
CROSS SECTIONS

Date:1/6/2022

Username: jomedavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\Xsect_Main_St.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1857(400)

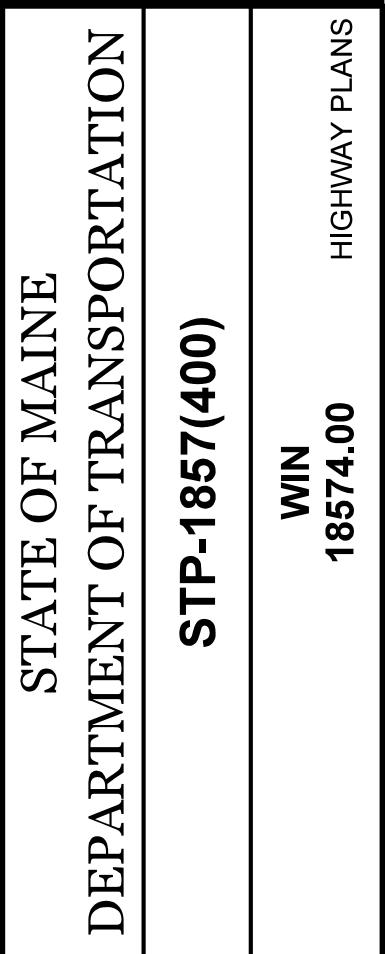
WIN
18574.00
HIGHWAY PLANS

PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	JRD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
STATE ROUTE 9

CROSS SECTIONS

SHEET NUMBER
20
OF 32



PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-Detailed	ACC	JBD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
 STATE ROUTE 9
 CROSS SECTIONS

SHEET NUMBER

21

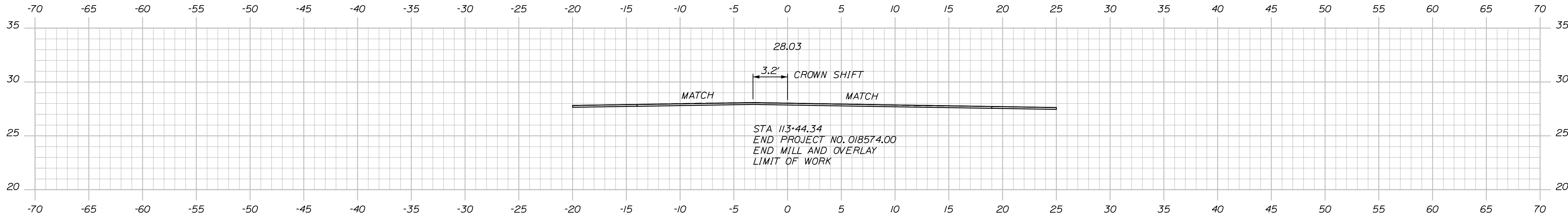
OF 32

Date:1/6/2022

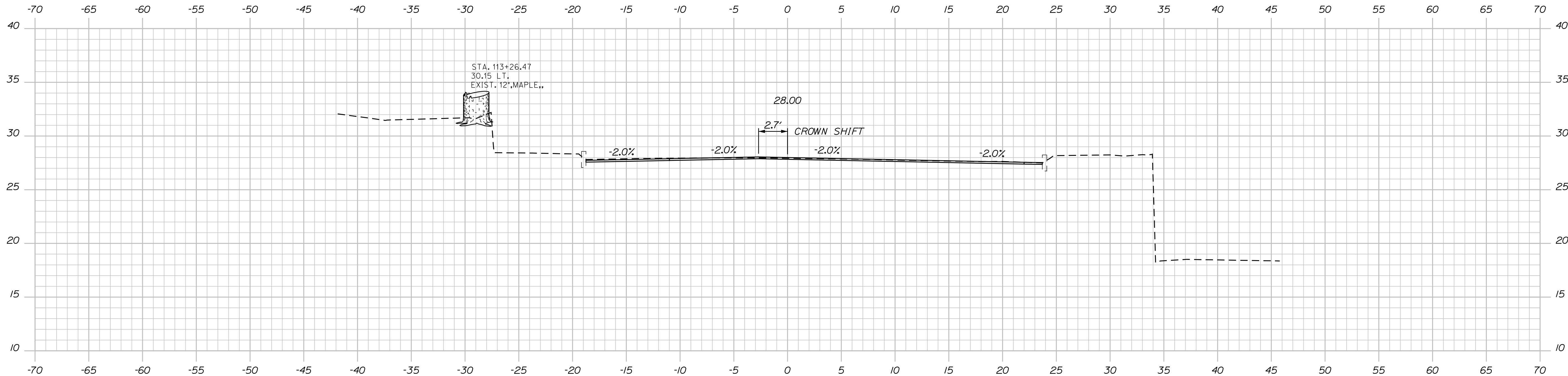
Username: jomedavis

Division: HIGHWAY

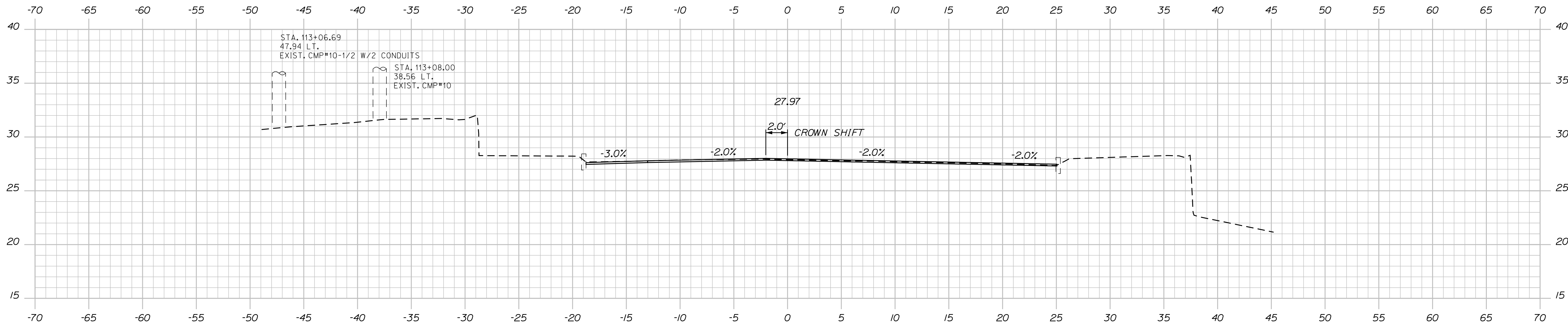
Filename: ... \HIGHWAY\MSTA\Xsect_Main_St.dgn



113+44.34



113+25.00



113+00.00



PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	ABD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

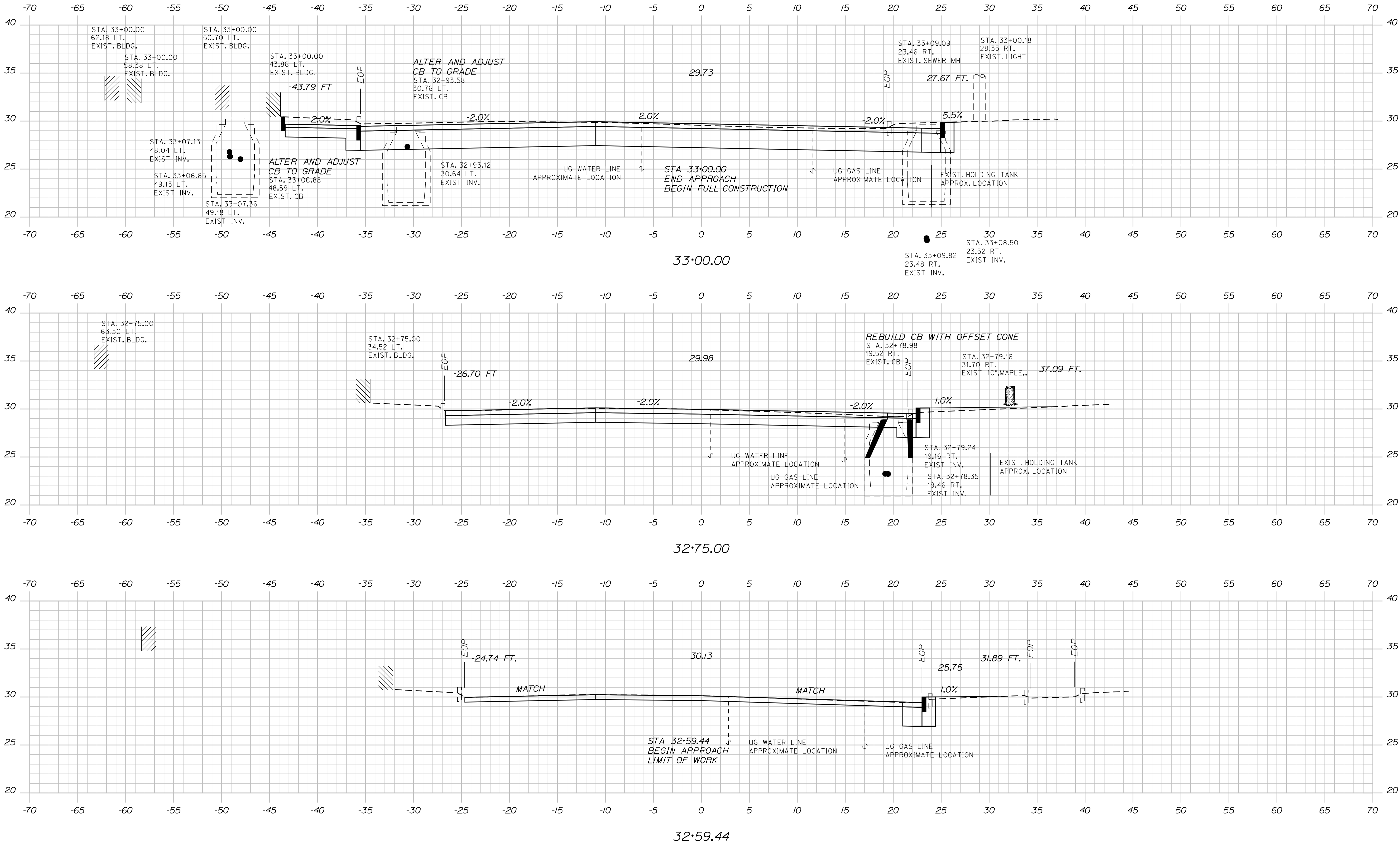
BIDDEFORD
STATE ROUTE 9
CROSS SECTIONS

Date:1/6/2022

Username: jomedavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\Xsect_WaterSt.dgn



PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ECF	AGC	12/20
CHECKED-REVIEWED	AG		
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

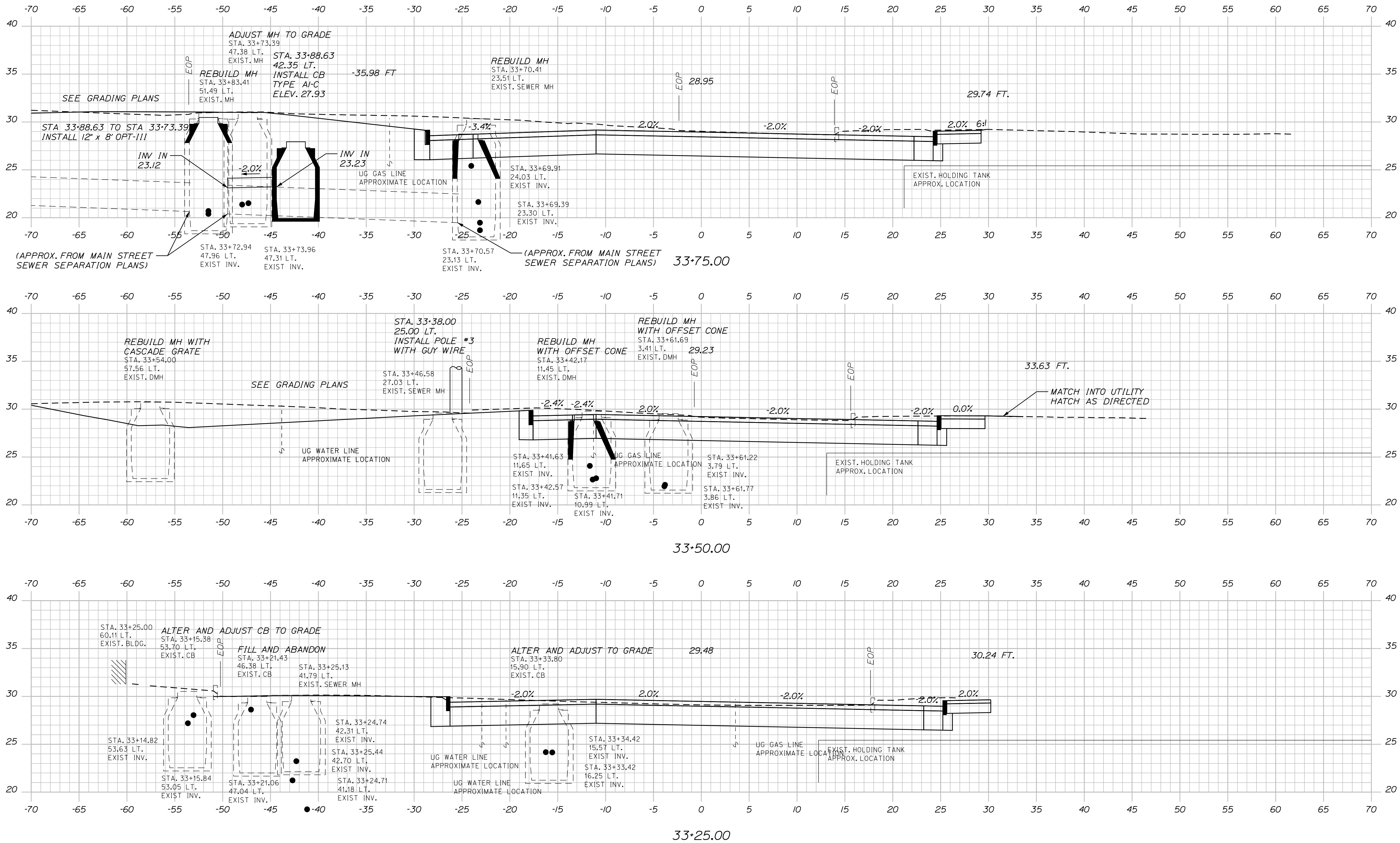
BIDDEFORD
WATER STREET
CROSS SECTIONS

Date:1/6/2022

Username: jonesdavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTAXsect_WaterSt.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1857(400)

WIN
18574.00
HIGHWAY PLANS

PROJ. MANAGER	DESIGN-DETAILED	CHECKED-REVIEWED	DATE	BY	B. KEEZER	DATE	BY
	ECF	AG	12/20	AGC			
	DESIGN-DETAILED						
	DESIGN-DETAILED						
	REVISIONS 1						
	REVISIONS 2						
	REVISIONS 3						
	REVISIONS 4						
	FIELD CHANGES						

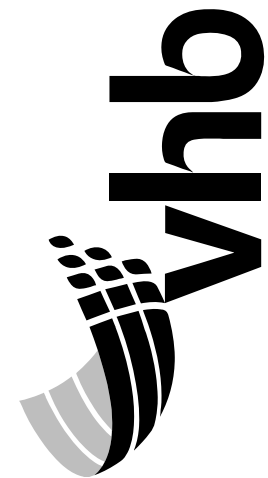
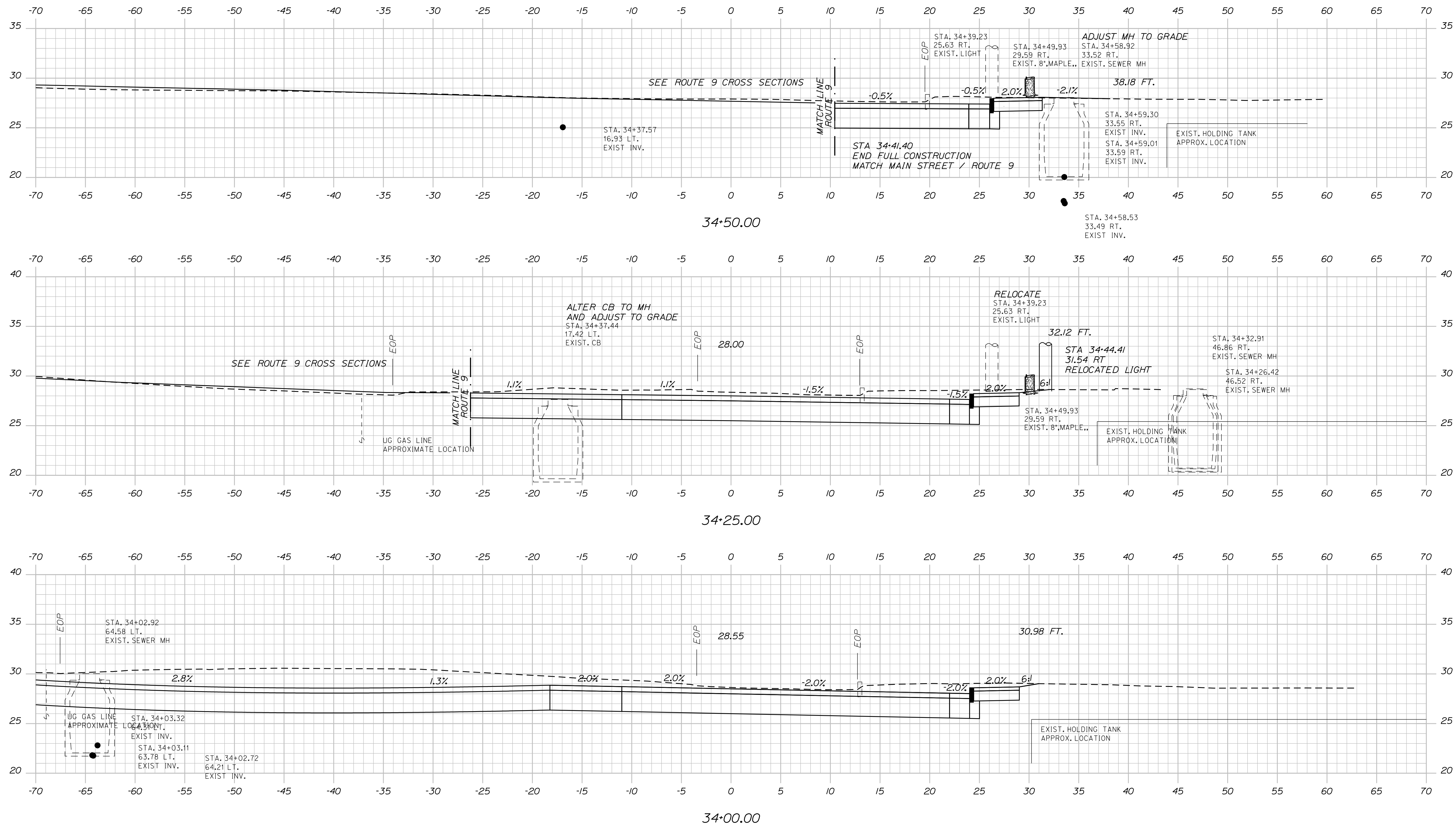
BIDDEFORD
WATER STREET

CROSS SECTIONS

SHEET NUMBER
24
OF 39

Sta. 33+25.00 to Sta. 33+75.00 57

Filename: ... \HIGHWAY\MSTA\Xsect_WaterSt.dgn



PROJ. MANAGER	B. KEZZER	BY	DATE
DESIGN-DETAILED	ECF	AGC	12/20
CHECKED-REVIEWED	AG		
DESIGN-DETAILED2			
DESIGN-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

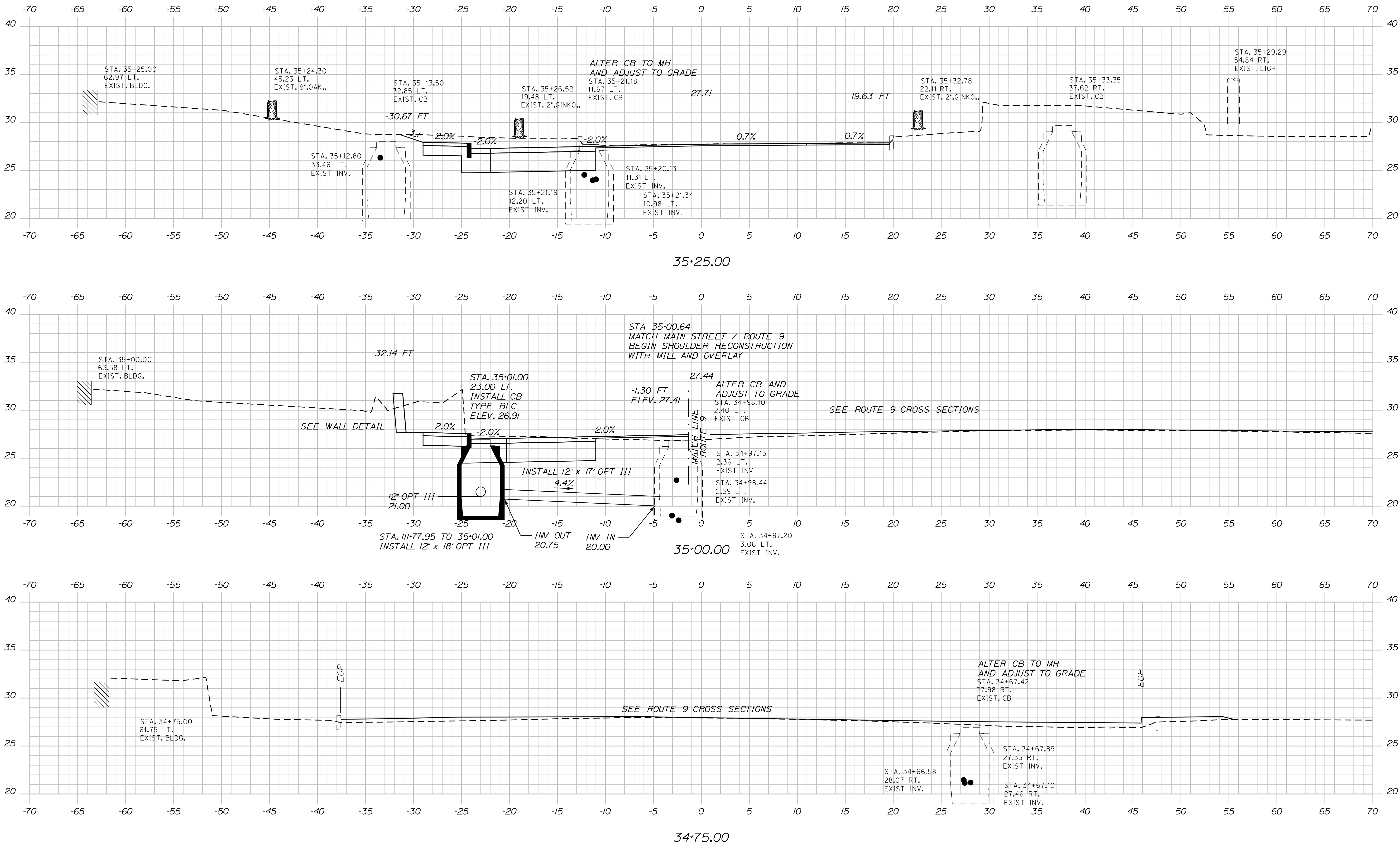
BIDDEFORD
 WATER STREET
 CROSS SECTIONS

Date:1/6/2022

Username: jomesdavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\Xsect_WaterSt.dgn



PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ECF	AGC	12/20
CHECKED-REVIEWED	AG		
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

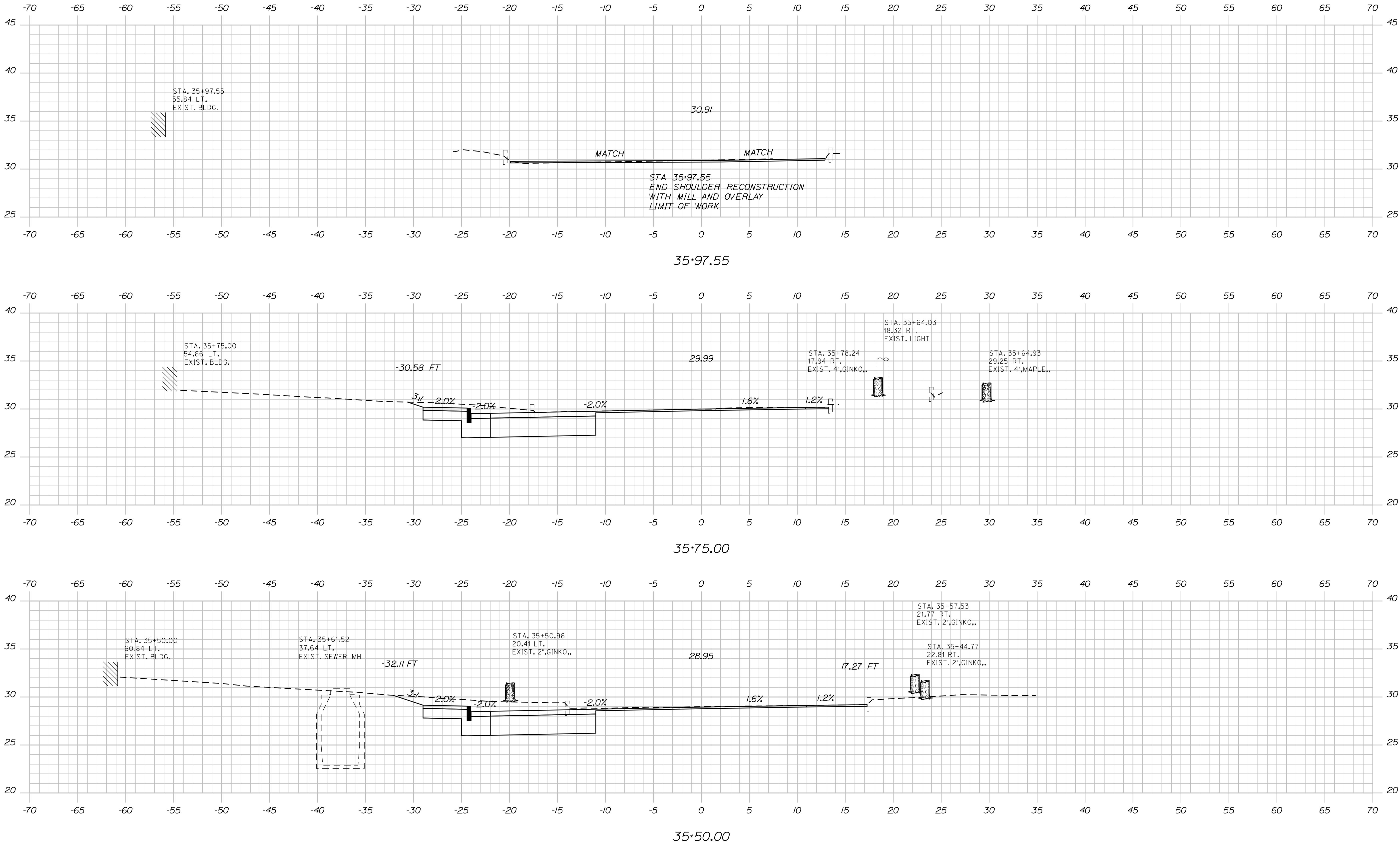
BIDDEFORD
WATER STREET
CROSS SECTIONS

Date:1/6/2022

Username: jomedavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\Xsect_WaterSt.dgn



PROJ. MANAGER	BY	DATE
B. KEEZER	AGC	12/20
DESIGN-DETAILED	ECF	
CHECKED-REVIEWED	AG	
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BIDDEFORD
WATER STREET
CROSS SECTIONS

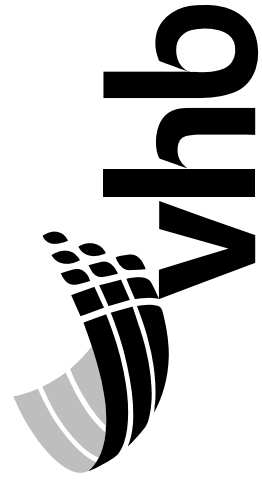
[illegible]

SHSB - Text Dimensions Shall Conform to "Standard Highway Signs Book" - 2012 Edition.

[illegible]

SHSB - Text Dimensions Shall Conform to "Standard Highway Signs Book" - 2012 Edition.

PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGNED-TAILED	ACC	JRD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGNED-TAILED2			
DESIGNS-TAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

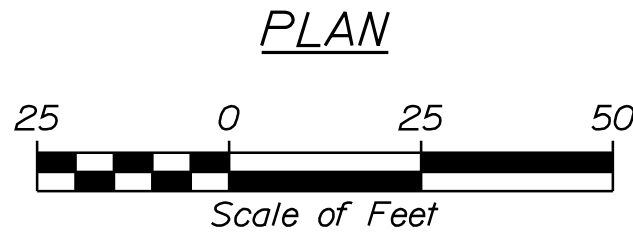
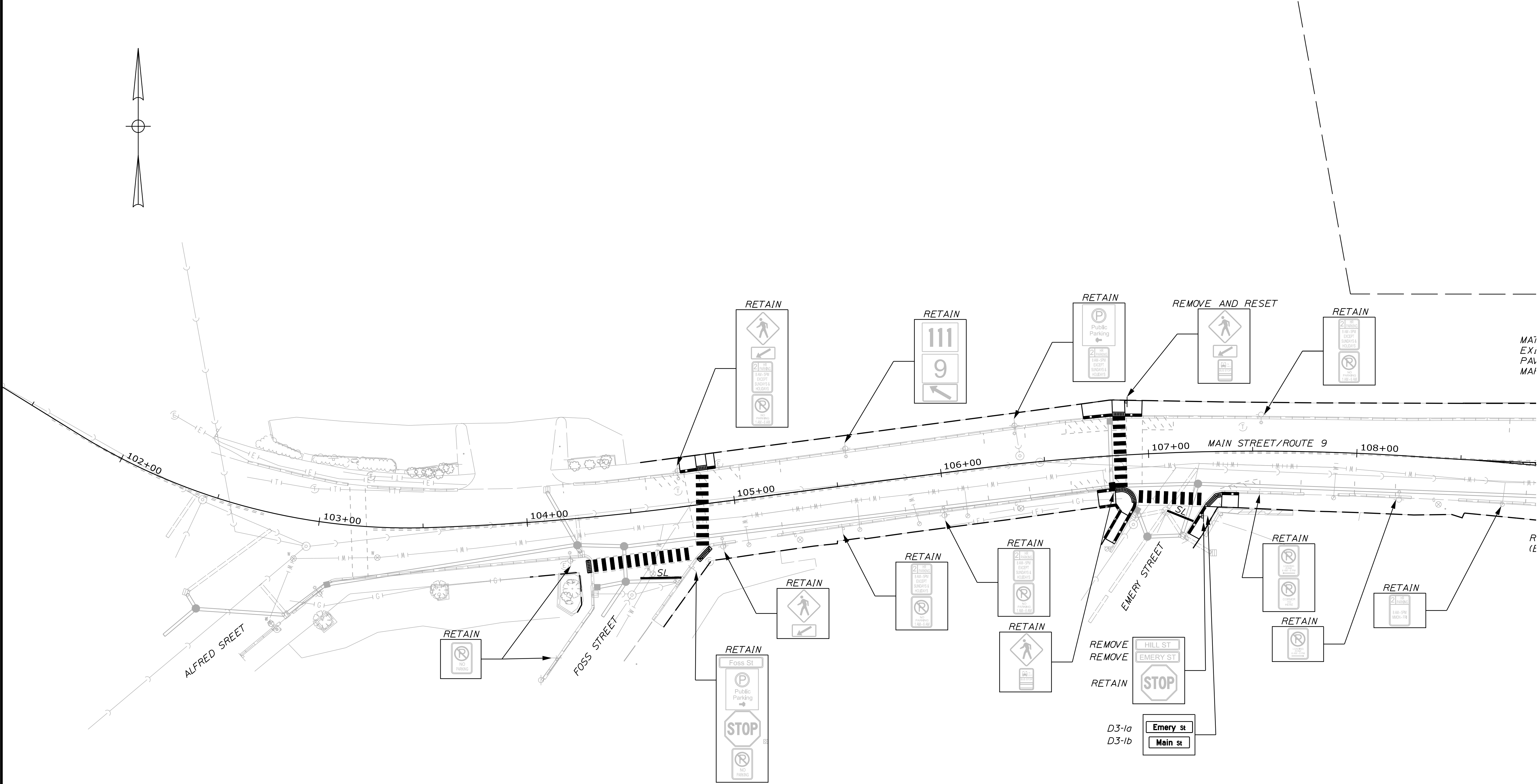


STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

STP-1857(400)

WIN
18574.00



SIGNING AND PAVEMENT MARKING LEGEND									
SWSL - SINGLE WHITE SOLID LINE									
SWBL - SINGLE WHITE BROKEN LINE (10' LINE 30' SPACE)									
SYSL - SINGLE YELLOW SOLID LINE									
2SYL - DOUBLE YELLOW SOLID LINE									
SL - SINGLE SOLID LINE - STOPLINE (12")									
DWLL - DOTTED WHITE LANE LINE WITH TAPE (3' LINE 9' SPACE)									
↶ ↷ - WHITE PAVEMENT MARKING SYMBOLS (SEE NOTE 5)									



PROJ. MANAGER	DATE	BY	B. KEEZER
DESIGN-DETAILED	12/21	JRD	ACC
CHECKED-REVIEWED	12/21	AC	ECF
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
STATE ROUTE 9

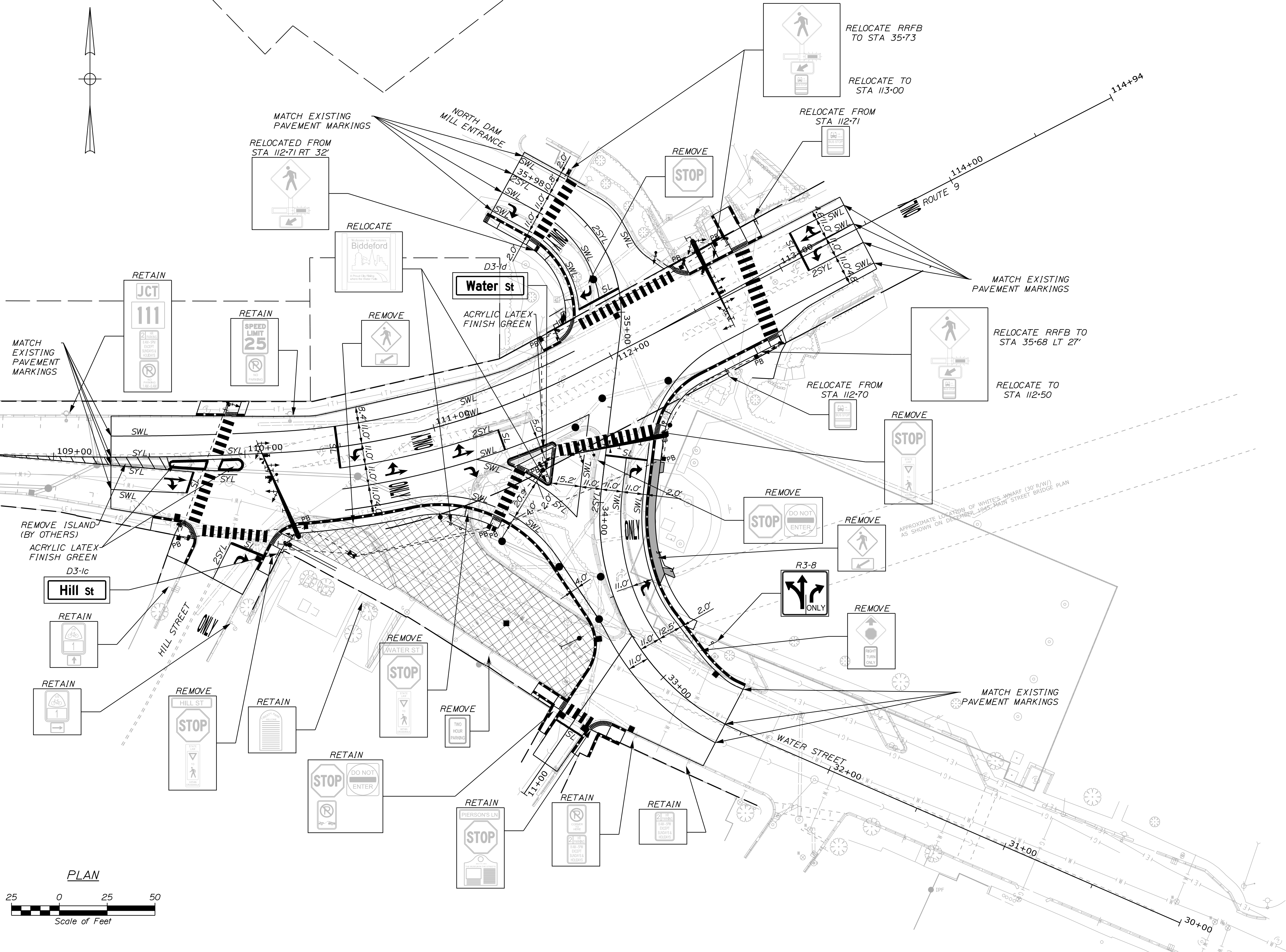
SIGNING AND STRIPING
PLANS (1 OF 2)

Date:1/6/2022

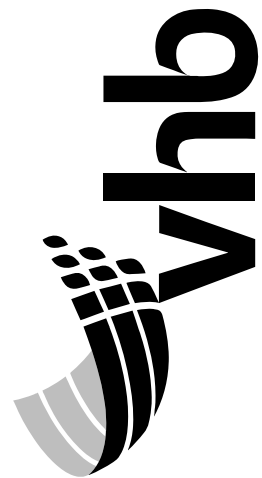
Username: jomedavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\037_SSPlan2.dgn

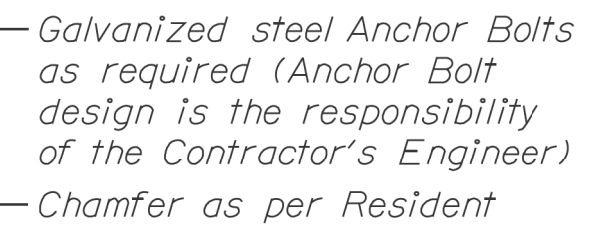
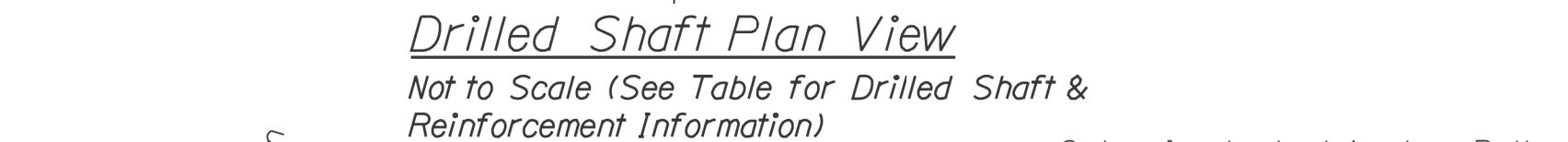


PLAN



PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	JRD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
STATE ROUTE 9
SIGNING AND STRIPING
PLANS (2 OF 2)



1. All reinforcing steel is to be grade 60 and conform to MaineDOT Standard Specification requirements along with any project specific Supplementals or Special Provisions.

3. Should there be a discrepancy between these Details and actual observed field conditions report it to the Resident immediately.

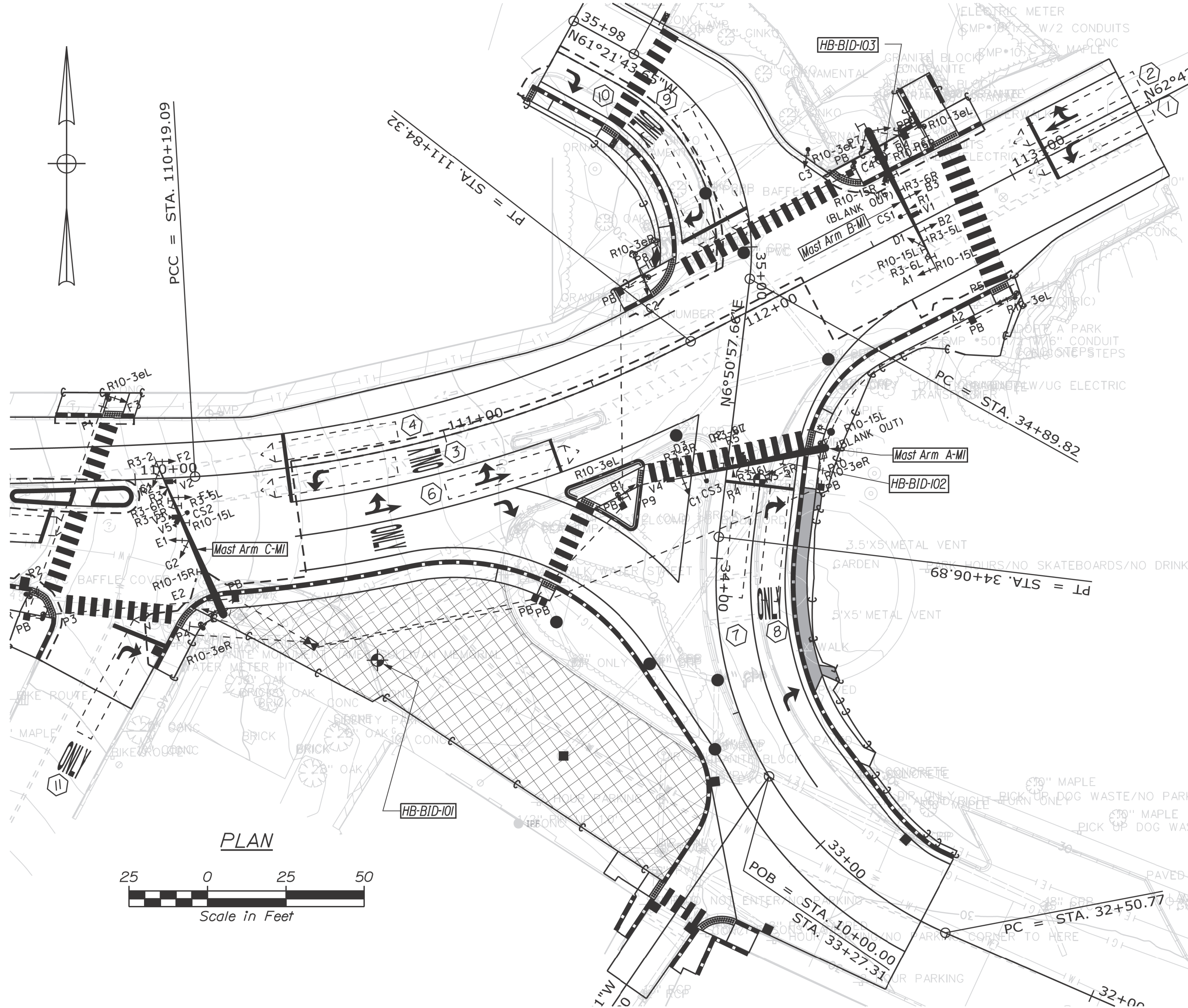
5. Concrete to be Class LP with $f'_c = 5,000$ PSI.

		X Diameter (feet)	L Length (feet)	R1 Longitudinal Rebars Quantity	R2 Longitudinal Rebars Size	S1 Spiral Rebars Size	Spiral Bar Spacing		
							D1 (in)	D2 (in)	D3 (in)
Mast Arm	Location						0 to 3 ft	3 ft to 2L/3 ft	2L/3 ft to tip
A-M1	Water Street	5.0	15.0	27	#10	#5	4	12	12
B-M1	Main Street	5.0	11.5	27	#10	#5	4	12	12
C-M1	Route 9	5.0	10.5	27	#10	#5	4	12	12

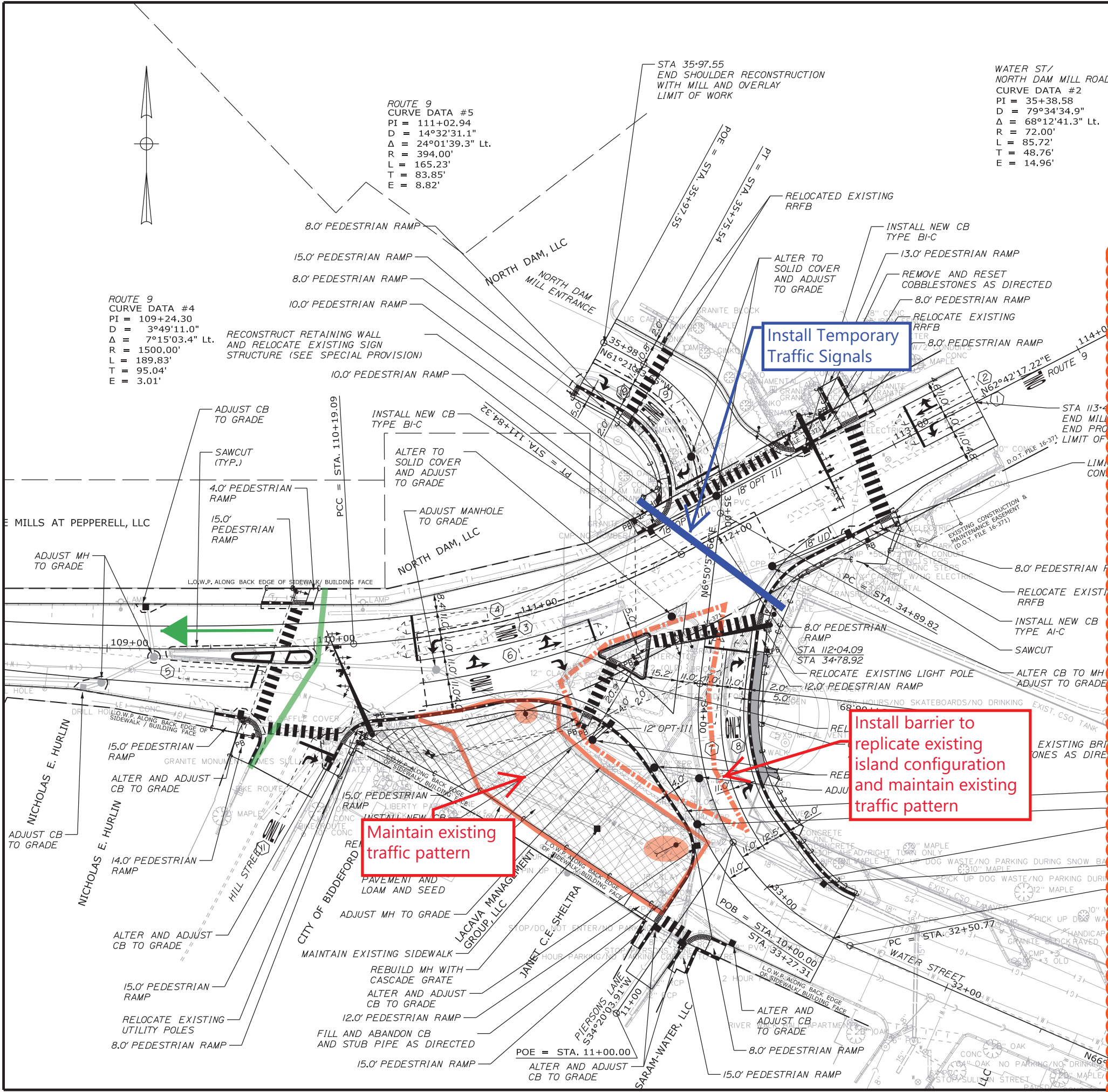
Maine Department of Transportation						Project: Route 9 and Kiefer Street Intersection Improvements Location: Biddeford, Maine		Boring No.: HB-BID-10
Soil/Bore Exploration Log US CUSTOMER UNITS								
Driller: MainDOT		Elevation (ft.): 32.0	WIN: 1857		Wiper: 10/000			5" Dia.
Operator: Douglas/Miles		Date: NA/D89			Sampler: Standard Sp			
Logged By: B. Wither		Rig Type: CME ASK			Hammer Mt./Fall: 140#/30"			
Date Start/Finish: 11/28/2018: 09:00-10:00		Drilling Method: Solid Stem Auger			Core Barrel: N/A			
Boring Location: 110466.2, 65.1 ±± ft.		Casing ID/OD: N/A			Water Level*: 9.5 ±± ft			
Homer Efficiency Factor: 0.928		Homer Type: Automatic ☒ Hydraulic ☐	Rigs & Settings ☐					
Penetration:		S = Rock Core Sample		L = Log Penetration Field Note (see notes)		In-situ Soil Pocket for cone test		
D = Split Spoon Sample		ISA = Solid Stem Auger		Auger = Low Vane Undrained Shear Strength (psi)		WC = Water Content		
M = Unconsolidated Split Spoon Sample		MSA = Motion Free Auger		SC = Recovered Compression Strength (ksi)		LS = Liquid Limit		
N = Thin Wall Tube Sample		RC = Roller Cone		Unconsolidated = Raw Soil Shear Strength		PL = Plastic Limit		
WP = Unconsolidated Thin Wall Tube Sample		HW = Height of Water Hammer Efficiency Factor = Rig Specific Actual Calibration Value		PS = Penetration Index		PE = Permeability		
V = Field Vane Shear Tests PP = Pore Pressure		RII = Weight or Ratio of Rate or Casing		SP = SP Unconsolidated Correlated Hammer Efficiency		C = Grain Size Analysis		
NA = Non-Available Data See Test Sheet		RII = Weight of the Rig		SE = Seismic Efficiency Factor (see notes)		C = Consolidation Test		
Sample Information								
Depth (ft.)	Sample No.	Pen./Obs. (in)	Sample Depth (ft.)	Block 1/4 In. Sample Length (feet) (12 in)	In-situ Penetration (lb/ft)	N ₆₀	Log Scale	Visual Description and Remarks
	10	24/10	1.00 ± 1.00	9/45/5/5	50	17		1.5" HMA, Brown, moist, dense. Gravelly fine to coarse SAND. Trace silt.
5	20	24/13	5.00 ± 1.00	1/1/2/3/5	3	5		Grav., wet, very loose. Fine to coarse SAND, some gravel, some clay.
10	30	24/24	10.00 ± 1.00	3/4/4/6	8	12		Gray, wet, medium stiff, clayey SILT, little fine sand.
Bottom								Bottom of Exploration at 12.0 feet below ground surface. NO REFUSE!
Identification lines represent approximate boundaries between soil types/transitions may be graded. *water level readings from file of records and under conditions stated. Groundwater fluctuations may occur due to conditions other than those presented by the file of records were made.								

Maine Department of Transportation										Project: Route 9 and Water Street Intersection Improvements		Boring No.: HB-8																																																																																			
Soil/Bore Exploration Log										Location: Eldersburg, Maine																																																																																					
US CUSTOMER UNITS										WINC		185																																																																																			
Driller:		MaineDOT		Elevation (ft.):		28.1		Auger (ft./min):		5" Dia.																																																																																					
Operator:		Daggett/Nillos		Datum:		NAVD88		Sampler:		Standard Sp																																																																																					
Quoted By:		B. Wilder		Rig Type:		CME 45C		Borehole Int./Fall:		1406/30"																																																																																					
Date Start/Finish:		11/28/2018; 10:00-11:00		Drilling Method:		Solid Stem Auger		Core Barrel:		N/A																																																																																					
Boring Location:		3426.6, 10.7, 44 Rt.		Casing (ft/min):		N/A		Water Level:		None Obs.																																																																																					
Header Efficiency Factor: 0.928				Header Type:		Automatic 50"		Hydraulic 10"		Rope & Cathead 30"																																																																																					
Cementitious				R = Rock Core		S = Soil		H = Hardened		L = Loose		T = Test																																																																																			
S = Split Spoon Sample				SSA = Solid Stem Auger		SSA = Split Spoon Sample		SSA = Split Spoon Sample		SSA = Split Spoon Sample		SSA = Split Spoon Sample																																																																																			
M = Unconsolidated Split Spoon Sample				M = Moisture		M = Moisture		M = Moisture		M = Moisture		M = Moisture																																																																																			
I = Thin Soil Tube Sample				RC = Roller Core		RC = Roller Core		RC = Roller Core		RC = Roller Core		RC = Roller Core																																																																																			
M = Unconsolidated Split Spoon Sample				M = Moisture of Soil		M = Moisture of Soil		M = Moisture of Soil		M = Moisture of Soil		M = Moisture of Soil																																																																																			
V = Field Vane Shear Test				PP = Pocket Penetrometer		KIPF = Weight of Rub or Casing		KIPF = Weight of Rub or Casing		KIPF = Weight of Rub or Casing		KIPF = Weight of Rub or Casing																																																																																			
M = Unconsolidated Split Spoon Sample				M = Moisture of Soil		M = Moisture of Soil		M = Moisture of Soil		M = Moisture of Soil		M = Moisture of Soil																																																																																			
<table border="1"> <thead> <tr> <th colspan="10">Sample Information</th> <th colspan="4">Visual Description and Remarks</th> </tr> <tr> <th>Depth (ft.)</th> <th>Sample No.</th> <th>Pen./Ref. (in)</th> <th>Sample Depth (ft.)</th> <th>Blow / S.F. (in)</th> <th>Grain Depth (ft./in)</th> <th>Grain Depth (ft./in)</th> <th>Grain Depth (ft./in)</th> <th>Grain Depth (ft./in)</th> <th>Grain Depth (ft./in)</th> <th>Grain Depth (ft./in)</th> <th>Grain Depth (ft./in)</th> <th>Grain Depth (ft./in)</th> <th>Grain Depth (ft./in)</th> </tr> </thead> <tbody> <tr> <td rowspan="2">5</td> <td>10</td> <td>24/14</td> <td>1.00 - 3.00</td> <td>10/10/8/8</td> <td>18</td> <td>28</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>20</td> <td>24/13</td> <td>5.00 - 7.00</td> <td>2/3/2/2</td> <td>5</td> <td>8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="2">10</td> <td>30</td> <td>24/18</td> <td>10.00 - 12.00</td> <td>2/2/3/2</td> <td>5</td> <td>8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>40</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>														Sample Information										Visual Description and Remarks				Depth (ft.)	Sample No.	Pen./Ref. (in)	Sample Depth (ft.)	Blow / S.F. (in)	Grain Depth (ft./in)	Grain Depth (ft./in)	Grain Depth (ft./in)	Grain Depth (ft./in)	Grain Depth (ft./in)	Grain Depth (ft./in)	Grain Depth (ft./in)	Grain Depth (ft./in)	Grain Depth (ft./in)	5	10	24/14	1.00 - 3.00	10/10/8/8	18	28								20	24/13	5.00 - 7.00	2/3/2/2	5	8								10	30	24/18	10.00 - 12.00	2/2/3/2	5	8								40												
Sample Information										Visual Description and Remarks																																																																																					
Depth (ft.)	Sample No.	Pen./Ref. (in)	Sample Depth (ft.)	Blow / S.F. (in)	Grain Depth (ft./in)	Grain Depth (ft./in)	Grain Depth (ft./in)	Grain Depth (ft./in)	Grain Depth (ft./in)	Grain Depth (ft./in)	Grain Depth (ft./in)	Grain Depth (ft./in)	Grain Depth (ft./in)																																																																																		
5	10	24/14	1.00 - 3.00	10/10/8/8	18	28																																																																																									
	20	24/13	5.00 - 7.00	2/3/2/2	5	8																																																																																									
10	30	24/18	10.00 - 12.00	2/2/3/2	5	8																																																																																									
	40																																																																																														
Stratification: Lines represent approximate boundaries between soil types. Transitions may be gradual. * Water level readings have been made of fines and/or conditions straddled. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.																																																																																															

Maine Department of Transportation							Project: Route 9 and Water Street Intersection Improvements		Boring No.: HB-B-0	
Soil/Rock Exploration Log US CUSTOMARY UNITS							Location: Biddeford, Maine		WIN: 185	
Driller:		MainsDOT		Elevation (ft.):	26.0		Auger ID(s):		5" Dia.	
Operator:		Daggett/Ailes		Datum:	NAD83		Sampler:		Standard Split	
Logged By:		B. Wilder		Rig Type:	CME 45C		Hammer Wt./Fall:		140#/30"	
Date Start/Finish:		11/28/2018 - 11/30-12/10		Drilling Method:	Solid Stem Auger		Core Barrels:		N/A	
Boring Location:		12W65.1, 24.0 ft LT		Casing ID(s):	N/A		Water Level(ft)		Name Obs:	
Hammer Efficiency Factor = 0.928				Hammer Type:	Automatic C	Hydraulic G	Drop & Catapult D			
Penetration Notes:										
R = Rock Core Sample				S = Test Penetration Field View Test Sites (See Strength Report)						
S = Split Spoon Sample				L = Lab test (untested shear strength test)						
MSA = Moisture Test Auger				W = Wooded Forest Description (Test)						
BC = Rubber Collar Tube Sample				U = Unconsolidated or Flow Field SPN In-situ						
W = Weight of Water				PS = Plasticity Index						
V = Field View Shear Tests				RF = Pocket Paracenter MFI = Weight of Rods or Casings						
HWP = Results of All Samples				HWP = Hammer Efficiency Parameter (unconsolidated)						
G = Grain Size Analysis				C = Consolidation Test						
Sample Information										
Depth (ft.)	Sample No.	Penet./Area: l/in	Sample Depth (ft)	Blow / 6 in. (ft)	Shear Strength (psi) or RQD (%)	Notes	Gravel (%)	Clay (%)	Plasticity (%)	Visual Description and Remarks
0-5	10	24/15	1.00 - 3.00	4/3/2/2	5	8	SS	SL	CL	4.5% HMA. Brown, moist, loose, fine to coarse SAND. Little gravel, little silt, IFILL.
5-10	20	24/11	5.00 - 7.00	2/3/4/4	7	11				Similar to above, IFILL.
10-15	30	24/18	10.00 - 12.00	3/3/5/4	8	12				Grey, moist, medium stiff clay, Clay SILT, some fine sand and trace gravel.
15-20										Bottom of Exploration at 12.0 feet below ground surface NO REFUSAL
Observation: Lines represent approximate boundaries between soil types; transitions may be gradual. * Water level readings have been made at times under conditions shall. Groundwater fluctuations occur due to conditions other than those present at the time measurements were made. Page 1 of 1 Boring No.: HB-BID-0										



65



Points for Schedule Discussion:

Time frames for steel for production of traffic signal mast arms and poles will likely take up to 9 months for production and push the traffic signal installation to December 2022.

If all earthwork and base paving were to be completed without traffic signals installed, the proposed geometry could be problematic. With the majority of traffic movements being condensed to the new Water Street intersection configuration, sight distance and turning movements to and from all directions would likely be an issue without any formal traffic control.

OPTION 1: Complete all the mill & overlay and related work between Alfred and Hill Streets this year and complete remainder in 2022. **No longer an option with the reduced scope.**

OPTION 2: Complete ALL earthwork and base paving this year but maintain existing traffic patterns with the use of barrier to replicate existing island until signals are installed in December of 2022. This will require some work to be finished in the spring of 2023 after a winter suspension. This option may also complicate the phasing of some pole relocations in the x-hatched area.

OPTION 3: Install temporary signals and have a substantial completion date in late summer/early fall 2022 where all work is complete except for the permanent signal installation. ****Traffic signal at Hill St operate under stop control until the signal is installed**** We'll need to verify the temporary impacts of the signal in the NE corner.

NOTE: Whatever work is completed in 2021, that condition will need to be maintained through the winter.



DESIGN-DETAILED	ECF	ACC	4/21
CHECKED-REVIEWED	AG		
DESIGN-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			