



**Connecticut Department of
Energy & Environmental Protection**
Bureau of Materials Management & Compliance Assurance
Water Permitting & Enforcement Division

General Permit Registration Form for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective 10/1/13 (electronic form)

Prior to completing this form, you **must** read the instructions for the subject general permit at [DEEP-WPED-INST-015](#).
This form must be filled out electronically before being printed.
You must submit the registration fee along with this form.

The [status of your registration](#) can be checked on the DEEP's ezFile. Portal. Please note that DEEP will no longer mail certificates of registration.

Part I: Registration Type

Select the appropriate boxes identifying the registration type and registration deadline.

CPPU USE ONLY	
App #:	_____
Doc #:	_____
Check #:	_____
Program:	<u>Stormwater</u>

Registration Type		Registration Timeline	
☐	Re-registration Existing Permit No. GSN _____	On or before February 1, 2014* *Note: Failure to renew a permit by this date will require submission of new registration. Re-registrants must only complete Parts I, II, III, IV - Question 1, VII and submit Attachment A.	
☒	New Registration (Refer to Section 2 of the permit for definitions of Locally Exempt and Locally Approvable Projects)	☒ Locally Approvable Size of soil disturbance: 11.11	New registration - Sixty (60) days prior to the initiation of the construction activity for: For sites with a total soil disturbance area of 5 or more acres
		☐ Locally Exempt Size of soil disturbance: _____	☐ New registration - Sixty (60) days prior to the initiation of the construction activity for: Sites with a total disturbance area of one (1) to twenty (20) acres except those with discharges to impaired waters or tidal wetlands
			☐ New registration - Ninety (90) days prior to the initiation of the construction activity for: (i) Sites with a total soil disturbance area greater than twenty (20) acres, or (ii) Sites discharging to a tidal wetland (that is not fresh-tidal and is located within 500 feet), or (iii) Sites discharging to the impaired water listed in the "Impaired Waters Table for Construction Stormwater Discharges"

Part II: Fee Information

1. New Registrations

a. Locally approvable projects (registration only):

☒ \$625

b. Locally exempt projects (registration and Plan):

☐ \$3,000 total soil disturbance area $\geq$ one (1) and < twenty (20) acres.

☐ \$4,000 total soil disturbance $\geq$ twenty (20) acres and < fifty (50) acres.

☐ \$5,000 total soil disturbance $\geq$ fifty (50) acres.

2. Re-Registrations

☐ \$625 (sites previously registered prior to September 1, 2012)

☐ \$0 (sites previously registered between to September 1, 2012 and effective date of this permit)

Total Fee: \$625.00

The fees for municipalities shall be half of those indicated in subsections (a), (b) and (c) above pursuant to Section 22a-6(b) of the Connecticut General Statutes. State and Federal agencies shall pay the full fees specified in this subsection. The registration will not be processed without the fee. The fee shall be non-refundable and shall be paid by certified check or money order payable to the Department of Energy and Environmental Protection.

Part III: Registrant Information

- If a registrant is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of the State. If applicable, the registrant's name shall be stated **exactly** as it is registered with the Secretary of the State. This information can be accessed at [CONCORD](#)
- If a registrant is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).

1. Registrant /Client Name:	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION		
Registrant Type:	State Agency		
Secretary of the State business ID #:			
Mailing Address:	1107 CROMWELL AVE		
City/Town:	ROCKY HILL	State:	CT Zip Code: 06067
Business Phone:	(203) 258-4601	ext.:	
<i>Example:(xxx) xxx-xxxx</i>			
Contact Person:	Donald L. Ward, P.E.	Title :	District 1 Engineer
E-Mail:	donald.ward@ct.gov		
2. List billing contact:			
Name:	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION		
Mailing Address:	1107 CROMWELL AVE		
City/Town:	ROCKY HILL	State:	CT Zip Code: 06067
Business Phone:	(203) 258-4601	ext.:	
Contact Person:	Donald L. Ward, P.E.	Title :	District 1 Engineer

3. List primary contact for departmental correspondence and inquiries:
 Name: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION
 Mailing Address: 1107 CROMWELL AVE
 City/Town: ROCKY HILL State: CT Zip Code: 06067
 Business Phone: (203) 258-4601 ext.
 Contact Person: Donald L. Ward, P.E. Title: District 1 Engineer

4. List owner of the property on which the activity will take place:
 Name: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION
 Mailing Address: 1107 CROMWELL AVE
 City/Town: ROCKY HILL State: CT Zip Code: 06067
 Business Phone: (203) 258-4601 ext.
 Contact Person: Donald L. Ward, P.E.

5. List preparer:
 Name: CLOSE, JENSEN AND MILLER, P.C.
 Mailing Address: 1137 Silas Deane Highway
 City/Town: Wethersfield State: CT Zip Code: 06109
 Business Phone: (860) 563-9375 ext.
 Contact Person: JEFFREY FONTAINE Title: PROJECT ENGINEER

6. List design professional:
 Name: VN ENGINEERS, INC.
 Mailing Address: 116 Washington Ave
 City/Town: North Haven State: CT Zip Code: 06473
 Business Phone: (203)234-7862 ext.
 Contact Person: Laurence Cafaro Title: Traffic / Civil Engineer

7. List Reviewing Qualified Professional (for locally approvable projects only):
 Name: VN ENGINEERS, INC.
 Mailing Address: 116 Washington Ave
 City/Town: North Haven State: CT Zip Code: 06473
 Business Phone: (203)234-7862 ext.
 Contact Person: Robert Gomez Title: Design Manager / VP

Part IV: Site Information

1. Site Name: Project 0053-0196
 Street Address or Description of Location: CT-2 E
 City/Town: Glastonbury State: CT Zip Code: 06033
 Brief Description of construction activity:
Modifications of lane striping to change exit-only left lane to through lane with left exit. Slight widening of Route 2 EB at
Bridge Nos. 00384 and 00386.
 Project Start Date: 1 Apr 2025 Anticipated Completion Date: 30 Nov 2026
 Normal working hours: 9 to 5

2. **MINING** : Is the activity on the site in question part of mining operations (i.e. sand and gravel)? ☐Yes ☒No

If yes, mining is not authorized by this general permit. You must submit the Registration Form for the General Permit for the Discharge of Stormwater Associated with Industrial Activity.

3. **COMBINED OR SANITARY SEWER:** Does all of the stormwater from the proposed activity discharge to a combined or sanitary sewer (i.e. a sewage treatment plant)? ☐ Yes ☒No

If yes, this activity is not regulated by this permit. Contact the Water Permitting & Enforcement Division at 860-424-3018.

4. **INDIAN LANDS:** Is or will the facility be located on federally recognized Indian lands? ☐ Yes ☒No

5. **COASTAL BOUNDARY:** Is the activity which is the subject of this registration located

within the coastal boundary as delineated on DEEP approved coastal boundary maps? ☐ Yes ☒No

The coastal boundaries fall within the following towns: Branford, Bridgeport, Chester, Clinton, Darien, Deep River, East Haven, East Lyme, Essex, Fairfield, Greenwich, Groton (City and Town), Old Lyme, Guilford, Hamden, Ledyard, Lyme, Madison, Milford, Montville, New London, New Haven, North Haven, Norwalk, Norwich, Old Saybrook, Orange, Preston, Shelton, Stamford, Stonington (Borough and Town), Stratford, Waterford, West Haven, Westbrook and Westport.

If "yes", and this registration is for a new authorization or a modification of an existing authorization where the physical footprint of the subject activity is modified, you must provide documentation to the DEEP Office of Long Island Sound Programs or the local governing authority has issued a coastal site plan approval or determined the project is exempt from coastal site plan review. Provide this documentation with your registration as Attachment B. See guidance in Appendix D of the general permit. Information on the coastal boundary is available at the local town hall or on the [Connecticut Coastal Resources Map](#) . Additional DEEP Maps and Publications are available by contacting DEEP Staff at 860-424-3555.

6. **ENDANGERED OR THREATENED SPECIES:**

In order to be eligible to register for this General permit, each registrant must either perform a self-assessment, obtain a limited one-year determination, or obtain a safe-harbor determination regarding threatened and endangered species. This may include the need to develop and implement a mitigation plan. While each alternative has different limitations, the alternatives are not mutually exclusive; a registrant may register for this General Permit using more than one alternative. See Appendix A of the general Permit. Each registrant must complete this AND Attachment C to this Registration form and a registrant who does not or cannot do so is not eligible to register under this General Permit.

Each registration must perform a review of the Department's Natural Diversity Database maps to determine if the site of the construction activity is located within or in proximity (within ¼ mile) to a shaded area.

- a. Provide the date of the NDDDB maps were reviewed: 8 Oct 2024 (Print a copy of the NDDDB map you viewed since it must be submitted with this registration as part of Attachment C.)

- b. For a registrant using a limited one-year determination or safe harbor determination to register for this General Permit, provide the Department's Wildlife Division NDDB identification number for any such determination:

_____ (The number is on the determination issued by the Department's Wildlife Division).

For more information on threatened and endangered species requirements, refer to Appendix A and section 3(b)(2) of this General Permit, Visit the DEEP website at [Natural Diversity Data Base](#) or call the NDDB at 860-424-3011.

- c. I verify that I have completed Attachment C to this Registration Form. ☐ Yes

7. **WILD AND SCENIC RIVERS:** Is the proposed project within the watershed of a designated

Wild and Scenic River? (See Appendix H for guidance)

☐ Yes ☒ No

8. **AQUIFER PROTECTION AREAS:** Is the site located within a mapped

[Aquifer Protection Area](#) , as defined in Section 22a-354h of the CT General Statutes?

(For additional guidance, please refer to Appendix C of the General Permit)

☐ Yes ☒ No

9. **Connecticut Guidelines for Soil Erosion and Sediment Control Guidelines:** Is the activity in

accordance with Connecticut Guidelines for Soil Erosion and Sediment Control Guidelines and local erosion & sediment control ordinances, where applicable?

☒ Yes ☐ No

10. **HISTORIC AND/OR ARCHAEOLOGICAL RESOURCES:**

Has the site of the proposed activity been reviewed (using the process outlined in Appendix G of this permit) for historic and/or archaeological resources?

☒ Yes ☐ No

- a. The review indicates the proposed site does not have the potential for historic/ archaeological resources, OR

☒ Yes ☐ No

- b. The review indicated historic and/ or archaeological resource potential exists and the proposed activity is being or has been reviewed by the Offices of Culture and Tourism, OR

☐ NA ☐ Yes ☒ No

- c. The proposed activity has been reviewed and authorized under an Army Corps of Engineers Section 404 wetland permit.

☐ NA ☐ Yes ☒ No

11. **CONSERVATION OR PRESERVATION RESTRICTION:**

Is the property subject to a conservation or preservation restriction?

☐ Yes ☒ No

If Yes, proof of written notice of this registration to the holder of such restriction or a letter from the holder of such restriction verifying this registration is in compliance with the terms of the restriction, must be submitted as Attachment D.

Part V: Stormwater Discharge Information

Table 1

Outfall #	a) Type	b) Pipe Material	c) Pipe Size	d) Note: To find lat/long, go to: CT ECO . A decimal format is required here. Directions on how to use CT ECO to find lat. /long. and conversions can be found in in Part V, section d of the DEEP-WPED-INST-015 .		e) What method was used to obtain your latitude/longitude information?
				Longitude (Format: -xx.xxxxx)	Latitude (Format: xx.xxxxx)	
1	Pipe	Concrete	15"	-72.609692	41.725247	ezFile Portal Map
2	Pipe	Concrete	15"	-72.60996	41.72537	GPS
3	Pipe	Metal	her (Please fill in below) 12"	-72.60973	41.72491	GPS
4	Pipe	Metal	15"	-72.60921	41.72444	GPS
5	Pipe	Metal	15"	-72.60728	41.72243	GPS

Part V: Stormwater Discharge Information Continued

Table 2

2. Provide the following information about the receiving water(s)/wetland(s) that receive stormwater runoff from your site, either directly or through the storm sewer system:							
Outfall #	Dates when this outfall will be active:	a) To what system or receiving water does your stormwater runoff discharge? either "storm sewer or wetlands" or "waterbody" (If you select storm sewer or wetlands, columns c.1&2 of this table are not required to be completed)	b) What is your watershed ID (freshwater) or 305b ID (estuary)? (Section 3.b, of the DEP-GP-INST-015 explains how to find this information)	c.1) Is your receiving water identified as an impaired water in the "Impaired Waters Table for Construction Stormwater Discharges" ?	<i>If you answered yes to question c.1, then answer the question below</i> c.2) Has any Total Maximum Daily Load (TMDL) been approved for your receiving waterbody?	For the drainage area associated with each outfall: Effective Impervious Area Before Construction (sq ft)	For the drainage area associated with each outfall: Effective Impervious Area After Construction (sq ft)
1	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	15162	15162
2	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	9586	9586
3	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	42667	41279
4	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	20925	28835
5	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	21284	18656
Provide the total effective impervious area for the entire site(sq ft):						418850	373104

Part V: Stormwater Discharge Information

Table 1

Outfall #	a) Type	b) Pipe Material	c) Pipe Size	d) Note: To find lat/long, go to: CT ECO . A decimal format is required here. Directions on how to use CT ECO to find lat. /long. and conversions can be found in in Part V, section d of the DEEP-WPED-INST-015 .		e) What method was used to obtain your latitude/longitude information?
				Longitude (Format: -xx.xxxxx)	Latitude (Format: xx.xxxxx)	
6	Pipe	Metal	15"	-72.60665	41.72175	GPS
7	Pipe	Concrete	18"	-72.60610	41.72114	GPS
8	Pipe	Concrete	18"	-72.60466	41.71991	GPS
9	Pipe	Concrete	18"	-72.60440	41.71982	GPS
10	Pipe	Concrete	15"	-72.60369	41.71928	GPS

Part V: Stormwater Discharge Information Continued

Table 2

2. Provide the following information about the receiving water(s)/wetland(s) that receive stormwater runoff from your site, either directly or through the storm sewer system:							
Outfall #	Dates when this outfall will be active:	a) To what system or receiving water does your stormwater runoff discharge? either "storm sewer or wetlands" or "waterbody" (If you select storm sewer or wetlands, columns c.1&2 of this table are not required to be completed)	b) What is your watershed ID (freshwater) or 305b ID (estuary)? (Section 3.b, of the DEP-GP-INST-015 explains how to find this information)	c.1) Is your receiving water identified as an impaired water in the "Impaired Waters Table for Construction Stormwater Discharges" ?	<i>If you answered yes to question c.1, then answer the question below</i> c.2) Has any Total Maximum Daily Load (TMDL) been approved for your receiving waterbody?	For the drainage area associated with each outfall: Effective Impervious Area Before Construction (sq ft)	For the drainage area associated with each outfall: Effective Impervious Area After Construction (sq ft)
6	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	17651	13972
7	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	12063	15072
8	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	59292	59989
9	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	26437	29537
10	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	39063	0
Provide the total effective impervious area for the entire site(sq ft):						418850	373104

Part V: Stormwater Discharge Information

Table 1

Outfall #	a) Type	b) Pipe Material	c) Pipe Size	d) Note: To find lat/long, go to: CT ECO . A decimal format is required here. Directions on how to use CT ECO to find lat. /long. and conversions can be found in in Part V, section d of the DEEP-WPED-INST-015 .		e) What method was used to obtain your latitude/longitude information?
				Longitude (Format: -xx.xxxxx)	Latitude (Format: xx.xxxxx)	
11	Pipe	Metal	15"	-72.60365	41.71930	GPS
12	Pipe	Metal	15"	-72.60291	41.71865	GPS
13	Pipe	Metal	15"	-72.60225	41.71813	GPS
14	Pipe	Concrete	18"	-72.60203	41.71782	GPS
15	Pipe	Metal	18"	-72.60053	41.71779	GPS

Part V: Stormwater Discharge Information Continued

Table 2

2. Provide the following information about the receiving water(s)/wetland(s) that receive stormwater runoff from your site, either directly or through the storm sewer system:							
Outfall #	Dates when this outfall will be active:	a) To what system or receiving water does your stormwater runoff discharge? either "storm sewer or wetlands" or "waterbody" (If you select storm sewer or wetlands, columns c.1&2 of this table are not required to be completed)	b) What is your watershed ID (freshwater) or 305b ID (estuary)? (Section 3.b, of the DEP-GP-INST-015 explains how to find this information)	c.1) Is your receiving water identified as an impaired water in the "Impaired Waters Table for Construction Stormwater Discharges" ?	<i>If you answered yes to question c.1, then answer the question below</i> c.2) Has any Total Maximum Daily Load (TMDL) been approved for your receiving waterbody?	For the drainage area associated with each outfall: Effective Impervious Area Before Construction (sq ft)	For the drainage area associated with each outfall: Effective Impervious Area After Construction (sq ft)
11	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	12247	11865
12	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	28967	0
13	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	3708	6428
14	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	24300	70336
15	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	16479	16479
Provide the total effective impervious area for the entire site(sq ft):						418850	373104

Part V: Stormwater Discharge Information

Table 1

Outfall #	a) Type	b) Pipe Material	c) Pipe Size	d) Note: To find lat/long, go to: CT ECO . A decimal format is required here. Directions on how to use CT ECO to find lat. /long. and conversions can be found in in Part V, section d of the DEEP-WPED-INST-015 .		e) What method was used to obtain your latitude/longitude information?
				Longitude (Format: -xx.xxxxx)	Latitude (Format: xx.xxxxx)	
16	Pipe	Metal	15"	-72.60145	41.71734	GPS
17	Pipe	Metal	15"	-72.60045	41.71681	GPS
18	Pipe	Metal	15"	-72.59965	41.71610	GPS
19	Pipe	Concrete	her (Please fill in below) 12"	-72.59930	41.71502	GPS
20	Pipe	Metal	15"	-72.59846	41.71549	GPS

Part V: Stormwater Discharge Information Continued

Table 2

2. Provide the following information about the receiving water(s)/wetland(s) that receive stormwater runoff from your site, either directly or through the storm sewer system:							
Outfall #	Dates when this outfall will be active:	a) To what system or receiving water does your stormwater runoff discharge? either "storm sewer or wetlands" or "waterbody" (If you select storm sewer or wetlands, columns c.1&2 of this table are not required to be completed)	b) What is your watershed ID (freshwater) or 305b ID (estuary)? (Section 3.b, of the DEP-GP-INST-015 explains how to find this information)	c.1) Is your receiving water identified as an impaired water in the "Impaired Waters Table for Construction Stormwater Discharges" ?	<i>If you answered yes to question c.1, then answer the question below</i> c.2) Has any Total Maximum Daily Load (TMDL) been approved for your receiving waterbody?	For the drainage area associated with each outfall: Effective Impervious Area Before Construction (sq ft)	For the drainage area associated with each outfall: Effective Impervious Area After Construction (sq ft)
16	Start: 21 Jul 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	10881	0
17	Start: 17 Nov 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	13955	0
18	Start: 17 Nov 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	15031	13046
19	Start: 17 Nov 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	12558	6314
20	Start: 17 Nov 2025 End:	Storm Sewer or Wetlands		☐ Y ☐ N ☒ NA	☐ Y ☐ N ☒ NA	16594	16548
Provide the total effective impervious area for the entire site(sq ft):						418850	373104

Part V: Stormwater Discharge Information

Table 1

Outfall #	a) Type	b) Pipe Material	c) Pipe Size	d) Note: To find lat/long, go to: CT ECO . A decimal format is required here. Directions on how to use CT ECO to find lat. /long. and conversions can be found in in Part V, section d of the DEEP-WPED-INST-015 .		e) What method was used to obtain your latitude/longitude information?
				Longitude (Format: -xx.xxxxx)	Latitude (Format: xx.xxxxx)	

Part V: Stormwater Discharge Information Continued

Table 2

2. Provide the following information about the receiving water(s)/wetland(s) that receive stormwater runoff from your site, either directly or through the storm sewer system:							
Outfall #	Dates when this outfall will be active:	a) To what system or receiving water does your stormwater runoff discharge? either "storm sewer or wetlands" or "waterbody" (If you select storm sewer or wetlands, columns c.1&2 of this table are not required to be completed)	b) What is your watershed ID (freshwater) or 305b ID (estuary)? (Section 3.b, of the DEP-GP-INST-015 explains how to find this information)	c.1) Is your receiving water identified as an impaired water in the "Impaired Waters Table for Construction Stormwater Discharges" ?	<i>If you answered yes to question c.1, then answer the question below</i> c.2) Has any Total Maximum Daily Load (TMDL) been approved for your receiving waterbody?	For the drainage area associated with each outfall: Effective Impervious Area Before Construction (sq ft)	For the drainage area associated with each outfall: Effective Impervious Area After Construction (sq ft)
_____	Start: _____ End: _____	Select One	_____	☐ Y ☐ N ☐ NA	☐ Y ☐ N ☐ NA	_____	_____
_____	Start: _____ End: _____	Select One	_____	Y N NA	Y N NA	_____	_____
_____	Start: _____ End: _____	Select One	_____	Y N NA	Y N NA	_____	_____
_____	Start: _____ End: _____	Select One	_____	Y N NA	Y N NA	_____	_____
_____	Start: _____ End: _____	Select One	_____	Y N NA	Y N NA	_____	_____
Provide the total effective impervious area for the entire site(sq ft):						418850	373104

Part V: Stormwater Discharge Information (continued)

Impaired waters: If you answered "yes" to Table 2, question 2.c.1, **verify** that the project's Pollution Control Plan (Plan) addresses the control measures below in Question 1 or 2, as appropriate.

1. If the impaired water does not have a TMDL, confirm compliance by selecting 1.a. or 2.b. below:

a. No more than 3 acres is disturbed at any time; ☐ Yes

OR

b. Stormwater runoff from a 2 yr, 24 rain event is **retained**. ☐ Yes

2. If the impaired water has a TMDL, confirm compliance by selecting 2.a. and 2.b. below and either question 2.c.1. or 2.c.2. below:

a. The Plan documents there is sufficient remaining Waste Load Allocations (WLA) in the TMDL for the proposed discharge, ☐ Yes

AND

b. Control measures shall be implemented to assure the WLA will not be exceeded, ☐ Yes

AND

c. 1. Stormwater discharges will be monitored for the indicator pollutant identified in the TMDL, ☐ Yes

OR

2. The Plan documents specific requirements for stormwater discharges specified in the TMDL. ☐ Yes

Part VI: Pollution Control Plan Availability (check one of the following four categories)

☐ I am registering a Locally Exempt project and submitting the required electronic Plan (in Adobe™ PDF or similarly publically available format) pursuant to Section 3(c)(2)(E) of this permit.

☐ Plan is attached to this registration form

☐ Plan is available at the following Internet Address (URL):

☐ I am registering a Locally Approvable project and have chosen not to submit the Plan with this registration pursuant to Section 3(c)(1) of this permit.

☒ I am registering a Locally Approvable project and have chosen to make my Plan electronically available pursuant to Section 4(c)(2)(N) of this permit.

☒ Plan is attached to this registration form

☐ Plan is available at the following Internet Address (URL):

☐ I am registering a Locally exempt project and do not have the capability to submit the Plan electronically. Therefore, I am submitting a paper copy with this registration as Attachment E.

Part VII: Registrant Certification

The registrant *and* the individual(s) responsible for actually preparing the registration must sign this part. A registration will be considered incomplete unless all required signatures are provided.

For New Registrants:

"I hereby certify that I am making this certification in connection with a registration under such general permit, submitted to the commissioner by E OF CONNECTICUT DEPARTMENT OF TRANSPORTA for an activity located at CT-2 E , Glastonbury, CT 06033 and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify that I have made an affirmative determination in accordance with Section 3(b) (8) (B) of this general permit. I understand that the registration filed in connection with such general permit is submitted in accordance with and shall comply with the requirements of Section 22a-430b of Connecticut General Statutes, as amended by Public Act 12-172. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

For Re-registrants:

"I hereby certify that I am making this certification in connection with a registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by _____ for an activity located at _____

and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that all designs and plans for such activity meet the current terms and conditions of the general permit in accordance with Section 5(b)(5)(C) of such general permit and that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I verify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this verification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and an other applicable law."

_____	_____
Signature of Registrant	
Donald L. Ward, P.E.	District 1 Engineer
Name of Registrant (print or type)	Title (if applicable)

Signature of Preparer and Date (if different than above)	
JEFFREY FONTAINE	PROJECT ENGINEER
Name of Preparer (print or type)	Title (if applicable)

Part VIII: Professional Engineer (or Landscape Architect, where appropriate) Design Certification (for publically approvable and exempt projects)

The following certification must be signed by a Professional Engineer, or Landscape Architect where appropriate.

"I hereby certify that I am a _____ licensed in the State of Connecticut. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by <u>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</u> for an activity located at <u>CT-2 E , Glastonbury, CT 06033</u> . I certify that I have thoroughly and completely reviewed the Stormwater Pollution Control Plan for the project or activity covered by this certification. I further certify, based on such review and on the standard of care for such projects, that the Stormwater Pollution Control Plan has been prepared in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, the Stormwater Quality Manual, as amended, and the conditions of the general permit, and that the controls required for such Plan are appropriate for the site. I further certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement in this certification may subject me to sanction by the Department and/or be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."	

Signature of Design Professional and Date	
Laurence Cafaro	PEN.0037481
Name of Professional (print or type)	License Number
Affix P.E./L.A Stamp Here	

Part IX: Reviewing Qualified Professional Certification

The following certification must be signed by a) a Conservation District reviewer OR, b) a qualified soil erosion and sediment control and/ or professional engineer

☐ **Review Certification by Conservation District:**

1.) District: _____

Date of Affirmative Determination: _____

" I am making this certification in connection with a registration under General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by _____ for an activity located at _____.

I have personally examined and am familiar with the information that provides the basis for this certification, and I affirm, based on the review described in Section 3(b)(11)(C) of this general permit and on the standard of care for such projects, that the Stormwater Pollution Control Plan is adequate to assure that the activity authorized under this general permit will comply with the terms and conditions of such general permit and that all stormwater management systems: (i) have been designed to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable and that conform to those in the Guidelines and the Stormwater Quality Manual; (ii) will function properly as designed; (iii) are adequate to ensure compliance with the terms and conditions of this general permit; and (iv) will protect the waters of the state from pollution."

Signature of District Professional and Date

Name of District Professional

License Number (if applicable)

Or

☒ **Review Certification by Qualified Professional:**

Company Name: VN ENGINEERS, INC.

Name: Robert Gomez

License #: 23842

Level of independency of professional:

Required for all projects disturbing over 1 acre:

1. I verify I am not an employee of the registrant. ☒ Yes

2. I verify I have no ownership interest of any kind in the project for which the registration is being submitted. ☒ Yes

Required for projects with 15 or more acres of site disturbance (in addition to questions 1&2):

3. I verify I did not engage in any activities associated with the preparation, planning, designing or engineering of the soil erosion and sediment control plan or stormwater management systems plan for this registrant. ☐ Yes

4. I verify I am not under the same employ as any person associated with the preparation, planning, designing or engineering of the soil erosion and sediment control plan or stormwater management systems plan for this registrant. ☐ Yes

Part IX: Reviewing Qualified Professional Certification (continued)

"I hereby certify that I am a qualified professional engineer or qualified soil erosion and sediment control professional, or both, as defined in the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and as further specified in Sections 3(b)(11)(A) and (B) of such general permit. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by <u>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</u> for an activity located at <u>CT-2 E , Glastonbury, CT 06033</u> . I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(11)(C) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify, based on my review of all information described in Section 3(b)(11)(C) of such general permit and on the standard of care for such projects, that I have made an affirmative determination in accordance with Sections 3(b)(11)(D)(i) and (ii) of this general permit. I understand that this certification is part of a registration submitted in accordance with Section 22a-430b of Connecticut General Statutes, as amended by Public Act 12-172, and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."	
Signature of Reviewing Qualified Professional	
VN ENGINEERS, INC.	23842
Name of Reviewing Qualified Professional	License No.
Affix P.E./ L.A. Stamp Here	

Note: Please submit the fee along with a completed, printed and signed Registration Form and all additional supporting documents to:

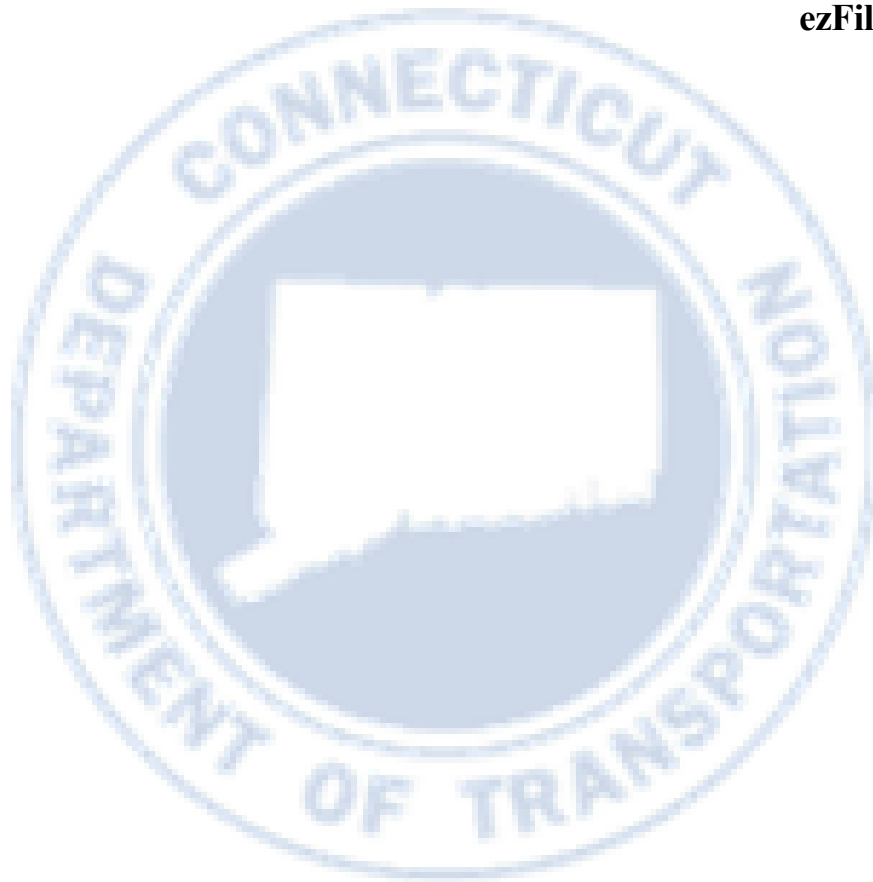
**CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127**

Template Date: December 15, 2023

STORMWATER POLLUTION CONTROL PLAN SWPCP

Route 2 Eastbound Lane Modifications Exit 6 to Exit 8 Glastonbury, CT

**State Project No.: 0053-0196
ezFile No. 116881**



Connecticut Department of Transportation

09/04/2024

This Stormwater Pollution Control Plan (SWPCP) is prepared to comply with the requirements for the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and the Connecticut Guidelines for Soil Erosion and Sediment Control (E&S Guidelines) as amended.

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Development & Contents of Plan

The Plan shall consist of site plan drawings and a narrative. The Plan shall be prepared in accordance with sound engineering practices, and shall be consistent with the [Connecticut Guidelines for Soil Erosion and Sediment Control](#), as amended, the [Connecticut Stormwater Quality Manual](#), as amended, and any applicable requirements of the General Permit.

Site Description

Site Description

This project consists of the construction of Route 2 Eastbound between Exit 6 and Exit 8. Currently, there are no discharges to impaired or coastal waters and there are no new direct discharges to any impaired or coastal waters as a result of this project. This project does not fall within an Aquifer Protection Area; however, this project does fall within an MS4 Priority Area. Additionally, this project does not outfall to a river within the National Wild and Scenic Rivers System in Connecticut. An NDDDB determination was performed, with the expiration date of July 7th, 2025, which stated that the increased negative impacts to State-listed species are not anticipated because of the proposed activity at this project site. This project site is not located within a Cold-Water Fisheries area. However, there is a Cold Water Stream Habitat Watershed located upstream approximately 1,000 feet northeast of Bridge No. 00385 not within the project limits.

The purpose of the project is to improve lane continuity and reduce weaving movements for motorists traveling on Route 2 Eastbound between Exit 6 and Exit 8. The existing lane configuration creates inefficient and non-standard travel patterns for through vehicles. This section of roadway includes an exit only left “lane-drop” at Exit 7 (Route 2 Eastbound to Route 17 South) and a right “lane-add” from the Route 3 On-Ramp between Exits 6 and 7.

Route 2 Eastbound vehicles travelling in the left-lane and continuing to travel on Route 2 Eastbound must change lanes to the right to avoid being “trapped” in the left, exit-only lane for Route 17 South (Exit 7). As vehicles make this movement, the Route 3 On-Ramp adds a lane on Route 2 Eastbound, creating a three lane-wide roadway. After Exit 7, Route 2 Eastbound reduces to two-lanes. The weaving through this area contributes to delays and crashes. During the afternoon peak hours, the Route 3 On-Ramp queue can extend back on the Route 3 mainline. There were 49 crashes at this location during a three-year period.

Bridge No. 00384 carries Route 2 Eastbound and Westbound over Griswold Street. The bridge was originally constructed in 1950 (Project No. 53-65) and was rehabilitated in 1988 (Project No. 53-140) and 2006 (Project No. 42-289). The 1988 rehabilitation consisted of a deck replacement, new parapets, and new median barriers. The 2006 rehabilitation consisted of stripping the existing pavement, waterproofing membrane, patching the deck, full painting of the structural steel joint replacement, and replacing the center median

Bridge No. 00385, which is a culvert just west of Route 2 Eastbound Exit 8 Off-Ramp and Bridge No. 00386 is not expected to be impacted as part of this project. Bridge No. 00386 carries Route

2 Eastbound, Route 17 Southbound, and Route 2 Westbound over House Street. The bridge was originally constructed in 1964 (Project No. 53-67 and 53-100) and was rehabilitated in 1986 (Project No. 171-104) and 2006 (Project No. 42-289). The 1986 rehabilitation consisted of a deck replacement and modifying the bridge to provide new Route 2 Westbound, Route 17 Southbound, and Route 2 Eastbound travel ways (existing was only Route 17 Northbound and Route 17 Southbound travel ways). The 2006 rehabilitation consisted of stripping the existing pavement, waterproofing membrane, patching the deck, full painting of the structural steel, joint replacement, and modifying the existing bridge parapets.

To accommodate the Route 2 lane modifications, Bridge No. 00384 will be widened to the south to reduce the pinch point. In addition, the Route 2 Eastbound roadway at Bridge No. 00386 will be widened to accommodate two Route 2 Eastbound lanes and a Route 2 Exit 8 exit lane. Route 2 is also expected to have concrete pavement in the area. This project does not recommend removing the concrete pavement, minor repairs to the concrete pavement may be required below the bituminous concrete pavement.

The proposed improvements to the existing drainage system primarily include:

- The replacement of existing catch basins and addition of new catch basins along the shoulders and medians to reduce the spread of stormwater runoff.
- The replacement of pipes, outlet pipes, and endwalls in the Eastbound direction of Route 2.
- The rehabilitation of existing reinforced concrete pipes (RCPs) with cured-in-place (CIPP) lining.
- Removal of curbing to promote sheet flow and decrease the directly connected impervious area (DCIA).
- The installation of outlet protection.

The majority of the stormwater within the project area drains into Salmon Brook or wetlands. The project scope does not include/allow work within this watercourse.

Environmental Considerations

- The project does not discharge directly to an impaired waterbody.
- There are no Aquifer Protection Areas (APAs) in the project area.
- This project is within a MS4 Priority Area.
- Stormwater outfall does not discharge to a river within the Nation Wild and Scenic Rivers System of Connecticut.
- A NDDDB determination was performed, with the expiration date of July 7th, 2025, which stated that increased negative impacts to State-listed species are not anticipated as a result of the proposed activity at the site.
- New provisions restricting tree clearing between April 15th to October 31st will be implemented as a protection measure for the tri-colored bat.

Site work includes pavement rehabilitation and reconstruction, bridge widening, minor bridge work, roadway widening, guardrails and barrier upgrades, drainage improvements, utility relocations, and sign replacement. Additional site work to construct these elements include temporary access, staging areas, and drainage facilities. Existing outlets were not inspected as part

of this due to the nature of the fast-paced design schedule. In the proposed drainage design, all the outlets along Route 2 Eastbound construction limits will be replaced with new outlet end treatments and outlet protection.

Outfall #	Type	Pipe Material	Pipe Size	Longitude	Latitude	Method to Obtain Information
EO-01	R.C. Culvert End	RCP	15"	-72.61036	41.72582	CTECO
EO-02	R.C. Culvert End	RCP	15"	-72.60996	41.72537	CTECO
EO-03	Metal Culvert End	CMP	12"	-72.60973	41.72491	CTECO
EO-04	Metal Culvert End	CMP	15"	-72.60921	41.72444	CTECO
EO-05	Endwall	C.C.M. Pipe	15"	-72.60728	41.72243	CTECO
EO-06	Endwall	C.C.M. Pipe	15"	-72.60665	41.72175	CTECO
EO-07	Endwall	RCP	18"	-72.60610	41.72114	CTECO
EO-08	Endwall	RCP	18"	-72.60466	41.71991	CTECO
EO-09	Endwall	RCP	18"	-72.60440	41.71982	CTECO
EO-10	Endwall	RCP	15"	-72.60369	41.71928	CTECO
EO-11	Endwall	CMP	15"	-72.60365	41.71930	CTECO
EO-12	Endwall	CMP	15"	-72.60291	41.71865	CTECO
EO-13	Endwall	C.C.M. Pipe	15"	-72.60225	41.71813	CTECO
EO-14	Endwall	RCP	18"	-72.60203	41.71782	CTECO
EO-15	Endwall	CMP	18"	-72.60053	41.71779	CTECO
EO-16	Endwall	CMP	15"	-72.60145	41.71734	CTECO
EO-17	Endwall	CMP	15"	-72.60045	41.71681	CTECO
EO-18	Endwall	C.C.M. Pipe	15"	-72.59965	41.71610	CTECO
EO-19	R.C. Culvert End	RCP	12"	-72.59930	41.71502	CTECO
EO-20	Endwall	CMP	15"	-72.59846	41.71549	CTECO

Outfall #	Dates when this outfall is active	To what receiving water does your storm runoff discharge	Watershed ID	Is receiving water identified as an impaired water?	Has any TMDL been approved for your receiving waterbody?	Effective Impervious Area Before Construction (sqft)	Effective Impervious Area After Construction (sqft)
EO-01	TBD	Storm Sewer/Wetland	4006-09-2-R3	N/A	N/A	15162	15162
EO-02	TBD	Storm Sewer/Wetland	4006-09-2-R3	N/A	N/A	9586	9586
EO-03	TBD	Storm Sewer/Wetland	4006-09-2-R3	N/A	N/A	42667	41279
EO-04	TBD	Storm Sewer/Wetland	4006-09-2-R3	N/A	N/A	20925	28835
EO-05	TBD	Storm	4006-00-2-	N/A	N/A	21284	18656

		Sewer/Wetland	R6				
EO-06	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	N/A	17651	13972
EO-07	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	N/A	12063	15072
EO-08	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	N/A	59292	59989
EO-09	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	N/A	26437	29537
EO-10	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	N/A	39063	0
EO-11	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	N/A	12247	11865
EO-12	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	N/A	28967	0
EO-13	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	N/A	3708	6428
EO-14	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	41.71782	24300	70336
EO-15	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	41.71779	16479	16479
EO-16	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	N/A	10881	0
EO-17	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	N/A	13955	0
EO-18	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	N/A	15031	13046
EO-19	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	N/A	12558	6314
EO-20	TBD	Storm Sewer/Wetland	4006-00-2- R6	N/A	N/A	16594	16548

Estimated Disturbed Area

The total area for this project site is 11.11 acres. Of this area, 1.62 acres will be disturbed by construction activities regardless of phasing.

The proposed SWPCP cannot account for unexpected findings in construction or changes that are required during construction which may affect the overall disturbance area. Based on this possibility of unexpected and investigatory work findings, some additional disturbance beyond what was depicted in the SWPCP plan sheets in Appendix A may be required. Additional disturbed area has been included in the SWPCP narrative/calculations and the ezFile polygon to account for the possibility of additional disturbed areas within the project limits being required. For this project, total project disturbance was initially quantified to be 1.47 acres. An additional amount of 0.15 acres (10%) has been included in the registration calculations to account for unexpected/investigatory work findings in construction. If it is found that changes to disturbed area, engineered, or non-engineered or post-construction measures have the potential to increase the quantity and quantity of pollution, the appropriate BMPs will be incorporated at any/all locations where this may occur. If any of this additional area or changes in BMP's/measures are required in construction, the SWPCP and plans will be updated to "Keep the Plans Current" as required by the General Permit.

Estimated Runoff Coefficient

The runoff coefficient assumed for pavement is 0.9 and for gravel roads is 0.7. For the pervious areas, a coefficient of 0.3 was assumed.

Pre-Construction

$$(1.25 \text{ ac.} \times 0.3) + (9.86 \text{ ac.} \times 0.9) + (0.00 \text{ ac.} \times 0.7) = 0.83$$

$$1.25 \text{ ac.} + 9.86 \text{ ac.} + 0.00 \text{ ac.}$$

Post-Construction

$$(2.55 \text{ ac.} \times 0.3) + (8.56 \text{ ac.} \times 0.9) + (0.00 \text{ ac.} \times 0.7) = 0.76$$

$$2.55 \text{ ac.} + 8.56 \text{ ac.} + 0.00 \text{ ac.}$$

Receiving Waters

The name of the receiving water is wetlands associated with Salmon Brook, which drain ultimately into the Connecticut River.

Extent of Wetlands on Site

There are wetlands in the vicinity of the project area. According to the FEMA Flood Rate Insurance Map (FIRM) there are 100-year floodplains and floodways mapped at the proposed project location. As indicated in FEMA FIRM Number 09003C0526F and 09003C0528F dated September 26th, 2008, the Route 2 highway corridors cross over the regulated floodway and 100-year floodplain associated with Salmon Brook. Project work intersecting the mapped FEMA floodway at the Route 2 corridor is located above at elevation 47 feet. The FEMA floodway is mapped at an elevation of 32 – 34 feet at this location. However, there will be anticipated work within the 100-year floodplain due to the proposed drainage improvements and roadway widening at this location within the project site.

Construction Sequencing

The Contractor will be given approximately 20 months (two construction seasons with a 4-month winter shutdown) for the construction of all phases of the project, which shall be revised as necessary to keep the Plan current.

The suggested sequence of construction is as follows:

1. Conduct a preconstruction meeting.
2. Verify the surveyed staked-out limits of the project and clearly identify the limits of disturbance (LOD).
3. Install erosion and sedimentation controls where soil will be exposed or susceptible to erosion (e.g., effected inlet/outlets, disturbed slopes, toe of slopes, etc.).
4. Conduct the plan implementation inspection.
5. Perform clearing and grubbing activities.
6. Apply temporary stabilization measures for disturbed areas in accordance with Temporary Stabilization Practices.
7. Install sedimentation control system in limited areas that will not be damaged during

- clearing operations.
8. Clear all trees & brush and complete balance of sedimentation control system to the limits shown on the plans.
 9. Install permanent stormwater control measures (e.g., stormwater basins) in the early phase of construction.
 10. Construction Sequencing:

Stage 1 (26 Weeks)

- Perform tree clearing between stations 135+00 to 145+50 prior to April 15th
- Install SCS
- Perform sideslope grading between 115+80 to 145+50 up to formation of subgrade
- Install proposed drainage outlets and slope pipes
- Relocate existing underground utilities on Griswold Street and relocate House Street Utility underground.
- Bridge No. 00384: Stage 1A
 - Install Griswold signs and temp traffic control, shift traffic
 - Install TERS: Wingwall 1B
 - Excavate, construct footing: Wingwall 1B/Abutment 1
 - Demo existing wingwall 1B: Top to bottom of deck
 - Construct stem/backwall/cheekwall/Wingwall: Abutment 1
 - Substructure patching, remove TERS, reconstruct sidewalk
- Bridge No. 00384: Stage 1B
 - Relocate Griswold signs and temp traffic control, shift traffic
 - Install TERS: Wingwall 2B
 - Excavate, construct footing: Wingwall 2B/Abutment 2
 - Demo existing wingwall 2B: Top to bottom of deck
 - Construct stem/backwall/cheekwall/Wingwall: Abutment 2
 - Substructure patching, remove TERS, reconstruct sidewalk
- Install signage and temporary traffic control, merge Route 2 Eastbound to one lane, install Stage 1 traffic pattern.
- Perform shoulder widening and install drainage along Route 2 Eastbound from 115+80 to 120+50 and 122+00 to 148+00.
- Bridge No. 00384: Stage 1C

- Install diaphragm connection plates on existing beam 12 during short term alternating one-way on Griswold Street.
- Remove existing bridge parapet and portion of existing deck
- Remove abutment 1 and 2 cheekwalls and backwalls from top to bottom of deck
- Strip existing overlay and patch existing deck
- Mobilize crane, erect steel superstructure during overnight closure of Griswold Street.
- Install debris shield, SIP forms, and shear studs
- Bridge No. 00384: Stage 1D
 - Construct concrete deck and parapet
 - Install membrane and wearing surface and concrete sealer
 - Perform remaining shoulder widening in vicinity of structure.
- Shift temporary barrier slightly west and reopen both through-lanes of Route 2 Eastbound
- Install roadside safety from northern extents to House Street.
- Perform full depth reconstruction of 2E8OFF Gore and install roadside safety and drainage
- Bridge No. 00386 Stage 1
 - Reconstruct south parapet and end blocks
 - Strip existing overlay and patch deck
 - Install membrane and wearing surface and concrete sealer

STAGE 2 (17 Weeks)

- Install signage and temporary traffic control install Stage 2 traffic pattern along Route 2 Eastbound and Westbound.
- Reconstruct concrete median, drainage (including crossings), and shoulders from 115+80 to 143+00
- Perform Route 2 Eastbound left side widening, install drainage, and roadside safety along from 146+00 to 158+00.
- Install overhead sign structure 22191 at station 153+50
- Bridge No. 00384: Stage 2
 - Strip existing overlay and patch concrete deck
 - Install membrane and wearing surface

- Bridge No. 00386: Stage 2
 - Remove existing north parapet on Route 2 Eastbound and construct proposed parapet
 - Excavate and modify existing abutments
 - Construct approach slabs, barrier, end block, and closure wall on Route 2 Eastbound
 - Strip overlay, patch deck
 - Install membrane, wearing surface, and concrete sealer
- Install traffic monitoring camera in vicinity of Bridge No. 00386.

STAGE 3 (4 Weeks)

- Perform final milling and paving.
11. Establish turf on all exposed soil surfaces and as shown on the Plan Sheets and stabilize according to the slope stabilization details.
 12. Stabilize the disturbed areas. Establish with appropriate seeding mixture per Plan Sheets, on all remaining disturbed areas.
 13. Remove erosion and sedimentation controls when it has been determined that the disturbed areas have been stabilized. (This determination will be made by the Qualified Inspector).
 14. All post-construction stormwater structures shall be cleaned of construction sediment and any remaining sediment control systems (SCS) shall be removed prior to the filing of the “Notice of Termination Form: Non-Solar Projects.”
 15. Ensure the project area is cleaned, free of debris, and catch basins have been cleaned, etc.

If the areas of disturbance have a contributing drainage area that contains 2-5 acres of disturbed soils per discharge point, a temporary sedimentation trap must be provided. The Contractor must submit to the Qualified Inspector a revised SWPCP for review and approval.

If the areas of disturbance have a contributing drainage area that contains greater than five acres of disturbed soils per discharge point, a temporary engineered sedimentation basin must be provided. The Contractor must submit to the Qualified Inspector a revised SWPCP for review and approval. The SWPCP must include locations of the temporary engineered sedimentation basin designed and installed in accordance with the E&S Guidelines, as amended. The Contractor shall provide an inspection and maintenance plan for the engineered sedimentation basin as part for the amended SWPCP.

Control Measures

Best Management Practices have been incorporated into the project design to minimize erosions and sedimentation (E&S) and the discharge of pollutants during construction activities (see the plans in Appendix C for erosion and sedimentation controls). All E&S controls will be installed prior to land disturbance and remain in place for the entire duration of the work activities associated with that phase and any other applicable phases. Control Measures will be in accordance with the

2024 E&S Guidelines, the 2024 Stormwater Quality Manual, or by Special Provisions accepted by the Department. The locations of E&S controls are shown on the plans in Appendix C.

It is anticipated that hay bales, siltation fences made of geotextile fabric, and/or erosion control logs will be utilized for E&S controls throughout the project work areas. In addition, anti-tracking pads will be installed at construction entrances as needed to reduce the potential for tracking mud and dirt onto nearby public roadways. Existing drainage inlets will be protected with silt sacks, fiber rolls, and hay bales as needed throughout construction. Stone or straw wattles may be used to prevent run-on to paved surfaces in cut locations. Standard 2-foot-sumps and 4-foot-sumps in catch basins will allow sediment and debris to settle out of stormwater. Turf establishment and erosion control matting is included to stabilize disturbed areas and prevent E&S. Outlet protection at outfalls is also included to improve water quality.

A completed MS4 Maximum Extent Practicable (MEP) Worksheet is required for the project as effective impervious cover is changing pre to post construction. The MEP Worksheet is provided in Appendix D.

Impaired Waters

There are no direct discharges to impaired waters from the project. There are no new direct discharges to any impaired waters as a result of this project.

Erosion and Sedimentation Controls

The Department of Transportation (Department) will have a Qualified Inspector assigned to the project to oversee the Contractor's operations and to ensure compliance with the provisions of the Contract. Further Department oversight is provided by the District 1 Environmental Coordinator and the Office of Environmental Planning.

The following timelines will be followed for the proposed construction activities:

- The Contractor shall stabilize disturbed areas with temporary or permanent measures as quickly as possible after the land is disturbed.
- Areas that remain disturbed but inactive for at least 14 days shall receive temporary seeding or soil protection within seven (7) days.
- Areas that will be disturbed past the planting season will be covered with a long-term, non-vegetative stabilization method that will provide protection through the winter.
- If construction activities are completed to final grade, permanent stabilization measures shall take place within seven (7) days.

The Department projects are required to have Preconstruction Meetings with the Contractor. The Contractor is required to review and understand the Contract Plans and Specifications as well as develop an E&S Plan for review and approval by the Engineer. The Contractor's E&S plan shall demonstrate compliance with the Stormwater Permit requirement for a double row

of sediment control barriers at all disturbed locations.

Double Row of Erosion and Sediment Control Barriers

- A double row of sediment control barrier shall be utilized between any disturbed area and downgradient wetland or watercourse within 50 feet, unless there would be an adverse impact to adjacent wetlands/watercourses due to installation of a double row (i.e., would result in larger wetland/watercourse impact.)
- Additional erosion control barriers (double row of SCS) may also be required within the project area. Factors to be reviewed by the Engineer include but are not limited to: the contributing disturbed area, drainage area, slope, length of slope, and flow conditions to maintain sheet flow. If determined necessary, the Engineer will direct the Contractor to install and maintain additional rows of erosion control barrier (or equivalent).

Soil Stabilization and Protection

Temporary and permanent soil stabilization practices for managing disturbed areas on the project site are described in detail in the Temporary and Permanent Stabilization Practices sections below.

These practices include temporary seeding, turf establishment, and use of vegetative cover, crushed stone, or riprap to stabilize the site. Soil stockpiles will be located the maximum distance from regulated resources and have a geotextile silt fence or hay bale barrier installed approximately 10 feet from the toe of slope. Side slopes of the stockpiles will be no steeper than 2:1. Stockpiles that will be inactive for a period than greater than 14 days will need to receive temporary seeding mix within 7 days. Permanent vegetated measures will be instituted if soil stockpiles will be dormant for more than 12 months. Vegetation will be preserved to the maximum extent possible, and any disturbed portions of the site will be minimized and stabilized throughout the duration of the construction activity at the site.

Reverse Slope Benches

The 2024 E&S Guidelines, as amended, requires that Reverse Slope Benches be utilized “whenever the vertical height of any slope steeper than 3H:1V exceeds 15 feet, except when engineered slope stabilization structures measures are included in the slope and/or a detailed soils mechanical analysis calculation has confirmed that an acceptable factor of safety exists for the finished slope”. The CTDOT has determined that slope benching is not feasible/practical in this location due to the limited space available in the constrained roadway corridor and highway right-of-way. The CTDOT Soils and Foundations unit has determined that Connecticut soils which are 2H:1V or flatter, have appropriate drainage, as they do not become saturated, are located above the groundwater table, and are considered stable. Slopes that do not meet the criteria above require an analysis by a Professional Engineer with experience in geotechnical engineering or soil mechanics.

The surficial stability of permanent slopes (i.e., prevention of erosion, rilling, and rutting) is typically provided through surface erosion control measures (i.e., vegetation establishment, erosion control matting, or crushed stone blanket.) Refer to ***Section Control Measures***. An engineering soil mechanics analysis is not required in association with these types of measures.

Temporary Stabilization Practices

Temporary or permanent vegetation or other ground cover will be maintained at all times in all the areas of the site, except those undergoing active disturbance. Types of temporary BMPs which may be used on-site include but are not limited to:

- Erosion Control Matting: On slopes steeper than 2:1 erosion control matting shall be used to stabilize the topsoil or as necessary and directed by the Qualified Inspector. ECM type shall be disclosed and selected from the Department's [Qualified Products List](#), as amended.
- Sedimentation Control System (SCS): SCS shall be placed at the toe of the slope or as directed by the Qualified Inspector.
- Anti-Tracking Pads: Construction entrances (gravel anti-tracking pads) shall be constructed at truck access/exit points to off-road route. Access road(s) should grade away from the main roadway or waterbody.
- Dust Control: Routine sweeping and application of dust suppression agents, including but not limited to, water and calcium chloride, over exposed subbase shall be completed for dust control. Additional measures may be necessary to minimize dust within the project limits and within staging and stockpile areas.
- Temporary Seeding: Areas that will remain disturbed but inactive for at least 14 calendar days shall receive temporary seeding or soil protection within 7 days.
- Impaired Waters: For those areas for which construction activity will be temporarily suspended for a period of greater than 14 days, temporary stabilization measures shall be implemented within 3 days of such suspension of activity.
- Catch Basin Inlet Protection: Catch basin inlet protection shall be used to reduce the amount of sediment entering the storm drainage system during construction.

Stabilization practices shall be implemented after completion, as final grades are reached, within seven (7) days.

Temporary seeding shall be spread over any disturbed areas which will remain inactive for at least 14 days. Areas to remain disturbed through winter shall be protected with non-vegetative stabilization measures. The Contractor must provide an Erosion and Sedimentation Control plan for each winter season during construction operations.

The Contractor may elect to utilize other controls in conformance with the E&S Guidelines as amended, as approved by the Qualified Inspector. The Contractor will be required to provide the necessary details for any erosion controls not specifically called for on the project plans.

During construction, all areas disturbed by the construction activity that have not been stabilized, structural control measures, and locations where vehicles enter or exit the site shall be inspected at least once a week and within 24 hours of the end of a storm that generates a discharge. For

storms that end on a weekend, holiday, or other time in which normal working hours will not commence within 24 hours, an inspection is required within 24 hours following any storm in which 0.5 inches or greater of rain occurs. For lesser storms, inspection shall occur immediately upon the start of subsequent normal working hours.

Permanent Stabilization Practices

During construction, the following methods of permanent stabilization shall be installed:

- **Topsoiling**: Once final grades have been established, topsoil shall be applied to provide a suitable growth medium for vegetation, if required.
- **Permanent Stabilization**: Once soils have been brought to final grade; permanent stabilization shall be used to stabilize the soil with a vegetative cover or, with crushed stone for slope protection or riprap, shall be applied, if required. Disturbed areas below the wetland limit shall be seeded with the appropriate seed mix. The Qualified Inspector will verify compliance with this requirement on the Notice of Termination Form: Non-Solar Projects. A full growing season is defined as the timeframe encompassed by two consecutive full seeding seasons: April 1 through June 15, and August 15 through October 1. If final stabilization is achieved during a seeding season, the following seeding season will be considered the first full seeding season after final stabilization has been achieved, the Contractor shall have the site inspected by the CTDOT Consultant Inspector (Qualified Inspector) to confirm such stabilization is maintained. The CTDOT Consultant Inspector (Qualified Inspector) will verify compliance with this requirement on the Notice of Termination Form: Non-Solar Projects, with the concurrence of CTDOT.
- **Landscaping**: Not applicable for this project.

All new embankments and unpaved areas that are graded or disturbed by construction will receive erosion control matting, topsoil and/or seed establishment. The Contractor may use other permanent stabilization practices that have been accepted by the Qualified Inspector or CTDOT that are in conformance with the E&S Guidelines.

All areas disturbed by construction shall receive 4 inches of topsoil and conservation seeding for slopes unless otherwise noted or identified on the contract plans. Processed aggregate will be used at guiderail locations.

Structural Measures

Structural measures shall be used to divert flows away from exposed soils, store flows, limit runoff, and minimize the discharge of pollutants. The SCS at catch basins will be installed in all existing and proposed catch basins within the project limits or immediately downgradient of project limits. Standard 2-foot-sump catch basins and 4-foot-sump catch basins will allow for sediment and debris to settle out of the stormwater. The proposed drainage systems have been designed to maintain the current flow patterns and the existing discharge points, therefore opportunities for structural measures are limited.

Maintenance

All construction activities and related activities shall conform to the requirements of Section 1.10 "Environmental Compliance" of the Department's Standard Specifications. In general, all construction activities shall proceed in such a manner so as not to pollute any wetlands, watercourses, water body, and conduit carrying stormwater. The Contractor shall limit, in so far as possible, the surface area of earthen materials exposed by construction activity and immediately provide temporary and permanent pollution control to prevent soil erosion and contamination on the site. Water pollution control provisions and Required Best Management Practices per Section 1.10, Environmental Compliance of the Standard Specifications shall be administered during construction. Control measures shall be inspected and maintained in accordance with the 2024 E&S Guidelines and as directed by the Qualified Inspector.

Dewatering Wastewaters

Dewatering Guidelines

When dewatering is necessary, pumps used shall not be allowed to discharge directly into a wetland, watercourse, or stormwater drainage system. Prior to any dewatering, the Contractor must submit to the Engineer a written proposal for specific methods and devices to be used on site. Written approval must be obtained from the Engineer for methods and devices, including, but not limited to, the pumping of water into a temporary sedimentation basin, providing surge protection at the inlet or outlet of pumps, floating the intake of a pump, or any other method for minimizing and retaining the suspended solids. If the Qualified Inspector determines that a pumping operation is causing turbidity problems, the Contractor shall halt said operation until a means of controlling the turbidity is submitted by the Contractor in writing to the Engineer. Once written acceptance is received from the Engineer with the concurrence of CTDOT, the Contractor may implement the turbidity control measures.

No discharge of dewatering wastewater shall contain or cause a visible oil sheen, floating solids or foaming in the receiving water. If required, all activities are to be performed in compliance with the Department's Standard Specifications.

Post-Construction Stormwater Management

Post-construction stormwater controls will be in conformance with the 2024 Stormwater Quality Manual and the CTDOT's qualified product list or by Special Provision accepted by the Department.

The CTDOT Consultant Inspector (Qualified Inspector) may provide direction to install other BMPs during the construction process to minimize the discharge of pollutants, and stormwater discharges that will occur after construction operations have been completed.

- **Minimal Curbing**: Curbing shall be avoided wherever possible to maximize overland sheet

flow and encourage infiltration.

- Outlet Protection: Riprap outlet protection shall be used at the proposed outlet to decrease velocity and the potential for erosion (e.g., apron, splash pad, etc.).
- Catch Basins: Catch basins shall be used, especially adjacent to outlets, to intercept pollutants and debris.
- MS4 Measures: List any permanent post construction water quality BMP's by including the completed CTDOT MS4 Maximum Extent Possible (MEP) sheet in Appendix D of the Plan.

Post-Construction Guidelines

After the project is complete, the Department will perform the following maintenance and restorative measures:

- Litter/debris and sweepings will be removed from the site, as needed.
- Mowing and maintenance of the seeded areas and vegetated areas will occur, as needed.
- Riprap outlet protection will be inspected and cleaned, as needed.
- Stormwater drainage system will be cleaned of sediment/debris, as needed.
- Identify, inspect, and maintain all stormwater quality BMPs included within the project, as per the MS4 or manufacturer recommendations.

Post Construction Performance Standards and Control Measure

Redevelopment:

The project area is more than 40% effective impervious cover in the existing condition; therefore, Redevelopment is applicable to this project. In order to comply with CTDOT's MS4 Permit Requirements, this project reduced the effective impervious cover (as defined in the Construction Stormwater General Permit effective 12/31/20; modification date 11/25/22 Permit) to the maximum extent practicable.

[Post-construction Impervious Area (2.88 ac.)] – [Pre-construction Impervious Area (6.61 ac.)] =
[Change in Impervious Area (-3.73 ac.)]

There will be a decrease in effective impervious cover and DCIA of approximately 3.73 acres as part of this project. The DCIA calculation is included in the MS4 Maximum Extent Practical (MEP) Worksheet in Appendix D. The effective impervious cover within the project's watershed will not be increased, thus the retention of half the water quality volume is not required.

Water quality volume was determined using the following equation:

$$WQV = \frac{(P)(R)(A)}{12}$$

where:

WQV = water quality volume (cubic feet)
 P = 1.3 inches (90th percentile rainfall event)
 R = volumetric runoff coefficient = $0.05 + 0.009(I)$
 I = post- development impervious area (percent) after application of non-structural LID site planning and design strategies and before application of structural stormwater BMPs
 A = post-development total drainage area of site or design point (square feet)

Area (A) =	11.11	acres
Area (A) =	0.01736	square miles
Design Precipitation (P) =	1.3	inch
% Impervious Cover (I) =	72.0	
Volumetric Runoff Coefficient (R) =	0.699	

WQV = 0.841 ac-ft

1/2 WQV= 0.421 ac-ft
= 18320 cu-ft

The water quality retention volume requirement for the site is 0.421 ac-ft. The proposed water quality retention volume for the site of 0.28 ac-ft does not meet the minimum requirement. However, the effective impervious cover within the project's watershed will not be increased, thus the retention of half the water quality volume is not required.

The full retention of ½ WQV cannot be met due to the site's topography, as well as highway right-of-way constraints and regulated area limitations. The existing drainage system will remain in place and in use, also limiting the opportunity for additional stormwater retention on-site. Several approaches have been included in the project to maximize runoff reduction on-site, including: removal of curbing/natural dispersion, hay bales, siltation fences, stone or straw wattles, and/or erosion control logs to prevent runoff.

Other Development:

The project area is more than 40% effective impervious cover in the existing condition;— therefore, Other Development is not applicable to this project.

Runoff Reduction and LID Practices

Due to the limited amount of available right-of-way LID practices have not been incorporated and are not part of the scope of this project as existing topography is a constraint. However, see Appendix D for additional information pertaining to soil information, MS4 documentation, and Areas of Environmental Concern (AOEC's).

Suspended Solids and Floatable Removal

Since the project proposes to reconnect to the existing storm drainage systems in locations throughout the project corridor, there is less opportunity to integrate stormwater management

measures to capture suspended solids and remove floatables. Runoff Reduction Measures employed to minimize the discharge of suspended solids and floatables (e.g., oil and grease, other floatable liquids, floatable solids, trash, etc.) will include standard 2-foot sumps and 4-foot sumps for catch basins.

Velocity Dissipation:

Velocity dissipation is an important long-term control to reduce the potential for erosion and sedimentation within the project area after construction. The project will incorporate the following BMPs to promote long-term, permanent velocity dissipation.

- Type B Riprap Aprons
- Type 1 Preformed Scour Holes

Inspections and maintenance of drainage structures will be conducted regularly, and riprap will be replaced as needed to maintain long-term control of erosions and sedimentation. These measures have been sized appropriately for the project elements, and supporting calculations are provided in Appendix B.

Other Controls (Non-Structural)

Waste Disposal

Construction site waste shall be properly managed and disposed of during the entire construction period.

The following is applicable:

- A waste collection area will be designated. The selected area will minimize truck travel through the site and will not drain directly to the adjacent wetlands.
- Waste collection shall be scheduled regularly to prevent the containers from overflowing.
- Spills shall be cleaned up immediately.
- Defective containers that may cause leaks or spills will be identified through regular inspection. Any found to be defective will be repaired or replaced immediately.
- Any stockpiling of materials should be confined to the designated area as approved by the Qualified Inspector.

Washout Areas

Washout of applicators, containers, vehicles, and equipment for concrete shall be conducted in a designated washout area. No surface discharge of washout wastewaters from the area will be allowed. All concrete wash water will be directed into a container or pit such that no overflows can occur. Washout shall be conducted in an entirely self-contained system and will be clearly designed and flagged or signed where necessary. The washout area shall be located outside of any buffers and at least 50 feet from any stream, wetland or other sensitive water or natural resources as determined or designated by the Department's Office of Environmental Planning or the project's Qualified Inspector.

Washout Area(s) will be site located by the Contractor, approved by the Qualified Inspector and the SWPCP revised, as appropriate. The “Concrete Washout Area” detail shows the recommended method of construction for the washout area. The designated area shall be designed and maintained such that no overflows can occur during rainfall or after snowmelt. Concrete Washout Area detail is provided in Appendix C.

Anti-tracking Pads and Dust Control (Form 818- Sections 2.11, 9.39, 9.42, and 9.43)

Off–site vehicle tracking of sediments and the generation of dust shall be minimized. Temporary anti-tracking pads from the active work site to the existing pavement will be installed and maintained at the locations shown on the plans.

The Contractor shall:

- Maintain the entrance in a condition which will prevent tracking and washing of sediment onto paved surfaces.
- Provide periodic top dressing with additional stone or additional length as conditions demand.
- Repair any measures used to trap sediment, as needed.
- Immediately remove all sediment spilled, dropped, washed, or tracked onto paved surfaces.
- Ensure roads adjacent to a construction site are left clean at the end of each day.

If the construction entrance is being properly maintained and the action of a vehicle traveling over the stone pad is not sufficient to remove the majority of the sediment, then the contractor shall either:

- Increase the length of the construction entrance,
- Modify the construction access road surface, or
- Install washing racks and associated settling area or similar devices before the vehicle enters a paved surface.

For construction activities which cause airborne particulates, wet dust suppression shall be utilized. Construction site dust will be controlled by sprinkling the ground surface with water until it is moist on an as-needed basis. The volume of water sprayed shall be such that it suppresses dust yet also prevents the runoff of water.

Maintaining and Storing Vehicles and Equipment- Storage of Chemicals & Petroleum Products

The Contractor shall take measures to prevent any contamination to wetlands and watercourses while maintaining and storing construction equipment on the site. All chemical and petroleum containers stored on site shall be provided with impermeable containment which will hold at least 110% of the volume of the largest container, or 10% of the total volume of all containers in the area, whichever is larger, without overflow from the containment area. All chemicals and their containers shall be stored under a roofed area except for those stored in containers of 100-gallon capacity or more, in which case double-walled tanks will suffice. Accumulation of rainwater

within secondary containment must be visually inspected for sheen prior to being discharged. If any sheen is identified; the accumulated water must be removed by the Contractor to an appropriate off-site location.

Cold Water Stream Habitat

This project site is not located within a Cold-Water Fisheries area. However, there is a Cold Water Stream Habitat Watershed located upstream approximately 1,000 feet northeast of Bridge No. 00385 not within the project limits.

Inspections

The Qualified Inspector will conduct site inspections once a week or after any rain event of 0.1 inches or greater during normal working hours. The Qualified Inspector conducting inspections shall fill out a [Construction Site Environmental Inspection Report \(CSEIR\)](#) for each inspection described below.

Each report shall be retained as a part of the SWPCP and shall be uploaded to the COMPASS Environmental subfolder available for CTDEEP request. The report shall include a statement that, in the judgment of the Qualified Inspector(s) conducting the site inspection, the site is either in compliance or out of compliance with the terms and conditions of the Plan and permit. If the site inspection indicates that the site is out of compliance, the inspection report shall include a summary of the remedial actions required to bring the site back into compliance, review Keeping Plans Current.

Plan Implementation Inspections

For each phase of construction, the site shall be inspected at least once within the first 30 days of construction activity and at least three times, with 7 or more days between inspections, within the first 90 days of construction activity to confirm compliance and proper initial implementation of all control measures.

Routine Inspections

The Permittee will maintain a rain gauge on-site to document rainfall amounts. During construction, all areas disturbed by the construction activity that have not been stabilized, all erosion and sediment control measures, structural control measures, soil stockpile areas, washout areas, and locations where vehicles enter or exit the site shall be inspected for evidence of or the potential for pollutant entering the drainage systems and impacts to the receiving waters at least every seven (7) calendar days and within 24 hours of the end of a storm that generates a discharge.

For storms that end on a weekend, holiday, or other time in which normal working hours will not commence within 24 hours, an inspection is required within 24 hours following any storm in which 0.5 inches or greater of rain occurs. For lesser storms, inspection shall occur immediately upon the start of subsequent normal working hours.

Where sites have been temporarily or finally stabilized, such inspection shall be conducted at least weekly until final stabilization has been achieved.

Qualified Inspectors provided by the Department's District 1 Office shall conduct inspections.

The following items shall be inspected as described below:

<u>Item</u>	<u>Procedure</u>
Sedimentation Control System (SCS)	The SCS shall be inspected to ensure that the fence line is intact with no breaks or tears. The fence shall be firmly anchored to the ground. Areas where the fence is excessively sagging or where support posts are broken or uprooted shall be noted. Depth of sediment behind the fence shall be noted if sediment needs to be removed.
Concrete Washout Area	Containers or pits shall be inspected at least once a week to ensure structural integrity, adequate holding capacity and will be repaired prior to future use if leaks are present. The contractor shall remove hardened concrete waste when it accumulates to a height of ½ of the container or pit or as necessary to avoid overflows. All concrete waste shall be disposed of in a manner consistent with all applicable laws, regulations and guidelines.
Catch Basin Protection	Protective measures shall be inspected to ensure that sediment is not entering the catch basins. Catch basin sumps shall be monitored for sediment deposition.
Erosion Control Matting	Inspect erosion control matting and repair any dislodged or failed blankets immediately. Replace any washed out seed or topsoil.
Anti-tracking Pad	Locations where vehicles enter or exit the site shall be inspected for evidence of off-site tracking.
Dust Control	Measures shall be taken for the purpose of allaying (diminishing) dust conditions. Measures may include the use of sweeping equipment and/or the application of water or calcium chloride.
General	Construction areas and the perimeter of the site shall be inspected for any evidence of debris that may blow or wash off-site or that has blown or washed off site. Construction areas shall be inspected for any spills or unsafe storage of materials that could pollute off site waters.

Post-Construction Inspection

Upon completion of construction activities and stabilization of the site, all post-construction

stormwater structures, including standard 2-foot-sump catch basins, 4-foot-sump catch basins, Type I Preformed Scour Holes, and Type B Riprap Aprons shall be cleaned of construction sediment or debris and the site inspected to confirm compliance with all post-construction stormwater management requirements. Sediment shall be properly disposed of in accordance with all applicable laws, regulations, and guidelines. Any remaining sediment control system(s) SCS shall be removed prior to acceptance of the project by the Department.

Final Stabilization Inspection

Once CTDOT has made a determination that the site has achieved final stabilization, the site shall be inspected, and photo documented by the District Environmental Coordinator (DEC) to confirm that no active erosion or sedimentation is present and site stabilization has been maintained.

Final stabilization is achieved when a full growing season is completed. A full growing season is defined as the timeframe encompassed by two consecutive full seeding seasons: April 1 through June 15, and August 15 through October 1. If final stabilization is achieved during a seeding season, the following seeding season will be considered the first full seeding season after final stabilization has been achieved, the DEC will verify compliance with this requirement on the Notice of Termination: Non-Solar Projects.

Keeping Plans Current

Revisions to Stormwater Pollution Control Plans

The Department will amend the Plan if the actions required by the Plan fail to prevent pollution or otherwise comply with provisions of the General Permit. The Plan shall also be amended whenever there is a change in contractors or sub-contractors at the site, or a change in design, construction, operation, or maintenance at the site which has not otherwise been addressed in the plan.

If the results of the inspections require modifications to the Stormwater Pollution Control Plan, the plans shall be revised as soon as practicable after the inspection. Such modifications shall provide for a timely implementation of any changes to non-engineered controls on the site within 24 hours and implementation of any changes to the plan within 3 (three) calendar days following the inspection. For Engineered measures, corrective actions shall be implemented on site within 7 (seven) days and incorporated into a revised Plan within 10 (ten) days of the date of inspection.

In no event shall the requirements to keep the Plan current or update a Plan, relieve the permittee and their contractor(s) of the responsibility to properly implement any actions required to protect the waters of the State and to comply with all conditions of the General Permit.

Contractors

General

This section shall identify all Contractors and Subcontractors who will perform on site actions which may reasonably be expected to cause or have the potential to cause pollution of the waters of the State.

Certification Statement

All contractors and subcontractors must sign the attached statement. All certifications will be included in the Stormwater Pollution Control Plan.

State Project No. 0053-0196

Route 2 Eastbound Lane Modifications Exit 6 to Exit 8
Glastonbury, CT

“I certify under penalty of law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as Contractor on the project, I am covered by this General Permit, and must comply with the terms and conditions of this permit, including, but not limited to, the requirements of the Stormwater Pollution Control Plan prepared for this project.”

GENERAL CONTRACTOR

Signed: _____

Date: _____

Title: _____

Firm: _____

Telephone: _____

Address: _____

SUBCONTRACTOR

Signed: _____

Date: _____

Title: _____

Firm: _____

Telephone: _____

Address: _____

General:

This Stormwater Pollution Control Plan (SWPCP) is prepared to comply with the requirements for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. Also, to be considered part of the SWPCP are the proposed construction plans, special provisions, and the Connecticut Department of Transportation's "Standard Specifications for Roads, Bridges and Incidental Construction" (Form 818) including supplements thereto and the Connecticut Guidelines for Erosion and Sediment Control (E&S Guidelines) and Stormwater Quality Manual (SWQ Manual), as amended.

List of Applicable Figures / Plans:

Appendix A – Figures

- Existing Drainage Area Plans
- Proposed Drainage Area Plans
- Master Outfall Table

Appendix B – Drainage Calculations

- Water Quality Calculations
- Velocity Dissipation

Appendix C – Plan Sheets

- Drainage Plans
- Applicable Stormwater Details
- Highway Plans
- Grading Plans
- Staging Plans

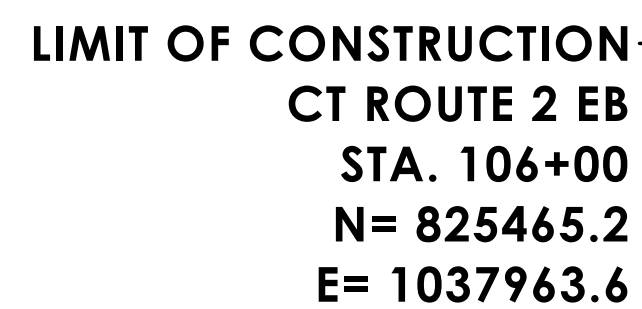
Appendix D- CTDOT MS4 Project Design Maximum Extent Practicable Worksheet

Appendix E- Construction Site Environmental Inspection Report (CSEIR)

Appendix F – Notice of Termination Form: Non-Solar Projects

Appendices

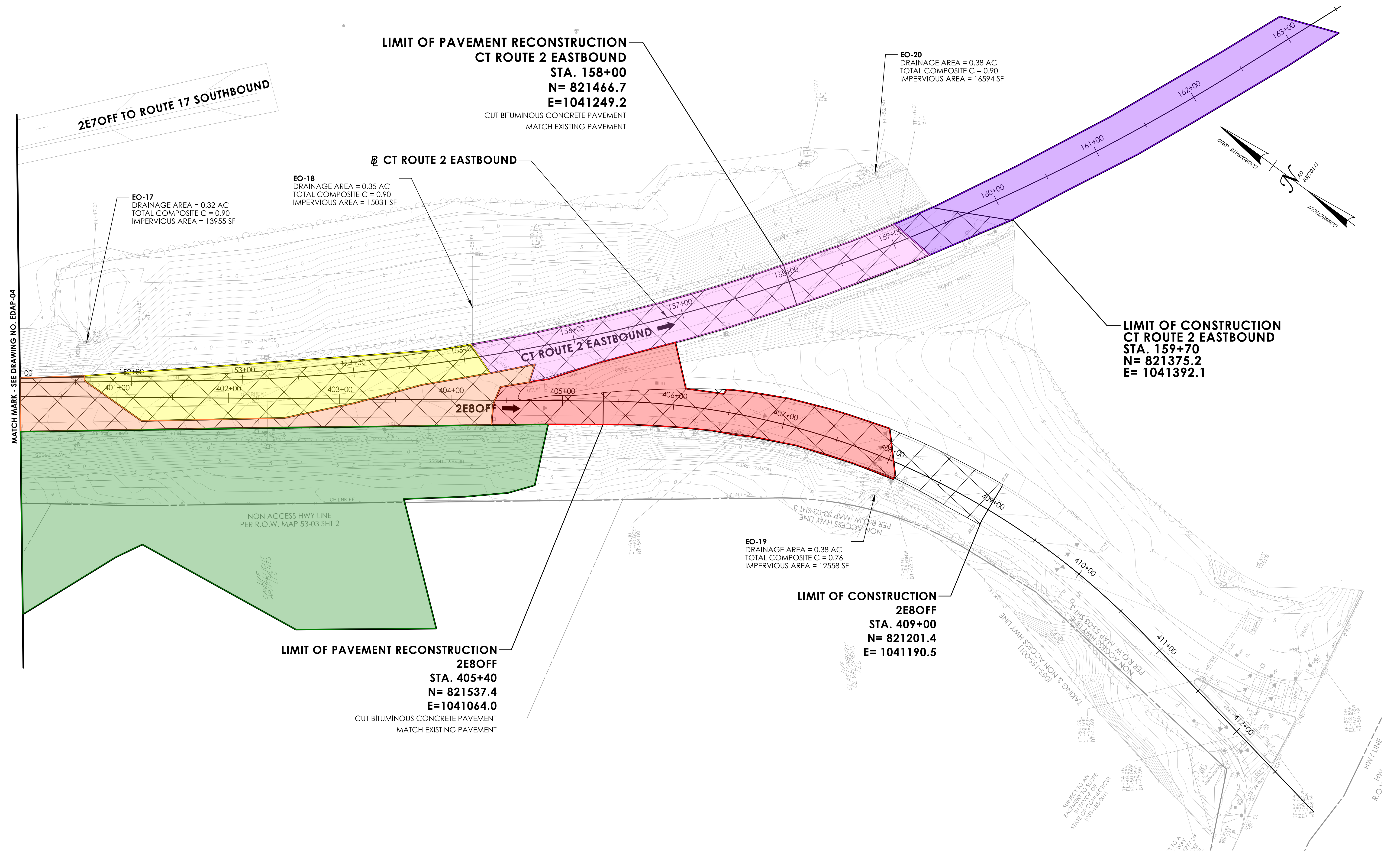
Appendix A: Figures



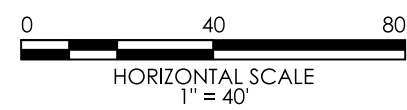
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SIGNATURE/
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VN ENGINEERS INC.
Traffic • Infrastructure • Planning
116 WASHINGTON AVENUE | NORTH HAVEN, CT 06473 | 203.234.7862

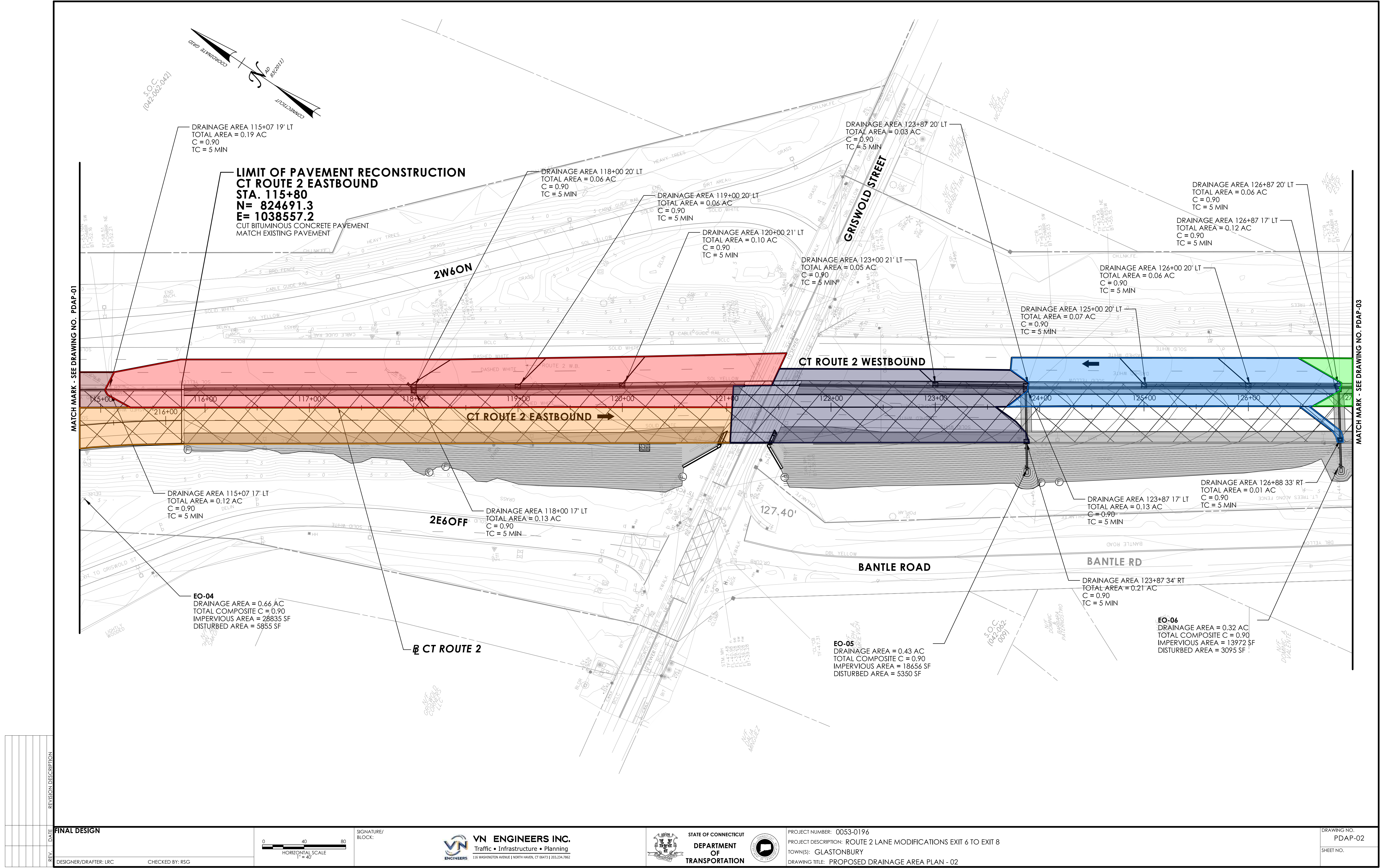


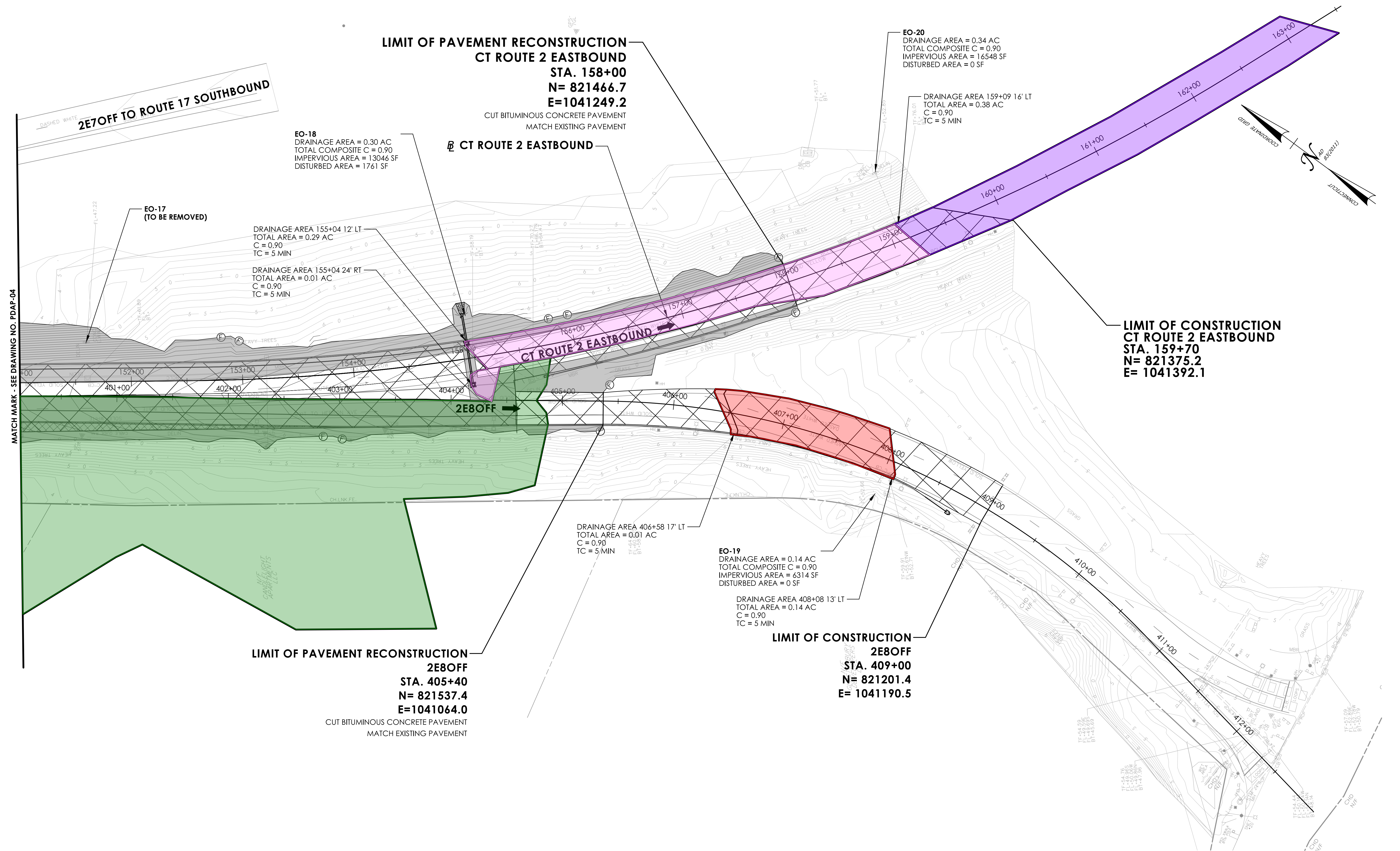
STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION



PROJECT NUMBER: 0053-0196
PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8
TOWN(S): GLASTONBURY
DRAWING TITLE: EXISTING DRAINAGE AREA PLAN - 05

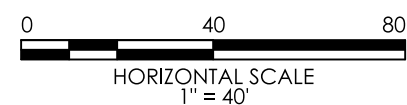
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EDAP-05
SHEET NO.



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FINAL DESIGN

DESIGNER/DRAFTER: TGC CHECKED BY: LRC
LASTED SAVED BY: LCafaro FILE NAME: c:\pwwordir\benesch projects\projects\d0140463\HW_CP_0053-0196_PDAP-05.dgn
PLOTTED DATE: 7/23/2024



SIGNATURE/
BLOCK:



VN ENGINEERS INC.
Traffic • Infrastructure • Planning
116 WASHINGTON AVENUE | NORTH HAVEN, CT 06473 | 203.234.7862



STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION



PROJECT NUMBER: 0053-0196

PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8

TOWN(S): GLASTONBURY

DRAWING TITLE: PROPOSED DRAINAGE AREA PLAN - 05

DRAWING NO.
PDAP-05

SHEET NO.

Outlet #	Approximate Location (Station & Offset)	Page of PDF	Outlet Type	Pipe Material	Pipe Size	Easting	Northing	Method to Obtain Easting/Northing	Latitude (Decimal Degrees, Format xx.xxxxx)	Longitude (Decimal Degrees, Format -xx.xxxxx)	Method to obtain Latitude/Longitude	Date Outfall will be Active (START)	Date Outfall will be Active (END)	Discharge to Storm Sewer, Wetlands or Waterbody	Impaired Water?	Qmax (CFS, 10 Year) (Proposed)	Vmax (FPS, 10 Year) (Proposed)	Existing Total Area (AC)	Proposed Total Area (AC)	Existing Composite C	Proposed Composite C	Total Impervious Area Before Construction Within Outlet Boundary (Sqft)	Total Impervious Area After Construction Within Outlet Boundary (Sqft)	For the drainage area associated with each outfall – effective impervious area before construction (sq ft)	For the drainage area associated with each outfall – effective impervious area after construction (sq ft)	Disturbed Area(Sqft)
EO-01	108+88 52' RT	DRG-01	R.C. Culvert End	RCP	15"	1038118.736	825220.602	NAD 1983 CT State Plane	41.72582	-72.61036	CTECO	TBD	TBD	Storm Sewer/Wetland	No	1.93	1.86	0.35	0.35	0.90	0.90	15162	15162	15162	15162	0
EO-02	110+87 65' RT	DRG-01	R.C. Culvert End	RCP	15"	1038228.453	825058.949	NAD 1983 CT State Plane	41.72537	-72.60996	CTECO	TBD	TBD	Storm Sewer/Wetland	No	1.6	1.58	0.22	0.22	0.90	0.90	9586	9586	9586	9586	0
EO-03	212+66 45' RT	DRG-01	Metal Culvert End	CMP	12"	1038292.761	824888.435	NAD 1983 CT State Plane	41.72491	-72.60973	CTECO	TBD	TBD	Storm Sewer/Wetland	No	6.4	42667	0.98	0.95	0.90	0.90	42667	41279	42667	41279	5472
EO-04	114+84 86' RT	DRG-02	Metal Culvert End	CMP	15"	1038433.947	824720.573	NAD 1983 CT State Plane	41.72444	-72.60921	CTECO	TBD	TBD	Storm Sewer/Wetland	No	3.22	3.16	0.61	0.66	0.90	0.90	20925	28835	20925	28835	5855
EO-05	123+88 60' RT	DRG-02	Endwall	C.C.M. PIPE	15"	1038963.407	823987.761	NAD 1983 CT State Plane	41.72243	-72.60728	CTECO	TBD	TBD	Storm Sewer/Wetland	No	2.2	9.03	0.35	0.43	0.90	0.90	21284	18656	21284	18656	5350
EO-06	126+89 58' RT	DRG-02	Endwall	C.C.M. PIPE	15"	1039133.215	823739.343	NAD 1983 CT State Plane	41.72175	-72.60665	CTECO	TBD	TBD	Storm Sewer/Wetland	No	1.83	6.71	0.51	0.32	0.90	0.90	17651	13972	17651	13972	3095
EO-07	129+60 58' RT	DRG-03	Endwall	RCP	18"	1039283.8	823517.927	NAD 1983 CT State Plane	41.72114	-72.60610	CTECO	TBD	TBD	Storm Sewer/Wetland	No	1.93	4.21	0.28	0.25	0.90	0.90	12063	15072	12063	15072	3367
EO-08	135+41 67' RT	DRG-03	Endwall	RCP	18"	1039678.537	823070.05	NAD 1983 CT State Plane	41.71991	-72.60466	CTECO	TBD	TBD	Storm Sewer/Wetland	No	7.07	5.6	0.47	3.47	0.47	0.47	59292	59989	59292	59989	3592
EO-09	136+14 42' RT	DRG-03	Endwall	RCP	18"	1039748.715	823038.686	NAD 1983 CT State Plane	41.71982	-72.60440	CTECO	TBD	TBD	Storm Sewer/Wetland	No	6.57	5.56	0.61	0.68	0.90	0.90	26437	29537	26437	29537	8103
EO-10	138+93 61' RT	DRG-03	Endwall	RCP	15"	1039945.074	822839.879	NAD 1983 CT State Plane	41.71928	-72.60369	CTECO	TBD	TBD	Storm Sewer/Wetland	No	0	0	0.90	0.00	0.90	0.00	39063	0	39063	0	0
EO-11	138+93 45' RT	DRG-03	Endwall	CMP	15"	1039953.834	822849.807	NAD 1983 CT State Plane	41.71930	-72.60365	CTECO	TBD	TBD	Storm Sewer/Wetland	No	1.59	5.84	0.28	0.27	0.90	0.90	12247	11865	12247	11865	4231
EO-12	142+08 82' RT	DRG-04	Endwall	CMP	15"	1040156.808	822612.287	NAD 1983 CT State Plane	41.71865	-72.60291	CTECO	TBD	TBD	Storm Sewer/Wetland	No	0	0	0.66	0.00	0.90	0.00	28967	0	28967	0	0
EO-13	144+80 72' RT	DRG-04	Endwall	C.C.M. PIPE	15"	1040337.211	822421.186	NAD 1983 CT State Plane	41.71813	-72.60225	CTECO	TBD	TBD	Storm Sewer/Wetland	No	0.81	0.97	0.06	0.15	0.90	0.90	3708	6428	3708	6428	714
EO-14	146+02 88' RT	DRG-04	Endwall	RCP	18"	1040397.015	822311.134	NAD 1983 CT State Plane	41.71782	-72.60203	CTECO	TBD	TBD	Storm Sewer/Wetland	No	5.36	3.56	3.81	4.52	0.39	0.48	35280	70336	24300	70336	22685
EO-15	308+18 107' LT	DRG-04	Endwall	CMP	18"	1040807.387	822301.123	NAD 1983 CT State Plane	41.71779	-72.60053	CTECO	TBD	TBD	Storm Sewer/Wetland	No	1.9	2	0.38	0.38	0.90	0.90	16479	16479	16479	16479	0
EO-16	148+40 65' RT	DRG-04	Endwall	CMP	15"	1040557.509	822136.71	NAD 1983 CT State Plane	41.71734	-72.60145	CTECO	TBD	TBD	Storm Sewer/Wetland	No	0	0	0.51	0.00	0.90	0.00	10881	0	10881	0	0
EO-17	151+60 36' RT	DRG-05	Endwall	CMP	15"	1040831.416	821942.69	NAD 1983 CT State Plane	41.71681	-72.60045	CTECO	TBD	TBD	Storm Sewer/Wetland	No	0	0	0.32	0.00	0.90	0.00	13955	0	13955	0	0
EO-18	155+04 38' LT	DRG-05	Endwall	C.C.M. PIPE	15"	1041048.647	821683.006	NAD 1983 CT State Plane	41.71610	-72.59965	CTECO	TBD	TBD	Storm Sewer/Wetland	No	0.31	3.55	0.35	0.30	0.90	0.90	15031	13046	15031	13046	1761
EO-19	408+02 29' RT	DRG-05	R.C. Culvert End	RCP	12"	1041146.586	821290.799	NAD 1983 CT State Plane	41.71502	-72.59930	CTECO	TBD	TBD	Storm Sewer/Wetland	No	0.78	1.07	0.38	0.14	0.76	0.90	12558	6314	12558	6314	0
EO-20	159+09 66' LT	DRG-05	Endwall	CMP	15"	1041373.315	821461.109	NAD 1983 CT State Plane	41.71549	-72.59846	CTECO	TBD	TBD	Storm Sewer/Wetland	No	1.73	1.85	0.38	0.34	0.90	0.90	16594	16548	16594	16548	0
Totals:																		12.410	13.430			429830	373104	418850	373104	64225
																						Effective Impervious Area Reduction Percentage:		10.9%		
Total Project Disturbed Area with 10% Buffer																							70647.5			

Appendix B: Drainage Calculations

TOTAL SITE AREA (A) = 11.11 acres

DRAINAGE AREAS

Drainage Area	Impervious Area	
Subcatchment-1	0.00	
Subcatchment-2	0.00	
Subcatchment-3	0.00	
Total Impervious	8.01	801.0%

WATER QUALITY VOLUME (WQV) CALCULATION

Design Precipitation (P) = 1.3 inch
% Impervious Cover (I) = 72
Volumetric Runoff Coefficient (R) = 0.699

WQV =	0.841	ac-ft
	36641	cu-ft

1/2 WQV=	0.421	ac-ft
=	18320	cu-ft



Pipe Information

	Inlet (Elev.)	Outlet (Elev.)	Pipe Length (ft)	Pipe Slope	Mannings Roughness Coefficient, n
15" C.C.M. PIPE	56.55	51.50	25	20.2%	0.024

Scour Hole Calcs

(Ref: ConnDOT Drainage Manual 11.13.6)

Sp = Inside Diameter for circular sections or Maximum inside pipe span for non-circular sections, m (ft)

Q = pipe (design) discharge, cms (cfs)

TW = Tailwater depth, m (ft)

Rp = maximum inside pipe rise, m (ft)

Note: Sp = Rp = inside diameter for circular sections

 d_{50} = Median stone size required

$$d_{50} = (0.0125Rp^2/TW)(Q/Rp^{2.5})^{1.33} \text{ (ft)} \quad (\text{eq. 11.35})$$

$$Sp = Rp = 1.25 \text{ ft} \quad (\text{Max. inside span})$$

$$TW = 0.88 \text{ ft}$$

$$A = 0.22 \text{ sf}$$

$$V = 9.20 \text{ ft/s}$$

$$Q = VA = 1.99 \text{ cfs}$$

$$d_{50} = 0.03 \text{ ft} \quad d_{50} < 0.42 \text{ ft} \quad \text{Use Modified Riprap}$$

Type 1 and 2 preformed scour hole dimensions (11.37)
(See Figure 11-15)

$$\text{Basin Length, m (ft)} = C = 3Sp + 6F$$

$$\text{Basin inlet \& outlet Width, m (ft)} = B = 2Sp + 6F$$

$$\text{Type 1 Basin Depression, m (ft)} = F = 0.5Rp$$

$$\text{Type 2 Basin Depression, m (ft)} = F = Rp$$

Modified	$d_{50} < 0.13\text{m (0.42 ft)}$
Intermediate	$0.13\text{m (0.42 ft)} < d_{50} < 0.20\text{m (0.67 ft)}$
Standard	$0.20\text{m (0.67 ft)} < d_{50} < 0.38\text{m (1.25 ft)}$
Special Design	$0.38\text{m (1.25 ft)} < d_{50}$

Scour Hole Design

Type 1

Recommend type 1 due to smaller footprint

$$F = 0.6$$

$$C = 8$$

$$B = 6$$

Type 2

$$F = 1.3$$

$$C = 11$$

$$B = 10$$

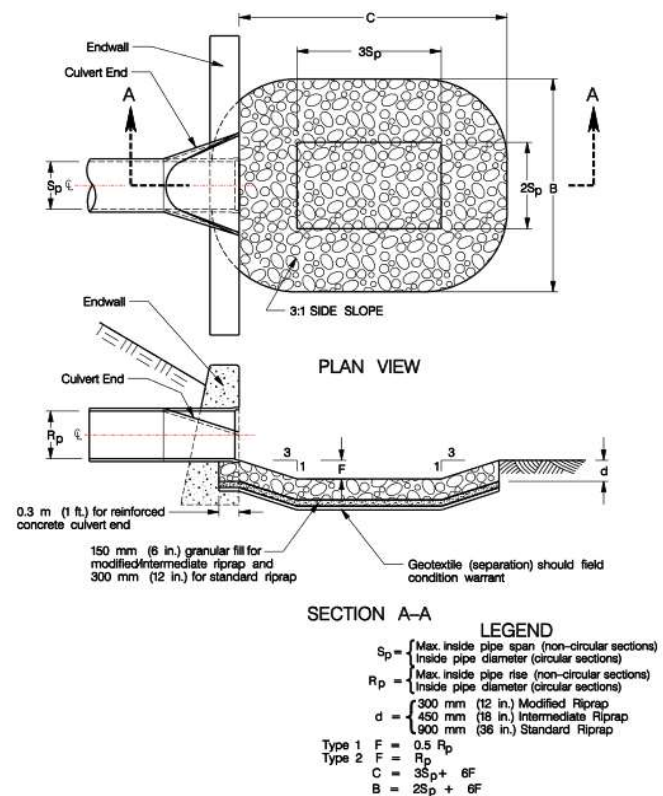


Figure 11-15 Preformed Scour Hole Type 1 and Type 2



Pipe Information

	Inlet (Elev.)	Outlet (Elev.)	Pipe Length (ft)	Pipe Slope	Mannings Roughness Coefficient, n
15" C.C.M. PIPE	50.55	48.00	25	10.2%	0.024

Scour Hole Calcs

(Ref: ConnDOT Drainage Manual 11.13.6)

Sp = Inside Diameter for circular sections or Maximum inside pipe span for non-circular sections, m (ft)

Q = pipe (design) discharge, cms (cfs)

TW = Tailwater depth, m (ft)

Rp = maximum inside pipe rise, m (ft)

Note: Sp = Rp = inside diameter for circular sections

 d_{50} = Median stone size required $d_{50} = (0.0125Rp^2/TW)(Q/Rp^{2.5})^{1.33}$ (ft) (eq. 11.35)

Sp = Rp =	1.25	ft	(Max. inside span)
TW =	0.9	ft	
A =	0.28	sf	
V =	6.67	ft/s	
Q = VA =	1.88	cfs	
d_{50} =	0.02	ft	$d_{50} < 0.42$ ft Use Modified Riprap

Type 1 and 2 preformed scour hole dimensions (11.37)
(See Figure 11-15)

Basin Length, m (ft) = C = 3Sp + 6F

Basin inlet & outlet Width, m (ft) = B = 2Sp + 6F

Type 1 Basin Depression, m (ft) = F = 0.5Rp

Type 2 Basin Depression, m (ft) = F = Rp

Modified	$d_{50} < 0.13$ m (0.42 ft)
Intermediate	0.13 m (0.42 ft) $< d_{50} < 0.20$ m (0.67 ft)
Standard	0.20 m (0.67 ft) $< d_{50} < 0.38$ m (1.25 ft)
Special Design	0.38 m (1.25 ft) $< d_{50}$

Scour Hole Design

Type 1

Recommend type 1 due to smaller footprint

F = 0.6

C = 8

B = 6

Type 2

F = 1.3

C = 11

B = 10

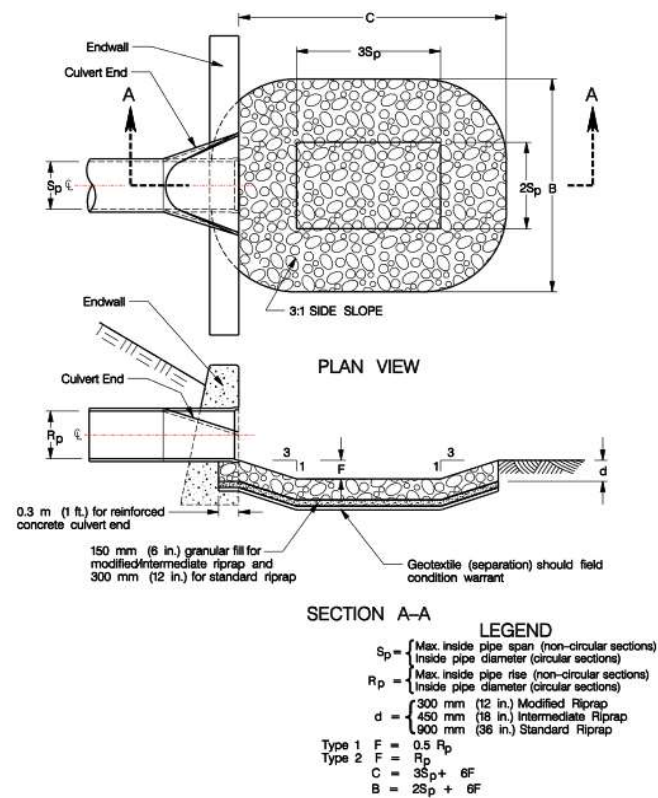


Figure 11-15 Preformed Scour Hole Type 1 and Type 2

VN ENGINEERS, INC.
 116 Washington Avenue
 North Haven, CT 06473
 (203) 234-7862

Job.	Route 2 Lane Modifications Exit 6 to Exit 8				
Project No.	0053-0196		VN PN.	224-124	
Sheet No.	1		Of	1	
Calculated By	TGC		Date	4/13/2024	
Checked By	LRC		Date		

STA. 129+60 58' RT

OUTLET PROTECTION



GIVEN

$Q_d = 2.03$ cfs Invert 45'
 $V_{exit} = 4.15$ ft/s
 Pipe Size (Sp) = 18 in (Sp = Rp = inside diameter for circular sections)
 $T_w = 1.02$ ft

Type B Riprap Apron (Maximum Tailwater Condition) $TW \geq 0.5 R_p$
 Assume Tailwater Elevation equal to depth of flow from HGL.

TYPE B

LENGTH

$$L_a = [3.0(Q-5)/Sp^{1.5}] + 10$$

$$L_a = 10 \text{ ft}$$

WIDTH

$W_1 = 3Sp$ (min.) (Width of apron at pipe outlet)
 $W_2 = 3Sp + 0.4L_a$ for $TW \geq 0.5 R_p$ (Width of apron at terminus)

Then $W_1 = 4.5$ ft
 $W_2 = 8.5$ ft

Then By the exit velocity, it required: **Modified Riprap**

Then Find depth according to riprap type

CHANNEL TYPE Modified

Choose factor
 12 in = Modified RipRap **depth D = 12 in**
 18 in = Intermediate RipRap
 36 in = Standard RipRap

Then Volume of Riprap Required is **Volume = 65.0 C.F.**

Then Find depth of granular fill according to riprap type
 Choose factor
 6 in = Modified RipRap **depth Dw = 6 in**
 6 in = Intermediate RipRap
 12 in = Standard RipRap

Then Volume of granular fill required is **Volume = 32.5 C.F**



Pipe Information

	Inlet (Elev.)	Outlet (Elev.)	Pipe Length (ft)	Pipe Slope	Mannings Roughness Coefficient, n
18" RCP	25.84	24.44	196	0.7%	0.013

Scour Hole Calcs

(Ref: ConnDOT Drainage Manual 11.13.6)

Sp = Inside Diameter for circular sections or Maximum inside pipe span for non-circular sections, m (ft)

Q = pipe (design) discharge, cms (cfs)

TW = Tailwater depth, m (ft)

Rp = maximum inside pipe rise, m (ft)

Note: Sp = Rp = inside diameter for circular sections

 d_{50} = Median stone size required $d_{50} = (0.0125Rp^2/TW)(Q/Rp^{2.5})^{1.33}$ (ft) (eq. 11.35)

Sp = Rp =	1.5	ft	(Max. inside span)
TW =	1.27	ft	
A =	1.27	sf	
V =	5.58	ft/s	
Q = VA =	7.09	cfs	
d_{50} =	0.08	ft	$d_{50} < 0.42$ ft Use Modified Riprap

Type 1 and 2 preformed scour hole dimensions (11.37)
(See Figure 11-15)Basin Length, m (ft) = $C = 3Sp + 6F$ Basin inlet & outlet Width, m (ft) = $B = 2Sp + 6F$ Type 1 Basin Depression, m (ft) = $F = 0.5Rp$ Type 2 Basin Depression, m (ft) = $F = Rp$

Modified	$d_{50} < 0.13m$ (0.42 ft)
Intermediate	$0.13m$ (0.42 ft) $< d_{50} < 0.20m$ (0.67 ft)
Standard	$0.20m$ (0.67 ft) $< d_{50} < 0.38m$ (1.25 ft)
Special Design	$0.38m$ (1.25 ft) $< d_{50}$

Scour Hole Design

Type 1

Recommend type 1 due to smaller footprint

F = 0.8

C = 9

B = 8

Type 2

F = 1.5

C = 14

B = 12

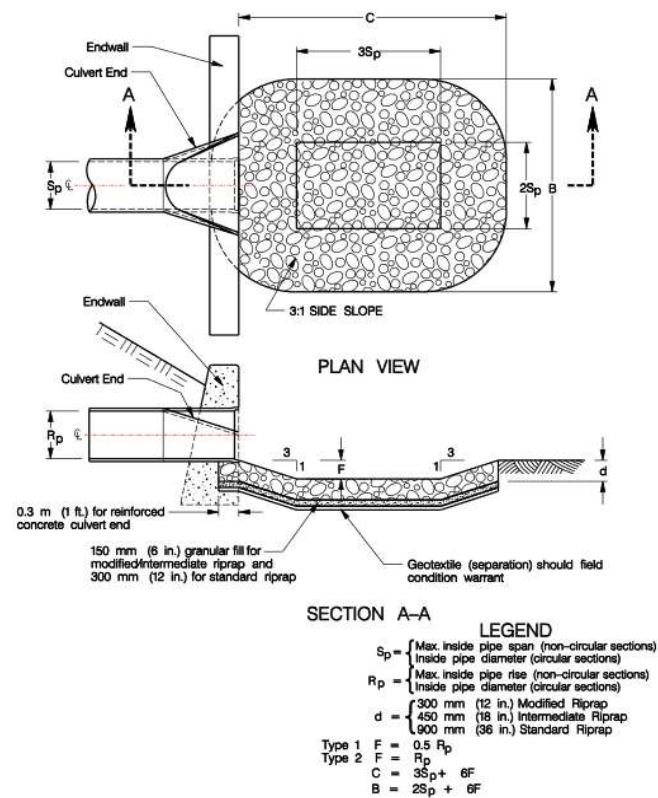


Figure 11-15 Preformed Scour Hole Type 1 and Type 2



Pipe Information

	Inlet (Elev.)	Outlet (Elev.)	Pipe Length (ft)	Pipe Slope	Mannings Roughness Coefficient, n
18" RCP	36.50	36.00	68	0.7%	0.013

Scour Hole Calcs

(Ref: ConnDOT Drainage Manual 11.13.6)

Sp = Inside Diameter for circular sections or Maximum inside pipe span for non-circular sections, m (ft)

Q = pipe (design) discharge, cms (cfs)

TW = Tailwater depth, m (ft)

Rp = maximum inside pipe rise, m (ft)

Note: Sp = Rp = inside diameter for circular sections

 d_{50} = Median stone size required

$$d_{50} = (0.0125Rp^2/TW)(Q/Rp^{2.5})^{1.33} \text{ (ft)} \quad (\text{eq. 11.35})$$

$$Sp = Rp = 1.5 \text{ ft} \quad (\text{Max. inside span})$$

$$TW = 0.99 \text{ ft}$$

$$A = 1.18 \text{ sf}$$

$$V = 5.56 \text{ ft/s}$$

$$Q = VA = 6.58 \text{ cfs}$$

$$d_{50} = 0.09 \text{ ft}$$

d50 < 0.42 ft Use Modified Riprap

Type 1 and 2 preformed scour hole dimensions (11.37)
(See Figure 11-15)

$$\text{Basin Length, m (ft)} = C = 3Sp + 6F$$

$$\text{Basin inlet \& outlet Width, m (ft)} = B = 2Sp + 6F$$

$$\text{Type 1 Basin Depression, m (ft)} = F = 0.5Rp$$

$$\text{Type 2 Basin Depression, m (ft)} = F = Rp$$

Modified	$d_{50} < 0.13\text{m (0.42 ft)}$
Intermediate	$0.13\text{m (0.42 ft)} < d_{50} < 0.20\text{m (0.67 ft)}$
Standard	$0.20\text{m (0.67 ft)} < d_{50} < 0.38\text{m (1.25 ft)}$
Special Design	$0.38\text{m (1.25 ft)} < d_{50}$

Scour Hole Design

Type 1

Recommend type 1 due to smaller footprint

$$F = 0.8$$

$$C = 9$$

$$B = 8$$

Type 2

$$F = 1.5$$

$$C = 14$$

$$B = 12$$

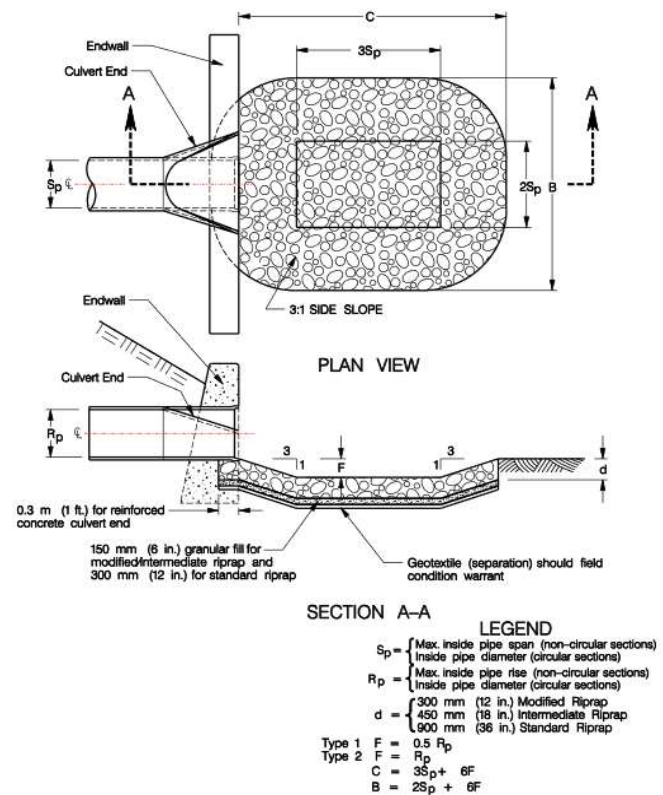


Figure 11-15 Preformed Scour Hole Type 1 and Type 2



Pipe Information

	Inlet (Elev.)	Outlet (Elev.)	Pipe Length (ft)	Pipe Slope	Mannings Roughness Coefficient, n
15" C.C.M. PIPE	37.00	36.00	13	7.7%	0.024

Scour Hole Calcs

(Ref: ConnDOT Drainage Manual 11.13.6)

Sp = Inside Diameter for circular sections or Maximum inside pipe span for non-circular sections, m (ft)

Q = pipe (design) discharge, cms (cfs)

TW = Tailwater depth, m (ft)

Rp = maximum inside pipe rise, m (ft)

Note: Sp = Rp = inside diameter for circular sections

 d_{50} = Median stone size required

$$d_{50} = (0.0125Rp^2/TW)(Q/Rp^{2.5})^{1.33} \text{ (ft)} \quad (\text{eq. 11.35})$$

$$Sp = Rp = 1.25 \text{ ft} \quad (\text{Max. inside span})$$

$$TW = 0.5 \text{ ft}$$

$$A = 0.27 \text{ sf}$$

$$V = 5.84 \text{ ft/s}$$

$$Q = VA = 1.59 \text{ cfs}$$

$$d_{50} = 0.03 \text{ ft} \quad d_{50} < 0.42 \text{ ft} \quad \text{Use Modified Riprap}$$

Type 1 and 2 preformed scour hole dimensions (11.37)
(See Figure 11-15)

$$\text{Basin Length, m (ft)} = C = 3Sp + 6F$$

$$\text{Basin inlet \& outlet Width, m (ft)} = B = 2Sp + 6F$$

$$\text{Type 1 Basin Depression, m (ft)} = F = 0.5Rp$$

$$\text{Type 2 Basin Depression, m (ft)} = F = Rp$$

Modified	$d_{50} < 0.13\text{m (0.42 ft)}$
Intermediate	$0.13\text{m (0.42 ft)} < d_{50} < 0.20\text{m (0.67 ft)}$
Standard	$0.20\text{m (0.67 ft)} < d_{50} < 0.38\text{m (1.25 ft)}$
Special Design	$0.38\text{m (1.25 ft)} < d_{50}$

Scour Hole Design

Type 1

$$F = 0.6$$

$$C = 8$$

$$B = 6$$

Type 2

$$F = 1.3$$

$$C = 11$$

$$B = 10$$

Recommend type 1 due to smaller footprint

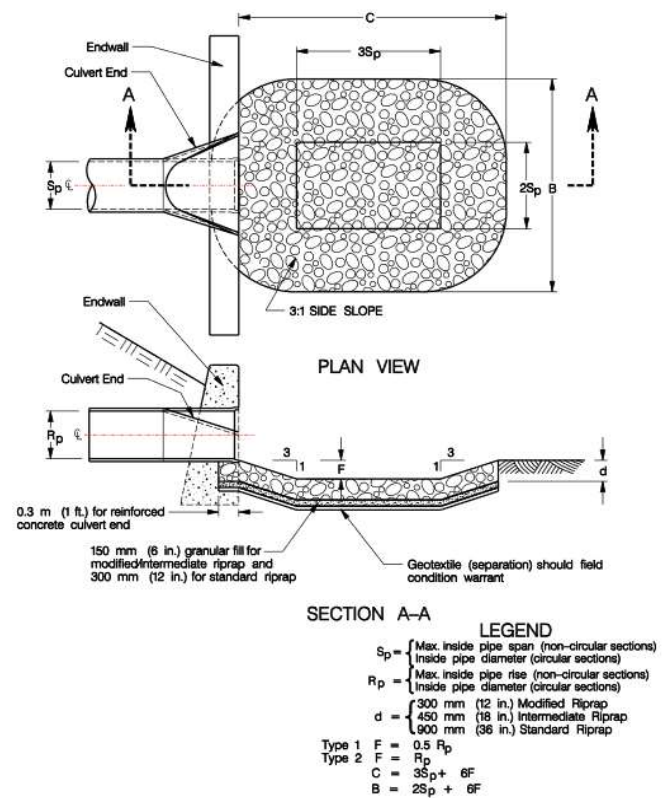


Figure 11-15 Preformed Scour Hole Type 1 and Type 2

VN ENGINEERS, INC.
116 Washington Avenue
North Haven, CT 06473
(203) 234-7862

Job.	Route 2 Lane Modifications Exit 6 to Exit 8				
Project No.	0053-0196		VN PN.	224-124	
Sheet No.	1		Of	1	
Calculated By	TGC		Date	4/13/2024	
Checked By	LRC		Date		

STA. 144+80 72' RT

OUTLET PROTECTION



GIVEN

$Q_d = 0.81$ cfs Invert 30'
 $V_{exit} = 8.67$ ft/s
 Pipe Size (Sp) = 15 in (Sp = Rp = inside diameter for circular sections)
 $T_w = 0.80$ ft

Type B Riprap Apron (Maximum Tailwater Condition) $TW \geq 0.5 R_p$
 Assume Tailwater Elevation equal to depth of flow from HGL.

TYPE B

LENGTH

$$L_a = [3.0(Q-5)/Sp^{1.5}] + 10$$

$$L_a = 10 \text{ ft}$$

WIDTH

$W_1 = 3Sp$ (min.) (Width of apron at pipe outlet)
 $W_2 = 3Sp + 0.4L_a$ for $TW \geq 0.5 R_p$ (Width of apron at terminus)

Then $W_1 = 3.75 \text{ ft}$
 $W_2 = 7.8 \text{ ft}$

Then By the exit velocity, it required: **Intermediate Riprap**

Then Find depth according to riprap type

CHANNEL TYPE Intermediate

Choose factor
 12 in = Modified RipRap **depth D = 18 in**
 18 in = Intermediate RipRap
 36 in = Standard RipRap

Then Volume of Riprap Required is **Volume = 86.3 C.F.**

Then Find depth of granular fill according to riprap type
 Choose factor
 6 in = Modified RipRap **depth Dw = 6 in**
 6 in = Intermediate RipRap
 12 in = Standard RipRap

Then Volume of granular fill required is **Volume = 28.8 C.F**

VN ENGINEERS, INC.
 116 Washington Avenue
 North Haven, CT 06473
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Job.	Route 2 Lane Modifications Exit 6 to Exit 8				
Project No.	0053-0196		VN PN.	224-124	
Sheet No.	1		Of	1	
Calculated By	TGC		Date	4/13/2024	
Checked By	LRC		Date		

STA. 155+04 38' LT

OUTLET PROTECTION



GIVEN

$Q_d = 0.31$ cfs Invert 62'
 $V_{exit} = 3.55$ ft/s
 Pipe Size (Sp) = 15 in (Sp = Rp = inside diameter for circular sections)
 $T_w = 0.74$ ft

Type B Riprap Apron (Maximum Tailwater Condition) $TW \geq 0.5 R_p$
 Assume Tailwater Elevation equal to depth of flow from HGL.

TYPE B

LENGTH

$$L_a = [3.0(Q-5)/Sp^{1.5}] + 10$$

$$L_a = 10 \text{ ft}$$

WIDTH

$W_1 = 3Sp$ (min.) (Width of apron at pipe outlet)
 $W_2 = 3Sp + 0.4L_a$ for $TW \geq 0.5 R_p$ (Width of apron at terminus)

Then $W_1 = 3.75 \text{ ft}$
 $W_2 = 7.8 \text{ ft}$

Then By the exit velocity, it required: **Modified Riprap**

Then Find depth according to riprap type

CHANNEL TYPE Modified

Choose factor
 12 in = Modified RipRap **depth D = 12 in**
 18 in = Intermediate RipRap
 36 in = Standard RipRap

Then Volume of Riprap Required is **Volume = 57.5 C.F.**

Then Find depth of granular fill according to riprap type
 Choose factor
 6 in = Modified RipRap **depth Dw = 6 in**
 6 in = Intermediate RipRap
 12 in = Standard RipRap

Then Volume of granular fill required is **Volume = 28.8 C.F**



VN ENGINEERS, INC.
116 Washington Avenue
North Haven, CT 06473
(203) 234-7862

Job. Route 2 Lane Modifications Exit 6 to Exit 8

Project No.	0053-0196	VN PN.	224-124
Sheet No.	1	Of	1
Calculated By	LRC	Date	4/13/2023
Checked By	TGC	Date	4/13/2023

Allowable Velocities for Various Soil Texures

Connecticut Guidelines for Soil Erosion & Sediment Control

Table 5. 26 Allowable Velocities for Various Soil Textures

Soil Texture	Allowable Velocity (ft./sec.)
Sand and sandy loam	2.5
Silt Loam	3.0
Sandy clay loam	3.5
Clay loam	4.0
Clay, fine gravel, graded loam to gravel	5.0
Cobbles	5.5
Shale	6.0

10 Year Design Storm is being used for the Velocity Calculations

STA 123+20 RT (8' X 10' CRUSHED STONE SLOPE PROTECTION)

AC	Drainage Area (acres) =	0.06	acres	*Drainage Area to Crushed Stone Slope Protection
C	Runoff Coeff. =	0.9	-	
I	Rainfall Intensity =	7.45	in/hr	* 10 Year Storm for TC of 5 min
Q	Flow (cfs) =	0.41	cfs	* $Q=c*i*a$ (rational method)
A	Area of Gutter Section (ft ²) =	0.20	ft ²	* Spread = 2.13' & 0.191' depth of water for 10 Year Storm
V	Velocity of Flow (ft/s) =	2.01	ft/s	* $Q=A*V$

2.01 ft/s PASSES FOR ALLOWABLE VELOCITY (GRAVEL)

Appendix C: Plan Sheets

SUBSET 04 - DRAINAGE INDEX OF DRAWINGS			
DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
INX-01	INDEX OF DRAWINGS		
DRG-01	DRAINAGE PLAN - 01		
DRG-02	DRAINAGE PLAN - 02		
DRG-03	DRAINAGE PLAN - 03		
DRG-04	DRAINAGE PLAN - 04		
DRG-05	DRAINAGE PLAN - 05		
DRG-06	MISCELLANEOUS DRAINAGE DETAILS - 01		
DRG-07	MISCELLANEOUS DRAINAGE DETAILS - 02		
DRG-08	MISCELLANEOUS DRAINAGE DETAILS - 03		
DRG-09	MISCELLANEOUS DRAINAGE DETAILS - 04		
DRG-10	MISCELLANEOUS DRAINAGE DETAILS - 05		
DRG-11	MISCELLANEOUS DRAINAGE DETAILS - 06		
DRG-12	MISCELLANEOUS DRAINAGE DETAILS - 07		
DRG-13	OUTLET GRADING DETAILS - 01		
DRG-14	OUTLET GRADING DETAILS - 02		

[illegible]

DATE: _____ TIME: _____		
	DESIGNER/DRAFTER: TGC	CHECKED BY: LRC

SIGNATURE/
BLOCK:

 **VN ENGINEERS INC.**
Traffic • Infrastructure • Planning
116 WASHINGTON AVENUE | NORTH HAVEN, CT 06473 | 203.234.7862



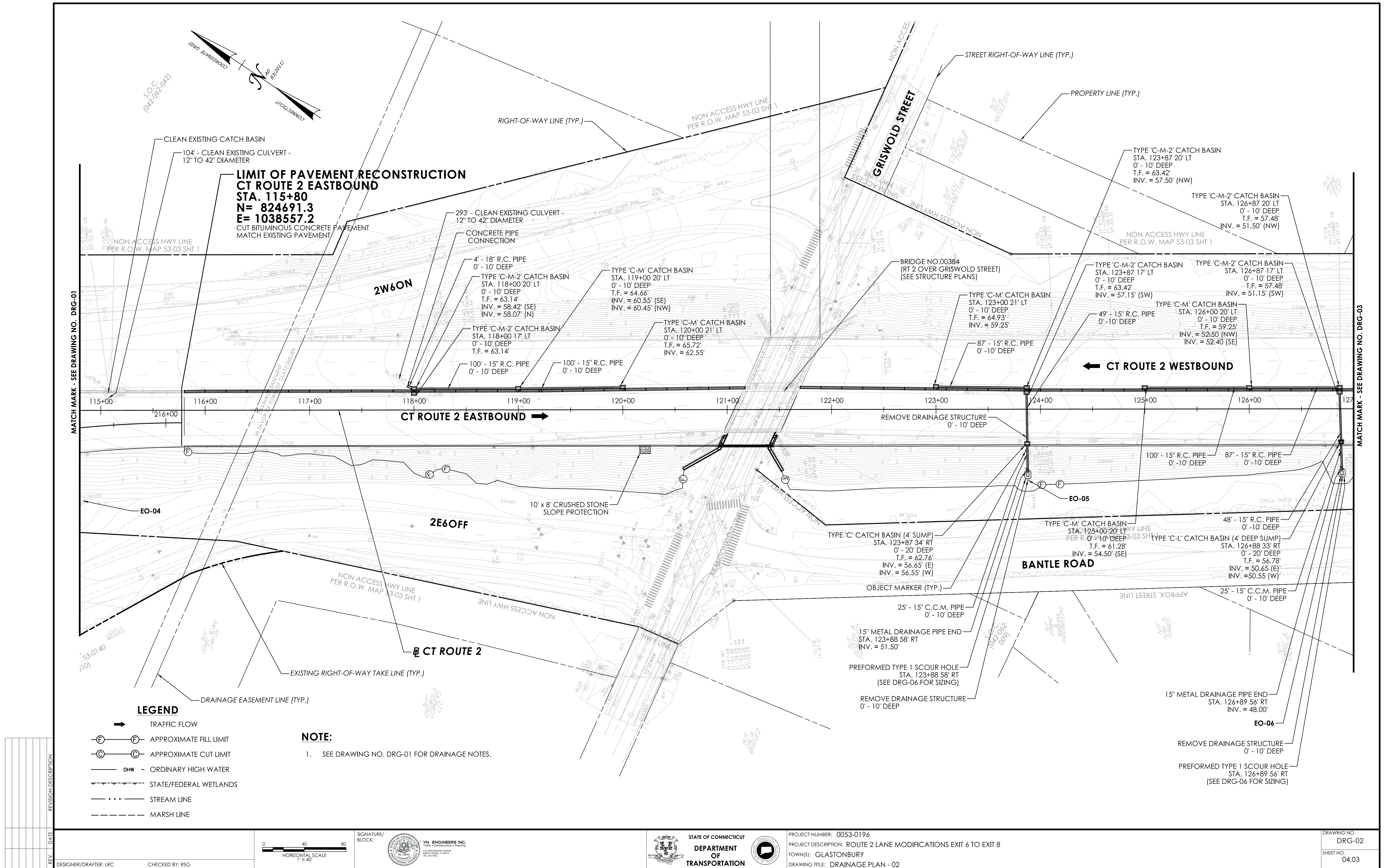
STATE OF CONNECTICUT

**DEPARTMENT
OF
TRANSPORTATION**



PROJECT NUMBER: 0053-0196
PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8
TOWN(S): GLASTONBURY
DRAWING TITLE: INDEX OF DRAWINGS

DRAWING NO.	INX-01
SHEET NO.	04.01



REV

DATE

REVISION DESCRIPTION

→

TRAFFIC FLOW

⊖

⊖

APPROXIMATE FILL LIMIT

⊙

⊙

APPROXIMATE CUT LIMIT

— OHW —

ORDINARY HIGH WATER

STATE/FEDERAL WETLANDS

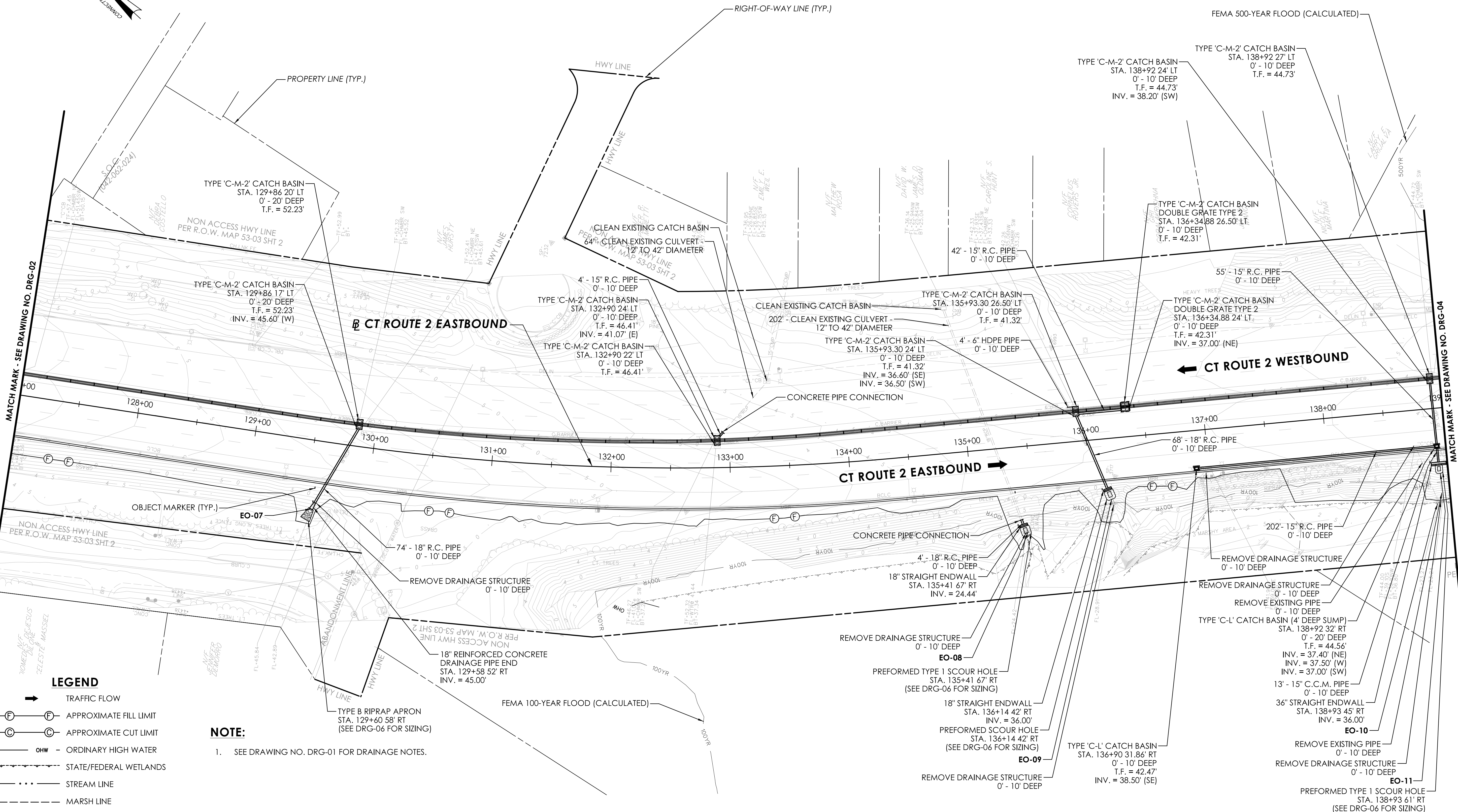
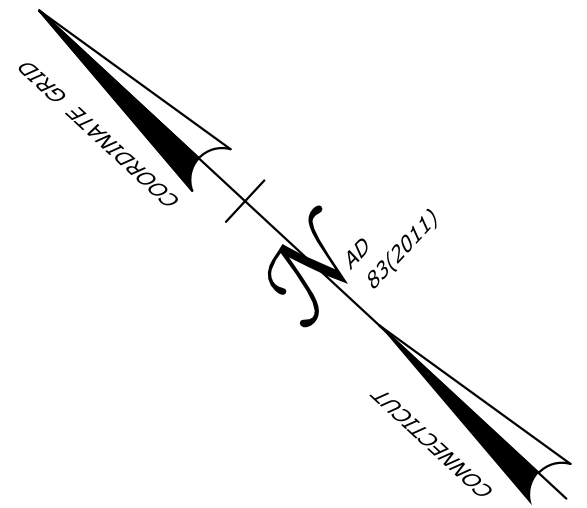
— · · · —

STREAM LINE

MARSH LINE

NOTE:

1. SEE DRAWING NO. DRG-01 FOR DRAINAGE NOTES.



LEGEND

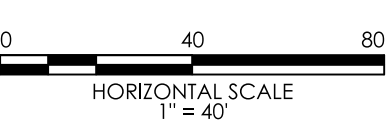
- ➔ TRAFFIC FLOW
- ⊖ ⊕ APPROXIMATE FILL LIMIT
- ⊖ ⊕ APPROXIMATE CUT LIMIT
- OHW — ORDINARY HIGH WATER
- STATE/FEDERAL WETLANDS
- STREAM LINE
- MARSH LINE

NOTE:

1. SEE DRAWING NO. DRG-01 FOR DRAINAGE NOTES.

REV.	DATE	REVISION DESCRIPTION

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LASTED SAVED BY: LColarone FILE NAME: c:\pwworkdr\benesch projects\projects\0140463\HW_CP_0053-0196_DRG-03.dgn
PLOTTED DATE: 8/26/2024



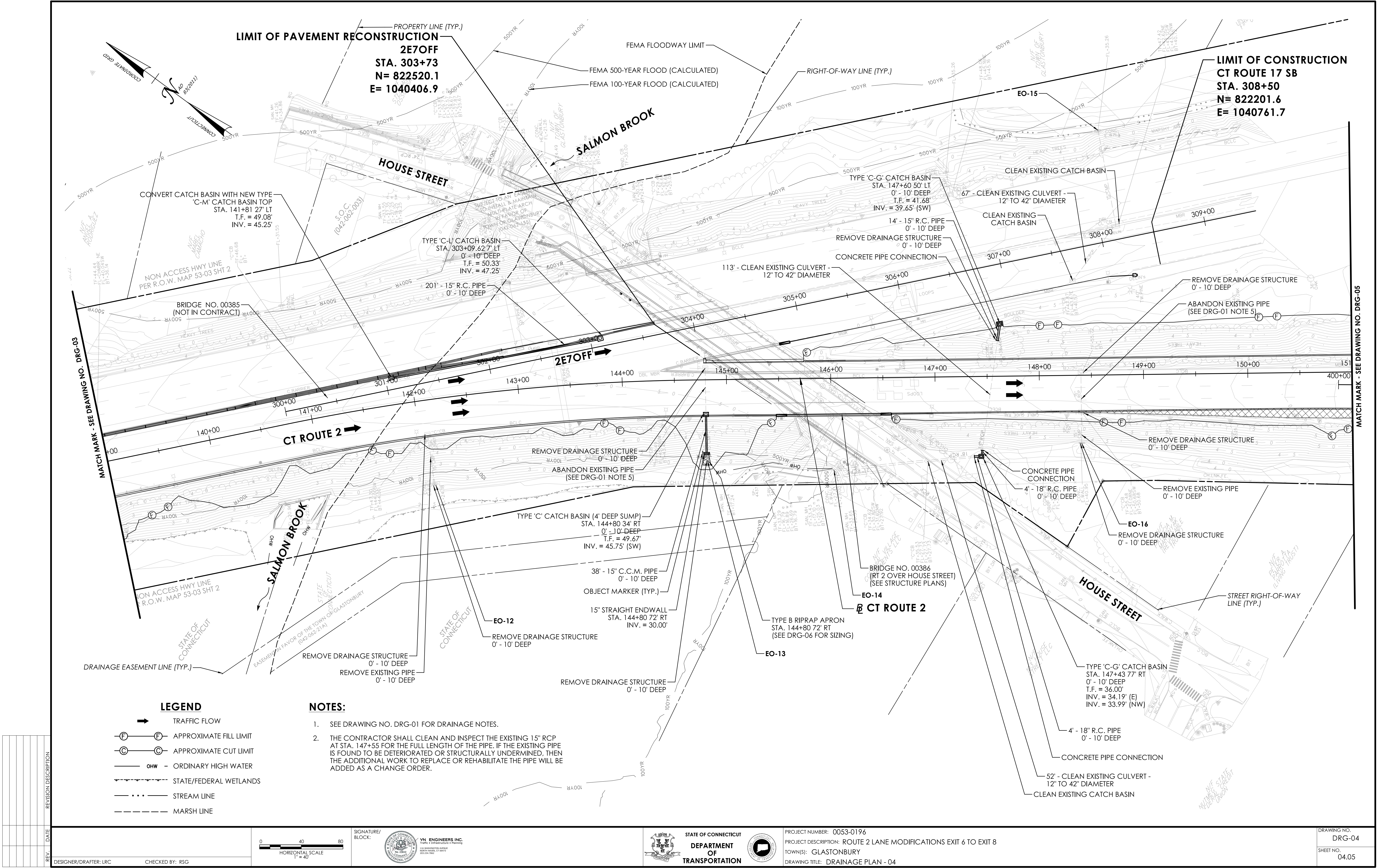
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BLOCK:

YN ENGINEERS INC.
Traffic • Infrastructure • Planning
110 NEWINGTON AVENUE
SUITE 200, NEWINGTON, CT 06457
(860) 294-1962

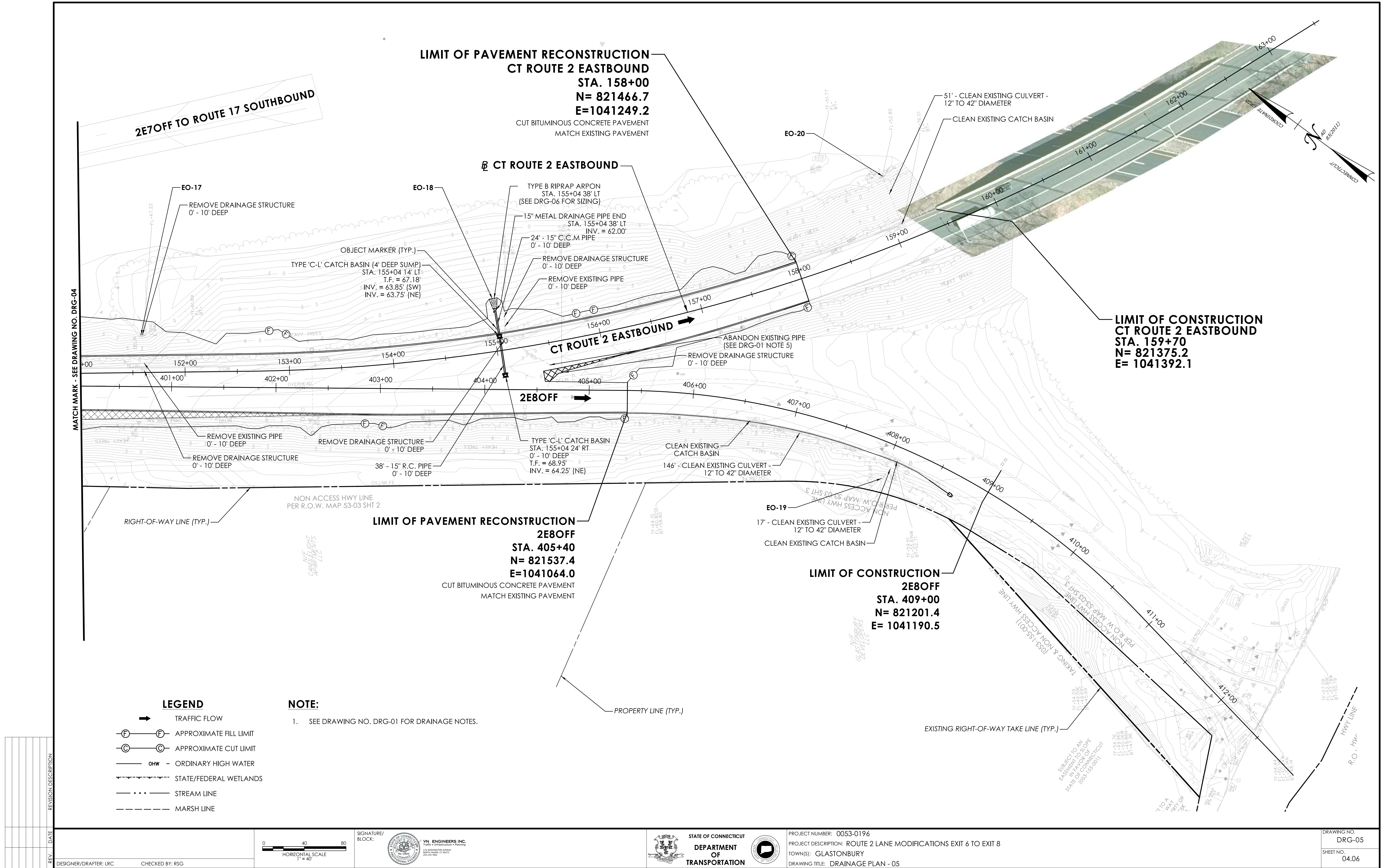


PROJECT NUMBER: 0053-0196
PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8
TOWN(S): GLASTONBURY
DRAWING TITLE: DRAINAGE PLAN - 03

DRAWING NO.
DRG-03
SHEET NO.
04.04



REV.	DATE	REVISION DESCRIPTION





LEGEND

$$\begin{aligned} S_p &= \begin{cases} \text{MAX. INSIDE PIPE SPAN (NON-CIRCULAR SECTIONS)} \\ \text{INSIDE PIPE DIAMETER (CIRCULAR SECTIONS)} \end{cases} \\ R_p &= \begin{cases} \text{MAX. INSIDE PIPE RISE (NON-CIRCULAR SECTIONS)} \\ \text{INSIDE PIPE DIAMETER (CIRCULAR SECTIONS)} \end{cases} \\ d &= \begin{cases} 12 \text{ IN. MODIFIED RIPRAP} \\ 18 \text{ IN. INTERMEDIATE RIPRAP} \end{cases} \end{aligned}$$

TYPE 1 $F = 0.5 R_p$
 $C = 3S_p + 6F$
 $B = 2S_p + 6F$

PREFORMED SCOUR HOLE TYPE 1

TYPE 1 SCOUR HOLES

NOT TO SCALE
MINIMUM DIMENSIONS PROVIDED IN TABLES

[illegible]

TYPE B RIPRAP APRON

TYPE B RIPRAP APRONS

NOT TO SCALE
MINIMUM DIMENSIONS PROVIDED IN TABLES

LEGEND

$$\begin{aligned} S_p &= \begin{cases} \text{MAX. INSIDE PIPE SPAN (NON-CIRCULAR SECTIONS)} \\ \text{INSIDE PIPE DIAMETER (CIRCULAR SECTIONS)} \end{cases} \\ R_p &= \begin{cases} \text{MAX. INSIDE PIPE RISE (NON-CIRCULAR SECTIONS)} \\ \text{INSIDE PIPE DIAMETER (CIRCULAR SECTIONS)} \end{cases} \end{aligned}$$

L_a = LENGTH OF RIPRAP APRON (MEASURED FROM THE
END OF CULVERT END SECTION OR FACE OF ENDWALL)

$$d = \begin{cases} 12 \text{ IN. MODIFIED RIPRAP} \\ 18 \text{ IN. INTERMEDIATE RIPRAP} \end{cases}$$

DESIGNER/DRAFTER: LRC CHECKED BY: RSG

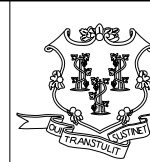
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PLOTTED DATE: 8/26/2024

SCALE AS NOTED

SIGNATURE/
BLOCK:



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SOUTH MAHAM, CT 06487

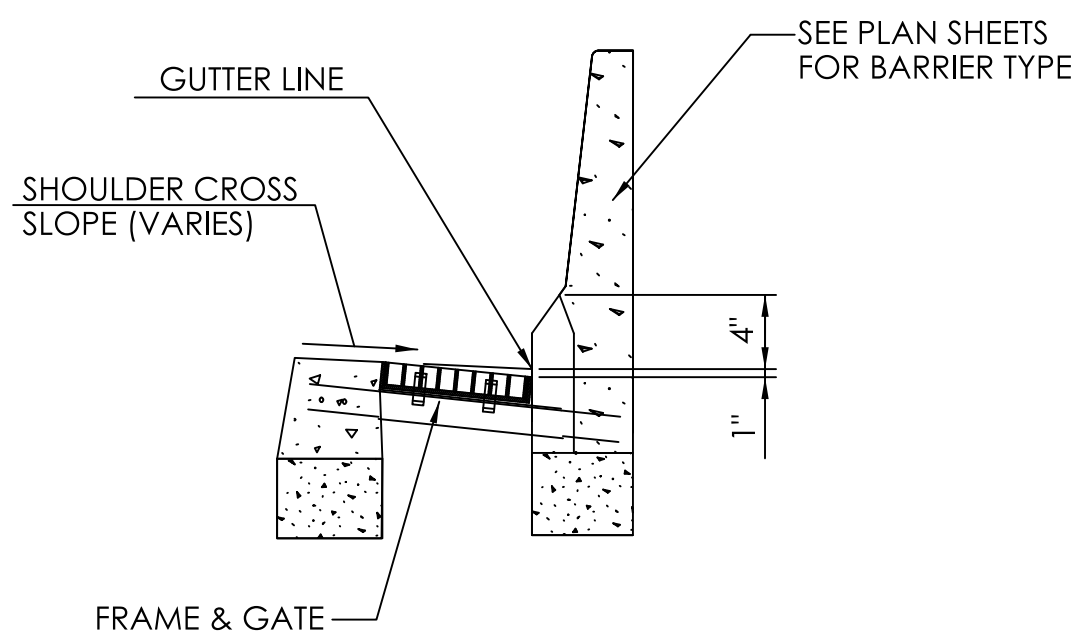
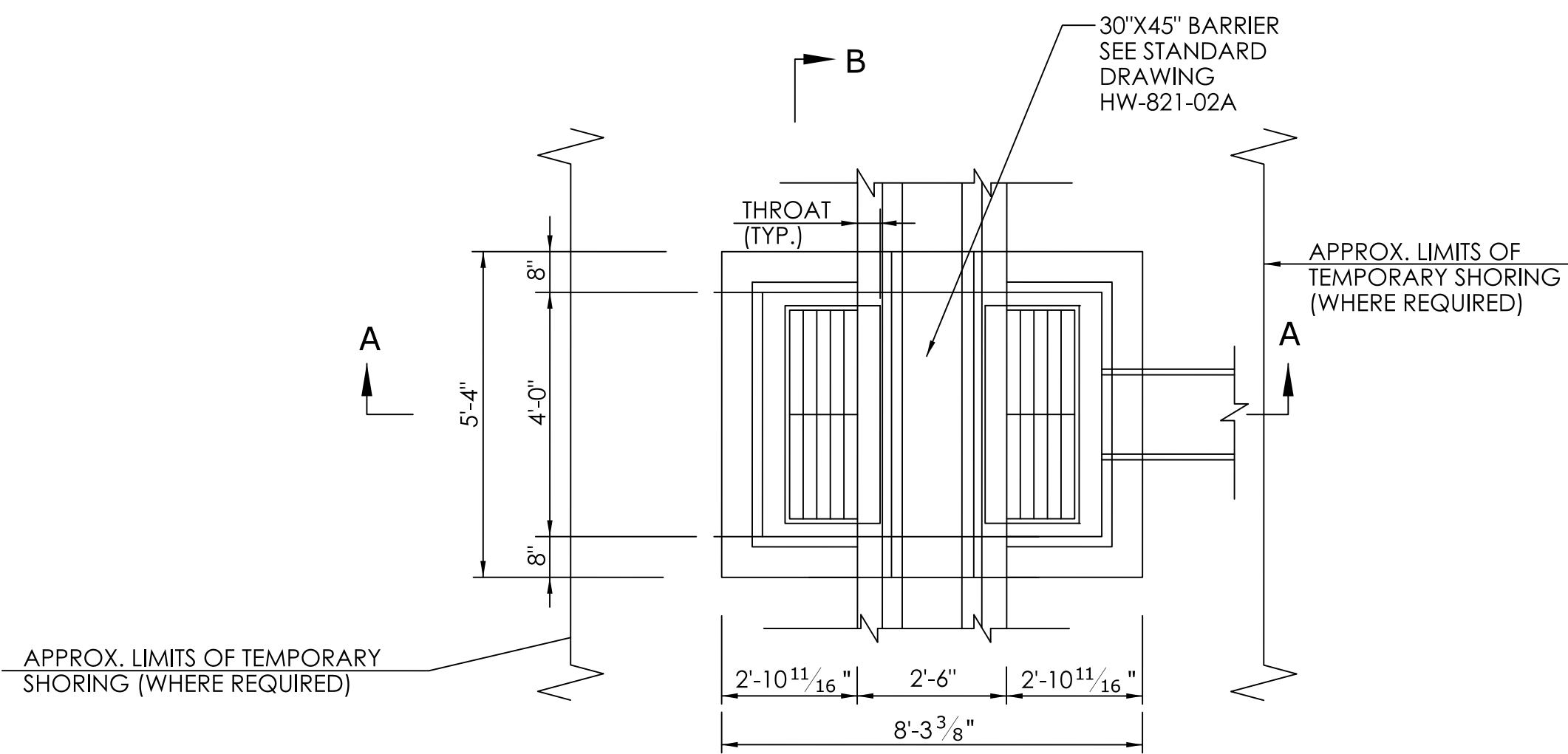


STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION

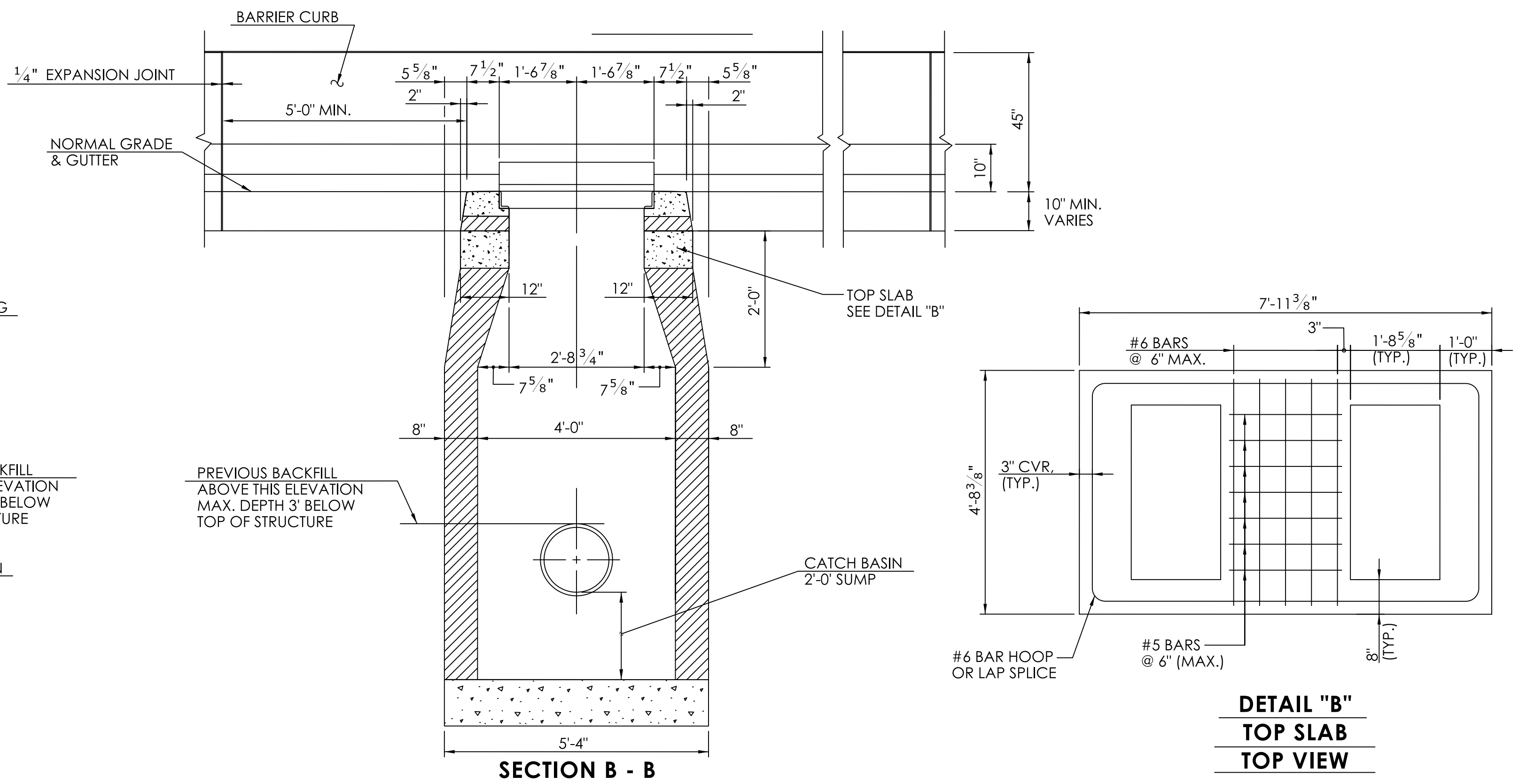
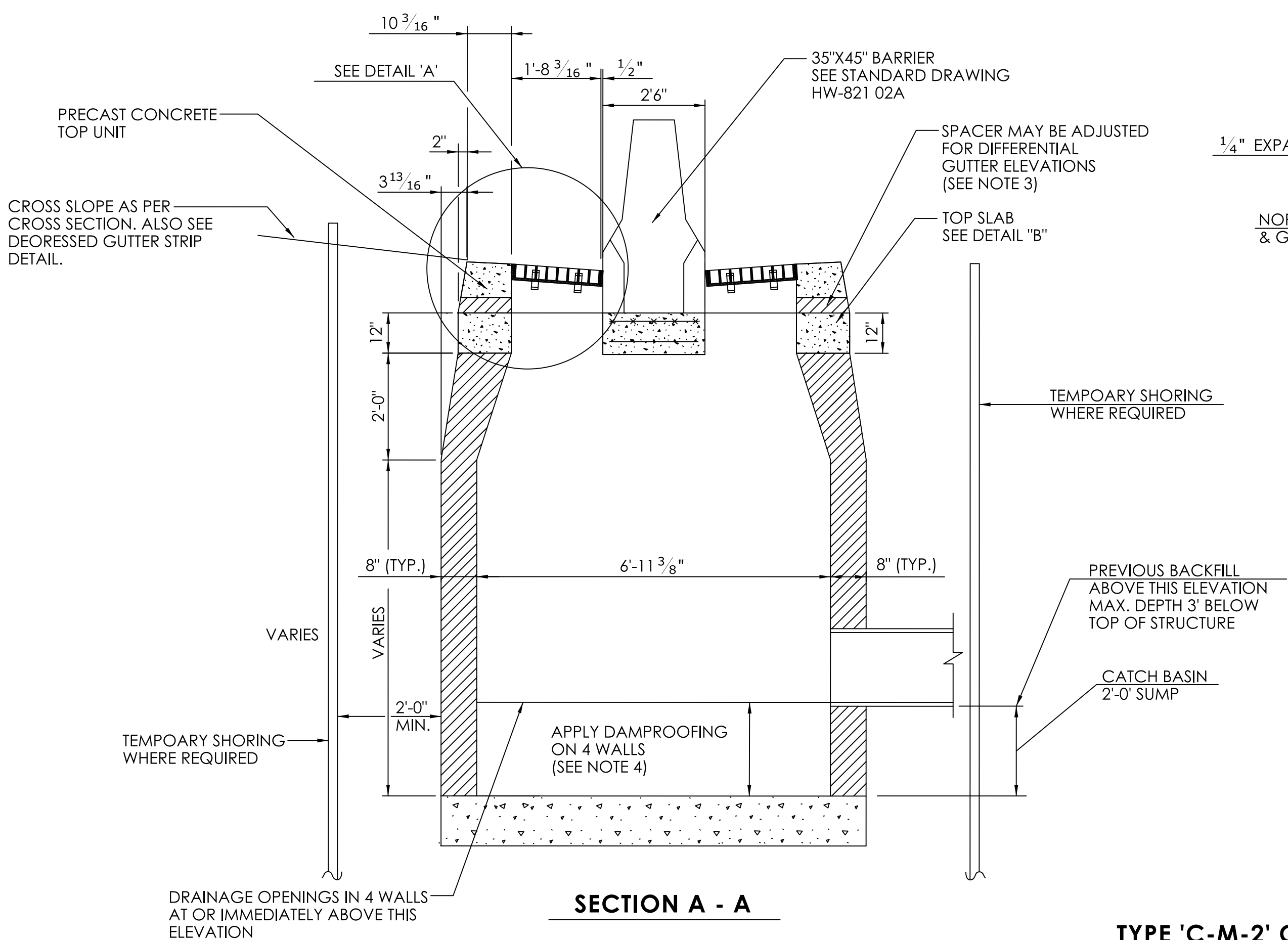


PROJECT NUMBER: 0053-0196
PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8
TOWN(S): GLASTONBURY
DRAWING TITLE: MISCELLANEOUS DRAINAGE DETAILS - 01

DRAWING NO.	DRG-06
SHEET NO.	04.07

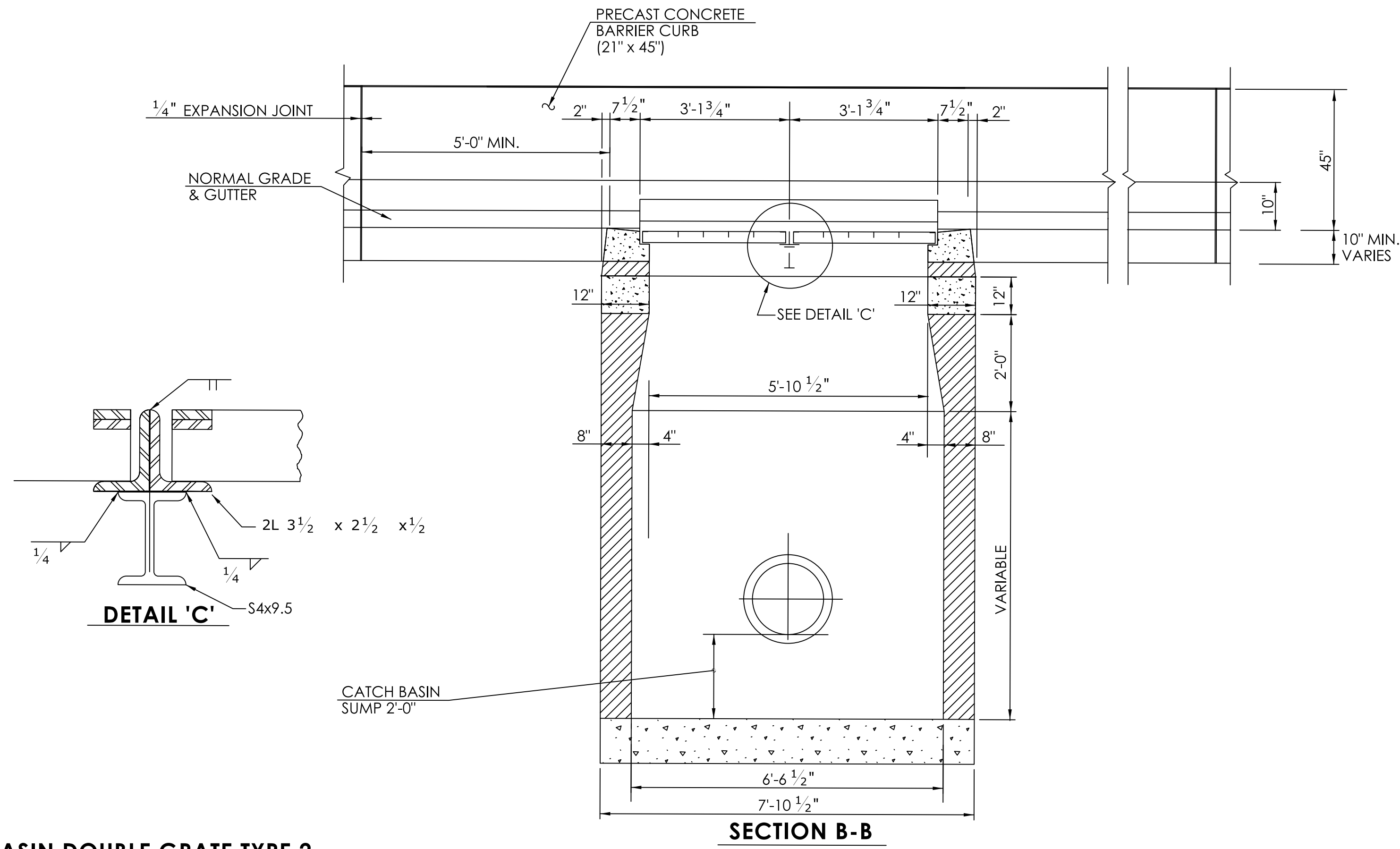
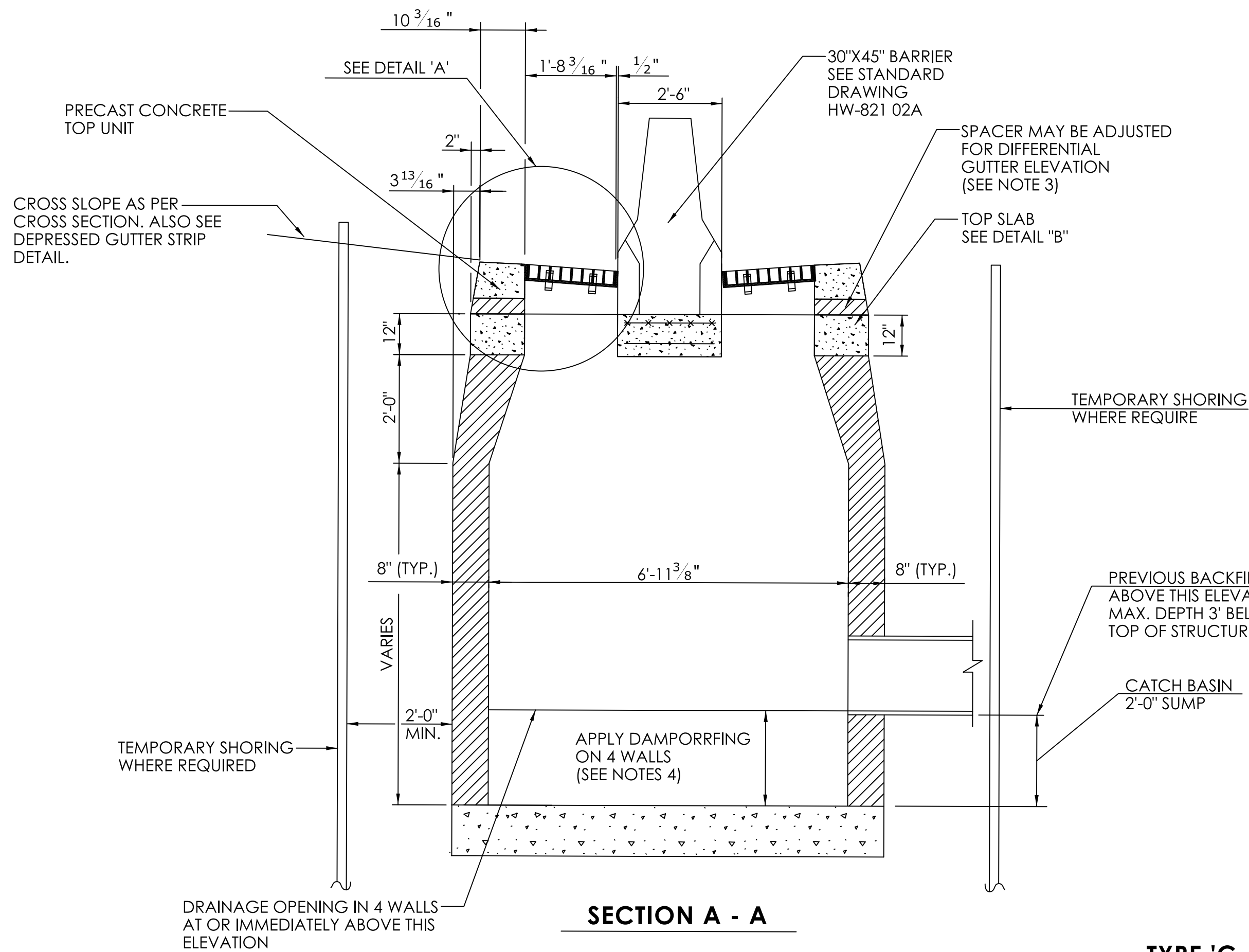
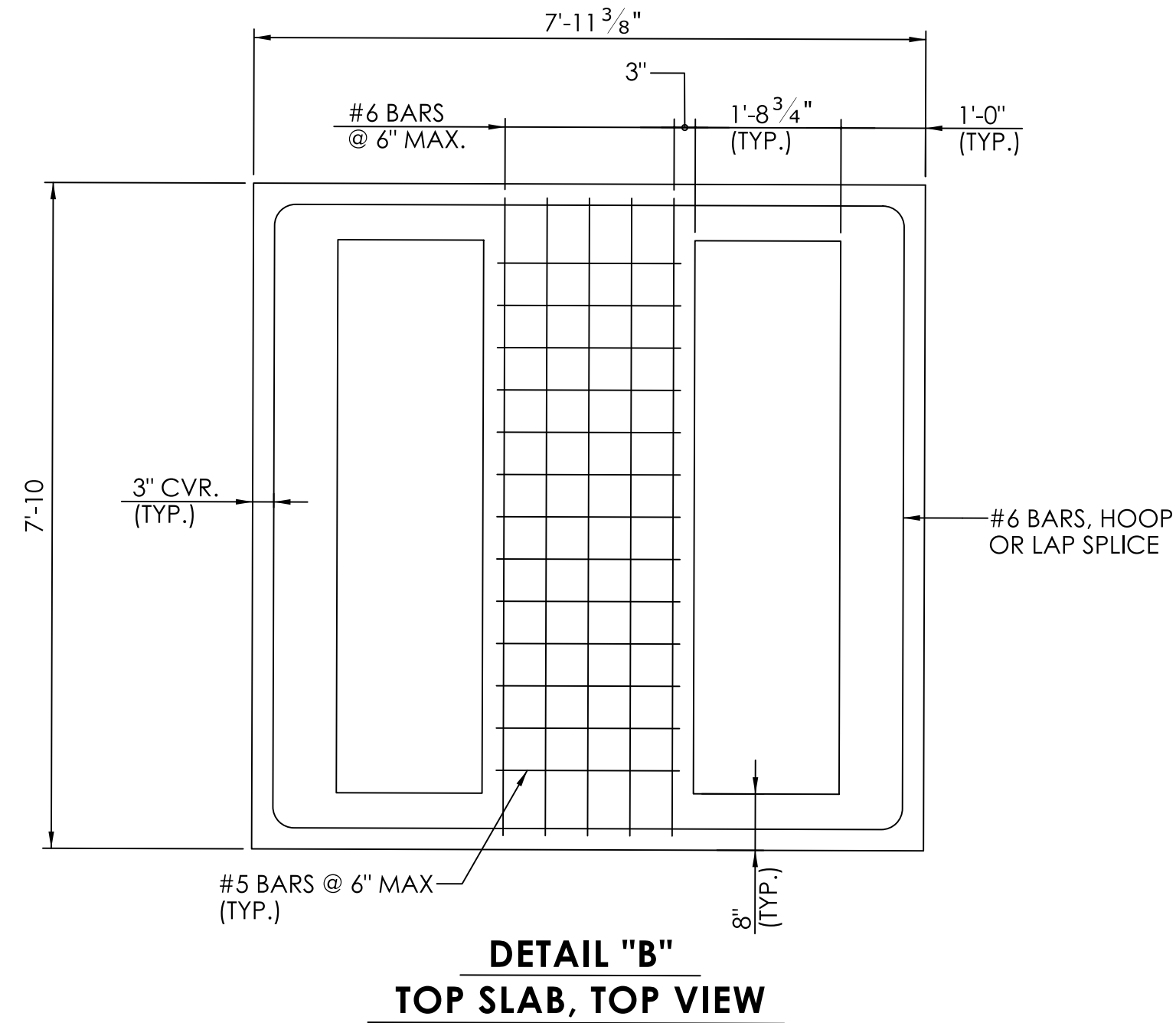
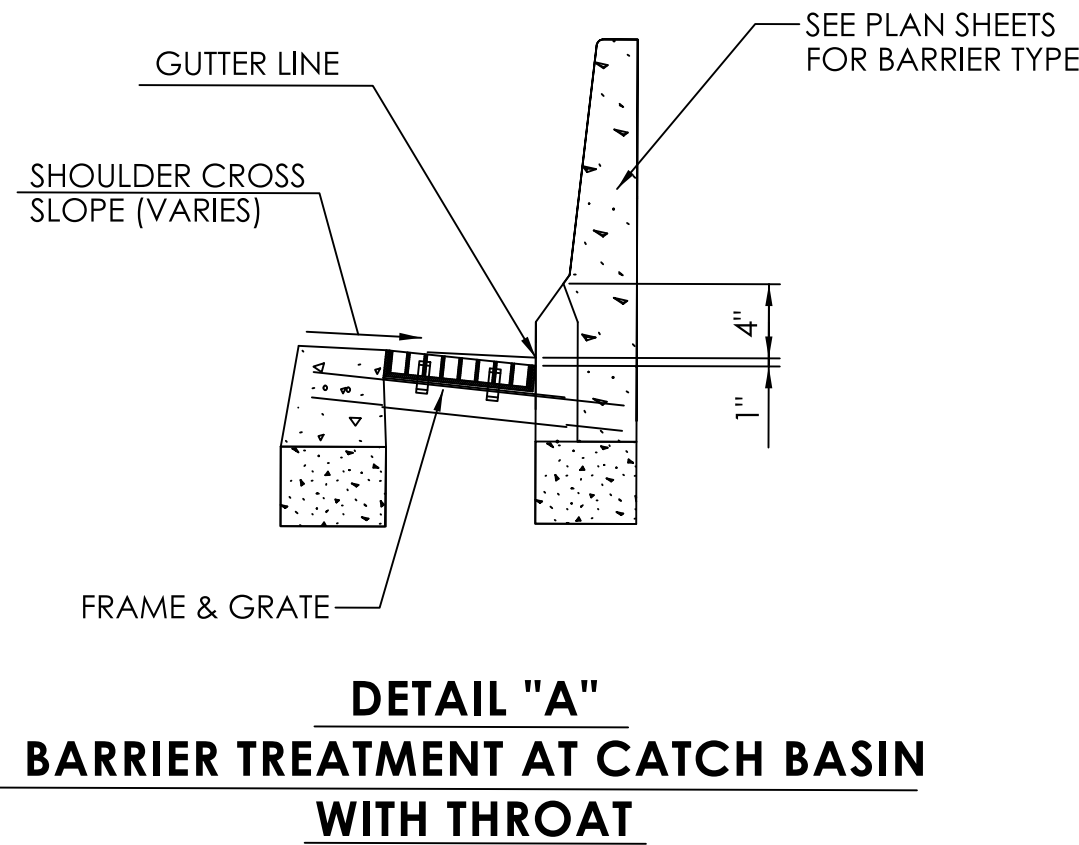
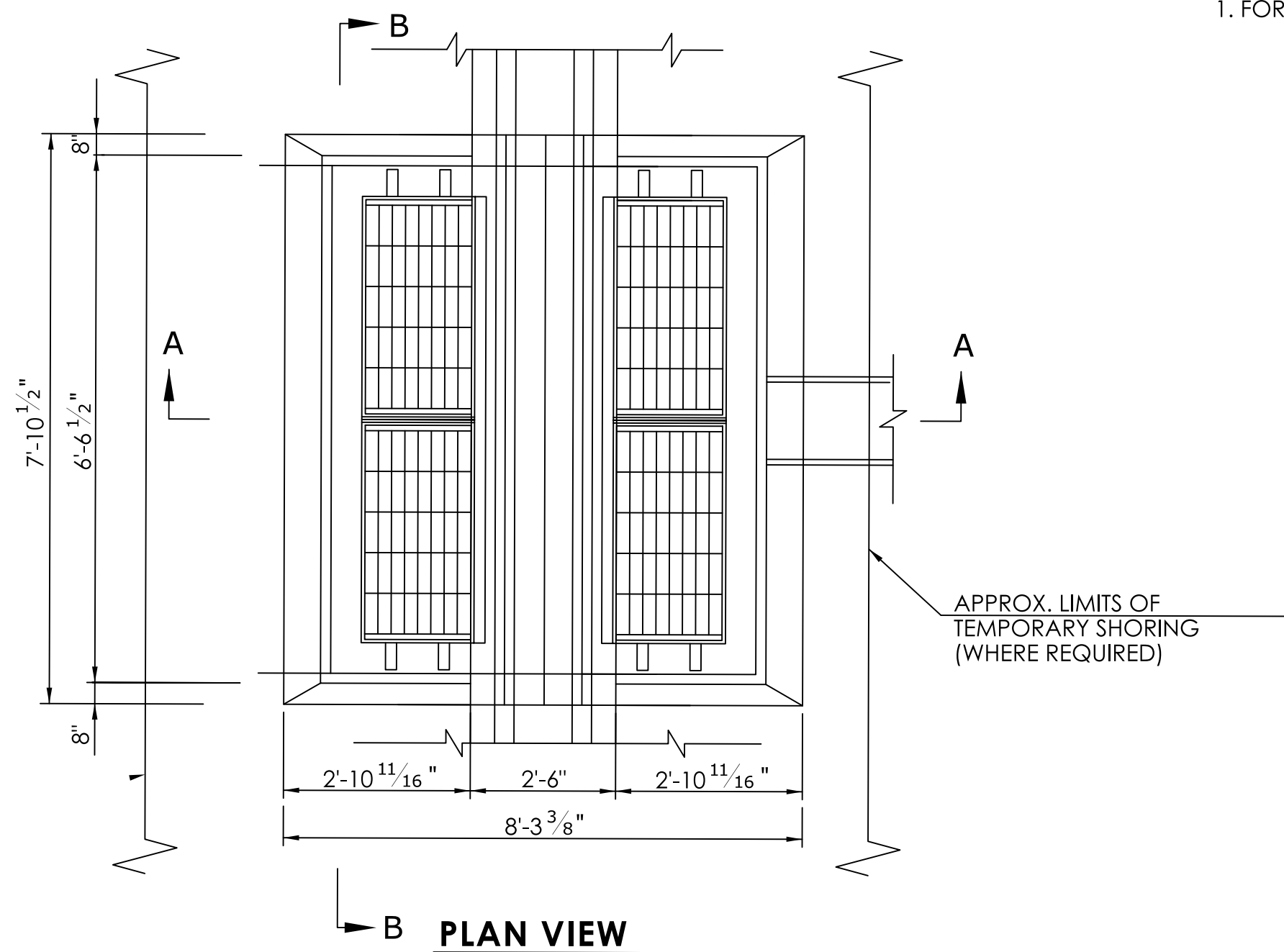


- NOTES:**
1. FACES OF STRUCTURES IN CONTRACT WITH CONCRETE PAVEMENT SHALL BE COVERED WITH A LAYER OF TAR PAPER OR APPROVED EQUAL. THE COST OF THE TAR PAPER SHALL BE INCLUDED IN THE BID PRICE FOR TYPE "C-M" CATCH BASIN OF THE APPROPRIATE DEPTH.
 2. MINIMUM CONCRETE COMPRESSIVE STRENGTH OF F'c = 4000 PSI SHALL BE OBTAINED PRIOR TO SHIPPING.
 3. SPACERS MAY BE CMU OR PRECAST WITH REQUIRED REINFORCING, AS RECOMMENDED BY THE MANUFACTURER, AS NEEDED TO PROVIDE PROPER GRADE SHOWN ON THE PLANS.
 4. APPLY DAMPROOFING ON THE 4 WALLS BELOW THE LOWEST PIPE INVERT. THE COST OF DAMPROOFING SHALL BE INCLUDED IN THE PRICE BID FOR THE TYPE "C-M" CATCH BASIN OF THE APPROPRIATE DEPTH.
 5. ALL STEEL, SHALL BE GALVANIZED IN CONFORMANCE WITH SECTION M06.03 OF CONNECTICUT'S STANDARD SPECIFICATIONS.
 6. ALL GRATES SHALL BE TYPE B, FOR DETAILS OF FRAME AND GATES SEE STANDARD SHEET HW-586 09.
 7. ALL MILD STEEL REINFORCEMENT SHALL BE ASTM A615 GRADE 60. MILD STEEL SHALL BE GALVANIZED AFTER FABRICATION, TO THE REQUIREMENTS OF ASTM A767, CLASS 1, INCLUDING SUPPLEMENTAL REQUIREMENTS. THE COST OF FURNISHING AND PLACING THIS REINFORCEMENT SHALL BE INCLUDED IN THE "EACH" PAY ITEMS FOR THE CATCH BASINS. BOTTOM STEEL REINFORCEMENT DEPICTED, TOP STEEL SHALL BE 6"X6" W4XW4 WELDED WIRE FABRIC
 8. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF "C-M" CATCH BASIN FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.



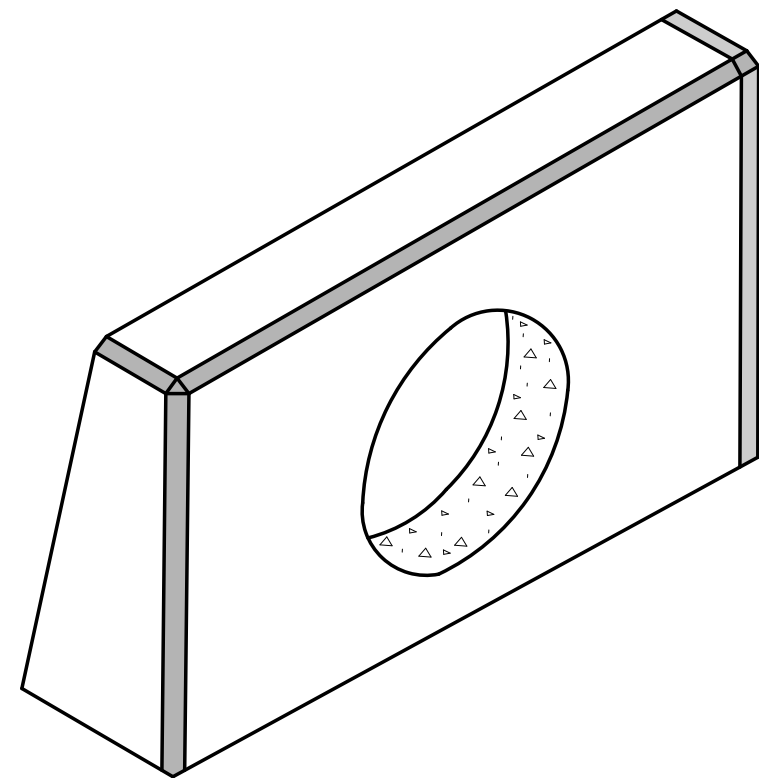
REV.	DATE	REVISION DESCRIPTION

NOTE:
1. FOR CATCH BASIN NOTES, SEE DRAWING NO. DRG-07

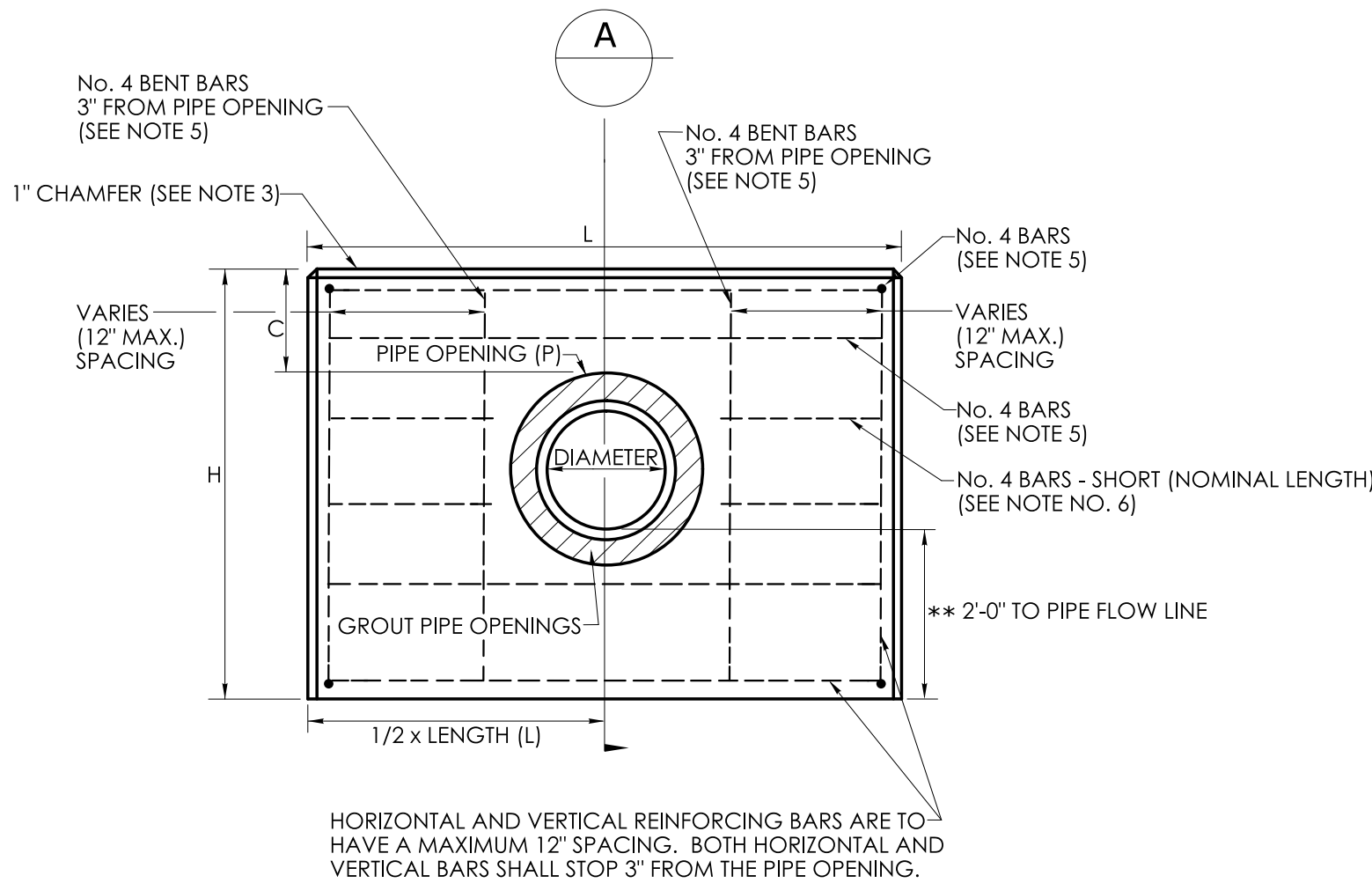


TYPE 'C-M-2' CATCH BASIN DOUBLE GRATE TYPE 2

REV.	DATE	REVISION DESCRIPTION

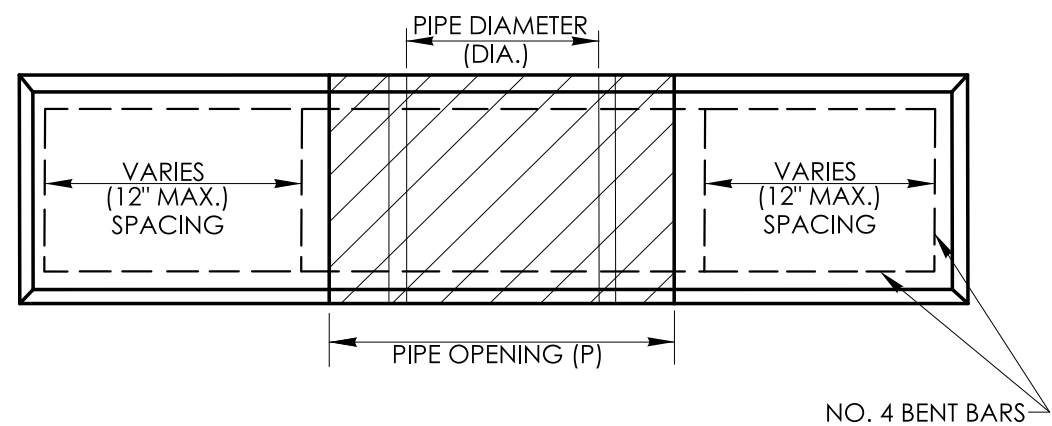


STRAIGHT ENDWALL



FRONT ELEVATION

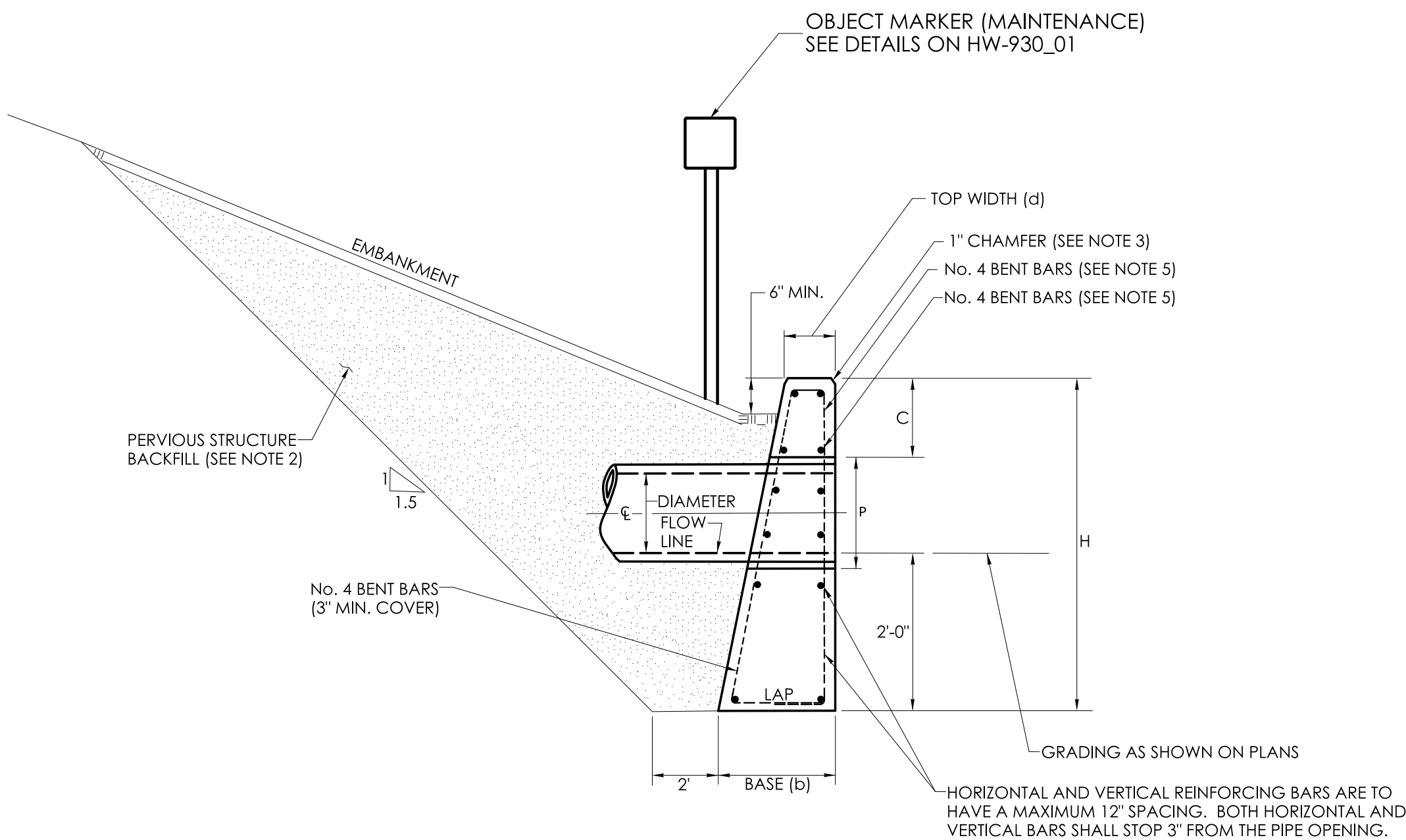
** THIS ENDWALL CONFIGURATION IS TO BE USED WHEN ALL MATERIAL EXCEPT STANDARD RIPRAP IS TO BE INSTALLED AT THE OUTLET. A 2'-0" ELEVATION DIFFERENCE IS PROVIDED FROM THE BASE TO THE PIPE FLOW LINE.



STRAIGHT ENDWALL PLAN

GENERAL NOTES:

- PIPE OPENING (P) DIMENSIONS ARE NOMINAL (SEE CHART*).
- INSTALL THE PERVIOUS STRUCTURE BACKFILL AS SHOWN IN SECTION A AND B, AND ONLY ALONG THE LENGTH OF THE ENDWALL.
- PROVIDE A 1" CHAMFER ON ALL EXPOSED EDGES OR AS SHOWN.
- SEE CHARTS BELOW FOR STANDARD WALL DIMENSIONS AND STEEL REINFORCING DETAILS.
- ALL HORIZONTAL BARS SHOWN ARE NO. 4 BARS AND ALL VERTICAL BARS SHOWN ARE NO. 4 BENT BARS. SEE SHEETS HW-505_01b AND HW-505_01c FOR REINFORCING DETAILS.
- THE LENGTH AND QUANTITY OF NO. 4 BARS - SHORT (NOMINAL LENGTH) VARY FOR EACH WALL SIZE. THESE BARS ARE SHOWN ON HW-505_01b AND HW-505_01c FOR REFERENCE ONLY.



SECTION A

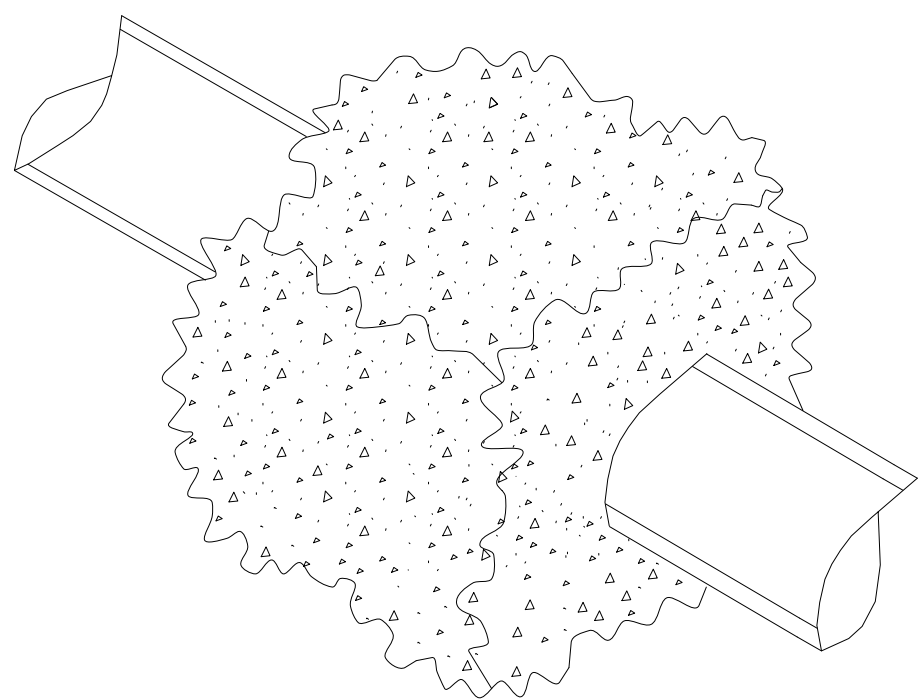
STRAIGHT ENDWALL

STRAIGHT ENDWALL DIMENSIONS

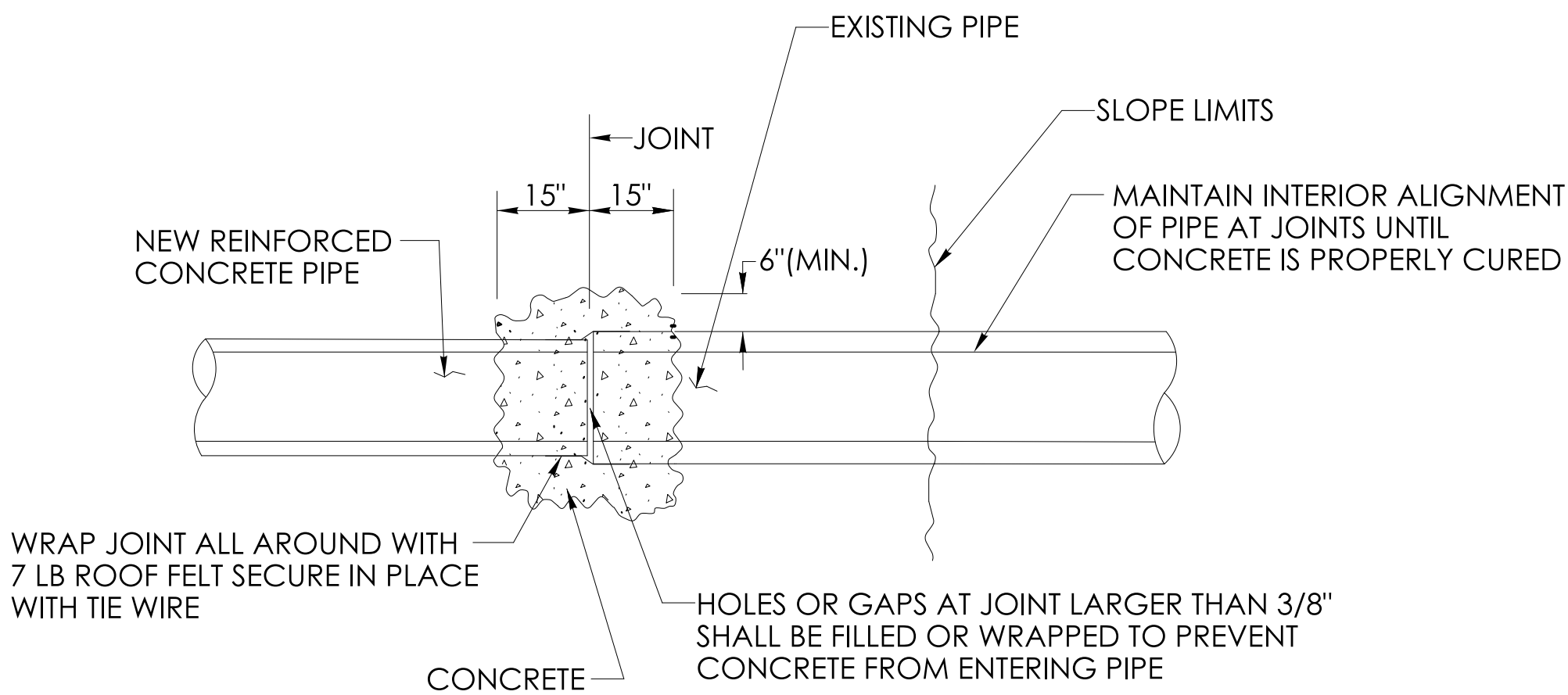
CONCRETE								REINFORCING STEEL		
PIPE DIAMETER (DIA.)	CLEARANCE (C)	*PIPE OPENINGS (P)	TOTAL HEIGHT (H)	LENGTH (L)	TOP WIDTH (d)	BASE (b)	VOL.	PIPE DIAMETER (DIA.)	NO. 4 BENT BARS	NO. 4 BARS - (NOMINAL LENGTH)
IN.	IN.	IN.	FT-IN.	FT-IN.	FT-IN.	FT-IN.	C.Y.	IN.	EA.	EA.
12"	14"	20"	4'-6"	4'-6"	1'-3"	2'-0"	1.10	12"	4	14 - (4'-0")
15"	13.5"	24"	4'-9"	5'-6"	1'-3"	2'-0"	1.39	15"	6	14 - (5'-0")
18"	14"	26"	5'-0"	6'-6"	1'-3"	2'-0"	1.75	18"	6	14 - (6'-0")
24"	14"	32"	5'-6"	8'-6"	1'-6"	2'-3"	2.87	24"	8	16 - (8'-0")
30"	12"	42"	6'-0"	10'-6"	1'-9"	2'-6"	3.98	30"	8	14 - (10'-0")
36"	12"	48"	6'-6"	12'-6"	1'-9"	2'-8"	5.67	36"	10	16 - (12'-0")
42"	12"	54"	7'-0"	14'-6"	2'-0"	3'-0"	7.99	42"	12	16 - (14'-0")
48"	11"	62"	7'-6"	16'-6"	2'-0"	3'-0"	9.59	48"	14	18 - (16'-0")

GENERAL NOTES:

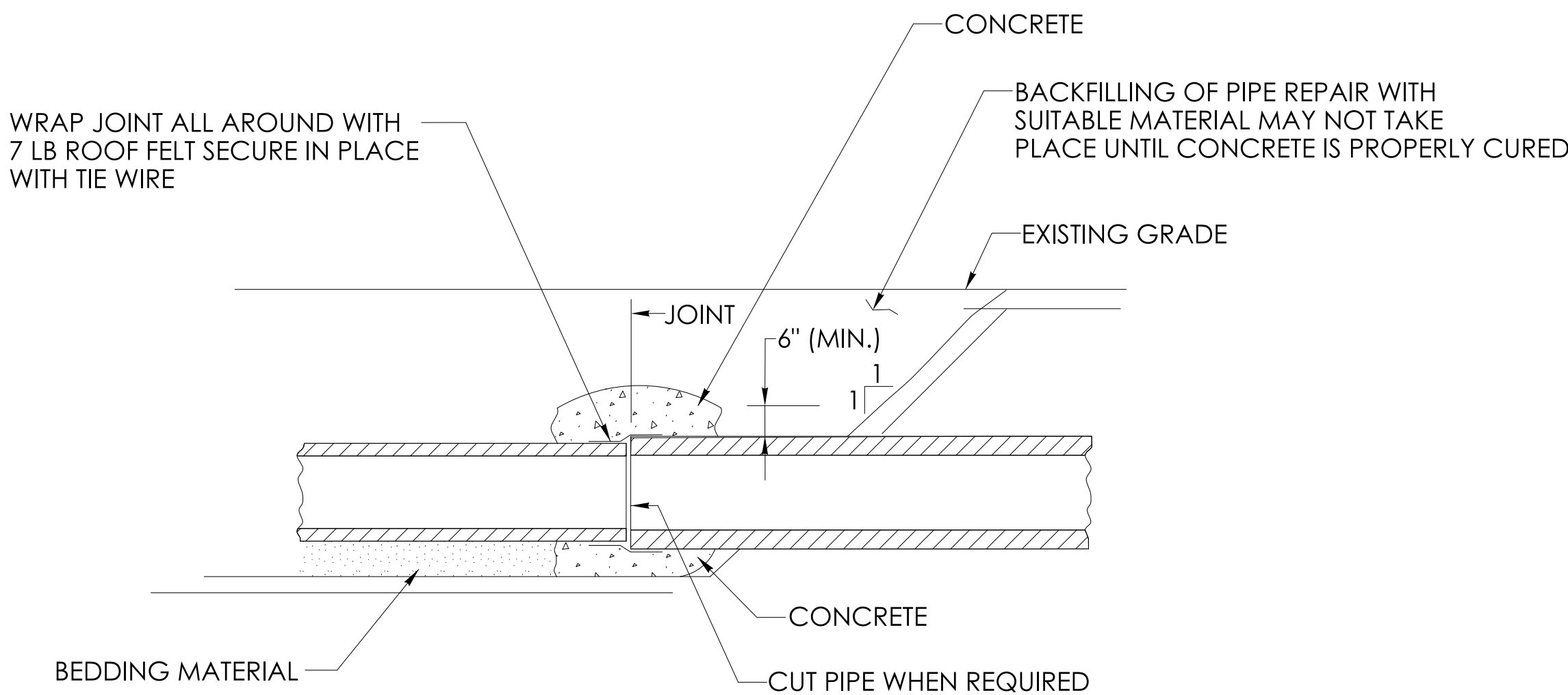
- "CONCRETE PIPE CONNECTION" IS INTENDED FOR USE WHERE A REINFORCED CONCRETE PIPE REPAIR OR MODIFICATION IS NEEDED SOMEWHERE WITHIN A PIPE RUN WHERE A BELL/SPIGOT JOINT CANNOT BE ACHIEVED.
- MAINTAIN INTERIOR ALIGNMENT OF PIPE AT JOINTS UNTIL CONCRETE IS PROPERLY CURED.
- BACKFILL OF PIPE REPAIR WITH SUITABLE MATERIAL MAY NOT TAKE PLACE UNTIL THE CONCRETE IS PROPERLY CURED.
- CONTRACTOR SHALL MAINTAIN LINE AND GRADE OF PIPE REPAIR OR MODIFICATION BY METHODS APPROVED BY THE ENGINEER
- HOLES OR GAPS AT JOINT LARGER THAN 3/8" SHALL BE FILLED OR WRAPPED TO PREVENT CONCRETE FROM ENTERING THE PIPE.



CONCRETE PIPE AT THE JOINT

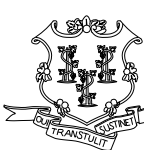


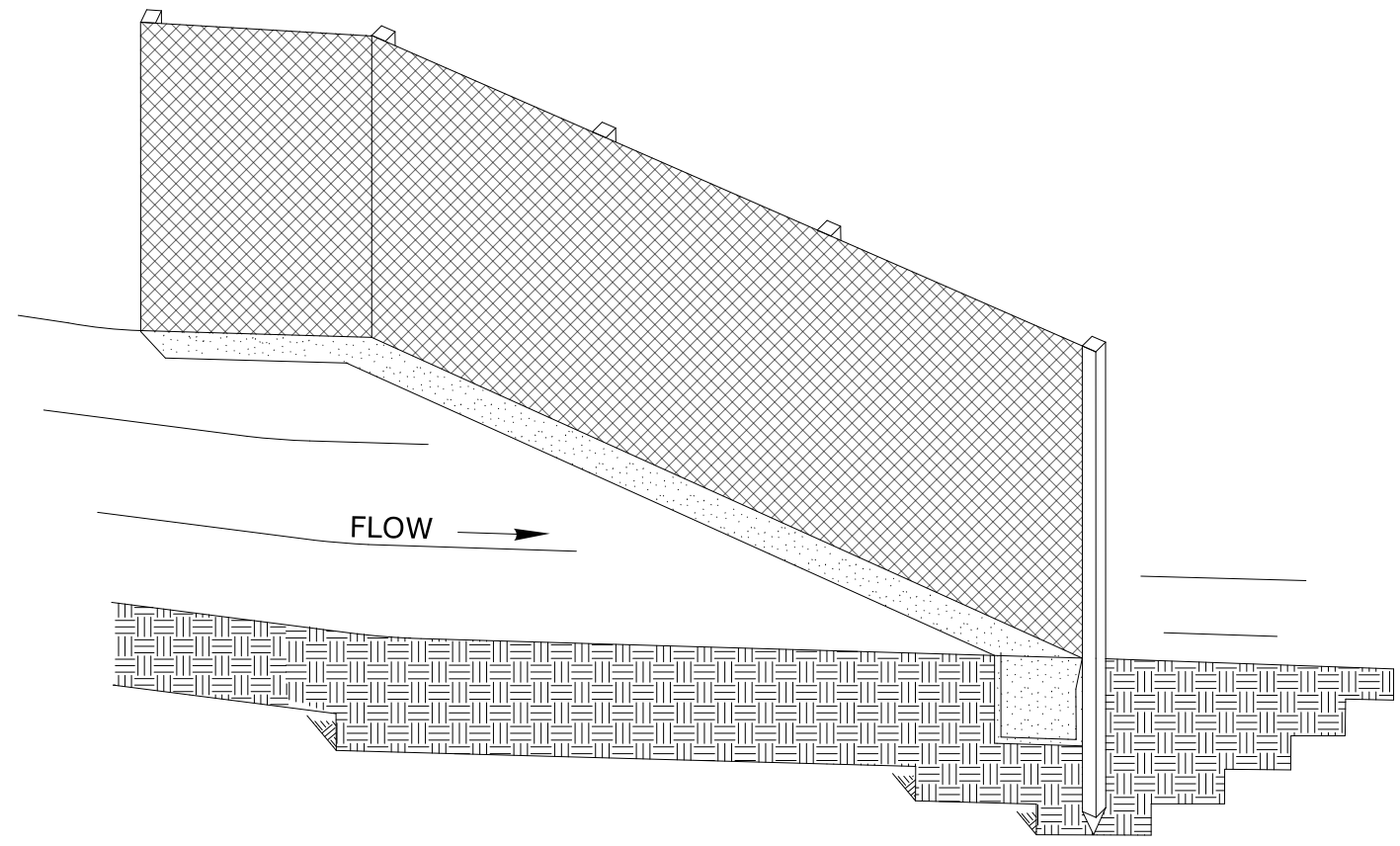
PLAN



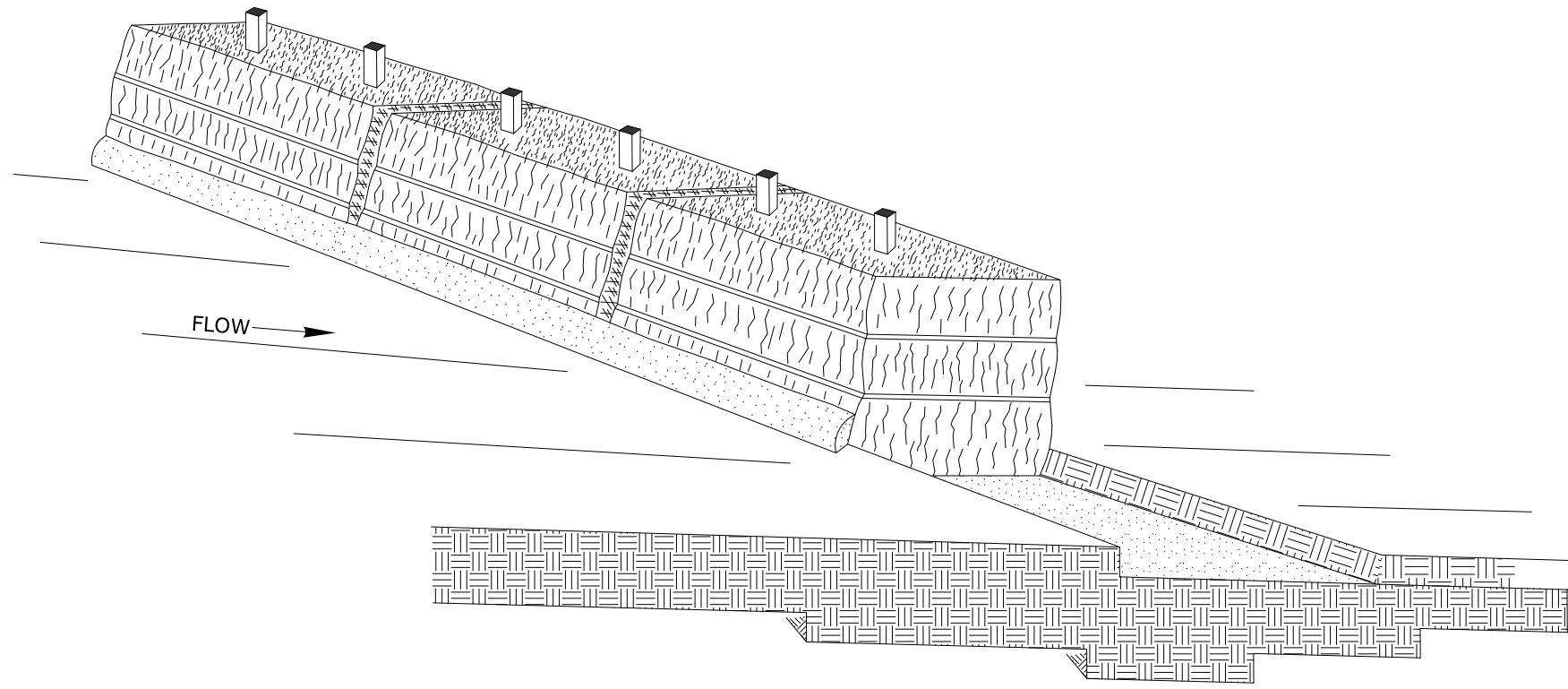
SECTION
CONCRETE PIPE CONNECTION

REV.	DATE	REVISION DESCRIPTION

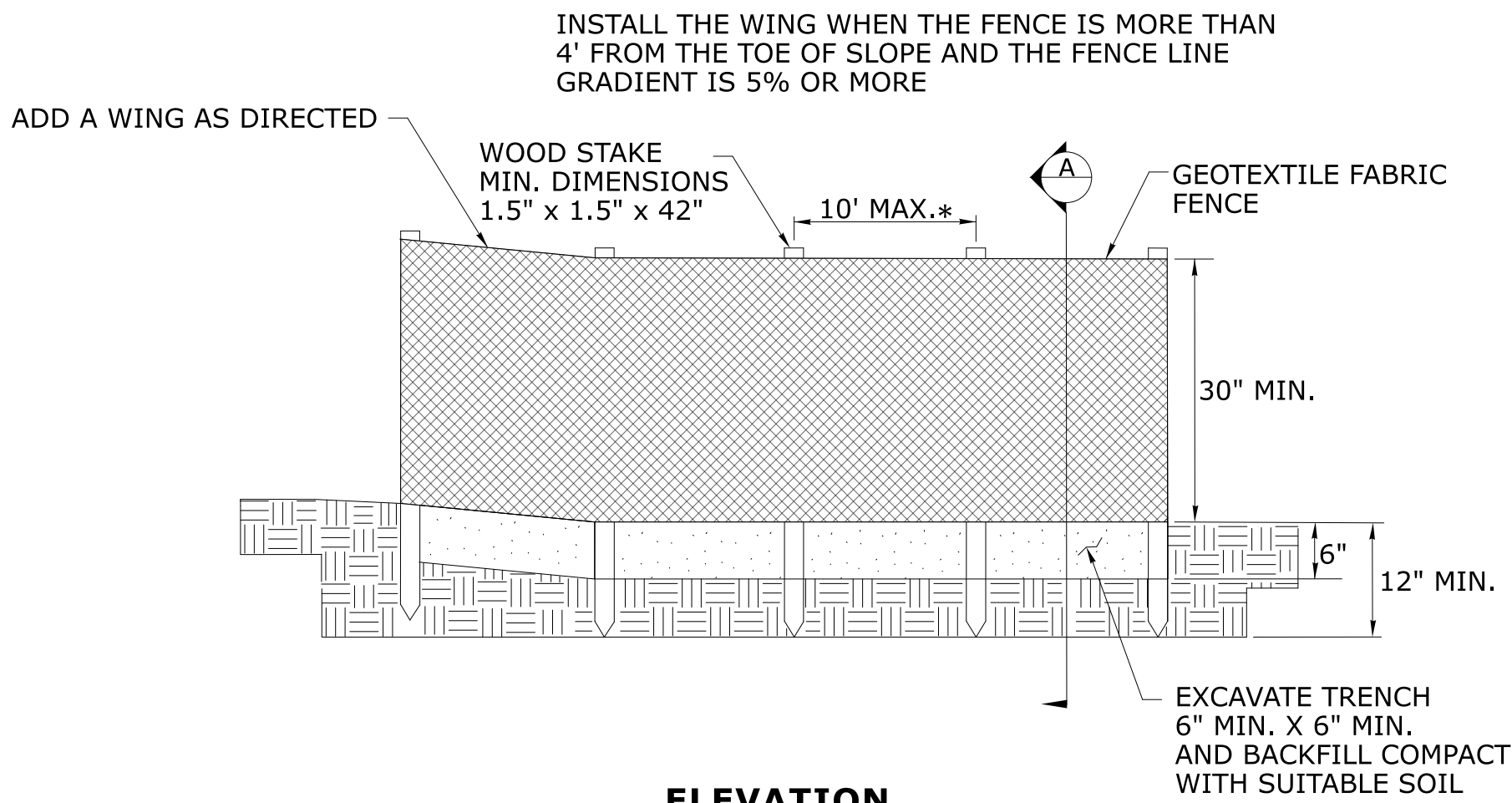




SEDIMENTATION CONTROL SYSTEM

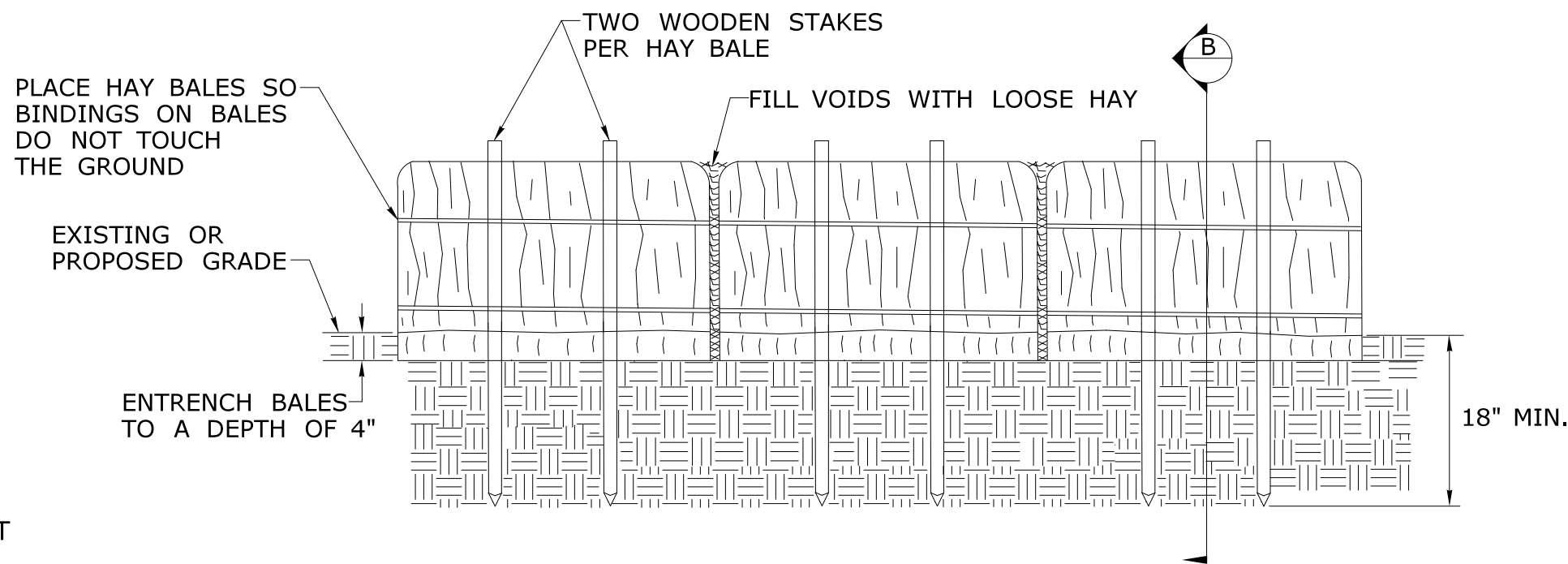


SEDIMENTATION CONTROL SYSTEM

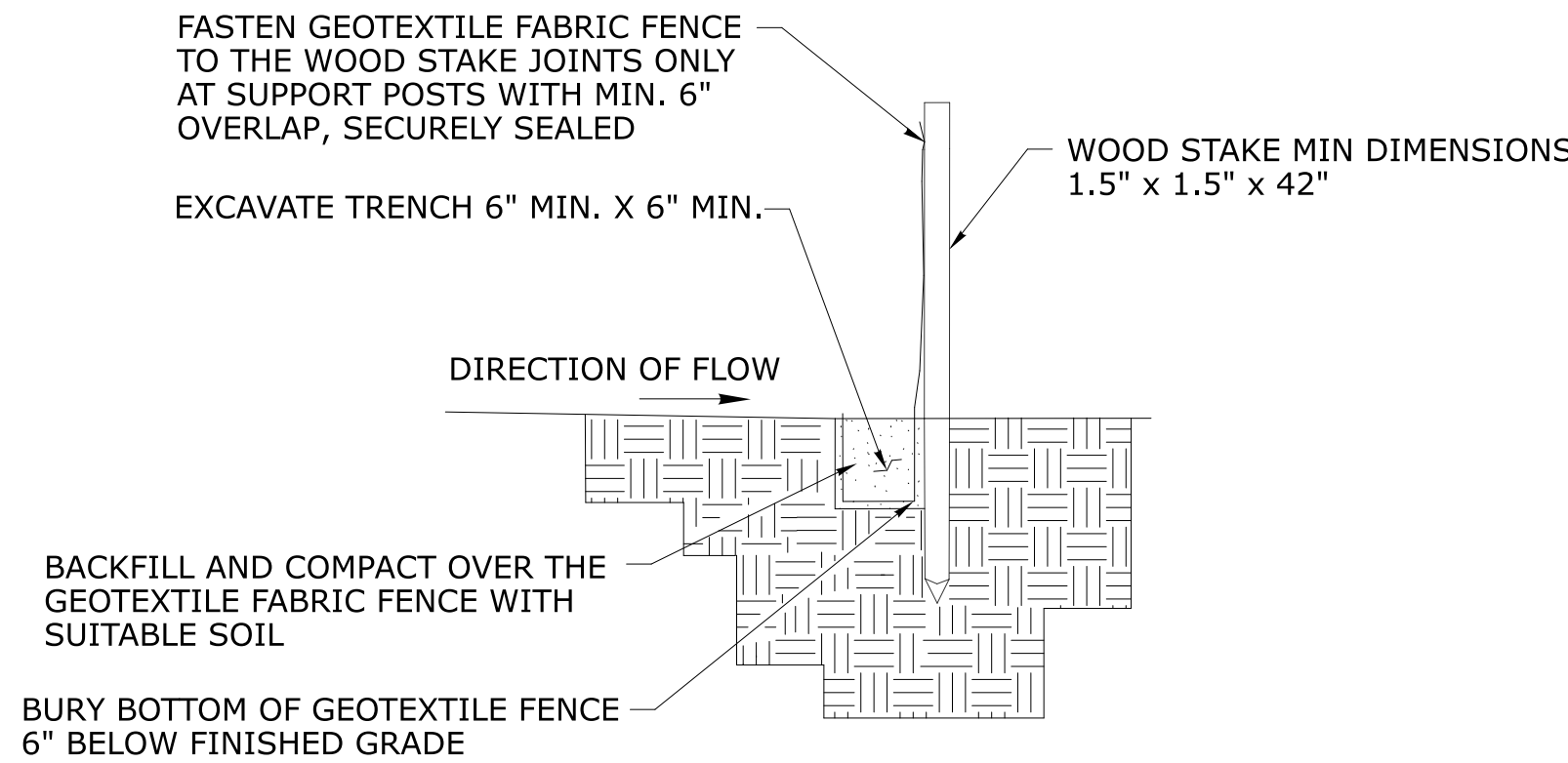


ELEVATION

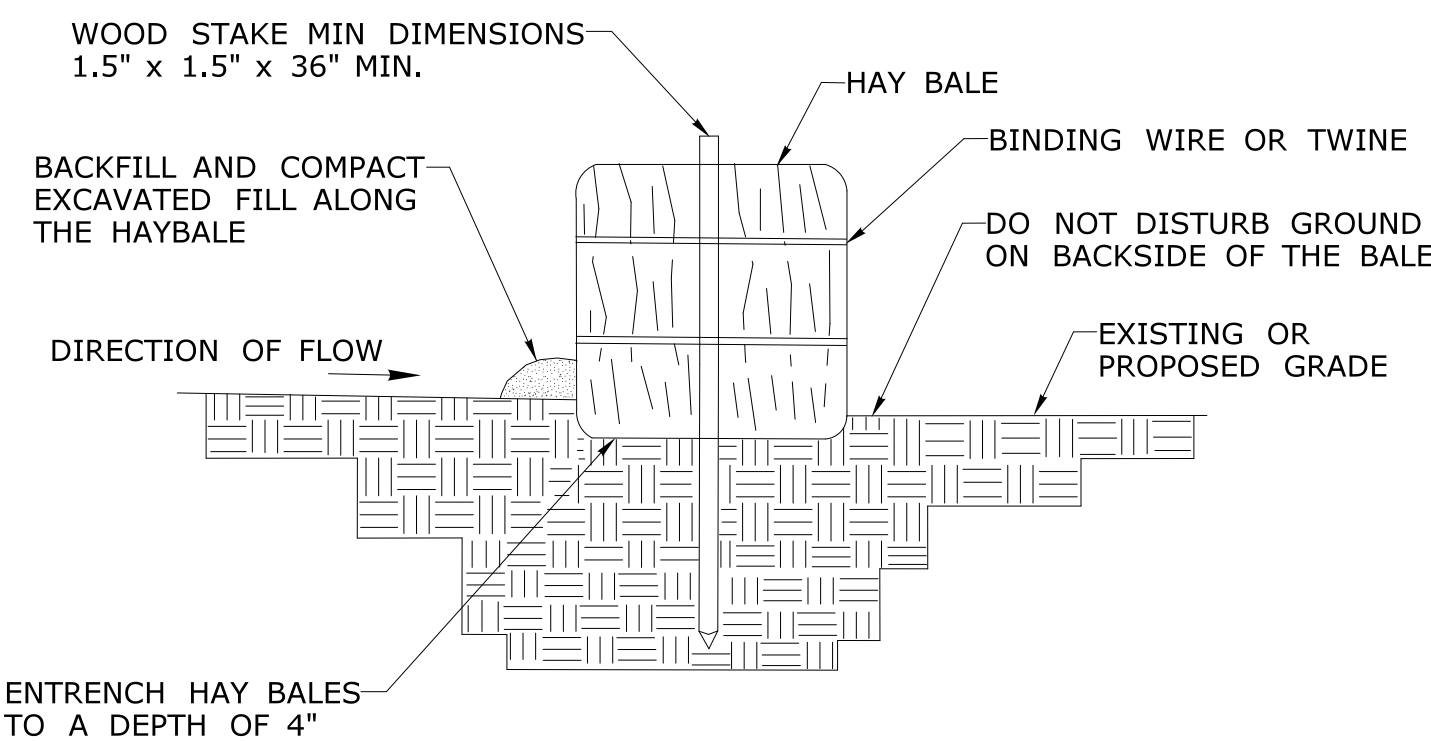
* FOR SLOPES STEEPER THAN 2:1
USE A 5' POST SPACING OR AS
DIRECTED BY THE ENGINEER



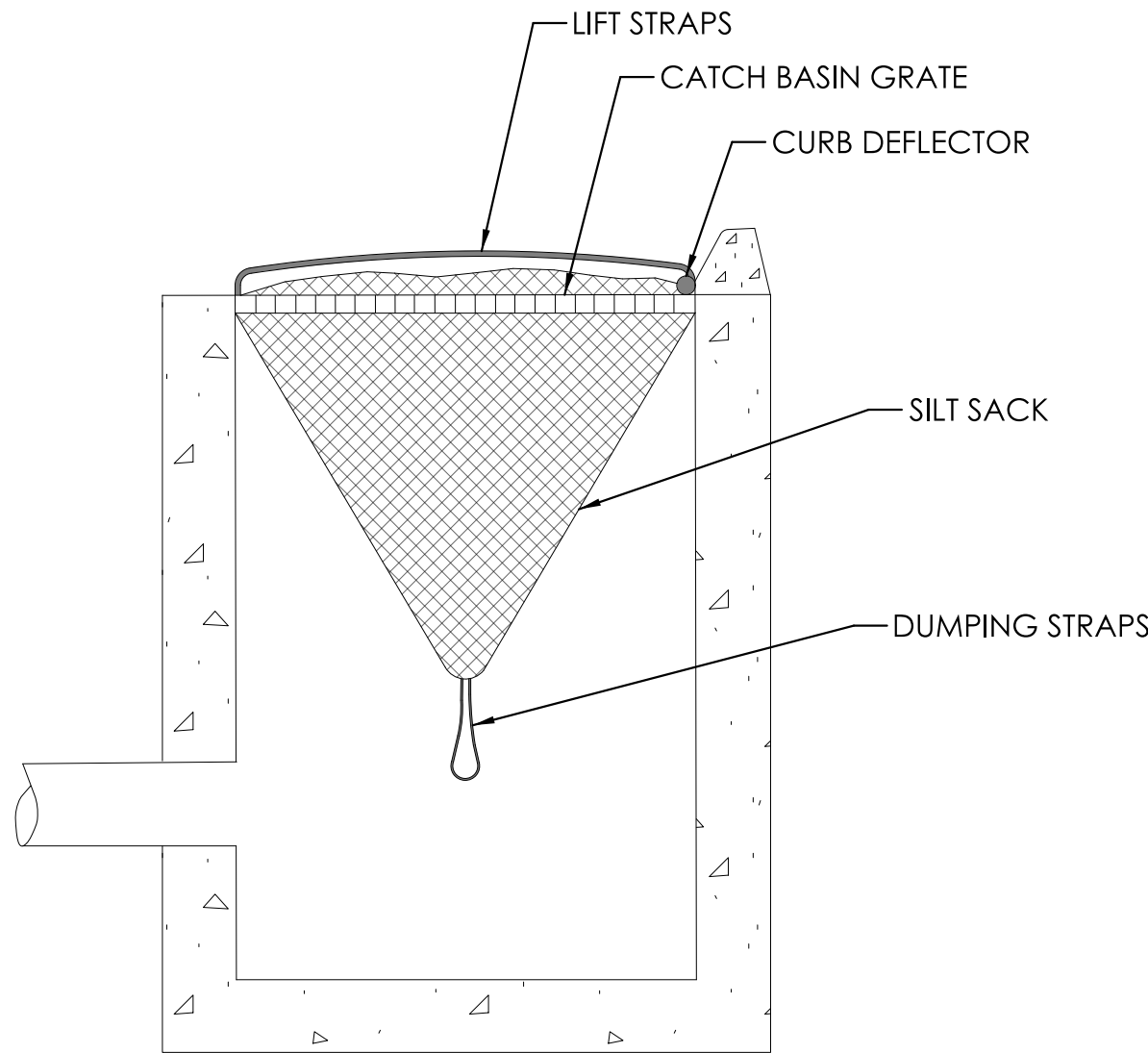
ELEVATION



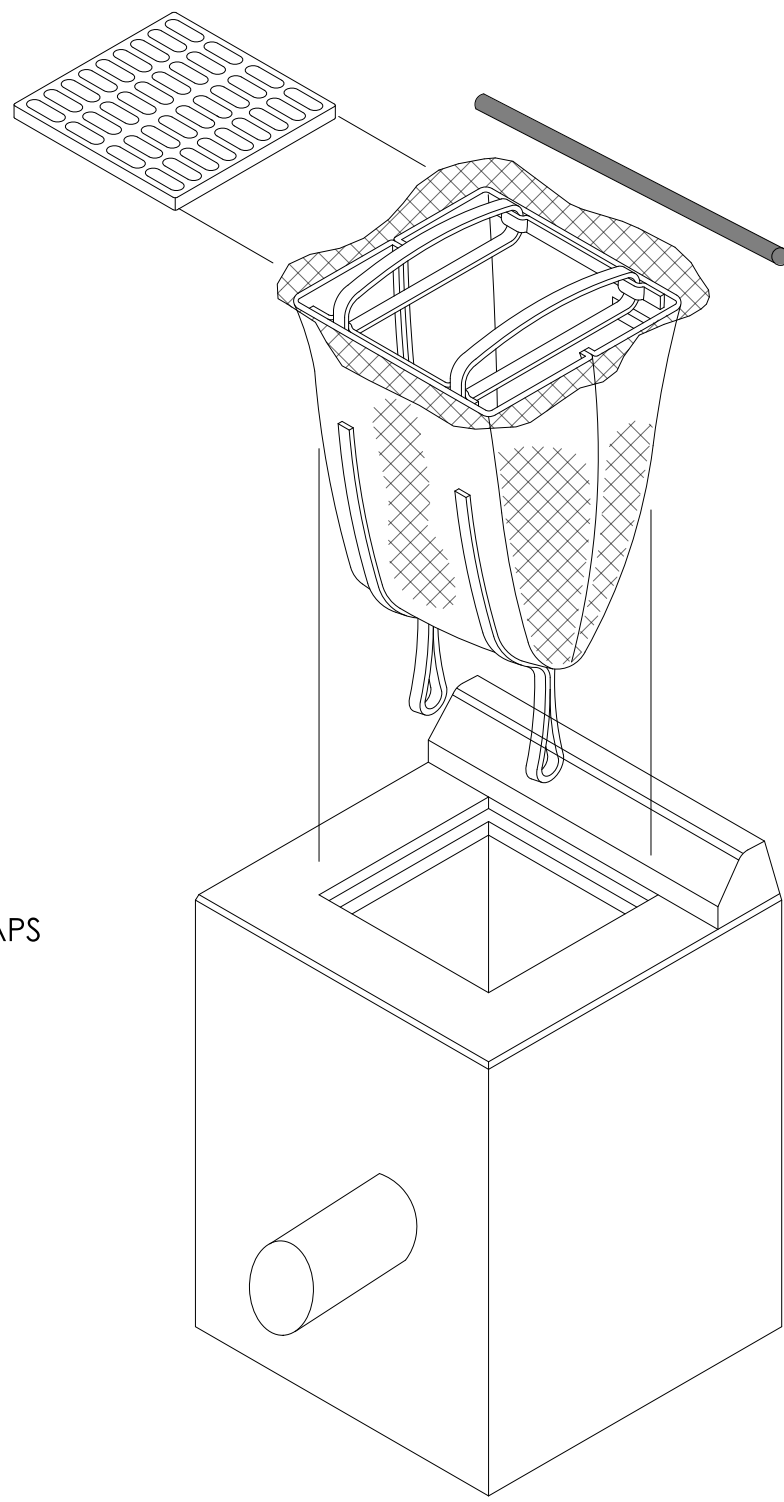
SECTION A



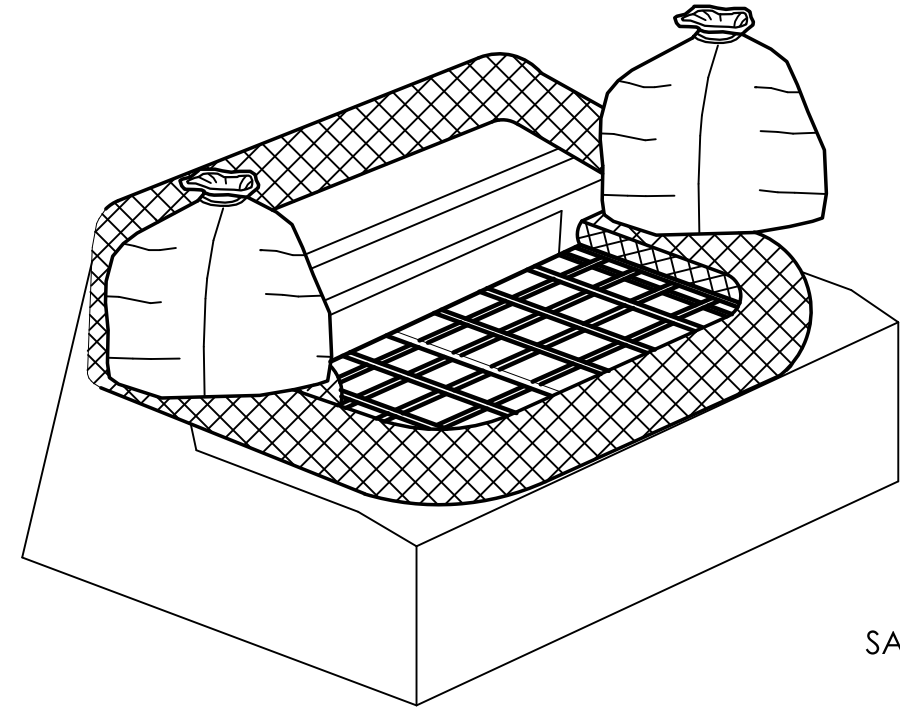
SECTION B



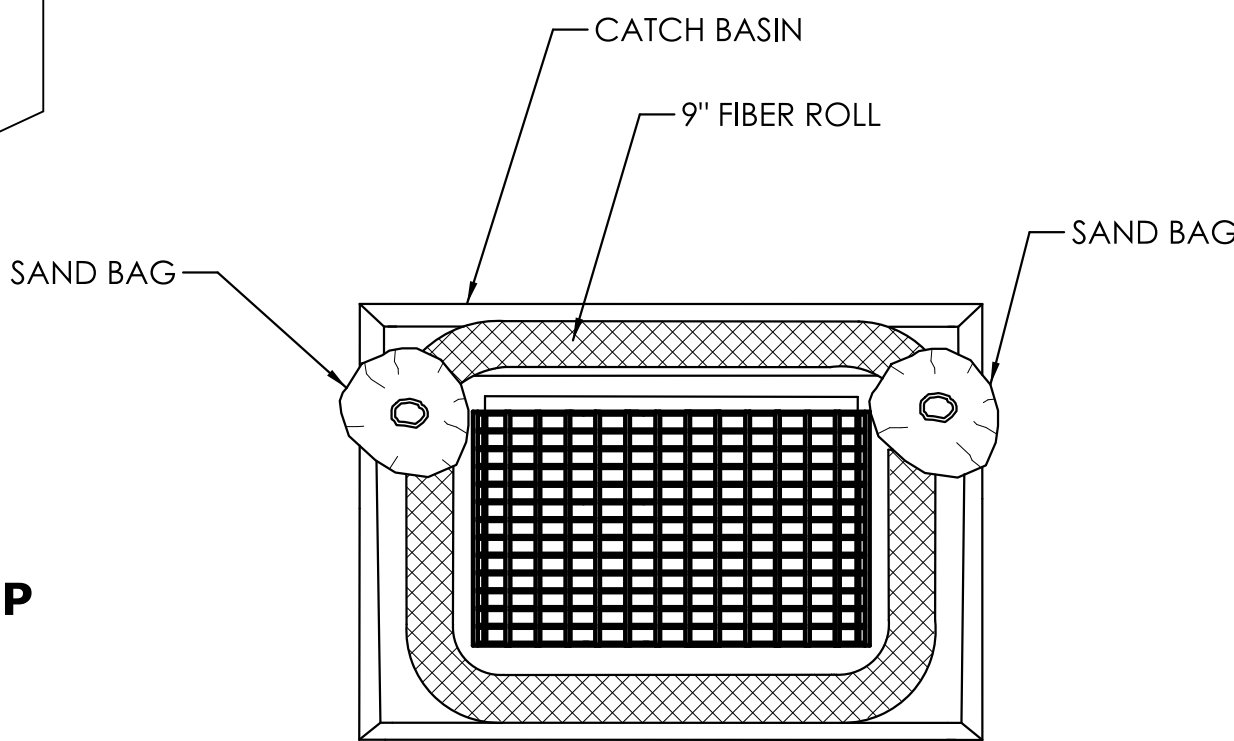
SECTION



INLET SEDIMENT CONTROL DEVICE
AT TYPE "C" OR "C-L" CATCH BASIN

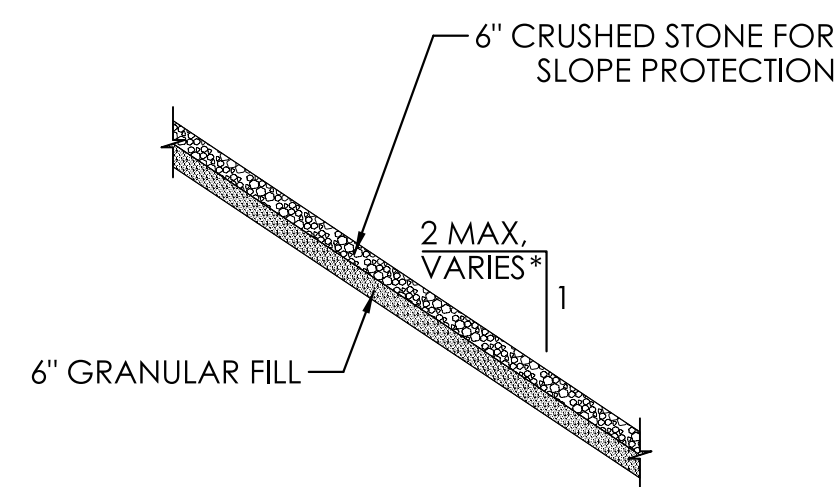


FIBER ROLL AROUND
TYPE "C" OR "C-L" CATCH BASIN TOP



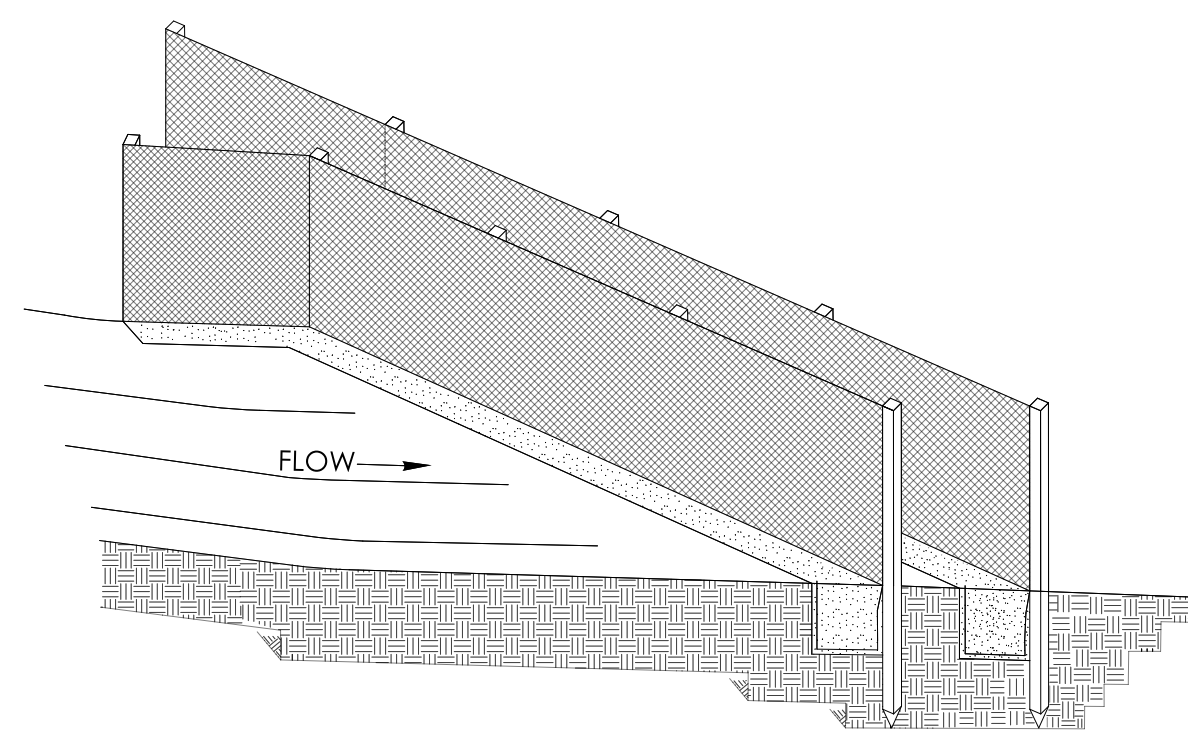
PLAN

REV.	DATE	REVISION DESCRIPTION

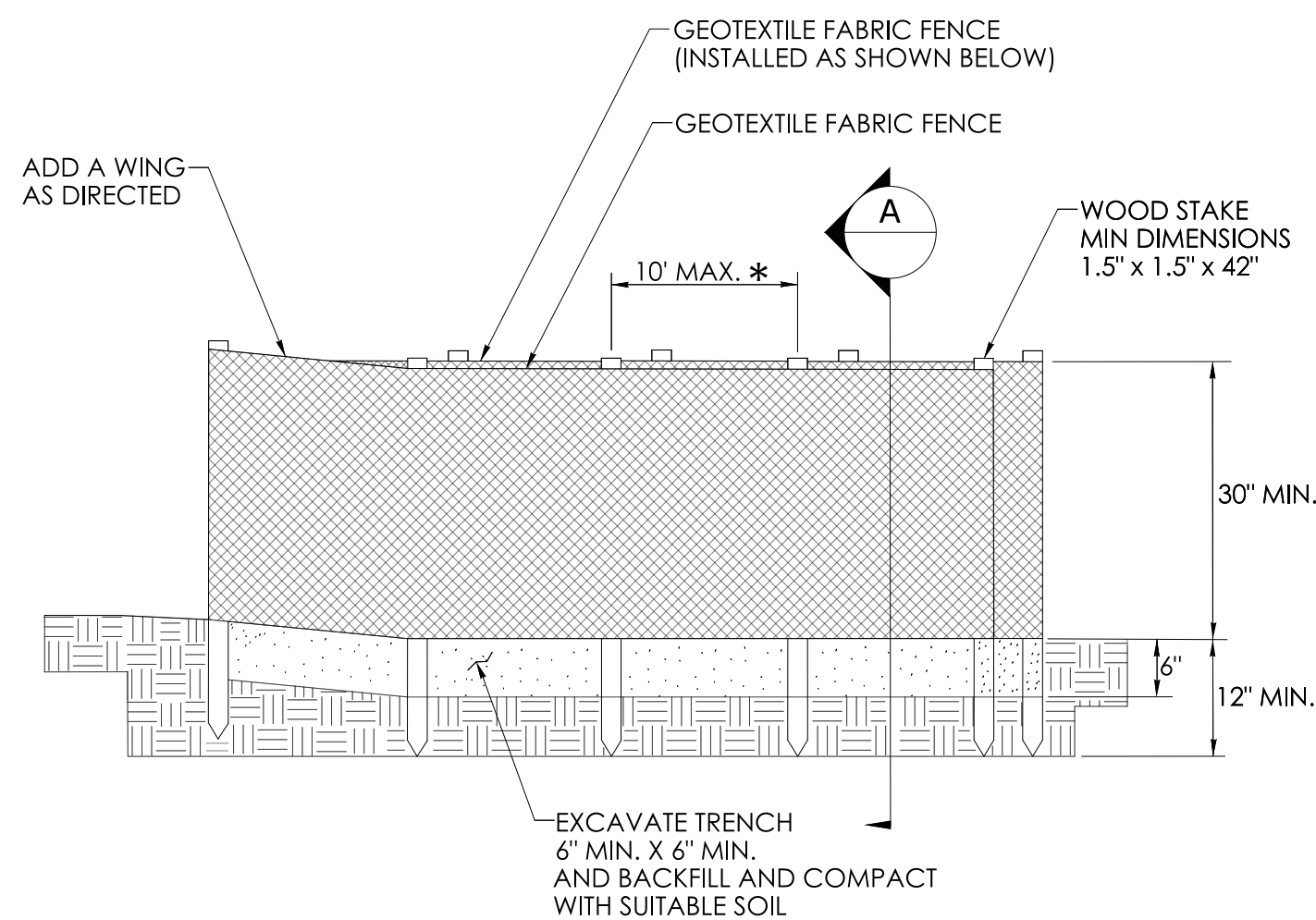


* SEE CROSS SECTIONS

SLOPE PROTECTION DETAIL

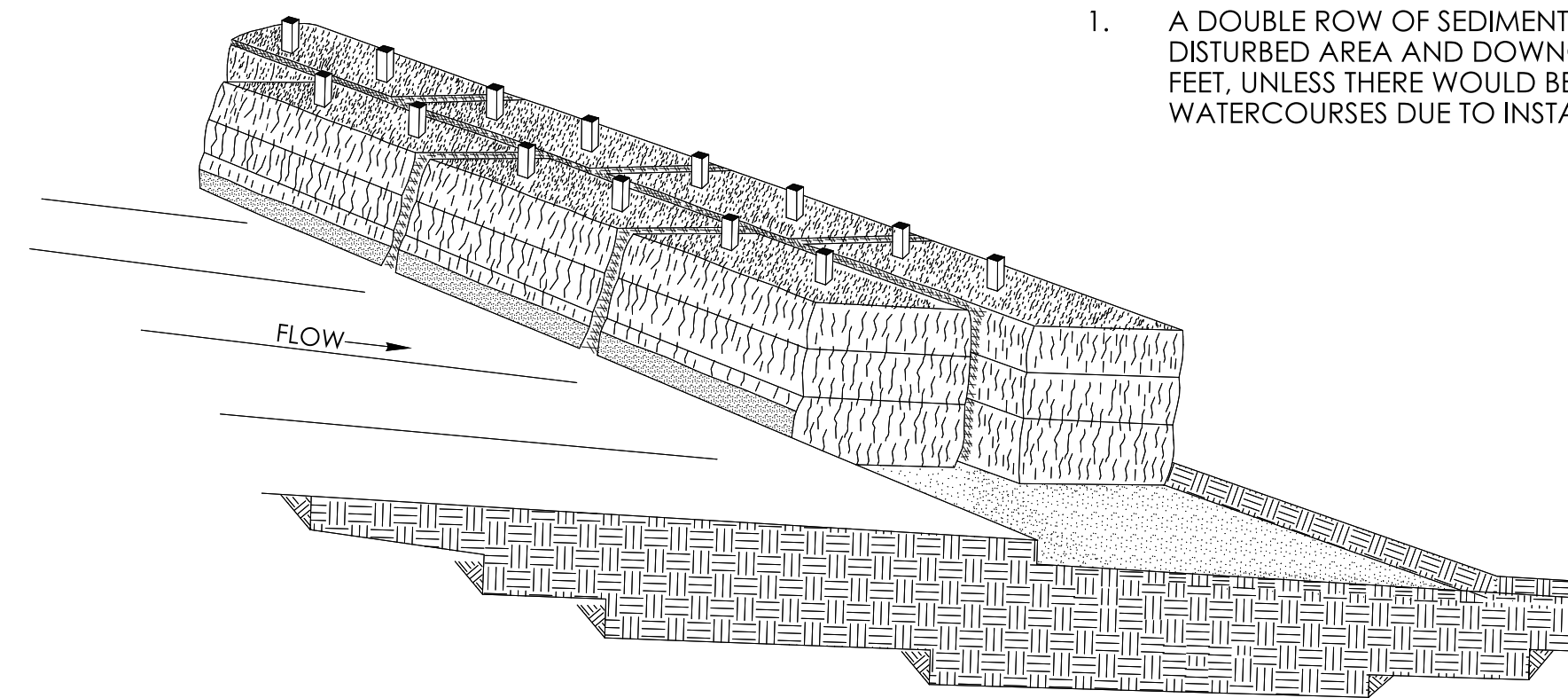


DOUBLE ROW OF GEOTEXTILE FABRIC FENCE

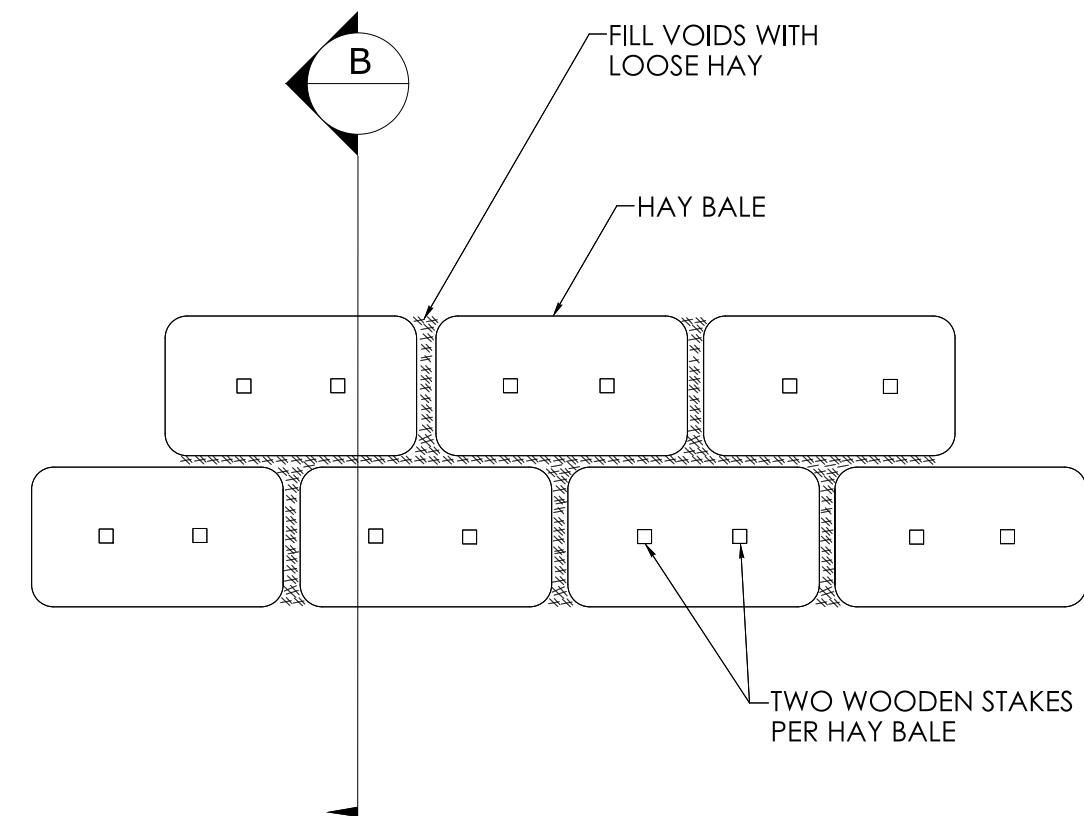


ELEVATION

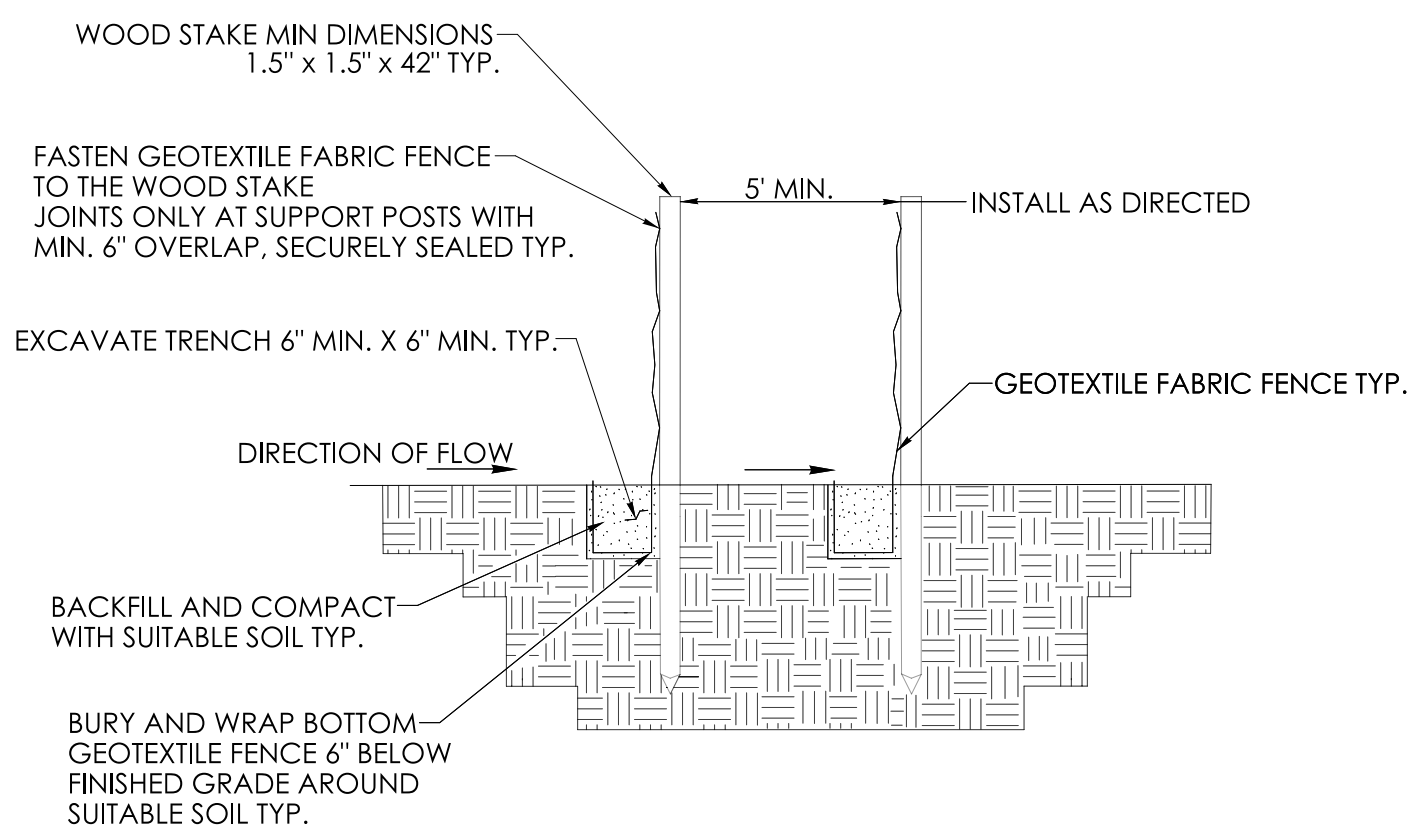
* FOR SLOPES STEEPER THAN 2:1
USE A 5' POST SPACING OR AS
DIRECTED BY THE ENGINEER



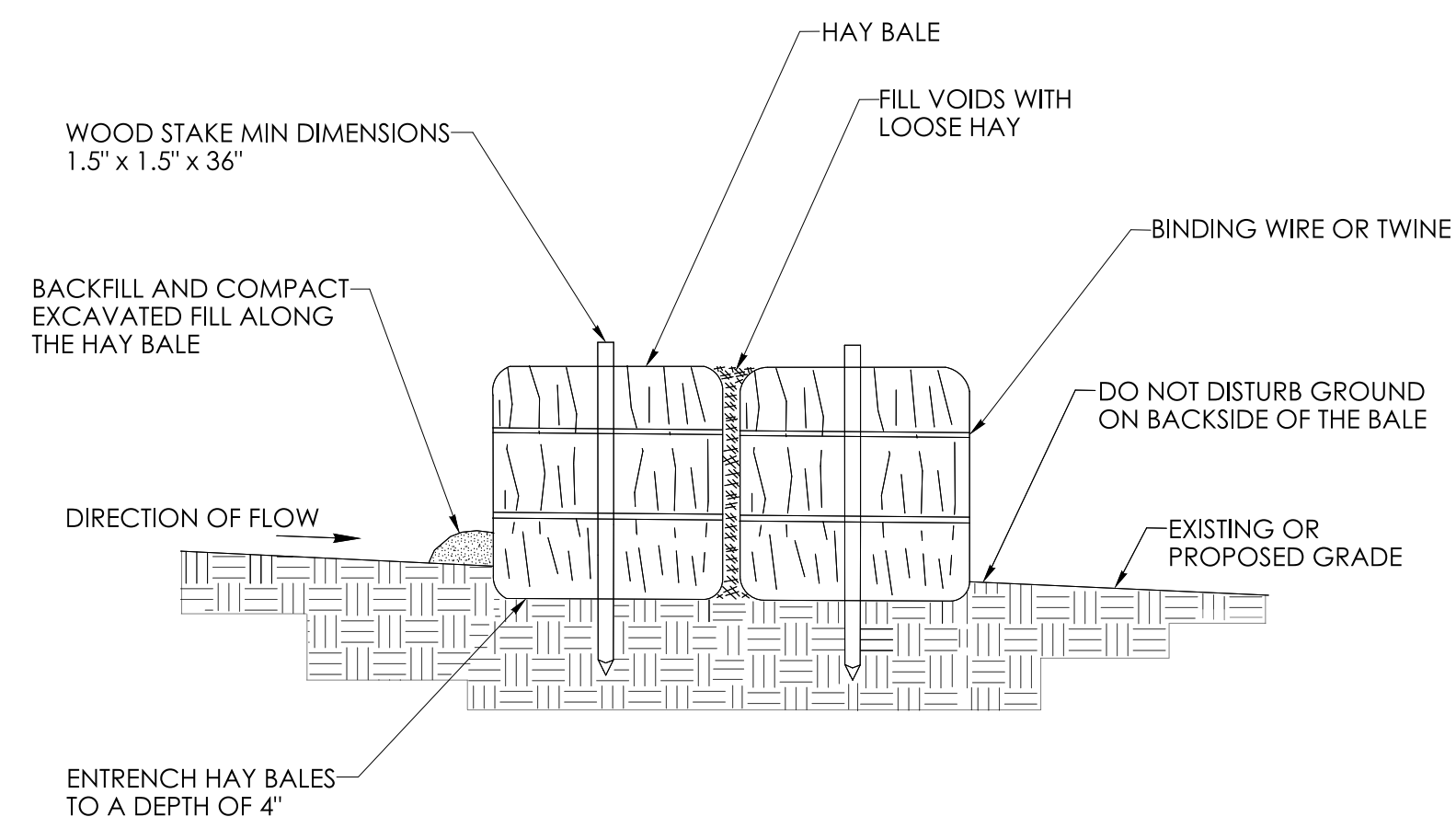
DOUBLE ROW HAY BALE SYSTEM



PLAN



SECTION A

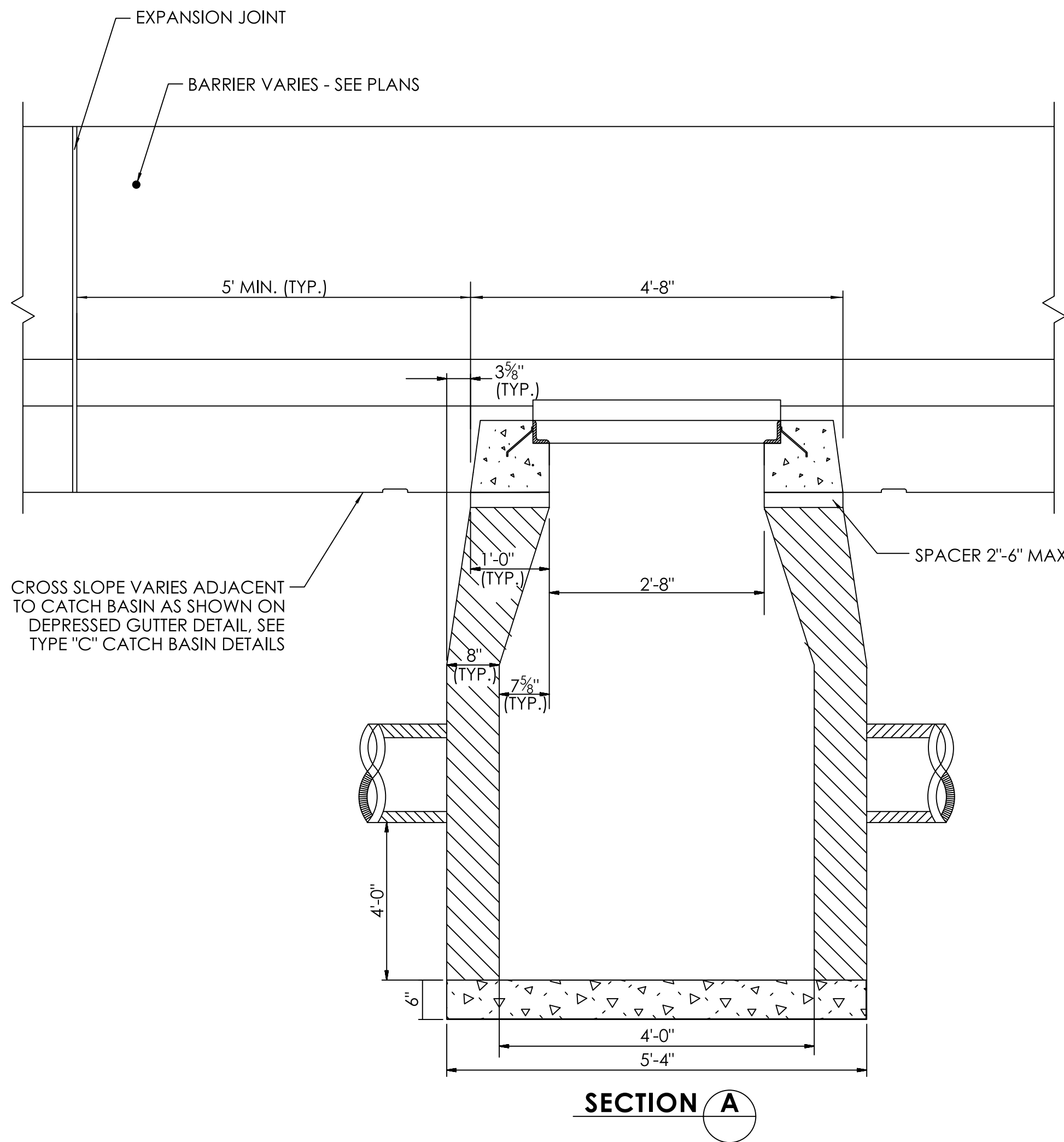
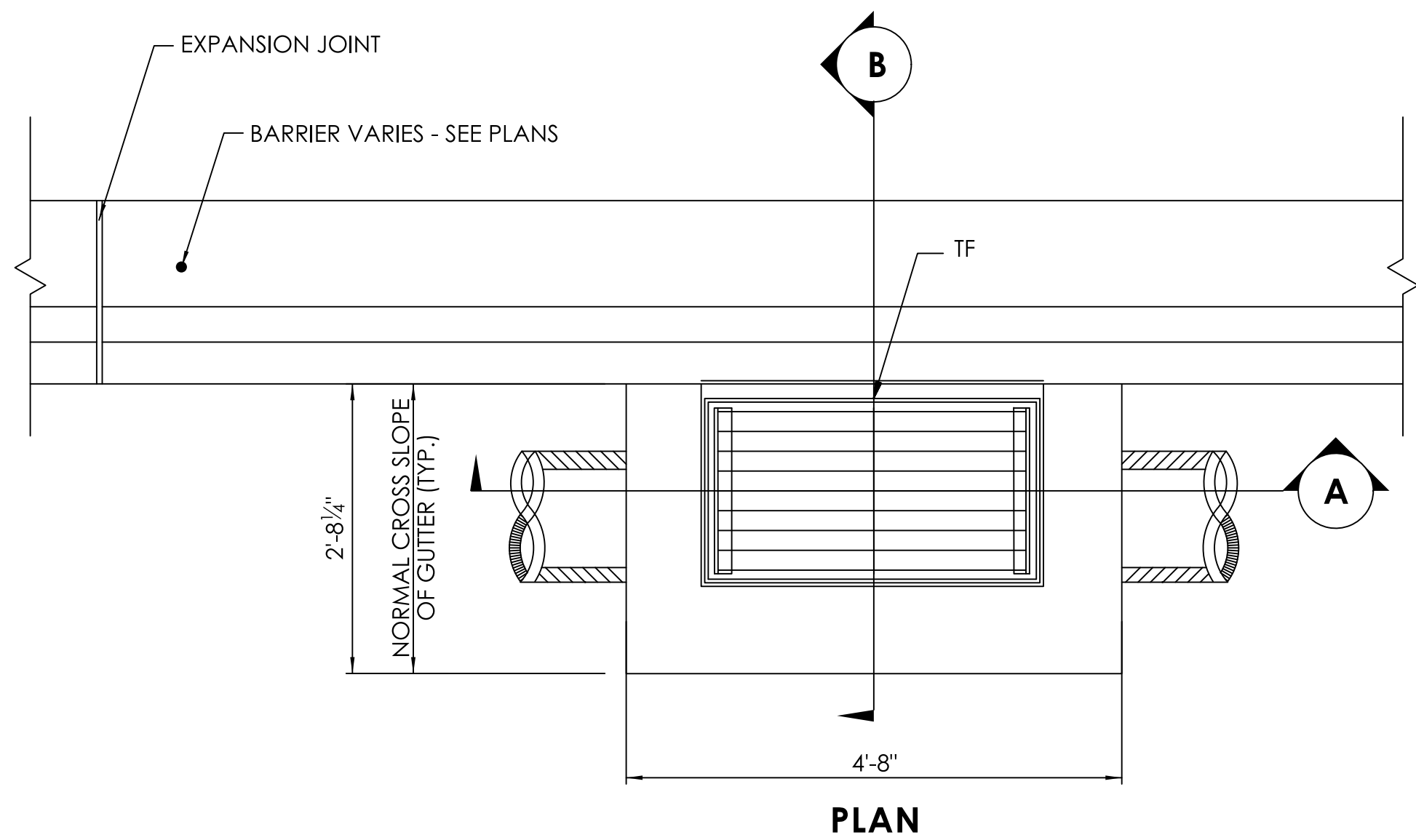


SECTION B

NOTE:

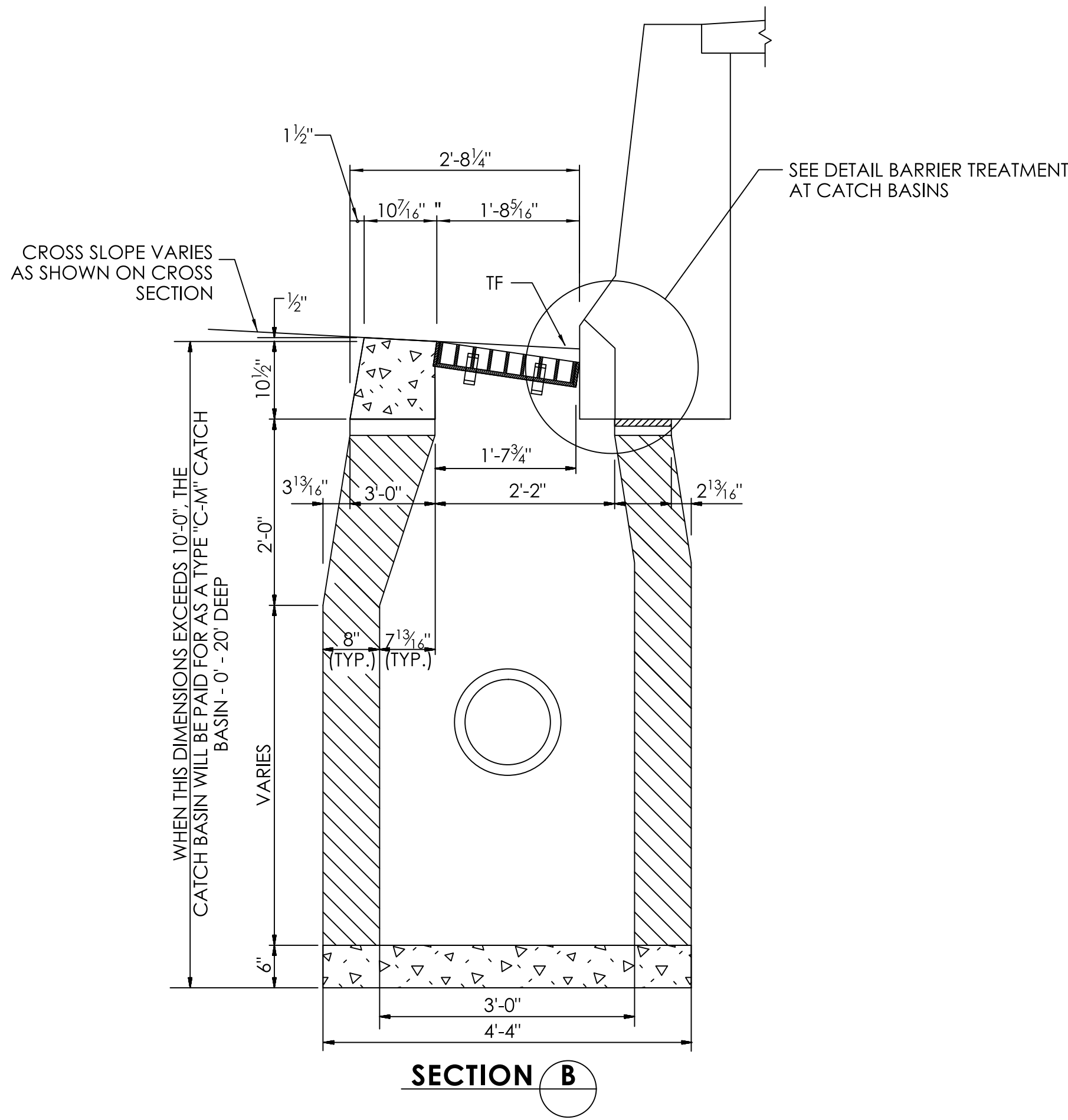
1. A DOUBLE ROW OF SEDIMENT CONTROL BARRIER SHALL BE UTILIZED BETWEEN ANY DISTURBED AREA AND DOWNGRADIENT WETLAND OR WATERCOURSE WITHIN 50 FEET, UNLESS THERE WOULD BE AN ADVERSE IMPACT TO ADJACENT WETLANDS / WATERCOURSES DUE TO INSTALLATION OF A DOUBLE ROW.

REV.	DATE	REVISION DESCRIPTION

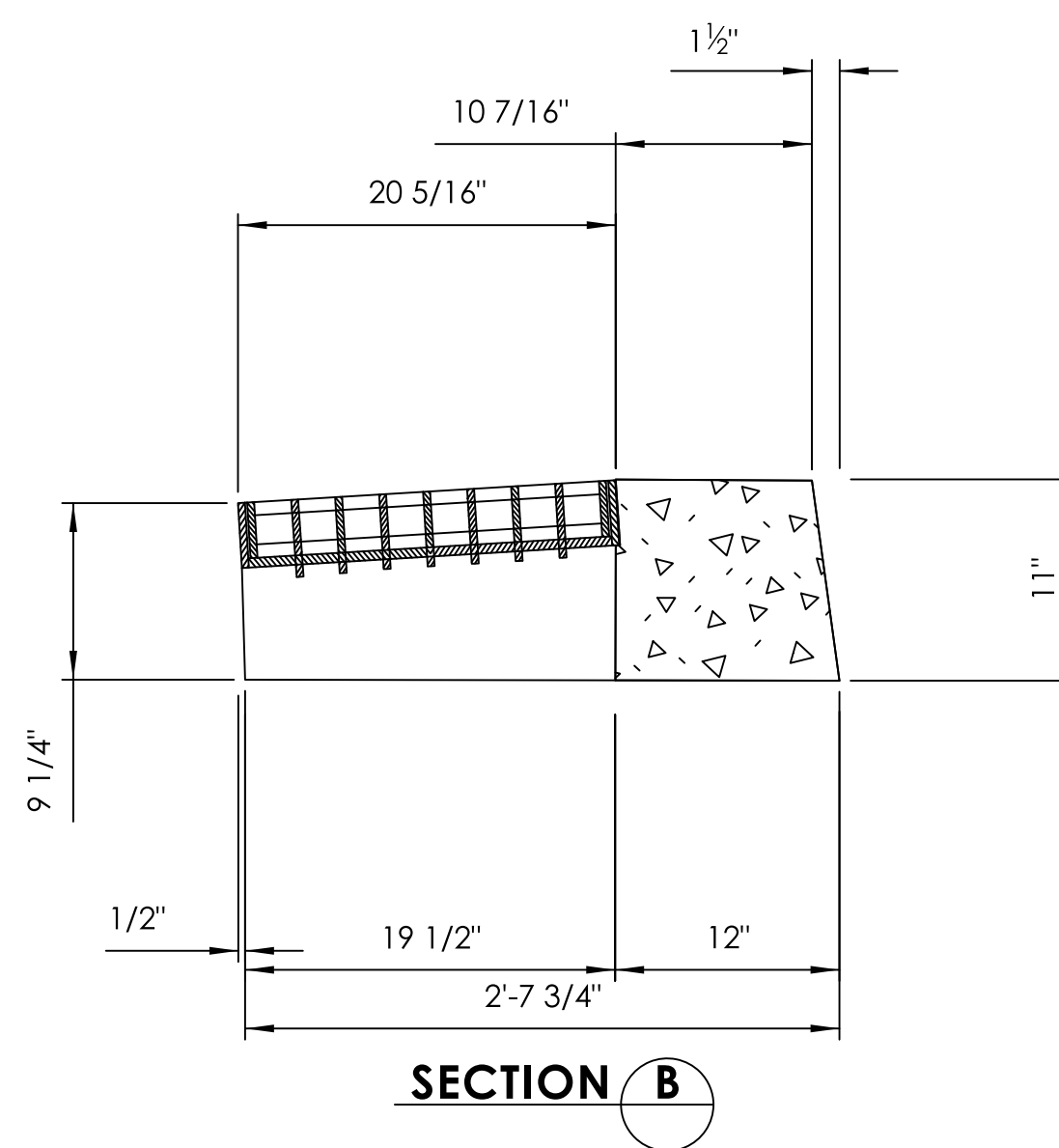
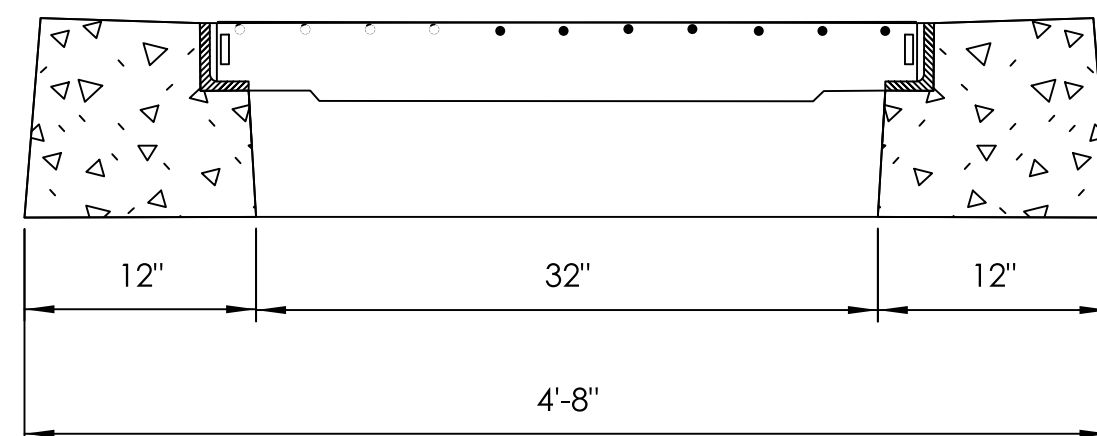
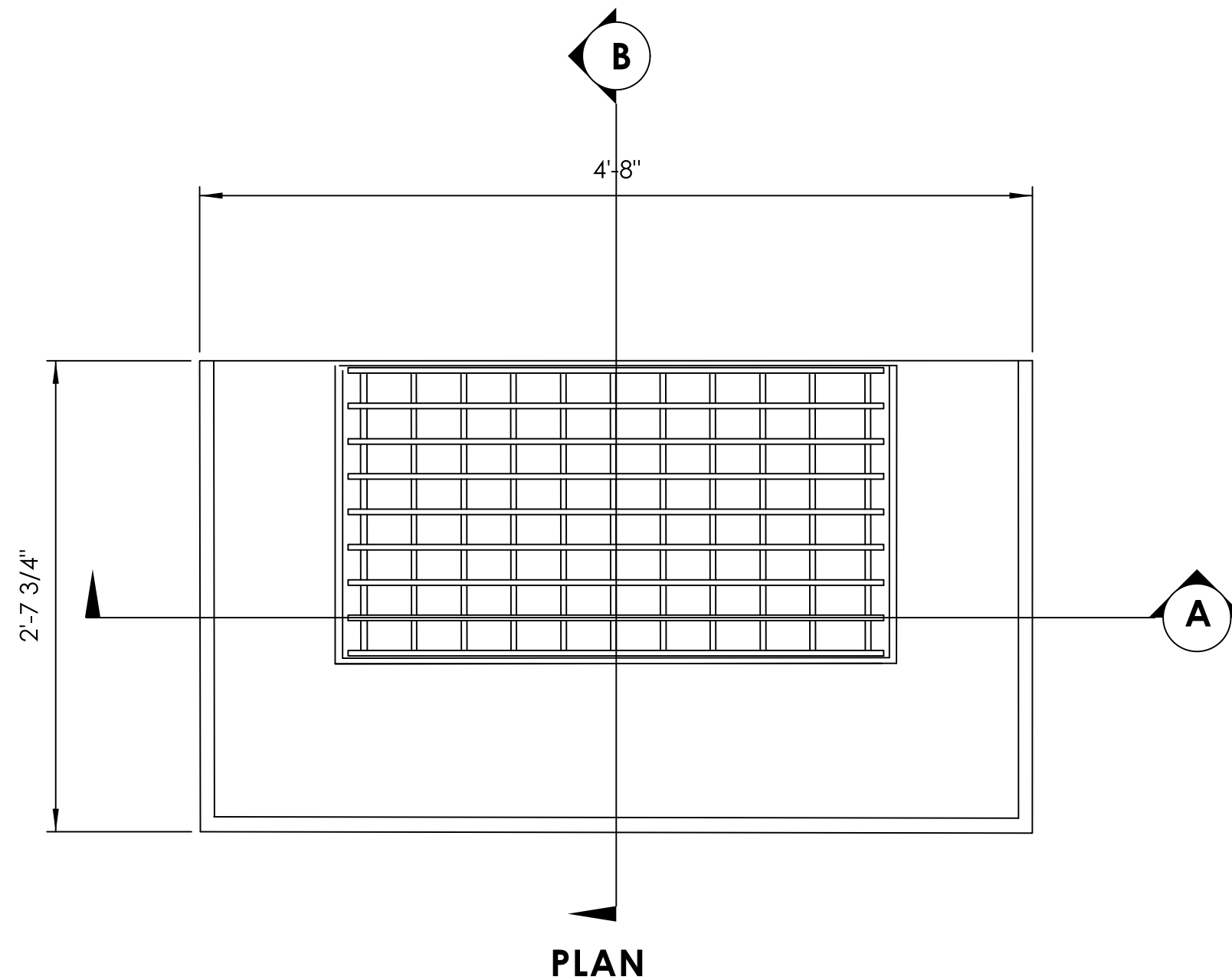


NOTES:

1. FOR ADDITIONAL INFORMATION REFER TO CTDOT STANDARD DRAWINGS FOR CATCH BASIN FRAME & GRATES AND BARRIER TREATMENT AT CATCH BASIN DETAILS.
2. TYPE "B" GRATES SHALL BE USED.
3. ALL CATCH BASINS SHALL BE CONSTRUCTED WITH THROAT.
4. ALL REINFORCING BARS SHALL HAVE 2" COVER.
5. WALL THICKNESS OF CATCH BASINS OVER 10' - 0" DEEP SHALL BE INCREASED TO 12". INSIDE DIMENSIONS OF CATCH BASINS TO REMAIN THE SAME.
6. THE COST OF 1" EXPANSION JOINT FILLER WILL NOT BE PAID FOR DIRECTLY, BUT THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE TYPE OF DRAINAGE STRUCTURE SPECIFIED.
7. REINFORCING STEEL DEFORMED BARS SHALL CONFORM TO THE LATEST ASTM SPECIFICATION A 615, GRADE 60.
8. CONCRETE COMPRESSIVE STRENGTH - 4,000 PSI AT 28 DAYS SELF COMPACTING CONCRETE MIX.

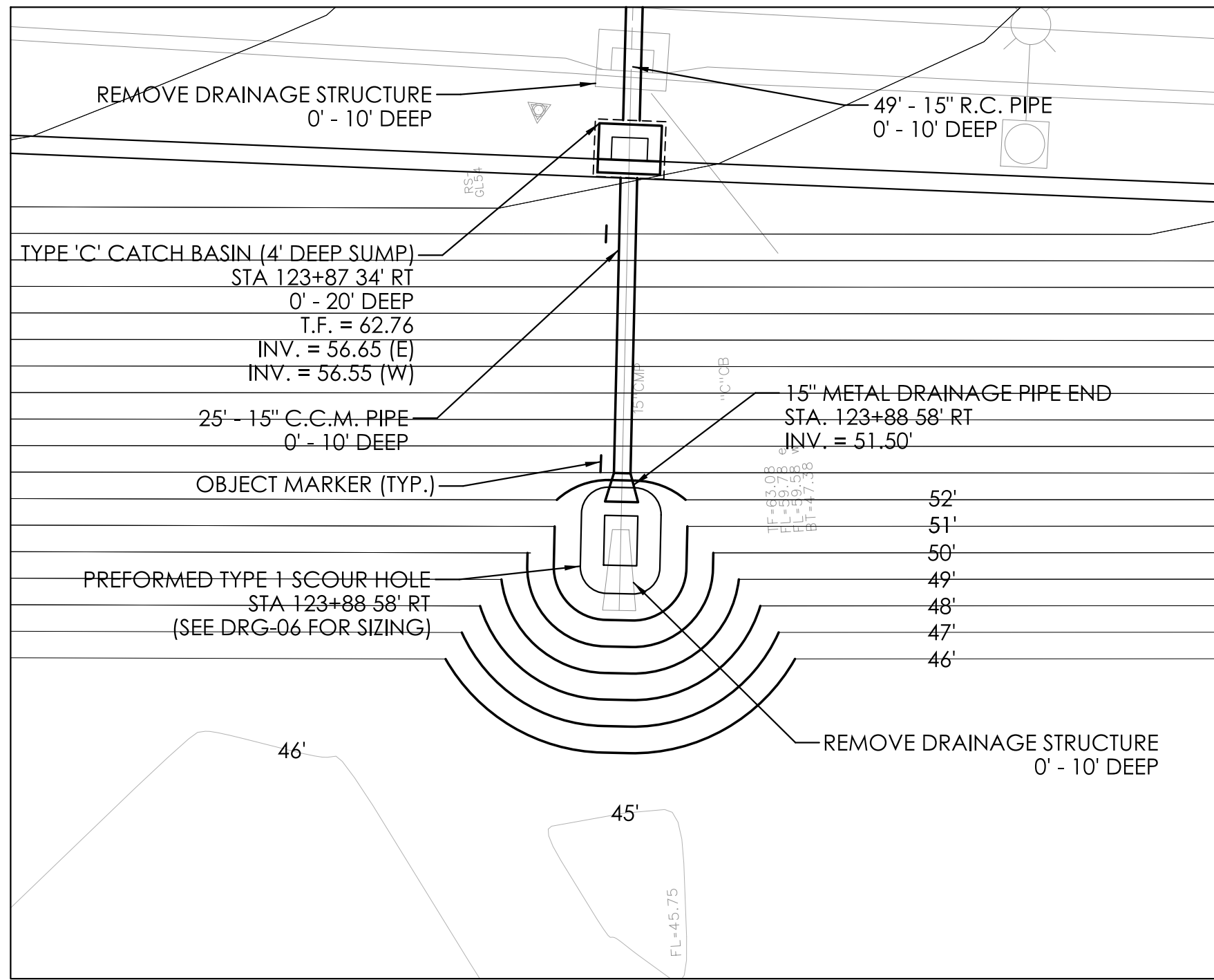


DRAINAGE DETAILS TYPE "C-M" CATCH BASIN TOP



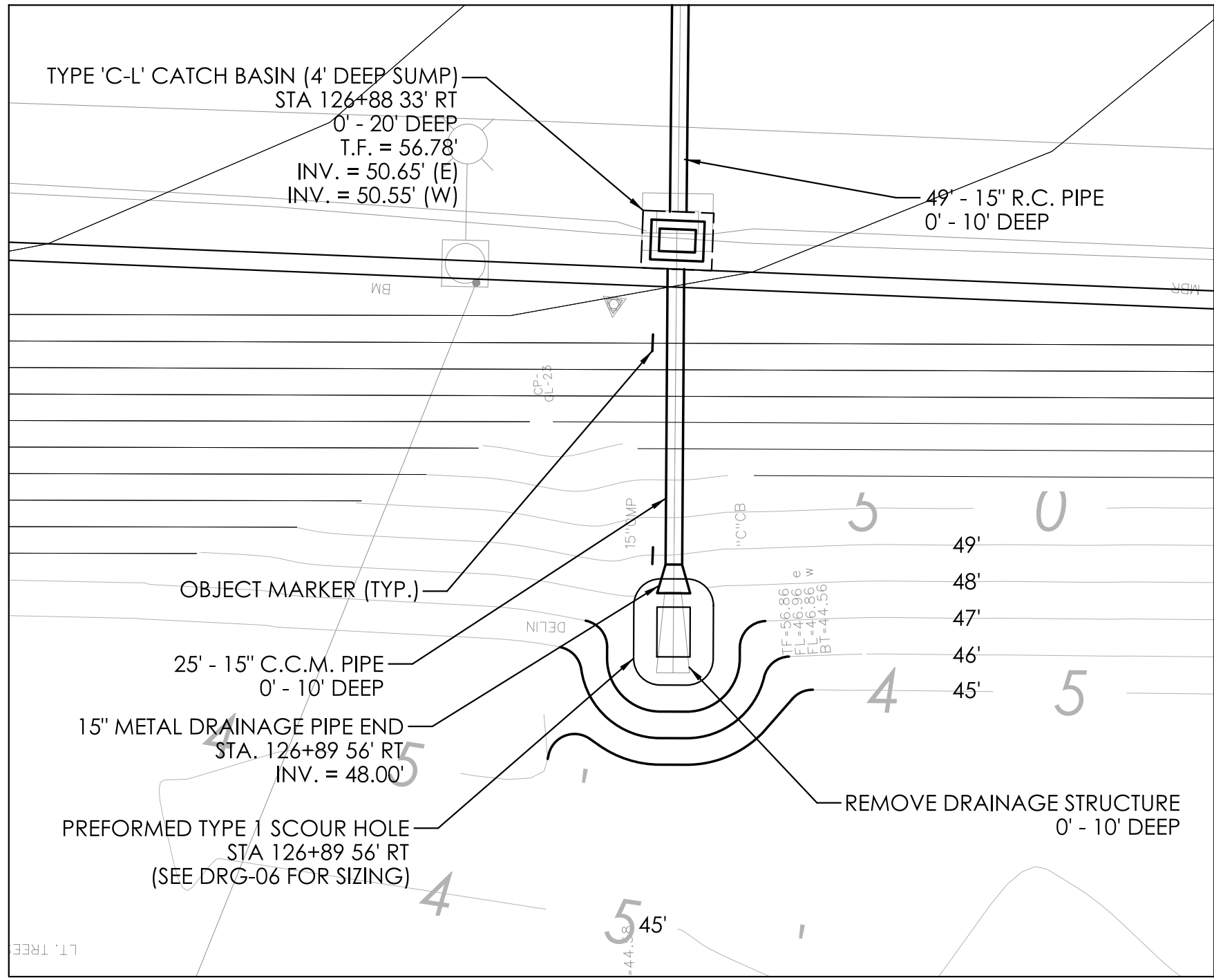
TYPE 'C-M' CATCH BASIN

REV.	DATE	REVISION DESCRIPTION



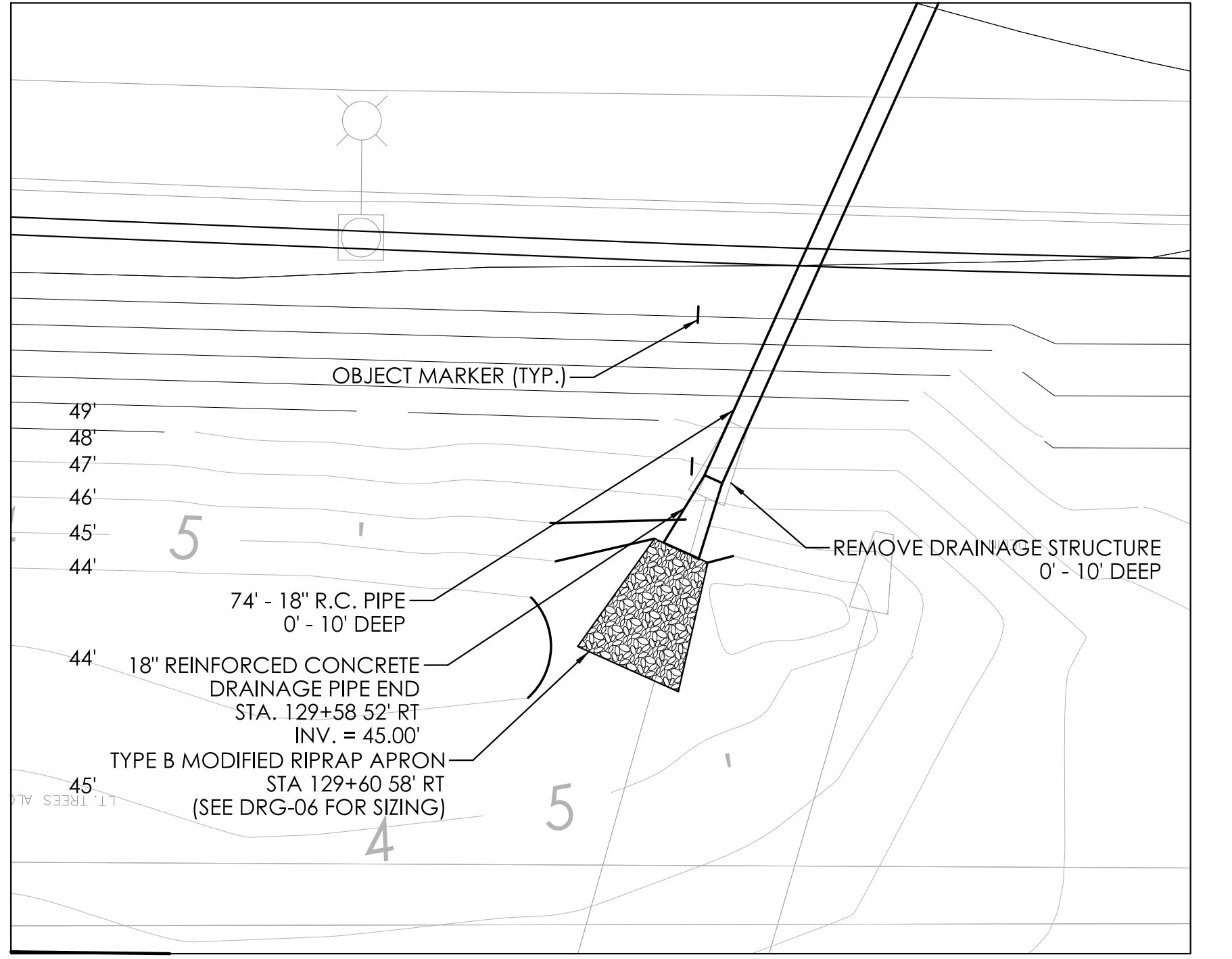
ROUTE 2 EB STA. 123+88 58' RT
PREFORMED SCOUR HOLE (TYPE 1)

SCALE: 1" = 10'



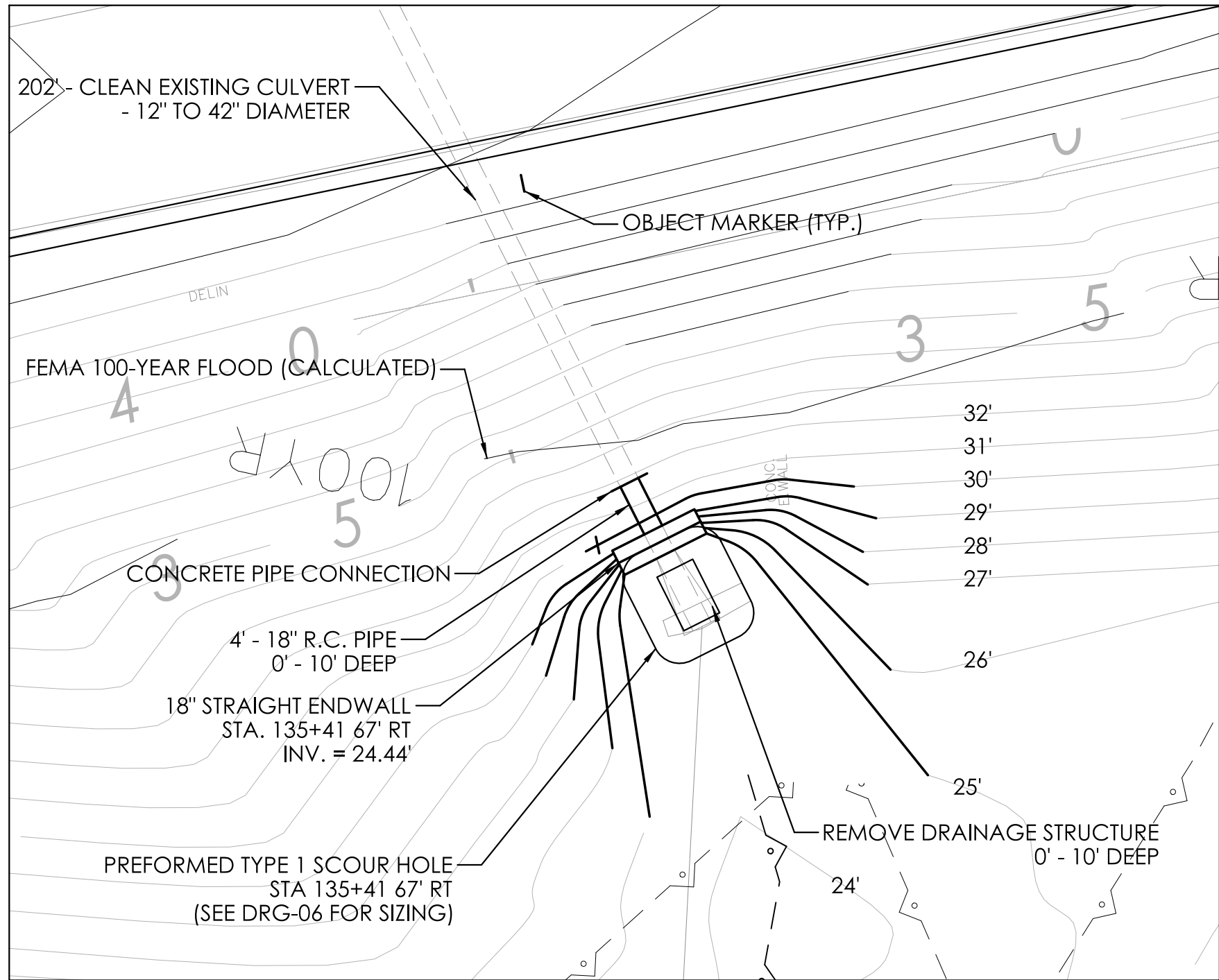
ROUTE 2 EB STA. 126+89 56' RT
PREFORMED SCOUR HOLE (TYPE 1)

SCALE: 1" = 10'



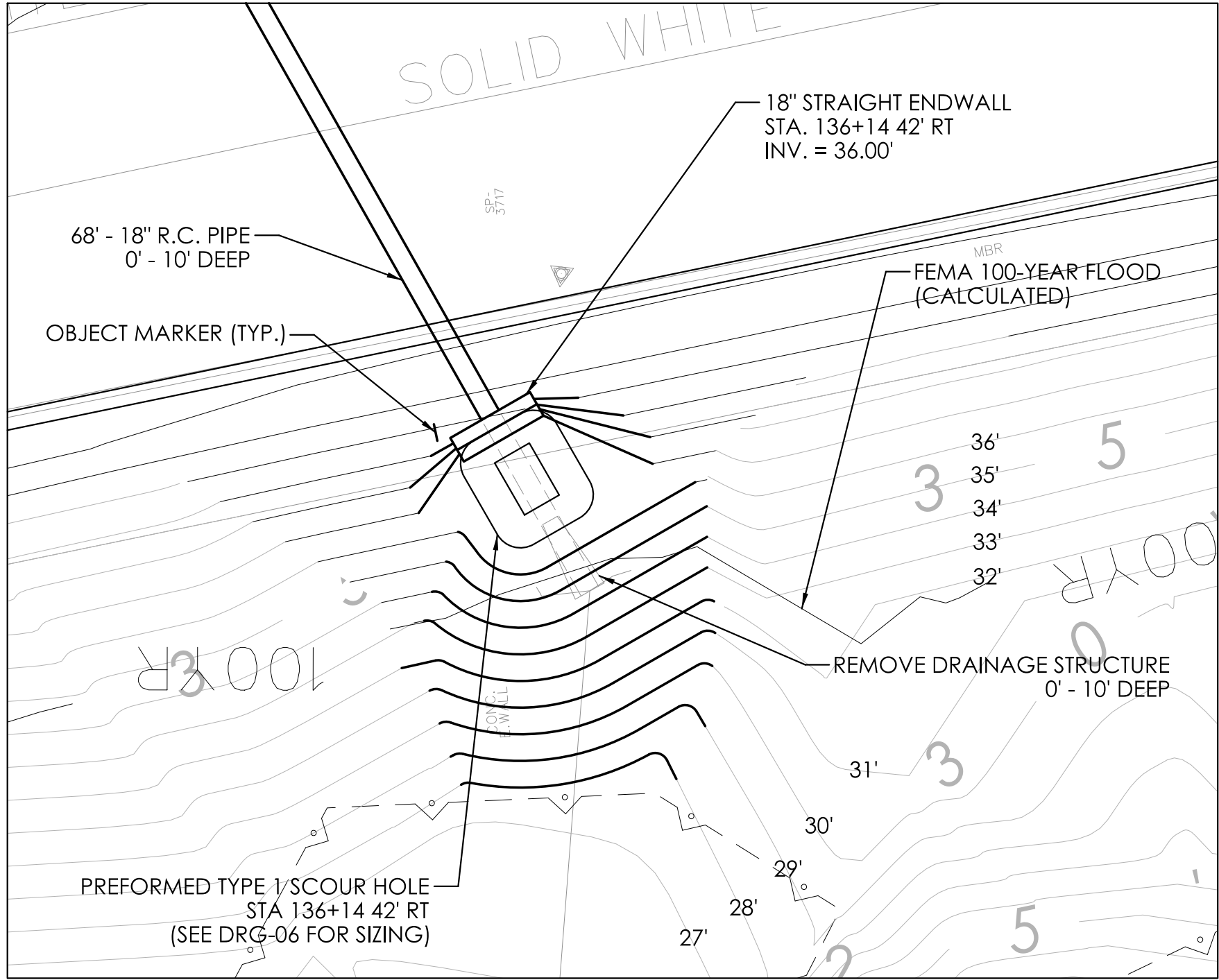
ROUTE 2 EB STA. 129+60 58' RT
TYPE B RIPRAP APRON

SCALE: 1" = 10'



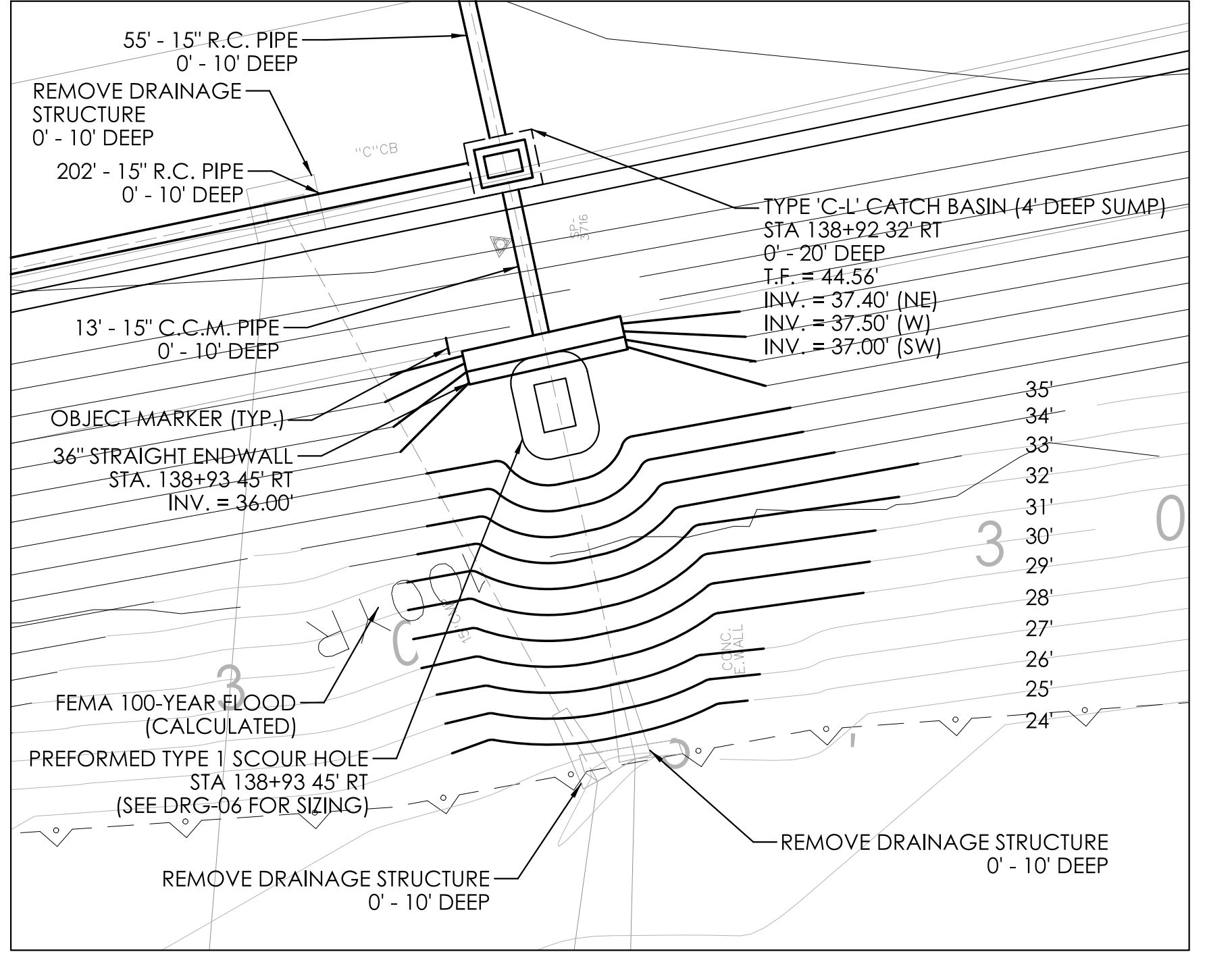
ROUTE 2 EB STA. 135+41 67' RT
PREFORMED SCOUR HOLE (TYPE 1)

SCALE: 1" = 10'



ROUTE 2 EB STA. 136+14 42' RT
PREFORMED SCOUR HOLE (TYPE 1)

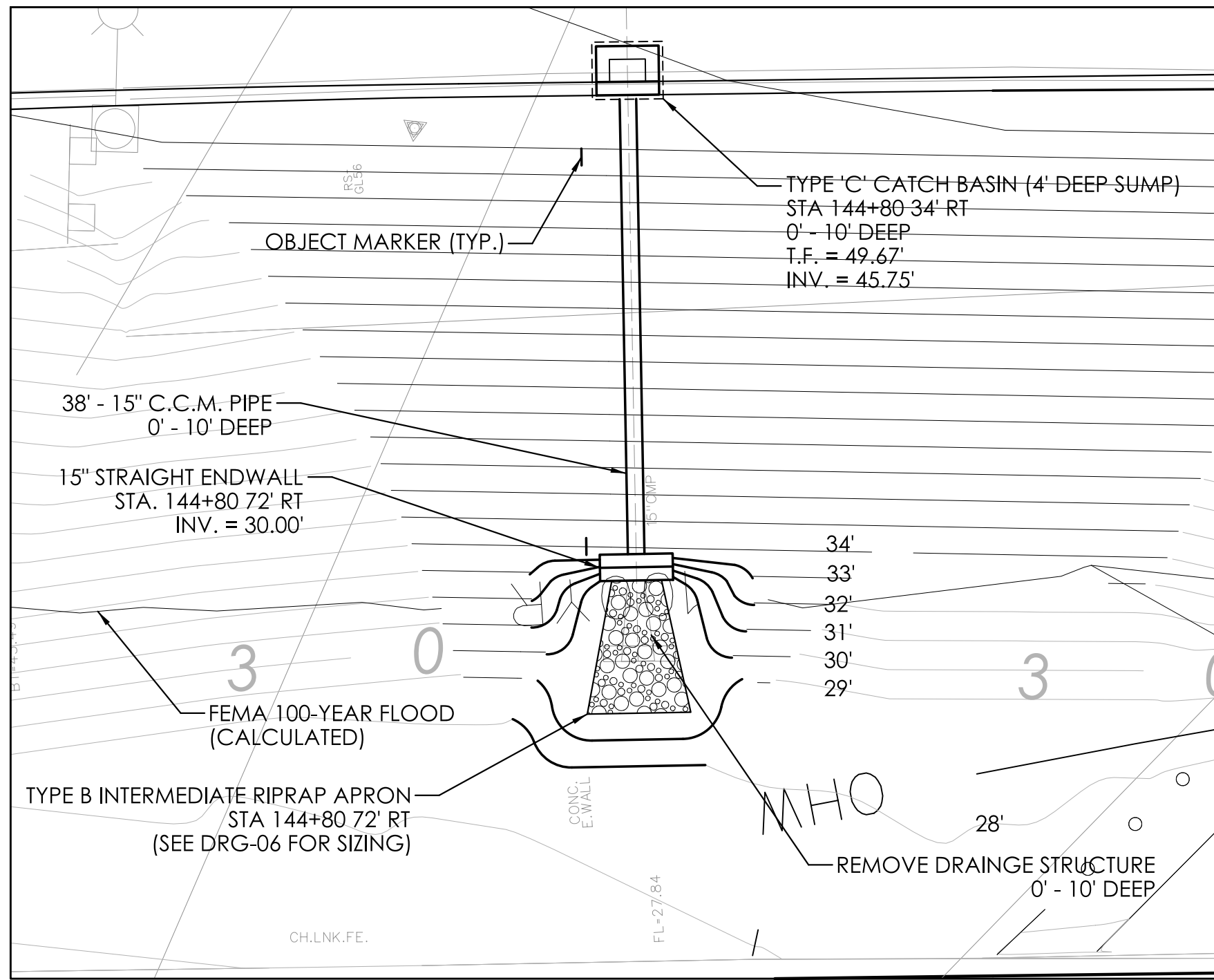
SCALE: 1" = 10'



ROUTE 2 EB STA. 138+93 45' RT
PREFORMED SCOUR HOLE (TYPE 1)

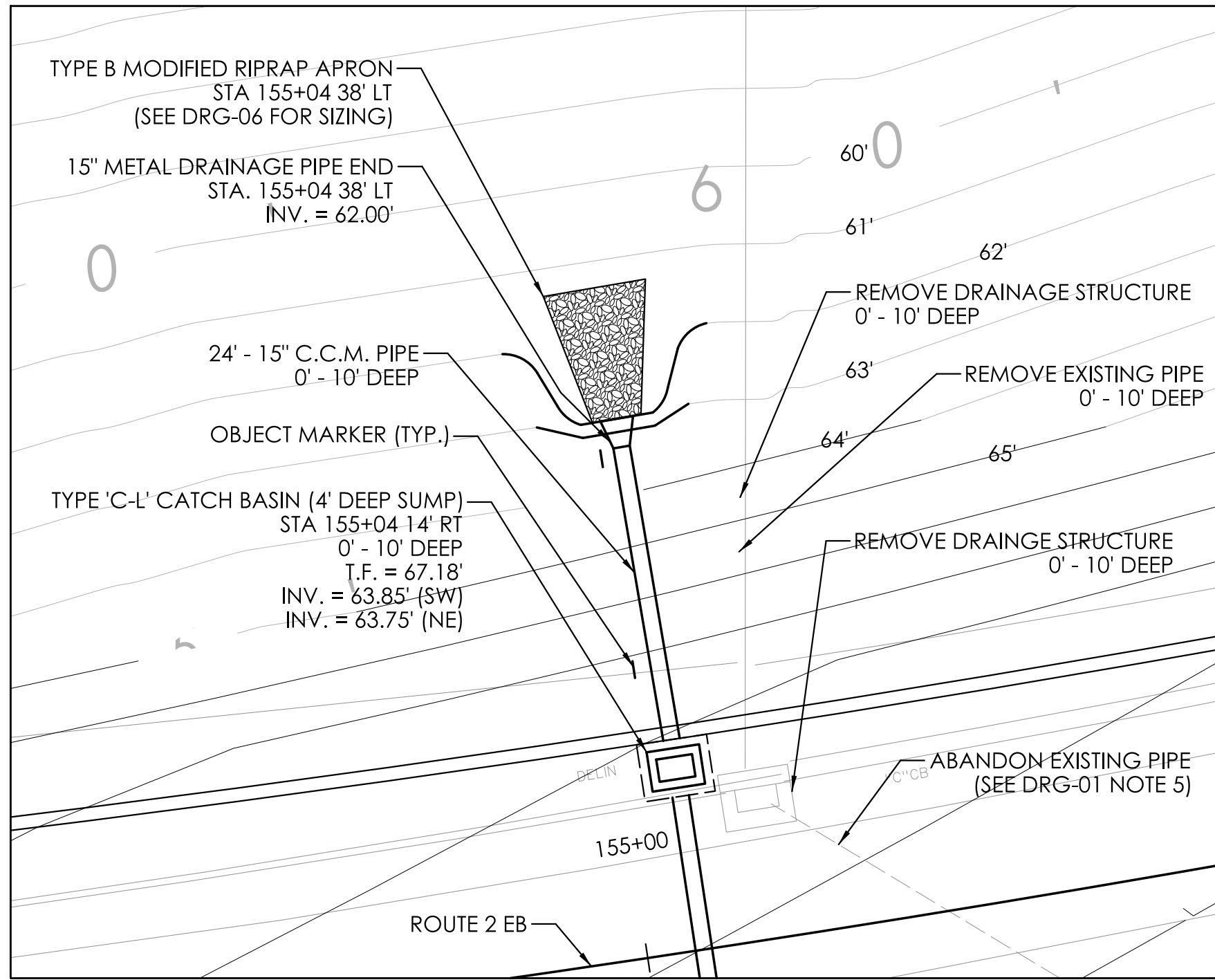
SCALE: 1" = 10'

REV.	DATE	REVISION DESCRIPTION



ROUTE 2 EB STA. 144+80 72' RT
TYPE B RIPRAP APRON

SCALE: 1" = 10'



ROUTE 2 EB STA. 155+04 38' LT
TYPE B RIPRAP APRON

SCALE: 1" = 10'

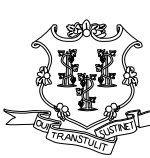
REV.	DATE	REVISION DESCRIPTION

SCALE AS NOTED

SIGNATURE/
BLOCK:



YN ENGINEERS INC.
Traffic • Infrastructure • Planning
1400 WESTBURY AVENUE
SUITE 200 WESTBURY, CT 06091
(860) 339-1962



STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION



PROJECT NUMBER: 0053-0196
PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8
TOWN(S): GLASTONBURY
DRAWING TITLE: OUTLET GRADING DETAILS - 02

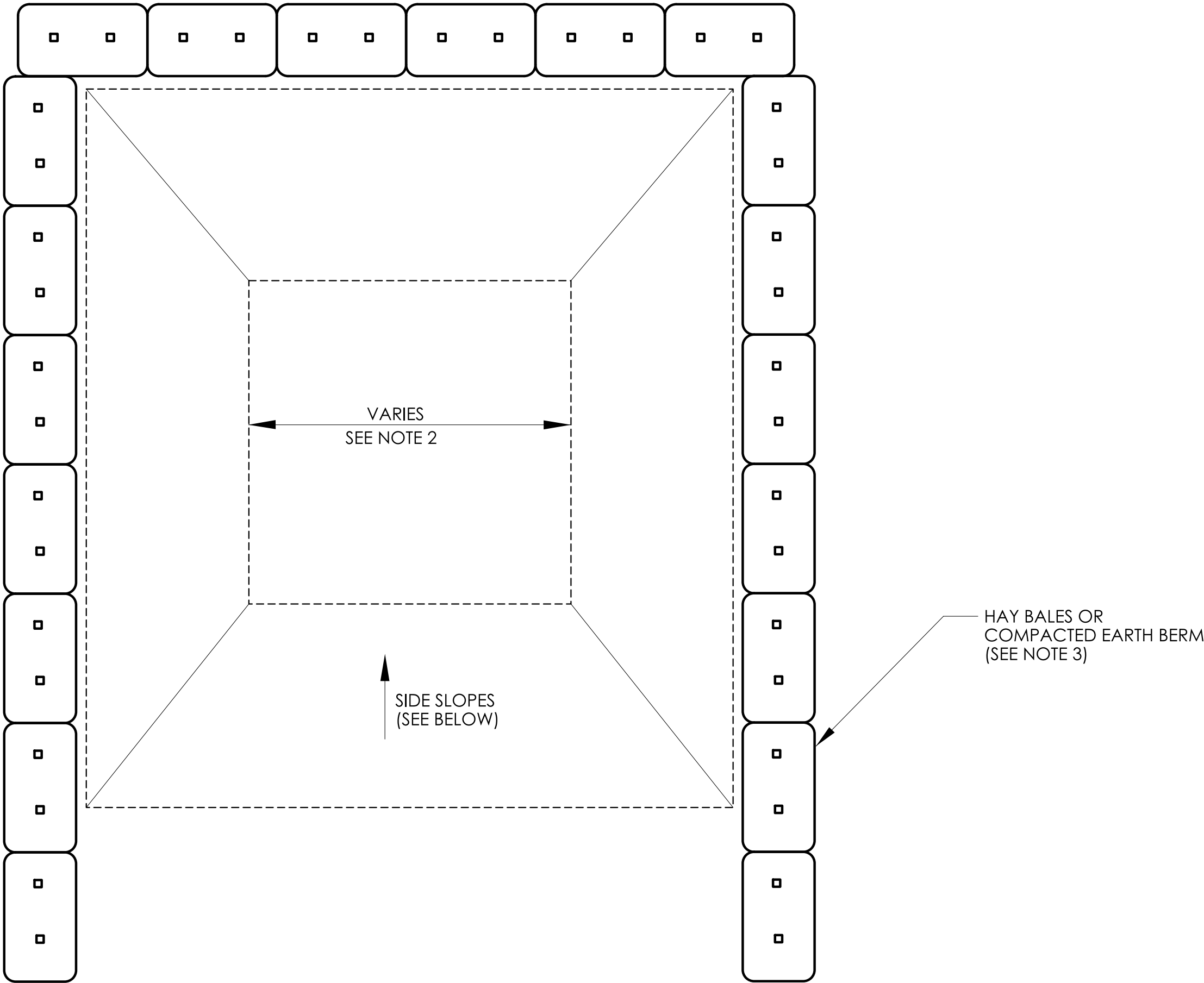
DRAWING NO.
DRG-14
SHEET NO.
04.15

GENERAL NOTES:

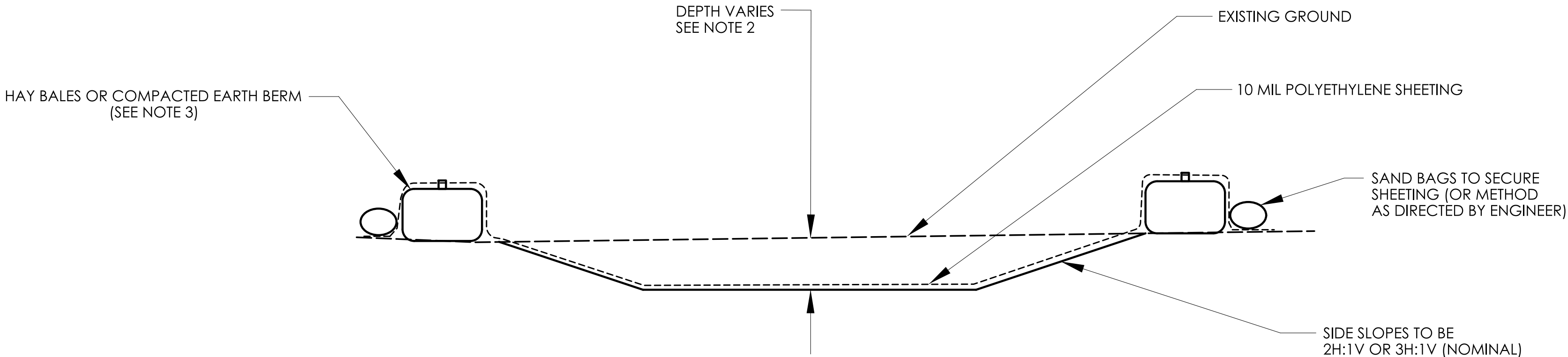
1. CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE. THE CONCRETE WASHOUT AREA SHALL BE ENTIRELY SELF-CONTAINED.
2. THE CONTRACTOR SHALL SUBMIT THE DESIGN, LOCATION AND SIZING OF THE CONCRETE WASHOUT AREA(S) WITH THE PROJECT'S EROSION AND SEDIMENTATION CONTROL PLAN AND SHALL BE APPROVED BY THE ENGINEER.

LOCATION: WASHOUT AREA(S) ARE TO BE LOCATED AT LEAST 50 FEET FROM ANY STREAM, WETLAND, STORM DRAINS, OR OTHER SENSITIVE RESOURCE. THE FLOOD CONTINGENCY PLAN MUST ADDRESS THE CONCRETE WASHOUT IF THE WASHOUT IS TO BE LOCATED WITHIN THE FLOODPLAIN.

SIZE: THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS INCLUDING, BUT NOT LIMITED TO, OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.
3. SURFACE DISCHARGE IS UNACCEPTABLE. THEREFORE, HAY BALES OR OTHER CONTROL MEASURES, AS APPROVED BY THE ENGINEER, SHOULD BE USED AROUND THE PERIMETER OF THE CONCRETE WASHOUT AREA FOR CONTAINMENT.
4. SIGNS SHOULD BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CONCRETE AREA(S) AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS. WASHOUT AREA(S) SHOULD BE FLAGGED WITH SAFETY FENCING OR OTHER APPROVED METHOD.
5. WASHOUT AREA(S) ARE TO BE INSPECTED AT LEAST ONCE A WEEK FOR STRUCTURAL INTEGRITY, ADEQUATE HOLDING CAPACITY AND CHECKED FOR LEAKS, TEARS, OR OVERFLOWS. (AS REQUIRED BY THE CONSTRUCTION SITE ENVIRONMENTAL INSPECTION REPORT) WASHOUT AREA(S) SHOULD BE CHECKED AFTER HEAVY RAINS.
6. HARDENED CONCRETE WASTE SHOULD BE REMOVED AND DISPOSED OF WHEN THE WASTE HAS ACCUMULATED TO HALF OF THE CONCRETE WASHOUT'S DEPTH. THE WASTE CAN BE STORED AT AN UPLAND LOCATION, AS APPROVED BY THE ENGINEER. ALL CONCRETE WASTE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH ALL APPLICABLE LAWS, REGULATIONS, AND GUIDELINES.
7. PAYMENT FOR THIS ITEM IS TO BE INCLUDED UNDER THE GENERAL COST OF THE WORK FOR THE PROJECT, INCLUDING SITE RESTORATION.



PLAN



CONCRETE WASHOUT AREA

NOT TO SCALE
(SEE NOTE 2)

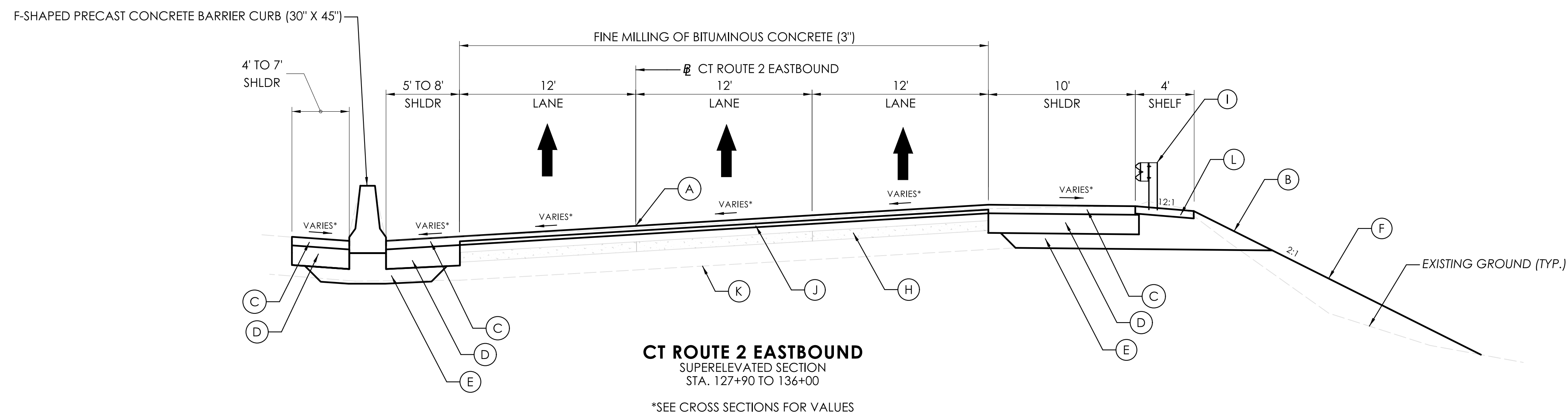
REV.	DATE	REVISION DESCRIPTION

03 - HIGHWAY INDEX OF DRAWINGS			
DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
INX-03	INDEX OF DRAWINGS	GRA-01 - GRA-02	GRADING PLAN
BOR-01 - BOR-03	BORING LOGS	XSC-01 - XSC-52	CROSS SECTIONS
TYP-01 - TYP-03	TYPICAL SECTIONS		
ALN-01 - ALN-05	ALIGNMENT PLAN		
SLT-01	SURVEY LAYOUT AND TIE PLAN		
HWY-01 - HWY-05	HIGHWAY PLAN		
PRO-01 - PRO-05	PROFILE - CT ROUTE 2 EASTBOUND		
PRO-06	PROFILE - 2E7OFF		
PRO-07	PROFILE - 2E8OFF		

[illegible]

DESIGNED BY: **BENESCH**

		SIGNATURE/ BLOCK:	 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT NUMBER: 0053-0196		DRAWING NO. INX-03
DESIGNER/DRAFTER: N BROWN	CHECKED BY: R ALLARD			PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8		
				TOWN(S): GLASTONBURY		
				DRAWING TITLE: INDEX OF DRAWINGS		



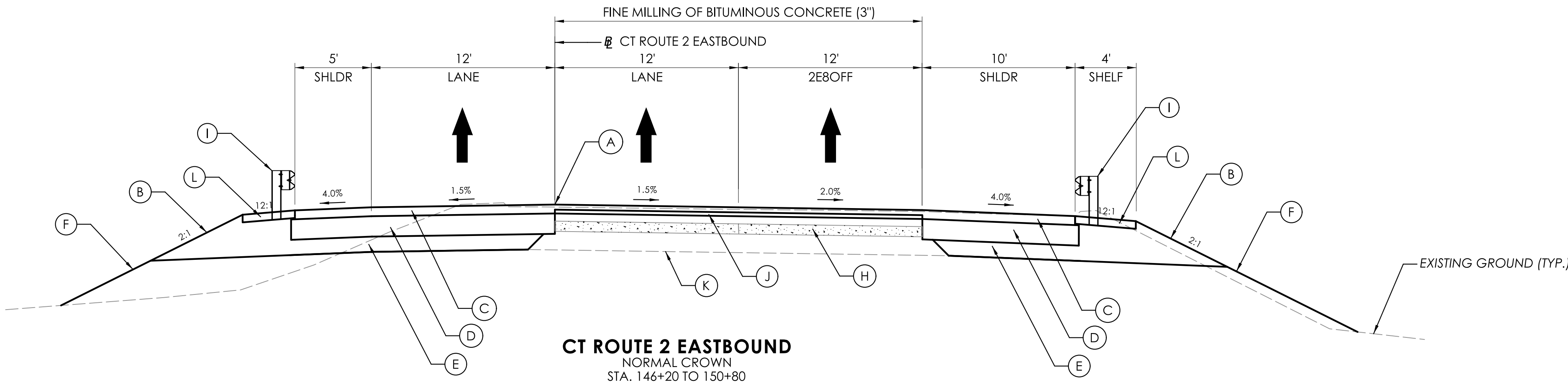
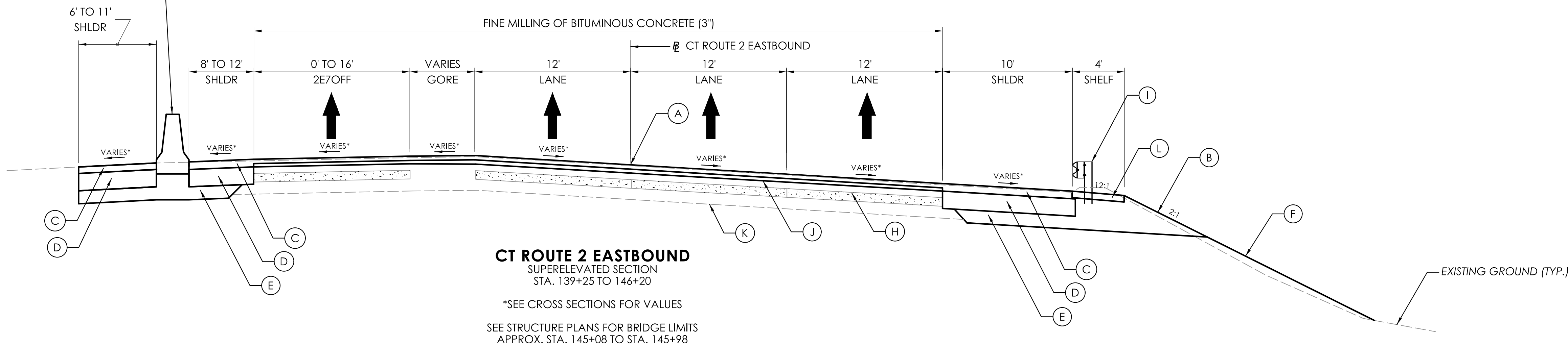
- (A) POINT OF APPLIED GRADE
- (B) EROSION CONTROL MATTING TYPE D
- (C) 4" PMA \$0.5 TRAFFIC LEVEL 3 (PLACED IN TWO EQUAL LIFTS)
- (D) 8" PMA \$1.0 TRAFFIC LEVEL 3 (PLACED IN TWO EQUAL LIFTS)
- (E) 12" PROCESSED AGGREGATE BASE
- (F) 6" TOPSOIL & TURF ESTABLISHMENT
- (H) EXISTING CONCRETE PAVEMENT
- (I) METAL BEAM RAIL (R-B MASH)
- (J) VARIABLE DEPTH - WEDGE COURSE PAVEMENT (SEE TABLE)
- (K) EXISTING SUBBASE
- (L) 6" PROCESSED AGGREGATE

↑ DIRECTION OF TRAVEL

1. APPLY ANTI-TRACKING TACK COAT BETWEEN EACH LIFT REGARDLESS OF DURATION.
2. SEE HWY PLANS FOR SPECIFIC MEDIAN AND ROADSIDE PROTECTION LIMITS.
3. SEE LIFT THICKNESS FOR WEDGE COURSES TABLE FOR VARIABLE DEPTH GUIDANCE.
4. PAVE TOP COURSE TO MATCH ADJACENT PAVEMENT.
5. 3" FINE MILLING OF BITUMINOUS CONCRETE SHALL BE PAID UNDER ITEM: 0409001 - FINE MILLING OF BITUMINOUS CONCRETE (0" TO 4").
6. TEMPORARY CONCRETE SURFACE PATCHING SHALL BE PAID UNDER ITEM: 0406124A - BITUMINOUS CONCRETE SURFACE PATCHING.
7. FULL DEPTH PCC PAVEMENT REPAIR SHALL BE PAID UNDER ITEM: 0406128.10A - BITUMINOUS CONCRETE PATCHING.
8. SEALING OF CRACKS SHALL BE PAID UNDER ITEM: 0406195A - FILING JOINTS AND CRACKS IN BITUMINOUS CONCRETE PAVEMENT.
9. THE FINAL LIFT FOR ALL ROADWAYS SHALL BE A UNIFORM 2" LIFT OF PMA \$0.5.
10. EROSION CONTROL MATTING SHALL BE APPLIED TO THE TOP 10' OF ALL 2:1 SLOPES ALONG ROUTE 2.

[illegible]

F-SHAPED PRECAST CONCRETE BARRIER CURB (30" X 45")



LEGEND

- (A) POINT OF APPLIED GRADE
(B) EROSION CONTROL MATTING TYPE D
(C) 4" PMA S0.5 TRAFFIC LEVEL 3 (PLACED IN TWO EQUAL LIFTS)
(D) 8" PMA S1.0 TRAFFIC LEVEL 3 (PLACED IN TWO EQUAL LIFTS)
(E) 12" PROCESSED AGGREGATE BASE
(F) 6" TOPSOIL & TURF ESTABLISHMENT
(H) EXISTING CONCRETE PAVEMENT
(I) METAL BEAM RAIL (R-B MASH)
(J) VARIABLE DEPTH - WEDGE COURSE PAVEMENT (SEE TABLE)
(K) EXISTING SUBBASE
(L) 6" PROCESSED AGGREGATE
↑ DIRECTION OF TRAVEL

LIFT THICKNESS FOR WEDGE COURSES		
BITUMINOUS CONCRETE MIX DESIGN (TRAFFIC LEVEL 2)	MINIMUM LIFT THICKNESS IN WEDGING	MAXIMUM LIFT THICKNESS IN WEDGING
HMA S0.25	0.25"	1.50"
HMA S0.375	0.5"	2.5"

NOTES

- APPLY ANTI-TRACKING TACK COAT BETWEEN EACH LIFT REGARDLESS OF DURATION.
- SEE HWY PLANS FOR SPECIFIC MEDIAN AND ROADSIDE PROTECTION LIMITS.
- SEE LIFT THICKNESS FOR WEDGE COURSES TABLE FOR VARIABLE DEPTH GUIDANCE.
- PAVE TOP COURSE TO MATCH ADJACENT PAVEMENT.
- 3" FINE MILLING OF BITUMINOUS CONCRETE SHALL BE PAID UNDER ITEM: 0409001 - FINE MILLING OF BITUMINOUS CONCRETE (0" TO 4").
- TEMPORARY CONCRETE SURFACE PATCHING SHALL BE PAID UNDER ITEM: 0406124A - BITUMINOUS CONCRETE SURFACE PATCHING.
- FULL DEPTH PCC PAVEMENT REPAIR SHALL BE PAID UNDER ITEM: 0406128.10A - BITUMINOUS CONCRETE PATCHING.
- SEALING OF CRACKS SHALL BE PAID UNDER ITEM: 0406195A - FILING JOINTS AND CRACKS IN BITUMINOUS CONCRETE PAVEMENT.
- THE FINAL LIFT FOR ALL ROADWAYS SHALL BE A UNIFORM 2" LIFT OF PMA S0.5.
- EROSION CONTROL MATTING SHALL BE APPLIED TO THE TOP 10' OF ALL 2:1 SLOPES ALONG ROUTE 2.

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: B. VALENZUELA CHECKED BY: R. ALLARD

SIGNATURE/
BLOCK:

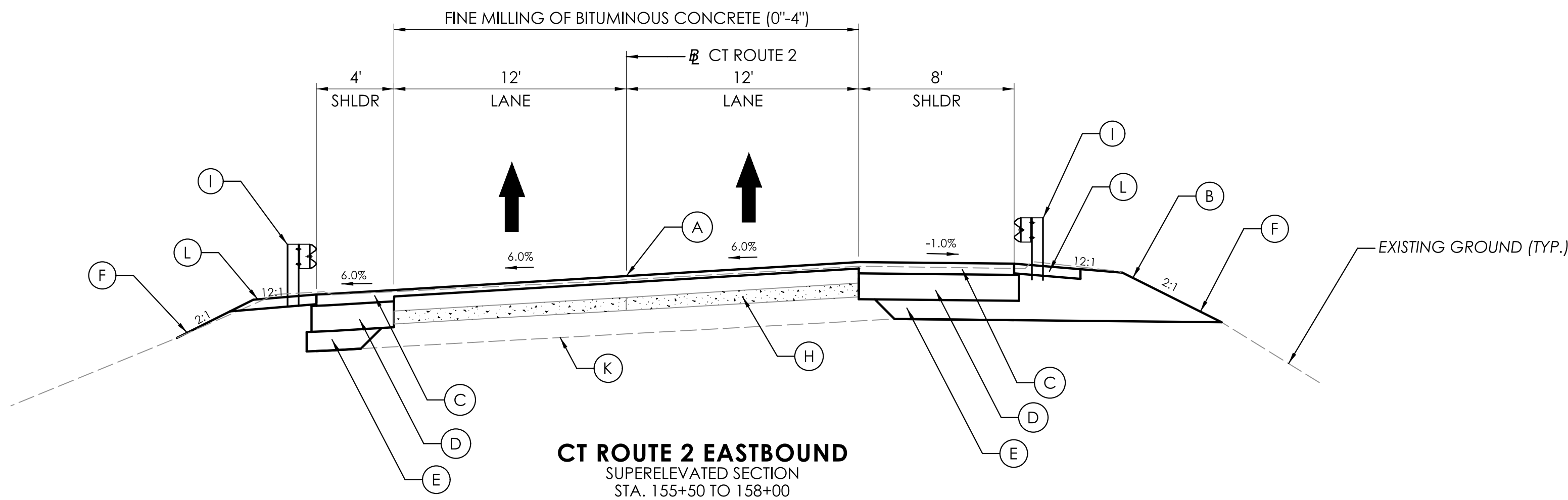
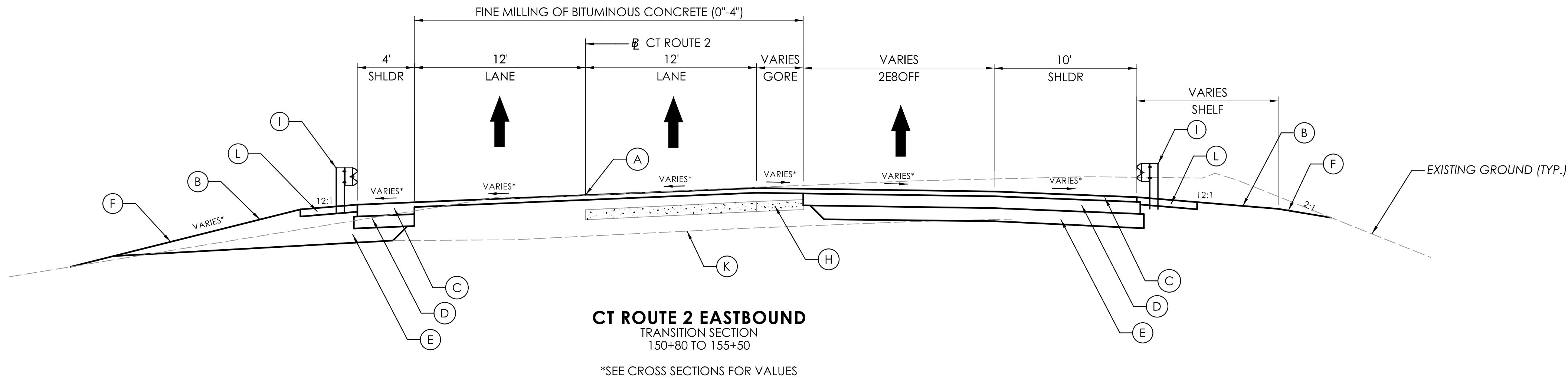


STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION



PROJECT NUMBER: 0053-0196
PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8
TOWN(S): GLASTONBURY
DRAWING TITLE: TYPICAL SECTIONS

DRAWING NO.
TYP-02
SHEET NO.



LEGEND

- (A) POINT OF APPLIED GRADE
(B) EROSION CONTROL MATTING TYPE D
(C) 4" PMA S0.5 TRAFFIC LEVEL 3 (PLACED IN TWO EQUAL LIFTS)
(D) 8" PMA S1.0 TRAFFIC LEVEL 3 (PLACED IN TWO EQUAL LIFTS)
(E) 12" PROCESSED AGGREGATE BASE
(F) 6" TOPSOIL & TURF ESTABLISHMENT
(H) EXISTING CONCRETE PAVEMENT
(I) METAL BEAM RAIL (R-B MASH)
(J) VARIABLE DEPTH - WEDGE COURSE PAVEMENT (SEE TABLE)
(K) EXISTING SUBBASE
(L) 6" PROCESSED AGGREGATE
↑ DIRECTION OF TRAVEL

LIFT THICKNESS FOR WEDGE COURSES		
BITUMINOUS CONCRETE MIX DESIGN (TRAFFIC LEVEL 2)	MINIMUM LIFT THICKNESS IN WEDGING	MAXIMUM LIFT THICKNESS IN WEDGING
HMA S0.25	0.25"	1.50"
HMA S0.375	0.5"	2.5"

NOTES

- APPLY ANTI-TRACKING TACK COAT BETWEEN EACH LIFT REGARDLESS OF DURATION.
- SEE HWY PLANS FOR SPECIFIC MEDIAN AND ROADSIDE PROTECTION LIMITS.
- SEE LIFT THICKNESS FOR WEDGE COURSES TABLE FOR VARIABLE DEPTH GUIDANCE.
- PAVE TOP COURSE TO MATCH ADJACENT PAVEMENT.
- 3" FINE MILLING OF BITUMINOUS CONCRETE SHALL BE PAID UNDER ITEM: 0409001 - FINE MILLING OF BITUMINOUS CONCRETE (0" TO 4").
- TEMPORARY CONCRETE SURFACE PATCHING SHALL BE PAID UNDER ITEM: 0406124A - BITUMINOUS CONCRETE SURFACE PATCHING.
- FULL DEPTH PCC PAVEMENT REPAIR SHALL BE PAID UNDER ITEM: 0406128.10A - BITUMINOUS CONCRETE PATCHING.
- SEALING OF CRACKS SHALL BE PAID UNDER ITEM: 0406195A - FILING JOINTS AND CRACKS IN BITUMINOUS CONCRETE PAVEMENT.
- THE FINAL LIFT FOR ALL ROADWAYS SHALL BE A UNIFORM 2" LIFT OF PMA S0.5.
- EROSION CONTROL MATTING SHALL BE APPLIED TO THE TOP 10' OF ALL 2:1 SLOPES ALONG ROUTE 2.

REV.	DATE	REVISION DESCRIPTION

NOTES

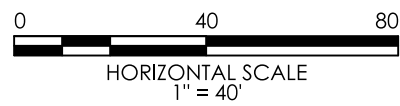
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2. ADDITIONAL EROSION CONTROL BARRIERS (DOUBLE ROW OF SCs) MAY ALSO BE REQUIRED WITHIN THE PROJECT AREA. FACTOR TO BE REVIEWED BY THE ENGINEER INCLUDE BUT ARE NOT LIMITED TO: THE CONTRIBUTING DISTURBED AREA, DRAINAGE AREA, SLOP, LENGTH OF SLOPE, AND FLOW CONDITIONS TO MAINTAIN SHEET FLOW. IF DETERMINED NECESSARY, THE ENGINEER WILL DIRECT THE CONTRACTOR TO INSTALL AND MAINTAIN ADDITIONAL ROWS OF EROSION CONTROL BARRIER (OR EQUIVALENT).

**LIMIT OF CONSTRUCTION
CT ROUTE 2 EASTBOUND
STA. 106+00
N = 825465.2
E = 1037963.6**
BEGIN MILLING AND OVERLAY
BEGIN RUMBLE STRIPS

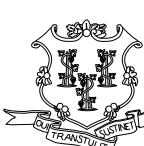
**LIMIT OF CONSTRUCTION
3E2E
STA. 210+40
N = 825039.2
E = 1038126.8**
BEGIN MILLING AND OVERLAY

LEGEND

- ➔ TRAFFIC FLOW
- ▬ LIMITS OF MILLING AND OVERLAY
- ▬ LIMITS OF FULL DEPTH CONSTRUCTION



SIGNATURE/
BLOCK:



STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION

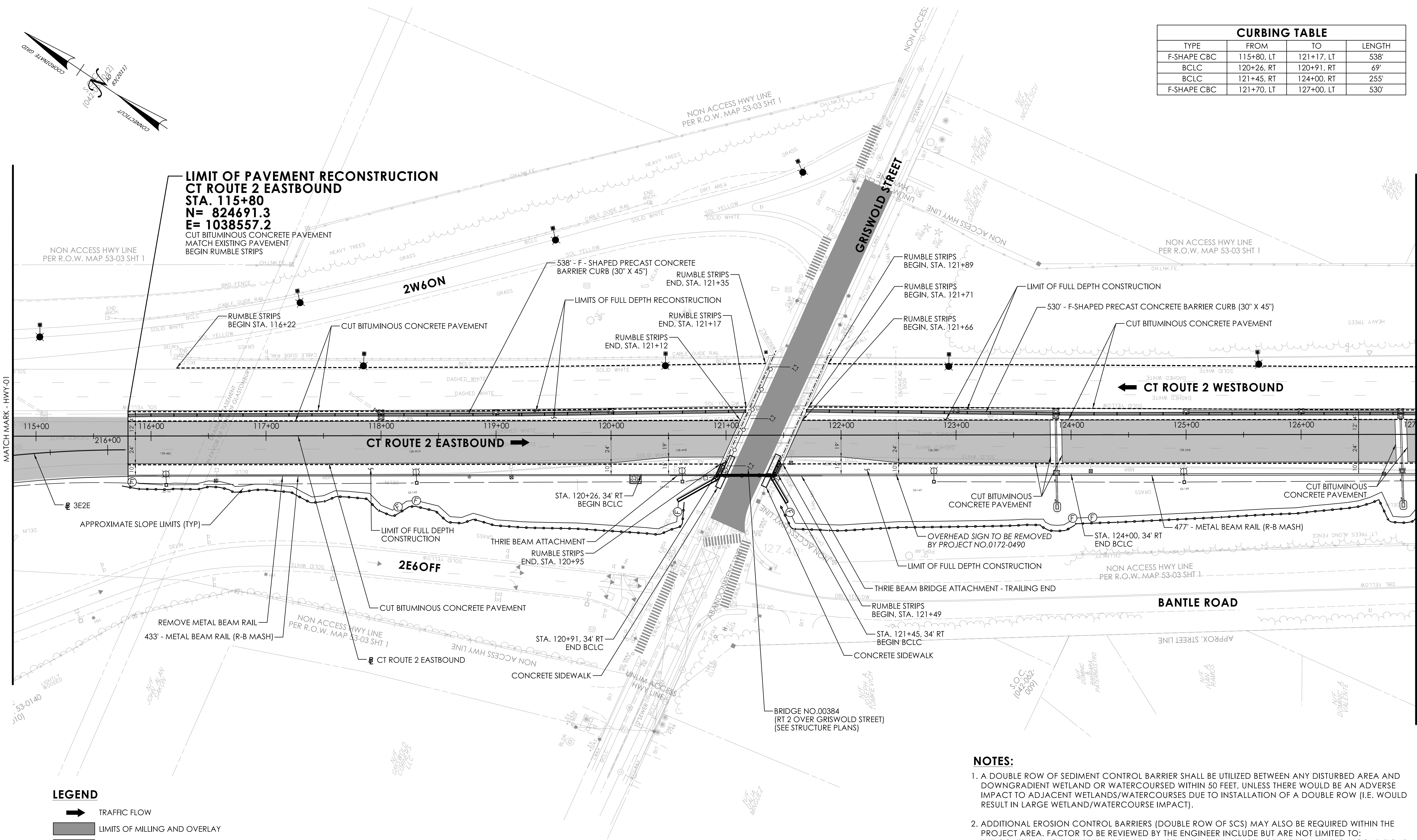


PROJECT NUMBER: 0053-0196
PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8
TOWN(S): GLASTONBURY
DRAWING TITLE: HIGHWAY PLAN

DRAWING NO.
HWY-01
SHEET NO.

CURBING TABLE			
TYPE	FROM	TO	LENGTH
F-SHAPE CBC	115+80, LT	121+17, LT	538'
BCLC	120+26, RT	120+91, RT	69'
BCLC	121+45, RT	124+00, RT	255'
F-SHAPE CBC	121+70, LT	127+00, LT	530'

**LIMIT OF PAVEMENT RECONSTRUCTION
CT ROUTE 2 EASTBOUND
STA. 115+80
N= 824691.3
E= 1038557.2**
CUT BITUMINOUS CONCRETE PAVEMENT
MATCH EXISTING PAVEMENT
BEGIN RUMBLE STRIPS



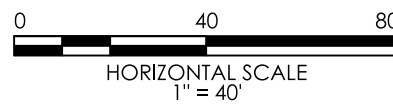
LEGEND

- TRAFFIC FLOW
- LIMITS OF MILLING AND OVERLAY
- LIMITS OF FULL DEPTH CONSTRUCTION

NOTES:

- A DOUBLE ROW OF SEDIMENT CONTROL BARRIER SHALL BE UTILIZED BETWEEN ANY DISTURBED AREA AND DOWNGRADIENT WETLAND OR WATERCOURSE WITHIN 50 FEET, UNLESS THERE WOULD BE AN ADVERSE IMPACT TO ADJACENT WETLANDS/WATERCOURSES DUE TO INSTALLATION OF A DOUBLE ROW (I.E. WOULD RESULT IN LARGE WETLAND/WATERCOURSE IMPACT).
- ADDITIONAL EROSION CONTROL BARRIERS (DOUBLE ROW OF SCS) MAY ALSO BE REQUIRED WITHIN THE PROJECT AREA. FACTOR TO BE REVIEWED BY THE ENGINEER INCLUDE BUT ARE NOT LIMITED TO: THE CONTRIBUTING DISTURBED AREA, DRAINAGE AREA, SLOP, LENGTH OF SLOPE, AND FLOW CONDITIONS TO MAINTAIN SHEET FLOW. IF DETERMINED NECESSARY, THE ENGINEER WILL DIRECT THE CONTRACTOR TO INSTALL AND MAINTAIN ADDITIONAL ROWS OF EROSION CONTROL BARRIER (OR EQUIVALENT).

REV.	DATE	REVISION DESCRIPTION



SIGNATURE/
BLOCK:



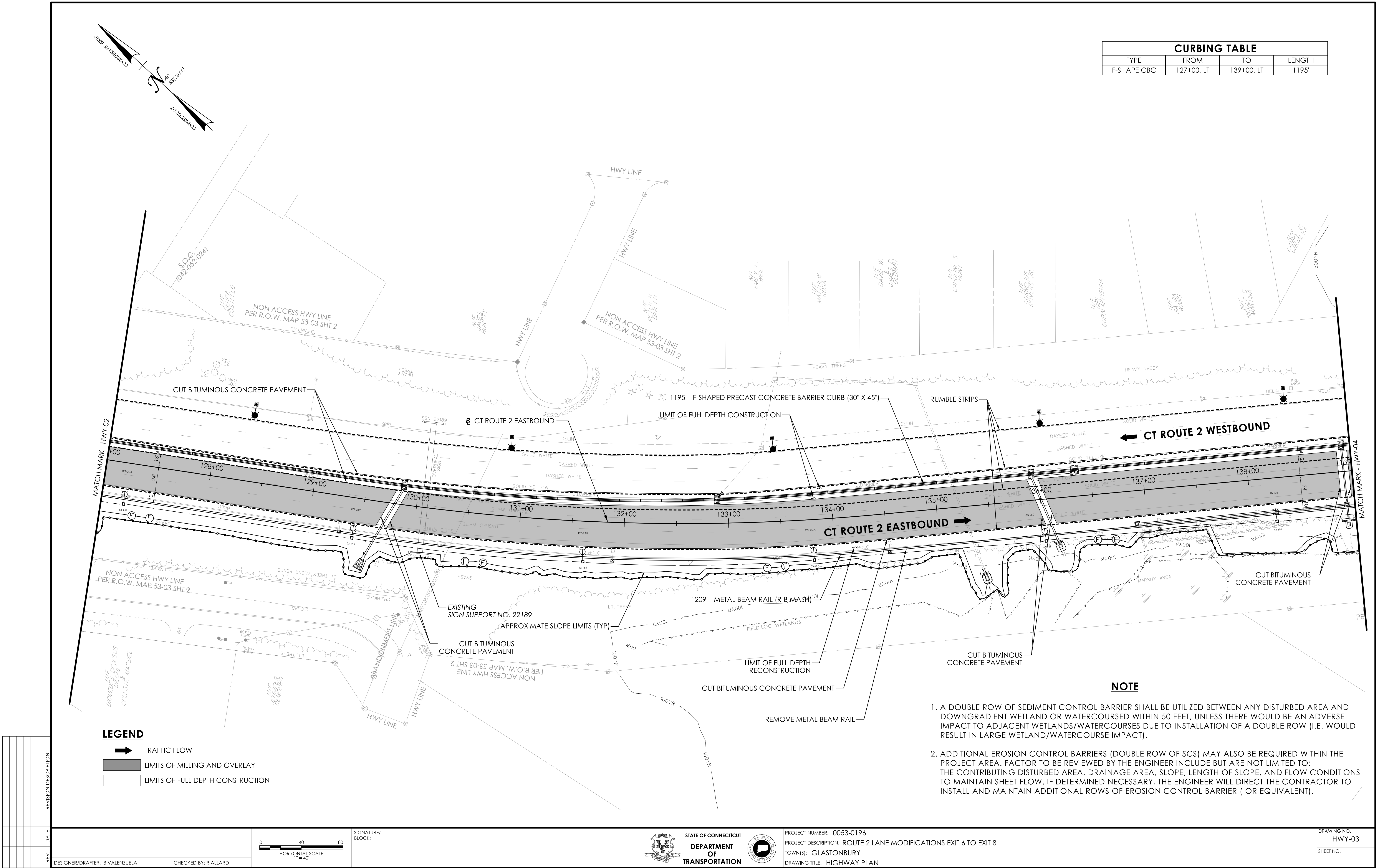
STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION



PROJECT NUMBER: 0053-0196
PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8
TOWN(S): GLASTONBURY
DRAWING TITLE: HIGHWAY PLAN

DRAWING NO.
HWY-02
SHEET NO.

CURBING TABLE			
TYPE	FROM	TO	LENGTH
F-SHAPE CBC	127+00, LT	139+00, LT	1195'



LEGEND

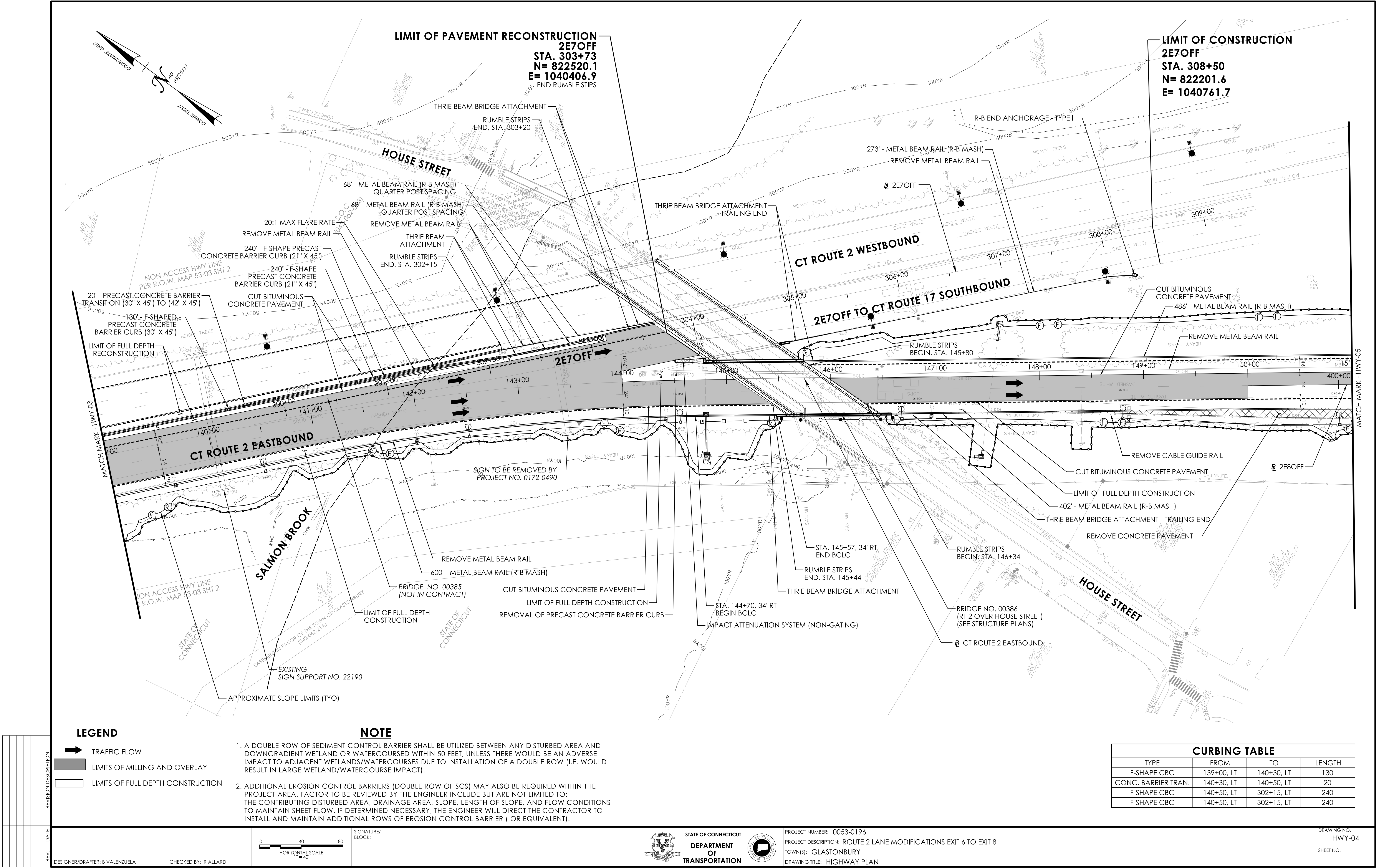
➔ TRAFFIC FLOW

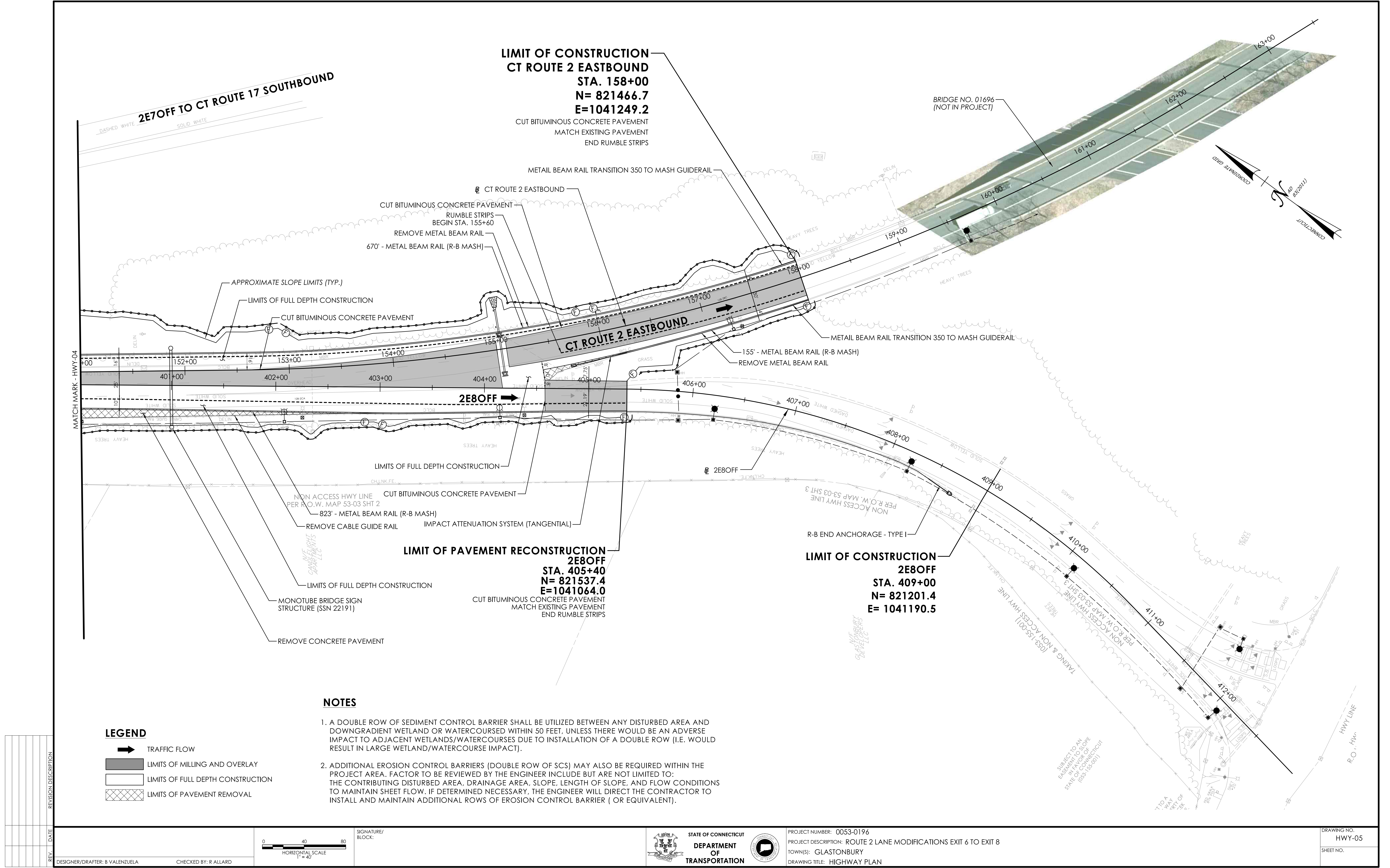
▬ LIMITS OF MILLING AND OVERLAY

▬ LIMITS OF FULL DEPTH CONSTRUCTION

- NOTE**
1. A DOUBLE ROW OF SEDIMENT CONTROL BARRIER SHALL BE UTILIZED BETWEEN ANY DISTURBED AREA AND DOWNGRADIENT WETLAND OR WATERCOURSE WITHIN 50 FEET, UNLESS THERE WOULD BE AN ADVERSE IMPACT TO ADJACENT WETLANDS/WATERCOURSES DUE TO INSTALLATION OF A DOUBLE ROW (I.E. WOULD RESULT IN LARGE WETLAND/WATERCOURSE IMPACT).
 2. ADDITIONAL EROSION CONTROL BARRIERS (DOUBLE ROW OF SCS) MAY ALSO BE REQUIRED WITHIN THE PROJECT AREA. FACTOR TO BE REVIEWED BY THE ENGINEER INCLUDE BUT ARE NOT LIMITED TO: THE CONTRIBUTING DISTURBED AREA, DRAINAGE AREA, SLOPE, LENGTH OF SLOPE, AND FLOW CONDITIONS TO MAINTAIN SHEET FLOW. IF DETERMINED NECESSARY, THE ENGINEER WILL DIRECT THE CONTRACTOR TO INSTALL AND MAINTAIN ADDITIONAL ROWS OF EROSION CONTROL BARRIER (OR EQUIVALENT).

REV.	DATE	REVISION DESCRIPTION



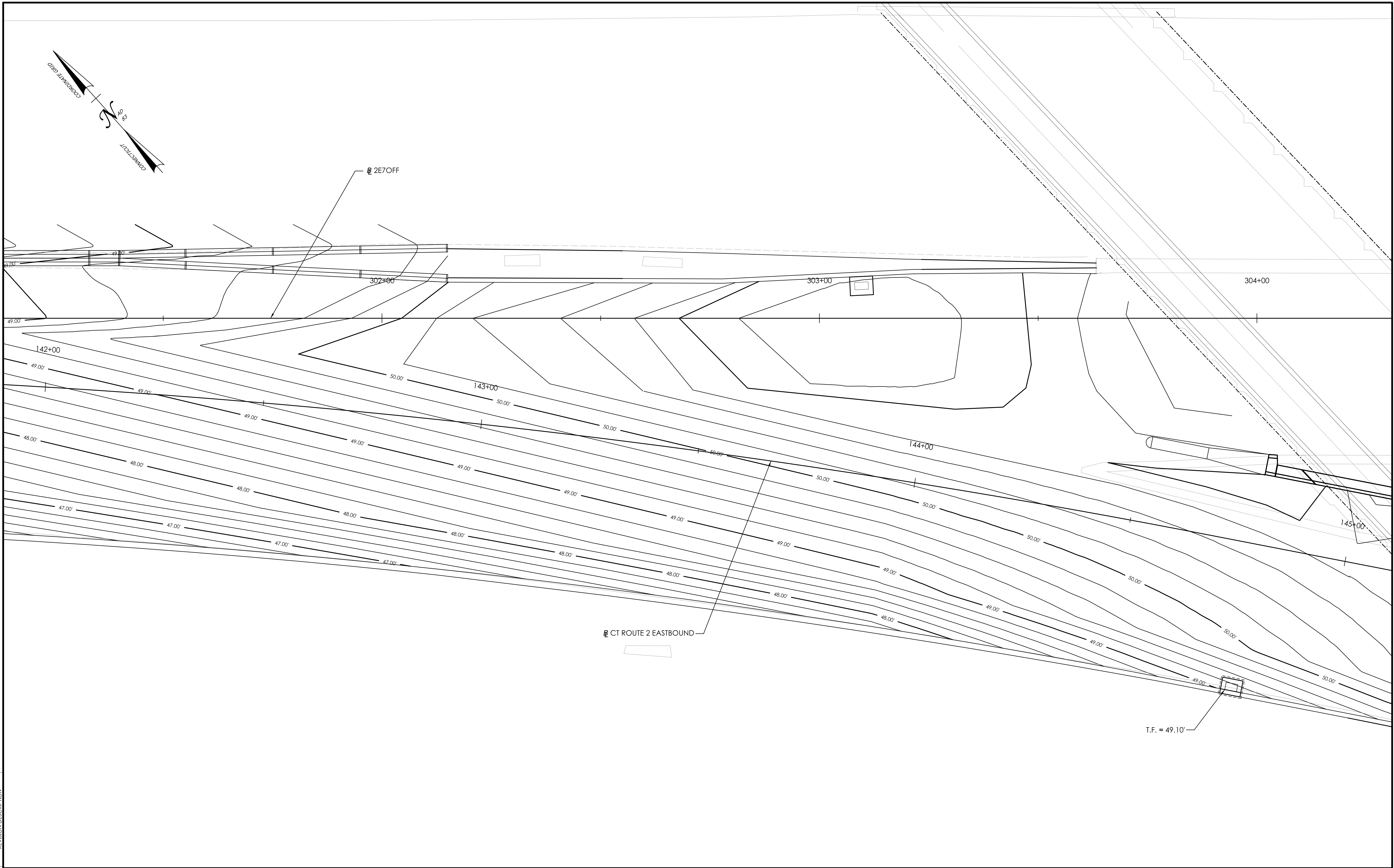


LEGEND

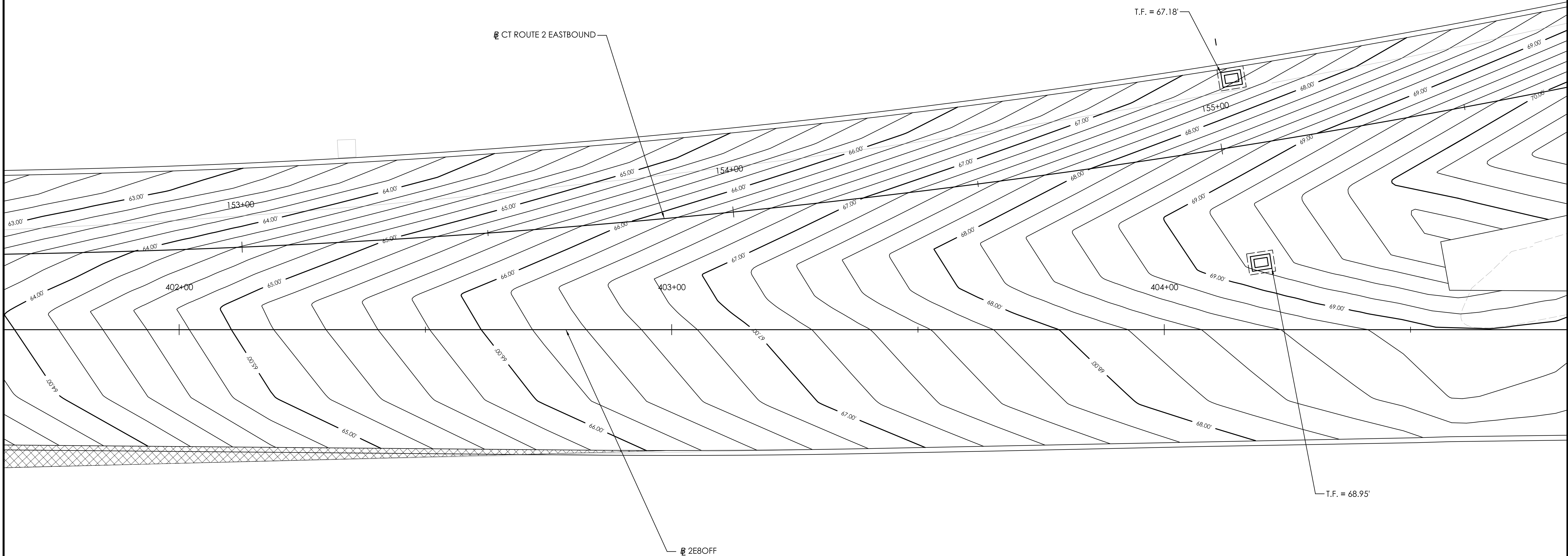
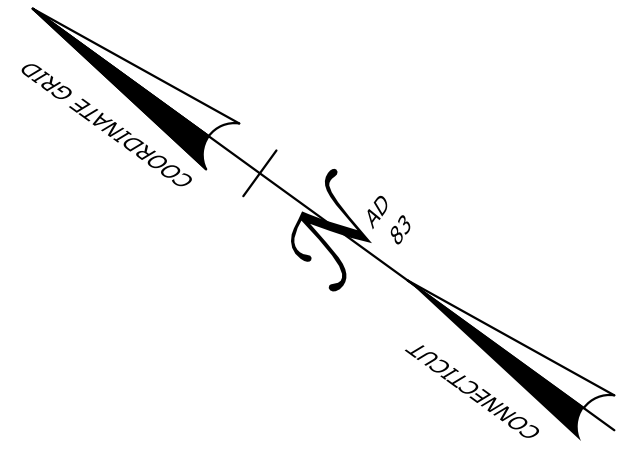
- TRAFFIC FLOW
- LIMITS OF MILLING AND OVERLAY
- LIMITS OF FULL DEPTH CONSTRUCTION
- LIMITS OF PAVEMENT REMOVAL

NOTES

- A DOUBLE ROW OF SEDIMENT CONTROL BARRIER SHALL BE UTILIZED BETWEEN ANY DISTURBED AREA AND DOWNGRADE WETLAND OR WATERCOURSE WITHIN 50 FEET, UNLESS THERE WOULD BE AN ADVERSE IMPACT TO ADJACENT WETLANDS/WATERCOURSES DUE TO INSTALLATION OF A DOUBLE ROW (I.E. WOULD RESULT IN LARGE WETLAND/WATERCOURSE IMPACT).
- ADDITIONAL EROSION CONTROL BARRIERS (DOUBLE ROW OF SCS) MAY ALSO BE REQUIRED WITHIN THE PROJECT AREA. FACTOR TO BE REVIEWED BY THE ENGINEER INCLUDE BUT ARE NOT LIMITED TO: THE CONTRIBUTING DISTURBED AREA, DRAINAGE AREA, SLOPE, LENGTH OF SLOPE, AND FLOW CONDITIONS TO MAINTAIN SHEET FLOW. IF DETERMINED NECESSARY, THE ENGINEER WILL DIRECT THE CONTRACTOR TO INSTALL AND MAINTAIN ADDITIONAL ROWS OF EROSION CONTROL BARRIER (OR EQUIVALENT).



REV.	DATE	REVISION DESCRIPTION



REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: D.WALSH

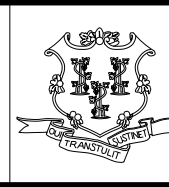
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01020

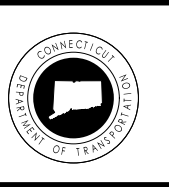
HORIZONTAL SCALE

1" = 10'

SIGNATURE/
BLOCK:



STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION



PROJECT NUMBER: 0053-0196

PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8

TOWN(S): GLASTONBURY

DRAWING TITLE: GRADING PLAN

DRAWING NO.
GRA-02

SHEET NO.

05 - TRAFFIC INDEX OF DRAWINGS	
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DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
INX-05	INDEX OF DRAWINGS	MPT-2A-01	MAINTENANCE AND PROTECTION OF TRAFFIC (HOUSE STREET) - STAGE 2A
TRA-GN	GENERAL NOTES	MPT-2B-01	MAINTENANCE AND PROTECTION OF TRAFFIC (HOUSE STREET) - STAGE 2B
SPM-01 TO SPM-05	SIGNING AND PAVEMENT MARKING PLANS	MPT-2C-01	MAINTENANCE AND PROTECTION OF TRAFFIC (HOUSE STREET) - STAGE 2C
MPT-01	MAINTENANCE AND PROTECTION OF TRAFFIC - GENERAL NOTES	TCS-01	REFERENCE SIGNAL PLAN FOR GRISWOLD ST & RTE 2 RAMP / BANTLE ST
MPT-02	MAINTENANCE AND PROTECTION OF TRAFFIC - SEQUENCE OF CONSTRUCTION	GS-01	SIGN FACE SHEET ALUMINUM R SERIES TYPICAL SIGN DETAILS
MPT-1-01 - MPT-1-05	MAINTENANCE AND PROTECTION OF TRAFFIC - STAGE 1	GS-02	SIGN FACE SHEET ALUMINUM S & W SERIES TYPICAL SIGN DETAILS
MPT-1A-01	MAINTENANCE AND PROTECTION OF TRAFFIC (GRISWOLD STREET) - STAGE 1A	GS-03	SIGN FACE SHEET ALUMINUM D, RS, E, I, & M SERIES TYPICAL SIGN DETAILS
MPT-1B-01	MAINTENANCE AND PROTECTION OF TRAFFIC (GRISWOLD STREET) - STAGE 1B	REF-01 - REF-02	EXISTING TRAFFIC SIGNAL PLAN (FOR INFORMATIONAL PURPOSES ONLY)
MPT-1C-01	MAINTENANCE AND PROTECTION OF TRAFFIC (GRISWOLD STREET) - STAGE 1C	MBS-01 - MBS-06	MONOTUBE BRIDGE STRUCTURE DETAILS
MPT-1D-01	MAINTENANCE AND PROTECTION OF TRAFFIC (GRISWOLD STREET) - STAGE 1D	TMS-01 - TMS-02	TRAFFIC MONITORING SYSTEM DETAILS
MPT-2-01 - MPT-2-05	MAINTENANCE AND PROTECTION OF TRAFFIC - STAGE 2		

REV.	DATE	REVISION DESCRIPTION	

DESIGNED BY: **BENESCH**

SIGNING NOTES

1.
- ALL SHEET ALUMINUM SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH TR-1208_01 - SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS AND TR-1208_02 - METAL SIGN POSTS AND SIGN MOUNTING DETAILS UNLESS OTHERWISE NOTED ON THE PLANS.
2.
- FINAL SIGN LOCATIONS SHALL BE VERIFIED BY THE ENGINEER.
3.
- ALL EXISTING SIGNS OUTSIDE OF THE PROJECT LIMITS ARE TO REMAIN UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
4.
- SIGNS SHALL BE INSTALLED NO CLOSER THAN 10' FROM UTILITY POLES.
5.
- THE CONTRACTOR SHALL CLEAR AND TRIM SO AS TO PROVIDE ADEQUATE SIGHT LINES TO THE ENTIRE FACE OF ALL SHEET ALUMINUM SIGNS, SEE "DIAGRAM B" ON TR-1208_01, OR AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID FOR UNDER ITEM NO. 0952001A - SELECTIVE CLEARING AND THINNING.
6.
- ALL OBJECT MARKERS WITHIN PROJECT LIMITS ARE TO BE REPLACED. THIS WORK WILL BE PAID FOR UNDER ITEM NO. 1208937A - SIGN FACE - SHEET ALUMINUM (TYPE XI RETROREFLECTIVE).
7.
- THE CONTRACTOR SHALL INSTALL TYPE DE-1, DE-2, AND DE-3 DELINEATORS IN ACCORDANCE WITH TR-1205_01: DELINEATION, DELINEATORS AND OBJECT MARKER DETAILS. DELINEATORS TO BE PAID FOR UNDER ITEM NOS. 1205201, 1205202, AND 1205203.
8.
- ALL SHEET ALUMINUM SIGNS AND POSTS LOCATED WITHIN THE PROJECT LIMITS ARE TO BE REPLACED UNLESS OTHERWISE NOTED. THESE SIGNS SHALL BE PAID FOR UNDER ITEM NO. 1208931A - SIGN FACE SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING) AND ITEM NO. 1208937A - SIGN FACE SHEET ALUMINUM (TYPE XI RETROREFLECTIVE SHEETING). REFER TO THE SPM PLANS FOR ADDITIONAL INFORMATION.
9.
- ALL EXISTING SIGNS LOCATED WITHIN THE SIGNING LIMITS SHALL BE REMOVED UNLESS OTHERWISE SPECIFIED. THIS WORK SHALL BE PAID FOR UNDER THE CONTRACT ITEM NO. 1206023A - REMOVAL AND RELOCATION OF EXISTING SIGNING.
10.
- "CALL BEFORE YOU DIG" SHALL BE CONTACTED PRIOR TO THE INSTALLATION OF ANY SIGNS.
11.
- ALL SIGNS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT THEIR EXPENSE.
12.
- WHEN A SIGN IS TO BE REPLACED, THE EXISTING SIGN SHOULD NOT BE REMOVED UNTIL THE REPLACEMENT SIGN IS INSTALLED.
13.
- SOME OVERHEAD SIGN STRUCTURES AND ALL OVERHEAD EXTRUDED ALUMINUM SIGNS ARE BEING REPLACED UNDER STATE PROJECT NO. 0172-0490. SEE PLANS FOR ANY REQUIRED MODIFICATIONS THESE SIGNS PRIOR TO THE START OF THIS PROJECT, AND DURING EACH CONSTRUCTION STAGE

SIGN LEGEND

- SINGLE POST MOUNTED SIGN
- DOUBLE POST MOUNTED SIGN
- TRIPLE POST MOUNTED SIGN

PAVEMENT MARKING NOTES

1.
- FINAL PAVEMENT MARKINGS SHALL BE TYPE 1 EPOXY RESIN. ALL PERMANENT PAVEMENT MARKINGS SHALL BE INSTALLED WITH 80 MIL PAVEMENT MARKING GROOVE (ITEM NO. 0406314, 0406315, 0406316, AND 0406317), DEPENDING ON THE MARKING WIDTH.
2.
- ALL PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEETS TR-1210_05 AND TR-1210_06 - PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS, UNLESS OTHERWISE NOTED.
3.
- ALL PAVEMENT MARKINGS FOR EXIT RAMPs SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET TR-1210_07 - PAVEMENT MARKINGS FOR EXIT RAMPs, UNLESS OTHERWISE NOTED.
4.
- ALL PAVEMENT MARKINGS FOR NON FREEWAYS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET TR-1210_08 - PAVEMENT MARKINGS FOR NON FREEWAYS, UNLESS OTHERWISE NOTED.
5.
- ALL CONFLICTING PAVEMENT MARKINGS WITHIN THE LIMIT OF CONSTRUCTION ARE TO BE REMOVED. REMOVAL OF PAVEMENT MARKINGS IS PAYABLE UNDER ITEM NO. 1211001 - "REMOVAL OF PAVEMENT MARKINGS".
6.
- PAVEMENT MARKINGS SHALL BE INSTALLED THROUGHOUT THE PROJECT LIMITS AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
7.
- PAVEMENT MARKINGS THAT ARE TO REMAIN IN THEIR EXISTING LOCATION AND ARE DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE REINSTALLED USING SURVEY CONTROL ESTABLISHED UNDER ITEM NO. 0980020 "CONSTRUCTION SURVEYING".
8.
- RUMBLE STRIPS SHALL BE INSTALLED ALONG THE YELLOW AND WHITE EDGE LINES ON CT ROUTE 2. RUMBLE STRIPS SHALL BE PAID FOR UNDER ITEM NO. 0407001 - RUMBLE STRIPS - AUTOMATED.
9.
- STATE TO MAINTAIN ALL PAVEMENT MARKINGS AND SIGNING ON CT ROUTE 2 AND ON/OFF-RAMPs WITHIN PROJECT LIMITS.

PAVEMENT MARKING ABBREVIATIONS

- WBLL

WHITE BROKEN LANE LINE (10' LINE 30' SPACE)
- WCL

WHITE CHANNELIZING LINE
- WDLL

WHITE DOTTED LANE LINE (3' LINE, 9' SPACE)
- WEL

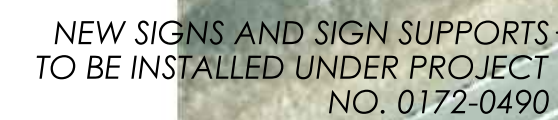
WHITE EDGE LINE
- YEL

YELLOW EDGE LINE
- WDEL

WHITE DOTTED EXTENSION LINE
- WCM

WHITE CHEVRON MARKINGS

REV.	DATE	REVISION DESCRIPTION

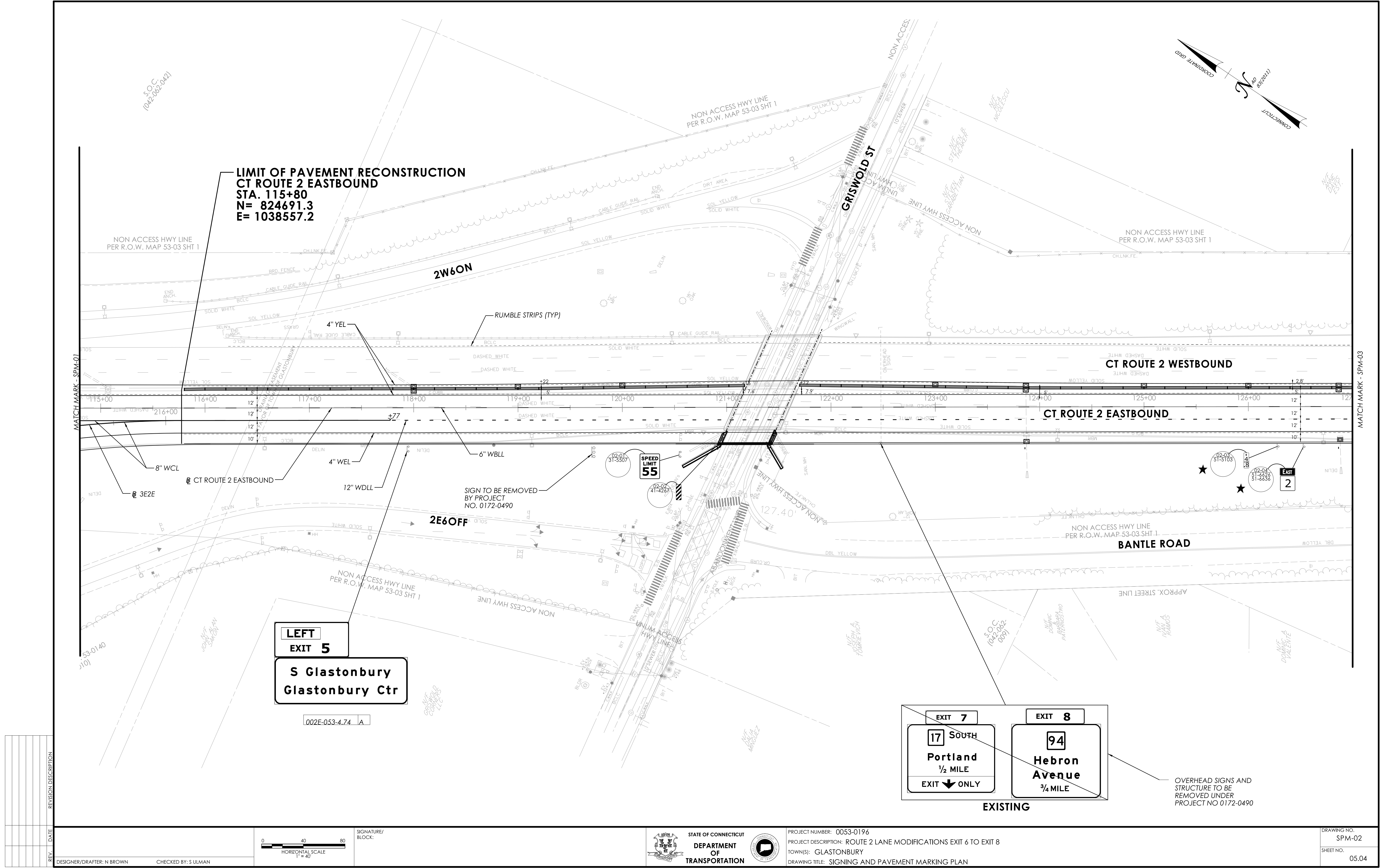


The diagram shows three highway exit signs. The first sign on the left is a rectangular sign with a black border. It has a small black box with the word "LEFT" in white, a black box with the word "EXIT" in white, and a large black box with the number "5" in white. Below this is a larger rectangular sign with a black border. It has a small black box with the number "17" in white, the word "SOUTH" in black, the word "Portland" in large black letters, and "1 1/4 MILE" in black. The second sign in the middle is a rectangular sign with a black border. It has a small black box with the word "EXIT" in white and a large black box with the number "4B" in white. Below this is a larger rectangular sign with a black border. It has the word "Griswold" in large black letters, the word "Street" in large black letters, and "1/2 MILE" in black. The third sign on the right is a rectangular sign with a black border. It has a small black box with the word "EXIT" in white and a large black box with the text "4A" in white. Below this is a larger rectangular sign with a black border. It has a small black box with the number "3" in white, the word "SOUTH" in black, the word "Glastonbury" in large black letters, the word "Wethersfield" in large black letters, and "EXIT ONLY" in black. A diagonal line with an arrowhead at the bottom right passes through the signs, starting from the top left of the first sign and ending at the bottom right of the third sign.

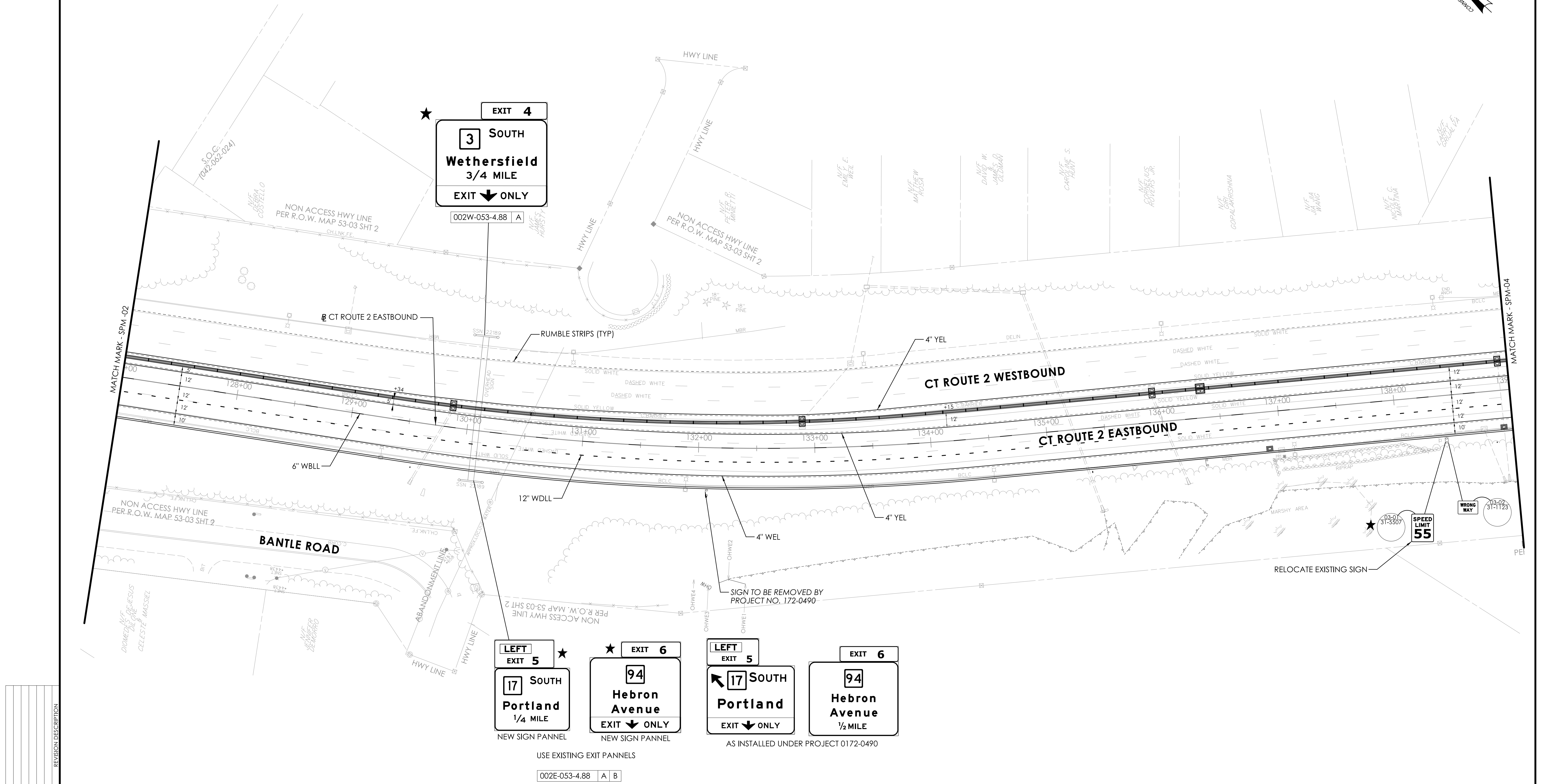
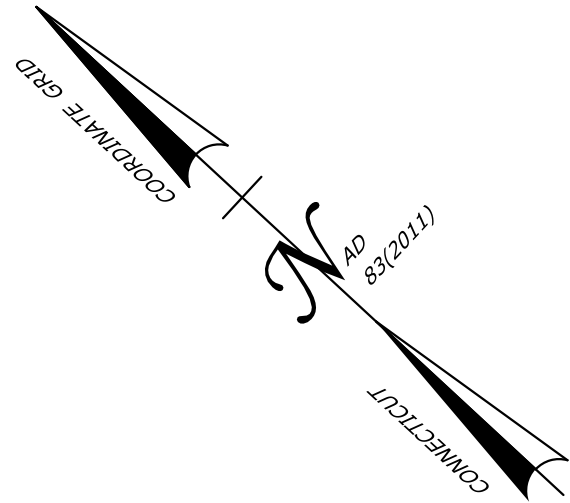
EXISTING

LIMIT OF SIGNING AND PAVEMENT MARKINGS
3E2E
STA. 210+40
N= 825039.2
E= 1038126.8
MATCH EXISTING PAVEMENT MARKINGS

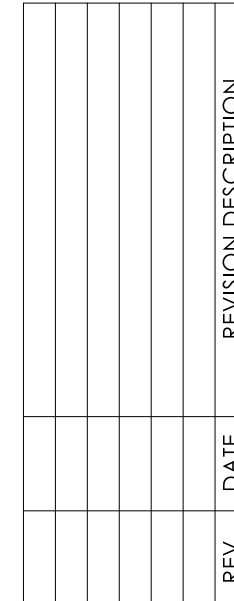
DRAWING NO.	SPM-01
SHEET NO.	05.03



REVISION DESCRIPTION			
REV	DATE	DESCRIPTION	BY



REV.	DATE	REVISION DESCRIPTION



MAINTENANCE AND PROTECTION OF TRAFFIC NOTES

1. SEE SPECIAL PROVISION SECTION 1.08 - PROSECUTION AND PROGRESS AND ITEM NO. 0971001A - MAINTENANCE AND PROTECTION OF TRAFFIC FOR CONSTRUCTION STAGING REQUIREMENTS.
2. THE CONTRACTOR SHALL INSTALL ALL TEMPORARY PAVEMENT MARKINGS AS SHOWN ON THE PLANS. ALL TEMPORARY PAVEMENT MARKINGS THROUGH ALL STAGES SHALL BE HOT APPLIED PAVEMENT MARKINGS AND ARE TO BE PAID FOR UNDER ITEM NOS. 1209114, 1209124, 1209129 AND 1209131.
3. ALL CONFLICTING PAVEMENT MARKINGS WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND WILL BE PAID FOR UNDER ITEM NO. 1211001 - REMOVAL OF PAVEMENT MARKINGS.
4. ALL TEMPORARY SIGNS SHALL BE PAID FOR UNDER ITEM NO. 1220027A - CONSTRUCTION SIGNS.
5. TEMPORARY TRAFFIC BARRIER REQUIRES DE-7 AND DE-7A DELINEATORS, SEE CTDOT TRAFFIC STANDARD SHEET TR_1205_01.
6. ALL CONSTRUCTION SIGNS, INCLUDING ADVANCE WARNING SIGNS, SHALL BE MOUNTED ON BREAKAWAY POSTS PER TRAFFIC STANDARD SHEETS, TR-1208_01, TR-1208_02, AND TR-1220_02.
7. ALL TEMPORARY PAVEMENT TRANSITIONS SHALL MEET THE REQUIREMENTS OF THE CTDOT FORM 818 SECTION 4.06 "TRANSITIONS FOR ROADWAY SURFACE".
8. THE CONTRACTOR SHALL INSTALL THE BIPARTISAN INFRASTRUCTURE LAW PROJECT SIGN TP1550 ON EACH APPROACH ON CT ROUTE 2 FOR ALL STAGES. CONTRACTOR TO INSTALL SIGNS AT LOCATIONS AS DETERMINED BY THE ENGINEER.
9. EACH STAGE SHALL BE FUNCTIONALLY COMPLETE, AS DETERMINED BY THE ENGINEER, BEFORE THE SUBSEQUENT STAGE MAY BE IMPLEMENTED, UNLESS OTHERWISE ALLOWED BY THE ENGINEER.
10. THE CONTRACTOR SHALL SUBMIT ANY PROPOSED VARIATIONS TO THE MAINTENANCE AND PROTECTION OF TRAFFIC PLANS TO THE ENGINEER FOR APPROVAL.
11. EXISTING SIGNS IN CONFLICT WITH TEMPORARY SIGNS SHALL BE COVERED, REMOVED OR REVISED TO MEET FIELD CONDITIONS.
12. THE LOCATIONS OF TRAFFIC DRUMS AND CONSTRUCTION BARRICADES TYPE III SHOWN ON THE PLANS ARE APPROXIMATE AND SHALL BE ADJUSTED BY THE CONTRACTOR TO MEET FIELD CONDITIONS.
13. LOCATIONS FOR TEMPORARY SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER SO AS NOT TO CONFLICT WITH EXISTING PERMANENT SIGNS.
14. THE CONTRACTOR SHALL NOTIFY THE STATE, THE TOWN OF GLASTONBURY AND ALL EMERGENCY SERVICES AT LEAST TWO WEEKS PRIOR TO THE BEGINNING OF CONSTRUCTION.
15. RELOCATE TEMPORARY TRAFFIC BARRIER AS REQUIRED TO FACILITATE EACH CONSTRUCTION STAGE.
16. INSTALL SERIES "16" SIGNS AS DIRECTED BY THE ENGINEER.
17. EXISTING SIGNS ARE TO BE RELOCATED AS NEEDED AND AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION SO THAT THEY ARE IN AN APPROPRIATE LOCATION AND VISIBLE TO MOTORISTS. SOME SIGNS MAY HAVE TO BE TEMPORARILY RELOCATED WITHIN THE WORK AREA. THE RELOCATION OF SIGNS WILL BE PAID FOR UNDER ITEM NO. 0971001A - MAINTENANCE AND PROTECTION OF TRAFFIC.
18. ANY EXISTING SIGNING DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT NO COST TO THE STATE.
19. BARRICADE WARNING LIGHTS - HIGH INTENSITY SHALL BE MOUNTED ON ALL DIAMOND SHAPED POST-MOUNTED CONSTRUCTION SIGNS AND ARE PAYABLE UNDER ITEM NO. 0976002.
20. THE CONTRACTOR SHALL PROVIDE ACCESS TO ALL PROPERTIES AND DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.
21. CONTRACTOR TO PROVIDE ONE (1) RADAR SPEED DISPLAY SIGNS FOR EACH APPROACH ON GRISWOLD STREET FOR EACH CONSTRUCTION STAGE. THE RADAR SPEED DISPLAY SIGNS SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER. THESE SIGNS ARE PAYABLE UNDER ITEM NO. 1131015A - RADAR SPEED DISPLAY - TRAILER MOUNT, TOW BEHIND.
22. THE FINAL 2" LIFT OF PAVEMENT SHALL BE INSTALLED IN A SINGLE OPERATION THROUGHOUT THE PROJECT LIMITS DURING THE FINAL STAGE OF EACH SITE.

EMERGENCY PRE-EMPTION NOTES

TEMPORARY SAND BARREL ARRAY NOTES

1. THE CONTRACTOR SHALL SELECT AN APPROVED SAND BARREL SYSTEM FROM THE CTDOT QUALIFIED PRODUCTS LIST (QPL). THE CONTRACTOR SHALL INSTALL THE BARREL ARRAY FOR DESIGN SPEED OF 65 MPH, PER MANUFACTURER'S REQUIREMENTS.
2. SAND BARREL ARRAYS SHALL BE ALIGNED TO FAVOR THE PREDOMINANT FLOW OF TRAFFIC.
3. SAND BARRELS SHALL BE PAID FOR INDIVIDUALLY (EACH) BASED ON THEIR RATED WEIGHTS AS FOLLOWS:
400 LB. - ITEM NO. 1802210.04 TEMPORARY SAND BARREL (400 LB.)
700 LB. - ITEM NO. 1802210.07 TEMPORARY SAND BARREL (700 LB.)
1400 LB. - ITEM NO. 1802210.14 TEMPORARY SAND BARREL (1400 LB.)
2100 LB. - ITEM NO. 1802210.21 TEMPORARY SAND BARREL (2100 LB.)
4. SAND BARREL RELOCATIONS SHALL BE PAID FOR INDIVIDUALLY (EACH) BASED ON THEIR RATED WEIGHTS AS FOLLOWS:
400 LB. - ITEM NO. 1802211.04 RELOCATION OF TEMPORARY SAND BARREL (400 LB.)
700 LB. - ITEM NO. 1802211.07 RELOCATION OF TEMPORARY SAND BARREL (700 LB.)
1400 LB. - ITEM NO. 1802211.14 RELOCATION OF TEMPORARY SAND BARREL (1400 LB.)
2100 LB. - ITEM NO. 1802211.21 RELOCATION OF TEMPORARY SAND BARREL (2100 LB.)

TEMPORARY SIGNALIZATION NOTES

1. INSTALL GUY WIRE AT EACH TEMPORARY WOOD SPAN POLE LOCATION. THE CONTRACTOR IS RESPONSIBLE FOR THE GUYING OF ALL TEMPORARY WOOD POLES. ALL TEMPORARY TRAFFIC SIGNAL SUPPORTS, INCLUDING WOOD SPAN POLES, SPAN WIRES, SPAN WIRE ATTACHMENTS, AND GUY WIRES, SHALL BE PAID FOR UNDER ITEM NO. 1118101A - TEMPORARY SIGNALIZATION.
2. THE CONTRACTOR SHALL CONTACT EVERSOURCE TO COORDINATE THE INSTALLATION OF TEMPORARY ELECTRICAL SERVICE. SEE NOTICE TO CONTRACTOR, SECTION 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES, FOR CONTACT INFORMATION.
3. RELOCATE TRAFFIC SIGNAL HEADS TO FACILITATE EACH CONSTRUCTION STAGE.
4. POWER FOR TEMPORARY LUMINAIRES INSTALLED ON UTILITY POLES SHALL BE ELECTRICALLY FED FROM A 15 AMP, 120V SINGLE POLE CIRCUIT BREAKER LOCATED IN THE TEMPORARY SIGNAL CABINET. SEE TEMPORARY SIGNALIZATION FOR ADDITIONAL INFORMATION. POWER WILL BE PAID FOR UNDER ITEM NO. 1118101A - TEMPORARY SIGNALIZATION.
5. TRAFFIC SIGNAL HEADS SHALL BE 16 FEET TO 17 FEET ABOVE THE ROADWAY AND SHALL BE SPACED BETWEEN 8 FEET AND 20 FEET APART.
6. COORDINATE THE INSTALLATION OF THE TEMPORARY WOOD SPAN POLES AND GUYING REQUIREMENTS WITH THE EXISTING AND PROPOSED OVERHEAD UTILITY LINES AND POLES TO FACILITATE MAINTAINING THE SPAN WIRE DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE UTILITY COMPANIES TO ENSURE ADEQUATE CLEARANCES ARE PROVIDED.
7. DISTANCES FROM STOP BAR TO SIGNAL HEADS SHALL BE 40 FEET MINIMUM.
8. EXACT LOCATIONS OF TRAFFIC CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD AS DIRECTED BY THE ENGINEER.
9. THE CONTRACTOR SHALL ADJUST THE TIMING PLAN TO MEET FIELD CONDITIONS AND COORDINATE AS DIRECTED BY THE ENGINEER.
10. ALL TEMPORARY TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED UPON COMPLETION OF THE WORK.
11. CONTACT THE DIVISION OF TRAFFIC ENGINEERING WHEN THE TEMPORARY SIGNAL IS SCHEDULED TO BE TURNED ON.
12. THE CONTRACTOR SHALL INSTALL TEMPORARY ILLUMINATION AS INDICATED ON THE PLANS AND SHALL ENSURE THE PROPER ORIENTATION OF ALL TEMPORARY LUMINAIRES WITHIN THE PROJECT LIMITS THROUGHOUT THE DURATION OF THE PROJECT. ALL TEMPORARY LUMINAIRES, CONDUCTORS, AND RELATED HARDWARE SHALL BE PAID FOR UNDER ITEM NO. 1020030A - TEMPORARY ILLUMINATION.
13. THE CONTRACTOR SHALL ENSURE THAT THE TEMPORARY SIGNAL HEADS ARE VISIBLE FROM THE TEMPORARY DETECTION ZONES AT ALL TIMES. TEMPORARY SIGNALS SHALL BE RELOCATED AS NECESSARY TO ENSURE ADEQUATE VISIBILITY AT ALL TIMES, IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
14. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SIGNALIZATION AS REQUIRED WITHIN THE PROJECT LIMITS DURING EACH STAGE AS DESCRIBED IN THE SPECIAL PROVISIONS. THE WORK SHALL INCLUDE, BUT NOT BE LIMITED TO: FURNISHING, INSTALLING, MAINTAINING, RELOCATION AND REMOVING TEMPORARY SIGNAL EQUIPMENT, SUPPORTS, AND ALL NECESSARY HARDWARE NEEDED THROUGHOUT THE DURATION OF CONSTRUCTION.
15. CONTRACTOR TO PROVIDE TEMPORARY DETECTION AT THE LOCATIONS SHOWN ON THE PLAN. TEMPORARY DETECTION WILL BE PAID FOR UNDER ITEM NO. 1118101A - TEMPORARY SIGNALIZATION AND ITEM NO. 1111201A - TEMPORARY DETECTION SITE 1 FOR DETECTION AT TEMPORARY SIGNALIZATION AT SITE 1.
16. THE TEMPORARY DETECTION MUST BE MAINTAINED AT ALL TIMES. TEMPORARY SIGNAL SHALL NOT RUN ON FIXED TIMES.

SUGGESTED SEQUENCE OF CONSTRUCTION

STAGE 1

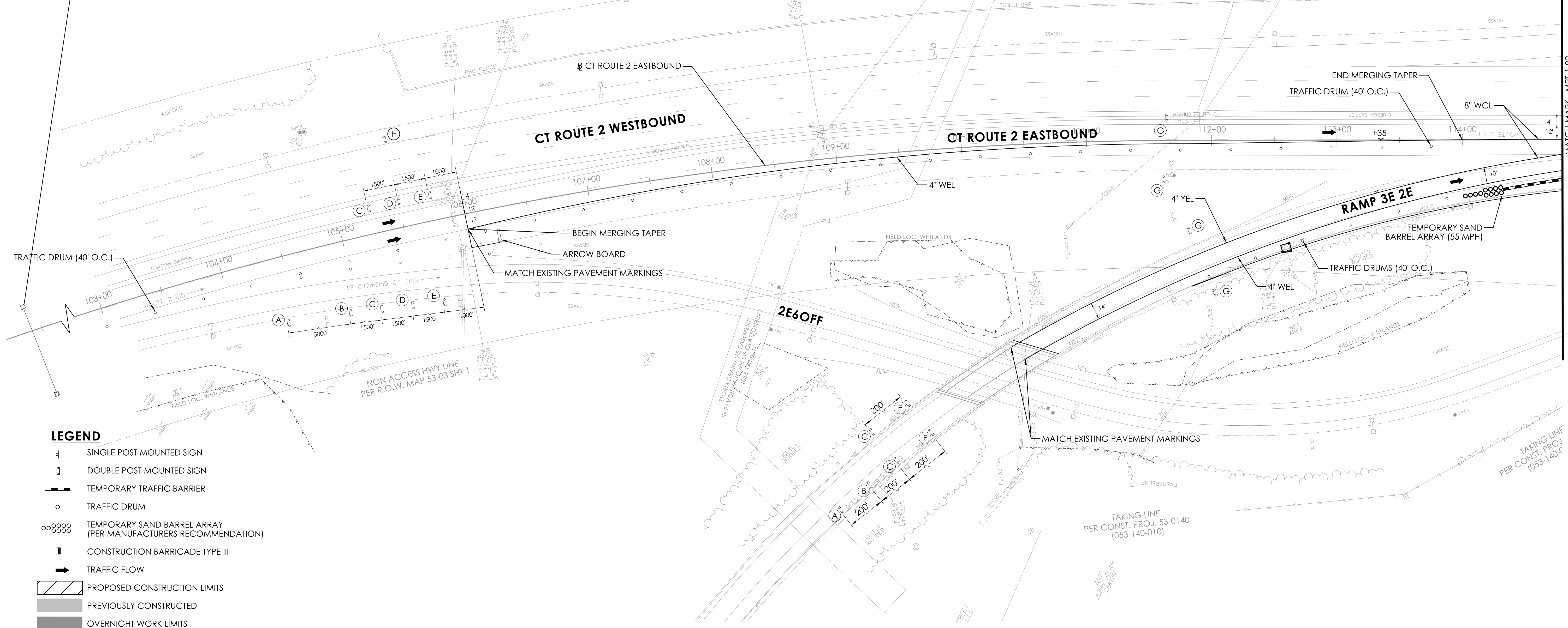
- PERFORM TREE CLEARING BETWEEN STATIONS 135+00 TO 145+50 PRIOR TO APRIL 15TH
- INSTALL SCS
- PERFORM SIDESLOPE GRADING BETWEEN 115+80 TO 145+50 UP TO FORMATION OF SUBGRADE
- INSTALL PROPOSED DRAINAGE OUTLETS AND SLOPE PIPES
- RELOCATE EXISTING UNDERGROUND UTILITIES ON GRISWOLD STREET AND RELOCATE HOUSE STREET UTILITY UNDERGROUND.
- **BRIDGE NO. 00384: STAGE 1A**
 - INSTALL GRISWOLD SIGNS AND TEMP TRAFFIC CONTROL, SHIFT TRAFFIC
 - INSTALL TERS: WINGWALL 1B
 - EXCAVATE, CONSTRUCT FOOTING: WINGWALL 1B/ABUTMENT 1
 - DEMO EXISTING WINGWALL 1B: TOP TO BOTTOM OF DECK
 - CONSTRUCT STEM/BACKWALL/CHEEKWALL/WINGWALL: ABUTMENT 1
 - SUBSTRUCTURE PATCHING, REMOVE TERS, RECONSTRUCT SIDEWALK
- **BRIDGE NO. 00384: STAGE 1B**
 - RELOCATE GRISWOLD SIGNS AND TEMP TRAFFIC CONTROL, SHIFT TRAFFIC
 - INSTALL TERS: WINGWALL 2B
 - EXCAVATE, CONSTRUCT FOOTING: WINGWALL 2B/ABUTMENT 2
 - DEMO EXISTING WINGWALL 2B: TOP TO BOTTOM OF DECK
 - CONSTRUCT STEM/BACKWALL/CHEEKWALL/WINGWALL: ABUTMENT 2
 - SUBSTRUCTURE PATCHING, REMOVE TERS, RECONSTRUCT SIDEWALK
- INSTALL SIGNAGE AND TEMPORARY TRAFFIC CONTROL, MERGE ROUTE 2 EASTBOUND TO ONE LANE, INSTALL STAGE 1 TRAFFIC PATTERN
- PERFORM SHOULDER WIDENING AND INSTALL DRAINAGE ALONG ROUTE 2 EASTBOUND FROM 115+80 TO 120+50 AND 122+00 TO 148+00.
- **BRIDGE NO. 00384: STAGE 1C**
 - INSTALL DIAPHRAGM CONNECTION PLATES ON EXISTING BEAM 12 DURING SHORT TERM ALTERNATING ONE-WAY ON GRISWOLD STREET.
 - REMOVE EXISTING BRIDGE PARAPET AND PORTION OF EXISTING DECK
 - REMOVE ABUTMENT 1 AND 2 CHEEKWALLS AND BACKWALLS FROM TOP TO BOTTOM OF DECK
 - STRIP EXISTING OVERLAY AND PATCH EXISTING DECK
 - MOBILIZE CRANE, ERECT STEEL SUPERSTRUCTURE DURING OVERNIGHT CLOSURE OF GRISWOLD STREET.
 - INSTALL DEBRIS SHIELD, SIP FORMS, AND SHEAR STUDS
- **BRIDGE NO. 00384: STAGE 1D**
 - CONSTRUCT CONCRETE DECK AND PARAPET
 - INSTALL MEMBRANE AND WEARING SURFACE AND CONCRETE SEALER
 - PERFORM REMAINING SHOULDER WIDENING IN VICINITY OF STRUCTURE.
 - SHIFT TEMPORARY BARRIER SLIGHTLY WEST AND REOPEN BOTH THROUGH-LANES OF ROUTE 2 EASTBOUND
 - INSTALL ROADSIDE SAFETY FROM NORTHERN EXTENTS TO HOUSE STREET.
 - PERFORM FULL DEPTH RECONSTRUCTION OF 2E8OFF GORE AND INSTALL ROADSIDE SAFETY AND DRAINAGE
- **BRIDGE NO. 00386: STAGE 1**
 - RECONSTRUCT SOUTH PARAPET AND END BLOCKS
 - STRIP EXISTING OVERLAY AND PATCH DECK
 - INSTALL MEMBRANE AND WEARING SURFACE AND CONCRETE SEALER

STAGE 2

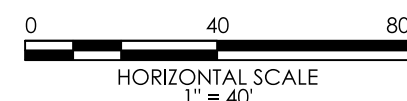
- INSTALL SIGNAGE AND TEMPORARY TRAFFIC CONTROL INSTALL STAGE 2 TRAFFIC PATTERN ALONG ROUTE 2 EASTBOUND AND WESTBOUND.
- RECONSTRUCT CONCRETE MEDIAN, DRAINAGE (INCLUDING CROSSINGS), AND SHOULDERS FROM 115+80 TO 143+00
- PERFORM ROUTE 2 EASTBOUND LEFT SIDE WIDENING, INSTALL DRAINAGE, AND ROADSIDE SAFETY ALONG FROM 146+00 TO 158+00.
- INSTALL OVERHEAD SIGN STRUCTURE 22191 AT STATION 153+50
- **BRIDGE NO. 00384: STAGE 2**
- STRIP EXISTING OVERLAY AND PATCH CONCRETE DECK
- INSTALL MEMBRANE AND WEARING SURFACE
- **BRIDGE NO. 00386: STAGE 2**
 - REMOVE EXISTING NORTH PARAPET ON ROUTE 2 EASTBOUND AND CONSTRUCT PROPOSED PARAPET
 - EXCAVATE AND MODIFY EXISTING ABUTMENTS
 - CONSTRUCT APPROACH SLABS, BARRIER, END BLOCK, AND CLOSURE WALL ON ROUTE 2 EASTBOUND
 - STRIP OVERLAY, PATCH DECK
 - INSTALL MEMBRANE, WEARING SURFACE, AND CONCRETE SEALER
- INSTALL TRAFFIC MONITORING CAMERA IN VICINITY OF BRIDGE NO. 00386.

REV.	DATE	REVISION DESCRIPTION

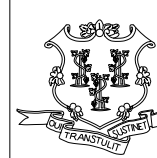
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CONSTRUCTION AHEAD ROAD-USE RESTRICTED STATE LIABILITY LIMITED GENERAL DUTY PERMITS 13-0-113 13-0-113-01 CONSTRUCTION OF TRANSPORTATION	ROAD WORK AHEAD LANES DOUBLED	ROAD WORK AHEAD	RIGHT LANE CLOSED AHEAD				END ROAD WORK
80-1605 84" X 60"	31-1907 60" X 54"	80-9604 48" X 48"	80-9848 48" X 48"	80-9917 48" X 48"	80-9452 48" X 48"	41-4434 48" X 48"	80-9612 48" X 24"

[illegible]

DESIGNER/DRAFTER: N BROWN CHECKED BY: C VAN ZANTEN
LASTED SAVED BY: rallard FILE NAME: c:\pwwordir\benesch projects\projects\d0140439\HW_CP_0053-0196_MPT-1-01.dgn
PLOTTED DATE: 7/24/2024



SIGNATURE/
BLOCK:



STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION

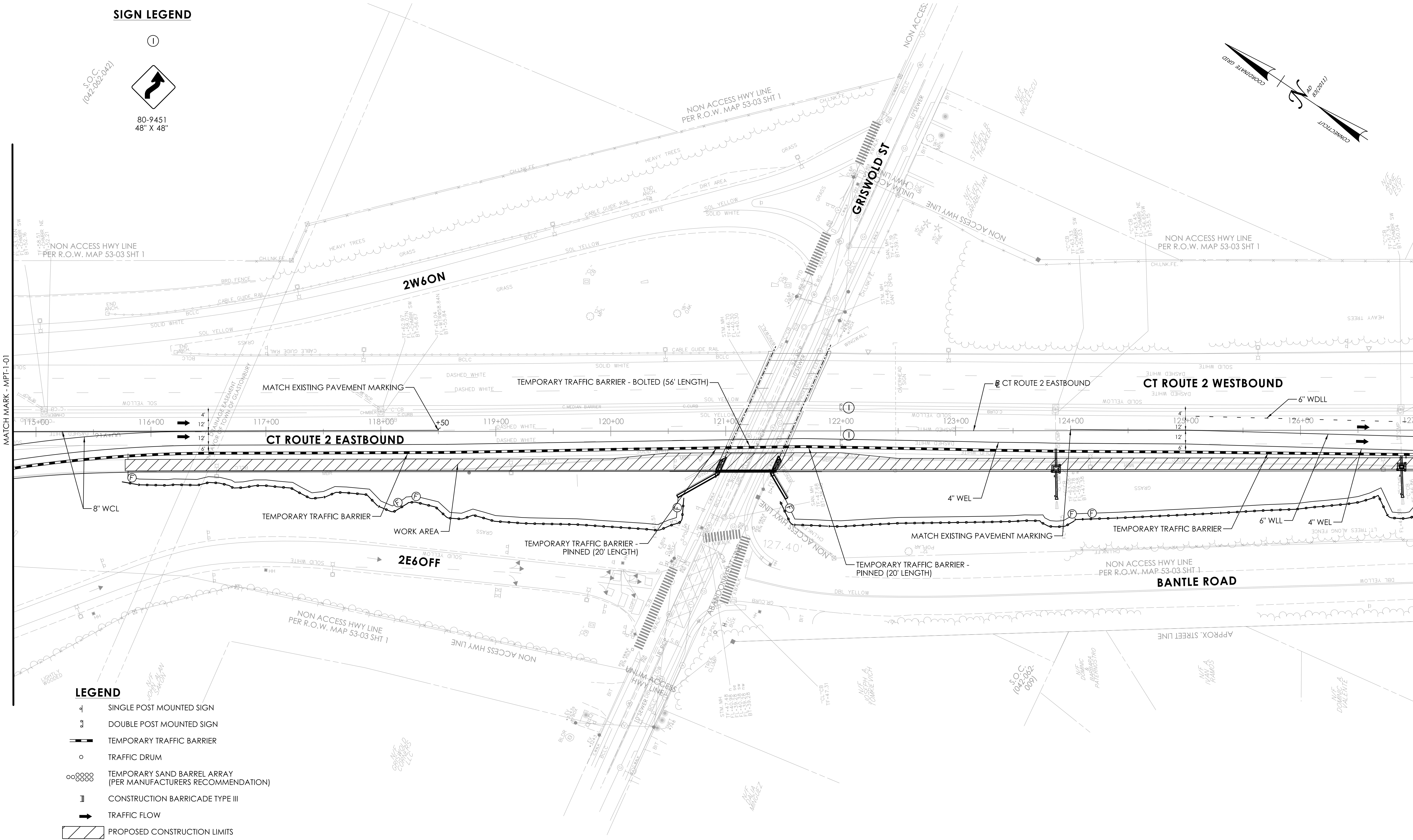
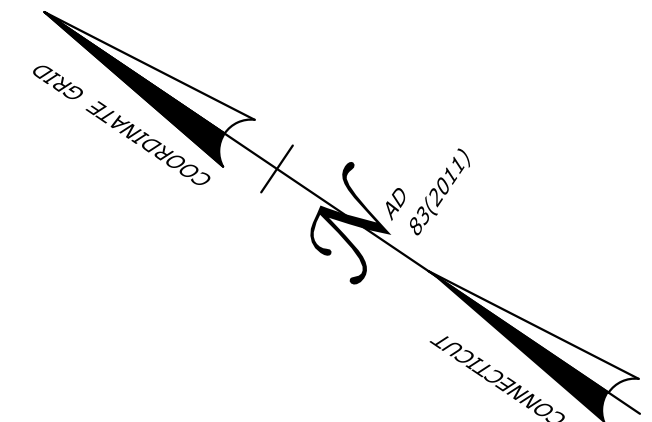
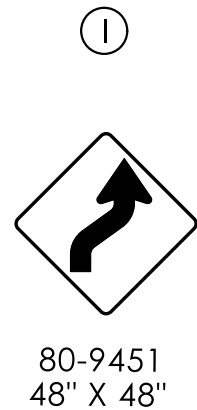


PROJECT NUMBER: 0053-0196
PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8
TOWN(S): GLASTONBURY
DRAWING TITLE: MAINTENANCE AND PROTECTION OF TRAFFIC - STAGE 1

DRAWING NO.
MPT-1-01

SHEET NO.
05.10

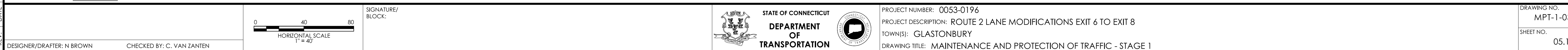
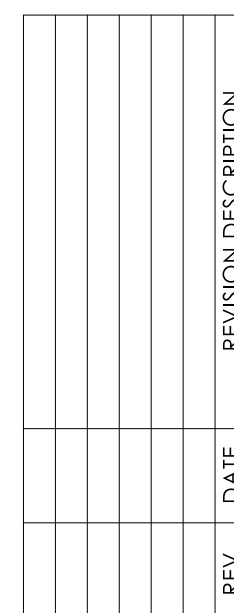
SIGN LEGEND



LEGEND

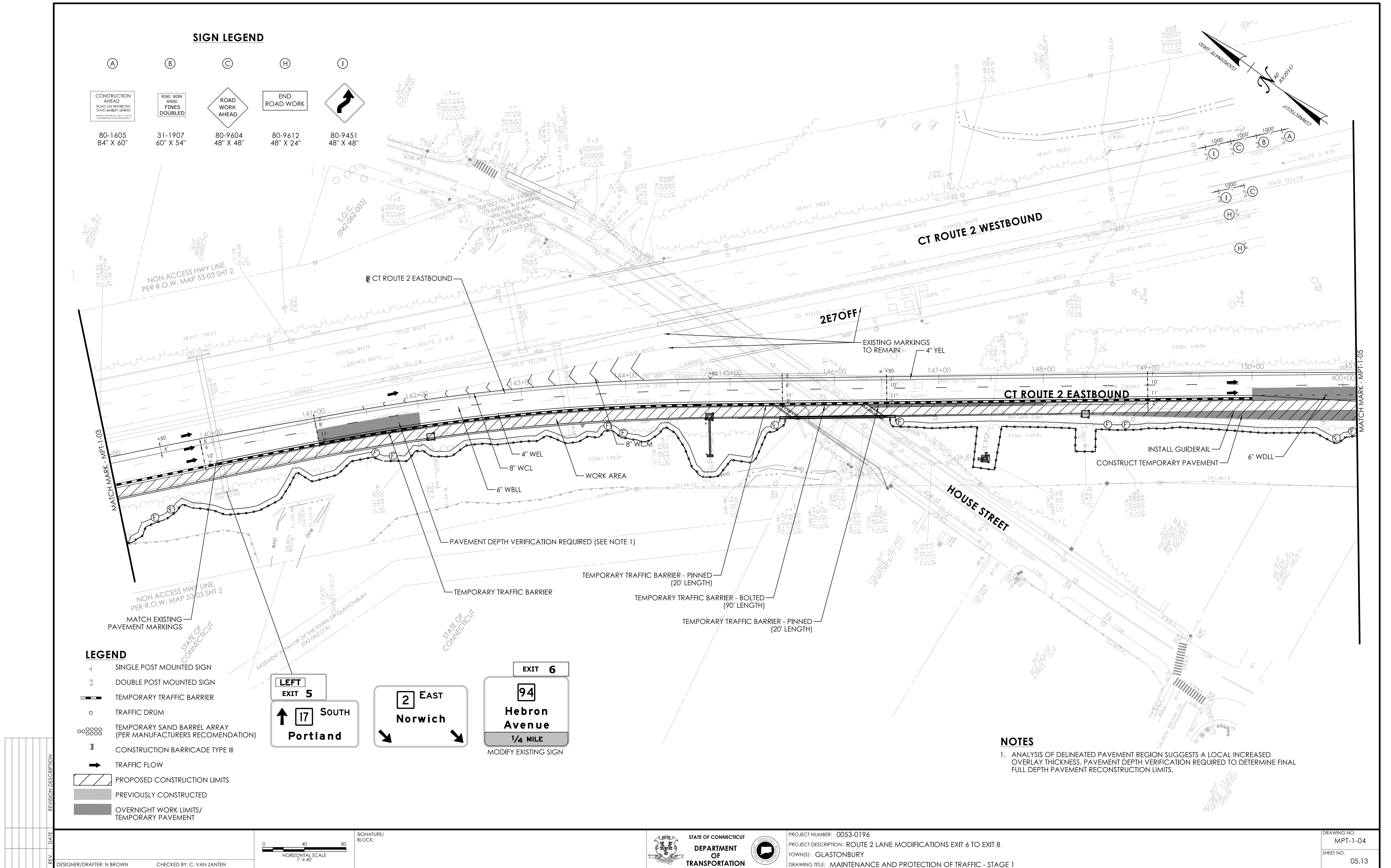
- 1 SINGLE POST MOUNTED SIGN
- 2 DOUBLE POST MOUNTED SIGN
- TEMPORARY TRAFFIC BARRIER
- TRAFFIC DRUM
- TEMPORARY SAND BARREL ARRAY (PER MANUFACTURERS RECOMMENDATION)
- CONSTRUCTION BARRICADE TYPE III
- TRAFFIC FLOW
- PROPOSED CONSTRUCTION LIMITS
- PREVIOUSLY CONSTRUCTED
- OVERNIGHT WORK LIMITS

REV	DATE	REVISION DESCRIPTION



SIGN LEGEND

(A)	(B)	(C)	(H)	(I)
CONSTRUCTION AHEAD ROAD USE RESTRICTED STATE LIABILITY LIMITED 80-1605 84" X 60"	ROAD WORK AHEAD FINES DOUBLED 31-1907 60" X 54"	ROAD WORK AHEAD 80-9604 48" X 48"	END ROAD WORK 80-9612 48" X 24"	80-9451 48" X 48"



LEGEND

- SINGLE POST MOUNTED SIGN
- DOUBLE POST MOUNTED SIGN
- TEMPORARY TRAFFIC BARRIER
- TRAFFIC DRUM
- TEMPORARY SAND BARREL ARRAY (PER MANUFACTURERS RECOMENDATION)
- CONSTRUCTION BARRICADE TYPE III
- TRAFFIC FLOW
- PROPOSED CONSTRUCTION LIMITS
- PREVIOUSLY CONSTRUCTED
- OVERNIGHT WORK LIMITS/ TEMPORARY PAVEMENT

LEFT
EXIT 5
17 SOUTH
Portland

2 EAST
Norwich

EXIT 6
94
Hebron Avenue
1/4 MILE
MODIFY EXISTING SIGN

NOTES

- ANALYSIS OF DELINEATED PAVEMENT REGION SUGGESTS A LOCAL INCREASED OVERLAY THICKNESS. PAVEMENT DEPTH VERIFICATION REQUIRED TO DETERMINE FINAL FULL DEPTH PAVEMENT RECONSTRUCTION LIMITS.

REV	DATE	REVISION DESCRIPTION

SIGN LEGEND

(H)
END
ROAD WORK
80-9612
48" X 24"

BRIDGE NO. 01696
(NOT IN PROJECT)

CT ROUTE 2 EASTBOUND

MATCH EXISTING PAVEMENT MARKINGS

TEMPORARY TRAFFIC BARRIER

MATCH EXISTING PAVEMENT MARKINGS

2E8OFF

NON ACCESS HWY LINE
PER R.O.W. MAP 53-03 SHT 3

LEGEND

- SINGLE POST MOUNTED SIGN
- DOUBLE POST MOUNTED SIGN
- TEMPORARY TRAFFIC BARRIER
- TRAFFIC DRUM
- TEMPORARY SAND BARREL ARRAY (PER MANUFACTURERS RECOMENDATION)
- CONSTRUCTION BARRICADE TYPE III
- TRAFFIC FLOW
- PROPOSED CONSTRUCTION LIMITS
- PREVIOUSLY CONSTRUCTED
- OVERNIGHT WORK LIMITS/ TEMPORARY PAVEMENT

NOTES

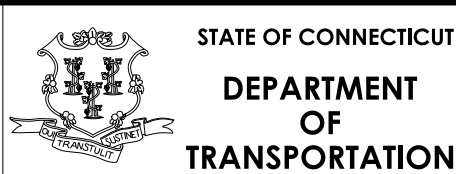
- ANALYSIS OF DELINEATED PAVEMENT REGION SUGGESTS A LOCAL INCREASED OVERLAY THICKNESS. PAVEMENT DEPTH VERIFICATION REQUIRED TO DETERMINE FINAL FULL DEPTH PAVEMENT RECONSTRUCTION LIMITS.

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: N BROWN
CHECKED BY: C. VAN ZANTEN
LASTED SAVED BY: rollard
FILE NAME: c:\pwword\benesch projects\projects\d0140439\HW_CP_0053-0196_MPT-1-05.dgn
PLOTTED DATE: 7/24/2024

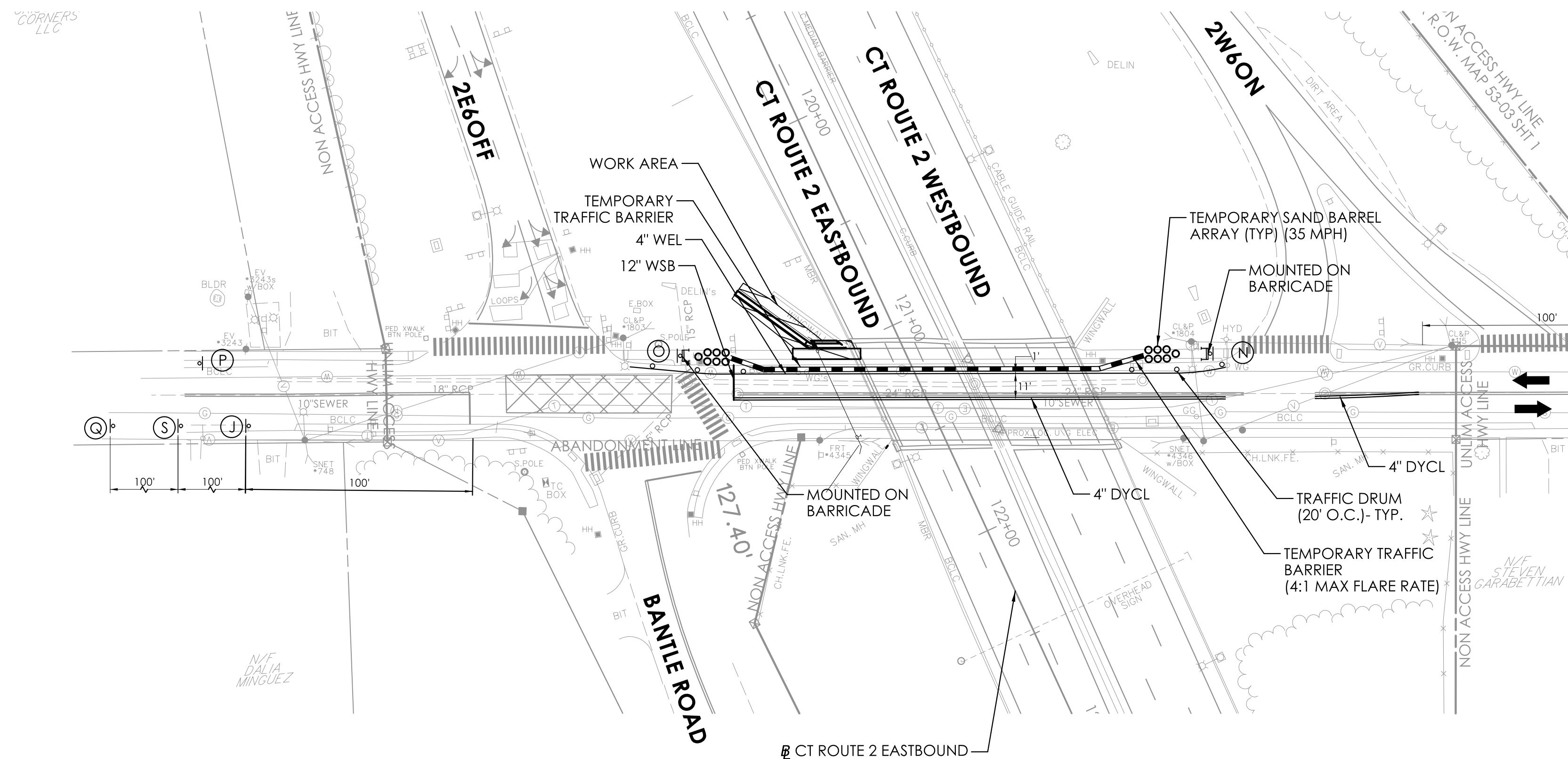
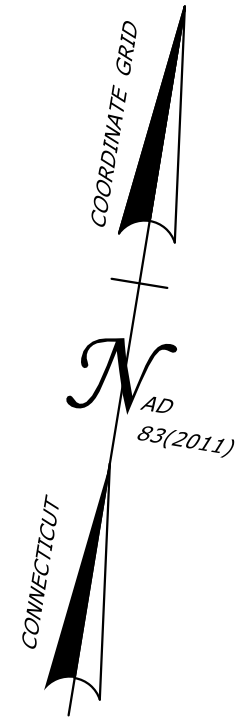
0 40 80
HORIZONTAL SCALE
1" = 40'

SIGNATURE/
BLOCK:



PROJECT NUMBER: 0053-0196
PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8
TOWN(S): GLASTONBURY
DRAWING TITLE: MAINTENANCE AND PROTECTION OF TRAFFIC - STAGE 1

DRAWING NO.
MPT-1-05
SHEET NO.
05.14



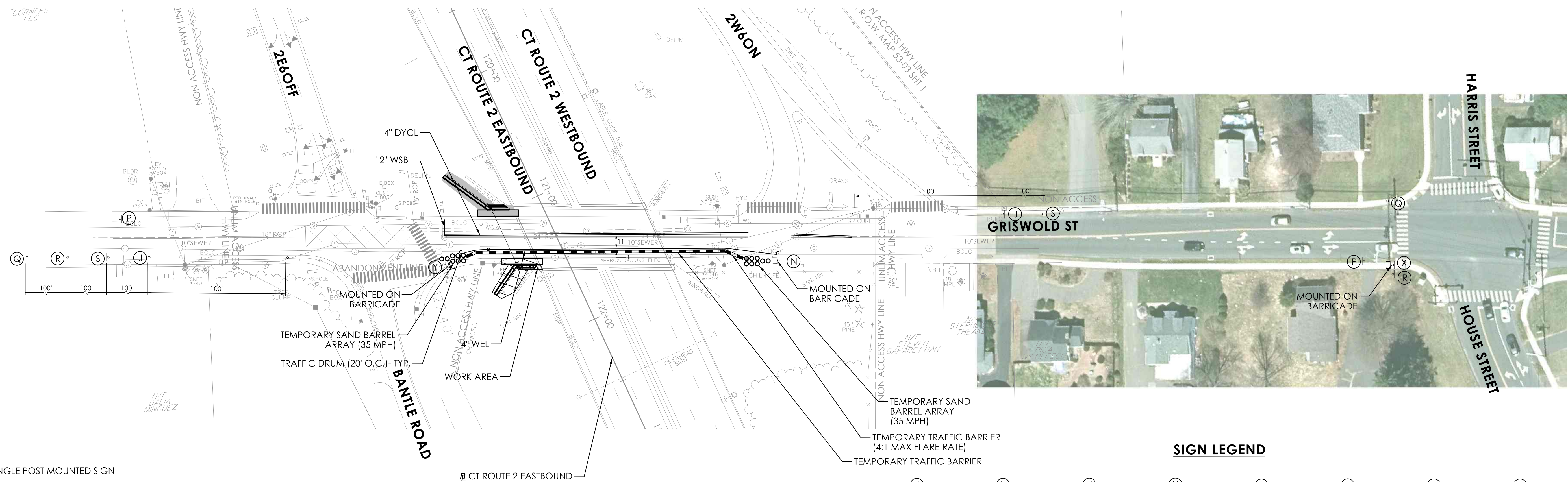
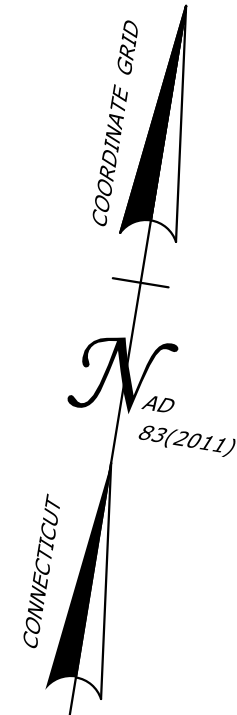
LEGEND

- SINGLE POST MOUNTED SIGN
- TEMPORARY TRAFFIC BARRIER
- TRAFFIC DRUM
- TEMPORARY SAND BARREL ARRAY (PER MANUFACTURERS RECOMMENDATION)
- CONSTRUCTION BARRICADE - DETECTABLE
- TRAFFIC FLOW

SIGN LEGEND

- | | | | | | | | |
|----------------------|------------------------|----------------------|------------------------|----------------------|----------------------|----------------------|----------------------|
| | | | | | | | |
| 80-9603
36" X 36" | 80-9074_L
24" X 18" | 80-9076
30" X 18" | 80-9075_R
24" X 18" | 80-9611
36" X 18" | 80-1613
30" X 24" | 80-1619
48" X 30" | 31-1906
48" X 42" |

REV	DATE	REVISION DESCRIPTION



LEGEND

- SINGLE POST MOUNTED SIGN
- TEMPORARY TRAFFIC BARRIER
- TRAFFIC DRUM
- TEMPORARY SAND BARREL ARRAY (PER MANUFACTURERS RECOMMENDATION)
- CONSTRUCTION BARRICADE - DETECTABLE
- TRAFFIC FLOW

SIGN LEGEND

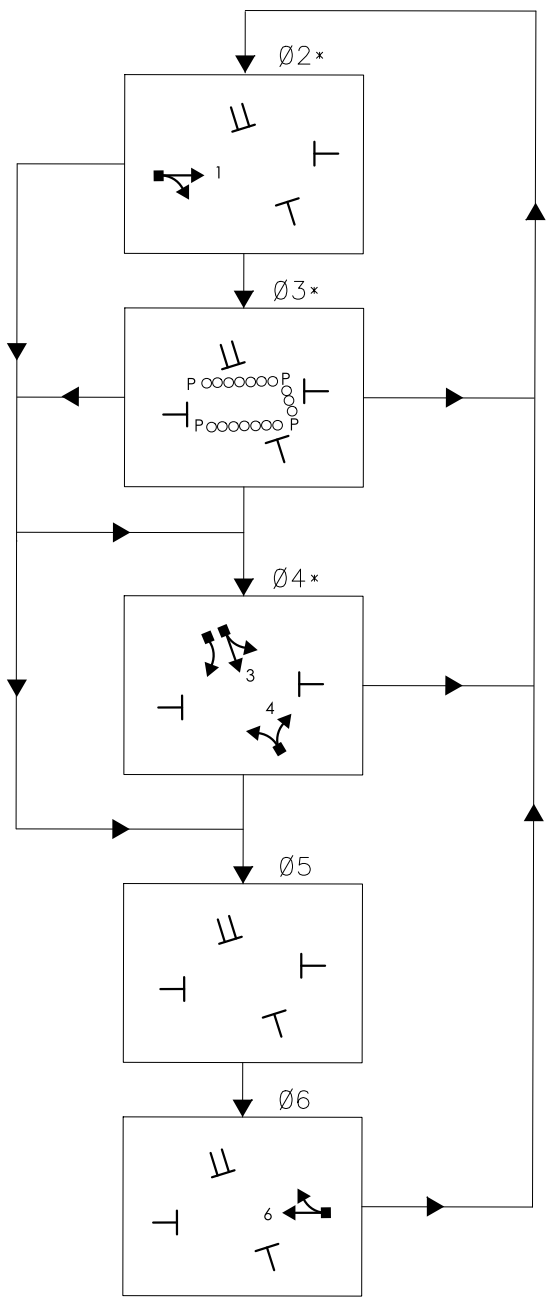
- | | | | | | | | |
|----------------------|------------------------|----------------------|------------------------|----------------------|----------------------|----------------------|----------------------|
| J | X | N | Y | P | Q | R | S |
| | | | | | | | |
| 80-9603
36" X 36" | 80-9074_R
24" X 18" | 80-9076
30" X 18" | 80-9075_L
24" X 12" | 80-9611
36" X 18" | 80-1613
30" X 24" | 80-1619
48" X 30" | 31-1906
48" X 42" |

REV	DATE	REVISION DESCRIPTION

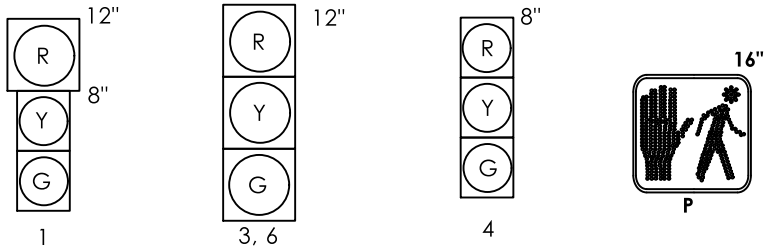
MOVEMENT DIAGRAM																												
NTOR		PHASE 1			PHASE 2 PRE-EMPT 1			PHASE 3			PHASE 4			PHASE 5			PHASE 6 PRE-EMPT 2			PHASE 7			PHASE 8					
F A C E #	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
	1 R				G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R						
	3 R				R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R							
	4 R				R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R							
	6 R				R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R							
	P OFF				DW	DW	DW	Wø	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW								
																		</										

PRE-EMPTION SETTINGS	PRE-EMPT 1	PRE-EMPT 2
PRIORITY	NO	NO
DET. LOCK	YES	YES
DELAY	0	0
ALT. MIN. GRN	5	5
ALT. YELLOW	PARENT	PARENT
ALT. RED	PARENT	PARENT
ALT. PED. CLR.	PARENT	PARENT
HOLD GREEN	10	10
HOLD YELLOW	3.5	3.5
HOLD RED	2.0	7.0
HOLD PHASE	2	6
EXIT PHASE	2	2
EXIT CALL	NONE	NONE

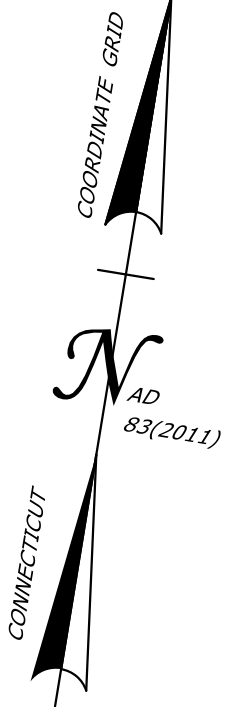
PHASING DIAGRAM



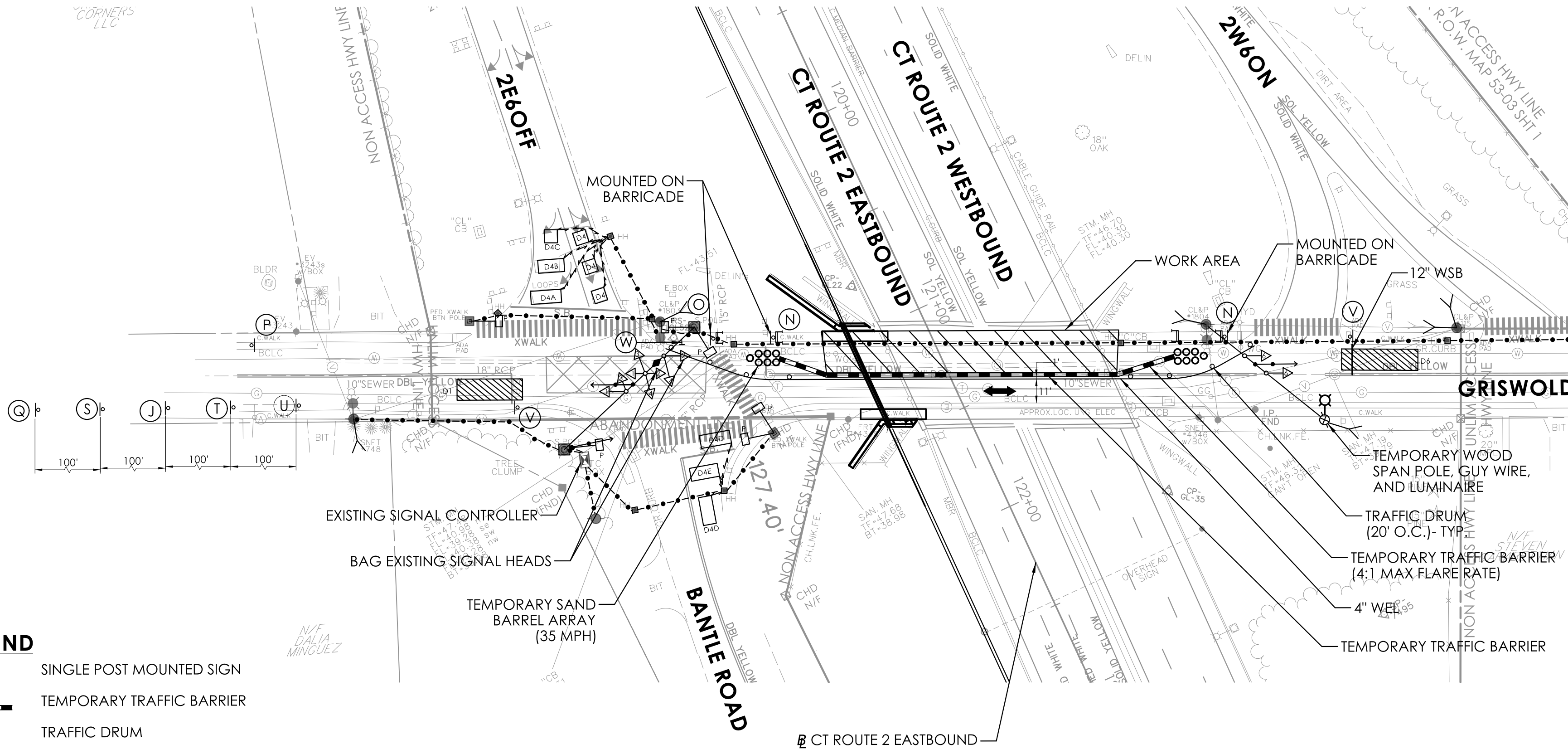
SIGNAL FACES



VEHICULAR SIGNAL FACES 1 AND 6 TO BE INSTALLED WITH BACKPLATES WITH YELLOW RETROREFLECTIVE BORDER.
ALL INDICATIONS HAVE LED LAMP.



SEE RECORD SIGNAL PLAN FOR ADDITIONAL INFORMATION.



LEGEND

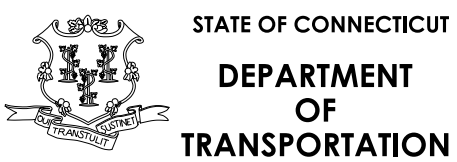
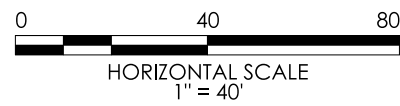
- SINGLE POST MOUNTED SIGN
- TEMPORARY TRAFFIC BARRIER
- TRAFFIC DRUM
- TEMPORARY SAND BARREL ARRAY (PER MANUFACTURERS RECOMMENDATION)
- CONSTRUCTION BARRICADE - DETECTABLE
- TRAFFIC FLOW
- TRAFFIC SIGNAL HEAD
- TEMPORARY WOOD SPAN POLE WITH GUY WIRE
- EXISTING TRAFFIC SIGNAL CONTROLLER
- TEMPORARY DETECTION ZONE
- TEMPORARY LUMINAIRE

SIGN LEGEND

- ROAD WORK AHEAD
- 80-9603 36" X 36"
- SIDEWALK CLOSED AHEAD CROSS HERE
- 80-9074_L 24" X 18"
- SIDEWALK CLOSED
- 80-9076 30" X 18"
- SIDEWALK CLOSED CROSS HERE
- 80-9075_R 24" X 18"
- END ROAD WORK
- 80-9611 36" X 18"
- CONSTRUCTION AHEAD ROAD USE RESTRICTED STATE LIABILITY LIMITED
- 80-1613 30" X 24"
- CONSTRUCTION AHEAD SIDEWALK USE RESTRICTED STATE LIABILITY LIMITED
- 80-1619 48" X 30"
- ROAD WORK AHEAD FINES DOUBLED
- 31-1906 48" X 42"
- ONE LANE ROAD AHEAD
- 80-9834 36" X 36"
- STOP HERE ON RED
- 80-9052 36" X 36"
- 31-0802 24" X 36"
- NO TURN ON RED
- 31-0823 24" X 24"

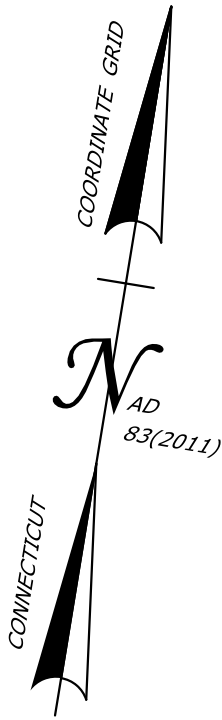
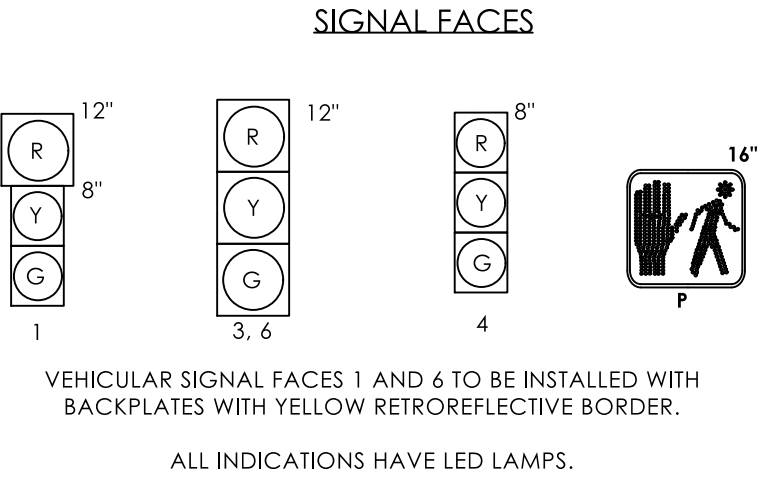
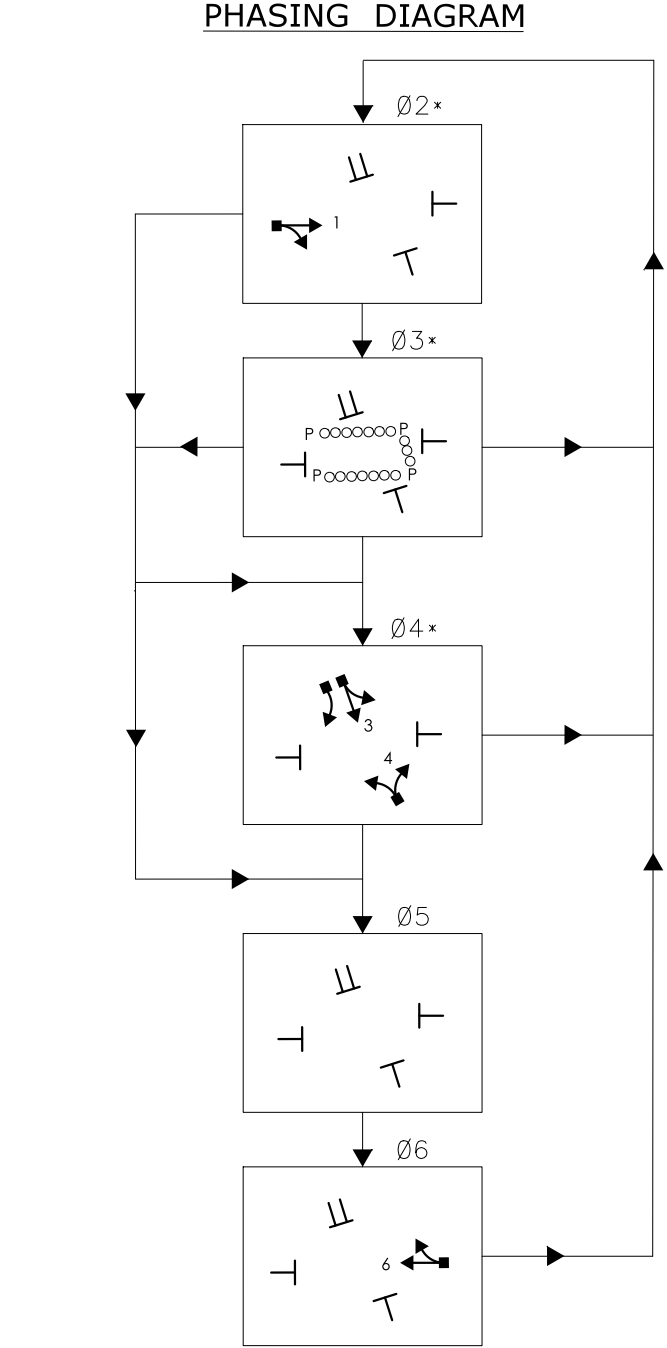
REV	DATE	REVISION DESCRIPTION

SIGNATURE/
BLOCK:

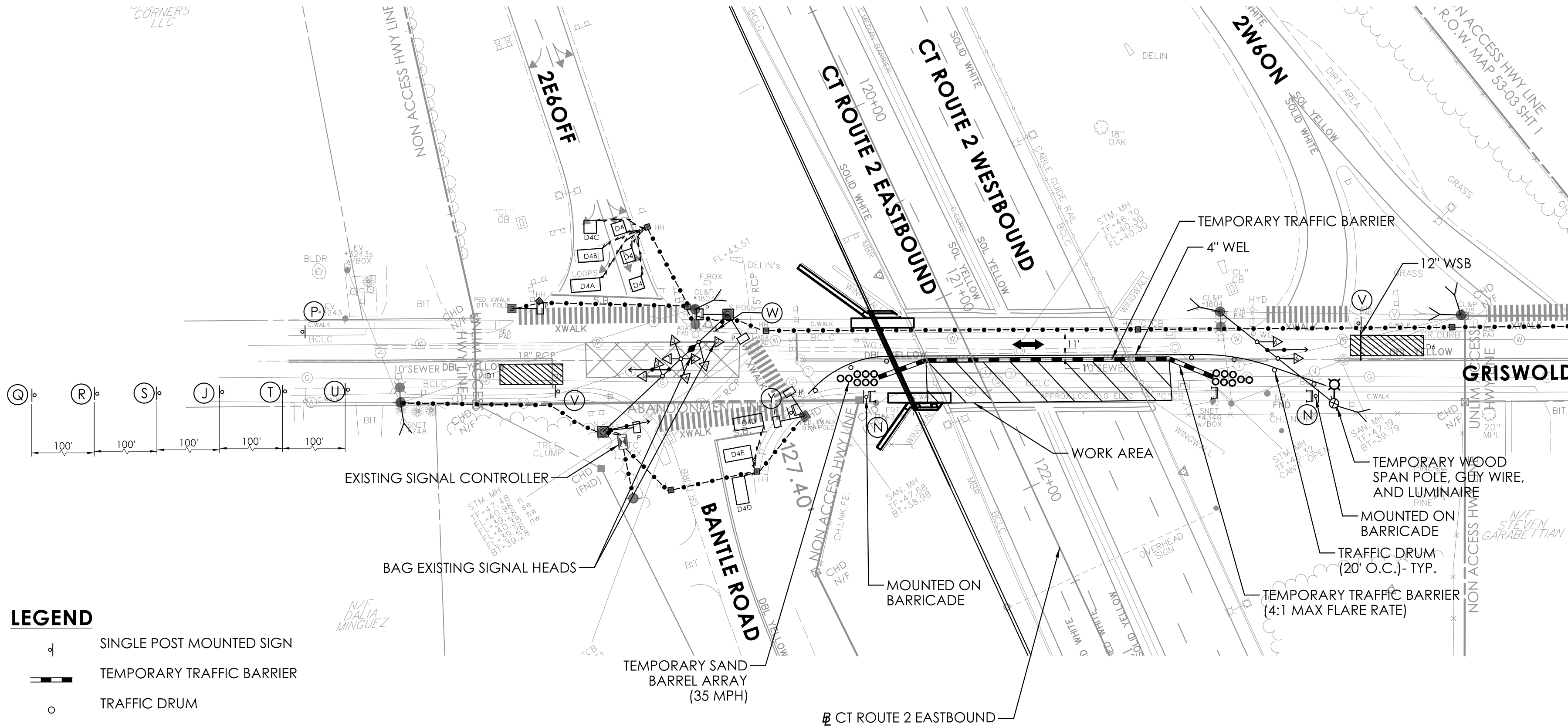


MOVEMENT DIAGRAM																														
NTOR		PHASE 1			PHASE 2 PRE-EMPT 1			PHASE 3			PHASE 4			PHASE 5			PHASE 6 PRE-EMPT 2			PHASE 7			PHASE 8							
F A C E #	1	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	
	3	R				G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R							
	4	R				R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R							
	6	R				R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R							
	P	OFF				DW	DW	DW	Wø	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW									

PRE-EMPTION SETTINGS	PRE-EMPTY 1	PRE-EMPTY 2
PRIORITY	NO	NO
DET. LOCK	YES	YES
DELAY	0	0
ALT. MIN. GRN	5	5
ALT. YELLOW	PARENT	PARENT
ALT. RED	PARENT	PARENT
ALT. PED. CLR	PARENT	PARENT
HOLD GREEN	10	10
HOLD YELLOW	3.5	3.5
HOLD RED	2.0	7.0
HOLD PHASE	2	6
EXIT PHASE	2	2
EXIT CALL	NONE	NONE



SEE RECORD SIGNAL PLAN FOR ADDITIONAL INFORMATION.



LEGEND

- SINGLE POST MOUNTED SIGN
- TEMPORARY TRAFFIC BARRIER
- TRAFFIC DRUM
- TEMPORARY SAND BARREL ARRAY (PER MANUFACTURERS RECOMMENDATION)
- CONSTRUCTION BARRICADE - DETECTABLE
- TRAFFIC FLOW
- TRAFFIC SIGNAL HEAD
- TEMPORARY WOOD SPAN POLE WITH GUY WIRE
- EXISTING TRAFFIC SIGNAL CONTROLLER
- TEMPORARY DETECTION ZONE
- TEMPORARY LUMINAIRE

SIGN LEGEND

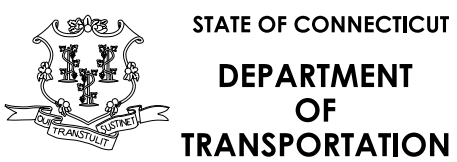
- 80-9603 36" X 36"
- 80-9074_R 24" X 18"
- 80-9076 30" X 18"
- 80-9075_L 24" X 12"
- 80-9611 36" X 18"
- 80-1613 30" X 24"
- 80-1619 48" X 30"
- 31-1906 48" X 42"
- 80-9834 36" X 36"
- 80-9052 36" X 36"
- 31-0802 24" X 36"
- 31-0823 24" X 24"

REV	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: N BROWN
CHECKED BY: C VAN ZANTEN
LASTED SAVED BY: ahook
FILE NAME: c:\pwword\benesch projects\projects\0140439\HW_CP_0053-0196_MPT-1D-01.dgn
PLOTTED DATE: 7/24/2024

SIGNATURE/
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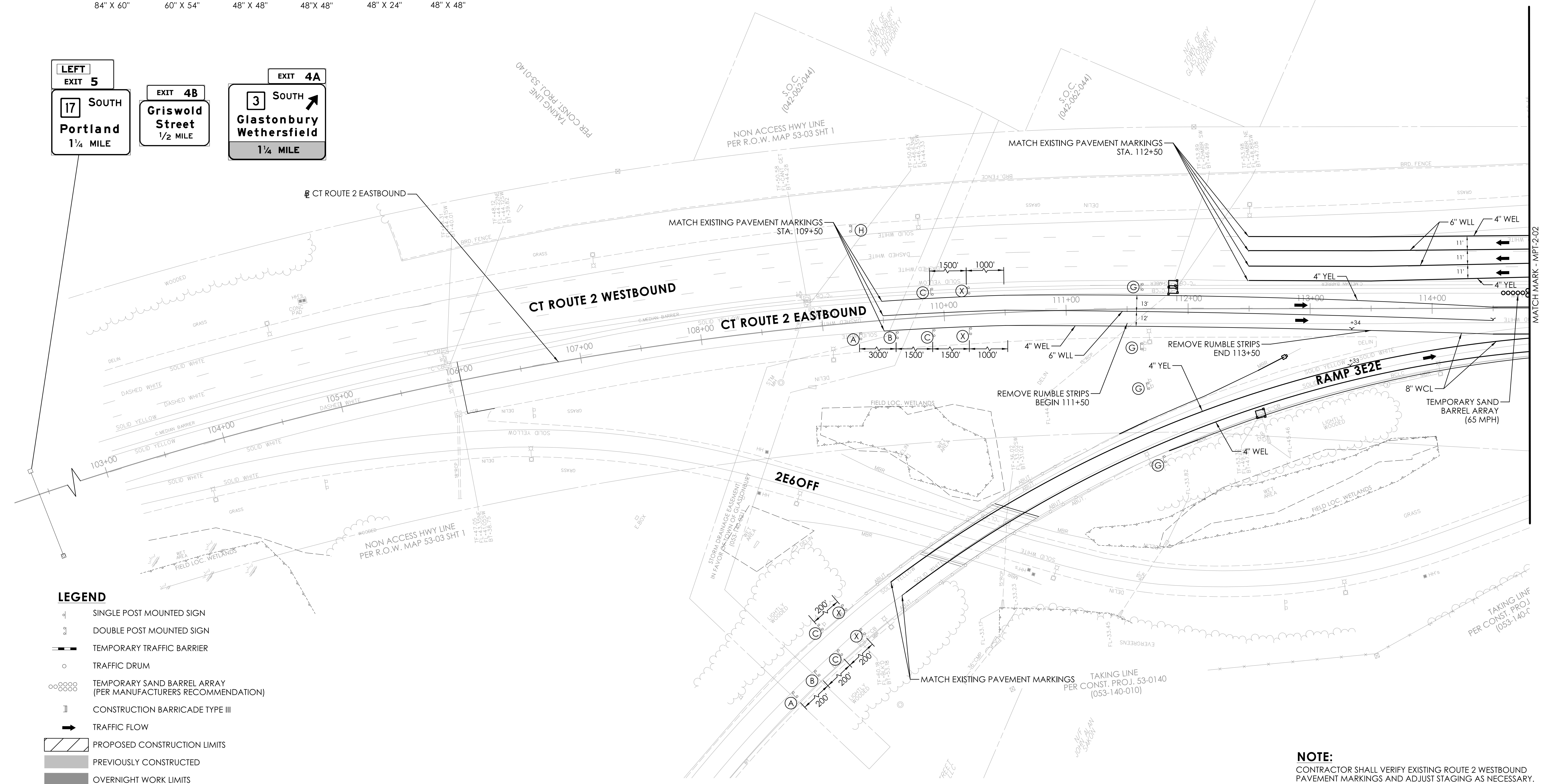
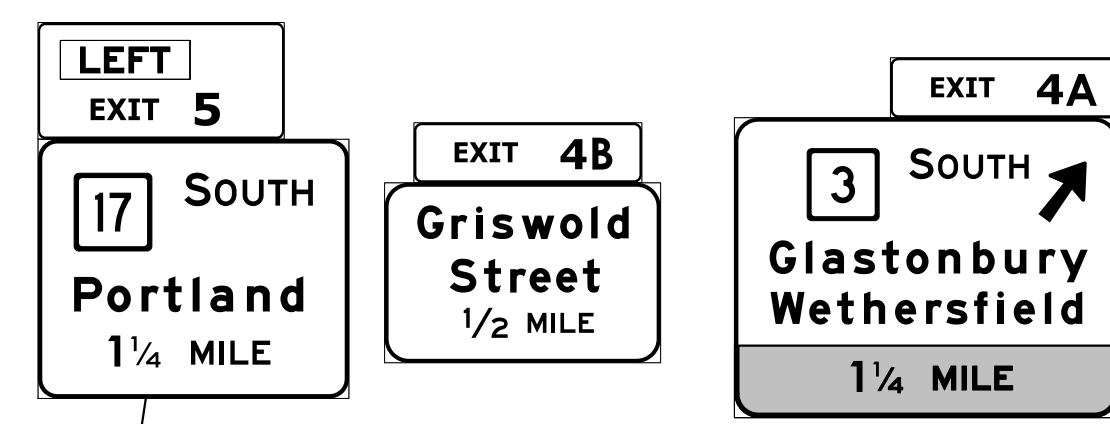
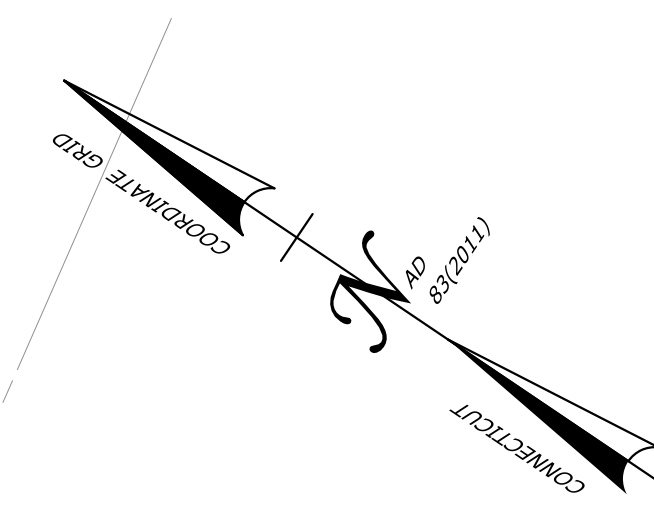
0 40 80
HORIZONTAL SCALE
1" = 40'



PROJECT NUMBER: 0053-0196
PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8
TOWN(S): GLASTONBURY
DRAWING TITLE: MAINTENANCE AND PROTECTION OF TRAFFIC (GRISWOLD STREET) - STAGE 1D

DRAWING NO.
MPT-1D-01
SHEET NO.
05.18

(A)	(B)	(C)	(G)	(H)	(X)
CONSTRUCTION AHEAD ROAD USE RESTRICTED STATE LIABILITY LIMITED GENERAL AVENUE SEC. 12A-112, 12A-114 COMMITTEE OF TRANSPORTATION	ROAD WORK AHEAD FINES DOUBLED	ROAD WORK AHEAD		END ROAD WORK	BOTH LANES SHIFT RIGHT
80-1605 84" X 60"	31-1907 60" X 54"	80-9604 48" X 48"	41-4434 48" X 48"	80-9612 48" X 24"	80-9436 48" X 48"



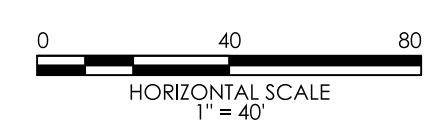
	SINGLE POST MOUNTED SIGN
	DOUBLE POST MOUNTED SIGN
	TEMPORARY TRAFFIC BARRIER
	TRAFFIC DRUM
	TEMPORARY SAND BARREL ARRAY (PER MANUFACTURER'S RECOMMENDATION)
	CONSTRUCTION BARRICADE TYPE III
	TRAFFIC FLOW
	PROPOSED CONSTRUCTION LIMITS
	PREVIOUSLY CONSTRUCTED
	OVERNIGHT WORK LIMITS

NOTE:
CONTRACTOR SHALL VERIFY EXISTING ROUTE 2 WESTBOUND
PAVEMENT MARKINGS AND ADJUST STAGING AS NECESSARY.

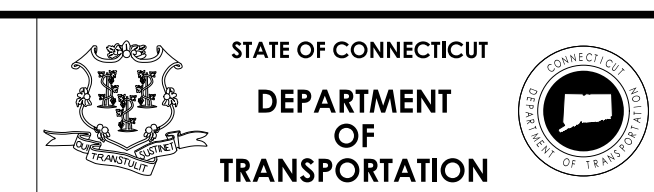
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DESIGNER/DRAFTER: N BROWN CHECKED BY: C VAN ZANTEN 1" = 40'

LASTED SAVED BY: rallard **FILE NAME:** c:\pwwordir\benesch projects\projects\d0140439\HW_CP_0053-0196_MPT-2-01.dgn
PLOTTED DATE: 7/24/2024

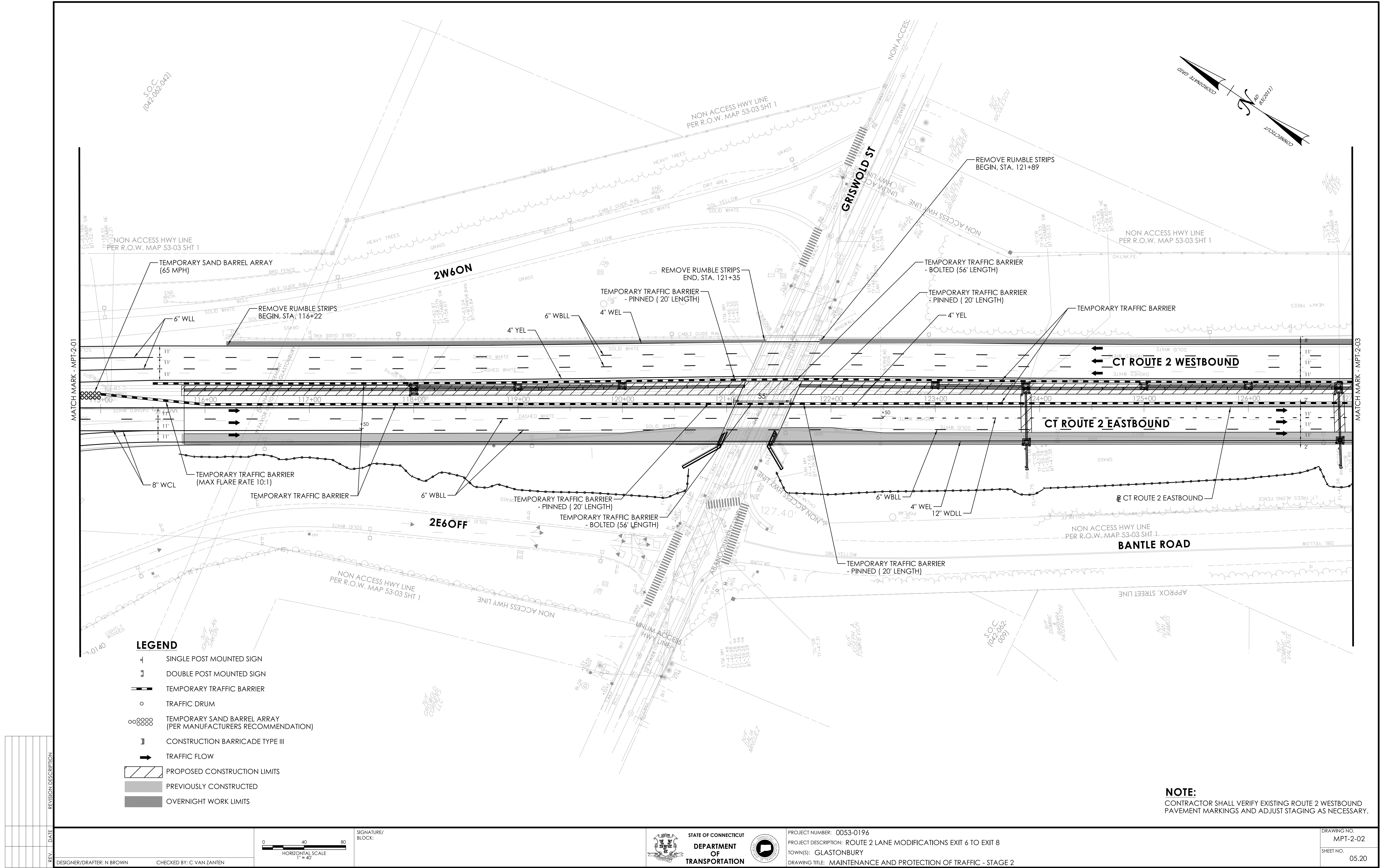


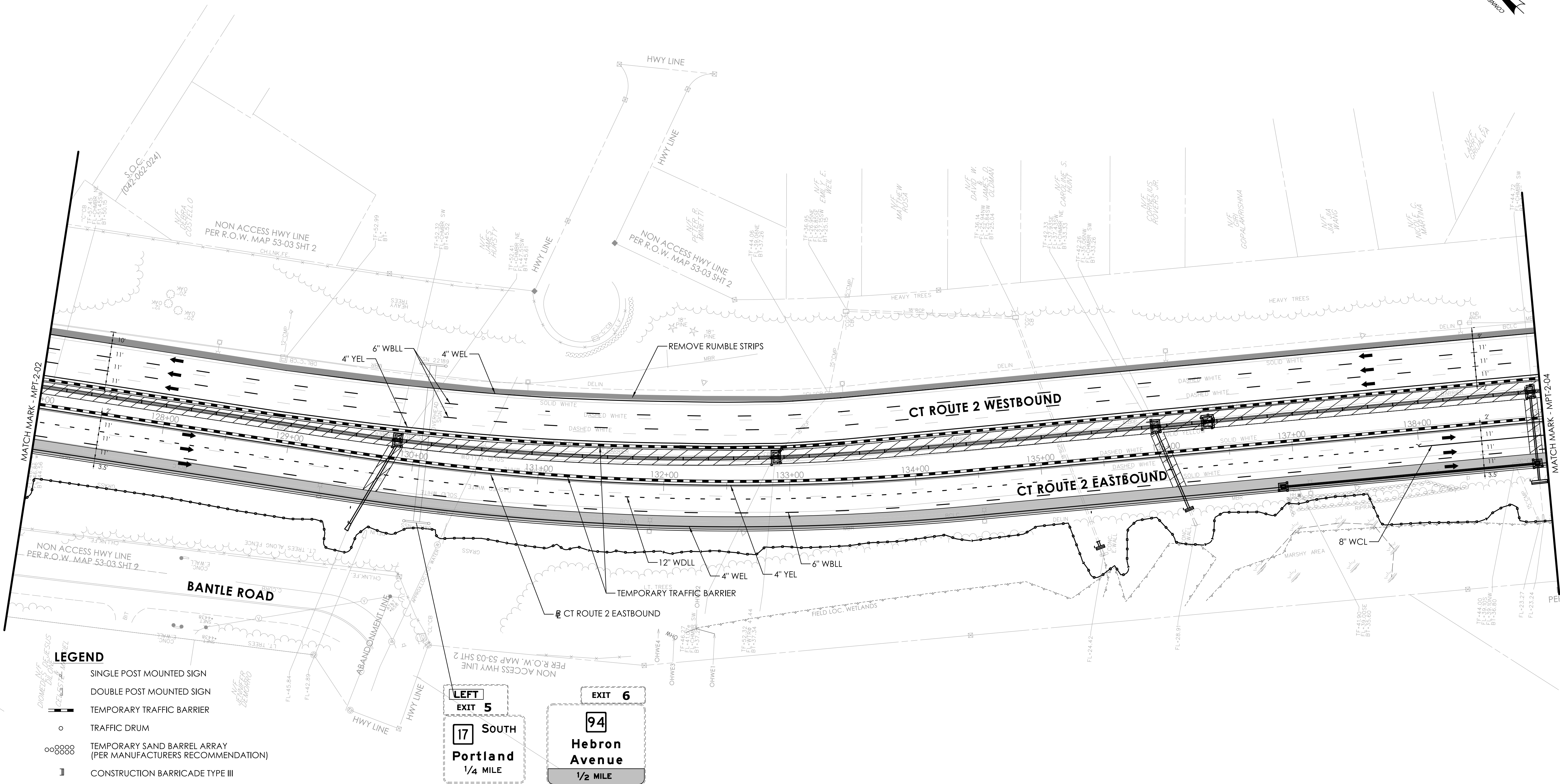
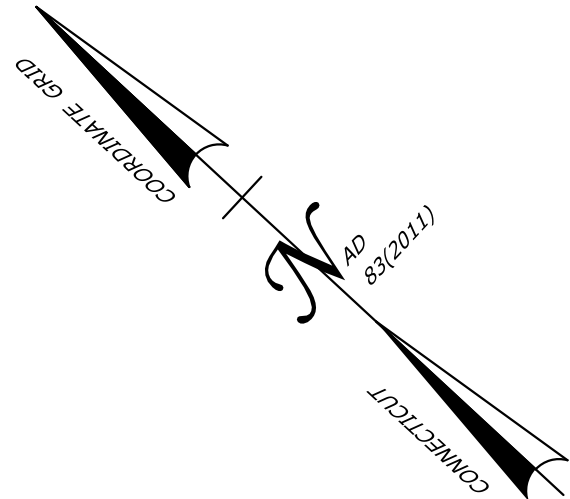
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PROJECT NUMBER: 0053-0196
PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8
TOWN(S): GLASTONBURY
DRAWING TITLE: MAINTENANCE AND PROTECTION OF TRAFFIC - STAGE 2

DRAWING NO.	MPT-2-01
SHEET NO.	05.19





LEGEND

- SINGLE POST MOUNTED SIGN
- DOUBLE POST MOUNTED SIGN
- TEMPORARY TRAFFIC BARRIER
- TRAFFIC DRUM
- TEMPORARY SAND BARREL ARRAY (PER MANUFACTURERS RECOMMENDATION)
- CONSTRUCTION BARRICADE TYPE III
- TRAFFIC FLOW
- PROPOSED CONSTRUCTION LIMITS
- PREVIOUSLY CONSTRUCTED
- OVERNIGHT WORK LIMITS

LEFT

EXIT 5

17 SOUTH

Portland

1/4 MILE

EXIT 6

94

Hebron Avenue

1/2 MILE

NOTE:
CONTRACTOR SHALL VERIFY EXISTING ROUTE 2 WESTBOUND PAVEMENT MARKINGS AND ADJUST STAGING AS NECESSARY.

REV.	DATE	REVISION DESCRIPTION

SIGN LEGEND

A

CONSTRUCTION AHEAD
ROAD USE RESTRICTED
STATE UNIFORM LIMITED
CONSTRUCTION AHEAD
80-1605
84" X 60"

B

ROAD WORK AHEAD
FINES DOUBLED
ROAD WORK AHEAD
31-1907
60" X 54"

C

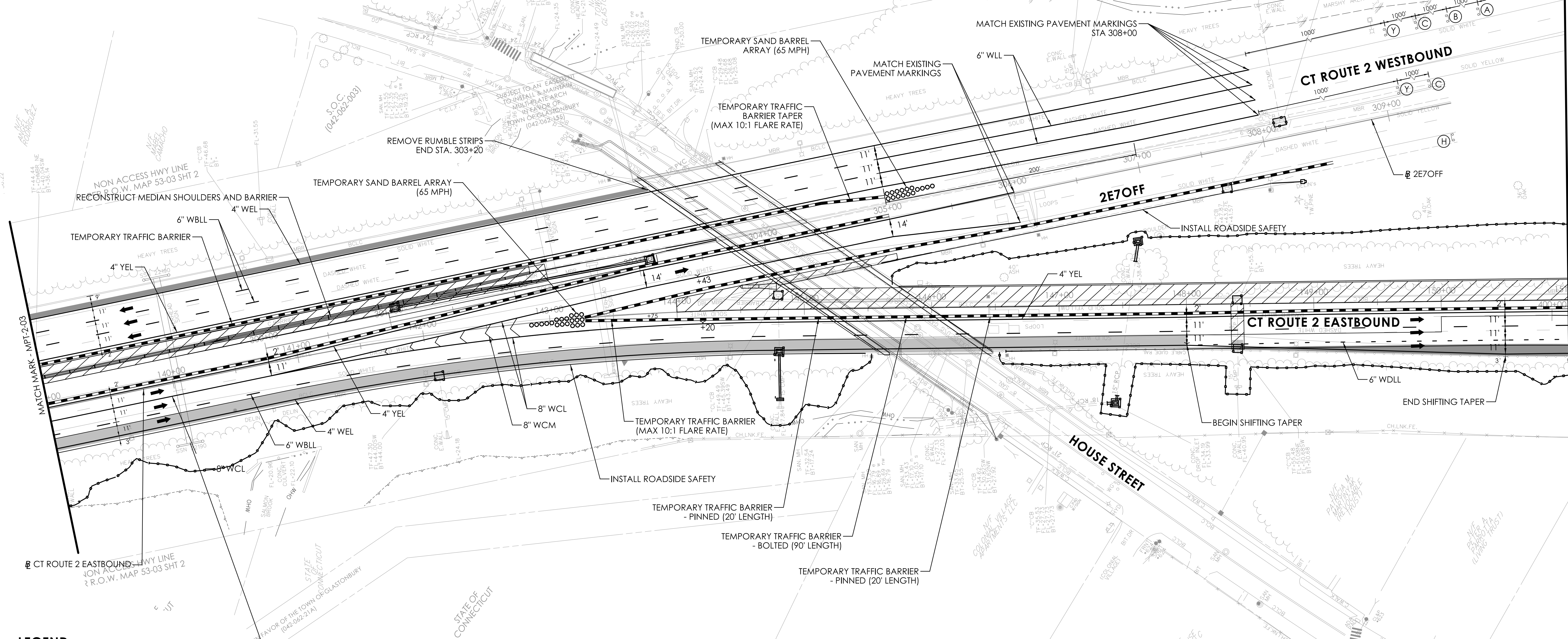
ROAD WORK AHEAD
ROAD WORK AHEAD
80-9604
48" X 48"

H

END ROAD WORK
END ROAD WORK
80-9612
48" X 24"

Y

ROAD WORK AHEAD
ROAD WORK AHEAD
80-9496
48" X 48"



LEGEND

▲

SINGLE POST MOUNTED SIGN

●

DOUBLE POST MOUNTED SIGN

—

TEMPORARY TRAFFIC BARRIER

○

TRAFFIC DRUM

○○○○○○

TEMPORARY SAND BARREL ARRAY
(PER MANUFACTURERS RECOMENDATION)

||

CONSTRUCTION BARRICADE TYPE III

→

TRAFFIC FLOW

▨

PROPOSED CONSTRUCTION LIMITS

■

PREVIOUSLY CONSTRUCTED

■

OVERNIGHT WORK LIMITS/
TEMPORARY PAVEMENT

LEFT

EXIT 5

↑ 17 SOUTH

Portland

2 EAST

Norwich

EXIT 6

94

Hebron Avenue

1/4 MILE

NOTE:
CONTRACTOR SHALL VERIFY EXISTING ROUTE 2 WESTBOUND
PAVEMENT MARKINGS AND ADJUST STAGING AS NECESSARY.

REV	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: N BROWN

CHECKED BY: C VAN ZANTEN

0 40 80

HORIZONTAL SCALE

1" = 40'

SIGNATURE/
BLOCK:

STATE OF CONNECTICUT

DEPARTMENT
OF
TRANSPORTATION

PROJECT NUMBER: 0053-0196

PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8

TOWN(S): GLASTONBURY

DRAWING TITLE: MAINTENANCE AND PROTECTION OF TRAFFIC - STAGE 2

DRAWING NO.

MPT-2-04

SHEET NO.

05.22

SIGN LEGEND

(H)

END
ROAD WORK

80-9612
48" X 24"

BRIDGE NO. 01696
(NOT IN PROJECT)

CT ROUTE 2 EASTBOUND

MATCH EXISTING PAVEMENT MARKINGS

CT ROUTE 2 EASTBOUND

2E8OFF

MATCH EXISTING PAVEMENT MARKINGS

NON ACCESS HWY LINE
PER R.O.W. MAP 53-03 SHT 3

SUBJECT TO AV
EASMENT TO CORE
STATE OF CONNECTICUT
(03-155001)

2 EAST
Norwich

EXIT 6
94
Hebron
Avenue
EXIT ONLY

2 EAST
Norwich

EXIT 6
94
Hebron
Avenue
EXIT ONLY

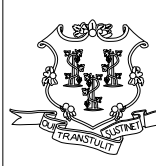
REMOVE EXISTING OVERHEAD SIGN STRUCTURE AND SIGNS
INSTALL PROPOSED MONOTUBE BRIDGE SIGN SUPPORT SSN 22191

LEGEND

- SINGLE POST MOUNTED SIGN
- DOUBLE POST MOUNTED SIGN
- TEMPORARY TRAFFIC BARRIER
- TRAFFIC DRUM
- TEMPORARY SAND BARREL ARRAY
(PER MANUFACTURERS RECOMENDATION)
- CONSTRUCTION BARRICADE TYPE III
- TRAFFIC FLOW
- PROPOSED CONSTRUCTION LIMITS
- PREVIOUSLY CONSTRUCTED
- OVERNIGHT WORK LIMITS/
TEMPORARY PAVEMENT

0 40 80
HORIZONTAL SCALE
1" = 40'

SIGNATURE/
BLOCK:



STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION



PROJECT NUMBER: 0053-0196
PROJECT DESCRIPTION: ROUTE 2 LANE MODIFICATIONS EXIT 6 TO EXIT 8
TOWN(S): GLASTONBURY
DRAWING TITLE: MAINTENANCE AND PROTECTION OF TRAFFIC - STAGE 2

DRAWING NO.
MPT-2-05
SHEET NO.
05.23

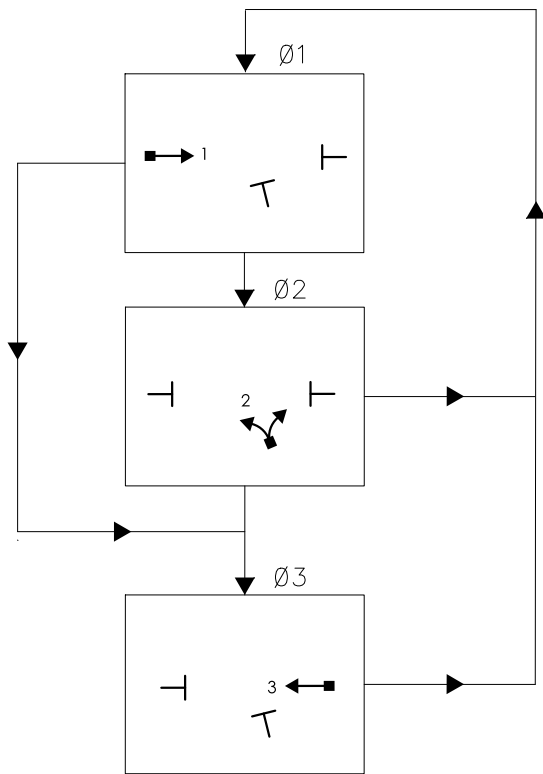
DESIGNER/DRAFTER: N BROWN CHECKED BY: C VAN ZANTEN
LASTED SAVED BY: rollard FILE NAME: c:\pwword\benesch projects\projects\d0140439\HW_CP_0053-0196_MPT-2-05.dgn
PLOTTED DATE: 7/24/2024

MOVEMENT DIAGRAM											
NTOR		PHASE 1				PHASE 2			PHASE 3		
											
FLASH		GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	
F A C E #	1	R	G	Y	R	R	R	R	R	R	
	2	R	R	R	R	G	Y	R	R	R	
	3	R	R	R	R	R	R	R	G	Y	
I N T E R V A L S	MIN GRN	15			5			5			
	WALK										
	PED CLR										
	VEH EXT	1.5			2			1.5			
	MAX 1	30			9			7			
	MAX 2										
	YELLOW		3			3			3		
	RED			15			3			15	
	ADD INIT										
	MAX INIT										
	TBR										
	TTR										
	MIN GAP										
MODE	MIN RECALL				LOCK			LOCK			
INIT START		THIS PHASE									

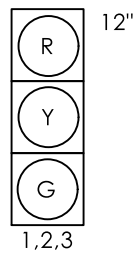
CONTROLLER TO REST IN RED.

ALL DETECTORS TO BE SET TO PRESENCE.

PHASING DIAGRAM

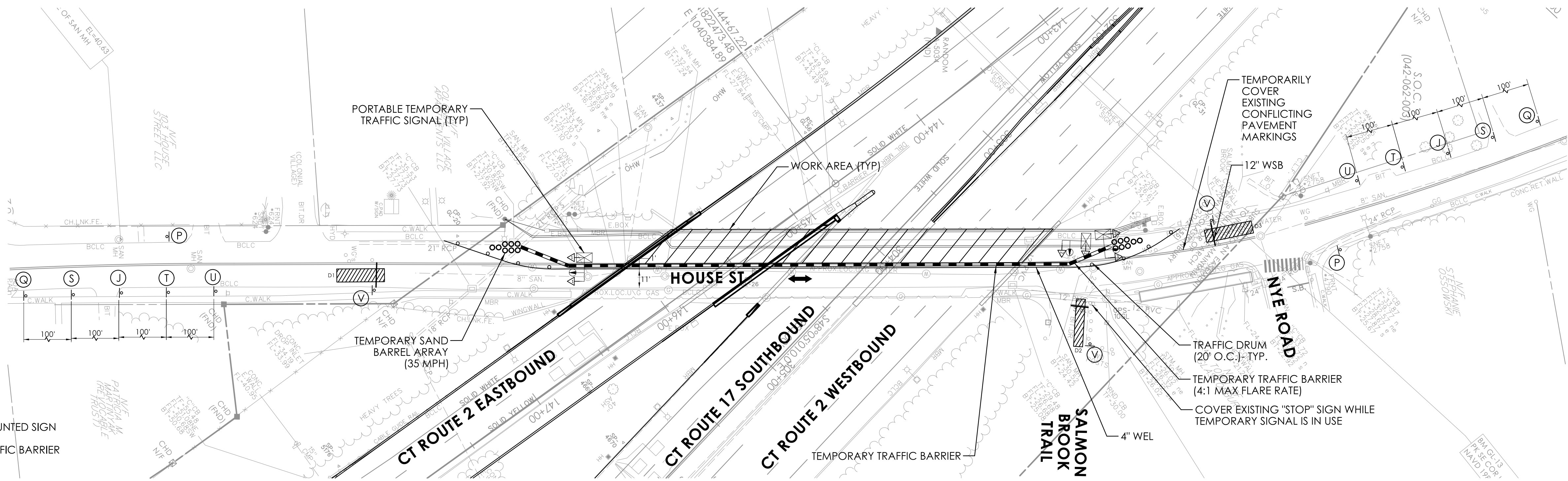
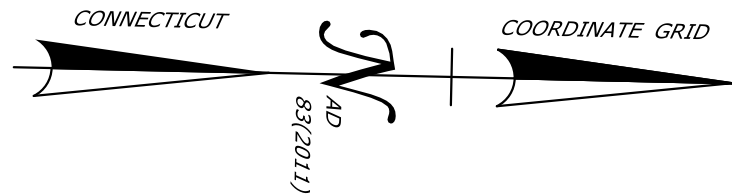


SIGNAL FACES



VEHICULAR SIGNAL FACES 1 AND 3 TO BE INSTALLED WITH BACKPLATES WITH YELLOW RETROREFLECTIVE BORDER.

ALL INDICATIONS HAVE LED LAMPS.



LEGEND

- SINGLE POST MOUNTED SIGN
- TEMPORARY TRAFFIC BARRIER
- TRAFFIC DRUM
- TEMPORARY SAND BARREL ARRAY (PER MANUFACTURER RECOMMENDATION)
- CONSTRUCTION BARRICADE - DETECTABLE
- TRAFFIC FLOW
- PORTABLE TEMPORARY TRAFFIC SIGNAL
- TEMPORARY DETECTION ZONE
- TEMPORARY LUMINAIRE

SIGN LEGEND

- ROAD WORK AHEAD (36" X 36")
- END ROAD WORK (36" X 18")
- CONSTRUCTION AHEAD (30" X 24")
- CONSTRUCTION AHEAD (48" X 30")
- ROAD WORK AHEAD FINES DOUBLED (48" X 42")
- ONE LANE ROAD AHEAD (36" X 36")
- STOP HERE ON RED (36" X 36")

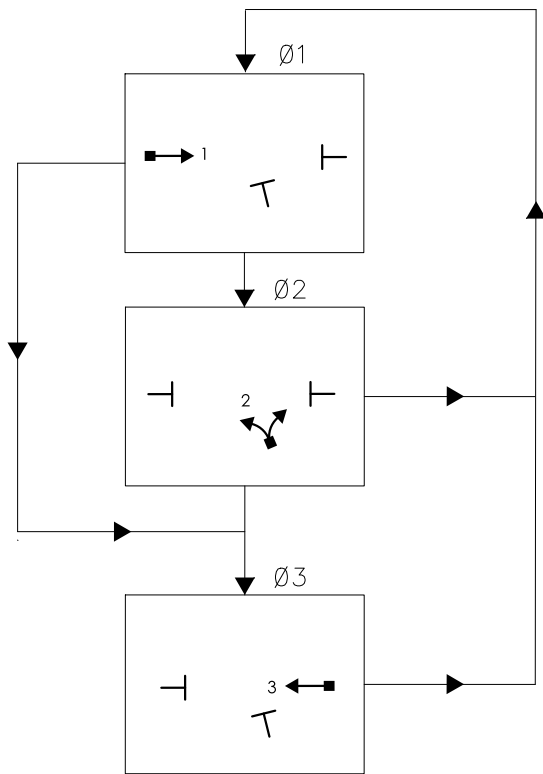
REV	DATE	REVISION DESCRIPTION

MOVEMENT DIAGRAM											
NTOR		PHASE 1				PHASE 2			PHASE 3		
											
FLASH		GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	
F A C E #	1	R	G	Y	R	R	R	R	R	R	
	2	R	R	R	R	G	Y	R	R	R	
	3	R	R	R	R	R	R	G	Y	R	
I N T E R V A L S	MIN GRN	15			5			5			
	WALK										
	PED CLR										
	VEH EXT	1.5			2			1.5			
	MAX 1	30			9			7			
	MAX 2										
	YELLOW		3			3			3		
	RED			15			3			15	
	ADD INIT										
	MAX INIT										
	TBR										
	TTR										
	MIN GAP										
MODE	MIN RECALL				LOCK			LOCK			
INIT START		THIS PHASE									

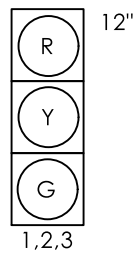
CONTROLLER TO REST IN RED.

ALL DETECTORS TO BE SET TO PRESENCE.

PHASING DIAGRAM

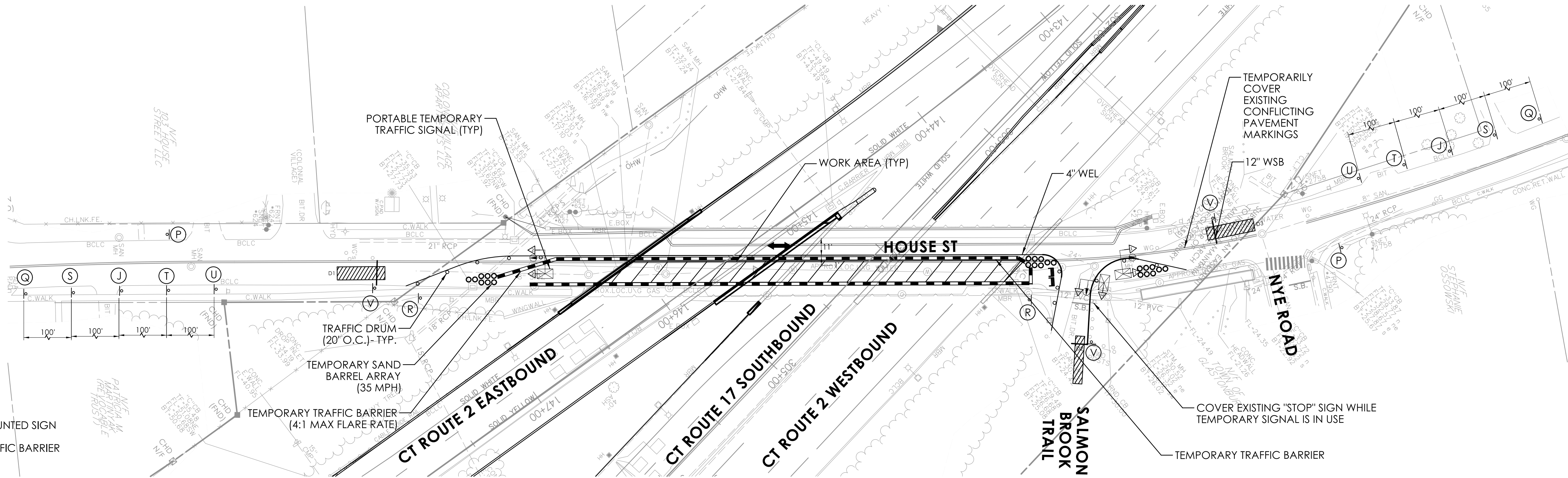
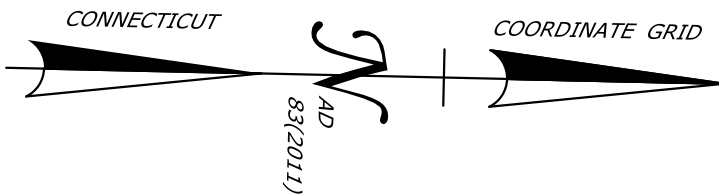


SIGNAL FACES



VEHICULAR SIGNAL FACES 1 AND 3 TO BE INSTALLED WITH BACKPLATES WITH YELLOW RETROREFLECTIVE BORDER.

ALL INDICATIONS HAVE LED LAMPS.



LEGEND

- SINGLE POST MOUNTED SIGN
- TEMPORARY TRAFFIC BARRIER
- TRAFFIC DRUM
- TEMPORARY SAND BARREL ARRAY (PER MANUFACTURER RECOMMENDATION)
- CONSTRUCTION BARRICADE - DETECTABLE
- TRAFFIC FLOW
- PORTABLE TEMPORARY TRAFFIC SIGNAL
- TEMPORARY DETECTION ZONE
- TEMPORARY LUMINAIRE

SIGN LEGEND

- | | | | | | | | |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | | | | | | | |
| 80-9603
36" X 36" | 80-9611
36" X 18" | 80-1613
30" X 24" | 80-1619
48" X 30" | 31-1906
48" X 42" | 80-9834
36" X 36" | 80-9052
36" X 36" | 31-0802
24" X 36" |

REV	DATE	REVISION DESCRIPTION

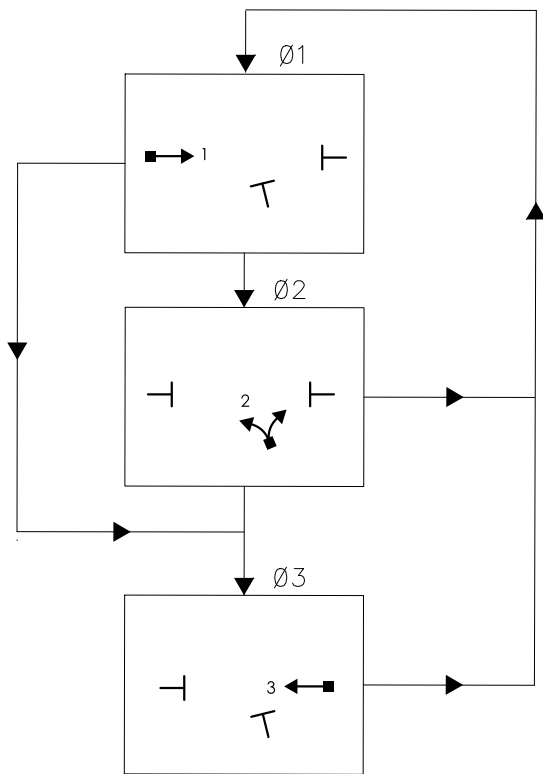


MOVEMENT DIAGRAM											
NTOR		PHASE 1				PHASE 2			PHASE 3		
FLASH		GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	
F A C E #	1	R	G	Y	R	R	R	R	R	R	
	2	R	R	R	R	G	Y	R	R	R	
	3	R	R	R	R	R	R	R	G	Y	
I N T E R V A L S	MIN GRN	15			5			5			
	WALK										
	PED CLR										
	VEH EXT	1.5			2			1.5			
	MAX 1	30			9			7			
	MAX 2										
	YELLOW		3			3			3		
	RED			15			3			15	
	ADD INIT										
	MAX INIT										
	TBR										
	TTR										
	MIN GAP										
	MODE	MIN RECALL				LOCK			LOCK		
	INIT START	THIS PHASE									

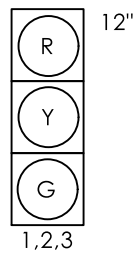
CONTROLLER TO REST IN RED.

ALL DETECTORS TO BE SET TO PRESENCE.

PHASING DIAGRAM

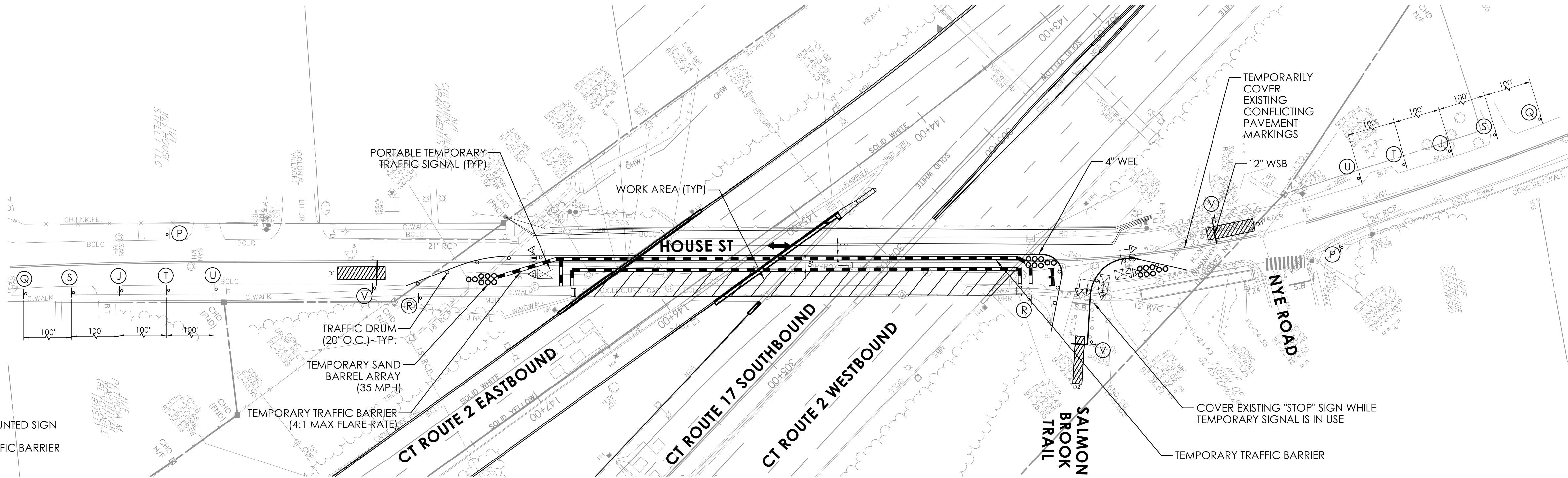
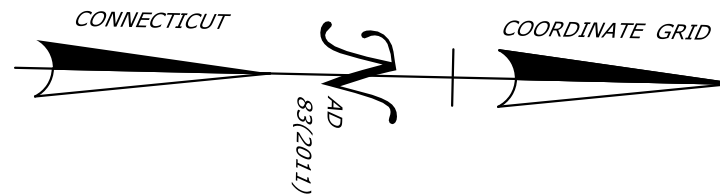


SIGNAL FACES



VEHICULAR SIGNAL FACES 1 AND 3 TO BE INSTALLED WITH BACKPLATES WITH YELLOW RETROREFLECTIVE BORDER.

ALL INDICATIONS HAVE LED LAMPS.



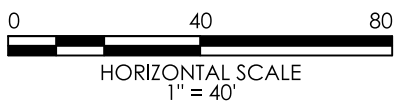
LEGEND

- SINGLE POST MOUNTED SIGN
- TEMPORARY TRAFFIC BARRIER
- TRAFFIC DRUM
- TEMPORARY SAND BARREL ARRAY (PER MANUFACTURER RECOMMENDATION)
- CONSTRUCTION BARRICADE - DETECTABLE
- TRAFFIC FLOW
- PORTABLE TEMPORARY TRAFFIC SIGNAL
- TEMPORARY DETECTION ZONE
- TEMPORARY LUMINAIRE

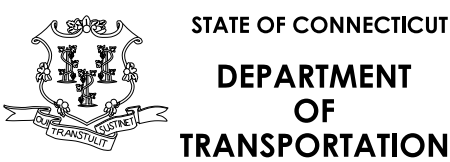
SIGN LEGEND

- | | | | | | | | |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| J | P | Q | R | S | T | U | V |
| | | | | | | | |
| 80-9603
36" X 36" | 80-9611
36" X 18" | 80-1613
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48" X 30" | 31-1906
48" X 42" | 80-9834
36" X 36" | 80-9052
36" X 36" | 31-0802
24" X 36" |

REV	DATE	REVISION DESCRIPTION



SIGNATURE/
BLOCK:



CONSTRUCTION NOTES :

ALL TRAFFIC SIGNAL EQUIPMENT IS EXISTING EXCEPT AS NOTED.

TERMINATE THE 12 STRAND FIBER OPTIC DROP CABLE ON A NEW 12 POSITION FIBER OPTIC PATCH PANEL.

CONTRACTOR SHALL CONTACT MR. DANIEL PENNINGTON, TOWN OF GLASTONBURY, TOWN ENGINEER AT 1-860-652-7736 PRIOR ANY EXCAVATION AND DELIVERY OF ALL SALVAGE MATERIAL.

CONTRACTOR SHALL OBTAIN ALL NECESSARY STATE AND TOWN PERMITS, INCLUDING BUT NOT LIMITED TO: SIDEWALK, CURB AND ROAD OPENING.

THE CONTRACTOR SHALL MAINTAIN EXISTING SIGNALIZATION DURING CONSTRUCTION.

CONTRACTOR TO PROVIDE FOUR SETS OF CABINET WIRING DIAGRAMS IN THE CABINET.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISIONS.

THE CONTRACTOR SHALL PROVIDE A NEW CONTROLLER UNIT AND MODIFY THE CONTROLLER CABINET WIRING, SEQUENCE AND TIMING INCLUDING ALL NECESSARY EQUIPMENT AND WIRING TO PROVIDE THE OPERATION SHOWN ON THIS PLAN. SEE THE SPECIAL PROVISION #1108163A "MODIFY EXISTING CONTROLLER"

CONTRACTOR TO INSTALL A SWITCH IN THE SIGNAL CABINET TO EFFECTIVELY DISCONNECT THE PRE-EMPTION EQUIPMENT FROM THE TRAFFIC SIGNAL CONTROLLER.

EXACT LOCATIONS OF THE OPTICAL DETECTORS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. ALL DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH OPTICAL DETECTOR TO THE CONTROLLER CABINET.

USE THE COORDINATION AND PRE-EMPTION SETTINGS SHOWN:

3/4" STAINLESS STEEL BANDING AND BUCKLE, TYP

3/4" HUB PLATE

3/4" NIPPLE (TYP.)

90° ELBOW

STEEL WASHER

NEOPRENE GASKET

OPTICAL DETECTOR

INSTALL HUB PLATE AT AN ELEVATION AS DIRECTED BY THE ENGINEER OR THE REPRESENTATIVE OF THE MANUFACTURER OF THE OPTICAL PRE-EMPTION EQUIPMENT.

STEEL POLE

SIDE OF STEEL SPAN POLE

OPTICAL DETECTOR INSTALLATION DETAILS

RIGID MOUNTING

NO.	DATE	INIT.	DESCRIPTION

Stephen Ulman
2018.01.29
09:00:59-05'00'

REV #

INTERSECTION #053-219

NO.	DATE	INIT.	DESCRIPTION

TOWN: **GLASTONBURY**

DRAWING TITLE: **TRAFFIC CONTROL SIGNAL PLAN**

PROJECT NO. 53-187

DRAWING NO. -

SHEET NO. -

DATE	DESCRIPTION
1/6/2014	

TRAFFIC CONTROL SIGNAL PLAN

INTERSECTION IMPROVEMENTS

FOR

GRISWOLD STREET

LOCATED AT

HARRIS & HOUSE STREETS

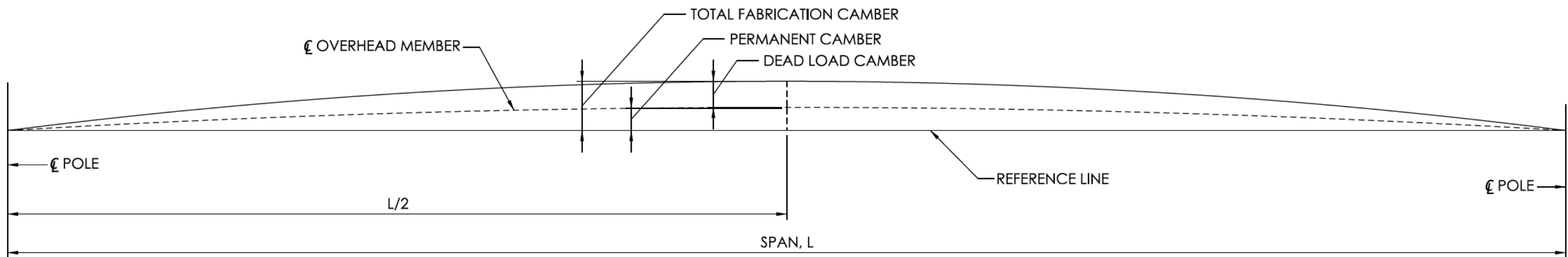
GLASTONBURY, CONNECTICUT

SHEET NO. 15A

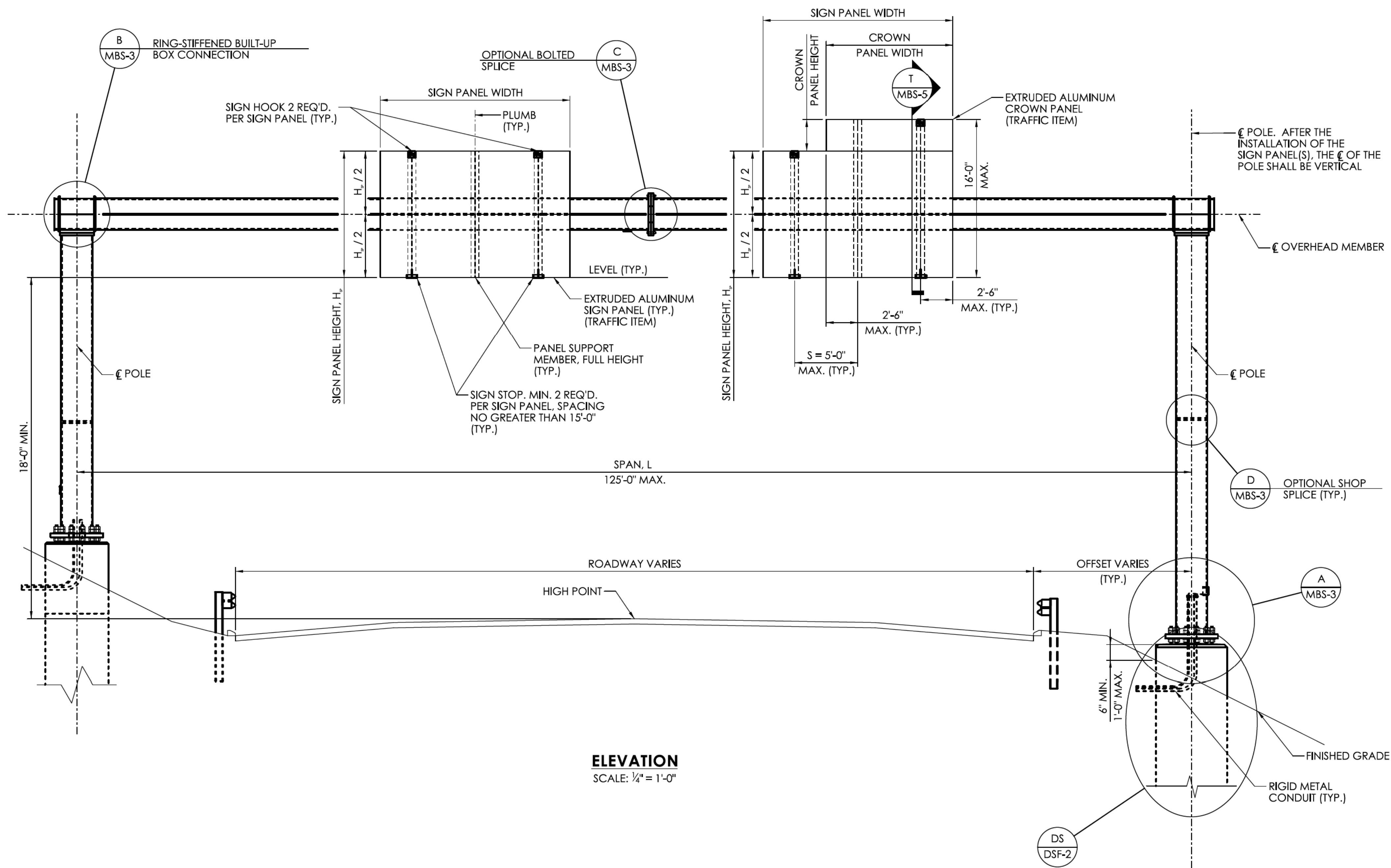
OF 35


STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION


DRAWING NO.	TCS-01
SHEET NO.	05.27



CAMBER DIAGRAM



ELEVATION
SCALE: 1/4" = 1'-0"

NOTES

THE MONOTUBE BRIDGE SIGN STRUCTURE, INCLUDING THE ANCHORAGE TO THE FOUNDATION AND THE HARDWARE AND STRUCTURAL MEMBERS REQUIRED TO SUPPORT THE TRAFFIC APPURTENANCES, SHALL BE DESIGNED, FABRICATED, ERECTED, ASSEMBLED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIAL PROVISION "MONOTUBE BRIDGE SIGN STRUCTURE".

THE MONOTUBE BRIDGE SIGN STRUCTURE SHALL BE COMPOSED OF A SINGLE LINEAR TUBULAR HORIZONTAL OVERHEAD SPAN MEMBER SUPPORTED ON EACH END BY A SINGLE LINEAR TUBULAR POLE MEMBER.

THE DETAILS PRESENTED AND REFERRED TO ON THIS SHEET REPRESENT CONCEPTUAL DETAILS OF A SIGN STRUCTURE CONSISTANT WITH THE REQUIREMENTS IN THE SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALL DETAILS AND DIMENSIONS.

THE APPROXIMATE DIMENSIONS OF THE HORIZONTAL OVERHEAD SPAN MEMBER AND THE POLE HEIGHTS ARE SHOWN IN PLAN AND ELEVATION ON THE TRAFFIC SHEETS. THE ACTUAL SIGN STRUCTURE DIMENSIONS SHALL BE DETERMINED BY THE CONTRACTOR BASED ON A THE HORIZONTAL AND VERTICAL CLEARANCES SHOWN ON THE TRAFFIC SHEETS, A FIELD SURVEY OF THE FINISHED GRADE AT THE SITE, THE ELEVATION OF THE TOP OF THE FINISHED FOUNDATION, THE LOCATIONS OF OVERHEAD AND SUBSURFACE UTILITIES, THE LOCATION OF THE DRAINAGE FACILITIES AND NOISE BARRIER WALL LOCATIONS.

THE SIGN PANELS, INCLUDING CROWN PANELS AS APPLICABLE, SHALL BE LOCATED ON THE HORIZONTAL OVERHEAD SPAN MEMBER BASED ON THE DIMENSIONS SHOWN ON THE TRAFFIC SHEETS AND THE ACTUAL SIGN STRUCTURE DIMENSIONS. THE SIGN PANELS SHALL BE INSTALLED SYMMETRICALLY ABOUT THE CENTERLINE OF THE OVERHEAD MEMBER. THE NUMBER AND SPACING OF PANEL SUPPORT MEMBERS SHALL BE DETERMINED BY THE CONTRACTOR BASED ON THE WIDTH OF THE SIGN AND CROWN PANELS AND THE SUPPORT MEMBER SPACING PARAMETERS. SIGN PANELS SHALL BE SUPPORTED BY NO LESS THAN 3 SUPPORT MEMBERS. CROWN PANELS SHALL BE SUPPORTED BY NO LESS THAN 2 SUPPORT MEMBERS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER FIT OF THE SIGN STRUCTURES ON THE CONSTRUCTED FOUNDATIONS. PRIOR TO FABRICATION, THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS TO VERIFY ALL SIGN STRUCTURE DIMENSIONS DEPENDENT UPON THE CONSTRUCTED FOUNDATIONS. THE OVERHEAD MEMBER SHALL BE TEMPORARILY SUPPORTED, IN ORDER TO BRING ALL PLATES OF THE CONNECTIONS INTO FIRM CONTACT, WHILE THE HIGH STRENGTH BOLTS ARE INSTALLED AND TENSIONED. THE CONTRACTOR SHALL TAKE THE PROPER PRECAUTIONS TO ENSURE THE STABILITY OF ALL STRUCTURAL ELEMENTS UNTIL THE TOTAL STRUCTURE IS ERECTED.

THE COST OF THE TUBULAR STEEL MEMBERS, STRUCTURAL STEEL ROLLED SHAPES, PLATES AND BARS, HIGH-STRENGTH BOLTS AND ANCHORAGE MATERIALS, INCLUDING THE DESIGN, FABRICATION, COATING AND ERECTION, SHALL BE PAID FOR UNDER THE ITEM "MONOTUBE BRIDGE SIGN STRUCTURE". THE COST OF FOUNDATION EXCAVATION, REINFORCEMENT AND CONCRETE, INCLUDING THE DESIGN AND FABRICATION, SHALL BE PAID FOR UNDER THE ITEM "DRILLED SHAFT TRAFFIC STRUCTURE FOUNDATION".

REV.	DATE	REVISION DESCRIPTION

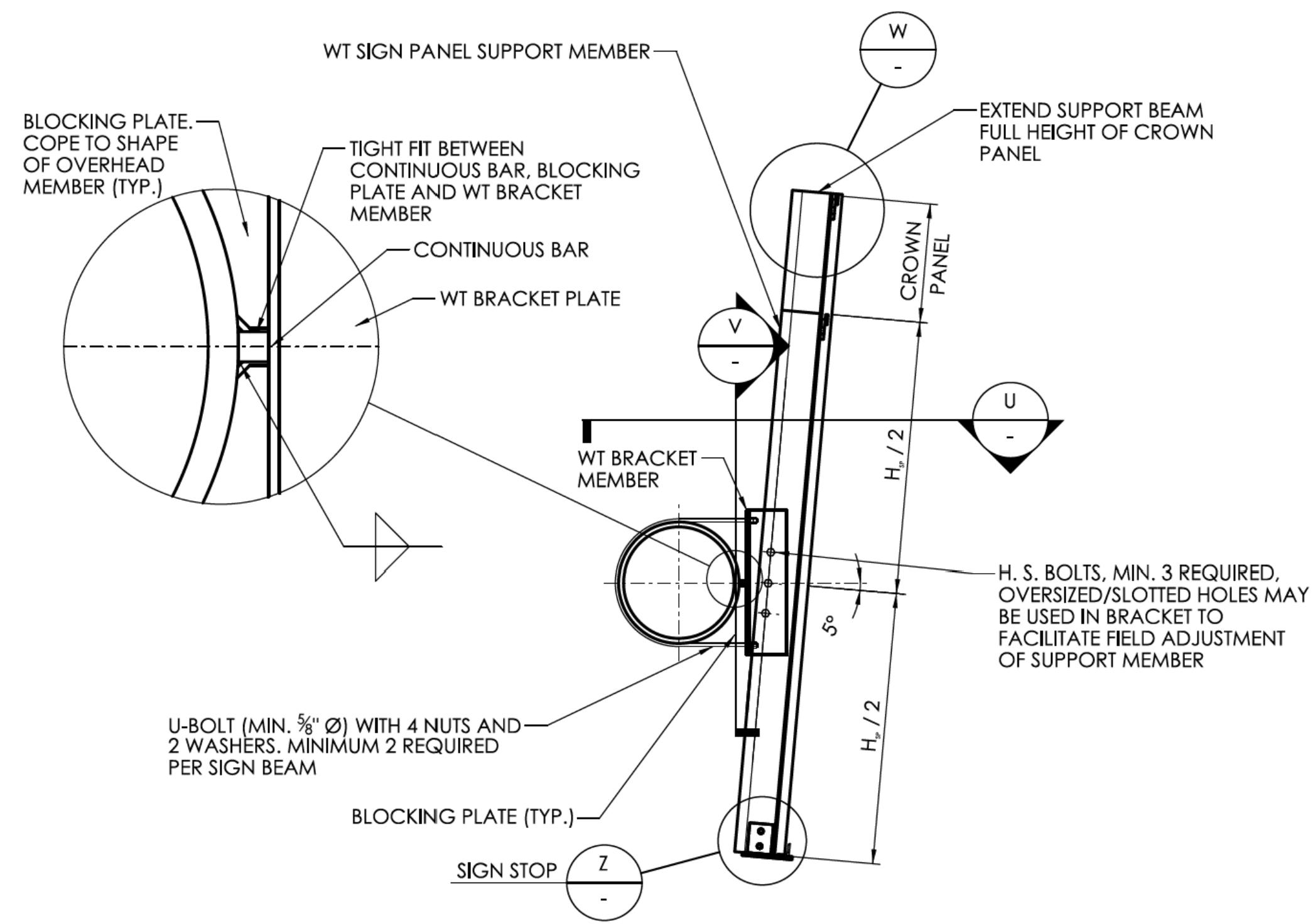


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PLOTTED DATE: 7/24/2024

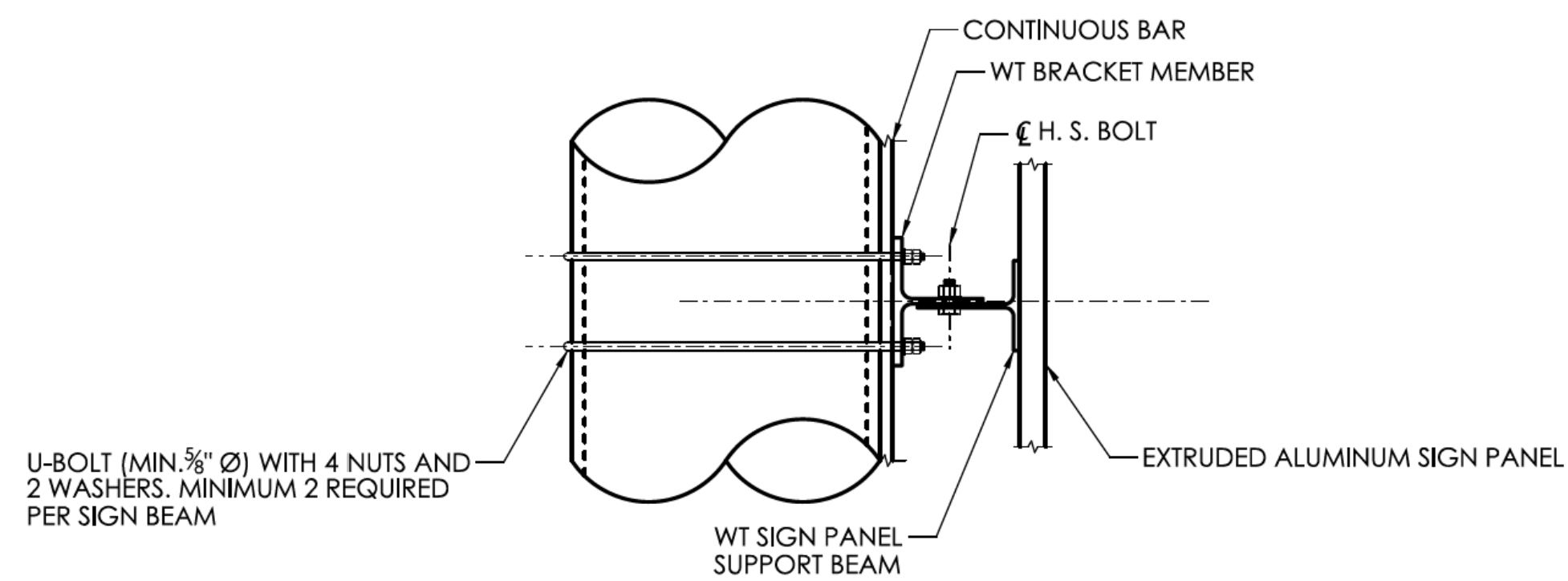
HORIZONTAL SCALE
1" = 40'



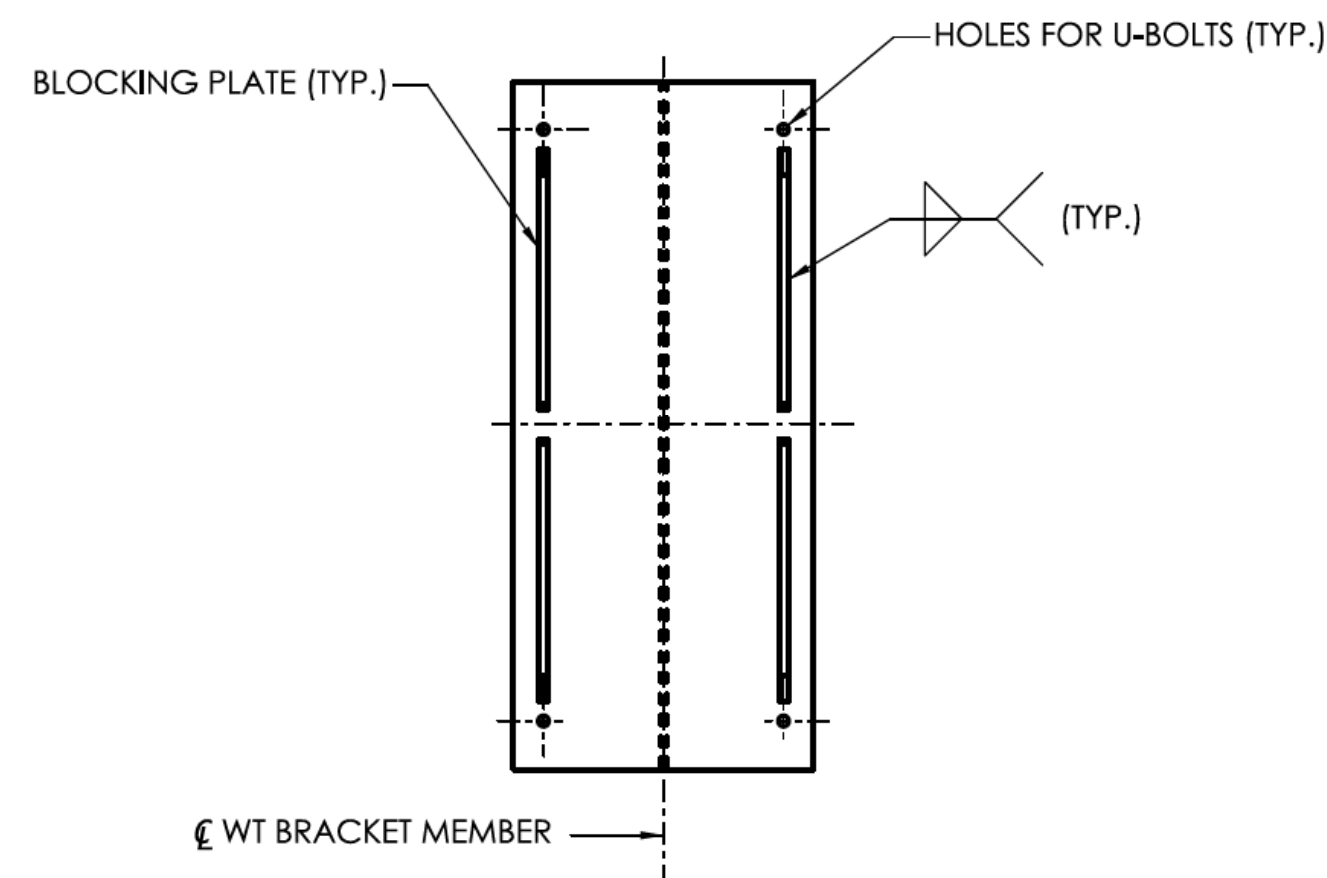
DRAWING NO.	MBS-03
SHEET NO.	05.30



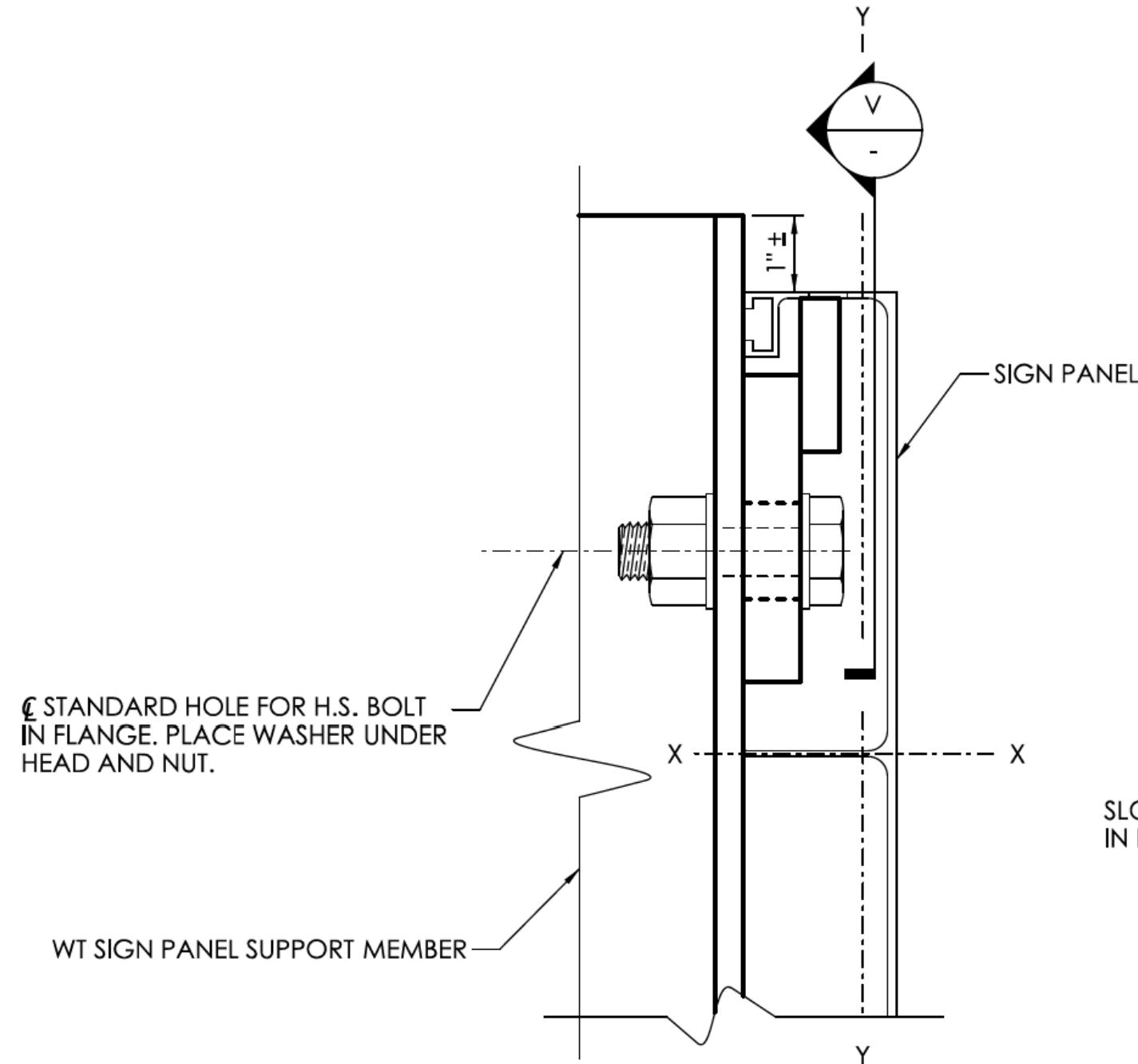
T SECTION
MBS-2 SCALE: 1/2" = 1'-0"



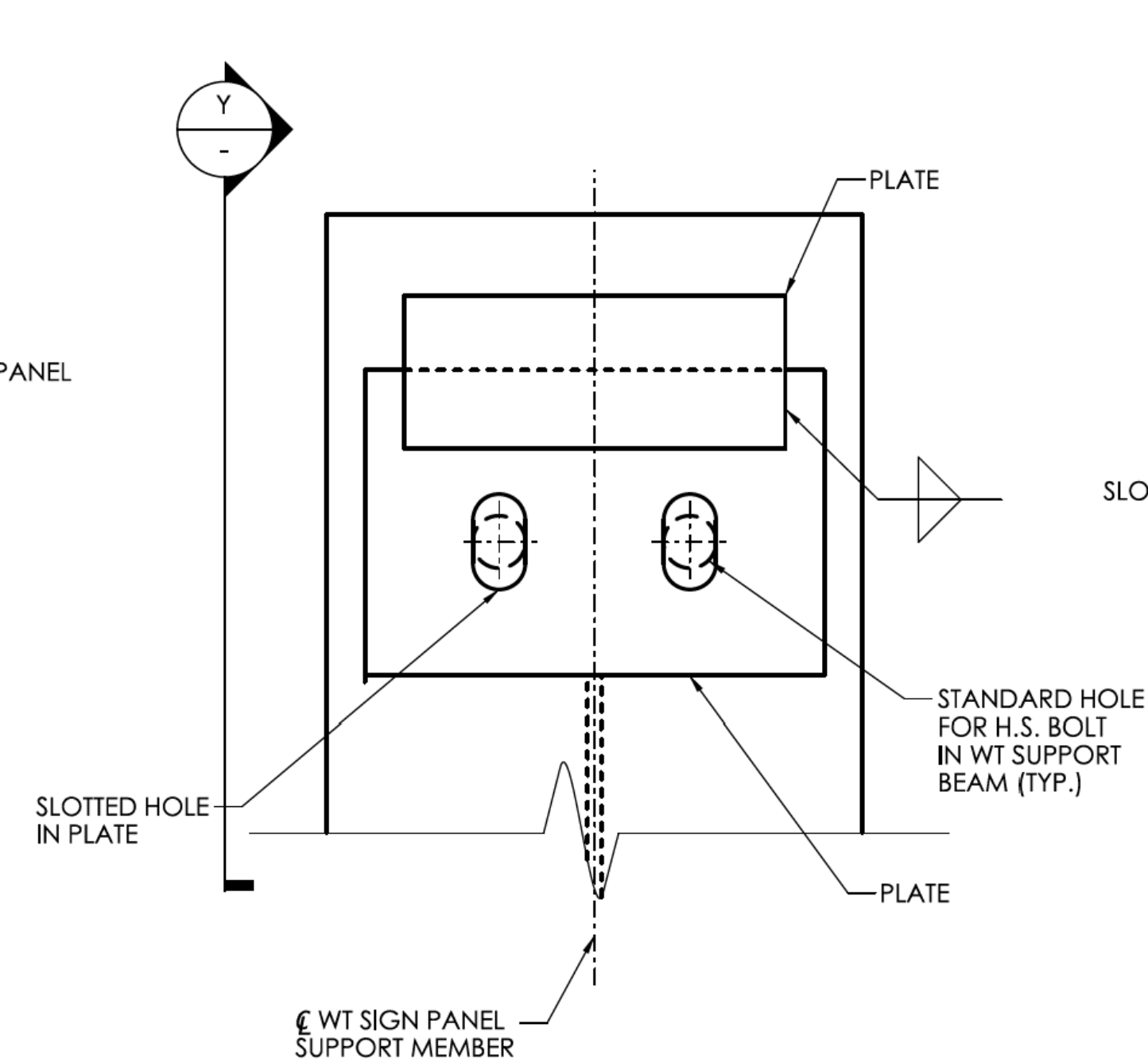
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SCALE: 1" = 1'-0"



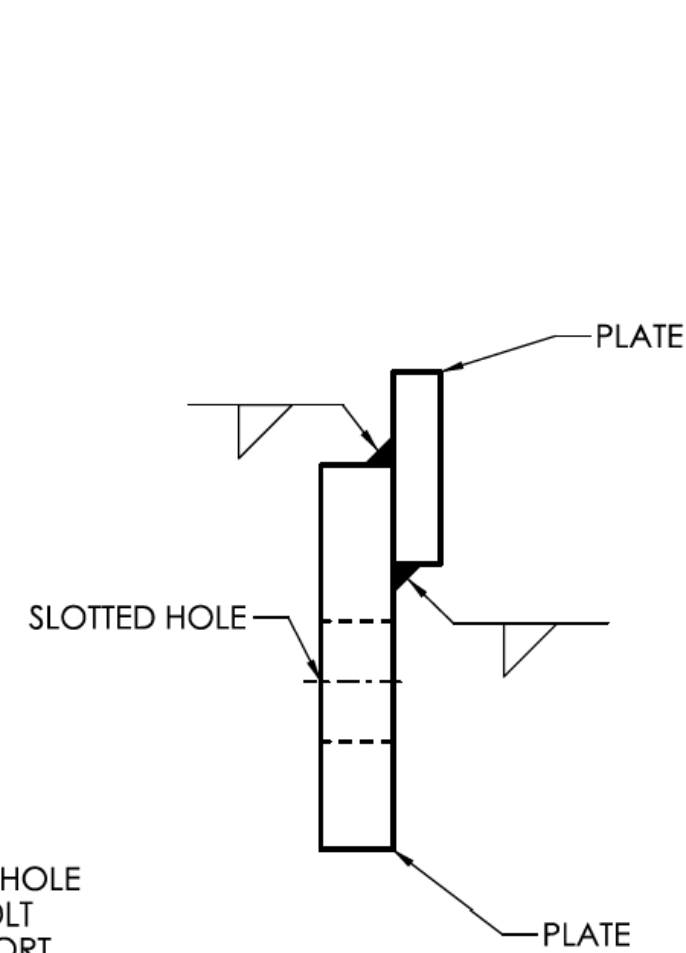
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SCALE: 1 1/2" = 1'-0"



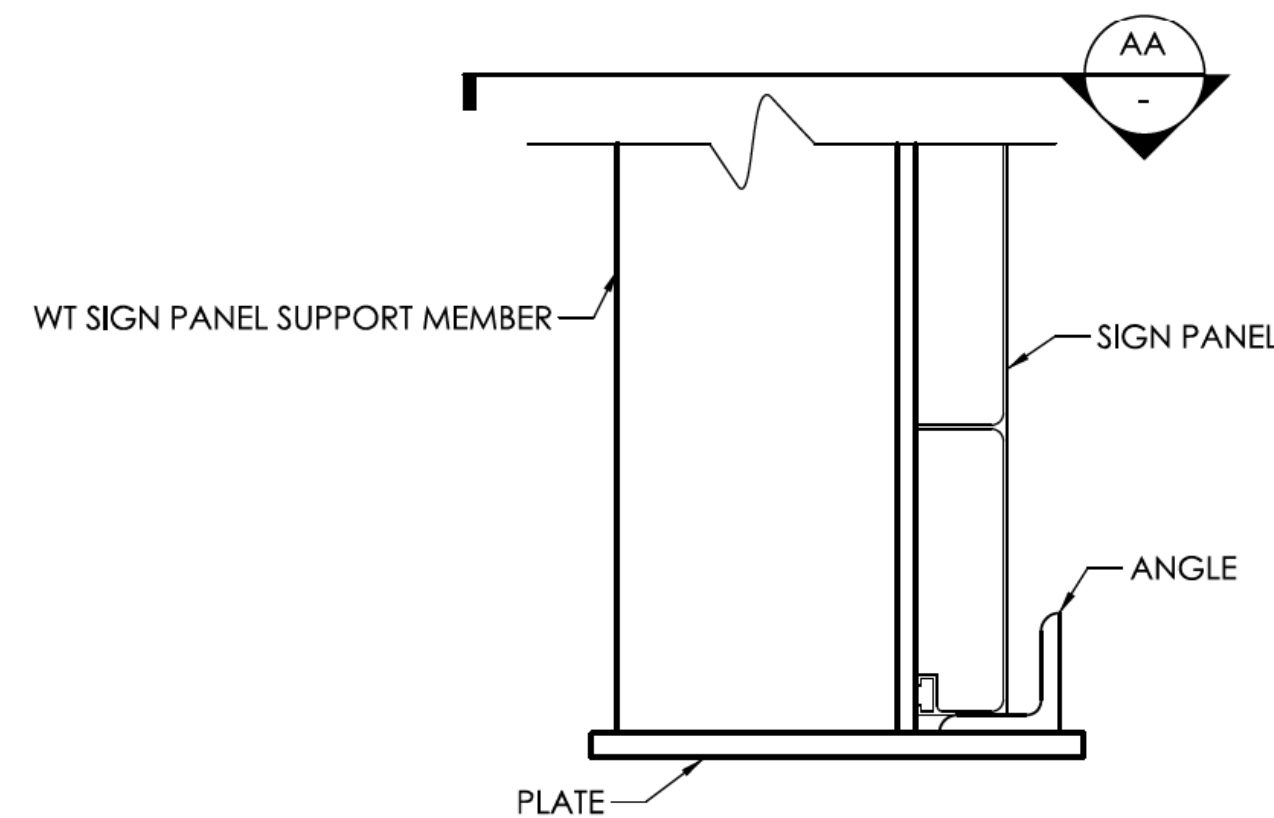
W SECTION
SCALE: 6" = 1'-0"



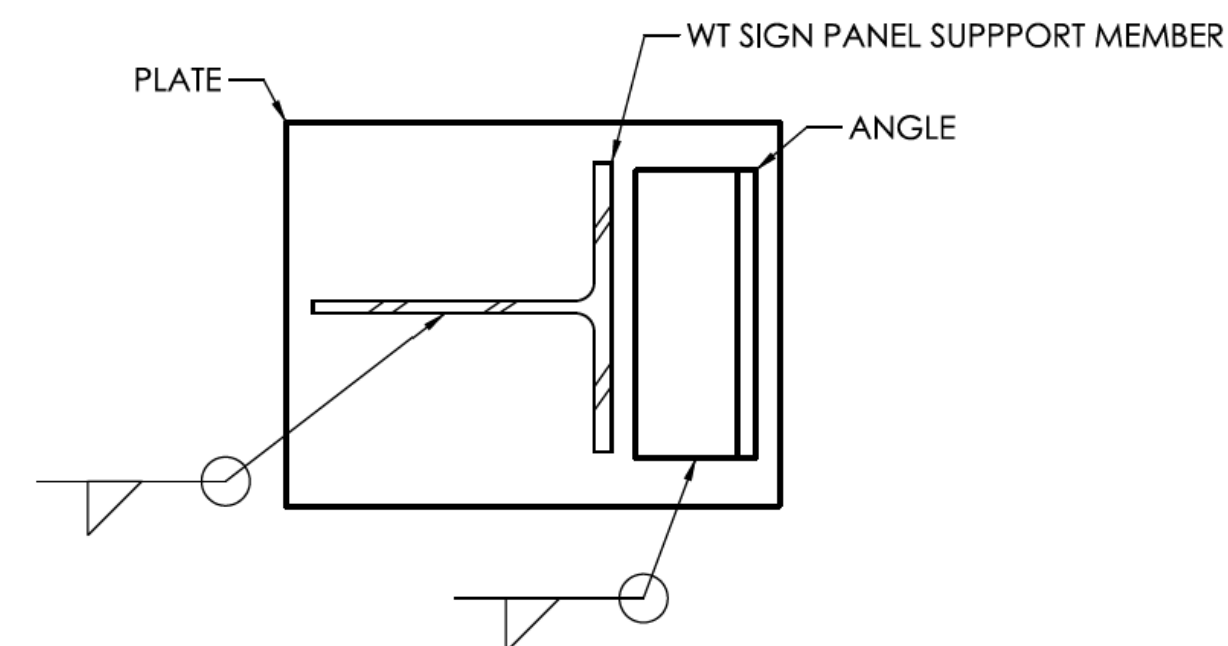
X SECTION
SCALE: 6" = 1'-0"



Y SECTION
SCALE: 6" = 1'-0"

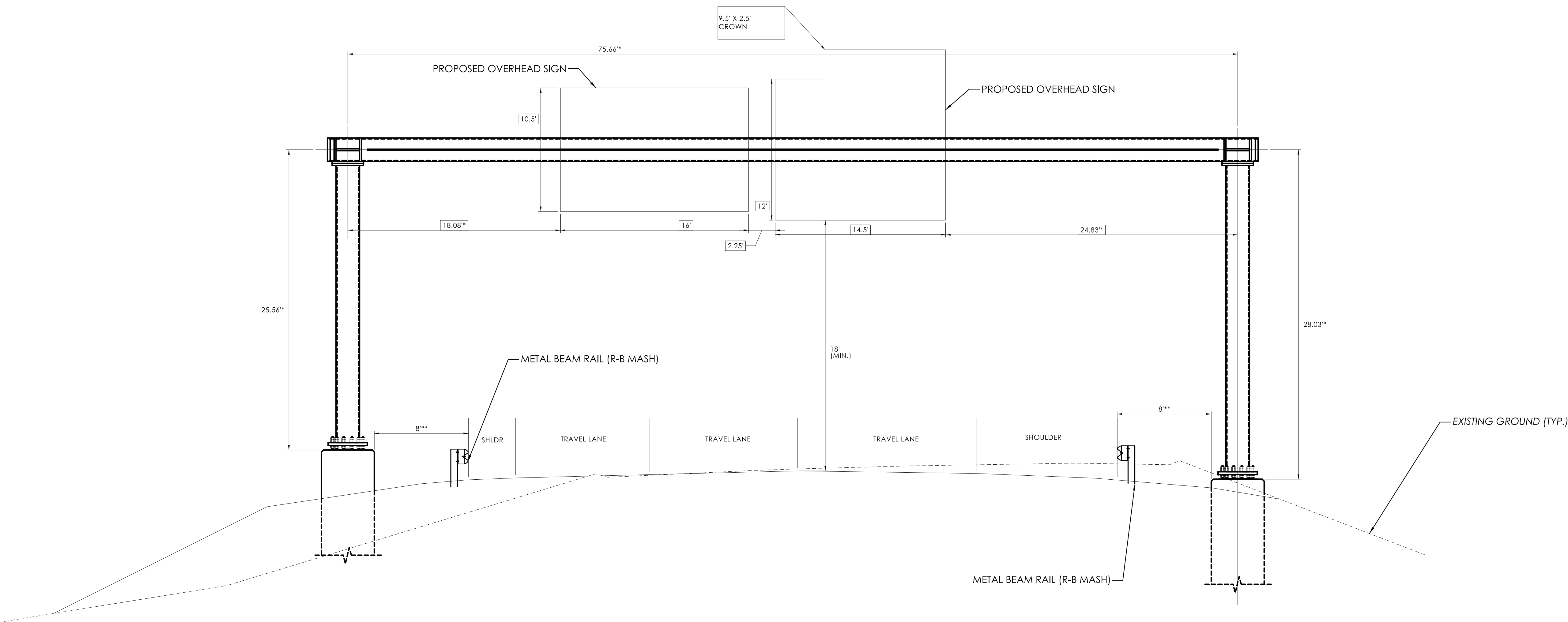


Z SECTION
SCALE: 3" = 1'-0"



AA SECTION
SCALE: 3" = 1'-0"

REV.	DATE	REVISION DESCRIPTION



MONOTUBE BRIDGE SIGN STRUCTURE: SSN 22191
2E8OFF STA. 401+00

- NOTES**
- * DIMENSIONS SHOWN WITH AN ASTERISK ARE APPROXIMATE - FOR ILLUSTRATION ONLY.
 - ** MINIMUM DISTANCE BEHIND GUIDERAIL. (MEASURED FROM THE FRONT FACE OF GUIDERAIL TO THE FACE OF FOUNDATION)

FOUNDATION NOTES

THE DRILLED SHAFT FOUNDATION SHALL BE DESIGNED, FABRICATED, AND CONSTRUCTED BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIAL PROVISION "DRILLED SHAFT TRAFFIC STRUCTURE FOUNDATION".

FOR THE DESIGN OF THE DRILLED SHAFT FOUNDATION, THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE SUBSURFACE CONDITIONS (CHARACTER OF THE SOIL AND ROCK, PRESENCE OF GROUND WATER, ETC.) IN THE LOCATION OF, ADJACENT TO AND BELOW THE SHAFT EXCAVATION. THE CONTRACTOR SHALL PERFORM A SUBSURFACE INVESTIGATION FOR EACH FOUNDATION LOCATION.

THE DESIGN OF THE FOUNDATION SHALL BE COORDINATED WITH THE SIGN STRUCTURE AND THE STRUCTURE ANCHORAGE TO ENSURE THAT THE FOUNDATION IS ADEQUATE FOR THE STRUCTURE REACTIONS AND TO AVOID CONFLICTS BETWEEN THE EMBEDDED STRUCTURE ANCHORAGE AND THE FOUNDATION REINFORCEMENT.

THE SIGN STRUCTURE SHALL NOT BE INSTALLED UNTIL BOTH THE PEDESTAL CONCRETE AND SHAFT CONCRETE HAVE ATTAINED A COMPRESSIVE STRENGTH, f_c , GREATER THAN OR EQUAL TO 4,000 PSI BASED ON PHYSICAL TESTING.

ADDITIONAL RIGID METAL CONDUITS SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.

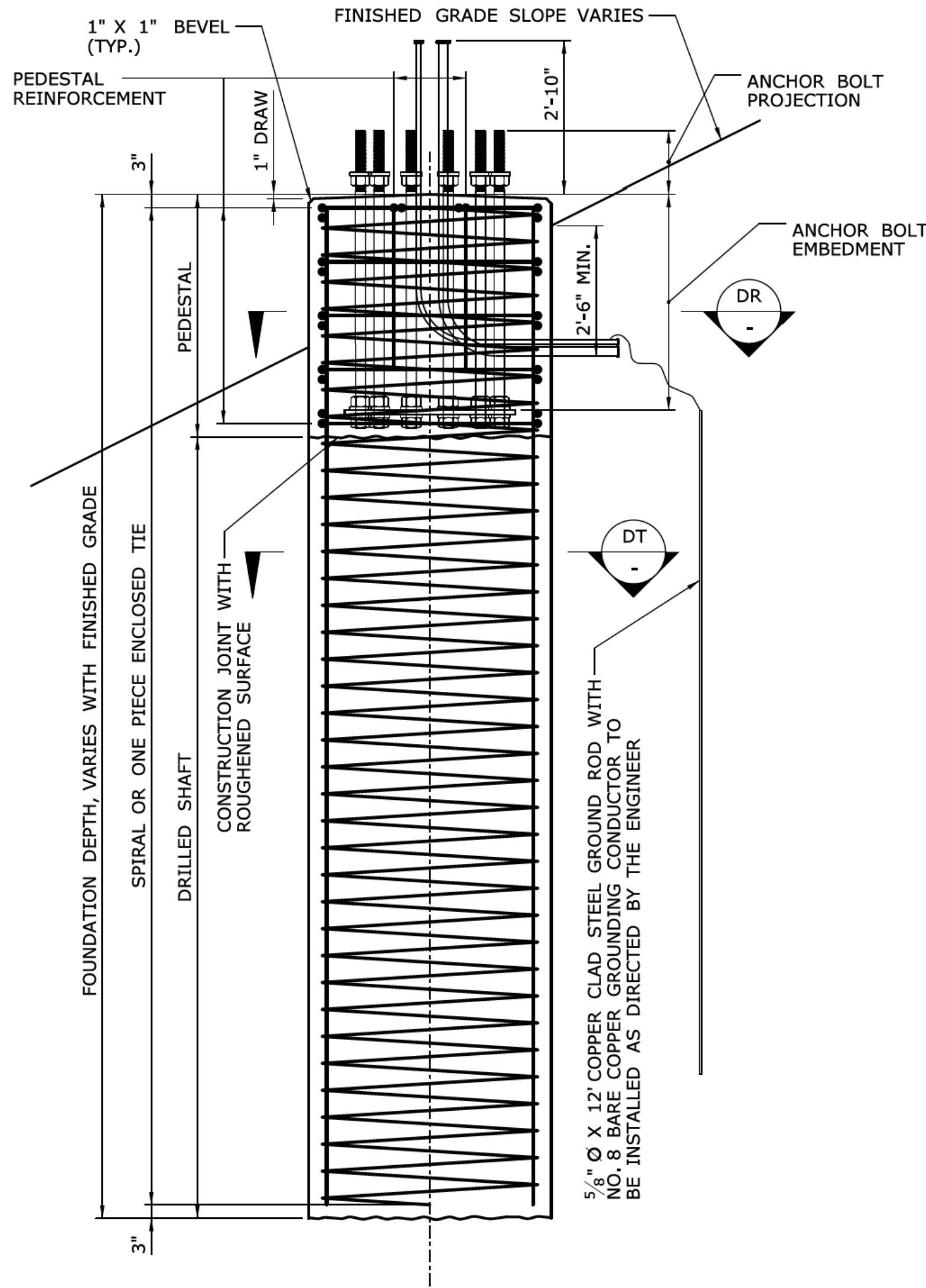
ALL EMPTY RIGID METAL CONDUITS SHALL BE CAPPED.

STAINLESS STEEL WIRE MESH SHALL BE INSTALLED TIGHT TO THE TOP OF THE FOUNDATIONS AND ATTACHED TO SIGN SUPPORT STRUCTURE BASEPLATES. THE MESH SHALL BE ATTACHED TO THE BASEPLATE WITH THE USE OF AN ADJUSTABLE STAINLESS STEEL HOSE CLAMP OF A DIAMETER THAT IS COMPATIBLE WITH THE GEOMETRY OF THE BASEPLATE.

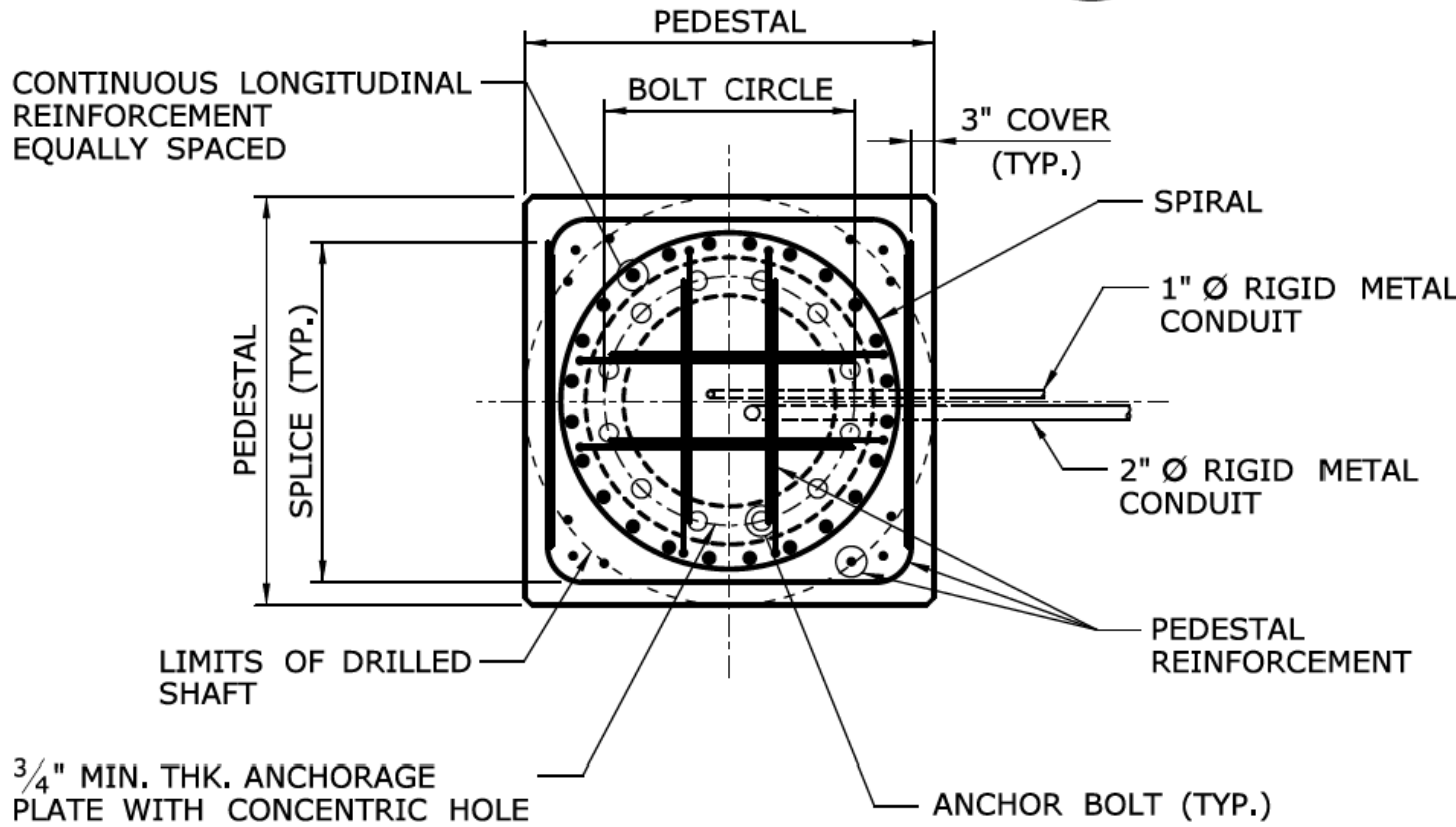
THE RIGID METAL CONDUIT SWEEPS SHALL EXTEND A MINIMUM 2'-0" FROM THE SIDE OF THE FOUNDATION AND SHALL BE PLACED A MINIMUM OF 2'-6" BELOW FINISHED GRADE.

THE NO. 8 AWG BARE COPPER CONDUCTOR SHALL BE CONNECTED TO THE EXTERNAL GROUND ROD USING A GROUNDING CLAMP APPROVED FOR DIRECT BURIAL.

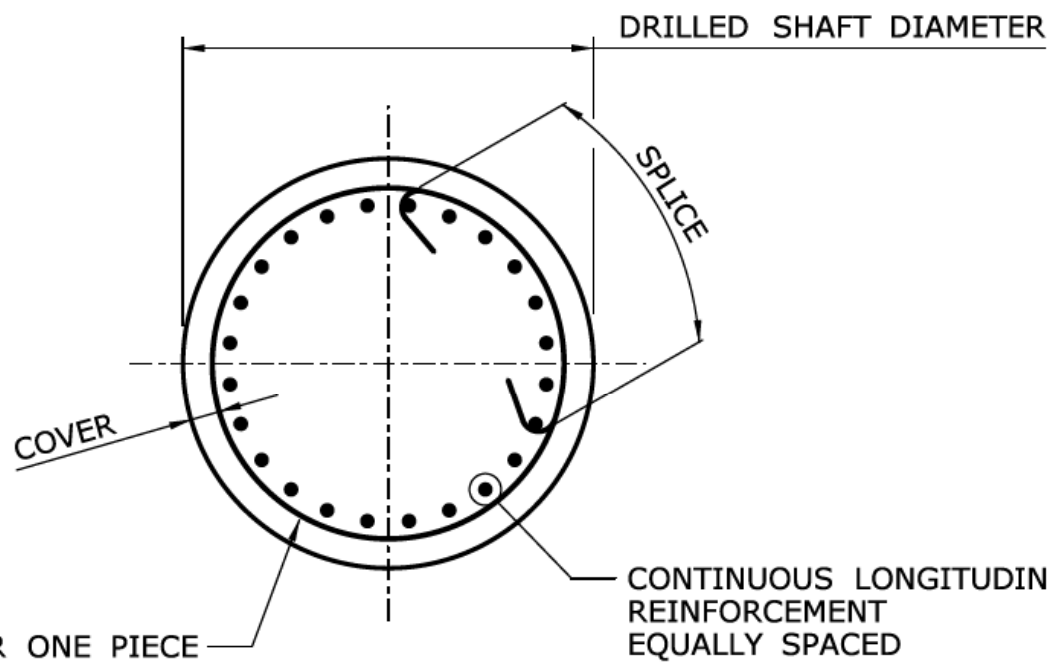
THE COST OF FOUNDATION EXCAVATION, REINFORCEMENT AND CONCRETE, INCLUDING THE DESIGN AND FABRICATION, SHALL BE PAID FOR UNDER THE ITEM "DRILLED SHAFT TRAFFIC STRUCTURE FOUNDATION".



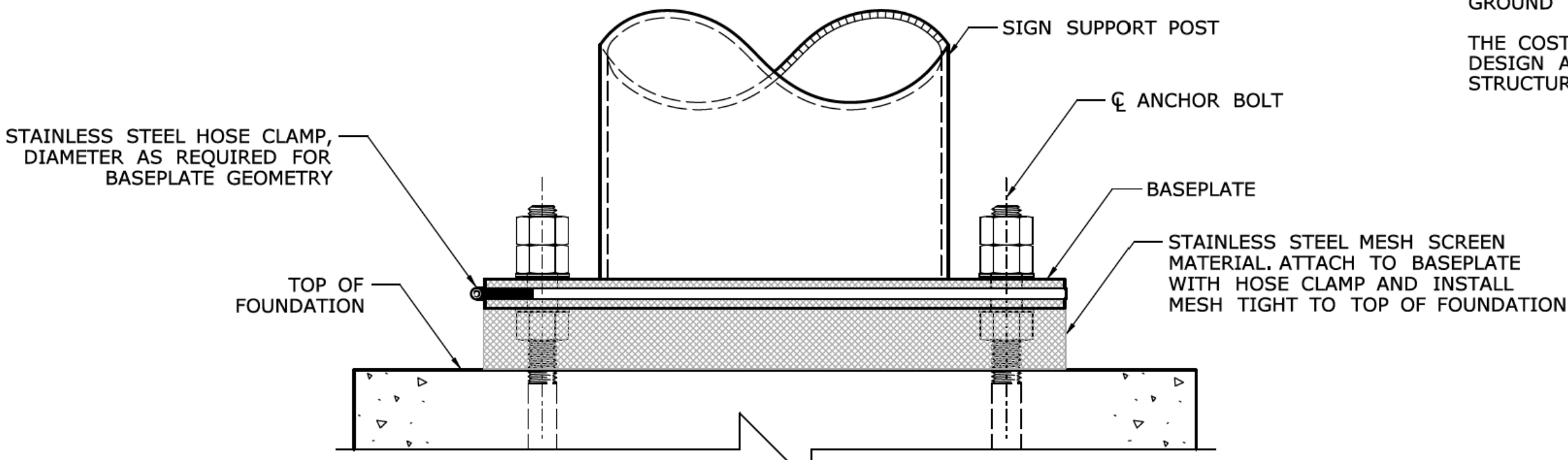
FOUNDATION IN EARTH DS
SCALE: 1/2" = 1'-0"



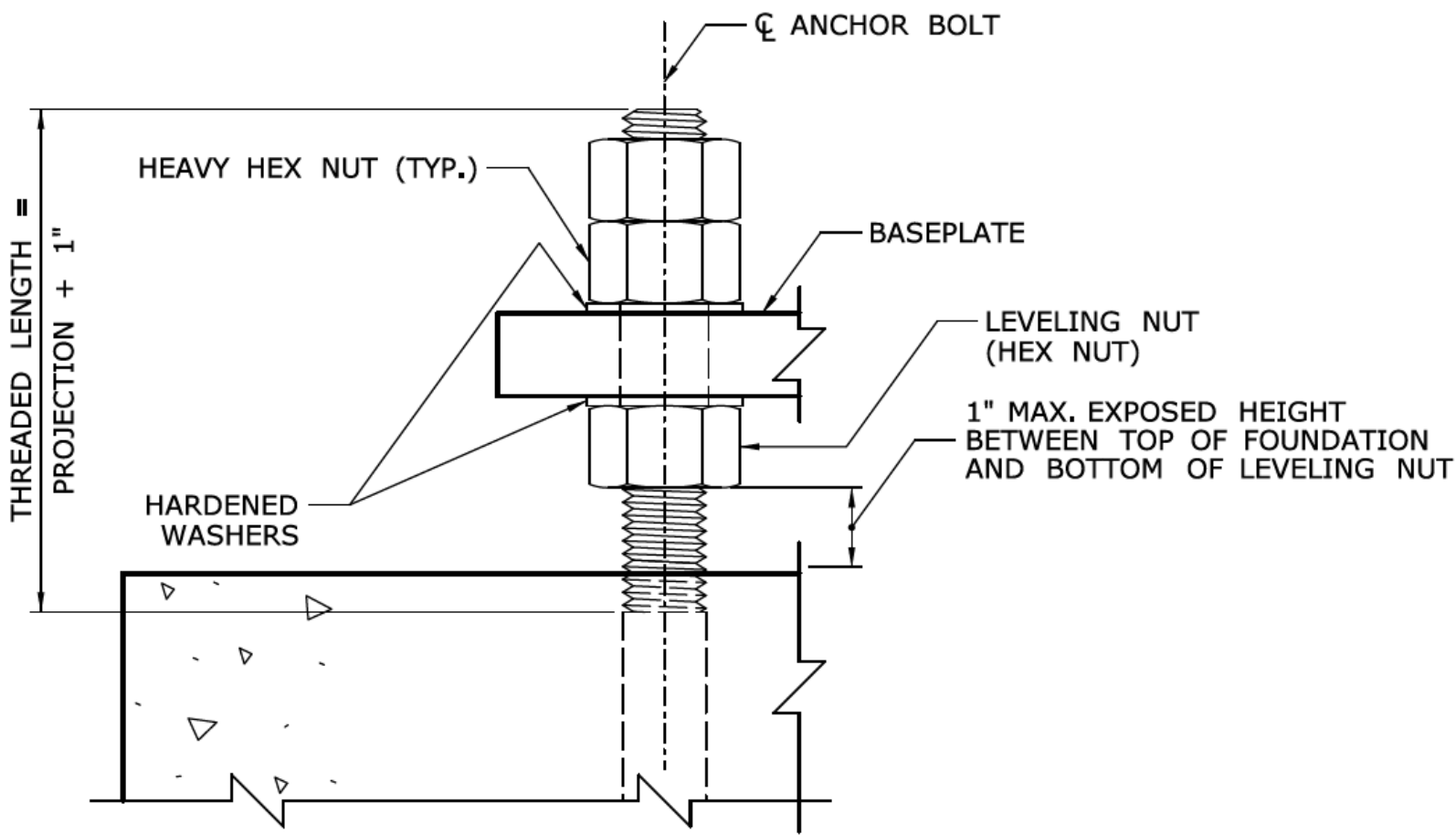
SECTION DR
SCALE: 1/2" = 1'-0"



SECTION DT
SCALE: 1/2" = 1'-0"



SCREEN AT BASEPLATE DETAIL
SCALE: 1 1/2" = 1'-0"



BASEPLATE CONNECTION DETAIL
SCALE: 3" = 1'-0"

REV.	DATE	REVISION DESCRIPTION

FEEDER SIZE SCHEDULE					
(FEEDER IS NOTED BY A)					
TAG	PHASE	NEUTRAL	GROUND	INSULATION	CONDUIT SIZE (MIN.)
A	2#10		1#10	PV OR USE-2	3/4"
B	3#6	1#6	1#10	THHN	1"
C	1#12	1#12	1#12	THHN	3/4"
D	3#600	1#600	1#3	XHHW-2	4"
E	3#8	1#8	1#10	THHN	3/4"

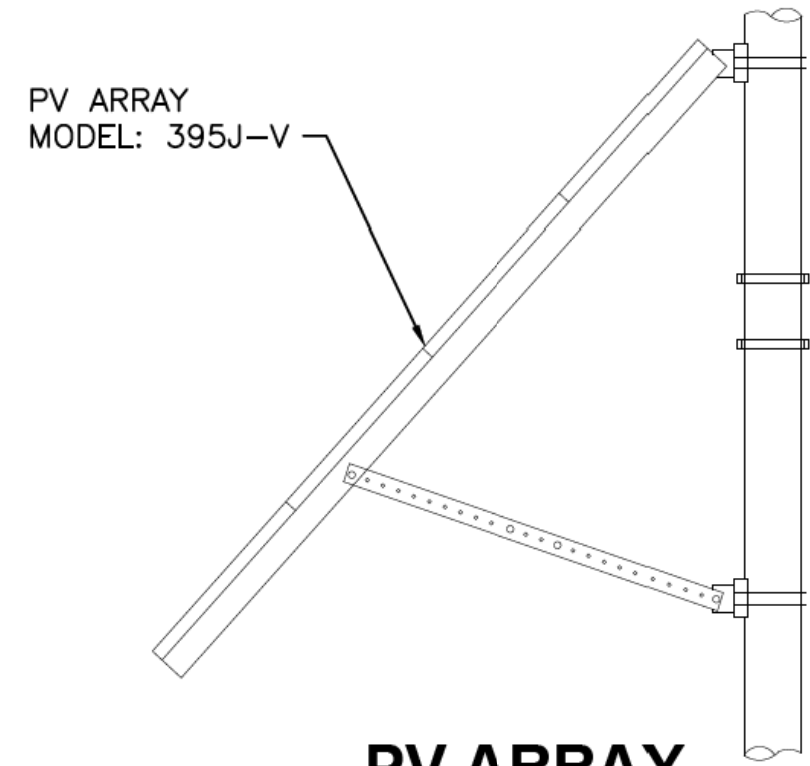
* CONDUCTOR SIZES ARE BASED ON 60°C TEMPERATURE RATING FOR OVERCURRENT DEVICES 100A AND SMALLER, AND 75°C TEMPERATURE RATING FOR OVERCURRENT DEVICES LARGER THAN 100A. NOT MORE THAN THREE CURRENT CARRYING CONDUCTORS SHALL BE PROVIDED IN RACEWAY, CABLE OR EARTH (DIRECT BURY), BASED ON AMBIENT TEMPERATURE OF 30°C, UNLESS OTHERWISE NOTED.

FEEDER SIZE SCHEDULE NOTES:

- FEEDER SIZES ARE BASED ON COPPER CONDUCTORS (TYPE THHN/THWN FOR CONDUCTORS SMALLER THAN #3, AND TYPE XHHW FOR CONDUCTORS #3 AND LARGER).
- PROVIDE 4-WIRE FEEDER UNLESS DEVICE SERVED DOES NOT HAVE PROVISIONS FOR A NEUTRAL CONNECTION.

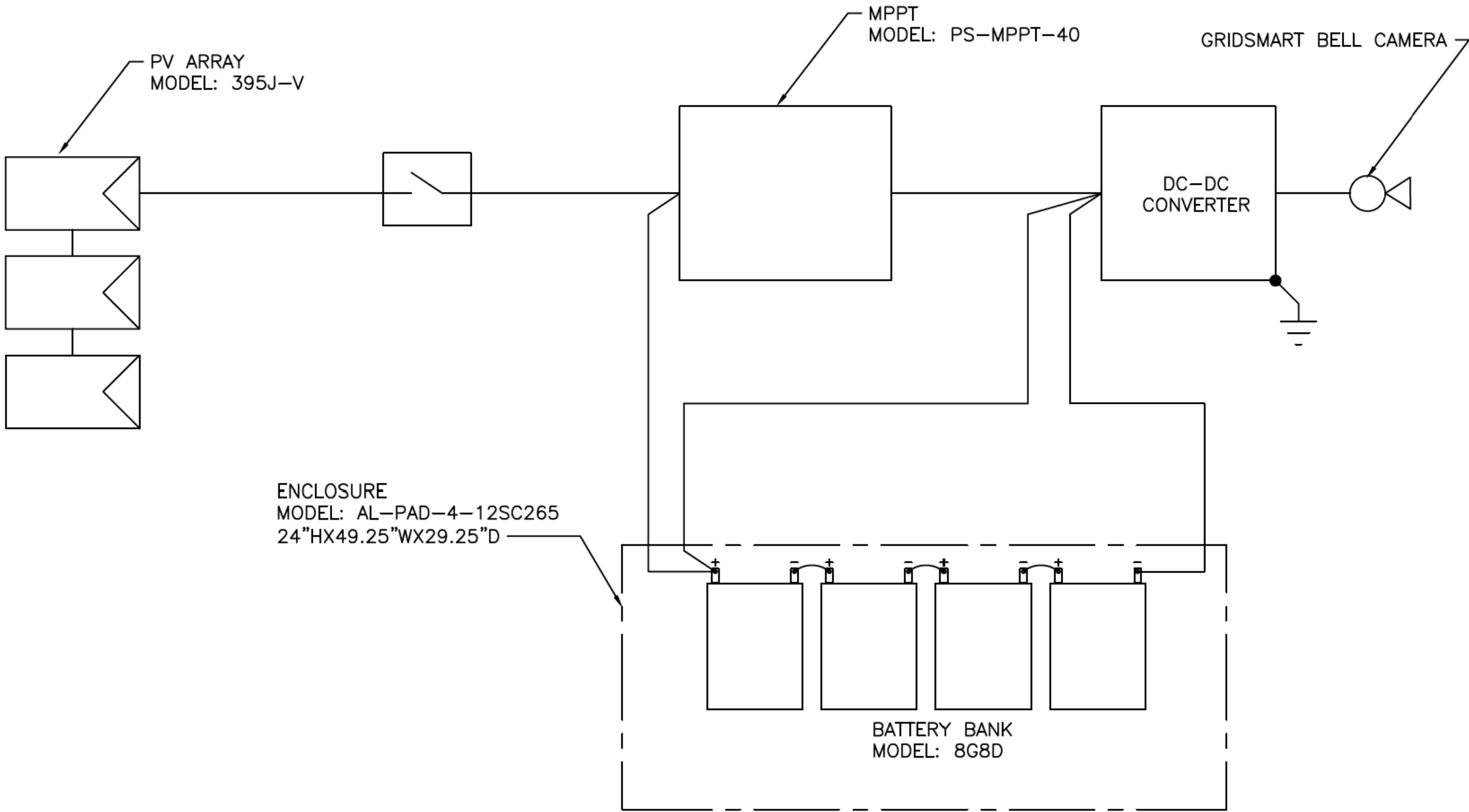
DESIGN CRITERIA
WIND SPEED: 135MPH
EXPOSURE: C
MAX HEIGHT: 30' ABOVE GROUND
TILT ANGLE: 55° S

PV ASSEMBLY ON POLE



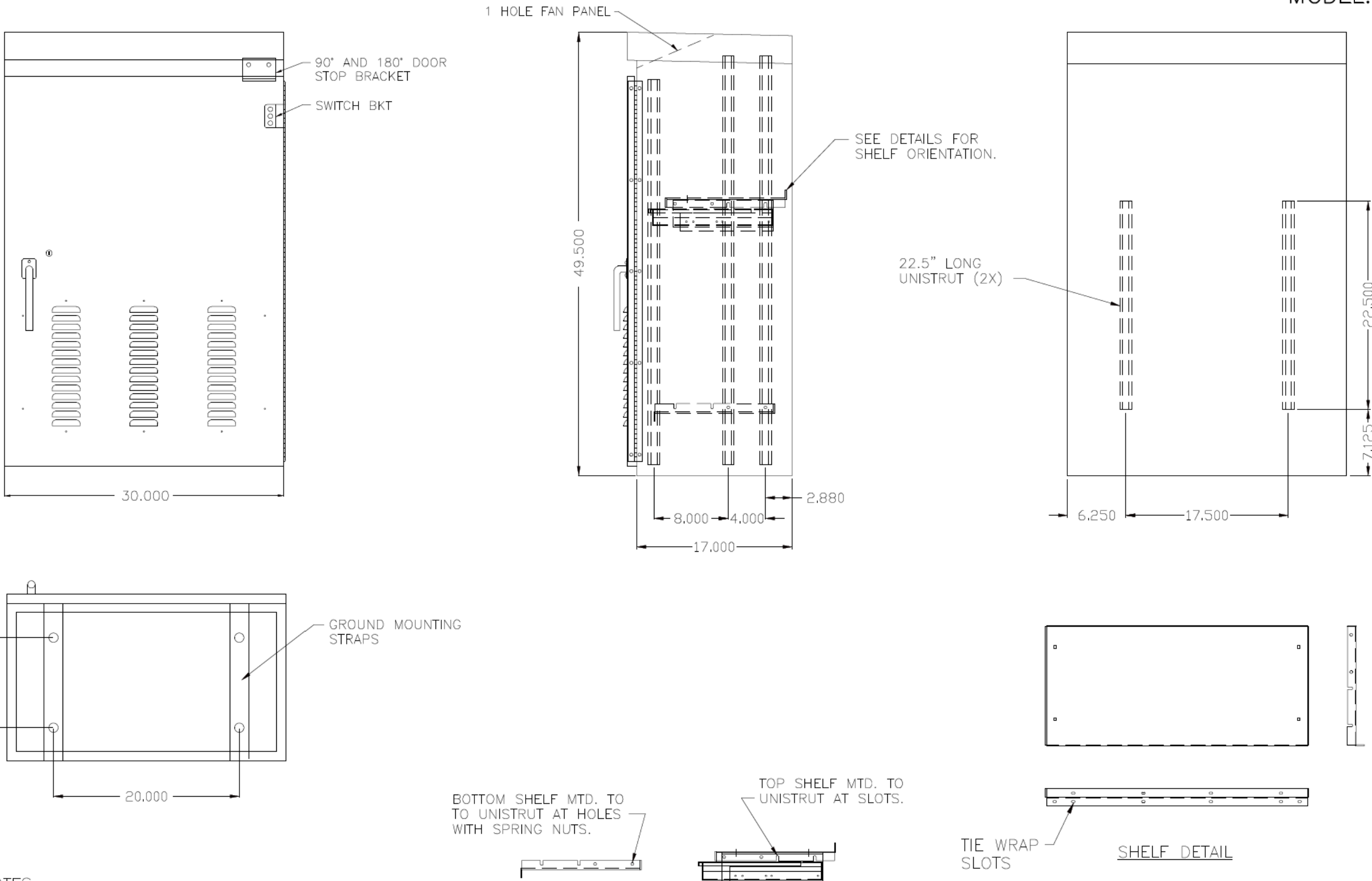
PV ARRAY

MODEL: 395J-V



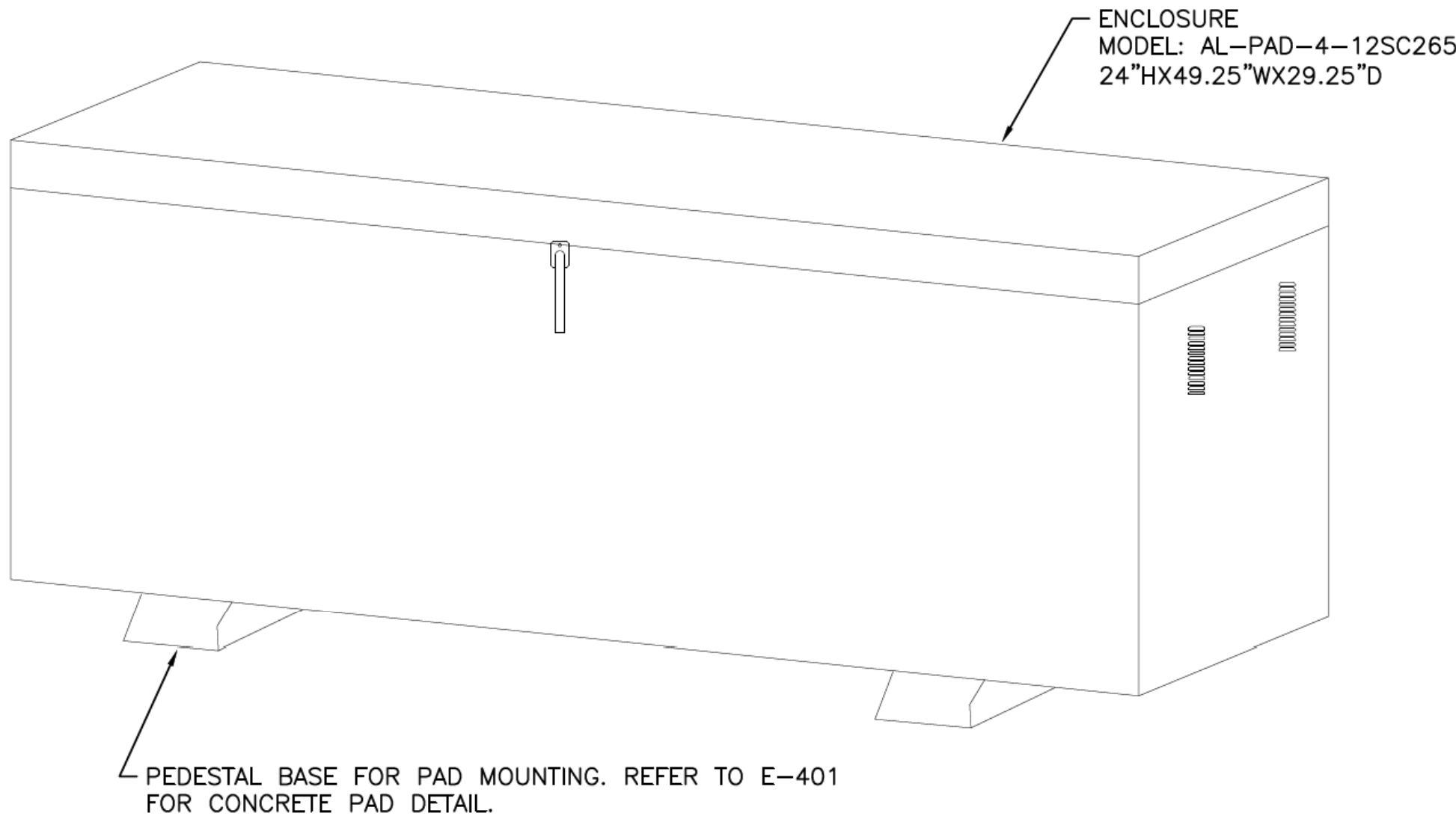
ONE-LINE DIAGRAM

- 1,565 WH/DAY BASED ON TOTAL LOAD
- BATTERIES RATED FOR FIVE (5) DAYS WITHOUT DIRECT SUNLIGHT
- CONTACT SOLAR ELECTRIC SUPPLY, INC. FOR THE MOST RECENT MODEL NUMBERS AND ORDER INFORMATION. CONTACT PERSON IS: CHRISTOPHER PINELLI, SOLAR ELECTRIC SUPPLY, INC, CPINELLI@SOLARELECTRICSUPPLY.COM, 720-855-8601



POLE MOUNTED ENCLOSURE - M TRAFFIC CABINET

MODEL: 006986

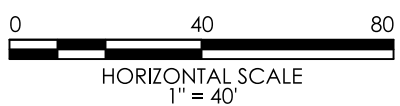


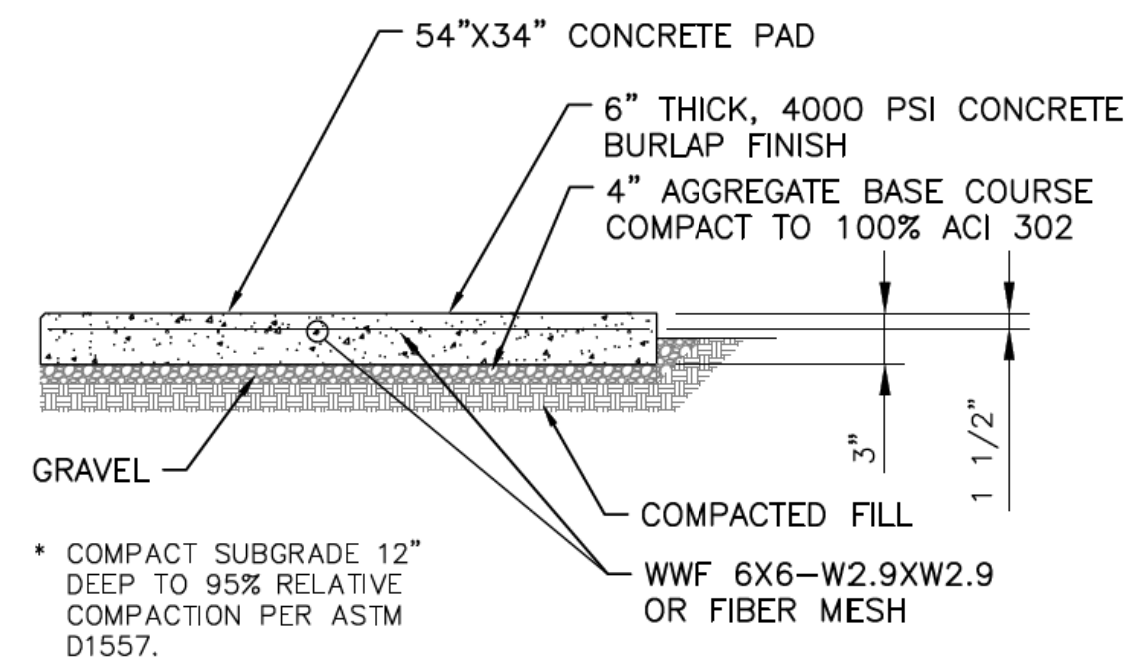
PAD MOUNT ENCLOSURE

MODEL: AL-PAD-4-12SC265

REV	DATE	REVISION DESCRIPTION

SIGNATURE/
BLOCK:





CONCRETE PAD DETAIL

Diagram illustrating the dimensions and components of a square base plate:

- BOLT SPACING (SEE TABLE):** Dimension across the top of the plate.
- BOLT CIRCLE DIAMETER (SEE TABLE):** Dimension across the circle defined by the bolt locations.
- 2" RMC:** Dimension indicating the thickness of the plate.
- 26":** Dimension across the side of the plate.
- 3/4" PVC GROUND ROD SLEEVE:** Dimension indicating the diameter of the sleeve.

INSULATED BONDING BUSHING

45° BEVEL

2"

3"

1-1/2"

#8 GROUND WIRE CONNECTION TO GROUND ROD AND TRANSFORMER BASE. GROUND ROD TO EXTEND 2" ABOVE TOP OF FOUNDATION.

GRADE LINE ALL SIDES

18" RADIUS

22"

2" RMC

ANCHOR BOLTS WITH NUTS, SEE DIMENSION TABLE.

4"

3/4" PVC GROUND ROD SLEEVE.

CLASS "F" CONCRETE

5/8"x10' GROUND ROD

72"

26"

1-1/2"

1. ALUMINUM ALLOY POLE SHALL BE 6063, T6 TEMPER.
2. BOLT CIRCLE SHOWN IS FOR TRANSFORMER BASE BOTTOM.
3. POLE SHALL BE DESIGNED TO AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" FOR 120 M.P.H. WINDS.
4. WELDING DESIGN AND FABRICATION SHALL CONFORM TO THE LATEST EDITION OF THE ANSI/AWS D1.2, STRUCTURAL WELDING CODE—ALUMINUM.
5. FOR BASE CONNECTION WELDS, FABRICATION INSPECTION AND TESTING SHALL BE PERFORMED AS NECESSARY PRIOR TO ASSEMBLY, DURING ASSEMBLY, DURING WELDING, AND AFTER WELDING, TO ENSURE THAT MATERIALS AND WORKMANSHIP MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. FABRICATION INSPECTION AND TESTING IS THE RESPONSIBILITY OF THE CONTRACTOR. VERIFICATION INSPECTION AND TESTING IS THE PREROGATIVE OF THE ENGINEER (CONNDOT).
6. NON-DESTRUCTIVE TESTING FOR ALUMINUM SHALL BE AS FOLLOWS: A RANDOM 25% OF ALL BASE CONNECTION WELDS SHALL BE INSPECTED IN ACCORDANCE WITH ASTM E-165 STANDARD PRACTICE FOR LIQUID PENETRANT INSPECTION METHOD.

DESIGNER/DRAFTER: N BROWN CHECKED BY: C. VAN ZANTEN



DRAWING NO.	MBS-02
SHEET NO.	05.35

Appendix D: CTDOT MS4 Project Design Maximum Extent Practical Worksheet

**CTDOT MS4 Project Design
Maximum Extent Practicable (MEP) Worksheet**

Section 1: Project Information

Project Number: 0053-0196

Title/Description: Route 2 Lane Modifications Exit 6 to Exit 8

Location: Glastonbury

Section 2: Existing Conditions

EC1	Total Project Area	11.11 acres		
EC2	Pre-construction Total Impervious Area	7.55 acres		
EC3	Pre-Construction Disconnected Impervious Area	0.94 acres		
EC4	Pre-construction DCIA for the Project (<i>EC2 minus EC3</i>)	6.61 acres	59.50 % (EC4/EC1)	
EC5	Soil Infiltration Potential Data Source: ☒ Existing Report / Soils Map ☐ Field Verified	☒ Good/Fair	☐ Poor	☐ Mixed
EC6	Depth to Maximum Groundwater	☒ TBD	_____ to _____ ft below grade	
EC7	Depth to Bedrock	☒ TBD	_____ to _____ ft below grade	
EC8	Aquifer Protection Area? (from PNDF)	☐ Yes	☒ No	
EC9	MS4 Priority Area? (from PNDF)	☒ Yes (See Below)	☐ No	
Check All That Apply ☒ Urbanized Area ☒ DCIA >11% ☐ Impaired Waterbody (See Below)				
Select All Impairments That Apply				
EC10	Contamination known or suspected to be present? (From Environmental Compliance)	☐ Yes	☒ No	
EC11	Adjoining DOT ROW beyond project limits available for stormwater quality management	17.78 acres		

NOTES:

Worksheet users should refer to the current *CT DOT MS4 Project Design MEP Worksheet V4 Instructions*

Reference the CT DEEP Stormwater Quality Manual (SWQM) for design and the New England Stormwater Retrofit Manual for Crediting

CTDOT MS4 Design MEP Worksheet Version 4 Revised 2/15/2024

Page 1 of 3

**CTDOT MS4 Project Design
Maximum Extent Practicable (MEP) Worksheet**

Section 3: Designed Conditions

Section 3A: Document Water Quality Volume (WQV) Retained and/or Treated (ac-ft)

Water Quality Volume Documentation			30% Design	60% Design	90% Design	FDP
DC1	WQV design goal	☐ Full ☒ 1/2-WQV (Full = EC4 % ≤ 40%)	0.421 ac-ft ☐ TBD	0.421 ac-ft	.421 ac-ft	.421 ac-ft
DC2	WQV goal retained (refer to page 3)		.28 ac-ft	.28 ac-ft	.28 ac-ft	.28 ac-ft
DC3	WQV goal treated (refer to page 3)		.28 ac-ft	.28 ac-ft	.28 ac-ft	.28 ac-ft

Did the Project Retain and/or Treat the Entire WQV Goal? ☒ Yes ☐ No

Section 3B: Document Changes in Directly Connected Impervious Area (DCIA) Pre to Post Construction (acres)

DCIA Documentation		30% Design	60% Design	90% Design	FDP
DC4	Post-construction Total Impervious Area	8.01 ac. ☐ TBD	8.01 ac.	8.01 ac.	8.01 ac.
DC5	Post-construction DCIA before new BMPs	7.07 ac. ☐ TBD	7.07 ac.	7.07 ac.	7.07 ac.
DC6	DCIA Disconnected by new BMPs (from Pg 3)	4.19 ac. ☐ TBD	4.19 ac.	4.19 ac.	4.19 ac.
DC7	Final Post-construction DCIA (DC5 minus DC6)	2.88 ac. ☐ TBD	2.88 ac.	2.88 ac.	2.88 ac.
DC8	Pre-construction DCIA (refer to EC4 from Pg 1)	6.61 ac.	6.61 ac.	6.61 ac.	6.61 ac.
DC9	Change in DCIA from pre- to post-construction (DC7 minus DC8) Can be positive (DCIA gained) or negative (DCIA lost)	-3.73 ac. ☐ TBD	-3.73 ac.	-3.73 ac.	-3.73 ac.
Date completed		4/10/2024	4/10/2024	7/15/2024	7/15/2024
Completed by (initials)		TGC	TGC	TGC	TGC
Reviewed by (initials)		LRC	LRC	LRC	LRC

NOTES:

The project is adding 0.46 acres of new impervious area compared to the pre-construction condition, but 4.19 acres are being disconnected via the removal of curbing resulting in a net decrease of DCIA of 3.73 acres.

Section 4: Stormwater BMP Selection Summary											
Design Phase ☐30%☐60% ☐90%☒FDP	BMP Type	WQV Retained* (ac-ft)	WQV Treated* (ac-ft)	DCIA Captured by BMP (ac)	Runoff Depth from DCIA Captured by BMP (in)	HSG Soil Type	DCIA Disconnection Credit (%)**	DCIA Disconnection Credit (ac)	(TP) reduction %**	(TSS) reduction %**	(TN) reduction %*
BMP Category											
Natural Dispersion	Curbing Removal	0.28	0.28			B		4.19			
TOTAL		0.28	0.28					4.19			
		To Row DC2	To Row DC3					To Row DC6			
Describe Site Constraints Limiting BMP Implementation if applicable:											
Other Notes:											

* List the amount of the WQV the BMP is designed to retain or treat.

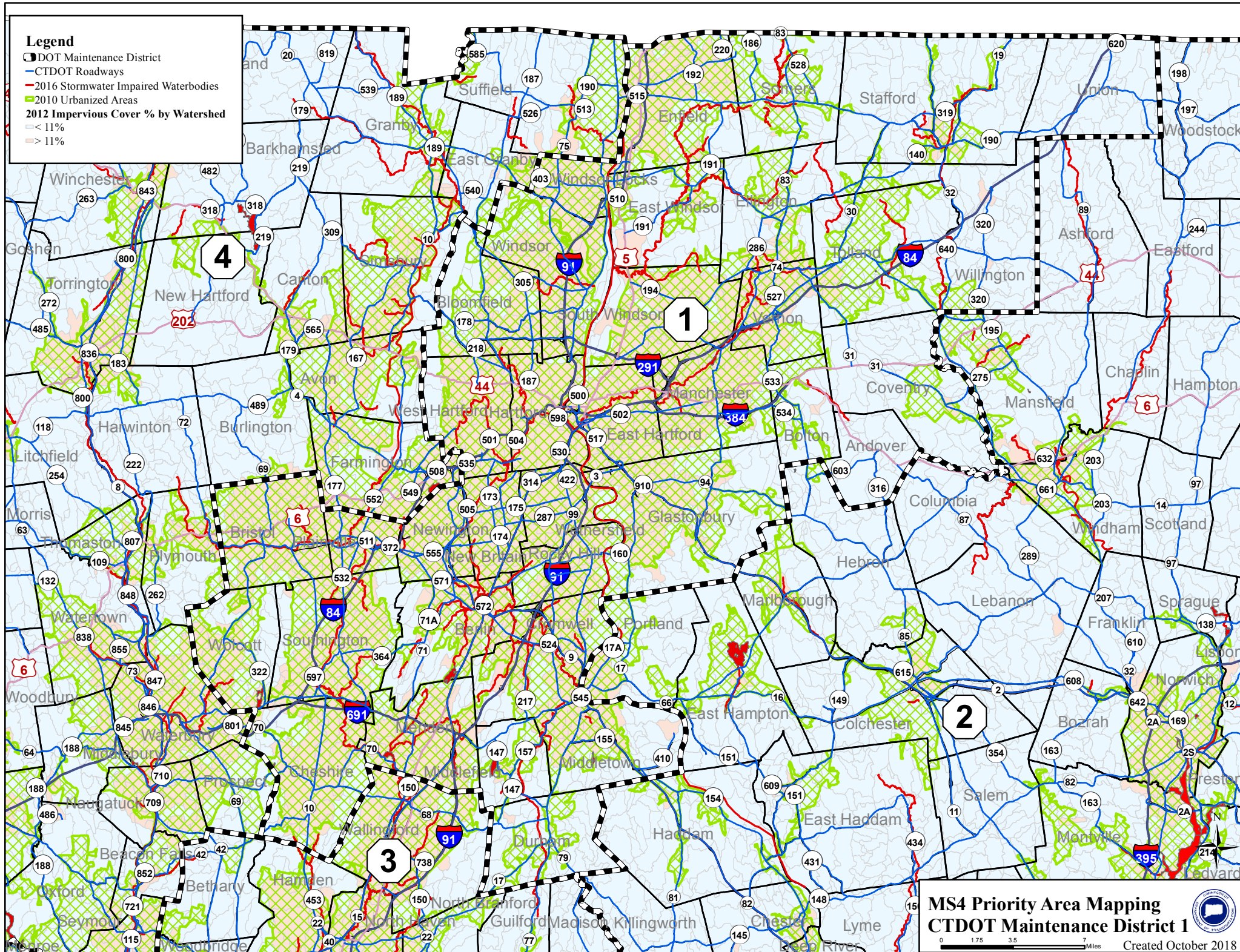
** Refer to the CT DEEP Stormwater Quality Manual (SWQM) [Stormwater Manual \(ct.gov\)](#) and New England Stormwater Retrofit Manual [Stormwater Retrofit Manual \(snepnetwork.org\)](#) to determine disconnection and pollutant removal percentages. BMPs should be designed to meet specific TP, TN and TSS pollutant reductions to the maximum extent practicable when the entire WQV cannot be retained. Pollutant Reduction Targets are: New Development TP 60%, TN 40%, TSS 90%. Redevelopment TP 50%, TN, 30% TSS 80%. (Page 48 of the SWQM)

CTDOT MS4 Design MEP Worksheet Version 4 Revised 2/15/2024

Page 3 of 3

Legend

- DOT Maintenance District
- CTDOT Roadways
- 2016 Stormwater Impaired Waterbodies
- 2010 Urbanized Areas
- 2012 Impervious Cover % by Watershed
 - < 11%
 - > 11%



AQUIFER PROTECTION AREAS

Glastonbury, CONNECTICUT

LEGEND

- Level A Aquifer Protection Area (Final Adopted)
- Level A Aquifer Protection Area (Final)
- Level B Aquifer Protection Area (Preliminary)

EXPLANATION

The Aquifer Protection Program, administered by the Connecticut Department of Energy & Environmental Protection (DEEP), provides primary protection for Connecticut's high-yield public water supply well fields. Responsibilities within the program are shared by DEEP, municipalities and the water companies. The intent of this program is to protect the water supplies by identifying the land areas contributing ground water to the wells through detailed field work and ground-water flow modeling, and then by regulating land use within those areas. Once mapped, municipalities adopt land use regulations for the final aquifer protection areas, sometimes called "wellhead protection areas". For example, land use involving hazardous materials within a designated aquifer protection area is strictly monitored and regulated.

This information is intended to be used to depict regulated Aquifer Protection Areas on a map preferably at 1:24,000 scale. The mapping of these areas is one of the requirements of Connecticut's Aquifer Protection Area Program. The program requires water companies to complete both preliminary and final Aquifer Protection Area mapping. Preliminary mapping provides a general estimate of the area contributing ground water to the well field. Final mapping is based on extensive, site-

specific, detailed modeling of the ground water flow system at the well field. Preliminary mapping is conducted first and is replaced later with the more detailed final mapping.

The aquifer protection area information can be used in conjunction with surficial materials, bedrock geology, elevation, and soils to more thoroughly understand the physical characteristics of the aquifers. The spatial relationships between these areas and environmental quality data such as water quality, non-point source pollution, impaired ground water, contaminated lands, and past, present and projected land use can be analyzed.

This information does not include protection areas for all public water supply wells in Connecticut. It only includes aquifer protection areas for public water supply wells located in Connecticut that are set in stratified drift and serve a residential population of 1,000 or more. It does not include protection areas for smaller stratified drift public water supply wells that serve less than 1,000 people, public water supply wells drilled into bedrock, nor public water supply wells located in Connecticut that serve customers out of state.

DATA SOURCES

AQUIFER PROTECTION AREA DATA – Aquifer Protection Areas shown on this map are from the Aquifer Protection Area digital dataset which contains polygon data intended to be used at 1:24,000 scale. The dataset contains regulated areas classified as Level A Aquifer Protection Area (Final) and Level B Aquifer Protection Area (Preliminary). The data was collected from 1991 to the present and is actively updated as Final area mapping replaces earlier Preliminary areas. The Aquifer Protection Areas are delineated by the individual water companies owning the well fields and submitted to DEEP for approval. Preliminary mapping provides a general estimate of the area contributing ground water to the well field. Final mapping is based on extensive, site-specific, detailed modeling of the ground water flow system. DEEP may adjust Final area boundaries to be consistent with 1:24,000 scale topography and base map data where appropriate during the approval process.

BASE MAP DATA - Based on data originally from 1:24,000-scale USGS 7.5 minute topographic quadrangle maps published between 1969 and 1992. It includes political boundaries, railroads, airports, hydrography, geographic names and geographic places. Streets and street names are from Tele Atlas® copyrighted data. Base map information is neither current nor complete.

MASSACHUSETTS WELLHEAD PROTECTION DATA - The Massachusetts Wellhead Protection Areas which may be shown on this map were downloaded from the MassGIS web site. The information was published on July 9, 2014. More information about wellhead protection in Massachusetts is available from www.mass.gov/deep.

RHODE ISLAND WELLHEAD PROTECTION DATA - The Rhode Island Wellhead Protection Areas which may be shown on this map were obtained from RIGIS. The information was published in December 2014. More information about wellhead protection in Rhode Island is available from www.dem.ri.gov.

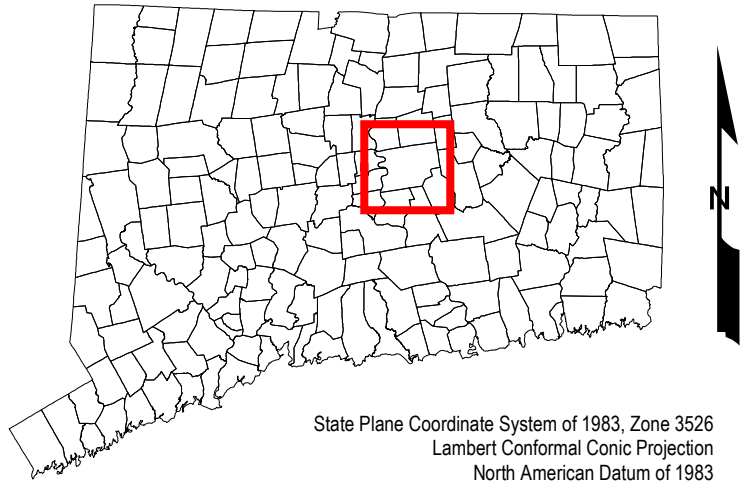
RELATED INFORMATION

This map is intended to be printed at its original dimensions in order to maintain the 1:24,000 scale (1 inch = 2000 feet).

AQUIFER PROTECTION PROGRAM - Go to the DEEP website for more information on the Aquifer Protection Program and the aquifer protection areas.

MAPS AND DIGITAL DATA - Go to the CT ECO website for this map and a variety of others. Go to the DEEP website for the digital spatial data shown on this map.

MAP LOCATION

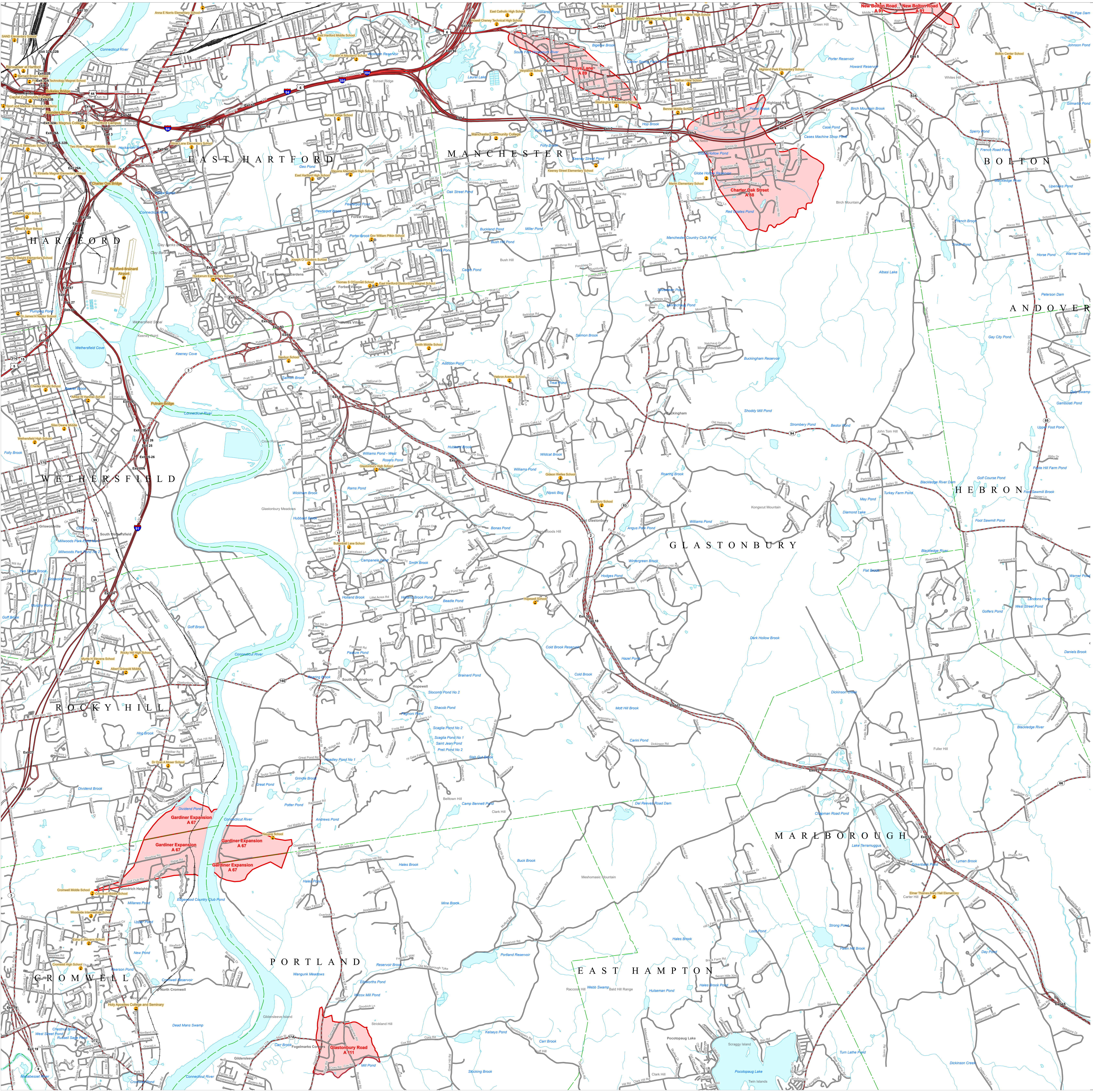


Scale 1:24,000 (1 inch = 2000 feet) when map is printed at original size



STATE OF CONNECTICUT
DEPARTMENT OF
ENERGY & ENVIRONMENTAL PROTECTION
79 Elm Street
Hartford, CT 06106-5127

Map created by DEEP
December 2021
Map is not colorfast
Protect from light and moisture



Appendix E: Construction Site Environmental Inspection Report (CSEIR)

DOT Environmental Inspection Report

Instructions

The following Construction Site Environmental Inspection Report (CSEIR) is to be used on all Department of Transportation (DOT) construction projects. A new form must be filled out at a minimum of once a week and within twenty four (24) hours after any storm event with precipitation greater than .10 inches. For projects that hold an Individual Inland Wetlands Permit from the Connecticut Department of Environmental Protection (DEP), a monthly submittal including all the completed CSEIRs will need to be sent to DEP. For all other DOT projects the CSEIRs must be kept in the field office as part of the Stormwater Pollution Control Plan (SWPCP).

Using the Inspection Report:

This CSEIR is designed to be customized according to the SWPCP that has been developed for each individual construction project. It will need to be adjusted to match the existing site conditions and indicate the most current Best Management Practices (BMPs) being implemented at any given date. At the beginning of construction for each project, a site plan shall be developed that identifies, by number, all potential discharge locations that will collect runoff from a disturbed area during the current phase of construction. Once the discharge locations have been identified by number, a brief description of the BMP will need to be listed in the site specific section of the CSEIR. Examples of a site specific BMPs include construction entrances, temporary sediment traps, temporary sediment basins, or localized areas of silt fence (e.g., silt fence along Main Street; silt fence along toe of slope at Wetland A, etc.). All areas that will be used for construction operations need to be included in the site specific BMPs section including Staging Areas, Waste Stockpile Areas, and Field Office locations.

To facilitate simpler inspections, the “General Information” section and “BMP and Location” section can be filled out on a blank inspection report at the beginning of construction and then copied for re-use as long as the site specific locations remain the same. Any additional BMPs or other changes that result from staged construction or corrective actions need to be included on the site plan and CSEIR within three (3) days following an inspection.

During the site inspection the inspector will need to walk the site with a copy of the site map and CSEIR. Each numbered location will need to be inspected and any deficiencies or maintenance issues identified and documented.

The “Overall Site Issues Reference Checklist” should be consulted when completing the CSEIR to help identify any locations where maintenance or additional BMPs may be required. This checklist is not submitted with the CSEIR but should be kept on file for future reference.

Overall Site Issues Reference Checklist

Below are some general site issues that should be assessed during inspections. This Check List should be consulted during the site inspection and used to determine the appropriate BMP corrective actions required in BMP Maintenance section above. **Not required to be included with CSEIR submission or as part of certification**

BMP/activity	Completed	Maint. Required	Corrective Action by Contractor- Note completion date and action taken
Are all slopes and disturbed areas not actively being worked properly stabilized?	☐ Yes ☐ No	☐ Yes ☐ No	
Is there any evidence of erosion occurring throughout the project site?	☐ Yes ☐ No	☐ Yes ☐ No	
Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☐ Yes ☐ No	☐ Yes ☐ No	
Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☐ Yes ☐ No	☐ Yes ☐ No	
Are discharge points and receiving waters free of any sediment deposits?	☐ Yes ☐ No	☐ Yes ☐ No	
Are storm drain inlets properly protected?	☐ Yes ☐ No	☐ Yes ☐ No	
Is the construction exit preventing sediment from being tracked into the street?	☐ Yes ☐ No	☐ Yes ☐ No	
Is trash/litter from work areas collected and placed in covered dumpsters?	☐ Yes ☐ No	☐ Yes ☐ No	
Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐ Yes ☐ No	☐ Yes ☐ No	
Are vehicle and equipment fueling, cleaning, and maint. areas free of spills, leaks, or any other deleterious material?	☐ Yes ☐ No	☐ Yes ☐ No	
Are materials that are potential stormwater contaminants stored inside or under cover?	☐ Yes ☐ No	☐ Yes ☐ No	
Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	☐ Yes ☐ No	☐ Yes ☐ No	
(Other) Describe	☐ Yes ☐ No	☐ Yes ☐ No	

**State of Connecticut
Department of Transportation
Construction Site Environmental Inspection Report**

This Form Must Be Completed At Least Once a Week and within Twenty Four (24) Hours Of the End of a Storm Event That Is 0.1 inches or Greater * Next Working Day as Directed by Engineer*

General Information			
Project Number		Date	
Permit Number(s)		Location	
Contractor			
Project Engineer		Phone No	
Type of Inspection: Check all that apply ☐ Weekly ☐ Pre-storm event ☐ Post-storm event			
Weather at time of this inspection? ☐ Clear ☐ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds Temperature: _____			
Start Date: _____ Time: _____ Duration (hrs): _____ Precipitation (in) ≈ _____			

Site-specific BMPs - Number the structural and non-structural BMPs on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map for reference with you during your inspections. Note- If have additional locations add rows. Site Map Attached ☐ Yes ☐ No

Location	BMPs Installed	BMP Maint. Required	Remedial Action Required	Remedial Action* If yes, provide description and date contractor notified	Date Fixed	Repeat Failure
	☐ Yes ☐ No	☐ Yes ☐ No				☐ Yes ☐ No
	☐ Yes ☐ No	☐ Yes ☐ No				☐ Yes ☐ No
	☐ Yes ☐ No	☐ Yes ☐ No				☐ Yes ☐ No
	☐ Yes ☐ No	☐ Yes ☐ No				☐ Yes ☐ No
	☐ Yes ☐ No	☐ Yes ☐ No				☐ Yes ☐ No
	☐ Yes ☐ No	☐ Yes ☐ No				☐ Yes ☐ No

Are there any sediment discharges to a regulated area or potential wetland occurring or have any occurred since the last inspection? ☐ Yes ☐ No

If yes, contact the District Environmental Coordinator immediately and submit project incident report (include description of the discharge including location, time identified, and the approximate amount of sediment)

Incident report attached to this CSEIR? ☐ Yes ☐ No

"I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief."

Prepared By: _____

Title:	Signature:	Date:
---------------	-------------------	--------------

Review By: _____

Title: _____ **Signature:** _____ **Date:** _____

I acknowledge receipt of a copy of the CSEIR and will perform the required maintenance or remedial action indicated in the report.

Contractor: _____

Title: _____ **Signature:** _____ **Date:** _____

Appendix F: Notice of Termination Form: Non-Solar Projects



**Connecticut Department of
Energy & Environmental Protection**
Bureau of Materials Management & Compliance Assurance
Water Permitting & Enforcement Division

**General Permit for the Discharge of Stormwater and Dewatering Wastewaters from
Construction Activities**

Notice of Termination Form: Non-Solar Projects

This Notice serves as a request to terminate the below listed permit as well as any applicable Letter(s) of Credit.

Part I: Permittee Information

The below information is required in accordance with Section 6(b) of the General Permit.

1. Permit Number: GSN
2. Registrant:
3. Site Address:
City/Town: State: Zip Code:
4. Date of completion of construction:
Date all storm drainage structures were cleared of construction
sediment and debris:
Beginning and Ending Dates of post-construction inspections:
Date of final stabilization inspection(s)*:
Qualified Inspector who conducted
the Final Stabilization Inspection:
(This person must sign Part III)
5. Check the post-construction activity(ies)** at the site (check all that apply):

☐ Industrial	☐ Residential	☐ Capped Landfill
☐ Commercial	☐ Solar Array	☐ Other:

* The Final Stabilization Inspection must occur at least one full growing season after final stabilization has been achieved. A full growing season is defined as the timeframe encompassed by two consecutive full seeding seasons: April 1 through June 15, and August 15 through October 1. If final stabilization is achieved during a seeding season, the following seeding season will be considered the first full seeding season after final stabilization has been achieved.

** If the post-construction activity involves solar arrays, the Department may require that the "Solar Projects: Notice of Termination Form" be used. Any questions regarding the necessity of such a form for the project can be sent via email to DEEP.StormwaterStaff@ct.gov.

Locally Approvable Projects Must Complete the following Part II - (Attach additional sheets as needed)

Part II: Locally Approvable Post-Construction Inspection Certification

The below information is required in accordance with Section 5(b)(4)(C)(i) of the General Permit.

Certification by a Qualified Professional Engineer / Qualified Soil Erosion and Sediment Control Professional / District Representative

"I hereby certify that I am a qualified professional engineer / a qualified soil erosion and sediment control professional / a representative of the District in which the site is located as defined in Section 2 of the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (general permit). I am familiar with the site described in this Notice of Termination and the requirements of the general permit. I certify, based on my personal inspection of the site pursuant to Section 6(a) of the general permit that all post-construction measures have been installed as specified in the permittee's Stormwater Pollution Control Plan and in accordance with Section 5(b)(2)(C) of the general permit and that all such measures have been cleaned of construction sediment and debris. I understand that this certification is part of a registration submitted in accordance with section 22a-430b of Connecticut General Statutes and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

Signature of Qualified Professional Engineer / Qualified Soil Erosion and Sediment Control Professional / Representative of the District

Date

Printed Name of Qualified Professional Engineer / Qualified Soil Erosion and Sediment Control Professional / Representative of the District

Title

Check off the qualifications of the signatory of the above part:

☐ Qualified Professional Engineer ☐ Qualified Soil Erosion and Sediment Control Professional ☐ Representative of the District

Locally Exempt Projects Must Complete the following Part II - (Attach additional sheets as needed)

Part II: Locally Exempt Post-Construction Inspection Certification

The below information is required in accordance with Section 5(b)(4)(C)(ii) of the General Permit.

Certification by a Qualified Professional Engineer / Qualified Soil Erosion and Sediment Control Professional

"I hereby certify that I am a qualified professional engineer / a qualified soil erosion and sediment control professional as defined in Section 2 of the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (general permit). I am familiar with the site described in this Notice of Termination and the requirements of the general permit. I certify, based on my personal inspection of the site pursuant to Section 6(a) of the general permit that all post-construction measures have been installed as specified in the permittee's Stormwater Pollution Control Plan and in accordance with Section 5(b)(2)(C) of the general permit and that all such measures have been cleaned of construction sediment and debris. I understand that this certification is part of a registration submitted in accordance with section 22a-430b of Connecticut General Statutes and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

Signature of Qualified Professional Engineer / Qualified Soil
Erosion and Sediment Control Professional

Date

Printed Name of Qualified Professional Engineer / Qualified Soil
Erosion and Sediment Control Professional

Title

Check off the qualifications of the signatory of the above part:

☐ Qualified Professional Engineer

☐ Qualified Soil Erosion and
Sediment Control Professional

Part II: State Agency Post-Construction Inspection Certification

The below information is required in accordance with Section 5(b)(4)(C)(iii) of the General Permit.

Certification by a DOT District Engineer or his/her designee / a DOT District Environmental Coordinator / a designated employee of another state agency

"I hereby certify that I am a DOT District Engineer or his/her designee / a DOT District Environmental Coordinator / a designated employee of another state agency as defined in Section 2 of the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (general permit). I am familiar with the site described in this Notice of Termination and the requirements of the general permit. I certify, based on my personal inspection of the site pursuant to Section 6(a) of the general permit that all post-construction measures have been installed as specified in the permittee's Stormwater Pollution Control Plan and in accordance with Section 5(b)(2)(C) of the general permit and that all such measures have been cleaned of construction sediment and debris. I understand that this certification is part of a registration submitted in accordance with section 22a-430b of Connecticut General Statutes and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

Signature

Date

Printed Name

Title

Check off the qualifications of the signatory of the above part:

- ☐ Qualified Professional Engineer ☐ Qualified Soil Erosion and Sediment Control Professional ☐ Representative of the District

All Projects Must Complete the following Part III - (Attach additional sheets as needed)

Part III: Final Stabilization Inspection Certification

The below information is required in accordance with Section 5(b)(4)(D) of the General Permit.

Certification by a Qualified Inspector

"I hereby certify that I am a qualified inspector as defined in Section 2 of the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (general permit). I am familiar with the site described in this Notice of Termination and the requirements of the general permit. I certify, based on my personal inspection of the site pursuant to Section 6(a) of the general permit that the site has been stabilized, as defined in Section 2 of the general permit, for a period of no less than one full growing season following the cessation of construction activities. I further certify that there is no active erosion or sedimentation present on site and no disturbed areas remain exposed. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

Signature of Qualified Inspector

Date

Printed Name of Qualified Inspector

Title

All Projects Must Complete the following Part IV - (Attach additional sheets as needed)

Part IV: Permittee Certification

The below information is required in accordance with Section 5(b)(4)(D) of the General Permit.

Certification by the Permittee

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with section 22a-6 of the Connecticut General Statutes, pursuant to section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

Signature of Permittee

Date

Printed Name of Permittee

Title

All Projects Must Complete the following Part V - (Attach additional documentation as needed)

Part V: Additional Submittals

The following attachments are required to be submitted along with the Notice of Termination Form:

- ☐ Post-Construction Inspection Report (must contain photos with time stamps)
- ☐ Final Stabilization Inspection Report (must contain photos with time stamps)

Complete and submit this form in accordance with the general permit (DEEP-WPED-GP-015) to ensure the proper handling of the termination. Print or type unless otherwise noted.

Submit this Notice of Termination Form to the address below, as well as via email to DEEP.StormwaterStaff@ct.gov:

WATER PERMITTING AND ENFORCEMENT DIVISION/STORMWATER GROUP
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127