CONSERVATION COMMISSION AGENDA
REGULAR MEETING (VIRTUAL)
Thursday, April 11, 2024, 7:30 P.M.
Town Office Building, 15 Gilead Street, Hebron, CT

REGULAR MEETING (VIRTUAL)

Conservation Commission Regular Meeting (Virtual)
Apr 11, 2024, 7:30 – 10:30 PM (America/New York)
Please join my meeting from your computer, tablet or smartphone.
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REGULAR MEETING OF APRIL 11, 2024

I. Call to Order/Roll Call

A. Seating of Alternate

II. Approval of Minutes – Public Hearing – February 8, 2024, Regular Meeting – February 8, 2024, Public Hearing – February 22, 2024, and Special Meeting – February 22, 2024

III. Additions to the Agenda

IV. Recognition of Guests: Opportunity for citizens to briefly address the Commission on non-agenda items.

V. Violations

VI. Pending Applications

VII. New Applications

A. **Petition 2024-03**: Grayville Road Over Jeremy Brook, 126 / 129 Grayville Road, Town of Hebron, Replacement of Bridge Superstructure.

VIII. Wetlands Agent Approvals

IX. Pre-applications - None

CONSERVATION COMMISSION
AGENDA (cont.)
REGULAR MEETING (VIRTUAL)
Thursday, April 11, 2024, 7:30 P.M.
Town Office Building, 15 Gilead Street, Hebron, CT

X. New Business

XI. Other Pertinent Business

A. Maple Fest 24, March 16th and 17th

XII. Correspondence

A. Correspondence dated February 8, from J. Cordier to Matt Bordeaux, Director of Planning and Development, Town of Hebron re: Notice of Decision, Petition 2024-1
B. Correspondence dated February 8, from J. Cordier to Richard Breski, JonNick Enterprises re: Notice of Decision, Petition 2024-2
C. Correspondence dated February 23, from J. Cordier to Roderic McCorrison re: Notice of Decision, Petition 2023-04

XIII. Liaison Reports

A. Open Space Land Acquisition Committee
B. Salmon River Watershed Partnership
C. Hebron Trail Rangers

XIV. Adjournment

Next Regular Meeting – May 9, 2024 (Virtual)

JC/dmg

TOWN OF HEBRON
CONSERVATION COMMISSION
Public Hearing (Virtual)
Thursday, February 8, 2024 - 7:30 PM

MINUTES

ATTENDENCE:

Conservation Commission (Present): Tom Loto (Chair), Chris Frey (Vice-Chair), Dan Seremet, Joanna Chester

Staff: Jim Cordier, Matt Bordeaux

Guests: Mark Reynolds, Mac McCorrison

1. **Introduction**
   Mark Reynolds, engineer representing the applicant, summarized changes made to the plan following Tom Fenton's review. These include an additional silt fence along the entire edge of the wood line, and increased detail on rain gardens in design drawings. He also offered clarification regarding maximum building coverage on commercial lots, noting it is 20%, per zoning regulations. He reviewed scenarios where further approvals would or would not be necessary on both residential and commercial lots.
2. **Discussion**
   There was discussion on potential building sizes. M. Reynolds reviewed T. Fenton's engineering assessment point by point, discussing measures taken to address each concern. He noted most are minor changes, relating to detail and information shown on plans, rather than material changes to the plan itself. These include additional detail on drainage maps. The Commission discussed how potential developments could be required to secure additional review and permitting. M. Reynolds provided further detail on rain garden design, function, and maintenance. There was discussion on the practicality of building size relative to parcel dimensions, road frontage, and parking lot design. Landscaping designs, including measures for soil retention, bare earth stabilization, and wildlife-favorable plantings were also debated. J. Cordier reviewed an email from M. Bordeaux, addressing questions raised by T. Loto following the initial Public Hearing. The Commission discussed the timeline for a decision. M. McCorrison expressed hesitation about granting an extension to the application. M. Bordeaux noted his hope to hold a Public Hearing with Planning and Zoning on March 12.
3. **Public Comment**
   None.
4. **Conclusion**
   The Commission agreed to continue the Public Hearing at a special meeting, on or prior to February 22, and ended the session for this evening at 9:28 p.m.

Respectfully submitted,
Hannah Walcott

TOWN OF HEBRON
CONSERVATION COMMISSION
Regular Meeting (Virtual)
Thursday, February 8, 2024 - 7:30 PM (Following Public Hearing)
MINUTES

I. Call to Order/Roll Call

Chair Tom Loto resumed the regular meeting at 9:28 p.m.

Members Present: Tom Loto (Chair), Christopher Frey (Vice-Chair), Dan Seremet, Joanna Chester
Members Absent: Jasmin Okugic
Staff Present: Jim Cordier, Matt Bordeaux
Guests: Richard Breski

II. Approval of Minutes

A. **January 6, 2024 (Special Meeting)** – Previously approved.
B. **January 18, 2024 (Public Hearing)**
Discussion:
J. Chester offered the following amendment under Section 2 (Commission Discussion):
1. Following the last sentence, amend to include: "She also suggested that the wetland be donated to the town as Open Space rather than a fee given in lieu of Open Space to preserve it."

Motion by D. Seremet and seconded by J. Chester to approve the minutes of the public hearing of Thursday, January 18, 2024 as amended. The motion passed unanimously (4-0).

C. **January 18, 2024 (Special Meeting)**

Motion by D. Seremet and seconded by C. Frey to approve the Thursday, January 18, 2024 Special Meeting minutes as submitted. The motion passed unanimously (4-0).

III. Additions to the Agenda

Motion by J. Chester and seconded by D. Seremet to review Petition 2024-02 (24 Wall Street) before Petition 2024-01 (30 Pendleton Drive). The motion passed unanimously (4-0).

IV. Recognition of Guests

None.

V. Violations

None.

VI. Pending Applications

A. **Petition 2023-04:** Church St, Map 12, Lot 18, Zone NC into 3 lots & Zone R-1 into 2 lots, Roderic A. McCorrison, 5-Lot Subdivision. This item was the topic of tonight's Public Hearing. The Commission determined to leave the Public Hearing open, and to hold a special meeting on February 22.

VII. New Applications

A. **Petition 2024-02:** 24 Wall Street, Map 70, Lot 12, JonNic Enterprises, Construction of Emissions Bay and Driveway – R. Breski, contractor for the applicant, briefed the Commission on the proposal, which would involve the addition of a drive-through emissions bay and driveway. A gravel parking area will be split, with a portion converted to paved parking spots, and the remaining part (closest to the wetlands) returned to grass, increasing the wetland buffer area by roughly 1800 square feet. The Commission discussed planting vegetation downgradient of the parking lot, and possible impacts from runoff.

Motion by D. Seremet and seconded by J. Chester to approve Petition 2024-02, with the following conditions:

1. **The berm design, grading plan, stormwater management measures and plan of vegetation be approved by the Town Engineer and Conservation and Inland Wetlands Agent**
2. **The applicant will confer with his engineer regarding proper site vegetation pursuant to CT DEEP Guidelines and incorporate the foregoing into the overall site plan**
3. **Silt fencing will be installed along the rear of the property prior to any site excavation or grading**
4. **The Conservation and Inland Wetlands Agent will be contacted to inspect SEC measures at the time of construction**

The motion passed unanimously (4-0).

B. **Petition 2024-01:** 30 Pendleton Drive, 42 Pendleton Drive, 22 Main Street, and 28 Main Street, Town of Hebron, Construction of a pedestrian bridge and trail and associated site improvements – M. Bordeaux summarized the proposal, which would construct a pedestrian connection from the library to Pendleton Drive, including a roughly 26-foot span over an unnamed brook. He noted a Public Hearing with Planning and Zoning is also required for this application. The Commission discussed the planned removal of stone walls and trees, necessary for the path's construction. It was noted a leak-off point is present in the existing parking lot adjacent to the proposed path. Commission members expressed interest in a water quality swale in that area.

Motion by D. Seremet and seconded by C. Frey to approve Petition 2024-01, with the following conditions:

1. **Work with the Town Engineer to determine the feasibility of the installation of a water quality swale between the paved leak-off and culvert outlet**
2. **Examine the state of the stone walls and have the PZC take a closer look at their disposition**

3. **Conservations and Inland Wetlands Agent will inspect SEC measures prior to and during construction**

The motion passed unanimously (4-0).

VIII. Wetlands Agent Approvals/Compliance Updates

None.

IX. Pre-Applications

None.

X. New Business

None.

XI. Other Pertinent Business

A. **Maple Fest '24, March 16th & 17th**
The Commission will share a booth with OSLAC at the upcoming Maple Fest.

XII. Correspondence

A. **Email dated January 4, from Tom Fenton to Matt Bordeaux and Jim Cordier re: Pendleton Drive Trail and Bridge Project Engineers Report**
B. **Email dated January 3, from Tom Fenton to Matt Bordeaux and Jim Cordier re: Ellenberg Subdivision Engineers Report**
C. **Email dated January 25, from Tom Fenton to Matt Bordeaux and Jim Cordier re: Ellenberg Subdivision Engineers Report (revised)**
D. **Email dated January 30, from Tom Loto to Matt Bordeaux and Jim Cordier re: Questions for Town Attorney and Town Staff**
E. **Email dated February 1, from Matt Bordeaux to the Conservation Commission re: Response to Questions from the Conservation Commission (with attachments)**
All correspondence was included in the agenda, and discussed during deliberations.

XIII. Liaison Reports

Tabled.

XIV. Adjournment

Motion by T. Loto and seconded by C. Frey to adjourn.

Meeting adjourned at 10:54 p.m.

Respectfully submitted,
Hannah Walcott (Board Clerk)

TOWN OF HEBRON
CONSERVATION COMMISSION
Public Hearing (Virtual)
Thursday, February 22, 2024 - 7:30 PM

MINUTES

ATTENDENCE:

Conservation Commission (Present): Tom Loto (Chair), Chris Frey (Vice-Chair), Dan Seremet, Joanna Chester

Staff: Jim Cordier

Guests: Mac McCorrison, Mark Reynolds, Tom Fenton

Petition 2023-04: Church Street, Map 12, Lot 18, Zone NC into three lots & Zone R-1 into two lots, Roderic A. McCorrison, 5-Lot Subdivision, continued from February 8, 2024

1. **Discussion**

   Town engineer Tom Fenton stated updated plans, including drainage maps, were received, and reviewed. He confirmed all his previous comments have now been addressed. J. Chester reiterated her concerns about impacts to wetlands, including their role in recharging aquifers, and urged Town maintenance or ownership to protect it. She then suggested additional plantings in the regulated area to be seeded, aimed at combating non-native invasive species, as well as providing resources for wildlife. Lastly, she recommended restricting the use of underground storage tanks, due to the high water table in the area. M. Reynolds noted no additional activities are proposed within the regulated area. He then noted the proposal for a fee in lieu of Open Space. He also restated that detailed site plans for individual parcels will still require the Commission's review, if relevant regulations indicate the need. He does not anticipate the need for underground tanks, but would consider all local building codes. There was additional discussion on Open Space, and collecting a fee in lieu of. C. Frey noted the area in question is already regulated, and a Conservation easement would not provide any additional protection. He also stated the advantage of collecting a fee, including the ability to purchase land that currently is not protected. T. Loto, C. Frey, and D. Seremet expressed preference for collecting the fee. There was discussion on stormwater management, and concerns raised during public comment at previous hearings.

2. **Public Comment**

   None.

3. **Conclusion**

Motion by C. Frey and seconded by D. Seremet to close the Public Hearing. The motion passed unanimously (4-0).

Respectfully submitted,
Hannah Walcott (Board Clerk)

TOWN OF HEBRON
CONSERVATION COMMISSION
Special Meeting (Virtual)
Thursday, February 22, 2024 - 7:30 PM (Following Public Hearing)

MINUTES

I. Call to Order/Roll Call

Chair Tom Loto called the meeting to order following the Public Hearing.

Members Present: Tom Loto (Chair), Christopher Frey (Vice-Chair), Dan Seremet, Joanna Chester
Members Absent: Jasmin Okugic
Staff Present: Jim Cordier
Guests: Mark Reynolds, Tom Fenton

II. Recognition of Guests

None.

III. Pending Applications

A. **Petition 2023-04:** Church St, Map 12, Lot 18, Zone NC into 3 lots & Zone R-1 into 2 lots, Roderic A. McCorrison, 5-Lot Subdivision.

Motion by D. Seremet and seconded by J. Chester to approve Petition 2023-04, with the following conditions:

1. **The Wetlands Agent will be contacted by the developers for site inspection during the implementation of SEC measures.**
2. **The Wetlands Agent will report to the Commission any adjustments to this plan that may have additional impact on the wetlands, pursuant to activity under Section 2.1.24 of the Hebron Conservation and Inland Wetlands Regulations.**
3. **The Applicant will incorporate the use of native grass, shrubs, berries, and nut trees to establish native species, discourage non-native species and delineate the upland review area.**
4. **The Conservation and Inland Wetlands Commission conveys its recommendation to the Planning and Zoning Commission of the Applicant's payment of Fees in Lieu of Open Space.**
5. **The Conservation and Inland Wetlands Commission recommends that the Planning and Zoning Commission considers evaluating whether stormwater runoff should be further controlled as part of site development planning.**
6. **The Conservation and Inland Wetlands Commission recommends to the Planning and Zoning Commission that the use of underground storage tanks be restricted due to the high groundwater table and proximity to the wetlands.**

The motion passed unanimously (4-0).

IV. Correspondence

A. **Email, dated February 19, 2024, from Mark Reynolds to Matt Bordeaux re: Ellenberg Subdivision – Drainage Report Update**
B. **Email dated February 20, 2024, from Thomas H. Fenton, P.E. to Matt Bordeaux re: Ellenberg Plan Review and Response**

All correspondence was included in the agenda, and discussed during deliberations.

V. Adjournment

Motion by C. Frey and seconded by T. Loto to adjourn.

Meeting adjourned.

Respectfully submitted,
Hannah Walcott (Board Clerk)

APPLICATION

Inland Wetlands and Watercourses Permit

CONSERVATION COMMISSION
TOWN OF HEBRON
15 Gilead Street
Hebron, CT 06248
(860) 228-5971
fax: (860)228-5980

File No.
Received:
Approved:
Denied:
Fee Paid:

Site Location Grayville Road Over Jeremy Brook Assessors Map N/A Lot N/A Zone R2

Street Address 126/129 Grayville Rd. Total Parcel Acreage N/A Total Area of Wetlands Disturbance 300 SF

Owner of Record Town of Hebron Telephone (H) (W) 860-228-5971

Address 15 Gilead Street, Hebron, CT 06231 Mailing Address 15 Gilead Street, Hebron, CT 06231

Address Mailing Address

Applicant Town of Hebron Telephone (H) (W) 860-228-5971

Address 15 Gilead Street, Hebron, CT 06231 Mailing Address 15 Gilead Street, Hebron, CT 06231

Address Mailing Address

Agent/Lessee Telephone (H) (W)

Address Mailing Address

Address Mailing Address

To the Conservation Commission:

I, Andrew Tierney, hereby apply for and Inland Wetlands and Water Courses Permit, pursuant to Section(s) 7.1 of the Hebron Inland Wetlands and Watercourse Regulations for: (describe proposed regulated activities) Replacement of Bridge Superstructure.

The undersigned hereby applies for an Inland Wetland and Watercourses permit for the property described herein and confirms that:

1) He is familiar with the currently effective Inland Wetlands and Watercourses Regulations, Town of Hebron.

2) The statements and representation contained herein and in all supporting documents are true to the best of his knowledge.

3) By making this application, he gives his permission to the Conservation Commission or its representative to enter the portions of the applicant's premises which are the subject of this application for the purpose of inspection and investigation and otherwise evaluating the merits of the application.

Signature of Owner (s) | Signature of Agent/Lessee | Signature of Applicant

NOTICE: This application shall be in compliance with Section 7 of the Hebron Inland Wetlands and Watercourses Regulations and accompanied by the required fee, assessors field card, 12 copies of a certified plot plan bearing the raised seal of the Engineer and Surveyor licensed in the State of Connecticut, evidence of good standing with the Tax Collector's office and other materials as may be required by the Town of Hebron Zoning Regulations and or building code, names and addresses of all property owners within 200 feet of the boundaries of the subject parcel keyed to a map delineating a 200 foot radius around the subject site, the limits of clearing, location of adjacent wells, septic systems, ponds, wetlands, watercourses and/or other information as may be required by policies of the Conservation Commission.

Connecticut Department of
ENERGY & ENVIRONMENTAL PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

GIS CODE #: ___ ___ ___ ___ ___ ___ ___ ___ ___
For DEEP Use Only

Statewide Inland Wetlands & Watercourses Activity Reporting Form

Please complete - print clearly - and mail this form in accordance with the instructions on pages 2 and 3 to:
Wetlands Management Section, Inland Water Resources Division, CT DEEP, 79 Elm Street – 3rd Floor, Hartford, CT 06106

PART I: To Be Completed By the Municipal Inland Wetlands Agency Only

1. DATE ACTION WAS TAKEN (enter one year and month): Year _____ Month _____
2. ACTION TAKEN (enter one code letter): _____
3. WAS A PUBLIC HEARING HELD (check one)? Yes _____ No _____
4. NAME OF AGENCY OFFICIAL VERIFYING AND COMPLETING THIS FORM:

   (type name) _____ (signature) _____

PART II: To Be Completed By the Municipal Inland Wetlands Agency or the Applicant

5. TOWN IN WHICH THE ACTION IS OCCURRING (type name): Hebron

   Does this project cross municipal boundaries (check one)? Yes _____ No X

   If Yes, list the other town(s) in which the action is occurring (type name(s)): _____, _____
6. LOCATION (see directions for website information): USGS Quad Map Name: Colchester or Quad Number: _____

   Subregional Drainage Basin Number: 4705
7. NAME OF APPLICANT, VIOLATOR OR PETITIONER (type name): Town of Hebron
8. NAME & ADDRESS/LOCATION OF PROJECT SITE (type information): Grayville Rd. over Jeremy River - 126/129 Grayville Rd.

   Briefly describe the action/project/activity (check and type information): Temporary ____ Permanent X

   Description: Replacement of Bridge Superstructure
9. ACTIVITY *PURPOSE* CODE (enter one code letter): E
10. ACTIVITY *TYPE* CODE(S) (enter up to four code numbers): 1, 2, 9, 12
11. WETLAND / WATERCOURSE AREA ALTERED (type in acres or linear feet as indicated):

    Wetlands: 0 acres Open Water Body: 0 acres Stream: 0 linear feet
12. UPLAND AREA ALTERED (type in acres as indicated): 0.015 acres within 100' upland review area
13. AREA OF WETLANDS / WATERCOURSES RESTORED, ENHANCED OR CREATED (type in acres as indicated): 0 acres

DATE RECEIVED: **PART III: To Be Completed By the DEEP** DATE RETURNED TO DEEP:

FORM COMPLETED: YES NO FORM CORRECTED / COMPLETED: YES NO

PROJECT NARRATIVE

FOR

REPLACEMENT OF BRIDGE 07085

GRAYVILLE ROAD OVER JEREMY RIVER

TOWN OF HEBRON, CONNECTICUT

NLJA # 0648-0101

APRIL 3, 2024

PREPARED BY:
NATHAN L. JACOBSON & ASSOCIATES, INC.
CONSULTING CIVIL AND ENVIRONMENTAL ENGINEERS SINCE 1972
CHESTER, CONNECTICUT

Existing conditions

The existing bridge carries Grayville Road in an east-west orientation over the Jeremy River which flows from north to south and provides sole access to two residential homes. According to the CTDOT, the existing superstructure was installed in 2001. The bridge consists of timber plank deck on steel stringers on concrete abutments. Existing bridge rails are wooden. There are no approach guiderails. The clear span is approximately 28'-4" and the curb-to-curb deck width is approximately 13'-6". The existing steel beams exhibit significant deterioration and section loss, resulting in an overall structure evaluation condition rating of "serious" by the CTDOT.

Proposed Improvements

It is proposed to remove and replace the existing superstructure on the existing abutments, maintaining the clear span and curb-to-curb deck width. The overall superstructure length will be 30'-3". The existing steel beam ends appear to be encased in concrete to form a backwall to prevent backfill material from spilling onto the bridge seat. Existing concrete above the bridge seat will be removed with the superstructure and a proposed back wall and cheek walls will be constructed to prevent backfill material from spilling onto the bridge seat. The proposed superstructure will consist of pressure treated timber planks on pressure treated nailers on hot-dipped galvanized steel beams on the existing abutments.

Removal of the superstructure will include excavation to a depth of approximately 20" behind the abutments and to facilitate construction of the proposed concrete backwalls. Removal of some approach bituminous paving and base materials will occur, so that new base materials and paving can be placed to repair the abutment excavation areas and poor pavement on the eastbound approach.

A temporary pedestrian bridge, of the contractor's design, will be constructed on the upstream side of the road, with processed aggregate base approach walkways.

Maintenance and protection of traffic controls will be in place to warn the public of the bridge being out of service.

Mitigation of Environmental Impacts

Temporary erosion controls during construction will include haybale or sedimentation fence proposed around the perimeter of the work, including beneath the superstructure. A temporary containment boom is proposed downstream of the bridge, across the river.

There will be no permanent impact to the watercourse or the wetlands. Temporary impact to the watercourse will be limited to installation, maintenance and removal of the containment boom. Temporary impact to the wetland will be limited to installation, maintenance, and removal of haybale or sedimentation fence erosion controls beneath the superstructure, and worker foot access to the full perimeter of the existing abutments.

Areas disturbed by construction activities, beyond the roadway surface, will be revegetated with topsoil and grass.

Project Implementation and Schedule

The Town intends to hire a "pre-approved" contractor from the CTDAS bid list to perform the construction in July 2024.

FW: Grayville Bridge

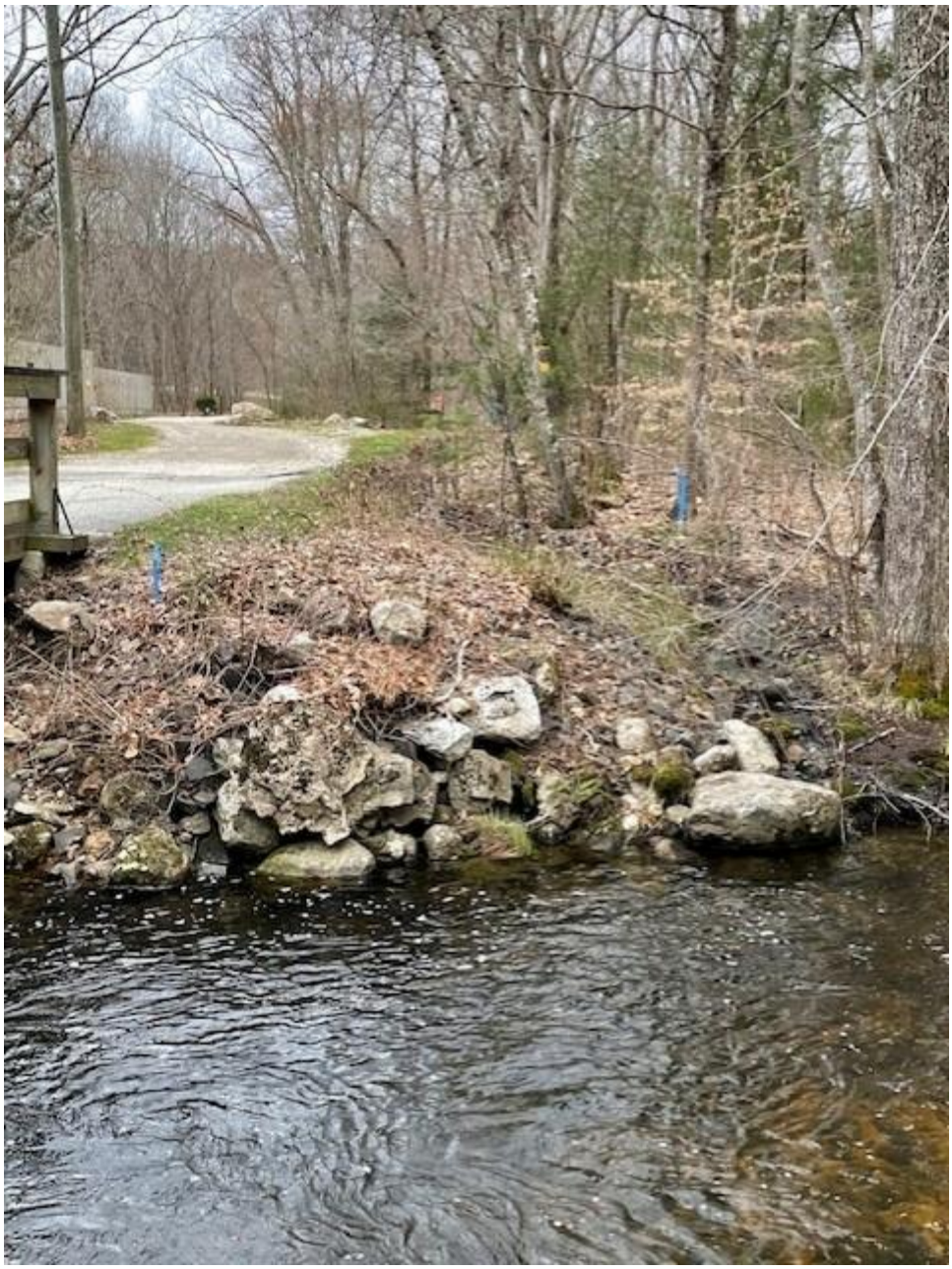
James Cordier <jcordier@hebronct.com>

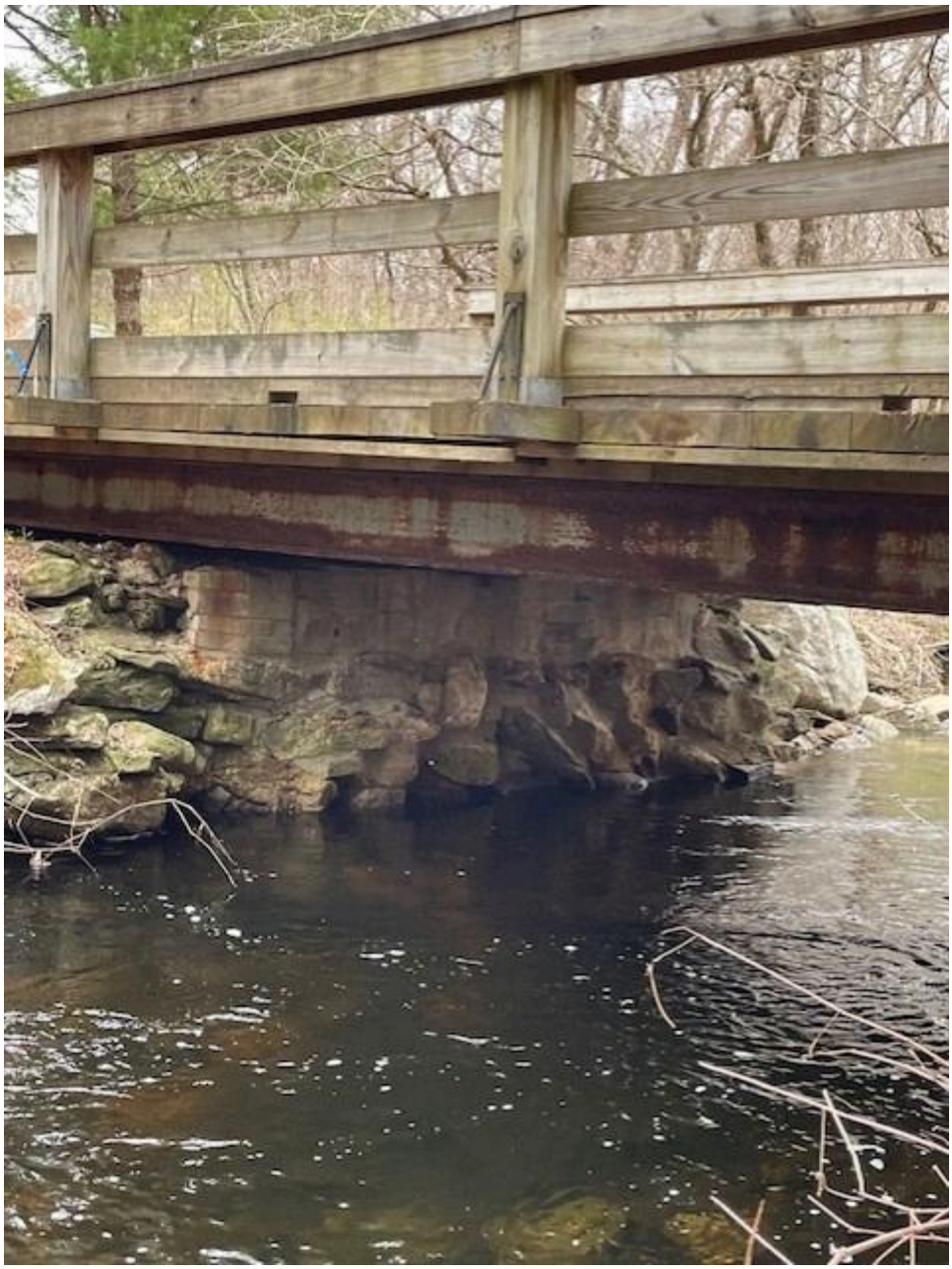
Tue 4/2/2024 5:42 PM

To:Matthew Bordeaux <mbordeaux@hebronct.com>;Thomas H. Fenton, P.E. <tfenton@nlja.com>

FYI. 1 0f 3
Jim

From: Gmail <james.p.cordier@gmail.com>
Sent: Tuesday, April 2, 2024 4:25 PM
To: James Cordier <jcordier@hebronct.com>
Subject: Grayville Bridge





ABBREVIATIONS

Bit.	BITUMINOUS
Conc.	CONCRETE
CL&P	CONNECTICUT LIGHT & POWER
FTR	FRONTIER COMMUNICATIONS
N/F	NOW OR FORMERLY
TYP.	TYPICAL

LEGEND

Existing		PROPOSED
100	INDEX CONTOUR	
98	INTERMEDIATE CONTOUR	
× 99.0	SPOT ELEVATION	
	CONIFEROUS TREE	
	DECIDUOUS TREE	
	STUMP	
	TREE LINE	
	STONE WALL	
	WATER EGDE	
WF 1	WETLAND FLAG	
	WETLAND LINE	
	BOULDER	
	PAVEMENT EDGE	
	GRAVEL EDGE	
	SIGN	
	WOOD FENCE	
	UTILITY POLE	
	UTILITY POLE WITH GUY	
AU	AERIAL UTILITIES	
	SURVEY CONTROL	
S	STREET LINE	
P	PROPERTY LINE	
	SAWCUT PAVEMENT	
	REMOVE TREE	
	SEDIMENT BARRIER	
	CONTAINMENT BOOM	
	REMOVE BITUMINOUS CONCRETE PAVEMENT AND CURBING	
	ROADWAY PAVEMENT	
	FEMA EFFECTIVE 100-YR BASE FLOOD EL.	

FINAL DESIGN
MARCH 2024

TOWN OF
HEBRON
CONNECTICUT

REPLACEMENT OF BRIDGE 07085 SUPERSTRUCTURE GRAYVILLE ROAD OVER JEREMY RIVER

BOARD OF SELECTMEN
PETER D. KASPER, CHAIRMAN
DANIEL E. LARSON, VICE-CHAIRMAN
TIFFANY V. THIELE
KEITH C. PETIT
CLAUDIA TEJADA RILEY

TOWN PLANNER
MATTHEW R. BORDEAUX

TOWN MANAGER
ANDREW J. TIERNEY

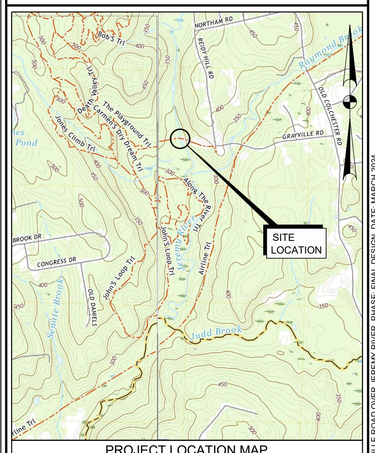
DIRECTOR OF PUBLIC WORKS
PAUL J. FORREST

SCHEDULE OF DRAWINGS

SHEET No.	TITLE
1 OF 7	COVER SHEET
2 OF 7	TOPOGRAPHIC SURVEY
3 OF 7	DEMOLITION PLAN
4 OF 7	SITE PLAN
5 OF 7	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
6 OF 7	NOTES, SPECIFICATIONS, SITE DETAILS AND MAINTENANCE AND PROTECTION OF TRAFFIC PLAN
7 OF 7	STRUCTURE DETAILS

CTDOT STANDARD DRAWINGS

SHEET No.	TITLE
TR-1205_01	DELINEATION, DELINEATORS AND OBJECT MARKER DETAILS
TR-1208_02	METAL SIGN POSTS AND SIGN MOUNTING DETAILS
TR-1220_01	SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS
TR-1220_02	CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES

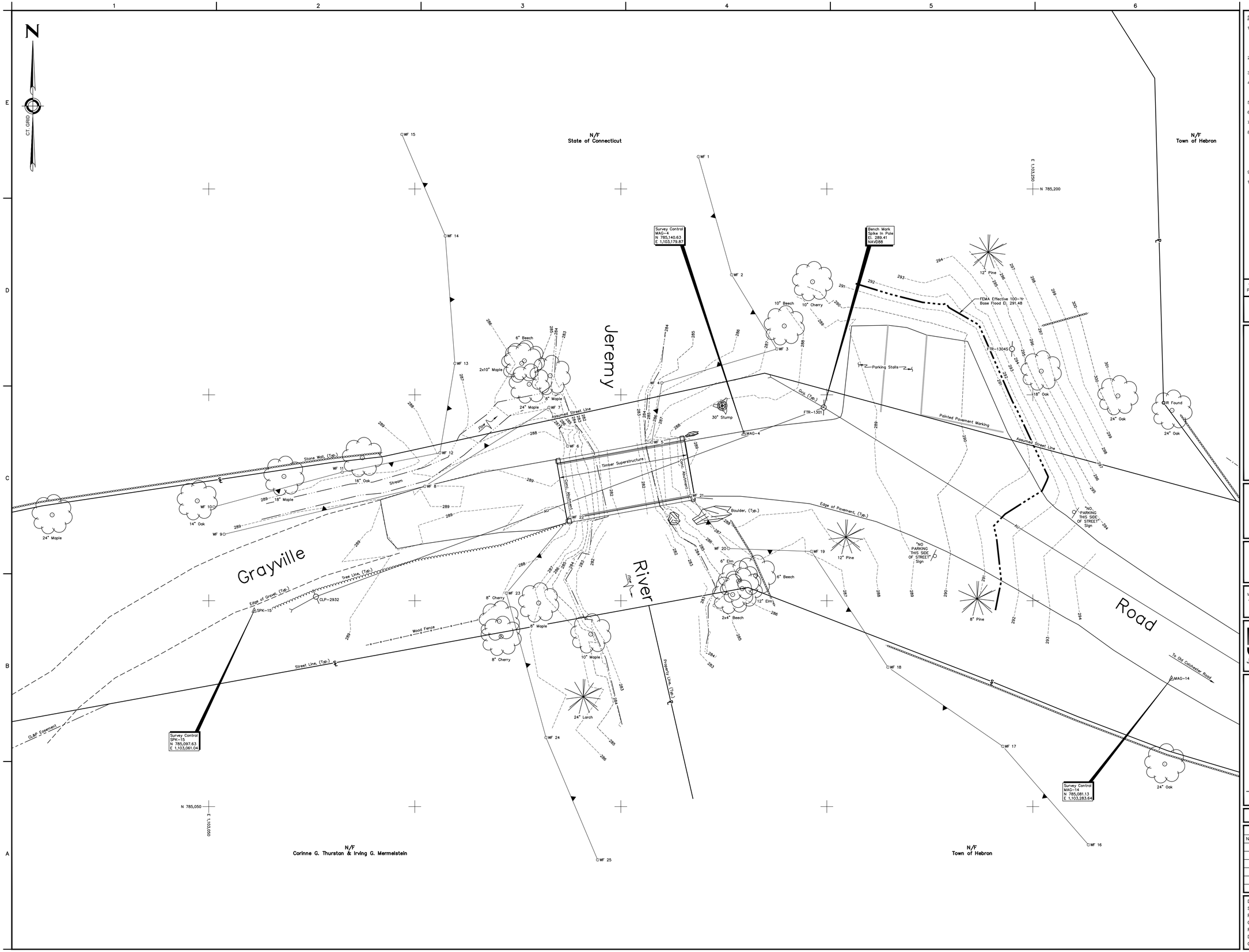


PROJECT LOCATION MAP
SCALE: 1" = 2,000'
2,000 1,000 0 2,000 4,000
(SCALE IN FEET)

Nathan L. Jacobson & Associates, Inc.
86 Main Street P.O. Box 337
Chester, Connecticut 06412-0337
Tel: (860) 526-9591 Fax: (860) 526-5416
www.nlja.com
Jacobson Consulting Civil and Environmental Engineers Since 1872

J. HOWARD PFROMMER, P.E.
CT REGISTRATION No. 15871

PROJECT NO. 08750098 PROJECT NAME: REPLACEMENT OF BRIDGE No. 07085 GRAYVILLE ROAD OVER JEREMY RIVER PHASE FINAL DESIGN DATE: MARCH 2024



SURVEY NOTES:

1. This survey was prepared pursuant to the Regulations of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 as a Class T-2 Topographic Survey (Vertical Accuracy Class V-2). Boundary lines depicted hereon are based on records research, other maps and limited field survey and do not represent a boundary opinion.
2. Underground or overhead encroachments, structures, and systems were not investigated as a part of this survey, except as shown or noted hereon.
3. Stone walls and/or fences may deviate slightly from principal courses shown.
4. Peripheral property lines of adjacent owners are shown for general informational purposes only and are not to be construed as being accurately located or shown hereon.
5. Horizontal datum is NAD83. Vertical datum is NAVD88.
6. Parcels are shown on Tax Map 36.
7. Survey field work performed 09 Sep 2023 thru 10 Oct 2023.
8. Parcels may be subject to such rights and easements as appear of record or are apparent by usage. This survey reflects encumbrances noticed and discovered by the surveyor in the normal course of work and does not necessarily show every possible condition affecting the property. Easements, servitudes, local ordinances, zoning and other legal encumbrances may exist which are not reflected hereon. Consult a title attorney to discover all legal encumbrances, if any, attached to this property.
9. Background imagery is 2016 orthophotography from CTECO.
10. Reference is made to the following maps:
    A. "PROPERTY OF MAXTON LESSENGER & ROBERT C. HALLOCK, N/F HEBRON, CONN. SCALE 1" = 80' JULY 15, 1963", by J. Koiva, L.S., H.L.R. Map Vol. 1 Pg. 14
    B. "PORTION OF PROPERTY PREPARED FOR PAUL SERRA GRAYVILLE ROAD - HEBRON, CONNECTICUT SCALE 1" = 40' SEPTEMBER 17, 1986", by Dutch & Associates, H.L.R. Map Vol. 33 Pg. 51
    C. "BOUNDARY SURVEY DIVISION MAP PREPARED FOR DALE S. & CORRINNE G. THURSTAN GRAYVILLE ROAD HEBRON, CONNECTICUT SCALE: 1" = 50' DATE: AUG. 17, 2005", by Joel M. Fuller, L.S., H.L.R. Map Vol. 28 Pg. 30

THIS DRAWING IS INTENDED TO BE USED FOR INFORMATION AND REVIEW PURPOSES ONLY AND IS NOT INTENDED TO BE USED FOR CONSTRUCTION.

GRAPHIC SCALE
10 8 6 4 2 0 10 20
SCALE: 1"=10'

TOWN OF HEBRON, CONNECTICUT

REPLACEMENT OF BRIDGE 07085 SUPERSTRUCTURE GRAYVILLE ROAD OVER JEREMY RIVER

TOPOGRAPHIC SURVEY

DESIGN

Jacobson
Land Survey & Technical Services, Inc.
86 Main Street P.O. Box 337
Chester, Connecticut 06412-0337
Tel: (860) 526-4522 Fax: (860) 526-5416
www.nlja.com
An Affiliate of Nathan L. Jacobson & Associates, Inc.

NOT VALID WITHOUT ORIGINAL SEAL

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

JEFFREY A. SANBORN, L.S.
CT REGISTRATION No. 12883

REVISIONS

No.	DESCRIPTION	DATE

DATE:	MARCH 2024
SCALE:	1"=10'
PROJECT No.:	06480101
CADD FILE:	06480101SP
FIELD BOOK:	-
DRAWN:	AJG
CHECKED:	-

SHEET No.: 2 OF 7

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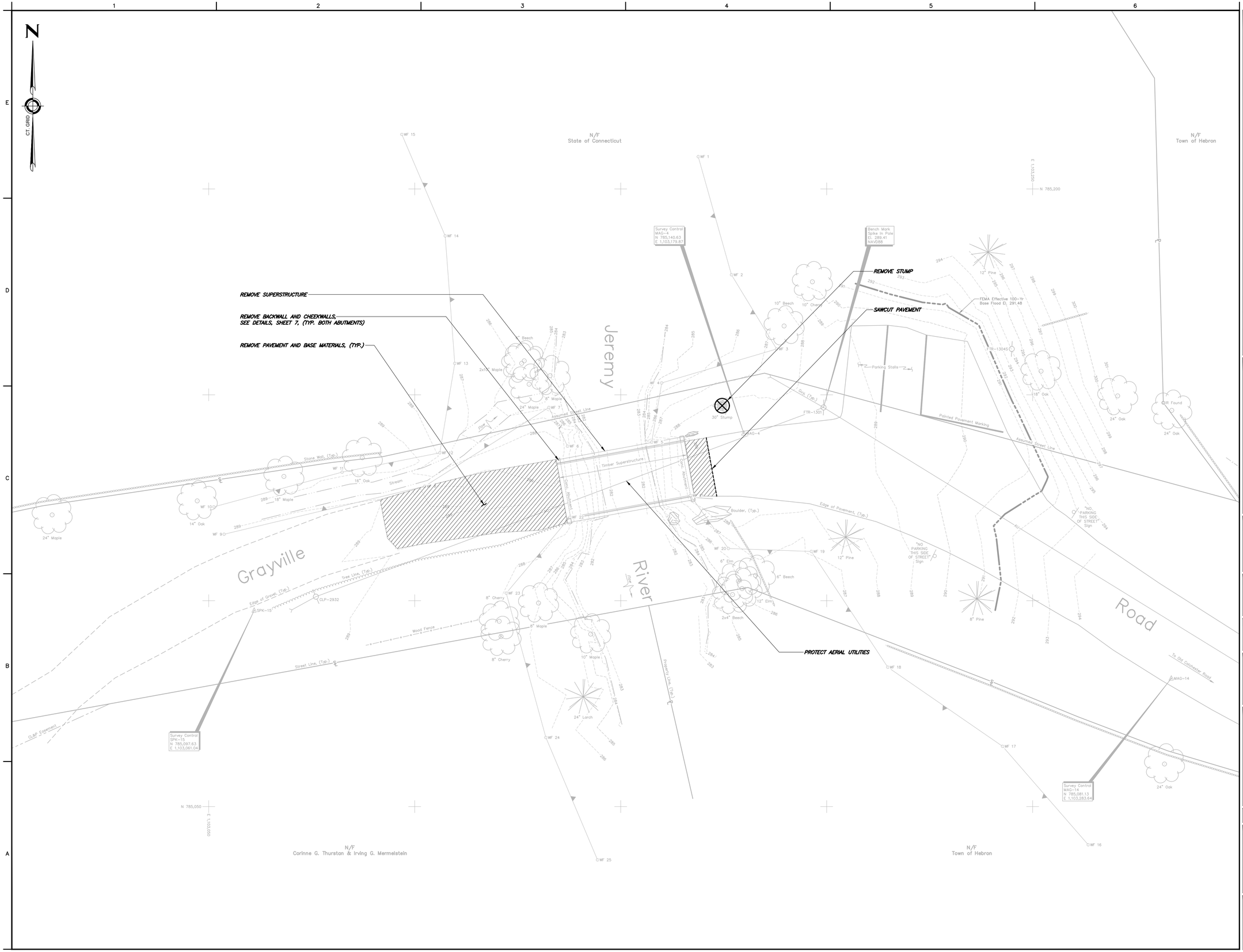

NOTES:

1. SEE SHEET 6 FOR PROJECT NOTES.

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GRAPHIC SCALE

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SCALE: 1"=10'

TOWN OF HEBRON, CONNECTICUT

REPLACEMENT OF BRIDGE 07085 SUPERSTRUCTURE GRAYVILLE ROAD OVER JEREMY RIVER

DEMOLITION PLAN

DESIGN

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J. HOWARD PFROMMER, P.E.
CT REGISTRATION No. 15871

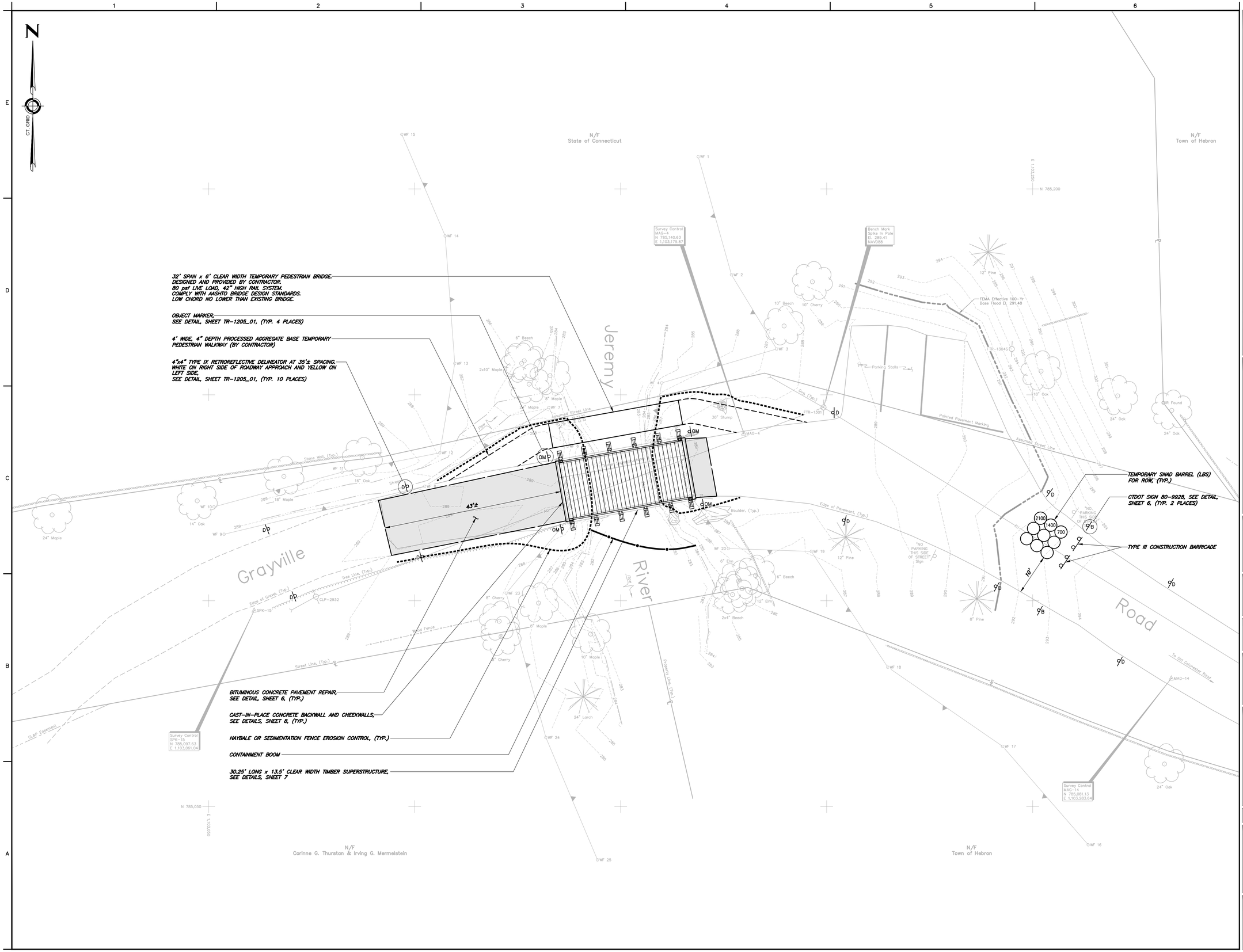
REVISIONS

No.	DESCRIPTION	DATE

DATE:	MARCH 2024
SCALE:	1"=10'
PROJECT No.:	06480101
CADD FILE:	06480101SP
DESIGNED:	ADT
DRAWN:	AJG
CHECKED:	-

SHEET No.:

3 OF 7



NOTES:

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GRAPHIC SCALE
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SCALE: 1"=10'

TOWN OF HEBRON, CONNECTICUT

REPLACEMENT OF BRIDGE 07085 SUPERSTRUCTURE GRAYVILLE ROAD OVER JEREMY RIVER

SITE PLAN

DESIGN

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REVISIONS

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DRAWN:	AJG
CHECKED:	-

SHEET No.: 4 OF 7

PROJECT NARRATIVE:

THE SUBJECT PROJECT INCLUDES THE REPLACEMENT OF AN EXISTING STEEL AND TIMBER SUPERSTRUCTURE.

ADDRESS OF PROPOSED USE:

GRAYVILLE ROAD OVER JEREMY RIVER
HEBRON, CT

OWNER'S AGENT:

MR. PAUL FORREST, DIRECTOR OF PUBLIC WORKS
TOWN OF HEBRON
15 GILEAD STREET
HEBRON, CT 06428
Tel. 860-228-2871

CONSTRUCTION SCHEDULING:

IT IS PROPOSED TO BEGIN CONSTRUCTION IN SUMMER AND TO COMPLETE CONSTRUCTION WITHIN ONE MONTH. IN GENERAL, THE SEQUENCE FOR SITE CONSTRUCTION AND SITE STABILIZATION MAY BE AS FOLLOWS:

1. INSTALL MAINTENANCE AND PROTECTION OF TRAFFIC MEASURES.
2. CLEAR AND THEN INSTALL SEDIMENT AND EROSION CONTROLS (EXCEPT BENEATH EXISTING SUPERSTRUCTURE).
3. INSTALL TEMPORARY PEDESTRIAN BRIDGE AND WALKS.
4. REMOVE PAVEMENT.
5. REMOVE SUPERSTRUCTURE.
6. INSTALL SEDIMENT AND EROSION CONTROLS BENEATH REMOVED SUPERSTRUCTURE.
7. EXCAVATE TO BRIDGE SEAT AND MODIFY ABUTMENT TOPS.
8. INSTALL PROPOSED SUPERSTRUCTURE.
9. INSTALL PROPOSED PAVEMENT AND BASE MATERIALS.
10. REMOVE TEMPORARY PEDESTRIAN BRIDGE AND WALKS.
11. REMOVE MAINTENANCE AND PROTECTION OF TRAFFIC ITEMS.
12. RESTORE REMOVED WALK AREAS WITH GRASS.
13. REMOVE EROSION CONTROLS ONCE VEGETATION HAS RE-ESTABLISHED.

THE CONTRACTOR SELECTED TO CONSTRUCT THIS PROJECT WILL BE RESPONSIBLE FOR IMPLEMENTATION OF SEDIMENT AND EROSION CONTROL MEASURES ON THIS SITE PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR WILL PROVIDE THE TOWN OF HEBRON WITH THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE RESPONSIBLE PERSON. SHOULD ANY PROBLEMS OCCUR, THEN THE OWNER'S AGENT, MR. PAUL FORREST, SHOULD BE CONTACTED AT 860-228-2871.

CONTINGENCY PLAN

A MINIMUM OF TWO WEEKS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE OWNER'S AGENT AND THE TOWN ENGINEER WITH THE NAMES AND TELEPHONE NUMBERS OF THE RESPONSIBLE PERSONS TO BE CONTACTED IN THE EVENT OF AN EROSION AND/OR SEDIMENT CONTROL PROBLEM.

THE CONTRACTOR SHALL AT ALL TIMES KEEP SUFFICIENT ADDITIONAL SEDIMENTATION CONTROL FENCE AND/OR HAY BALES ON THE PROJECT SITE TO CONTROL UNFORESEEN EROSION AND/OR SEDIMENT PROBLEMS. IN THE EVENT OF A PROBLEM THE CONTRACTOR SHALL PROMPTLY STABILIZE THE PROBLEM AND CONTAIN ANY SEDIMENT AND THEN NOTIFY THE OWNER'S AGENT.

EROSION AND SEDIMENT CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN FOR THE PROJECT.

THE MINIMUM STANDARDS FOR ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE THOSE OUTLINED IN THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL", LATEST REVISION. ALTERNATIVE MEASURES, METHODS, MEANS AND TECHNIQUES MAY BE ALLOWED WITH THE PRIOR APPROVAL OF THE OWNER'S AGENT.

GENERAL GUIDELINES:

1. NO CONSTRUCTION ACTIVITY SHALL TAKE PLACE WITHIN AREAS DESIGNATED AS INLAND WETLANDS, WATERCOURSES OR FLOODPLAINS, DESIGNATED UPLAND REVIEW ZONES OR WITHIN STREAM CHANNEL ENCROACHMENT LINES WITHOUT ALL REQUIRED APPROVALS AND/OR PERMITS.
2. TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.
3. ALL EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED CONTINUOUSLY AND SHALL NOT BE REMOVED UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED.
4. THE CONTRACTOR SHALL LIMIT THE DISTURBANCE OF LAND TO THOSE AREAS SHOWN ON THE DRAWINGS AND SHALL TAKE REASONABLE CARE TO PROTECT AND PRESERVE EXISTING VEGETATION WITHIN THE LIMITS OF DISTURBANCE WHERE FEASIBLE.
5. WHERE PRACTICABLE, THE CONTRACTOR SHALL PLAN HIS CONSTRUCTION OPERATIONS SO AS TO LIMIT THE AREAS OF EXPOSED SOIL TO AREAS ACTIVELY UNDER CONSTRUCTION. THE CONTRACTOR SHALL TAKE REASONABLE CARE TO LIMIT THE PERIOD OF EXPOSURE OF DISTURBED AREAS. THE INSTALLATION OF PERMANENT VEGETATIVE MEASURES SHALL BE ACCOMPLISHED AS SOON AS IS PRACTICABLE.
6. ADEQUATE PROVISIONS SHALL BE TAKEN TO PROTECT ALL EXPOSED CUT AND FILL SLOPES FROM SURFACE WATER FLOW DAMAGE.
7. ALL MATERIAL FROM CLEARING AND GRUBBING OPERATIONS SHALL BE DISPOSED OF IN A LAWFUL MANNER.
8. WATER FROM DEWATERING OPERATIONS SHALL NOT BE DISCHARGED DIRECTLY TO ANY WETLAND OR WATERCOURSE. SUCH WATER SHALL BE DISCHARGED TO AN APPROVED SEDIMENT BASIN AND/OR FILTER DEVICE OR TO A STORM DRAINAGE SYSTEM ONLY WHEN APPROVED. NO WATER FROM DEWATERING OPERATIONS SHALL BE DISCHARGED INTO A SANITARY SEWER SYSTEM.
9. THE STORAGE, WASHING, FUELING AND MAINTENANCE OF EQUIPMENT AND VEHICLES SHALL TAKE PLACE IN DESIGNATED AREAS ONLY. IN THE EVENT OF A CONTAMINANT SPILL THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION OIL AND CHEMICAL SPILL RESPONSE DIVISION (860-424-3338) AND THE OWNER'S AGENT.

PRESERVE AND CONSERVE SOIL

TOPSOILING

MATERIALS

SITE INVESTIGATIONS SHALL BE MADE TO DETERMINE IF THERE IS A SUFFICIENT QUANTITY OF TOPSOIL OF GOOD QUALITY ON THE SITE TO JUSTIFY STRIPPING. HIGH QUALITY TOPSOIL SHALL BE FRIABLE AND LOAMY (LOAM, SANDY LOAM, SILT LOAM, SANDY CLAY LOAM, CLAY LOAM). OTHER SOIL TYPES WITH HIGH ORGANIC CONTENT MAY BE FOUND SUITABLE AFTER TESTING. IT SHALL BE FREE OF DEBRIS, TRASH, STUMPS, ROCKS, ROOTS AND NOXIOUS WEEDS. IT SHALL GIVE EVIDENCE OF BEING ABLE TO SUPPORT HEALTHY VEGETATION. IT SHALL CONTAIN NO SUBSTANCE THAT IS POTENTIALLY TOXIC TO PLANT GROWTH.

ALL TOPSOIL SHALL BE TESTED BY A RECOGNIZED LABORATORY TO DETERMINE THE PROPER APPLICATION RATES OF LIME AND FERTILIZER.

INSTALLATION REQUIREMENTS

1. STRIPPING OF TOPSOIL SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA. THE DEPTH OF REMOVAL MAY VARY DEPENDING ON THE SITE CONDITIONS. ALL SEDIMENT CONTROLS SHALL BE IN PLACE PRIOR TO BEGINNING STRIPPING OPERATIONS.
2. TOPSOIL SHALL BE STOCKPILED IN SUCH A MANNER THAT NATURAL SURFACE WATER FLOW IS NOT OBSTRUCTED AND NO OFF-SITE SEDIMENT DAMAGE SHALL RESULT.
3. SIDE SLOPES OF STOCKPILES SHALL NOT BE STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL.
4. A SEDIMENT BARRIER SHALL SURROUND ALL TOPSOIL STOCKPILES.
5. TEMPORARY SEEDING OF STOCKPILES SHALL BE COMPLETED WITHIN 30 DAYS OF THE FORMATION OF THE STOCKPILE, IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE COVER REQUIREMENTS.
6. PREVIOUSLY ESTABLISHED GRADES ON THE AREAS TO BE TOPSOILED SHALL BE MAINTAINED ACCORDING TO THE DRAWINGS.
7. WHERE THE pH OF THE SUBSOIL IS 6.0 OR LESS, GROUND AGRICULTURAL LIMESTONE SHALL BE SPREAD IN ACCORDANCE WITH THE SOIL TEST TO A pH OF 6.0 TO 6.5 OR THE VEGETATIVE ESTABLISHMENT PRACTICE BEING USED.
8. AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, AND IMMEDIATELY PRIOR TO SPREADING THE TOPSOIL, THE SUBGRADE SHALL BE LOOSENED BY DISCING OR SCARIFYING OR TRACKING TO A DEPTH OF AT LEAST 4 INCHES TO ENSURE BONDING OF THE TOPSOIL AND SUBSOIL.
9. TOPSOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBGRADE IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING OR PROPOSED SODDING OR SEEDING. THE TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED TO A MINIMUM COMPACTED DEPTH OF 6 INCHES, UNLESS OTHERWISE NOTED. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
10. TOPSOIL SHALL BE COMPACTED ENOUGH TO ENSURE GOOD CONTACT WITH THE UNDERLYING SOIL AND TO OBTAIN A UNIFORM FIRM SEEDBED FOR THE ESTABLISHMENT OF A DURABLE TURF. UNDUE COMPACTION IS TO BE AVOIDED AS IT INCREASES RUNOFF VELOCITY AND VOLUME, AND PREVENTS SEED GERMINATION.
11. IMMEDIATELY FOLLOWING TOPSOIL APPLICATION, PROTECT THE TOPSOIL FROM EROSION BY EITHER SODDING, SEEDING AND/OR MULCHING.

LAND GRADING

1. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN UNTIL THEY ARE PERMANENTLY STABILIZED.
2. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
3. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.
4. FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS AND OTHER OBJECTIONABLE MATERIALS.
5. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
6. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION.
7. TOPSOILING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE REQUIREMENTS FOR TOPSOILING.
8. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.

DUST CONTROL

INSTALLATION REQUIREMENTS

WATER

1. THE EXPOSED SOIL SURFACE SHALL BE MOISTENED PERIODICALLY WITH ADEQUATE QUANTITIES OF WATER TO CONTROL DUST.

STONE

1. COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL. IN AREAS ADJACENT TO WATERWAYS USE CHEMICALLY STABLE AGGREGATE.

MAINTENANCE

1. WHEN TEMPORARY DUST CONTROL MEASURES ARE USED, REPETITIVE TREATMENT SHALL BE APPLIED AS NEEDED TO ACCOMPLISH CONTROL.

VEGETATIVE SOIL COVER

PERMANENT SEEDING

INSTALLATION REQUIREMENTS

1. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. ALL GRADING SHOULD BE BE DONE IN ACCORDANCE WITH THE REQUIREMENTS FOR LAND GRADING.

SEEDBED PREPARATION

1. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY THE UNIVERSITY OF CONNECTICUT SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 300 POUNDS PER ACRE OR 7.5 POUNDS PER 1,000 SQUARE FEET USING 10-10-10 OR EQUIVALENT. IN ADDITION, 300 POUNDS OF 36-0-0 PER ACRE OR EQUIVALENT OF SLOW RELEASE NITROGEN MAY BE USED FOR TOPDRESSING. APPLY GROUND LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AS FOLLOWS:

SOIL TEXTURE	TONS/ACRE	LBS/1,000 SQUARE FEET
CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL	3	135
SANDY LOAM, LOAM, SILT LOAM	2	90
LOAMY SAND, SAND	1	45

REFER TO COUNTY SOIL SURVEY REPORT FOR SOIL TEXTURES AT THE SITE.

2. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHALL BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
3. REMOVE FROM THE SURFACE ALL STONES ONE AND ONE-QUARTER INCHES OR LARGER IN ANY DIMENSION UNLESS OTHERWISE SPECIFIED. REMOVE ALL OTHER DEBRIS SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.
4. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED AS ABOVE.

SEEDING DATES

1. SPRING SEEDINGS USUALLY GIVE THE BEST RESULTS. SPRING SEEDINGS OF ALL SEED MIXES WITH LEGUMES IS RECOMMENDED. HOWEVER LATE SUMMER SEEDINGS PRIOR TO SEPTEMBER 15 CAN BE MADE. WHEN CROWN VETCH IS SEEDED IN LATE SUMMER AT LEAST 35 PERCENT OF THE SEED SHOULD BE HARD SEED (UNSCARIFIED). THE RECOMMENDED SEEDING DATES ARE:

   MARCH 15 THROUGH JUNE 15
   SEPTEMBER 1 THROUGH OCTOBER 15

2. WITH THE EXCEPTION OF CROWN VETCH, THE FINAL SEEDING DATE MAY BE EXTENDED 15 DAYS IN THE COASTAL TOWNS OF NEW LONDON, MIDDLESEX, NEW HAVEN AND FAIRFIELD COUNTIES.

SEEDING

1. THE SEED MIXTURE SHALL BE AS SPECIFIED IN ARTICLE M13.04 OF THE STANDARDSPECIFICATIONS, OR ACCEPTED SUBSTITUTION.
2. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER. NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2 INCH. HYDROSEEDINGS WHICH ARE MULCHED MAY BE LEFT ON SOIL SURFACE.
3. WHERE FEASIBLE, EXCEPT WHERE EITHER A CULTIPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG. SEEDING OPERATIONS SHOULD BE ON THE CONTOUR.
4. FROST CRACK SEEDING MUST BE DONE IN LATE WINTER OR EARLY SPRING. SUITABLE WEATHER CONDITIONS ARE FREEZING NIGHTS AND THAWING DAYS WITH LITTLE OR NO SNOW COVER. SEEDING RATES MUST BE INCREASED 10 PERCENT WHEN USING THIS METHOD.
5. HYDRAULIC APPLICATION (HYDROSEEDING), IS A SUITABLE METHOD FOR USE ON CRITICAL AREAS. WHEN HYDROSEEDING, A SEEDBED IS PREPARED IN THE CONVENTIONAL WAY OR BY HAND RAKING TO LOOSEN AND SMOOTH THE SOIL AND TO REMOVE SURFACE STONES LARGER THAN ONE INCH IN DIAMETER. SLOPES MUST BE NO STEEPER THAN 2 TO 1 (2 FEET HORIZONTALLY TO ONE FOOT VERTICALLY). LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF FIBER MULCH ON CRITICAL AREAS IS NOT RECOMMENDED (UNLESS IT IS USED TO HOLD STRAW OR HAY). FIBER MULCH DOES NOT PROVIDE ADEQUATE SEEDBED PROTECTION. BETTER PROTECTION IS GAINED BY USING STRAW MULCH AND HOLDING IT WITH ADHESIVE MATERIALS OR 500 POUNDS PER ACRE OF WOOD FIBER MULCH. SEEDING RATES MUST BE INCREASED BY 10 PERCENT WHEN HYDROSEEDING.
6. APPLY MULCH ACCORDING TO THE TEMPORARY MULCHING MEASURE.
7. IF SEEDING CANNOT BE DONE WITHIN THE SEEDING DATES, USE THE TEMPORARY MULCHING MEASURE TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

MAINTENANCE

1. LIME ACCORDING TO A SOIL TEST OR AT A MINIMUM OF EVERY FIVE YEARS USING A RATE OF TWO TONS PER ACRE (100 POUNDS PER 1,000 SQUARE FEET).
2. WHERE GRASSES PREDOMINATE, FERTILIZE ACCORDING TO A SOIL TEST OR BROADCAST BIENNIALLY, 300 POUNDS OF 10-10-10 OR EQUIVALENT PER ACRE (7.5 POUNDS PER 1,000 SQUARE FEET).
3. WHERE LEGUMES PREDOMINATE, FERTILIZE ACCORDING TO A SOIL TEST OR BROADCAST EVERY THREE YEARS 300 POUNDS OF 0-20-20 PER ACRE OR EQUIVALENT (7.5 POUNDS PER 1,000 SQUARE FEET).

NON-LIVING SOIL PROTECTION

MULCH FOR SEED

MATERIALS

1. SELECT MULCH MATERIALS BASED ON SITE CONDITIONS, AVAILABILITY OF MATERIALS AND LABOR AND EQUIPMENT. OTHER MATERIALS MAY BE USED ONLY WITH THE PERMISSION OF THE APPROVING AUTHORITY.

INSTALLATION REQUIREMENTS

ORGANIC MULCHES

1. ORGANIC MULCHES MAY BE USED IN ANY AREA WHERE MULCH IS REQUIRED, SUBJECT TO THE RESTRICTIONS NOTED BELOW:

	RATES	
MULCHES	PER ACRE	PER 1,000 SQUARE FEET
STRAW OR HAY	1 1/2 - 2 TONS	35-45 LBS

APPLICATION

1. MULCH MATERIALS SHALL BE SPREAD UNIFORMLY, BY HAND OR MACHINE. WHEN SPREADING STRAW OR HAY MULCH BY HAND, DIVIDE THE AREA TO BE MULCHED INTO APPROXIMATELY 1,000 SQUARE FOOT SECTIONS AND PLACE 35-45 POUNDS (3/4 TO 1 BALE) OF STRAW OR HAY IN EACH SECTION TO ENSURE UNIFORM DISTRIBUTION.

ANCHORING

1. HAY OR STRAW MULCHES MUST BE ANCHORED IMMEDIATELY AFTER APPLICATION TO PREVENT WINDBLOWING. HAY OR STRAW MULCH MAY BE ANCHORED BY TRACKING WITH CONSTRUCTION EQUIPMENT, BUT NOT BY USING NETTING.

MAINTENANCE

1. ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION. WHERE EROSION IS OBSERVED, ADDITIONAL MULCH SHOULD BE APPLIED. NETS SHALL BE INSPECTED AFTER RAINSTORMS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, REINSTALL NET AS NECESSARY AFTER REPAIRING DAMAGE TO THE SLOPE. INSPECTIONS SHALL TAKE PLACE UNTIL GRASSES ARE FIRMLY ESTABLISHED. GRASSES SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED WHICH IS MATURE ENOUGH TO CONTROL SOIL EROSION AND TO SURVIVE SEVERE WEATHER CONDITIONS. WHERE MULCH IS USED IN CONJUNCTION WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE, REPAIR AS NEEDED.

SEDIMENT IMPOUNDMENTS, BARRIERS, AND FILTERS

HAY BALE BARRIER

INSTALLATION REQUIREMENTS

SHEET FLOW APPLICATIONS

1. BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE ON THE CONTOUR, WITH THE ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.
2. ALL BALES SHALL BE EITHER WIRE-BOUND OR STRING TIED. BALES SHALL BE INSTALLED SO THAT BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES TO PREVENT DETERIORATION OF THE BINDINGS.
3. A TRENCH SHALL BE EXCAVATED THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED AND CHINKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AGAINST THE BARRIER. BACKFILL SOIL SHALL CONFORM TO THE GROUND LEVEL ON THE DOWNHILL SIDE AND SHALL BE BUILT UP TO 4 INCHES AGAINST THE UPHILL SIDE OF THE BARRIER. BALES SHOULD BE PLACED 10 FEET AWAY FROM THE TOE OF SLOPES UNLESS OTHERWISE SHOWN ON THE DRAWINGS OR DIRECTED.
4. EACH BALE SHALL BE SECURELY ANCHORED BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER. STAKES OR REBARS SHALL BE DRIVEN DEEP ENOUGH INTO THE GROUND TO SECURELY ANCHOR THE BALES.
5. THE GAPS BETWEEN BALES SHALL BE CHINKED (FILLED BY WEDGING) STRAW BETWEEN THEM TO PREVENT WATER FROM FLOWING BETWEEN THE BALES.

CHANNEL FLOW APPLICATIONS

1. BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE, ORIENTED PERPENDICULAR TO THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.
2. THE REMAINING STEPS FOR INSTALLING A BALE BARRIER FOR SHEET FLOW APPLICATIONS APPLY HERE, WITH THE FOLLOWING ADDITION:
3. THE BARRIER SHALL BE EXTENDED TO SUCH A LENGTH THAT THE BOTTOMS OF THE END BALES ARE HIGHER IN ELEVATION THAN THE TOP OF THE LOWEST MIDDLE BALE TO ASSURE THAT SEDIMENT LADEN RUNOFF WILL FLOW EITHER THROUGH OR OVER THE BARRIER BUT NOT AROUND IT.

MAINTENANCE

1. INSPECTION SHALL BE MADE AFTER EACH STORM EVENT AND PERIODICALLY DURING PROLONGED RAIN EVENTS AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
2. ACCUMULATED SEDIMENT BEHIND THE BALES SHALL BE REMOVED WHEN IT REACHES 1/2 OF THE ORIGINAL HEIGHT OF THE BALES.

GEOTEXTILE SILT FENCE

MATERIALS

1. GEOTEXTILE. GEOTEXTILE SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE FILAMENTS AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING REQUIREMENTS:

PHYSICAL PROPERTY	REQUIREMENTS
FILTERING EFFICIENCY	75% (MIN)
TENSILE STRENGTH AT 20% (MAX) ELONGATION	-
EXTRA STRENGTH	50 LBS./LIN. IN. (MIN)
STANDARD STRENGTH	30 LBS./LIN. IN. (MIN)
FLOW RATE	0.3 GAL./SF/MIN. (MIN.)

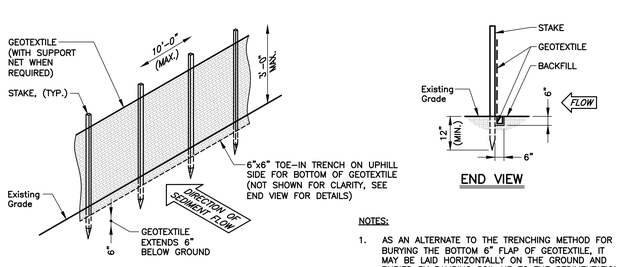
2. STAKES FOR GEOTEXTILE SILT FENCES SHALL BE 1" X 1" WOOD WITH A MINIMUM LENGTH OF 5 FEET.
3. WIRE FENCE REINFORCEMENT FOR GEOTEXTILE SILT FENCES USING STANDARD STRENGTH MATERIAL SHALL BE A MINIMUM OF 42 INCHES IN HEIGHT, A MINIMUM OF 14 GAUGE AND SHALL HAVE A MAXIMUM MESH SPACING OF 6 INCHES.

INSTALLATION REQUIREMENTS

1. THE HEIGHT OF THE BARRIER SHALL NOT EXCEED 36 INCHES. (HIGHER BARRIERS MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE). THE SEDIMENTATION CONTROL FENCE SHALL BE PLACED 10 FEET AWAY FROM THE TOE OF SLOPES UNLESS OTHERWISE SHOWN ON THE DRAWINGS OR DIRECTED.
2. WHEN JOINTS ARE NECESSARY, GEOTEXTILE ROLL ENDS SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6" OVERLAP AND SECURELY SEALED IN CONFORMANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
3. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM DEPTH OF 12 INCHES.
4. WHEN STANDARD STRENGTH GEOTEXTILE IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO A TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
5. THE STANDARD STRENGTH GEOTEXTILE SHALL BE STAPLED, WIRED OR TIED TO THE WIRE FENCE, AND 8 INCHES OF THE GEOTEXTILE SHALL BE EXTENDED INTO THE TRENCH.
6. WHEN EXTRA STRENGTH GEOTEXTILE OR BURLAP AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED.
7. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE GEOTEXTILE.

MAINTENANCE

1. INSPECTION SHALL BE MADE AFTER EACH STORM EVENT AND PERIODICALLY DURING PROLONGED RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE AS REQUIRED.
2. ACCUMULATED SEDIMENT BEHIND THE FENCE SHALL BE REMOVED WHEN IT REACHES 1/2 OF THE HEIGHT OF THE BARRIER.

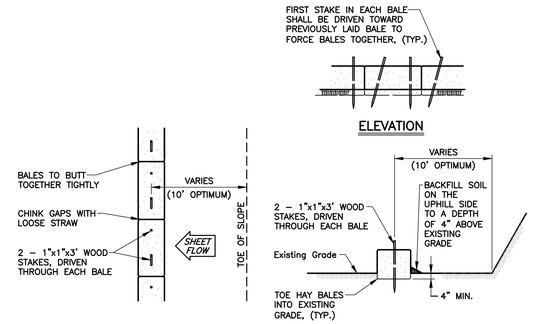


SEDIMENTATION FENCE

N.T.S.

NOTES:

1. AS AN ALTERNATE TO THE TRENCHING METHOD FOR BURYING THE BOTTOM 6" FLAP OF GEOTEXTILE, IT MAY BE LAID HORIZONTALLY ON THE GROUND AND BURIED BY RAMPING SOIL UP TO THE SEDIMENTATION FENCE AS SPECIFIED IN SECTION 2.19.03 OF THE STATE OF CT, DEPT. OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION, FORM 818, 2020, AS AMENDED TO DATE.



BALED HAY OR STRAW EROSION CHECKS

(SHEET FLOW APPLICATIONS)

N.T.S.

NOTES:

1. SEE SHEET 6 FOR PROJECT NOTES.

THIS DRAWING IS INTENDED TO BE USED FOR INFORMATION AND REVIEW PURPOSES ONLY AND IS NOT INTENDED TO BE USED FOR CONSTRUCTION.

TOWN OF
HEBRON, CONNECTICUT

REPLACEMENT OF
BRIDGE 07085
SUPERSTRUCTURE
GRAYVILLE ROAD
OVER JEREMY RIVER

EROSION AND
SEDIMENT CONTROL
NOTES AND DETAILS

DESIGN

Jacobson
Nathan L. Jacobson & Associates, Inc.
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www.nlja.com
Consulting Civil and Environmental Engineers Since 1972

NOT VALID WITHOUT ORIGINAL SEAL

J. HOWARD PFROMMER, P.E.
CT REGISTRATION No. 15871

REVISIONS

No.	DESCRIPTION	DATE

DATE:	MARCH 2024
SCALE:	N.T.S.
PROJECT No.:	06480101
CADD FILE:	06480101ED
DESIGNED:	JHP
DRAWN:	AJG
CHECKED:	-

SHEET No.: 5 OF 7

I:\Civil 3D\06480101_Production Drawings\06480101ED.dwg, 3/7/2024 1:30:44 PM, AutoCAD PDF (General Documentation).pc3

PROJECT NOTES:

1. IN-RIVER CONSTRUCTION WINDOW: THE IN-RIVER CONSTRUCTION WINDOW FOR UNCONFINED CONSTRUCTION ACTIVITIES SHALL BE JULY 1 TO SEPTEMBER 30, INCLUSIVE, OF THE SAME YEAR. IN-RIVER UNCONFINED CONSTRUCTION ACTIVITIES SHALL NOT OCCUR AT ANY OTHER TIME OF THE YEAR EXCEPT DURING THE IN-RIVER CONSTRUCTION WINDOW PERIOD. "CONFINED" SHALL BE DEFINED AS BEHIND A COFFERDAM.
2. DEWATERING: THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF WATER TO ENABLE CONSTRUCTION IN THE DRY, INCLUDING BUT NOT LIMITED TO TRENCHES, EXCAVATIONS, WATER CONTROL STRUCTURES AND COFFERDAMS, THAT MAY BE REQUIRED TO PROPERLY COMPLETE THE WORK. PARTICULAR ATTENTION IS CALLED TO FLUCTUATIONS IN WATER FLOWS AND LEVELS THAT MAY OCCUR DUE TO PRECIPITATION EVENTS. NO EXTRA MONETARY COMPENSATION WILL BE ALLOWED DUE TO WATER FLOW OR LEVEL FLUCTUATIONS. WHETHER PUMPING OR SIPHONING FOR DEWATERING IS USED OR NOT, IN ALL CASES, THE DISCHARGE SHALL BE HANDLED SO AS TO AVOID EROSION AND SEDIMENTATION AS APPROVED BY THE ENGINEER. TAKE ALL NECESSARY PRECAUTIONS AND FURNISH EQUIPMENT REQUIRED TO HANDLE ALL SURFACE, SUBSURFACE AND FLOOD FLOWS WHICH MAY BE ENCOUNTERED AT ANY TIME DURING CONSTRUCTION.
3. CONSTRUCTION FLOOD CONTINGENCY OPERATION PLAN: ALL TEMPORARY STRUCTURES, MATERIAL, EQUIPMENT NOT SPECIFICALLY DESIGNATED AS PART OF THE CONTRACTOR'S WATER HANDLING PLAN SHALL BE REMOVED FROM THE FLOOD PLAIN UPON A 'FLOOD WARNING NOTIFICATION' FOR THE PROJECT AREA ISSUED BY THE U.S. WEATHER SERVICE.
4. EROSION CONTROLS: INSTALL EROSION CONTROLS TO THE MAXIMUM EXTENT POSSIBLE AND OBTAIN APPROVAL OF THE INSTALLATION (NOT THE DESIGN) FROM THE TOWN OF HEBRON PRIOR TO THE START OF CONSTRUCTION.
5. MAINTENANCE OF EROSION CONTROLS: INSPECT EROSION CONTROLS REGULARLY AND IMMEDIATELY AFTER RAINFALL EVENTS AND MAINTAIN AND MODIFY AS NECESSARY OR AS DIRECTED BY THE TOWN TO ENSURE OPTIMUM PERFORMANCE.
6. PERMITS: ALL ACTIVITIES SHALL COMPLY WITH LOCAL, STATE AND FEDERAL AUTHORIZATIONS.
7. STOCKPILES: INSTALL EROSION CONTROLS AROUND THE BASE OF ALL STOCKPILES, AND TEMPORARILY SEED OR COVER THE PILES WITH AN IMPERVIOUS COVER IF THEY WILL REMAIN ON THE SITE LONGER THAN ONE MONTH.
8. CONSTRUCTION VEHICLES: NO CONSTRUCTION VEHICLES WILL BE STORED, SERVICED, REFUELED, WASHED, OR FLUSHED OUT IN A LOCATION WHERE LEAKS, SPILLAGE, WASTE MATERIALS, CLEANERS, OR WATERS WILL BE INTRODUCED OR FLOW INTO WETLANDS OR WATERCOURSES.
9. SPILL KIT: PROVIDE AND MAINTAIN A SUPPLY OF ABSORBENT SPILL RESPONSE BOOMS AND BLANKETS ON-SITE FOR THE ENTIRE CONSTRUCTION PERIOD.
10. CONTAMINANT SPILLS: NO EQUIPMENT STORAGE, CLEANING, REPAIRING, OR REFUELING SHALL BE CONDUCTED WITHIN 25' OF AN INLAND WETLAND BOUNDARY. SHOULD ANY CONTAMINANT SPILL OCCUR, IMMEDIATELY NOTIFY THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, OIL AND CHEMICAL SPILL RESPONSE DIVISION AT 860-424-3338 AND THE ENGINEER.
11. EQUIPMENT MAINTENANCE AND REFUELING: DURING CONSTRUCTION, ROUTINE EQUIPMENT MAINTENANCE AND REFUELING SHALL OCCUR AWAY FROM STORMWATER CATCH BASINS ON IMPERVIOUS SURFACE WITH OIL ABSORBENT SPILL RESPONSE MATERIALS IN PLACE. NON-ROUTINE MAINTENANCE OF EQUIPMENT SHALL BE CONDUCTED OFF-SITE. SHOULD ANY CONTAMINANT SPILL OCCUR, IMMEDIATELY NOTIFY THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, OIL AND CHEMICAL SPILL RESPONSE DIVISION AT 860-424-3338 AND THE ENGINEER.
12. FUEL STORAGE: BULK FUEL FOR CONSTRUCTION PURPOSES SHALL NOT BE STORED ON- SITE.
13. HAZARDOUS MATERIAL STORAGE: DURING CONSTRUCTION, ALL OIL, PAINT, OR OTHER HAZARDOUS MATERIALS SHALL BE STORED OFF-SITE, OR IF ON-SITE, THEN WITHIN A SECONDARY CONTAINMENT STRUCTURE WITH AN IMPERVIOUS FLOOR THAT WILL BE SECURED DURING NON-WORKING HOURS.
14. TREES: TREES AND VEGETATION TO BE REMOVED MAY NOT ALL BE SHOWN. IN ALL CASES, CLEARING SHALL BE LIMITED TO THE MINIMUM NECESSARY TO PERFORM THE CONSTRUCTION AS APPROVED BY THE TOWN. TREES TO BE REMOVED SHALL BE INDIVIDUALLY VERIFIED IN THE FIELD WITH THE ENGINEER PRIOR TO THE DISTURBANCE.
15. MATERIAL DISPOSAL: SURPLUS OR UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL ORDINANCES, RULES, REGULATIONS AND CODES.
16. CUTTING PAVEMENT: PAVEMENTS TO BE CUT SHALL BE SAW CUT, PRIOR TO PAVING, CLEAN FACE OF EXISTING PAVEMENT AND PAINT WITH LIQUID BITUMEN. MATCH EXISTING GRADES WITH NEW PAVEMENT.
17. UNDERGROUND UTILITIES: FOR LOCATION OF UNDERGROUND ELECTRIC, TELEPHONE, GAS, CABLE TV, AND OTHER FACILITIES OF PUBLIC UTILITY COMPANIES, INQUIRE OF "CALL BEFORE YOU DIG, INC." AT 1-800-922-4455.
18. UTILITIES: PROTECT AND MAINTAIN ALL EXISTING UTILITIES LOCATED WITHIN THE VICINITY OF THE CONSTRUCTION SITE, UNLESS OTHERWISE NOTED. IF ANY UTILITY IS DAMAGED OR SERVICE INTERRUPTED DURING CONSTRUCTION, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL DAMAGES INCLUDING RESTORING SERVICE IN A SAFE MANNER, TO THE COMPLETE SATISFACTION OF THE UTILITY OWNER AND THE ENGINEER.

    ELECTRIC - EVERSOURCE ENERGY
    TELEPHONE - FRONTIER COMMUNICATIONS OF CONNECTICUT
    CABLE TELEVISION - COMCAST OF CONNECTICUT, INC.

    INFORMATION OR DATA SHOWN ON OR INDICATED IN THE CONTRACT DOCUMENTS WITH RESPECT TO EXISTING UNDERGROUND PIPES, CABLES, CONDUITS, STRUCTURES OR OTHER UNDERGROUND FACILITIES IS BELIEVED TO BE REASONABLY CORRECT BUT IS NOT GUARANTEED TO BE EXACT OR COMPLETE. SUCH INFORMATION SHALL BE CONSIDERED TO HAVE BEEN PROVIDED FOR THE CONVENIENCE OF THE CONTRACT AND TO ALERT THE CONTRACTOR TO THE EXISTENCE OF SUCH UNDERGROUND FACILITIES WITHIN OR CONTIGUOUS TO THE PROJECT SITE AND THE TOWN, ENGINEER AND THEIR CONSULTANTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY SUCH INFORMATION OR DATA.

    THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR REVIEWING AND CHECKING ALL INFORMATION AND DATA DESCRIBED ABOVE, FOR LOCATING ALL SUCH UNDERGROUND FACILITIES SHOWN OR INDICATED IN THE CONTRACT DOCUMENTS, FOR COORDINATION OF THE WORK WITH THE OWNERS OF SUCH UNDERGROUND FACILITIES DURING CONSTRUCTION, FOR THE SAFETY AND PROTECTION THEREOF, AND FOR REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK, THE COST OF ALL WHICH WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE.
19. CONTRACT LIMIT LINE: SHALL BE LONGITUDINAL PROJECT LIMITS AND RIGHT OF WAY AND EASEMENT LINES AS MAY BE SHOWN ON THE DRAWINGS, OR OTHERWISE AGREED TO WITH THE ENGINEER.
20. SITE DISTURBANCE: SITE DISTURBANCE SHALL BE KEPT TO A MINIMUM.
21. SITE FEATURES: NEATLY REMOVE, STORE AND PROTECT AS APPLICABLE, AND REINSTALL OR REPLACE AS APPLICABLE, EXISTING SITE FEATURES DISTURBED BY CONSTRUCTION, REQUIRED FOR FINISHED CONSTRUCTION.
22. SALVAGE ITEMS: NONE.
23. NOISE: PROPERLY CONTROL MUFFLERS AND NOISE CONTROL DEVICES. REPLACE DEFECTIVE DEVICES AS NECESSARY AND LOCATE DEWATERING PUMPS AS FAR AS POSSIBLE FROM RESIDENTIAL STRUCTURES, SO AS TO MINIMIZE THE AMOUNT OF NOISE GENERATED AT THE SITE THAT WILL REACH RESIDENTIAL STRUCTURES.
24. CONTRACTOR SHALL BE:

    A. SOLELY RESPONSIBLE FOR PROTECTION OF PERSONS AND THE PUBLIC IN GENERAL, THE WORK TO BE PERFORMED UNDER THE CONTRACT, PUBLIC AND PRIVATE PROPERTY, AND EASEMENTS AND RIGHTS-OF-WAY DURING THE COURSE OF THE WORK OF THE CONTRACTOR AND HIS SUBCONTRACTORS;
    B. LIABLE FOR ALL DAMAGES AND CLAIMS RECEIVED OR SUSTAINED BY ANY PERSONS, CORPORATIONS OR PROPERTY IN CONSEQUENCE OF DAMAGE TO EXISTING UTILITIES, ROADWAYS, THEIR APPURTENANCES, OR OTHER FACILITIES CAUSED DIRECTLY OR INDIRECTLY BY THE OPERATIONS OF THE CONTRACTOR, AND;
    C. SOLELY RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES AND FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
25. IN GENERAL, Lower Case Text Identifies Existing Features/Conditions.
26. IN GENERAL, *UPPER CASE TEXT IDENTIFIES PROPOSED FEATURES/CONDITIONS* UNLESS OTHERWISE SPECIFIED.

REFERENCES:

1. WETLANDS WERE FLAGGED IN THE FIELD IN DEC. 2023 BY R. RICHARD SNARSKI, CPSS, MARLBOROUGH, CT.
2. FEMA EFFECTIVE FLOODPLAIN LINE WAS OBTAINED FROM A SUPERCEDED LETTER OF MAP AMENDMENT DETERMINATION DOCUMENT DATED 03-27-2014, CASE NO.: 14-01-1473A.

GENERAL NOTES:

1. SPECIFICATIONS: PREPARED BY NATHAN L. JACOBSON & ASSOCIATES, INC. TECHNICAL PORTION IS BASED SUBSTANTIALLY ON CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 818 (2020) AND SUPPLEMENTAL SPECIFICATIONS DATED JULY 2023.
2. DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION, 2002, SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003), REVISED THROUGH DECEMBER 2019.
3. ALLOWABLE DESIGN STRESSES:

    CLASS PCC03340 CONCRETE BASED ON f'_c = 3,000 psi
    REINFORCEMENT (ASTM A 615 GRADE 60) f_y = 60,000 psi

    THE CONCRETE STRENGTH, f'_c, USED IN DESIGN OF THE CONCRETE COMPONENTS IS NOTED ABOVE. THE COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF 6.01 - CONCRETE FOR STRUCTURES, AND M.03 - PORTLAND CEMENT CONCRETE.
4. LIVE LOAD: AASHTO HS20.
5. FUTURE PAVING ALLOWANCE: NONE.
6. CLASS PCC03340 CONCRETE: CLASS PCC03340 CONCRETE SHALL BE USED FOR ALL CAST-IN-PLACE CONCRETE.
7. JOINT SEAL: SEE SPECIFICATIONS.
8. EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1" x 1" UNLESS DIMENSIONED OTHERWISE.
9. CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE 2" COVER UNLESS DIMENSIONED OTHERWISE.
10. REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A 615 GRADE 60 AND GALVANIZED AFTER FABRICATION. ALL REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A767, CLASS 1, INCLUDING SUPPLEMENTAL REQUIREMENTS.
11. CONSTRUCTION JOINTS: CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE DRAWINGS, WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
12. CAST-IN-PLACE CONCRETE: THE SAME READY MIX CONCRETE SUPPLIER SHALL BE USED FOR ALL CAST-IN-PLACE CONCRETE.
13. LAP SPLICES: LAP SPLICES, OTHER THAN THOSE SHOWN ON THE DRAWINGS, WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
14. MINIMUM LAP SPLICE LENGTHS: UNLESS OTHERWISE SHOWN, #4 IS 30".

TECHNICAL SPECIFICATIONS:

GENERAL:

1. WHERE THESE SPECIFICATIONS REFER TO THE "STANDARD SPECIFICATIONS", IT SHALL MEAN THE CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, FACILITIES AND INCIDENTAL CONSTRUCTION, FORM 818, 2020, AS AMENDED TO THE DATE OF THESE DRAWINGS. UNLESS OTHERWISE NOTED, ONLY THOSE PARTS OF THE STANDARD SPECIFICATIONS THAT ARE REFERRED TO IN THE "MATERIALS" AND "CONSTRUCTION METHODS" PORTIONS OF THOSE SPECIFICATIONS SHALL APPLY, INCLUDING SUCH SUPPLEMENTS OR AMENDMENTS INCLUDED HEREIN.
2. RECLAIMED MISCELLANEOUS AGGREGATE FROM OFF-SITE IS NOT PERMITTED FOR USE.
3. CONSTRUCTION IS ANTICIPATED TO OCCUR MONDAY THROUGH FRIDAY, EXCEPT LEGAL HOLIDAYS, FROM 7:30AM TO 4:30PM.
4. CONSTRUCTION STAGING TO OCCUR ONSITE, AT A LOCATION APPROVED BY THE OWNER.

SPECIFIC:

1. OIL ABSORBENT SPILL RESPONSE BOOMS AND PADS - SPC510 BOOMS AND SPC100 PADS AS MANUFACTURED BY SORBENT PRODUCTS, INC., AS DISTRIBUTED BY ATLANTIC ENVIRONMENTAL CORP., TRUMBULL, CT OR ACCEPTED SUBSTITUTION. CONTINUOUSLY PROVIDE AND MAINTAIN ON SITE FORTY (40) LINEAR FEET OF NEW OIL ABSORBENT BOOM AND TWO-HUNDRED TWENTY-FOUR (224) SQUARE FEET OF NEW OIL ABSORBENT PADS FOR THE DURATION OF THE CONSTRUCTION. AS BOOMS AND/OR PADS ARE USED DURING THE CONSTRUCTION (IF NEEDED), THE SUPPLY SHALL BE CONTINUOUSLY REPLACED, AT ALL TIMES MAINTAINING THE REQUIRED QUANTITY SPECIFIED HEREIN.
2. EARTH EXCAVATION - CONFORM TO THE STANDARD SPECIFICATIONS, SECTION 2.02.
3. SUBBASE - CONFORM TO STANDARD SPECIFICATIONS, SECTION M.02. ARTICLE M.02.02. COMPACT TO 95% OF DRY DENSITY FOR THE MATERIAL WHEN TESTED IN ACCORDANCE WITH AASHTO T180 METHOD D. SUBMIT SHOP DRAWING FOR APPROVAL.
4. PROCESSED AGGREGATE BASE - CONFORM TO THE STANDARD SPECIFICATIONS, SECTION 3.04. SUBMIT SHOP DRAWING FOR APPROVAL.
5. SEDIMENTATION CONTROL SYSTEM - CONFORM TO THE STANDARD SPECIFICATIONS, SECTION 2.19. PROVIDE AND MAINTAIN AS SHOWN ON DRAWINGS AS WELL AS TWO (2) ADDITIONAL ROLLS OF NEW SEDIMENTATION CONTROL FENCE FOR THE DURATION OF CONSTRUCTION. AS SEDIMENTATION FENCE IS DAMAGED IT SHALL BE REMOVED AND REPLACED AND THE SUPPLY SHALL BE CONTINUALLY REPLACED, AT ALL TIMES MAINTAINING THE REQUIRED QUANTITY SPECIFIED HEREIN.
6. BITUMINOUS CONCRETE - CONFORM TO THE STANDARD SPECIFICATIONS, SECTION 4.06 FOR THE MIXTURE CLASS SHOWN. SUBMIT MIXTURE DESIGN FOR APPROVAL.
7. CAST-IN-PLACE CONCRETE - CONFORM TO THE STANDARD SPECIFICATIONS, SECTION 6.01, ARTICLE 6.01.02, FOR THE MIXTURE CLASS SPECIFIED. SUBMIT MIXTURE DESIGN FOR APPROVAL.
8. REINFORCING STEEL - CONFORM TO THE STANDARD SPECIFICATIONS, SECTION 6.02, HOT DIPPED GALVANIZED AFTER FABRICATION, TO THE REQUIREMENTS OF ASTM A767, CLASS 1, INCLUDING SUPPLEMENTAL REQUIREMENTS. SUBMIT SHOP DRAWING FOR APPROVAL.
9. STRUCTURAL STEEL - AASHTO M270, GRADE 50. CONFORM TO THE STANDARD SPECIFICATIONS, SECTION M.06.02-1 AND M.06.03. SUBMIT SHOP DRAWING FOR APPROVAL.
10. ANCHOR BOLTS - CONFORM TO THE STANDARD SPECIFICATIONS, SECTION M.06.02-2.
11. TIMBER - SUBMIT SHOP DRAWINGS FOR APPROVAL.

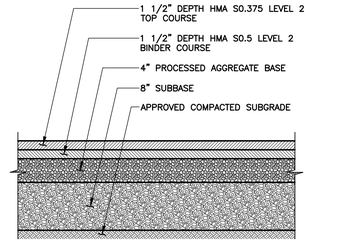
    A. WOOD
        1. COMMERCIAL LUMBER GRADE NO, 1 OR BETTER AFTER TREATMENT;
        2. AASHTO M 168;
        3. MINIMUM STRESS RATING OF 1, 350 PSI;
        4. ROUGH SAWN (NON-PLANED) OR S4S (SURFACE FOUR SIDES) SOUTHERN YELLOW PINE OR DOUGLAS FIR-LARCH WITH NOMINAL DIMENSIONS AS INDICATED ON THE DRAWINGS. VARIATIONS IN THE SIZE OF ANY DIMENSION SHALL NOT BE MORE THAN + ¼";
        5. TIMBER COMPONENTS SHALL BE PRESSURE TREATED WITH COPPER NAPTHENATE (CuN) CONFORMING TO AWPA STANDARD U1, COMMODITY SPECIFICATION A, USE CATEGORY 4B;
        6. TIMBER COMPONENTS SHALL BE FABRICATED (INCLUDING BUT NOT NECESSARILY LIMITED TO CUTTING, DRILLING, DAPPING, AND CHAMFERING) PRIOR TO TREATMENT;
        7. TIMBER COMPONENTS SHALL BE FREE OF EXCESS PRESERVATIVE AND SOLVENT AT THE CONCLUSION OF THE TREATING PROCESS. POST TREATMENT CLEANING SHALL BE BY EXPANSION BATH OR STEAMING IN ACCORDANCE WITH AWPA STANDARD C2;
        8. KILN OR AIR DRIED TO A MAXIMUM MOISTURE CONTENT OF 25% AFTER TREATMENT (KDAT - 25); AND,
        9. GRADE-MARKED AFTER TREATMENT BY AN AGENCY CERTIFIED BY THE AMERICAL LUMBER STANDARDS COMMITTEE (ALSC).

    B. FASTENERS
        1. BOLTS, NUTS, WASHERS, AND HEX LAG SCREWS SHALL CONFORM TO ASTM A307, GRADE A STEEL; AND,
        2. FASTENERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM F2329.
12. ELASTOMERIC BEARING PAD - CONFORM TO THE STANDARD SPECIFICATIONS, SECTION M.17, ARTICLE M.17.01. SUBMIT SHOP DRAWING FOR APPROVAL.
13. JOINT SEAL - ONE COMPONENT POLYURETHANE-BASE ELASTOMERIC SEALANT CONFORMING TO THE FEDERAL SPECIFICATION TT-S-00230C TYPE II - CLASS A. SUBMIT PRODUCT LITERATURE FOR APPROVAL.
14. TOPSOIL - CONFORM TO THE STANDARD SPECIFICATIONS, SECTION 9.44. PROVIDE 6" MINIMUM DEPTH. SUBMIT SOIL TEST RECOMMENDATIONS FROM STATE EXTENSION SERVICE.
15. TURF ESTABLISHMENT - CONFORM TO THE STANDARD SPECIFICATIONS, SECTION 9.50. SUBMIT DATA FOR FERTILIZER, LIME AND SEED FOR APPROVAL. ESTABLISH TURF ON ALL DISTURBED SURFACES NOT SHOWN TO BE COVERED OTHERWISE.
16. MAINTENANCE AND PROTECTION OF TRAFFIC - CONFORM TO THE STANDARD SPECIFICATIONS, SECTION 9.71 INCLUDING THE "DESCRIPTION" PORTION OF THAT SPECIFICATION.
17. MOBILIZATION - CONFORM TO THE STANDARD SPECIFICATIONS, SECTION 9.75.
18. CONSTRUCTION STAKING - CONFORM TO THE STANDARD SPECIFICATIONS, SECTION 9.80.
19. SIGNS - CONFORM TO THE STANDARD SPECIFICATIONS, SECTION 12.07. SUBMIT SHOP DRAWINGS FOR APPROVAL.

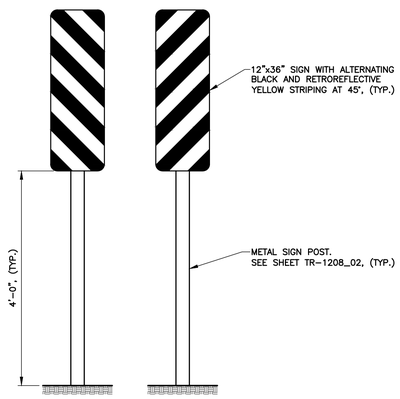
DETOUR PLAN
SCALE: 1"=100'

CONSTRUCTION SIGN LEGEND

SIGN DESIGNATION	CTDOT SIGN NUMBER	DIMENSION	SIGN FACE
(A)	80-9078	60"x30"	BRIDGE CLOSED 00 MILES AHEAD LOCAL TRAFFIC ONLY
(B)	80-9928	60"x30"	BRIDGE CLOSED



TYPICAL SECTION
PAVEMENT REPAIR
N.T.S.



TYPE 3 OBJECT MARKERS (CTDOT 41-4267)
N.T.S.

MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:

1. WORK SHALL BE PERFORMED IN ACCORDANCE WITH CTDOT FORM 818 AND THE PROJECT SPECIFICATIONS.
2. BE SOLELY RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF TRAFFIC, INCLUDING FURNISHING ALL NECESSARY TRAFFIC CONTROL AND SAFETY SIGNS, DEVICES, FLAGMAN, ETC.
3. NOTIFY THE TOWN AT LEAST FOURTEEN (14) DAYS IN ADVANCE OF ANTICIPATED WORK IN A ROADWAY.
4. FOR SIGN FACE MATERIAL DETAILS, SEE CTDOT STANDARD SHEET TR-1220_01.
5. FOR SIGN INSTALLATION DETAILS, SEE CTDOT STANDARD SHEET TR-1220_02 AND SHEET TR-1208_02.
6. THE PLACEMENT OF SIGNS SHALL NOT OBSCURE ANY PRESENT SIGNING OR SIGHTLINES FROM DRIVEWAYS OR INTERSECTING ROUTES. COORDINATE EXACT PLACEMENT OF SIGNS WITH THE ENGINEER.
7. SIGNS SHALL BE PLACED ON THE SPECIFIC METAL SIGN POSTS. THEY SHALL NOT BE PLACED ON EXISTING POSTS, UTILITY POLES OR TREES.
8. LOCATION AND DISTANCE BETWEEN CONSTRUCTION SIGNS MAY BE REVISED BY THE ENGINEER TO MEET FIELD CONDITIONS.
9. EXISTING AND PROPOSED TRAFFIC SIGNS SHALL BE REMOVED OR COVERED WITH AN OPAQUE COVER IF IN CONFLICT WITH THE MAINTENANCE AND PROTECTION OF TRAFFIC PLAN.
10. PROVIDE TYPE "B" BARRICADE WARNING LIGHTS HIGH INTENSITY ON SIGN A AND ON SIGN B.
11. THE 'MAINTENANCE AND PROTECTION OF TRAFFIC PLAN' IS A MINIMUM GUIDELINE ONLY FOR THE MAINTENANCE AND PROTECTION OF TRAFFIC. A SPECIFIC MAINTENANCE AND PROTECTION OF TRAFFIC PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
12. TEMPORARY SAND BARREL ARRAY DESIGN IS BASED ON 35 MPH DESIGN SPEED AND CONFIGURATION SUCH THAT AN UNRESTRAINED PASSENGER DOES NOT STRIKE THE INTERIOR OF THE VEHICLE IN EXCESS OF 30 FPS, THE SUBSEQUENT VEHICLE DECELERATION DOES NOT EXCEED 15 G'S AND THE VEHICLE VELOCITY AFTER THE LAST BARREL IS 10 MPH OR LESS.

THIS DRAWING IS INTENDED TO BE USED FOR INFORMATION AND REVIEW PURPOSES ONLY AND IS NOT INTENDED TO BE USED FOR CONSTRUCTION.

GRAPHIC SCALE
100 75 50 25 0 100 200
SCALE: 1"=100'

TOWN OF
HEBRON, CONNECTICUT

REPLACEMENT OF BRIDGE 07085 SUPERSTRUCTURE GRAYVILLE ROAD OVER JEREMY RIVER

NOTES, SPECIFICATIONS, SITE DETAILS AND MAINTENANCE AND PROTECTION OF TRAFFIC PLAN

DESIGN

Jacobson
Nathan L. Jacobson & Associates, Inc.
86 Main Street P.O. Box 337
Chester, Connecticut 06412-0337
Tel: (860) 526-9591 Fax: (860) 526-5416
www.nlja.com
Consulting Civil and Environmental Engineers Since 1972

NOT VALID WITHOUT ORIGINAL SEAL

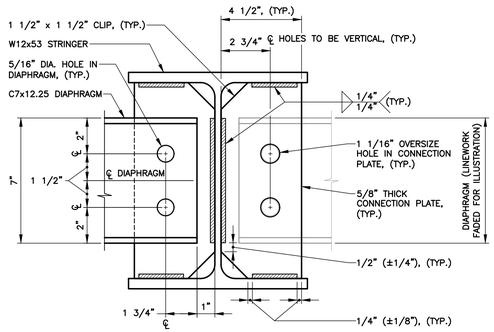
J. HOWARD PFROMMER, P.E.
CT REGISTRATION No. 15871

REVISIONS

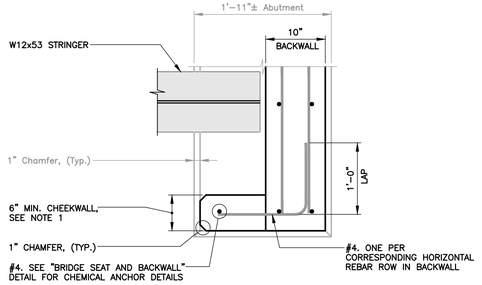
No.	DESCRIPTION	DATE

DATE:	MARCH 2024
SCALE:	1"=100'
PROJECT No.:	06480101
CADD FILE:	06480101SP
DESIGNED:	ADT
DRAWN:	AJG
CHECKED:	-

SHEET No.: 6 OF 7



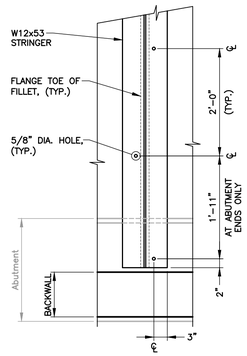
DIAPHRAGM CONNECTION PLATE
SCALE: 3"=1'-0"



TYPICAL SECTION
CHEEKWALL
SCALE: 1"=1'-0"

NOTES:

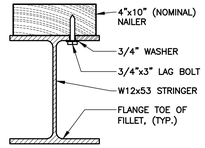
1. MODIFY PROPOSED CHEEKWALL WIDTH AS REQUIRED. TOP ELEVATION TO BE SET 1" BELOW BOTTOM OF TIMBER PLANK PASSING OVER CHEEKWALL.



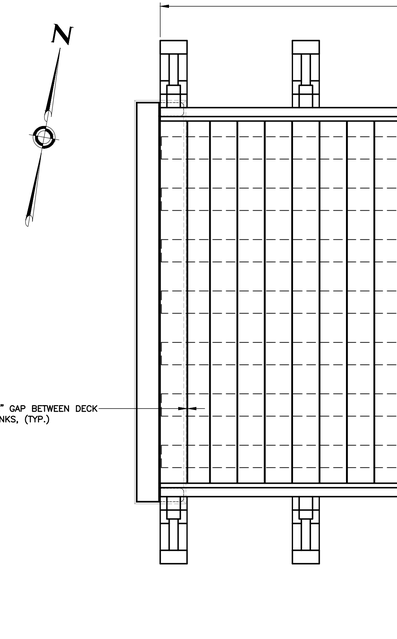
PLAN
SCALE: 3/4"=1'-0"

NOTES:

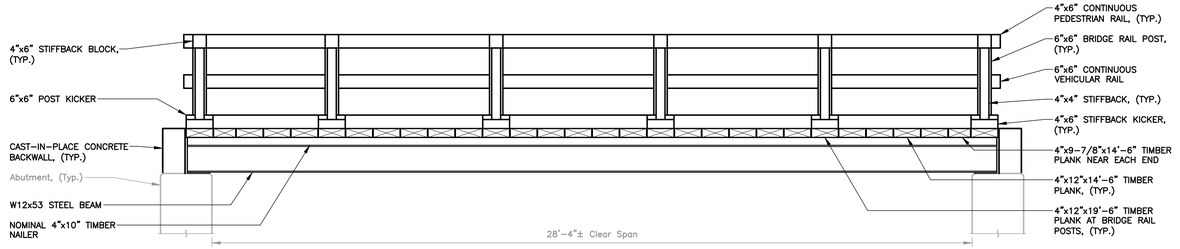
1. TIMBER MATERIAL NOT SHOWN.



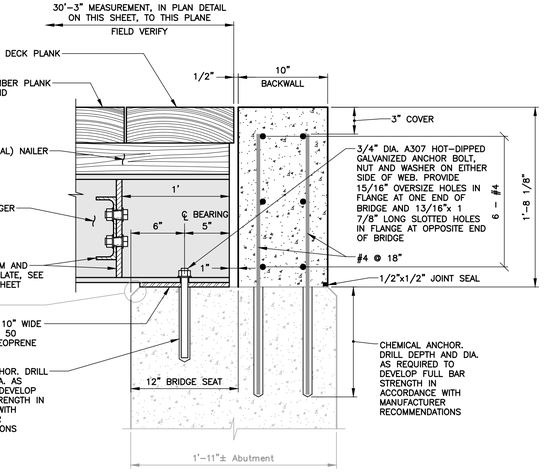
TYPICAL SECTION
NAILER ATTACHMENT TO STRINGER
SCALE: 1 1/2"=1'-0"



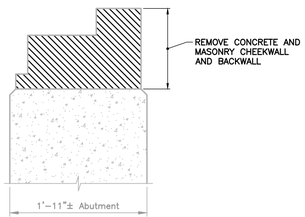
PLAN
SCALE: 3/8"=1'-0"



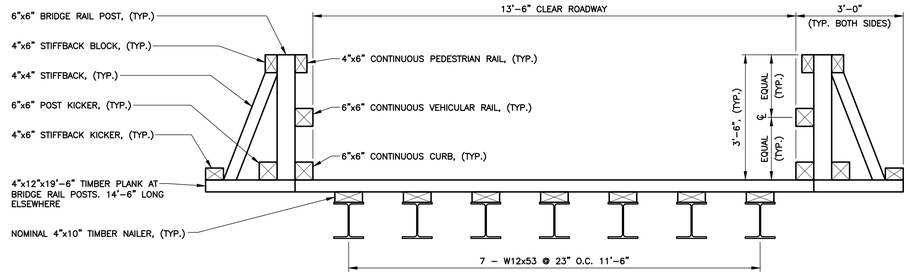
EXTERIOR ELEVATION
SCALE: 3/8"=1'-0"



TYPICAL SECTION
BRIDGE SEAT AND BACKWALL
SCALE: 1 1/2"=1'-0"



SUBSTRUCTURE DEMOLITION
SCALE: 1"=1'-0"



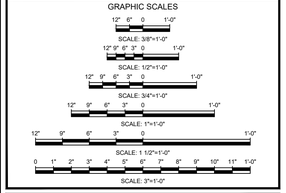
TYPICAL SECTION
SUPERSTRUCTURE
SCALE: 1/2"=1'-0"

NOTES:

1. SEE SHEET 6 FOR PROJECT NOTES.

THIS DRAWING IS INTENDED TO BE USED FOR INFORMATION AND REVIEW PURPOSES ONLY AND IS NOT INTENDED TO BE USED FOR CONSTRUCTION.

GRAPHIC SCALES



TOWN OF HEBRON, CONNECTICUT

REPLACEMENT OF BRIDGE 07085 SUPERSTRUCTURE GRAYVILLE ROAD OVER JEREMY RIVER

STRUCTURE DETAILS

DESIGN

Nathan L. Jacobson & Associates, Inc.
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J. HOWARD PFROMMER, P.E.
CT REGISTRATION No. 15871

REVISIONS

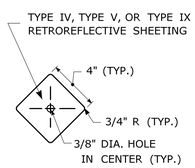
No.	DESCRIPTION	DATE

DATE:	MARCH 2024
SCALE:	AS NOTED
PROJECT No.:	06480101
CADD FILE:	06480101SP
DESIGNED:	ADT
DRAWN:	AJG
CHECKED:	-

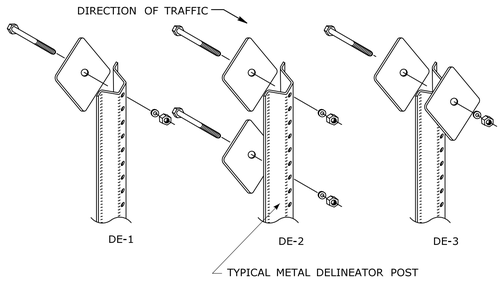
SHEET No.: 7 OF 7

DELINEATORS DE-1, DE-2, DE-3

INSTALLATION ON DELINEATOR POSTS



SIGN #51-5028 WHITE
SIGN #51-5029 YELLOW



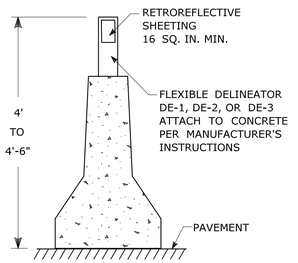
COLORS: - YELLOW OR WHITE.

DELINEATORS - .0625" THK. ALUMINUM ALLOY.

FACE SHALL BE PRESSURE SENSITIVE, SELF ADHERING, TYPE IV, TYPE V, OR TYPE IX RETROREFLECTIVE SHEETING.

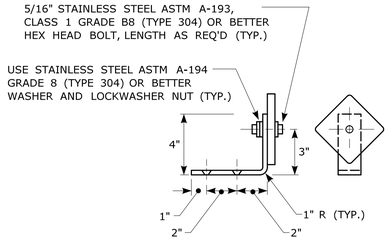
DELINEATORS SHALL BE FASTENED WITH 5/16" STAINLESS STEEL ASTM A-193 CLASS 1, GRADE B8 (TYPE 304) OR BETTER HEX HEAD BOLT (LENGTH AS REQUIRED), WASHER AND FIBER INSERT SELF LOCKING NUT, ON STANDARD METAL DELINEATOR POST.

INSTALLATION ON PERMANENT CONCRETE BARRIER, BRIDGE PARAPETS AND RETAINING WALLS

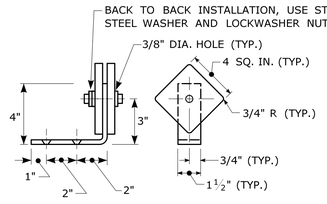


DELINEATORS DE-1, DE-2, DE-3 TO BE PAID FOR UNDER SECTION 12.05 DELINEATORS.

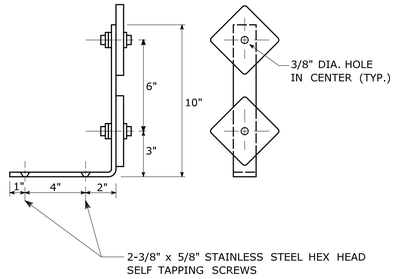
DELINEATORS DE-4, DE-4A, DE-5 FOR INSTALLATION ON METAL BRIDGE RAIL



DE-4



DE-4A

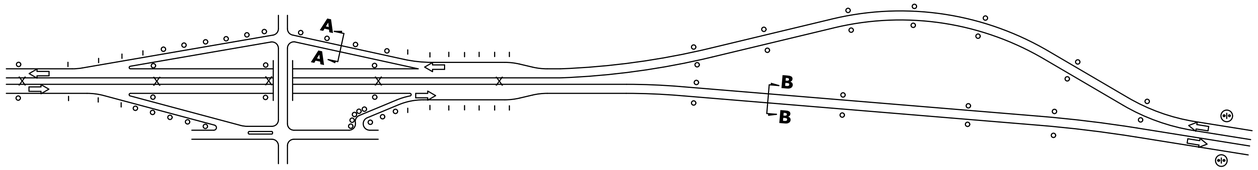


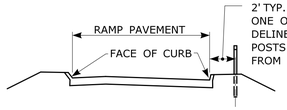
DE-5

COLORS: - YELLOW OR WHITE.
DELINEATORS - .0625" THK. ALUMINUM ALLOY.
BRACKET - .125" THK. ALUMINUM ALLOY, AND SHALL CONFORM TO SPECIFICATION M.18.07-03 BRIDGE RAIL MOUNTING BRACKETS.
FACE SHALL BE PRESSURE SENSITIVE, SELF ADHERING, TYPE IV, TYPE V, OR TYPE IX RETROREFLECTIVE SHEETING.
USE STAINLESS STEEL WASHERS ON FACE OF DELINEATORS, 5/8" O.D. X 3/8" I.D. X .032" THK. (TYP.)

DELINEATORS TYPE DE-4, DE-4A, AND DE-5 TO BE PAID FOR UNDER SECTION 12.05 DELINEATORS.

TYPICAL MAINLINE & INTERCHANGE DELINEATION

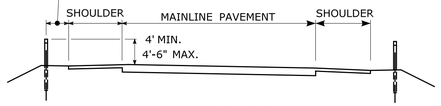




2' TYP. TO 8' MAX. AS DIRECTED BY ENGINEER.
ONE OFFSET SHALL BE USED THROUGHOUT PROJECT.
DELINEATORS TO BE PLACED IN LINE WITH GUIDE RAIL POSTS WHEN GUIDE RAIL IS 8' OR LESS FROM THE EDGE OF THE ROAD.

SECTION A-A

DELINEATOR PLACEMENT ON RAMPS
ON TANGENT SECTIONS - RIGHT SIDE OF RAMP
ON CURVED SECTIONS - BOTH SIDES OF CURVE



2' TYP. TO 8' MAX. AS DIRECTED BY ENGINEER.
ONE OFFSET SHALL BE USED THROUGHOUT PROJECT.
DELINEATORS TO BE PLACED IN LINE WITH GUIDE RAIL POSTS WHEN GUIDE RAIL IS 8' OR LESS FROM THE EDGE OF THE ROAD.

SECTION B-B

DELINEATOR PLACEMENT ON MAINLINE

DELINEATOR SPACING NOTES:

1) AT LOCATIONS WHERE THE MEDIAN WIDTH (BETWEEN SHOULDERS) IS 12' OR LESS, AND MEDIAN BEAM RAIL IS PRESENT, TYPE DE-3 DELINEATORS SHALL BE MOUNTED WITHIN THE MEDIAN BEAM RAIL.
2) SPACING ON MAINLINE EXPRESSWAY TANGENTS SHALL BE 400'.
3) SPACING ON MAINLINE EXPRESSWAY CURVES SHALL BE AS SPECIFIED IN TABLE 3F-1 OF THE MUTCD.
4) ON ACCELERATION AND DECELERATION LANES AND ON-RAMP TANGENT SECTIONS, DELINEATOR SPACING SHALL BE 100'.
5) ON CURVED PORTIONS OF RAMPS, DELINEATOR SPACING SHALL BE IN ACCORDANCE WITH TABLE 3F-1 OF THE MUTCD, BUT NOT TO EXCEED 100'.

LEGEND:

- ∘ DE-1 DELINEATORS OR DE-4 DELINEATOR ASSEMBLY
- ı DE-2 DELINEATORS OR DE-5 DELINEATOR ASSEMBLY
- X DE-3 DELINEATORS ASSEMBLY OR DE-4A DELINEATOR
- (11) D10-1, 2, 3, OR 4 ASSEMBLY TO BE INSTALLED WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

COLOR APPLICATION, FOR DE-1 THRU DE-5

LEFT SIDE OF ALL ROADWAYS AND RAMPS - YELLOW
RIGHT SIDE OF ALL ROADWAYS AND RAMPS - WHITE

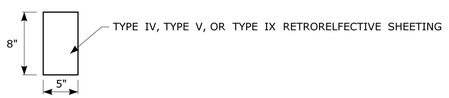
MUTCD TABLE 3F-1 APPROXIMATE SPACING FOR DELINEATORS ON HORIZONTAL CURVES

RADIUS (R) OF CURVE (feet)	APPROXIMATE SPACING (S) ON CURVE (feet)
50	20
115	25
180	35
250	40
300	50
400	55
500	65
600	70
700	75
800	80
900	85
1,000	90

DISTANCE IN FEET WERE ROUNDED TO THE NEAREST 5 FEET. SPACING FOR SPECIFIC RADII MAY BE INTERPOLATED FROM TABLE. THE MINIMUM SPACING SHOULD BE 20 FEET. THE SPACING ON CURVES SHOULD NOT EXCEED 300 FEET. IN ADVANCE OF OR BEYOND A CURVE, AND PROCEEDING AWAY FROM THE END OF THE CURVE, THE SPACING OF THE FIRST DELINEATOR IS 2S, THE SECOND IS 3S, AND THE THIRD 6S BUT NOT TO EXCEED 300 FEET.

S REFERS TO THE DELINEATOR SPACING FOR SPECIFIC RADII COMPUTED FROM THE FORMULA: $S=3\sqrt{R-50}$.

DELINEATORS DE-7, DE-7A, DE-7B, DE-7D FOR INSTALLATION ON TEMPORARY PRECAST CONCRETE BARRIER CURB AND TEMPORARY PRECAST CONCRETE BARRIER CURB (STRUCTURE)



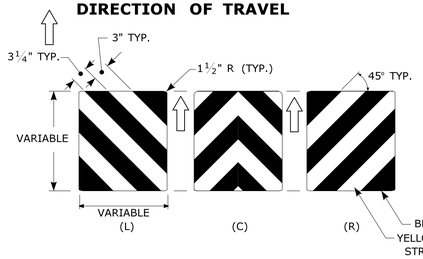
DE-7 ONE WAY WHITE
DE-7A ONE WAY YELLOW
DE-7B TWO WAY YELLOW
DE-7D TWO WAY WHITE
TEMPORARY PRECAST CONCRETE BARRIER DELINEATORS ARE TO BE FABRICATED OF ALUMINUM, STEEL, PLASTIC, OR OF A MATERIAL APPROVED BY THE ENGINEER AND MOUNTED IN THE CENTER OF EACH SECTION OF TEMPORARY BARRIER AS REQUIRED AND PER MANUFACTURER'S INSTRUCTIONS.

SPACING FOR TEMPORARY BARRIER CURB DELINEATORS:

ON THE LEADING TAPERED SECTION - EVERY 20',
ON THE FIRST 100' OF THE PARALLEL SECTION - EVERY 20',
ON THE REMAINING LENGTH - EVERY 100', MINIMUM OF 2 IF LESS THAN 100',
ALTERNATING ONE WAY TRAFFIC - EVERY 20',
ALL OTHER ROADWAYS SHALL BE DELINEATED IN ACCORDANCE WITH MUTCD.

DELINEATORS DE-7, DE-7A, DE-7B, AND DE-7D TO BE PAID FOR UNDER SECTION 12.05 DELINEATORS.

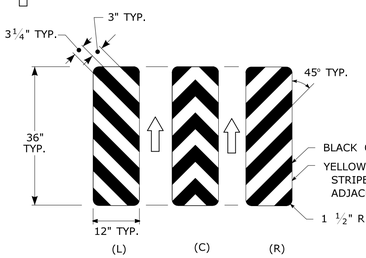
ATTENUATOR REFLECTORS SIGN #40-4266



THIS SHEETING WITHOUT A SUBSTRATE TO BE INSTALLED ON THE NOSE OF THE IMPACT ATTENUATOR WITH ADHESIVE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
THE SHEETING SHALL COVER THE NOSE OF THE IMPACT ATTENUATOR.
ON A CURVED NOSE, THE WIDTH OF THE SHEETING SHALL EXTEND 1" BEYOND THE POINT OF CURVATURE ON EACH SIDE OF THE NOSE.
THE HEIGHT AND WIDTH OF THE SHEETING VARIES DEPENDING ON THE SIZE OF THE NOSE OF THE IMPACT ATTENUATOR.

ATTENUATOR REFLECTOR TO BE PAID FOR UNDER SECTION 18.0 IMPACT ATTENUATOR

TYPE 3 OBJECT MARKERS SIGN #41-4267



SIGN #41-4267 MARKER MOUNTED ON 4lb. METAL SIGN POST.
BOTTOM OF SIGN #41-4267 TO BE 4' ABOVE ADJACENT EDGE OF PAVEMENT.
FINAL LOCATIONS OF SIGN #41-4267 MARKERS WILL BE AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

TYPE 3 OBJECT MARKER TO BE PAID FOR UNDER SECTION 12.08 SIGN FACE SHEET ALUMINUM

REV.	DATE	REVISION DESCRIPTION
5	8-2018	INCLUDED DE-7D AND REMOVED DE-7C, DE-9, AND DE-10.
4	4-2017	REVISED ATTENUATOR REFLECTOR AND TYPE 3 OBJECT MARKERS.
3	8-2015	UPDATED PER MUTCD AND FORM 816 JAN 2015 REVISION.
2	2-2011	MINOR REVISIONS.
1	1-2010	INCLUDED DETAILS IN D10-1, D10-2, D10-3 DELINEATORS.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 8/10/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1205..01..1..2018.dgn Model: TR-1205..01

SUBMITTED BY: NAME/DATE/TIME:

APPROVED BY: NAME/DATE/TIME:

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

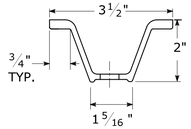
DELINEATION, DELINEATORS AND OBJECT MARKER DETAILS

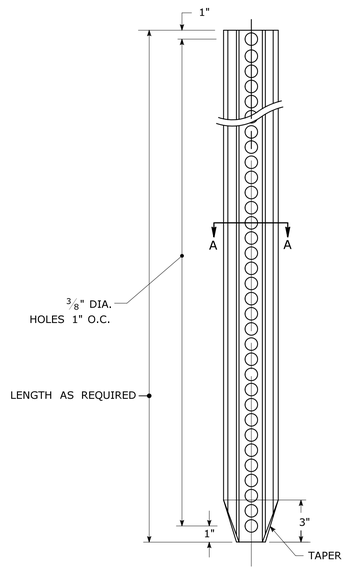
STANDARD SHEET NO.:

TR-1205_01

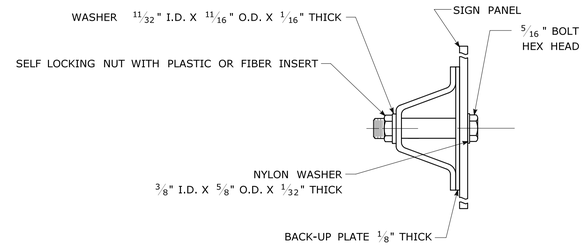
TYPICAL METAL SIGN POSTS

SECTION A-A

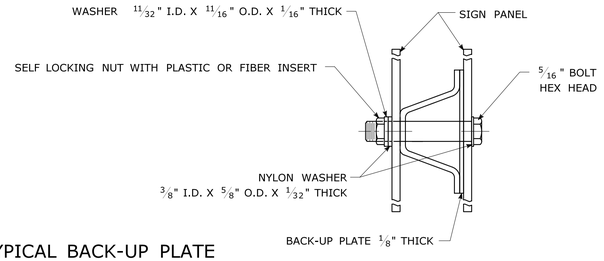




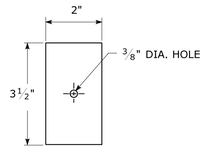
TYPICAL SIGN PANEL ATTACHMENT



TYPICAL BACK TO BACK SIGN PANEL ATTACHMENT



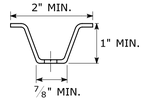
TYPICAL BACK-UP PLATE



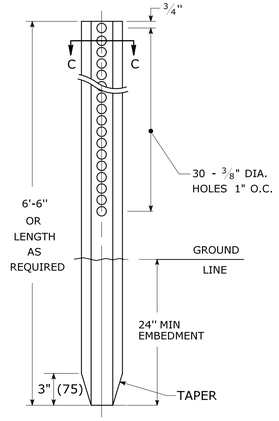
BOLTS - STAINLESS STEEL CONFORMING TO ASTM F593, ALLOY GROUP 1 OR 2 (ALLOY TYPES 304 OR 316).
SELF LOCKING NUTS - STAINLESS STEEL CONFORMING TO ASTM F594, ALLOY GROUP 1 OR 2 (ALLOY TYPES 304 OR 316).
WASHERS - STAINLESS STEEL CONFORMING TO ASTM A240, (ALLOY TYPES 304 OR 316).

METAL DELINEATOR POST

WT./FT. = 1.12 LBS./FT. MIN.



SECTION C-C

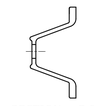


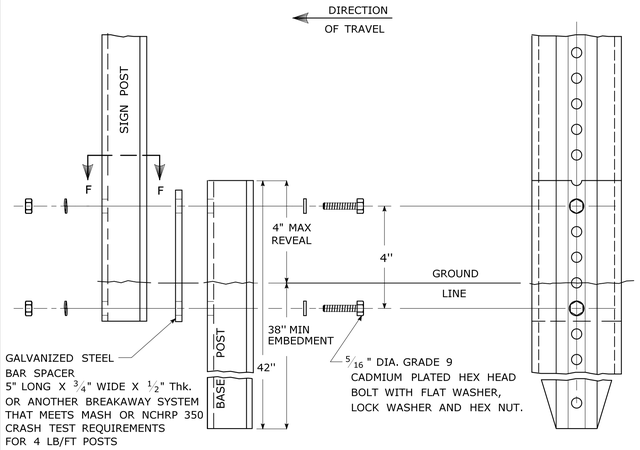
GENERAL NOTES:

1. STEEL FOR DELINEATOR POSTS SHALL BE ASTM A36 STEEL. STEEL FOR ALL OTHER POSTS SHALL CONFORM TO THE MECHANICAL REQUIREMENTS OF ASTM A 499 GRADE 80 AND TO THE CHEMICAL REQUIREMENTS OF ASTM A1 CARBON STEEL TEE RAIL HAVING NOMINAL WEIGHT (MASS) OF 91 LBS. OR GREATER PER LINEAR YARD.
2. AFTER FABRICATION, ALL STEEL POSTS, STRAPS AND PLATES SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A123.
3. WASHERS FOR BREAKAWAY INSTALLATIONS SHALL MEET ASTM F436, TYPE 1.
4. SPACER BAR FOR BREAKAWAY INSTALLATION SHALL CONFORM TO THE MECHANICAL REQUIREMENTS OF ASTM A36.
5. ALL BOLTS, NUTS, AND WASHERS FOR BREAKAWAY INSTALLATIONS SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A153.
6. ALL SIGN POSTS SHALL HAVE BREAKAWAY FEATURES THAT MEET AASHTO REQUIREMENTS CONTAINED IN THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS." THE BREAKAWAY FEATURES SHALL BE STRUCTURALLY ADEQUATE TO CARRY THE SIGNS SHOWN IN THE PLANS AT 60 mph WIND LOADINGS. INSTALLATIONS SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
7. SIGN POSTS SHALL BE 4 LBS./FT.

BREAKAWAY INSTALLATION

FOR 4 LBS./FT. POSTS

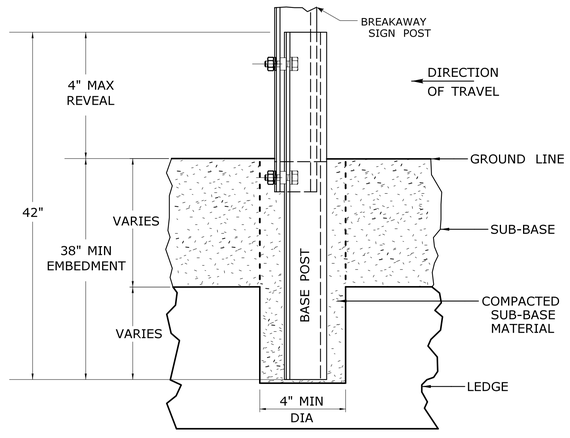




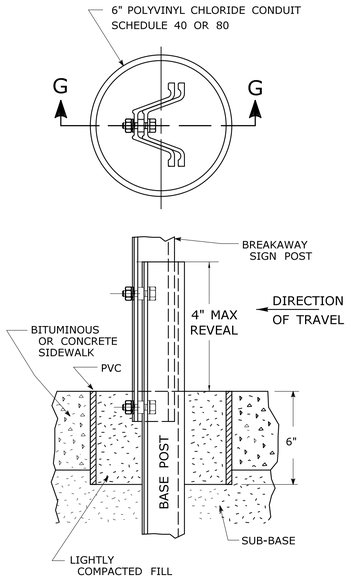
TYPICAL SIGN POST INSTALLATION IN LEDGE

LEDGE SHALL BE REMOVED TO DRIVE THE BASE POST TO A DEPTH OF 38".

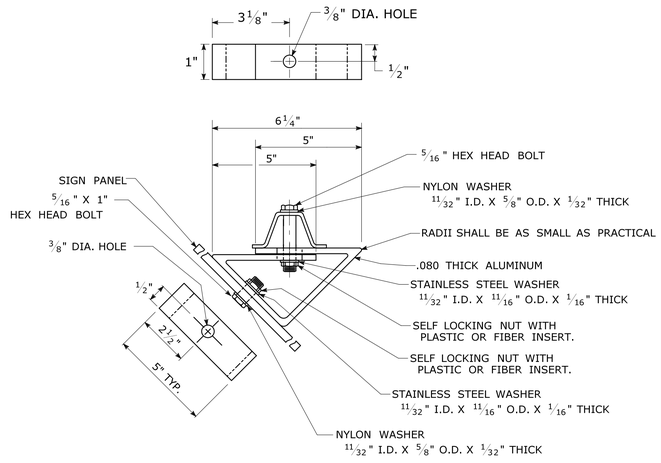
HOLE SHALL BE FILLED WITH SUB-BASE MATERIAL AND COMPACTED WITH A TAMPING BAR, OR TECHNIQUE APPROVED BY THE ENGINEER, PRIOR TO BASE POST INSTALLATION.



TYPICAL SLEEVE FOR PAVED AREAS



45° MOUNTING BRACKET FOR INSTALLATION OF PARKING SIGNS



REV.	DATE	REVISION DESCRIPTION
2	6-2017	SIGN POST REVISIONS.
1	2-2011	MINOR REVISIONS.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 6/6/2017

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1208_02_May_2017_Revision.dgn Model: TR-1208_02

SUBMITTED BY: NAME/DATE/TIME:

APPROVED BY: NAME/DATE/TIME:

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

METAL SIGN POSTS AND SIGN MOUNTING DETAILS

GUIDE SHEET NO.:

TR-1208_02

E5 - SERIES

E5-1

COPY & BORDER - WHITE
BACKGROUND - GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
16.0	48	51-6147	2

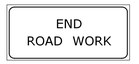
16 - SERIES

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
16-M	5.0	30X24	80-1613	1
16-H	17.5	60X42	80-1608	2
16-E	35.0	84X60	80-1605	2

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
16-S	10.0	48X30	80-1619	2

G20 - SERIES

G20-2a



AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
8.0	48X24	80-9612	2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9711	1
16.0	48	80-9712	2

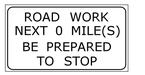
VARIABLE MILEAGE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
7.0	72X14	80-9720	

VARIABLE ARROW
COPY & BORDER - WHITE
BACKGROUND - BLUE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	50-5934	2

G20-2a



VARIABLE MILEAGE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
90.0	120X108	80-9728	

M4 - SERIES

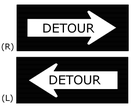
M4-8

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
2.0	24X12	80-9707	1

M4-8a

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
3.0	24X18	80-9708	1

M4-10



AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
6.0	48X18	80-9701R	2
6.0	48X18	80-9702L	2

VARIABLE ARROW

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
5.0	30X24	80-9710	1

M4-9b

VARIABLE ARROW

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
5.0	30X24	80-9703	1

M4-9b

VARIABLE ARROW

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
6.25	30X30	80-9706	1

R4 - SERIES

R4-7

COPY & BORDER - BLACK
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
5.0	24X30	80-1526	1

R4-9

COPY & BORDER - BLACK
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
5.0	24X30	80-1517	1
12.0	36X48	80-1518	1
20.0	48X60	80-1519	2

R1 - SERIES

R1-1

COPY & BORDER - WHITE
BACKGROUND - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
5.19	30	31-0552	1
13.30	48	31-0557	2

R1-2

COPY & BORDER - RED
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
3.90	36	31-0523	1
10.83	60	31-0528	2

R9 & R11 - SERIES

R9-9

COPY & BORDER - BLACK
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
3.75	30X18	80-9076	1

R9-11

VARIABLE ARROW
COPY & BORDER - BLACK
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
3.0	24X18	80-9074	1

R9-11a

VARIABLE ARROW
COPY & BORDER - BLACK
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
2.0	24X12	80-9075	1

R11-2

COPY & BORDER - BLACK
BACKGROUND - WHITE

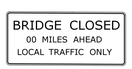
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
10.0	48X30	80-9080	2

R11-3a

VARIABLE MILEAGE
COPY & BORDER - BLACK
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
12.5	60X30	80-9077	2

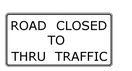
R11-3b



VARIABLE MILEAGE
COPY & BORDER - BLACK
BACKGROUND - WHITE

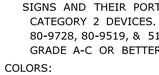
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
12.5	60X30	80-9078	2

R11-3b



COPY & BORDER - BLACK
BACKGROUND - WHITE

R11-3b



COPY & BORDER - BLACK
BACKGROUND - WHITE

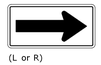
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
14.0	48X42	31-1906	2
22.5	60X54	31-1907	2

W1 - SERIES

W1-4

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9432L	1
9.0	36	80-9431R	1
16.0	48	80-9452L	2
16.0	48	80-9451R	2

W1-6

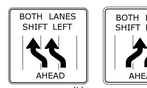


AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
8.0	48X24	80-9424	2
12.5	60X30	80-9423	2

W1-8

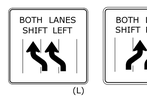
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
3.0	18X24	80-9401	1
5.0	24X30	80-9403	1
7.5	30X36	80-9404	1

W1-4



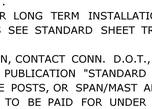
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
16.0	48	80-9433L	2
16.0	48	80-9435R	2

W1-4



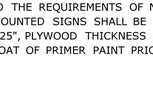
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
16.0	48	80-9434L	2
16.0	48	80-9436R	2

W1-6



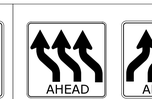
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
25.0	60	80-9443L	2
25.0	60	80-9445R	2

W1-4b



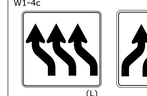
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
25.0	60	80-9444L	2
25.0	60	80-9446R	2

W1-4c



AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
25.0	60	80-9483L	2
25.0	60	80-9485R	2

W1-4c



AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
25.0	60	80-9484L	2
25.0	60	80-9486R	2

W3 - SERIES

W3-1

OCTAGON - RED W/ WHITE BORDER
ARROW & BORDER - BLACK
BACKGROUND - FLUORESCENT ORANGE

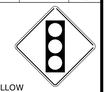
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9050	1
16.0	48	80-9051	2

W3-2

TRIANGLE - RED W/ WHITE BORDER
ARROW & BORDER - BLACK
BACKGROUND - FLUORESCENT ORANGE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9054	1
16.0	48	80-9055	2

W3-3

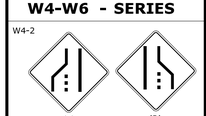


TOP CIRCLE - RED
MIDDLE CIRCLE - YELLOW
BOTTOM CIRCLE - GREEN
COPY & BORDER - BLACK
BACKGROUND - FLUORESCENT ORANGE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9052	1
16.0	48	80-9053	2

W4-W6 - SERIES

W4-2



AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
16.0	48	80-9918L	2
16.0	48	80-9917R	2

W6-3

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
16.0	48	80-9945	2

W8-W9 - SERIES

W8-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9901	1
16.0	48	80-9902	2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9801	1
16.0	48	80-9802	2

W9-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
16.0	48	80-9910L	2
16.0	48	80-9911R	2

W13 - SERIES

W13-1

SUBPLATE
VARIABLE SPEED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
4.0	24	80-9569	1
6.25	30	80-9567	1

VARIABLE SPEED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9506	1
16.0	48	80-9508	2

W3-5

VARIABLE SPEED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9520	1
16.0	48	80-9521	2

W16 - SERIES

W16-15P

COPY & BORDER - BLACK
BACKGROUND - ORANGE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
2.0	24X12	80-9049	

W20 - SERIES

W20-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
6.25	30	80-9602	1
9.0	36	80-9603	1
16.0	48	80-9604	2

W20-1

VARIABLE DISTANCE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9614	1
16.0	48	80-9615	2

W20-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9805	1
16.0	48	80-9806	2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9834	1
16.0	48	80-9835	2

W20-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
(L) 16.0	48	80-9836	2
(R) 16.0	48	80-9839	2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
(L) 16.0	48	80-9837	2
(R) 16.0	48	80-9838	2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
(L) 16.0	48	80-9847	2
(R) 16.0	48	80-9848	2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
(L) 16.0	48	80-9846	2
(R) 16.0	48	80-9849	2

W20-7a

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9803	1
16.0	48	80-9804	2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
32.0	96X48	80-9815	2

W16-9P

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
2.0	24X12	80-9870	
3.75	30X18	80-9871	

W16-3aP

VARIABLE MILEAGE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
2.5	30X12	80-9872	
4.5	36X18	80-9873	

W21 - SERIES

W21-6

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9607	1

W22 - SERIES

W22-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9620	1
16.0	48	80-9625	2

W22-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
10.5	42X36	80-9623	2

W22-3

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
10.5	42X36	80-9621	2

(VARIABLE LEGEND)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
4.17	60X10	80-9913	2
12.0	96X18	80-9914	2
3.33	48X10	80-9916	2

BLANK OR
VARIABLE LEGEND

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
9.0	36	80-9933	1
16.0	48	80-9934	2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
16.0	48	80-9956	2

(VARIABLE LEGEND)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
12.5	60X30	80-9928	2
24.0	72X48	80-9929	2

	AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
(1)	16.0	48	80-9957	2
(2)	9.0	36	80-9958	1
(2)	16.0	48	80-9959	2

STOP-SLOW PADDLE

SIDE A
BACKGROUND - RED
COPY & BORDER - WHITE
SIDE B
BACKGROUND - ORANGE
COPY & BORDER - BLACK PLAIN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS
2.25	18	80-9950	PADDLE

NOTES:
1. R1-SERIES SIGN THE LEGEND "O.S.T.A." SHALL APPEAR.
2. POSTS - SEE STANDARD SHEET TR-1208_02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS".
3. POSTS SHALL BE 4 LBS./FT.
4. ALL POSTS NOTED ARE FOR LONG TERM INSTALLATION. SEE STANDARD SHEET TR-1208_02.
5. FOR TEMPORARY SUPPORTS SEE STANDARD SHEET TR-1220_02 - "CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES".
6. FOR SPECIFIC SIGN DESIGN, CONTACT CONN. D.O.T., DIVISION OF TRAFFIC ENGINEERING. FOR BOLT HOLE PATTERN REFER TO FHWA PUBLICATION "STANDARD HIGHWAY SIGNS". SIGNS OF DIFFERENT DIMENSIONS TO BE ERECTED ON THE SAME POSTS, OR SPAN/MAST ARM MOUNTED, MAY REQUIRE SPECIAL BOLT HOLE PATTERNS.
7. ALL CONSTRUCTION SIGNS TO BE PAID FOR UNDER THE CONSTRUCTION SIGNS ITEM IN THE CONTRACT.
8. MATERIALS & COLORS SHALL CONFORM TO STATE SPECIFICATIONS.

MATERIALS:
SIGNS AND THEIR PORTABLE SUPPORTS SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES. ALUMINUM THICKNESS FOR POST MOUNTED SIGNS SHALL BE .100" EXCEPT SIGN #s. 80-1605, 80-9914, 80-9815, 80-9728, 80-9519, & 51-6147 (L OR R) WHICH SHALL BE .125", PLYWOOD THICKNESS FOR POST MOUNTED SIGNS SHALL BE 1/2" EXTERIOR GRADE A-C OR BETTER. SIGN BLANKS SHALL HAVE ONE COAT OF PRIMER PAINT PRIOR TO APPLICATION OF RETROREFLECTIVE SHEETING & COPY.

COLORS:
BACKGROUND - FLUORESCENT ORANGE - EXCEPT AS NOTED.
LEGEND - BLACK - EXCEPT AS NOTED.
ALL SIGNS WITH FLUORESCENT ORANGE BACKGROUND TO USE TYPE VIII RETROREFLECTIVE SHEETING.
ALL OTHER SIGNS TO USE TYPE IX RETROREFLECTIVE SHEETING.

REV.	DATE	REVISION DESCRIPTION
6	8-2018	REVISED POST REQUIREMENTS AND SHEETING TYPE.
5	8-2015	UPDATED PER MUTCD AND FORM 816 JAN 2015 REVISION.
4	6-2012	REVISED NOTE #1 TO REFERENCE "O.S.T.A."
3	4-2012	REVISED NEW SIGNAL SIGN(S) TO CONFORM TO 2009 MUTCD.
2	2-2011	MINOR REVISIONS.
1	3-2010	REMOVED OBSOLETE SIGNS (50-5925, 50-5935).

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 8/10/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1220_01_1_2018.dgn Model: TR-1220_01

SUBMITTED BY: NAME/DATE/TIME:

APPROVED BY: NAME/DATE/TIME:

CTDOT STANDARD SHEET

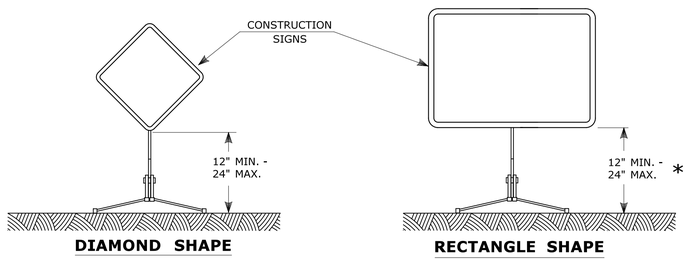
OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS

STANDARD SHEET NO.:

TR-1220_01

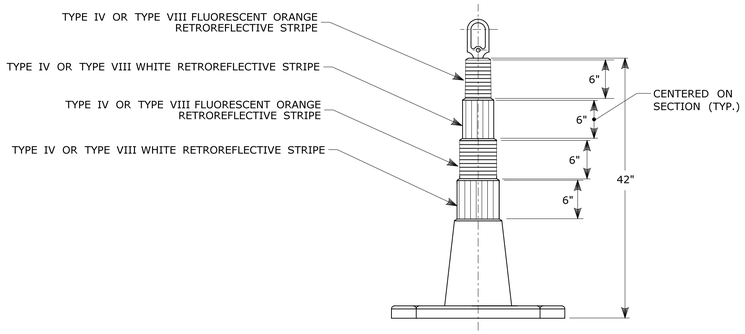


PORTABLE CONSTRUCTION SIGNS

NOTES FOR PORTABLE SIGN SUPPORTS:

1. SIGNS AND THEIR PORTABLE SUPPORTS SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES AND THE LATEST EDITION OF THE MUTCD.
2. MOUNTING HEIGHT OF SIGNS SHALL BE A MINIMUM OF 12" AND A MAXIMUM OF 24". SIGNS SHALL BE MOUNTED HIGHER AS NEEDED TO MEET FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.
3. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY SUPPORT DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
4. PORTABLE SIGN SUPPORTS SHALL BE STABILIZED IN A MANNER THAT WILL NOT AFFECT THEIR COMPLIANCE WITH NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES.
5. PORTABLE CONSTRUCTION SIGN SUPPORTS SHOULD NOT BE USED FOR DURATION OF MORE THAN 3 DAYS EXCEPT FOR R9-8 THROUGH R9-11a SERIES, R11 SERIES, W1-6 THROUGH W1-8 SERIES, M4-10, AND E5-1. SEE STANDARD SHEET TR-1220_01 - "SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS" FOR SIGN DETAILS.

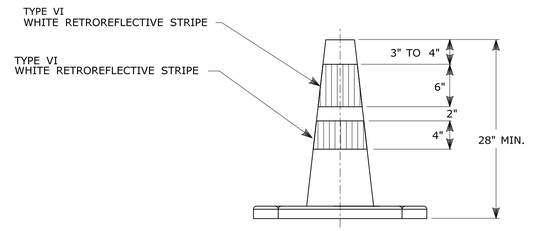
* FOR E5-1 (EXIT SIGNS) USE MIN 48".



42" TRAFFIC CONE

NOTES:

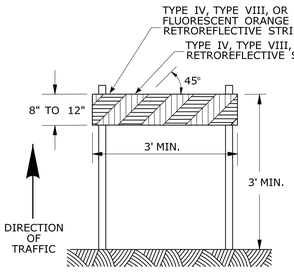
1. TRAFFIC CONES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
2. IF RUBBER CONES ARE USED, THEY SHALL HAVE INTERIOR RIBS FOR RIGIDITY.
3. IF PLASTIC CONES ARE USED, THEY SHALL BE COLOR IMPREGNATED.
4. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY CONE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
5. THE ENTIRE AREA OF FLUORESCENT ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
6. THE SECTIONS OF CONES NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.



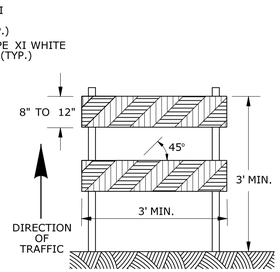
TRAFFIC CONE

NOTES:

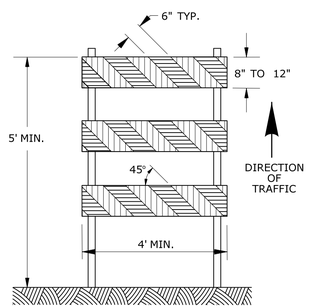
1. TRAFFIC CONES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
2. IF RUBBER CONES ARE USED, THEY SHALL HAVE INTERIOR RIBS FOR RIGIDITY.
3. IF PLASTIC CONES ARE USED, THEY SHALL BE COLOR IMPREGNATED.
4. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY CONE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
5. THE ENTIRE AREA OF WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
6. TRAFFIC CONES NOT USED AT NIGHT MAY UTILIZE TYPE III SHEETING.
7. THE SECTIONS OF CONES NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.



TYPE I BARRICADE



TYPE II BARRICADE

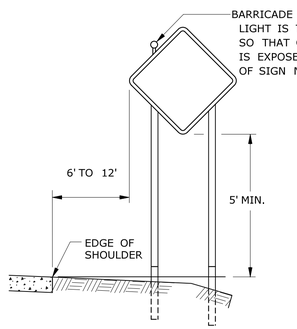


TYPE III BARRICADE

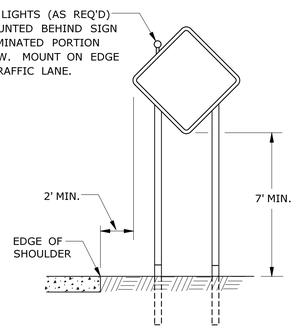
CONSTRUCTION BARRICADES

NOTES:

1. CONSTRUCTION BARRICADES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH AND THE LATEST EDITION OF THE MUTCD.
2. MARKINGS FOR BARRICADE RAILS SHALL BE ALTERNATE FLUORESCENT ORANGE AND WHITE STRIPES SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS. 6" WIDE STRIPES SHALL BE USED.
3. THE ENTIRE AREA OF FLUORESCENT ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS. THE SIDES OF BARRICADES FACING TRAFFIC SHALL HAVE RETROREFLECTIVE RAIL FACES.
4. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY BARRICADE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
5. CORNERS OF BARRICADE RAILS SHALL BE ROUNDED.
6. SIGNS MAY ONLY BE INSTALLED ON TYPE III BARRICADES AND SHALL BE PLACED SO AS TO COVER NO MORE THAN ONE BARRICADE RAIL.



RURAL AREA



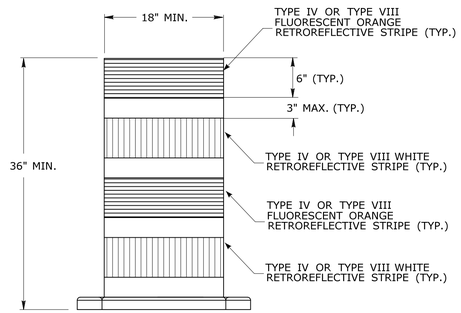
URBAN AREA

PLACEMENT OF CONSTRUCTION SIGNS TYPICAL LONG TERM INSTALLATION

NOTES:

SUPPORTS SHALL BE METAL SIGN POSTS AND HAVE BREAK-AWAY FEATURES.

REFER TO STANDARD SHEETS:
TR-1208_01 - "SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS."
TR-1208_02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS."



TRAFFIC DRUM FRONT VIEW

NOTES:

1. TRAFFIC DRUM SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
2. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY DRUM DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
3. THE ENTIRE AREA OF FLUORESCENT ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
4. THE SECTIONS OF DRUMS NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.

REV.	DATE	REVISION DESCRIPTION
3	8-2018	UPDATED SHEETING TYPE AND COLOR.
2	8-2015	UPDATED PER MUTCD AND FORM 816 JAN 2015 REVISION.
1	2-2011	MINOR REVISIONS.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 8/10/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1220_02_3_2018.dgn Model: TR-1220_02

SUBMITTED BY: NAME/DATE/TIME:

APPROVED BY: NAME/DATE/TIME:

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES

STANDARD SHEET NO.:

TR-1220_02

Town of Hebron

TOWN OFFICE BUILDING
15 GILEAD STREET
HEBRON, CONNECTICUT 06248
TELEPHONE: (860) 228-5971
FAX : (860) 228-5980
www.hebronct.com

PLANNING & DEVELOPMENT
PLANNING
ECONOMIC DEVELOPMENT
CONSERVATION
HEALTH
BUILDING

February 8, 2024

CERTIFIED MAIL

Matt Bordeaux, Director of Planning and Development,
Town of Hebron,
15 Gilead Street
Hebron CT
06248

Re: Petition 2024-01 – 30 Pendleton Drive, 42 Pendleton Drive, 22 Main Street, and 28 Main Street, Town of Hebron, Construction of a Pedestrian Bridge and Trail and Associated Site Improvements within the Regulated Area

NOTICE OF DECISION

Dear Mr. Bordeaux,

After reviewing the application for construction of a pedestrian bridge and trail and associated site improvements within an inland wetlands upland review area and based upon the findings in accordance with Section 22a-41 of the Connecticut General Statutes, **approval** is granted for conducting the activity described in the above-referenced application, with the following conditions:

1. Work with the Town Engineer to determine the feasibility of the installation of a water quality swale between the paved leak-off and culvert outlet
2. Examine the state of the stone walls and have the PZC take a closer look at their disposition
3. Conservation and Inland Wetlands Agent will inspect SEC measures prior to and during construction

We wish you success in this endeavor. Should you have any questions, please contact me at 860-228-5971 extension 139 or at jcordier@hebronct.com

For the Hebron Conservation and Inland Wetlands Commission:

James P. Cordier, MPH RS
Conservation and Inland Wetlands Agent
Town of Hebron

C.c.

Matt Bordeaux, Director of Planning and Development
Tom Loto, Chairman, Conservation and Inland Wetlands Commission
File # 2024-02

Town of Hebron

TOWN OFFICE BUILDING
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HEALTH
BUILDING

February 8, 2024

CERTIFIED MAIL

c/o Richard Breski, JonNick Enterprises,
111 Princess Pine Path,
Southington CT
06489

Re: Petition 2024-02 – 24 Wall Street, Map 70, Lot 12, JonNick Enterprises, Construction of Emissions Bay, and Driveway within the Regulated Area

NOTICE OF DECISION

Dear Mr. Breski,

After reviewing the application for construction of an emissions bay, and driveway within an inland wetlands upland review area and based upon the findings in accordance with Section 22a-41 of the Connecticut General Statutes, **approval** is granted for conducting the activity described in the above-referenced application, with the following conditions:

1. The berm design, grading plan, stormwater management measures and plan of vegetation be approved by the Town Engineer and Conservation and Inland Wetlands Agent
2. The applicant will confer with his engineer regarding proper site vegetation pursuant to CT DEEP Guidelines and incorporate the foregoing into the overall site plan
3. Silt fencing will be installed along the rear of the property prior to any site excavation or grading
4. The Conservation and Inland Wetlands Agent will be contacted to inspect SEC measures at the time of construction

We wish you success in this endeavor. Should you have any questions, please contact me at 860-228-5971 extension 139 or at jcordier@hebronct.com

For the Hebron Conservation and Inland Wetlands Commission:

James P. Cordier, MPH RS
Conservation and Inland Wetlands Agent
Town of Hebron

C.c.

Matt Bordeaux, Director of Planning and Development
Tom Loto, Chairman, Conservation and Inland Wetlands Commission
File # 2024-02

Town of Hebron

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February 23, 2024

CERTIFIED MAIL

David Ellenberg
1661 NW 143rd Terrace
Pembroke Pines FL
33028

Re: Petition 2023-04 – Church Street, Map 12, Lot 18. Zone NC into three lots & Zone R-1 into two lots, Roderic A. McCorrison, 5-Lot Subdivision

NOTICE OF DECISION

Dear Mr. Ellenberg,

After reviewing the application for a five-lot Subdivision, part of which is within an inland wetlands upland review area and based upon the findings in accordance with Section 22a-41 of the Connecticut General Statutes, **approval** is granted for conducting the activity described in the above-referenced application, with the following conditions:

A. The Wetlands Agent will be contacted by the developers for site inspection during the implementation of SEC measures.

B. The Wetlands Agent will report to the Commission any adjustments to this plan that may have additional impact to the wetlands, pursuant to activity under Section 2.1.24 of the Hebron Conservation and Inland Wetlands Regulations

C. The Applicant will incorporate the use of native grass, shrubs, berries, and nut trees to establish native species, discourage non-native species and delineate the upland review area.

D. The Conservation and Inland Wetlands Commission conveys its recommendation to the Planning and Zoning Commission of the Applicant's payment of Fees in Lieu of Open Space

E. The Conservation and Inland Wetlands Commission recommends that the Planning and Zoning Commission considers evaluating whether storm water runoff should be further controlled as part of site development planning

F. The Conservation and Inland Wetlands Commission recommends to the Planning and Zoning Commission that the use of underground storage tanks be restricted due to the high groundwater table and proximity to the wetlands

We wish you success in this endeavor. Should you have any questions, please contact me at 860-228-5971 extension 139 or at jcordier@hebronct.com

For the Hebron Conservation and Inland Wetlands Commission:

James P. Cordier, MPH RS
Conservation and Inland Wetlands Agent
Town of Hebron

C.c.
Matt Bordeaux, Director of Planning and Development
Tom Loto, Chairman, Conservation and Inland Wetlands Commission
File # 2023-04