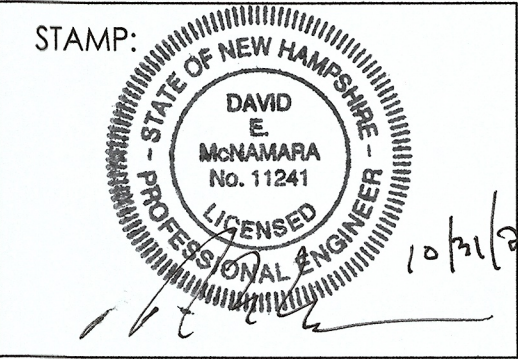




PLANS PREPARED BY:

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5 DARTMOUTH DR, SUITE 200, AUBURN, NH 03032
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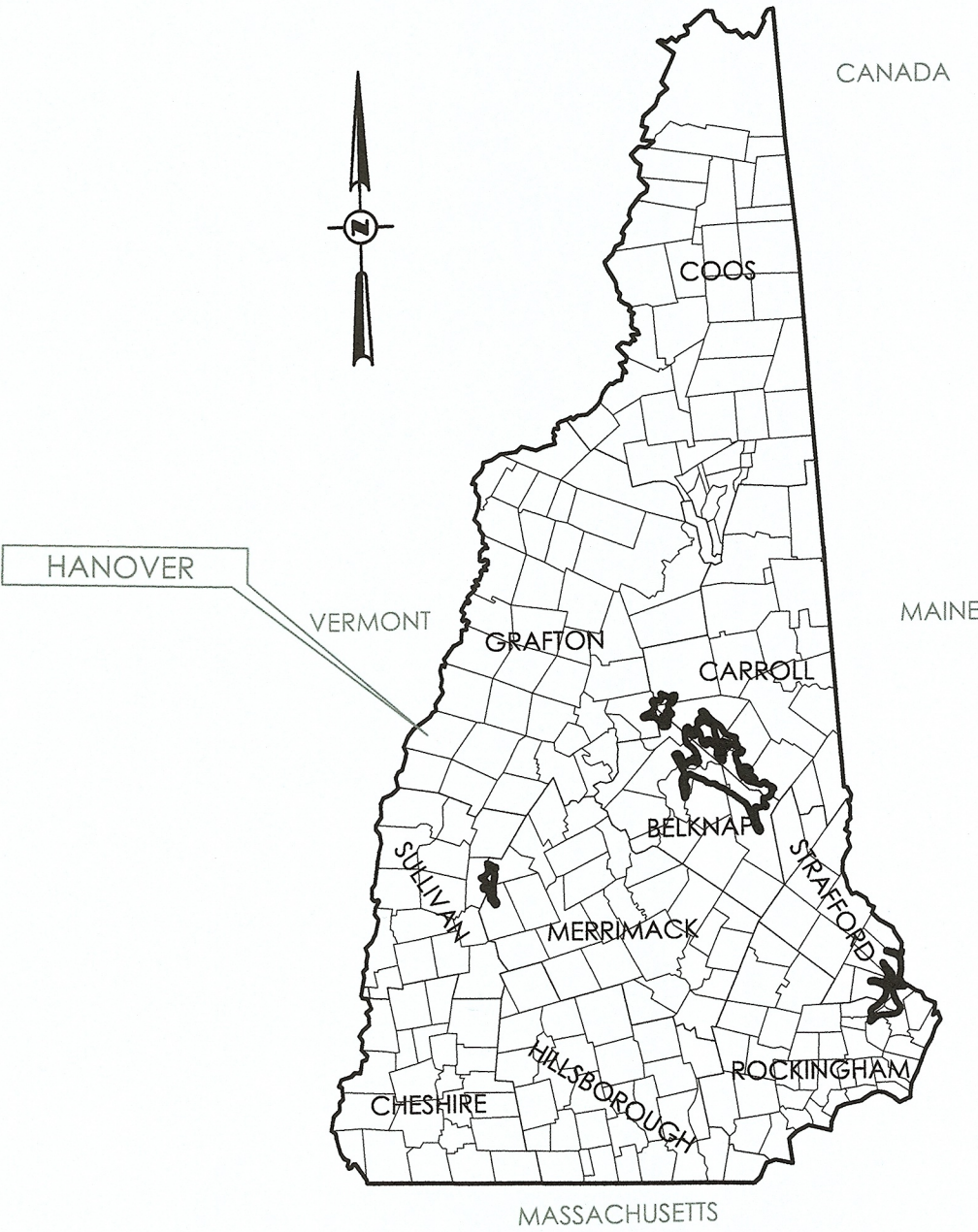


DEPARTMENT OF PUBLIC WORKS
TOWN OF HANOVER, NH
COUNTY OF GRAFTON

GIRL BROOK TRAIL
REHABILITATION

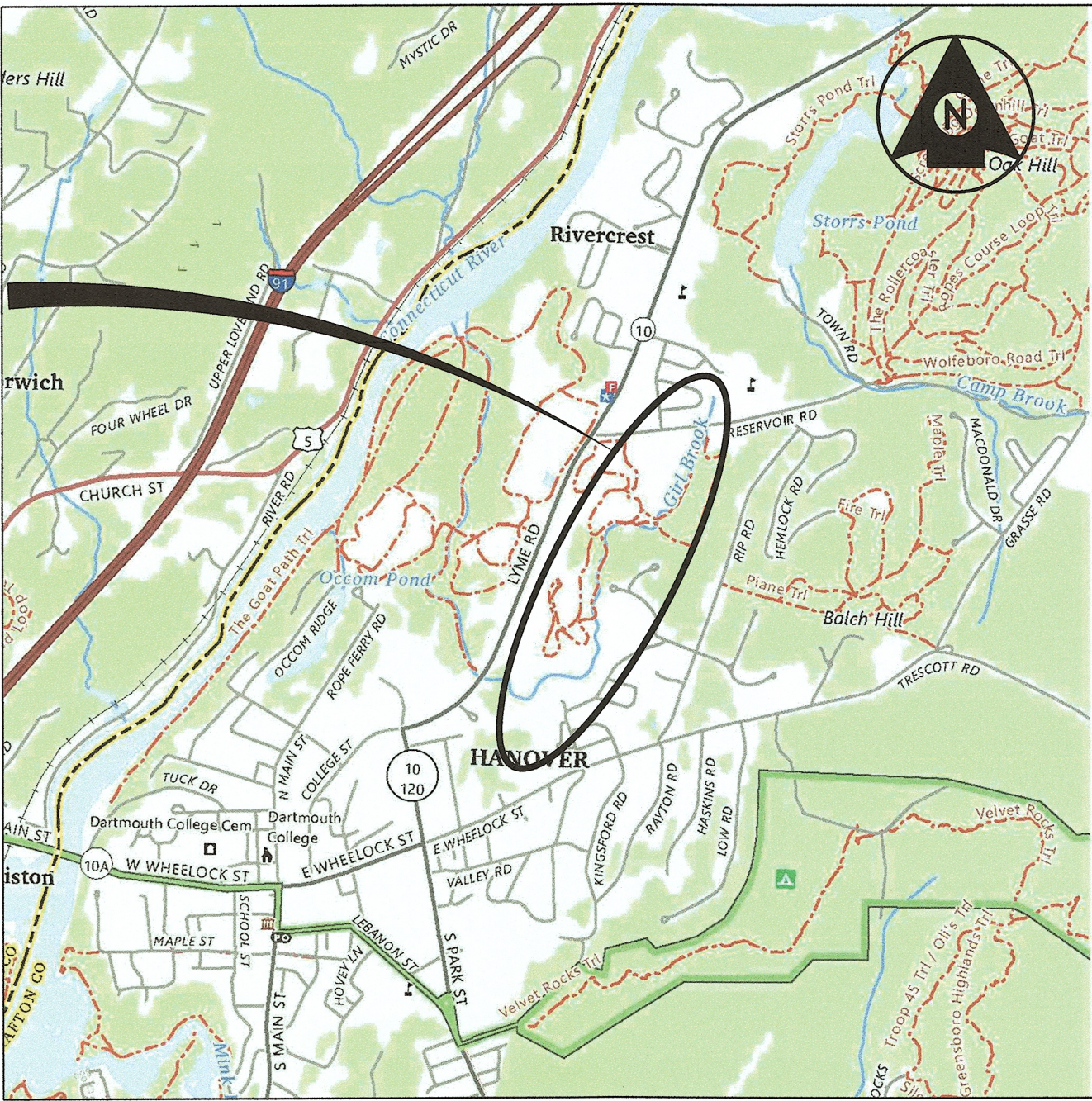
AUGUST 2025

NHDOT PROJECT NUMBER: 44015
STANTEC PROJECT NUMBER: 179450927



LOCATION MAP

PROJECT LOCATION



VICINITY MAP

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ORIGINAL SHEET - ANSI D

CIVIL LEGENDS

PROPOSED LEGEND

	PROPOSED BOUND		PROPOSED MAJOR CONTOUR
	PROPOSED BENCHMARK		PROPOSED MINOR CONTOUR
	PROPOSED CATCH BASIN (SQUARE)		PROPOSED SPOT ELEVATION
	PROPOSED CATCH BASIN (ROUND)		PROPOSED RAILROAD TRACKS
	PROPOSED COMMUNICATION MANHOLE		PROPOSED DITCH/SWALE
	PROPOSED CURB INLET		PROPOSED EDGE OF RIVER
	PROPOSED DRAIN MANHOLE (DMH)		PROPOSED EDGE OF POND
	PROPOSED DRILL HOLE		PROPOSED EDGE OF WETLAND
	PROPOSED ELECTRICAL MANHOLE		PROPOSED DEMOLITION WORK
	PROPOSED GUY POLE		PROPOSED EASEMENT
	PROPOSED SURVEY POINT		PROPOSED LIMITS OF CONSTRUCTION
	PROPOSED IRON PIN		PROPOSED RIGHT OF WAY
	PROPOSED NATURAL GAS MANHOLE		PROPOSED PROPERTY LINE
	PROPOSED HYDRANT		PROPOSED FUEL GAS
	PROPOSED SANITARY SEWER MANHOLE (SMH)		PROPOSED NATURAL GAS
	PROPOSED SINGLE POLE SIGN		PROPOSED OVERHEAD POWER
	PROPOSED DOUBLE POLE SIGN		PROPOSED UNDERGROUND POWER
	PROPOSED TELEPHONE MANHOLE		PROPOSED CABLE TV
	PROPOSED TEST PIT		PROPOSED OVERHEAD TELEPHONE
	PROPOSED BORING		PROPOSED UNDERGROUND TELEPHONE
	PROPOSED UTILITY POLE		PROPOSED SANITARY SEWER
	PROPOSED WATER SHUTOFF		PROPOSED SANITARY SEWER (FORCE MAIN)
	PROPOSED GATE VALVE		PROPOSED WATER MAIN
	PROPOSED WELL		PROPOSED PRESSURE STEAM
	PROPOSED FLOOD LIGHT		PROPOSED STORM DRAIN
	PROPOSED LIGHT POST		PROPOSED FOOTING UNDERDRAIN
	PROPOSED DRAINAGE FLOW		PROPOSED ROOF DRAIN
	PROPOSED CONIFEROUS TREE		PROPOSED FIRE PROTECTION
	PROPOSED DECIDUOUS TREE		PROPOSED GUARD RAIL
			PROPOSED FENCE (BARBED WIRE)
			PROPOSED FENCE (CHAIN LINK)
			PROPOSED FENCE (WOODEN)
			PROPOSED RETAINING WALL
			PROPOSED STONE WALL
			PROPOSED SILT FENCE
			PROPOSED HAYBALES
			PROPOSED TREE LINE

EXISTING LEGEND

	EXISTING BOUND		EXISTING MAJOR CONTOUR
	EXISTING BENCHMARK		EXISTING MINOR CONTOUR
	EXISTING SURVEY POINT		EXISTING DITCH/SWALE
	EXISTING CATCH BASIN (SQUARE)		EXISTING RAILROAD TRACKS
	EXISTING CATCH BASIN (ROUND)		EXISTING EDGE OF WATER
	EXISTING COMMUNICATION MANHOLE		EXISTING WETLAND BOUNDARY
	EXISTING CURB INLET		EXISTING EASEMENT
	EXISTING DRAIN MANHOLE (DMH)		EXISTING PROPERTY LINE
	EXISTING ELECTRICAL MANHOLE		EXISTING RIGHT-OF-WAY
	EXISTING GUY POLE		EXISTING SPOT ELEVATION
	EXISTING HYDRANT		EXISTING FUEL GAS
	EXISTING IRON PIN		EXISTING NATURAL GAS
	EXISTING NATURAL GAS MANHOLE		EXISTING OVERHEAD POWER
	EXISTING SEWER MANHOLE (SMH)		EXISTING UNDERGROUND POWER
	EXISTING SINGLE POLE SIGN		EXISTING SANITARY SEWER
	EXISTING DOUBLE POLE SIGN		EXISTING SANITARY SEWER (FORCE MAIN)
	EXISTING FLOOD LIGHT		EXISTING STORM DRAIN
	EXISTING LIGHT POST		EXISTING PRESSURE STEAM
	EXISTING MAILBOX		EXISTING WATER MAIN
	EXISTING DRAINAGE FLOW		EXISTING CABLE TV
	EXISTING TEST PIT		EXISTING OVERHEAD TELEPHONE
	EXISTING BORING		EXISTING UNDERGROUND TELEPHONE
	EXISTING STUMP		EXISTING GUARD RAIL
	EXISTING CONIFEROUS TREE		EXISTING FENCE
	EXISTING DECIDUOUS TREE		EXISTING CHAINLINK FENCE
	EXISTING WETLAND		EXISTING WOODEN FENCE
	EXISTING TELEPHONE MANHOLE		EXISTING RETAINING WALL
	EXISTING UTILITY POLE		EXISTING HAYBALES
	EXISTING WATER SHUTOFF		EXISTING STONE WALL
	EXISTING GATE VALVE		EXISTING TREE/SHRUB LINE
	EXISTING WELL		EXISTING INVASIVE SPECIES



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Client/Project

TOWN OF HANOVER, NH

GIRL BROOK TRAIL REHABILITATION

Hanover, New Hampshire

Title

LEGEND & SYMBOLS

Project No.

179450927

Scale

AS NOTED

Revision

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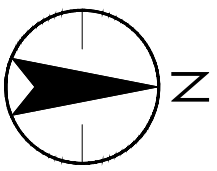
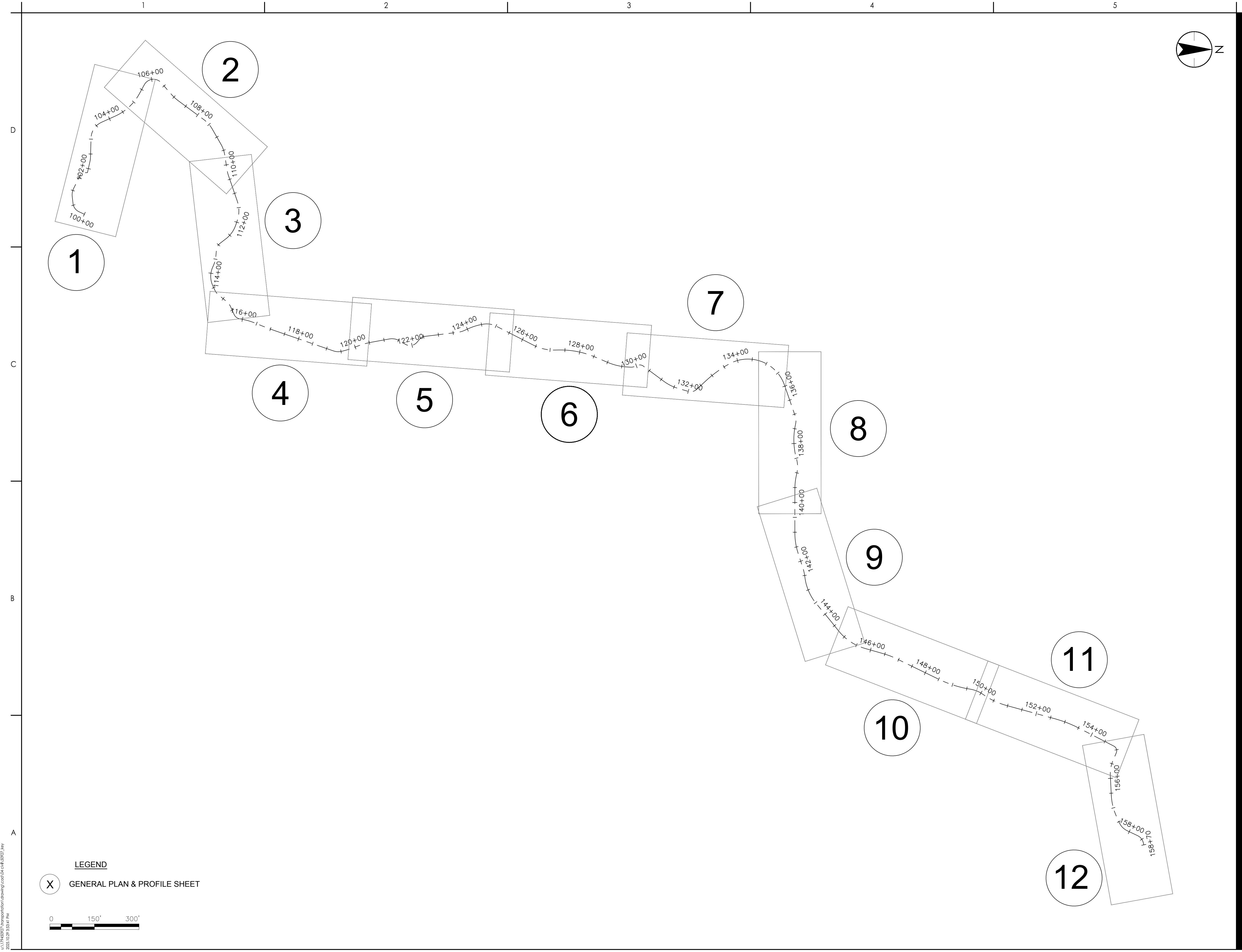
Sheet

3 of 21

Drawing No.

C-003

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File Name: 30927_KEY	TJG	DEM	2025-10-29
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Client/Project Logo

Client/Project
TOWN OF HANOVER, NH

GIRL BROOK TRAIL REHABILITATION

Hanover, New Hampshire

Title
KEY PLAN

Project No.
179450927

Revision
-

Sheet
4 of 21

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AS NOTED

Drawing No.

C-004

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TOWN OF HANOVER, NH

GIRL BROOK TRAIL REHABILITATION

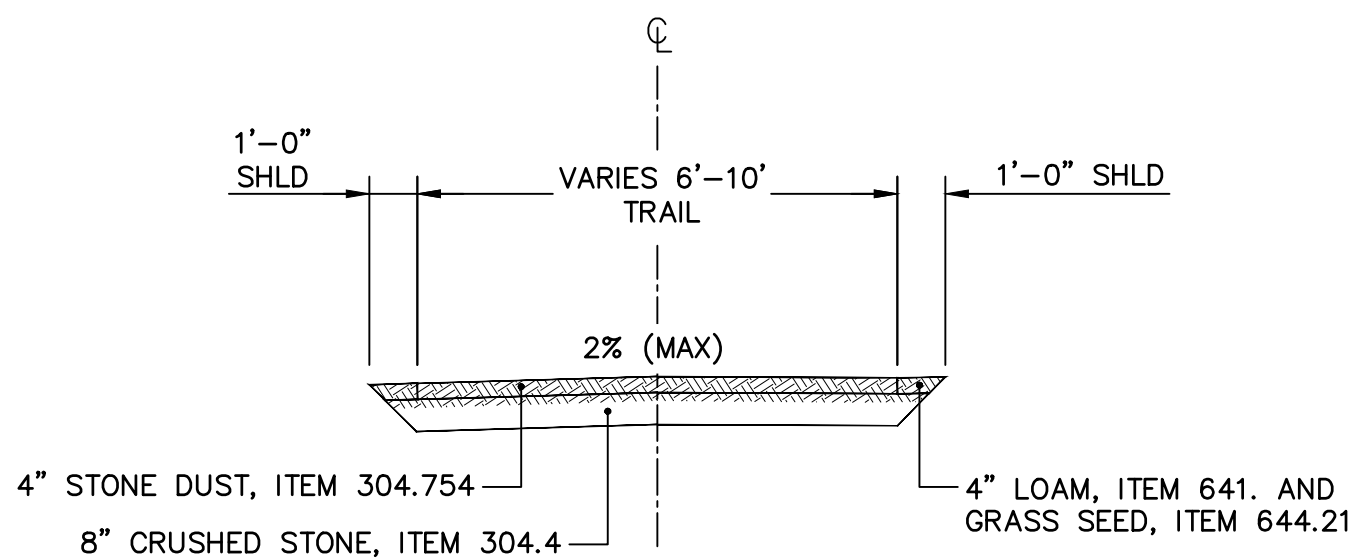
Hanover, New Hampshire

Title
CONSTRUCTION DETAILS
(SHEET 01 OF 05)

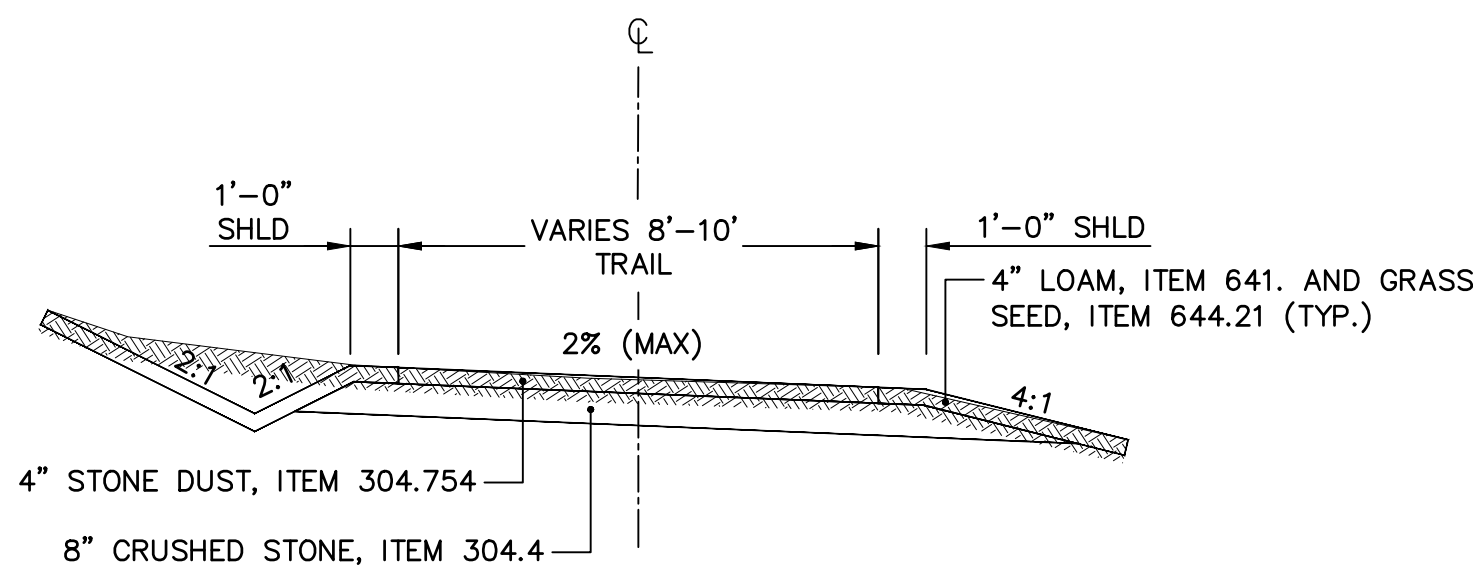
Project No.
179450927 Scale
AS NOTED

Revision Sheet Drawing No.
0 5 of 21

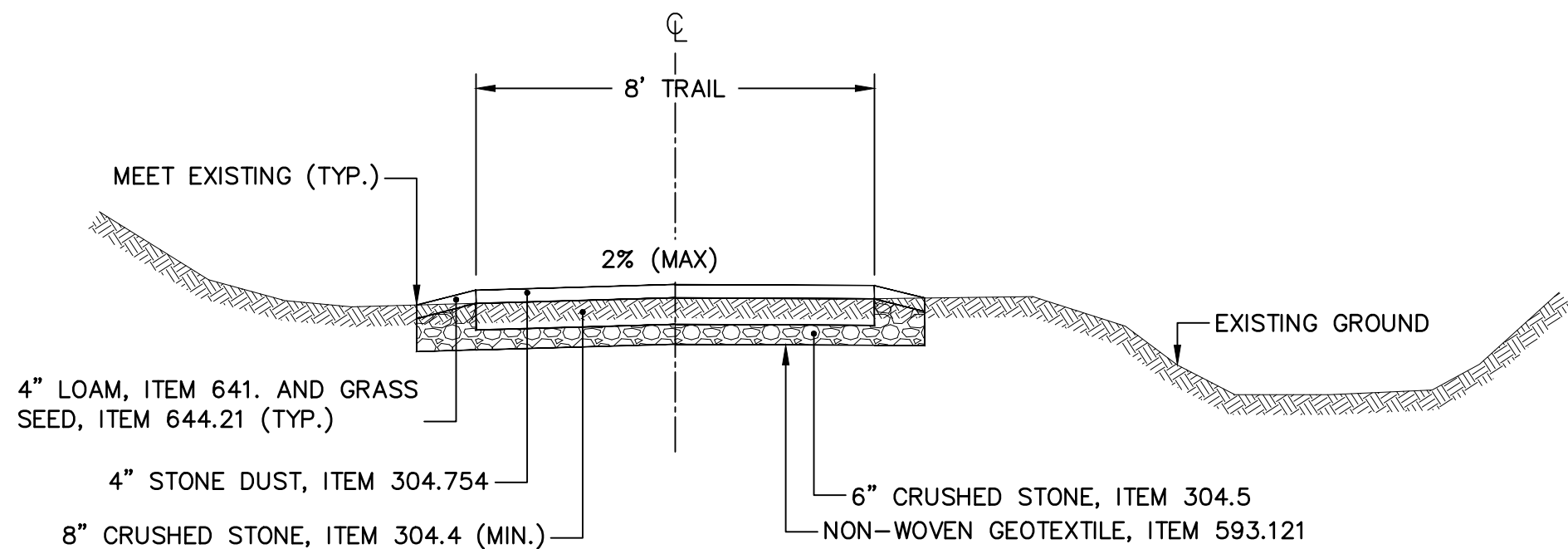
DET-01



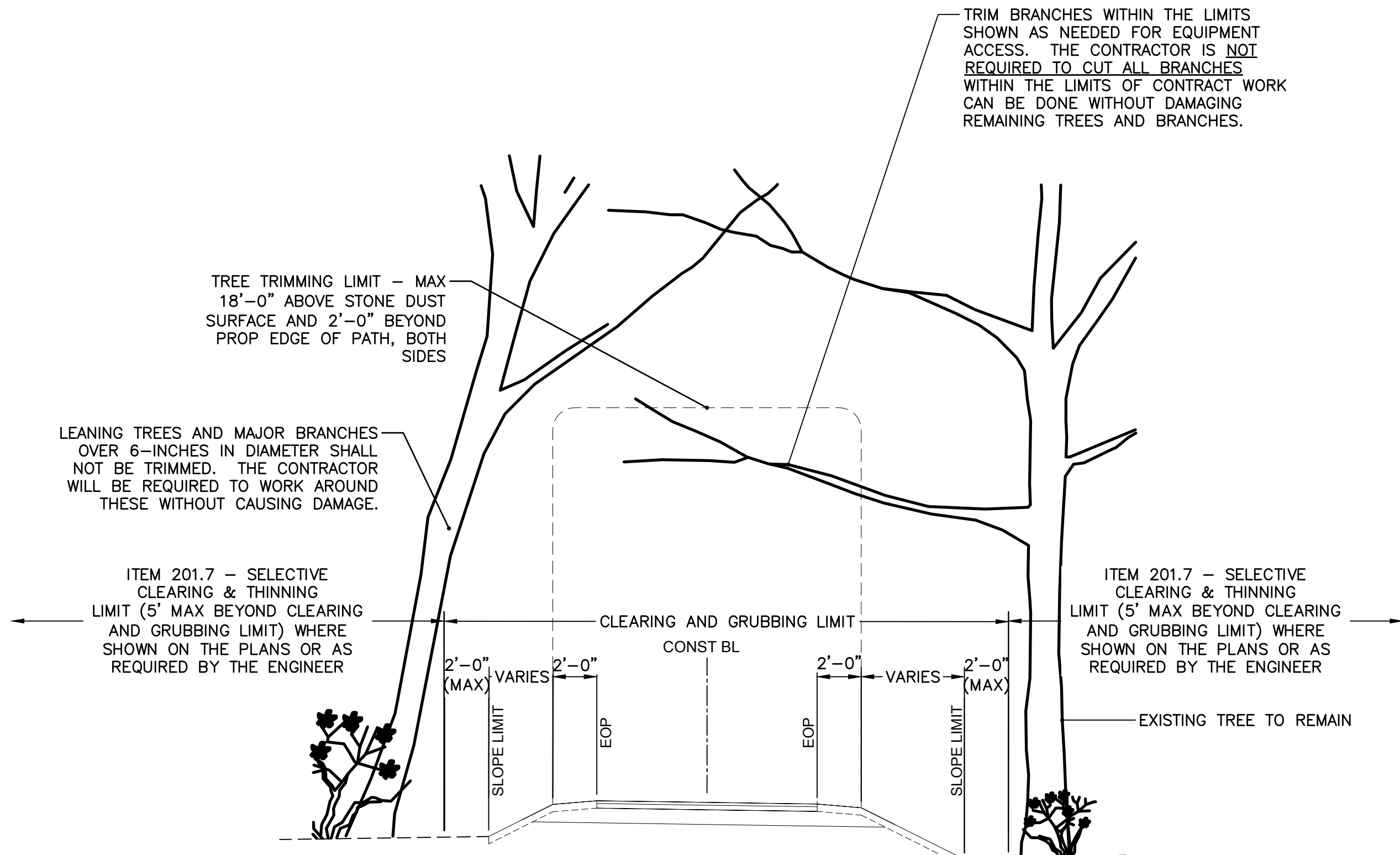
TYPICAL SECTION 01
NOT TO SCALE
UTILIZE THIS TYPICAL, UNLESS NOTED AS
TYPICAL SECTION 02 OR TYPICAL SECTION 03



TYPICAL SECTION 02
NOT TO SCALE
FROM STA. 108+00 TO STA. 109+50
FROM STA. 112+00 TO STA. 115+00
FROM STA. 139+00 TO STA. 141+50



WETLAND TRAIL SECTION 03
NOT TO SCALE
FROM STA. 104+27 TO STA. 105+04
FROM STA. 122+32 TO STA. 124+72
FROM STA. 127+02 TO STA. 129+24
FROM STA. 136+10 TO STA. 138+40
FROM STA. 141+50 TO STA. 144+63
FROM STA. 149+36 TO STA. 153+40



VEGETATION MANAGEMENT FOR CONSTRUCTION ACCESS
NOT TO SCALE

VEGETATION MANAGEMENT FOR CONSTRUCTION ACCESS NOTES:

1. THE INTENT IS TO PRESERVE AS MUCH NATURAL VEGETATION AS FEASIBLE. A 2'-FT MINIMUM OFFSET FROM THE EDGE OF PATH MUST REMAIN CLEAR OF TREES.
2. ALL TREES REQUIRING REMOVAL SHALL BE MARKED AND APPROVED BY THE ENGINEER PRIOR TO REMOVAL.
3. CLEARING AND GRUBBING AND SELECTIVE CLEARING SHALL NOT OCCUR WITHIN WETLAND AREAS.



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Client/Project Logo

Client/Project
TOWN OF HANOVER, NH

GIRL BROOK TRAIL REHABILITATION

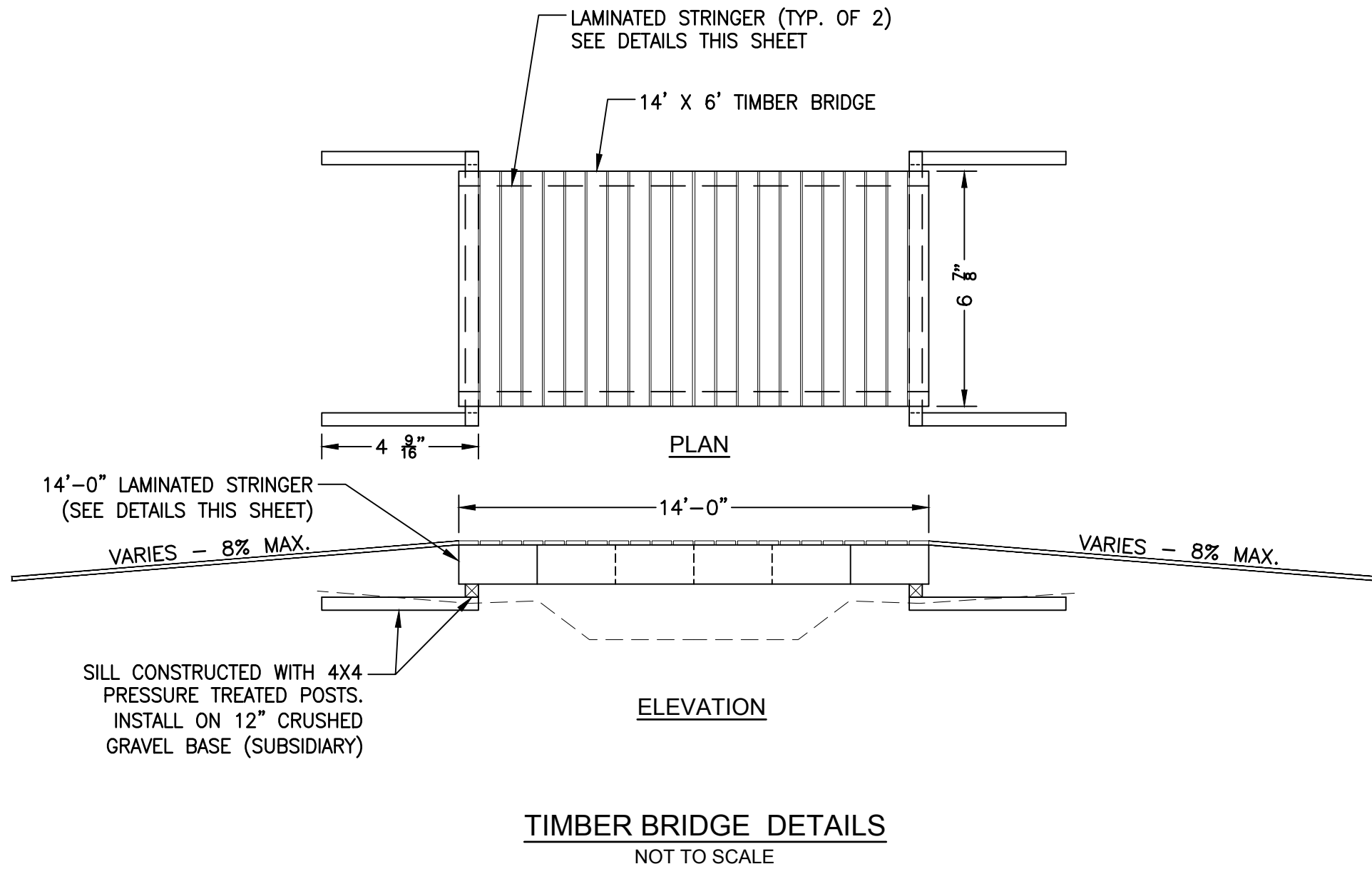
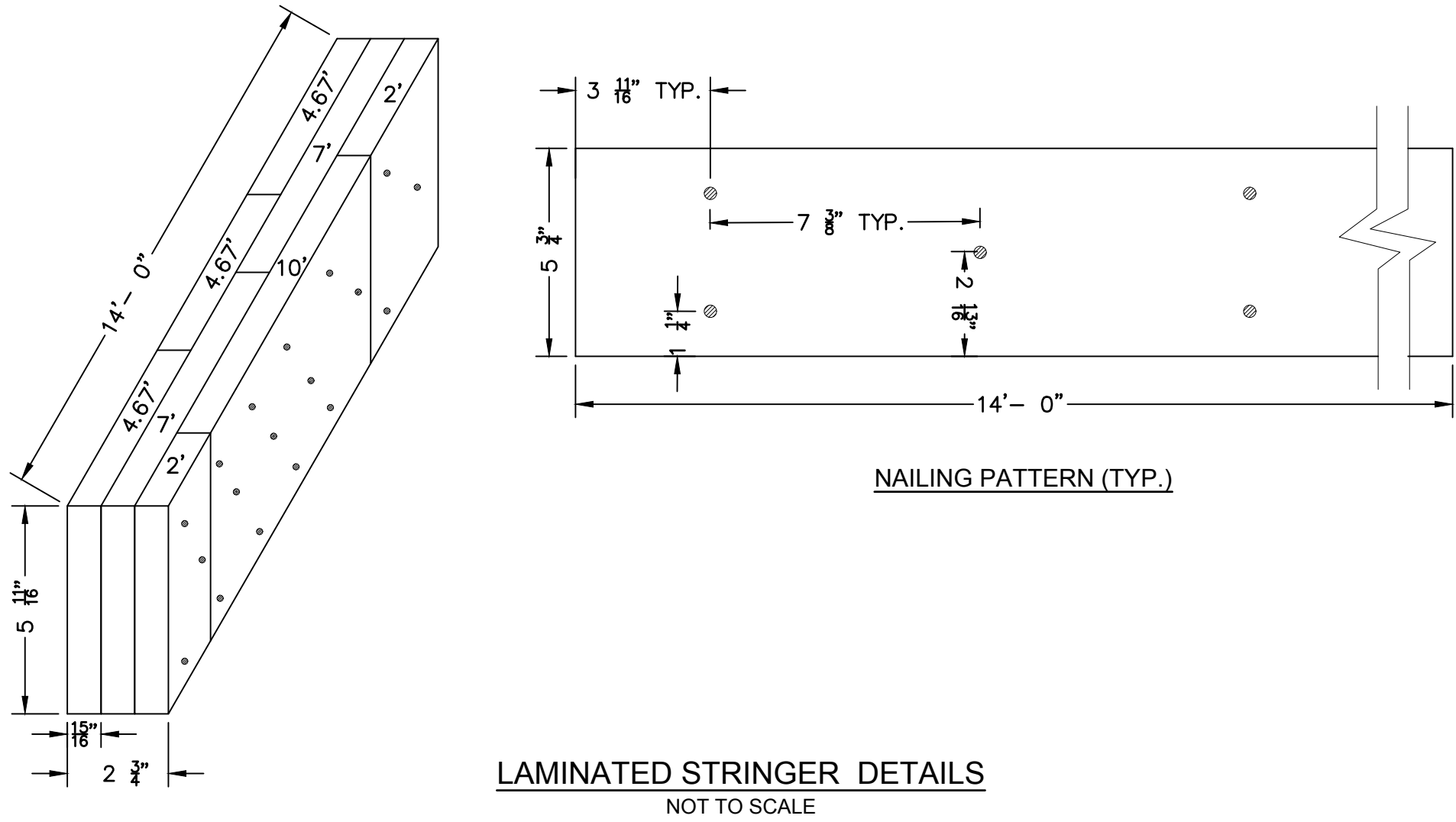
Hanover, New Hampshire

Title
CONSTRUCTION DETAILS
(SHEET 02 OF 05)

Project No. 179450927 Scale AS NOTED

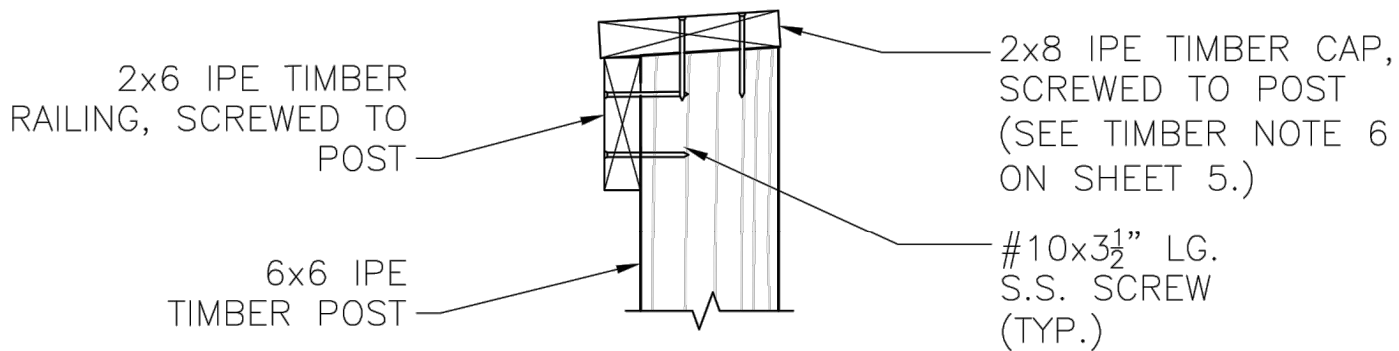
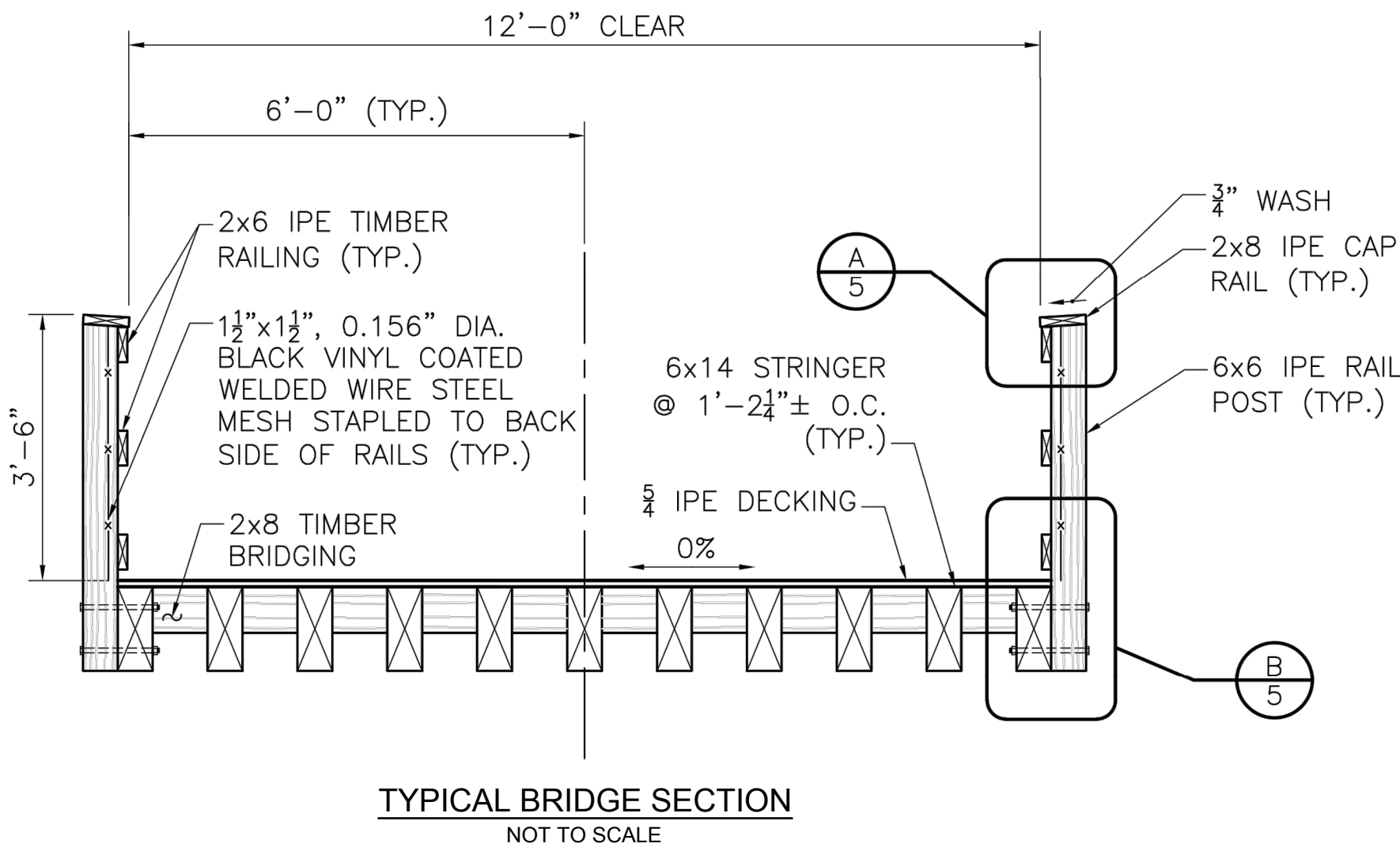
Revision 0 Sheet 6 of 21 Drawing No.

DTL-02

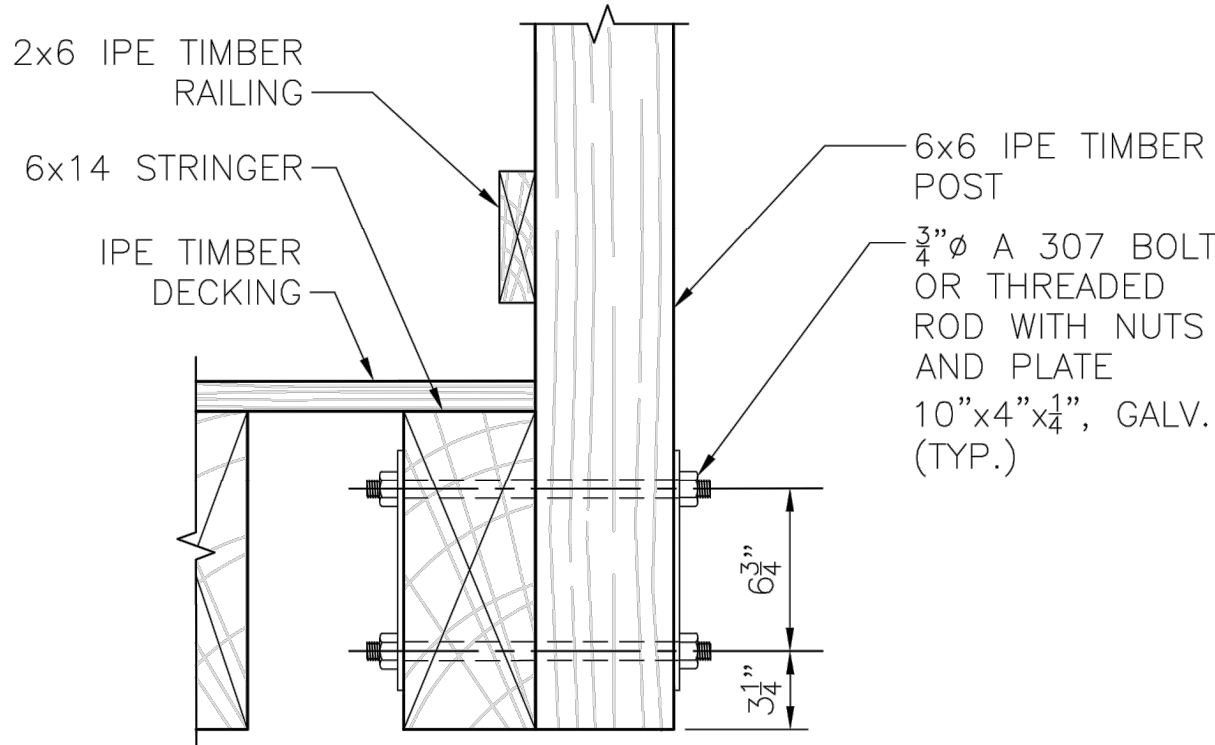


TIMBER BRIDGE NOTES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF NATIONAL DESIGN STANDARDS FOR WOOD CONSTRUCTION.
- DECKING - SMALL SPACES, MAXIMUM 1/2 INCH WIDE, SHOULD BE LEFT BETWEEN DECK PIECES TO ALLOW FOR DRAINAGE.
- BEFORE PUTTING DECKING ON, PLACE TAR PAPER OR ALUMINUM FLASHING OVER THE TOP OF THE STRINGERS FOR DRAINAGE AND TO HELP PREVENT ROT.
- TO PREVENT THE COMPLETE LOSS OF THE BRIDGE DURING FLOODS, CABLE ONE END OF THE STRINGERS TO A LARGE TREE, BOULDER, OR OTHER ANCHOR UPSTREAM.
- LAMINATE 2X10 AS SHOWN TO CREATE STRINGER. BE CERTAIN ALL JOINTS ARE AT LEAST 2' APART ALONG THE BRIDGE'S LENGTH. LAMINATE WITH CONSTRUCTION ADHESIVE AND 16d GALVANIZED NAILS AS SHOWN.



A
DTL-02
DETAIL AT TOP OF HAND RAIL
NOT TO SCALE



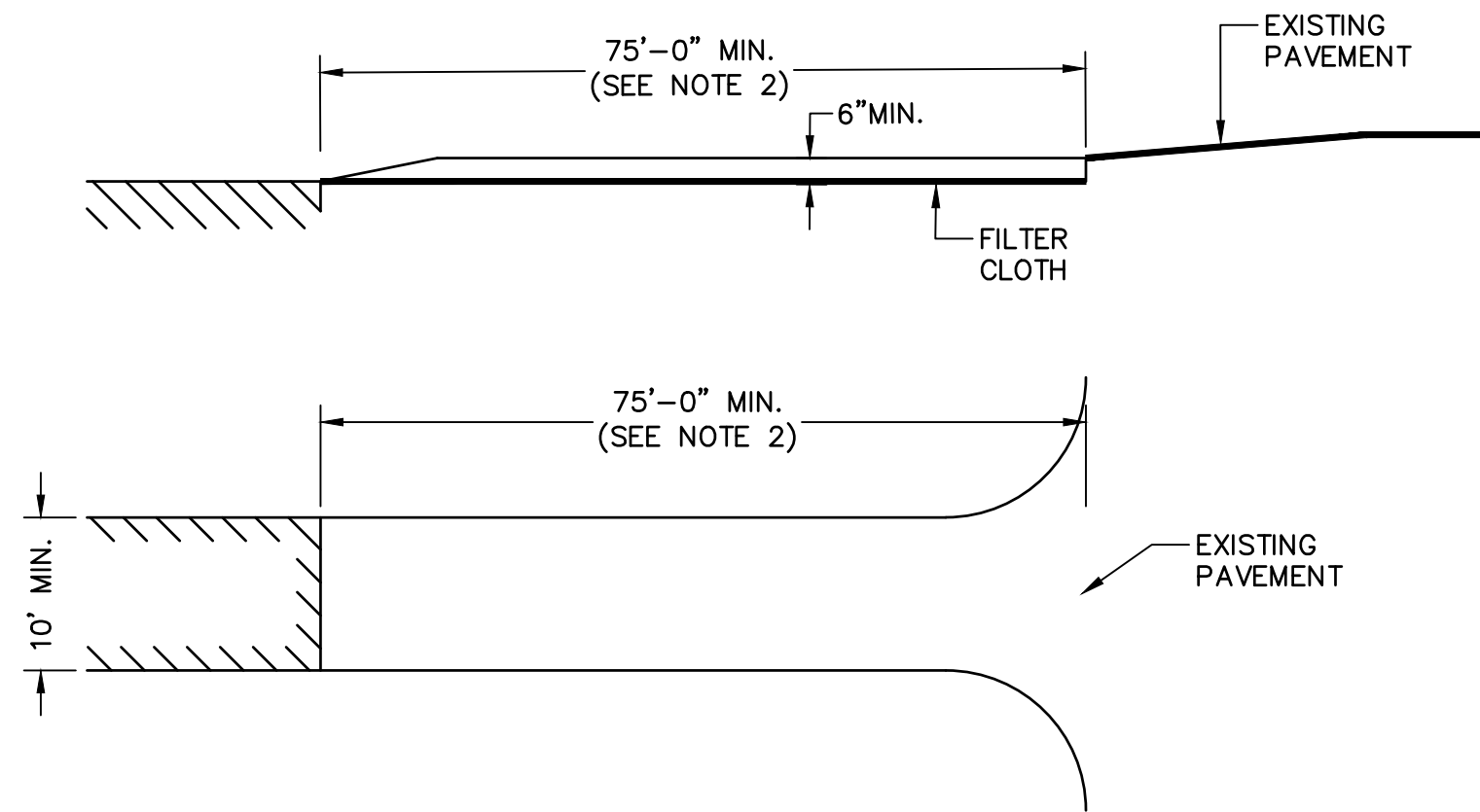
B
DTL-02
DETAIL AT LOWER HAND RAIL
NOT TO SCALE

D

C

B

A



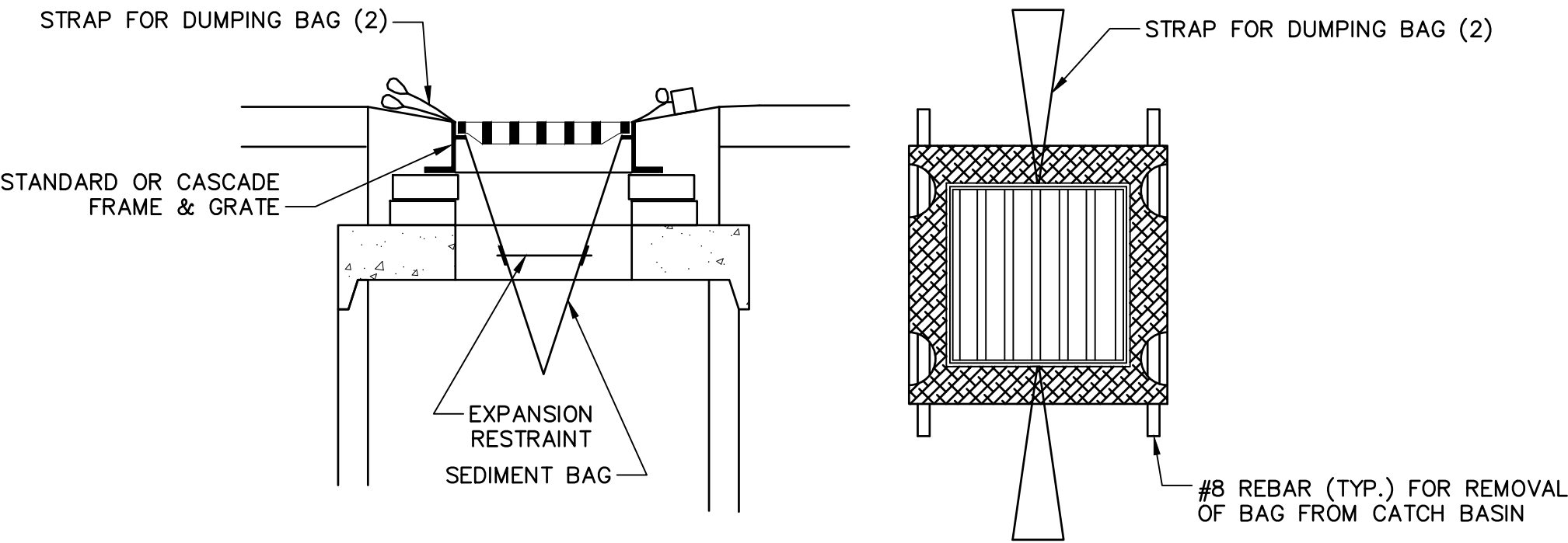
CONSTRUCTION SPECIFICATIONS:

- STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH MINIMUM STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
- THE LENGTH OF THE STABILIZED ENTRANCE MAY BE REDUCED TO 50 FEET IF A 3 INCH TO 6 INCH HIGH BERM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE.
- THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
- THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
- GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
- ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIRS AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENTS. ALL SEDIMENTS SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED PROMPTLY.
- WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- FOR UNDERGROUND INFILTRATION BASINS:
 - DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION SYSTEM.
 - AFTER THE INFILTRATION SYSTEM AREA IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
 - DO NOT PLACE INFILTRATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

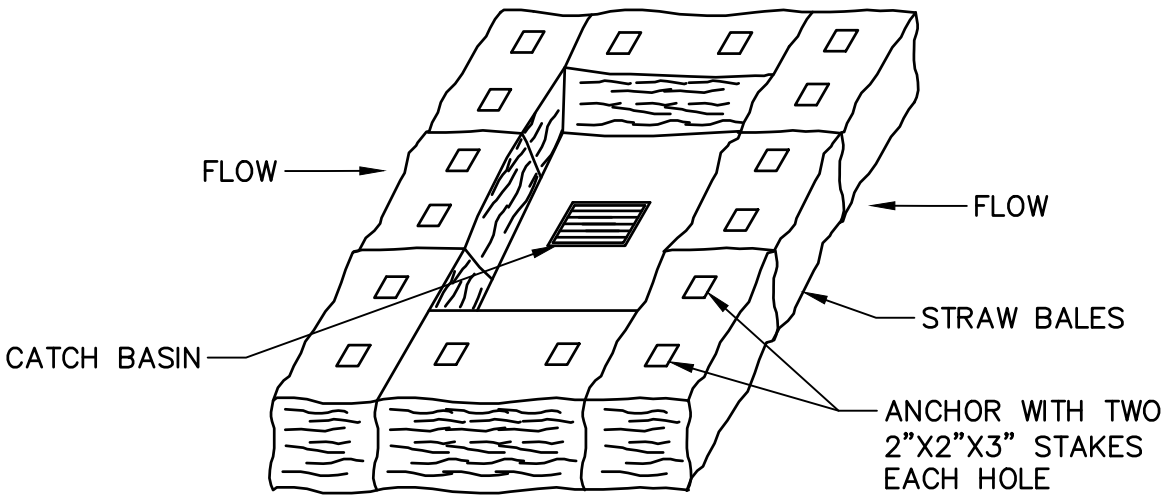
STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

GENERAL NOTES:

- IN ACCORDANCE WITH ENV-WQ 1504.06(K). THE PROJECT SHALL MEET THE REQUIREMENTS AND INTENT OF RSA 430.51-57 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
- FUGITIVE DUST SHALL BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000.
- IF ASBESTOS WASTE IS ENCOUNTERED, IT MUST BE MANAGED IN ACCORDANCE WITH ENV-SW 901 OF THE NH SOLID WASTE RULES.
- TREE CLEARING WILL NOT OCCUR BETWEEN JUNE 1 AND JULY 31 TO PROTECT POTENTIAL BAT ROOST HABITAT.

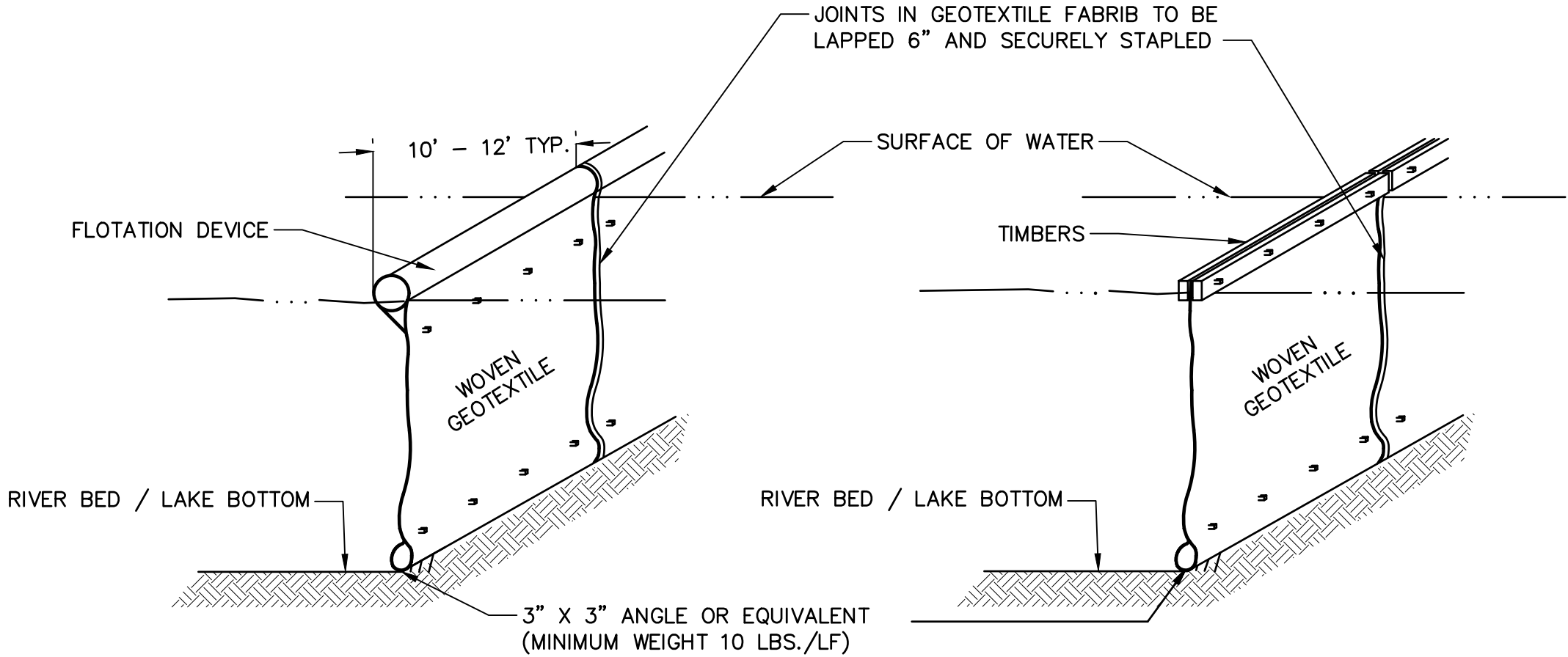


SEDIMENT CONTROL BAG AT CATCH BASIN
NOT TO SCALE



NOTE:
MAINTAIN EXISTING FILTERS FOR THE DURATION OF CONSTRUCTION.

TYPICAL STRAW BALE FILTER AT CATCH BASIN
NOT TO SCALE



NOTE:
THESE ARE SUGGESTED CONSTRUCTED METHODS. ACTUAL METHOD TO BE APPROVED BY THE ENGINEER

SILT SCREEN DETAIL
NOT TO SCALE



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TOWN OF HANOVER, NH

GIRL BROOK TRAIL REHABILITATION

Hanover, New Hampshire

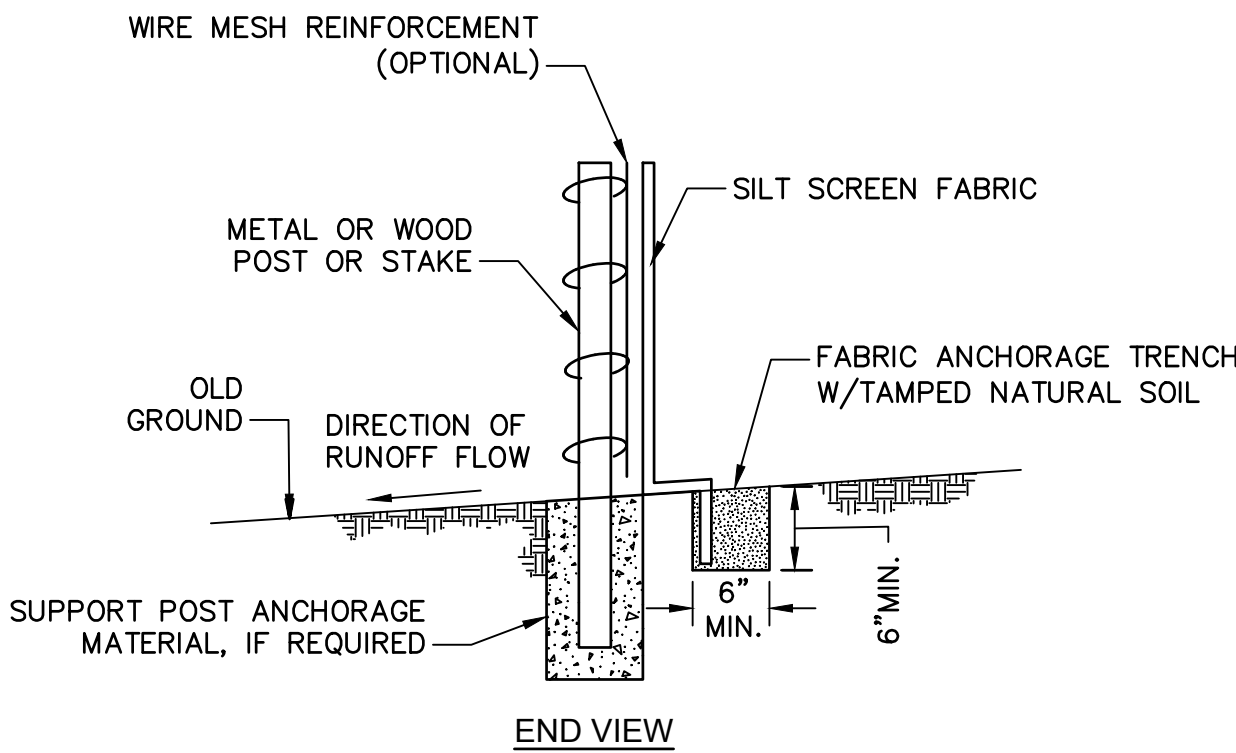
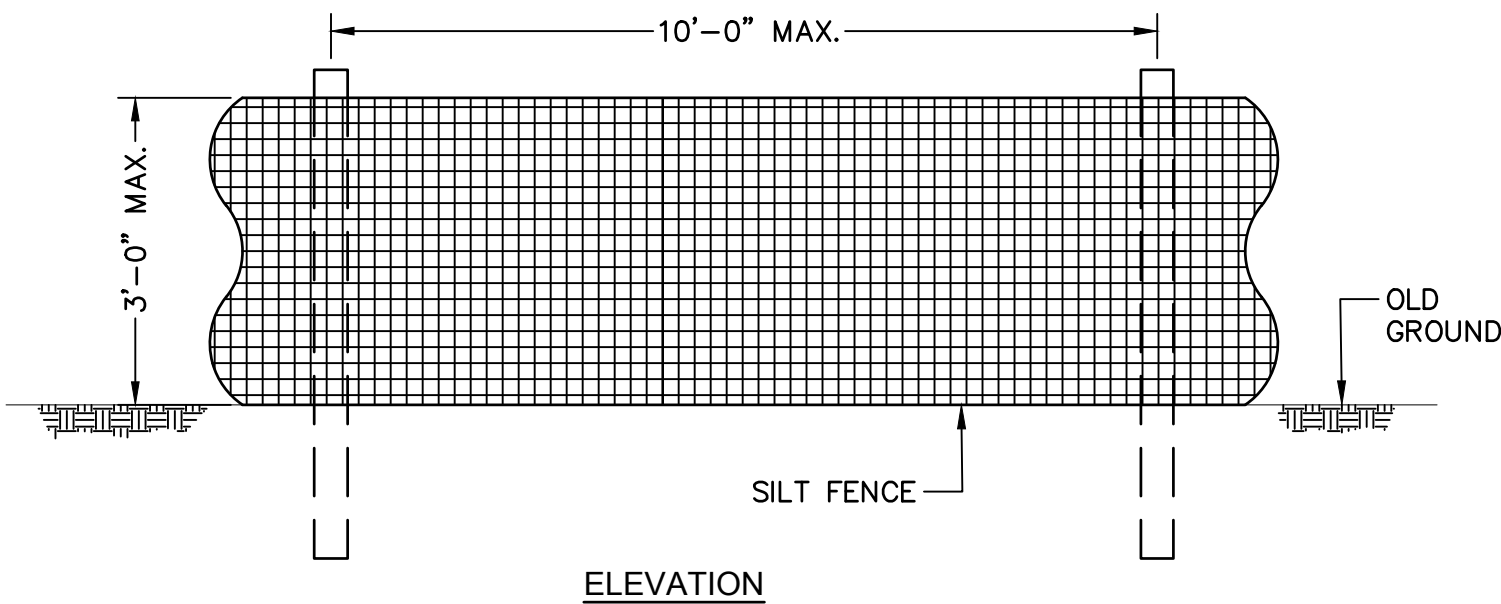
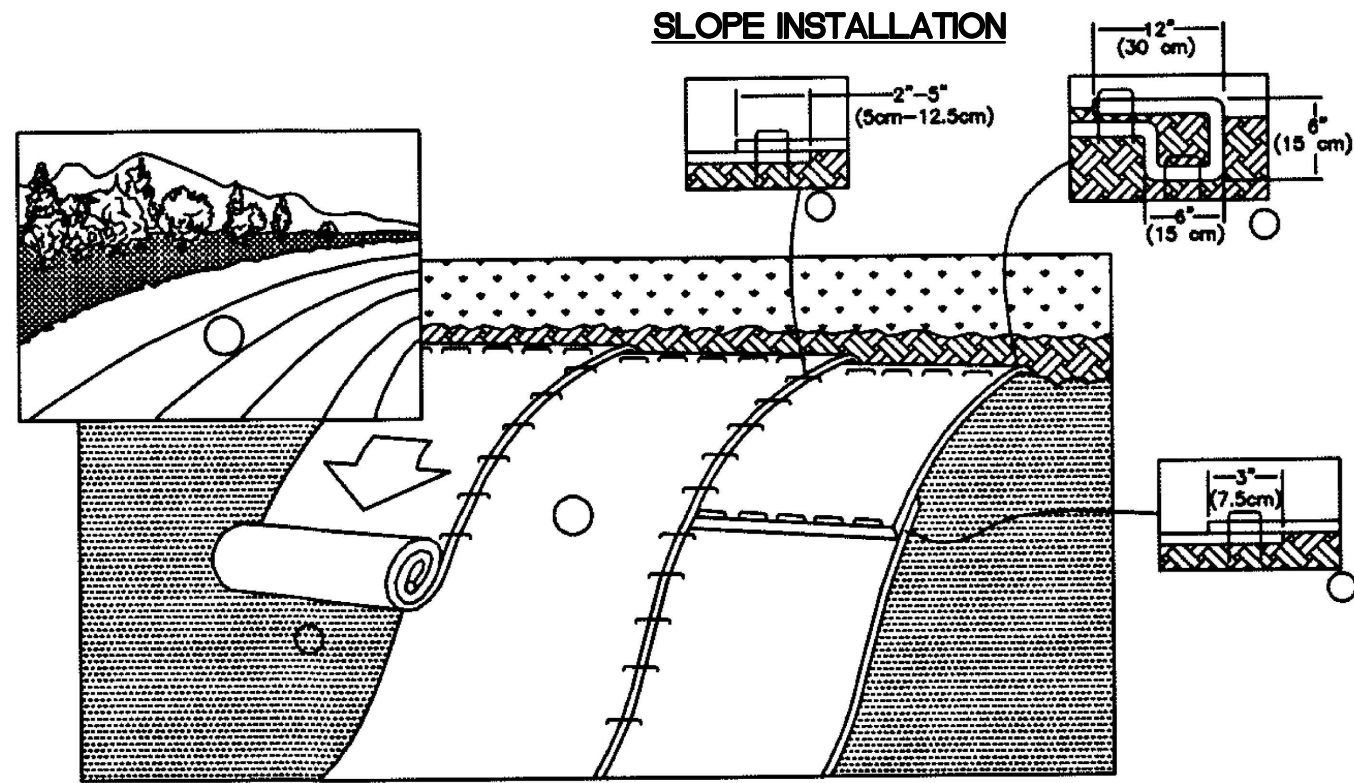
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(SHEET 03 OF 05)

Project No. 179450927 Scale AS NOTED

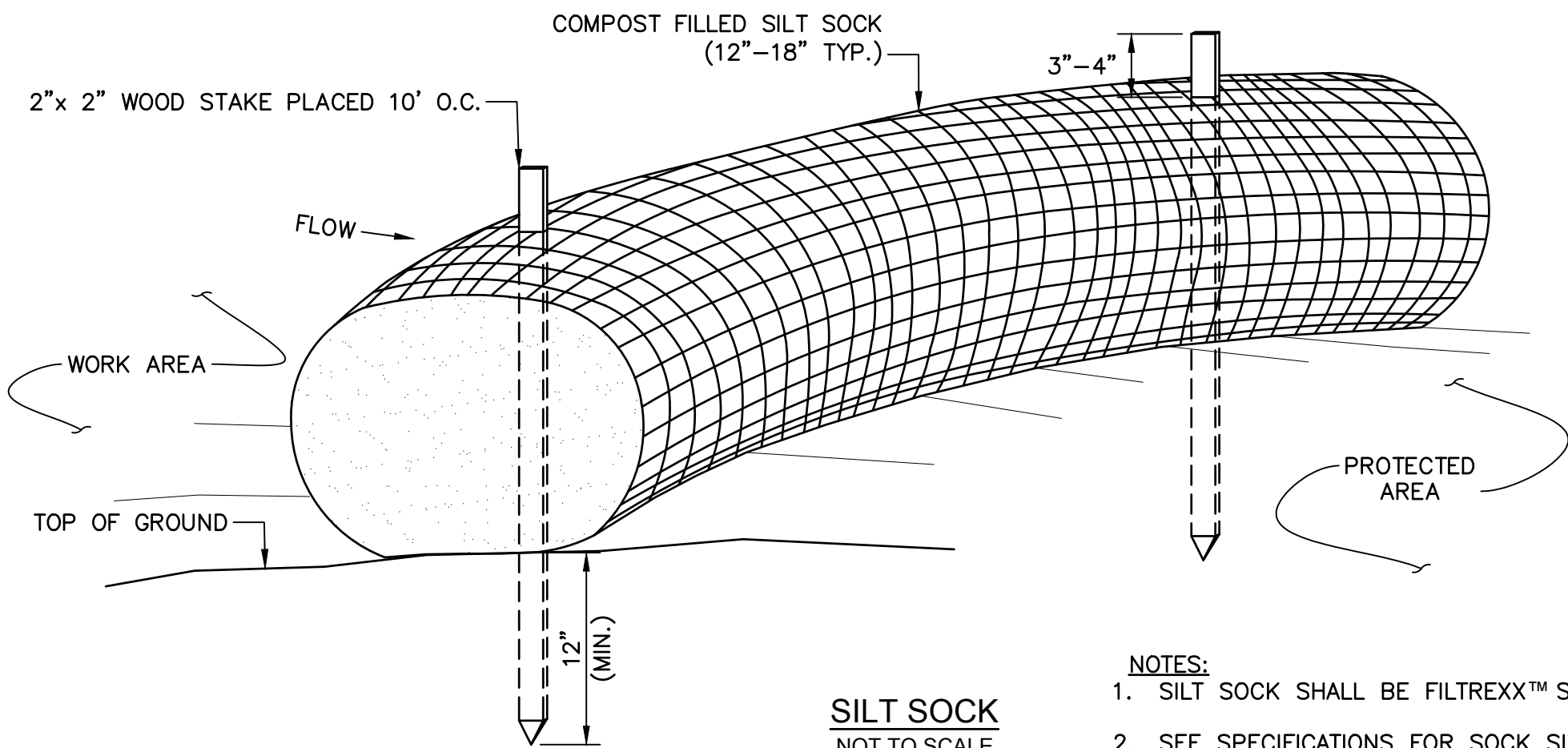
Revision 0 Sheet 7 of 21 Drawing No.

DET-03

SLOPE INSTALLATION



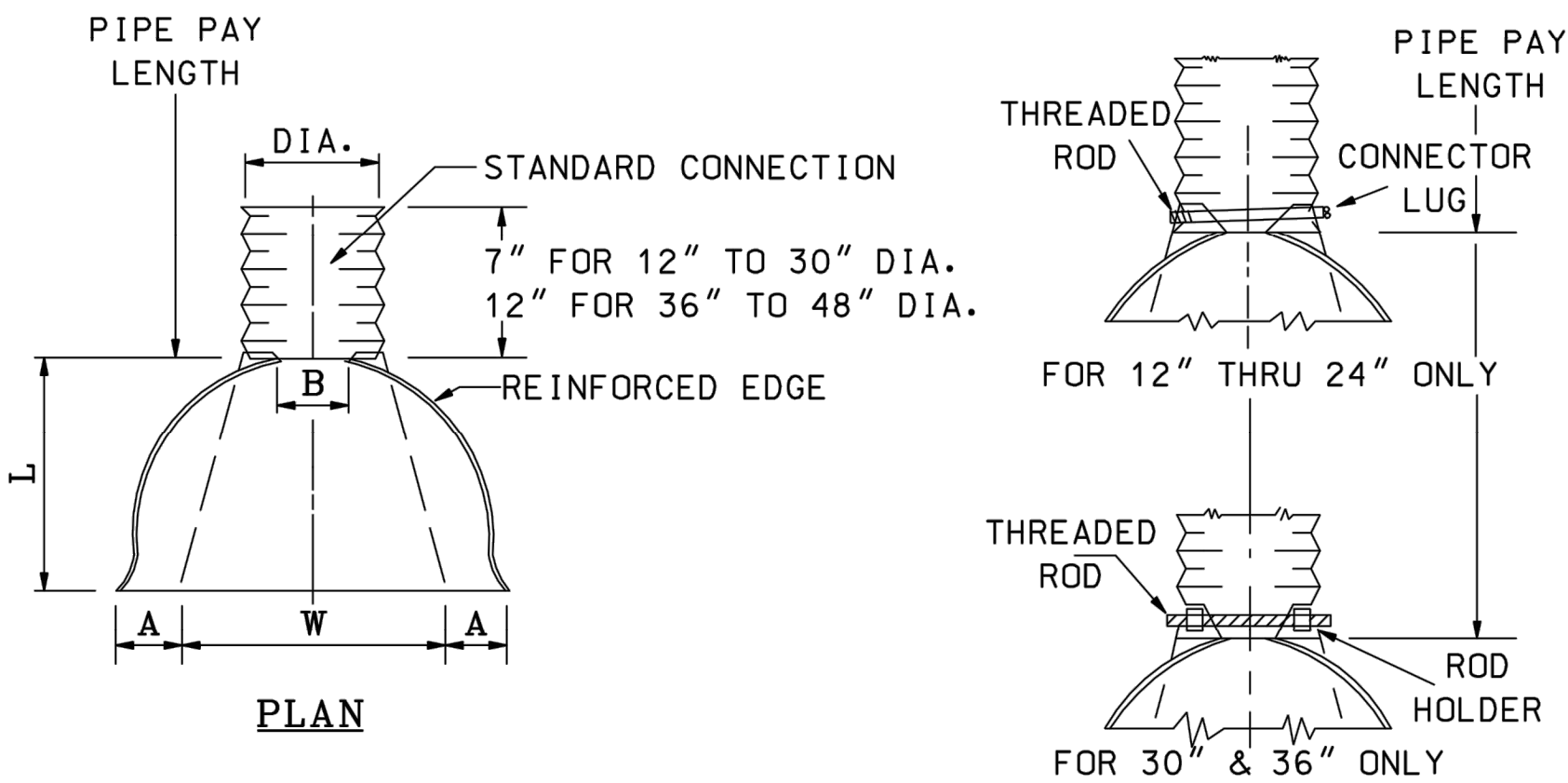
SILT FENCE DETAIL
NOT TO SCALE



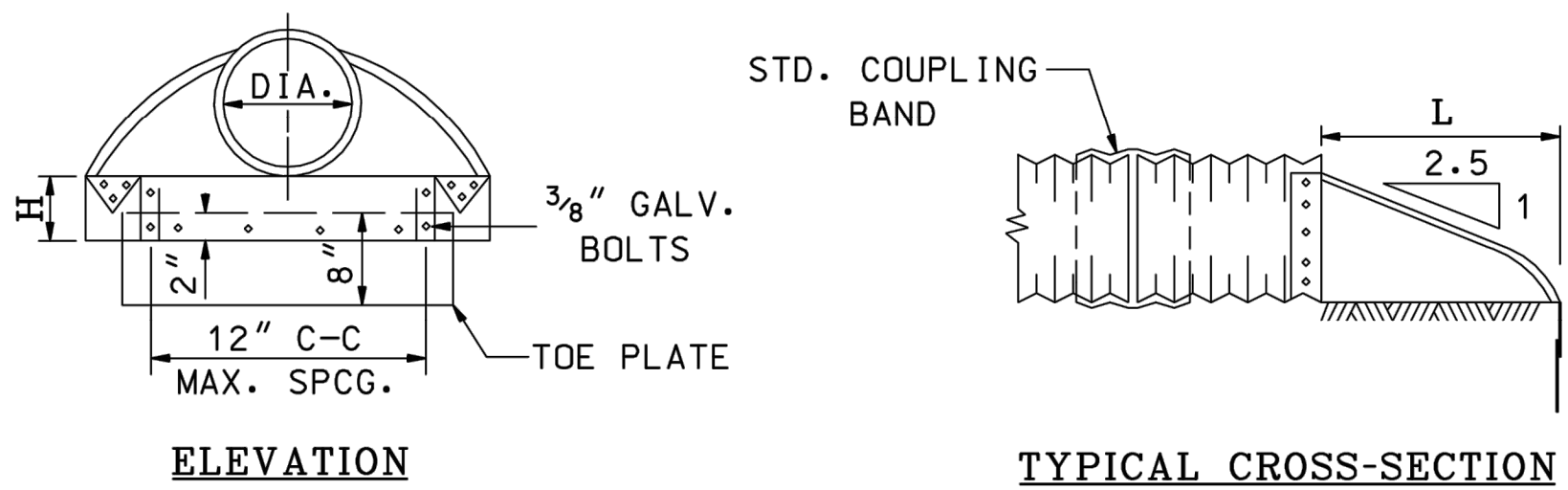
SILT SOCK
NOT TO SCALE

- NOTES:
1. SILT SOCK SHALL BE FILTREXX™ SILTSOXX™ OR APPROVED EQUIVALENT.
 2. SEE SPECIFICATIONS FOR SOCK SIZE AND COMPOST FILL REQUIREMENTS.
 3. SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED AS NEEDED.
 4. AFTER IMPACT AREA HAS BEEN FULLY STABILIZED, THE COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.

EROSION CONTROL BLANKET DETAIL
NOT TO SCALE



ALTERNATE CONNECTIONS



END SECTION FOR PLASTIC &
CORRUGATED STEEL PIPE
NOT TO SCALE

GENERAL NOTES

1. END SECTION FOR 12" TO 30" DIA. PIPE IN ONE PIECE. FOR 36" TO 48" DIA. PIPE TO BE MADE FROM TWO SHEETS JOINED BY RIVETING OR BOLTING ON CENTER LINE.
2. CONNECTOR SECTION, CORNER PLATE AND TOE PLATE TO BE SAME THICKNESS AS END SECTION AND EACH TO BE GALVANIZED.

ITEM NO.	PIPE DIA.	METAL GAGE	DIMENSIONS				
			A (1" TOL.)	B MAX.	H (1" TOL.)	L (1 1/2" TOL.)	W (2" TOL.)
603.34112	12"	16	6"	6"	6"	21"	24"
603.34115	15"	16	7"	8"	6"	26"	30"
603.34118	18"	16	8"	13"	6"	31"	36"
603.34124	24"	16	10"	16"	6"	41"	48"
603.34130	30"	14	12"	16"	8"	51"	60"
603.34136	36"	14	14"	19"	9"	60"	72"
603.34142	42"	12	16"	22"	11"	69"	84"
603.34148	48"	12	18"	27"	12"	78"	90"

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EROSION CONTROL NOTES AND STRATEGIES

1. Erosion Control/Stormwater Control Selection, Sequencing and Maintenance
- 1.1. Comply with RSA 485-A:17 Terrain Alteration.
- 1.2. Install and maintain all erosion control/stormwater controls in accordance with the New Hampshire Stormwater Management Manual, Volume 3, Erosion and Sediment Controls During Construction, December 2008 (BMP Manual), available from the NH Department of Environmental Services (NHDES).
- 1.3. Install erosion control/stormwater control measures prior to the start of work and in accordance with the manufacturer's recommendations.
- 1.4. Select erosion control/stormwater control measures based on the size and nature of the project and physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to jurisdictional areas.
- 1.5. Install perimeter controls prior to earth disturbing activities.
- 1.6. Install stormwater treatment ponds and drainage swales before rough grading the site.
- 1.7. Clean, replace, and augment stormwater control measures and infiltration basins as necessary to prevent sedimentation beyond project limits throughout the project duration.
- 1.8. Inspect erosion and sediment control measures in accordance with Section 645 of the specifications, weekly, and within 24 hours (during normal work hours), of any storm event greater than 0.25 inches of rain in a 24-hour period.
- 1.9. Contain stockpiles with temporary perimeter controls. Protect inactive soil stockpiles with soil stabilization measures (temporary erosion control seed mix and mulch, soil binder) or cover them with anchored tarps. If the stockpile is to remain undisturbed for more than 14 days, mulch the stockpile.
- 1.10.Maintain temporary erosion and stormwater control measures in place until the area has been permanently stabilized.
- 1.11.An area is considered stable if one of the following has occurred:

• Base course gravels have been installed in areas to be paved;

• A minimum of 85% vegetative growth has been established;

• A minimum of 3"of non-erosive material such as stone or rip-rap has been installed;

• Temporary slope stabilization has been properly installed (see Table 1).
- 1.12.Direct runoff to temporary practices until permanent stormwater infrastructure is constructed and stabilized.
- 1.13.Use temporary mulching, permanent mulching, temporary vegetative cover, and permanent vegetative cover to reduce the need for dust control. Use mechanical sweepers on paved surfaces where necessary to prevent dust buildup. Apply water, or other dust inhibiting agents or tackifiers.
- 1.14.Plan activities to account for sensitive site conditions

• Sequence construction to limit the duration and area of exposed soils.

• Clearly flag areas to be protected in the field and provide construction barrier to prevent trafficking outside of work areas.

• Protect and maximize existing native vegetation and natural forest buffers between construction activities and sensitive areas.

• When work is undertaken in a flowing watercourse, implement stream flow diversion methods prior to any excavation or filling activity.
- 1.15.Utilize storm drain inlet protection to prevent sediment from entering a storm drainage system prior to the permanent stabilization of the contributing disturbed area.
- 1.16.Use care to ensure that sediments do not enter any existing catch basins during construction. Place temporary inlet protection at inlets in areas of soil disturbance that are subject to sedimentation.
- 1.17.Construct, stabilize, and maintain temporary and permanent ditches in a manner that will minimize scour. Direct temporary and permanent ditches to drain to sediment basins or stormwater collection areas.
- 1.18.Supplement channel protection measures with perimeter control measures when ditch lines occur at the bottom of long fill slopes. Install the perimeter controls on the fill slope to minimize the potential for fill slope sediment deposits in the ditch line.
- 1.19.Divert sediment laden water away from drainage inlet structures to the extent possible.
- 1.20.Install sediment barriers and sediment traps at drainage inlets to prevent sediment from entering the drainage system.
- 1.21.Clean catch basins, drainage pipes, and culverts if significant sediment is deposited.
- 1.22.Construct and stabilize dewatering infiltration basins prior to any excavation that may require dewatering.
- 1.23.Place and stabilize temporary sediment basins or traps at locations where concentrated flow (channels and pipes) discharge to the surrounding environment from areas of unstabilized earth disturbing activities.
- 1.24.Stabilize, to appropriate anticipated velocities, conveyance channels or pumping systems needed to convey construction stormwater to basins and discharge locations prior to use.
- 1.25.Size temporary sediment basins to contain the 2-year, 24 hour storm event.
- 1.26.Size temporary sediment traps to contain 3,600 cubic feet of storage for each acre of drainage area.
- 1.27.Construct detention basins to accommodate the 2-year, 24-hour storm event.
2. Construction Planning
- 2.1. Divert off site runoff or clean water away from the construction activities to reduce the volume that needs to be treated on site.
- 2.2. Divert storm runoff from upslope drainage areas away from disturbed areas, slopes and around active work areas to a stabilized outlet location.
- 2.3. Construct impermeable barriers, as necessary, to collect or divert concentrated flows from work or disturbed areas.
- 2.4. Locate staging areas and stockpiles outside of wetlands jurisdiction.
- 2.5. Do not store, maintain, or repair mobile heavy equipment in wetlands, unless equipment cannot be practicably removed and secondary containment is provided.
- 2.6. Provide a water truck to control excessive dust, at the discretion of the Contract Administrator.
3. Site Stabilization
- 3.1. Stabilize all areas of unstabilized soil as soon as practicable, but no later than 45 days after initial disturbance.
- 3.2. Limit unstabilized soil to a maximum of 5 acres unless documentation is provided that demonstrates that cuts and fills are such that 5 acres is unreasonable.
- 3.3. Use erosion control seed mix in all inactive construction areas that will not be permanently seeded within two weeks of disturbance and prior to September 15' of any given year in order to achieve vegetative stabilization prior to the end of the growing season.
- 3.4. Apply, and reapply as necessary, soil tackifiers in accordance with the manufacturer's specifications to minimize soil and mulch loss until permanent vegetation is established.
- 3.5. Stabilize basins, ditches and swales prior to directing runoff to them.
- 3.6. Stabilize roadway and parking areas within 72 hours of achieving finished grade.
- 3.7. Stabilize cut and fill slopes within 72 hours of achieving finished grade.
- 3.8. When temporarily stabilizing soils and slopes, utilize the techniques outlined in Table 1.
- 3.9. Stabilize all areas that can be stabilized prior to opening up new areas to construction activities.
- 3.10.Utilize Table 1 when selecting temporary soil stabilization measures.
- 3.11.Divert off-site water through the project in an appropriate manner so as not to disturb the upstream or downstream soils, vegetation or hydrology beyond the permitted area.
- 3.12.Install and maintain construction exits anywhere traffic leaves a construction site onto a public right-of-way.
- 3.13.Sweep all construction related debris and soil from the adjacent paved roadways, as necessary.

4. Slope Protection
- 4.1. Intercept and divert storm runoff from upslope drainage areas away from unprotected and newly established areas and slopes to a stabilized outlet or conveyance.
- 4.2. Consider how groundwater seepage on cut slopes may impact slope stability and incorporate appropriate measures to minimize erosion.
- 4.3. Convey storm water down the slope in a stabilized channel or slope drain.
- 4.4. The outer face of the fill slope should be in a loose, ruffled condition prior to turf establishment.
5. Winter Construction
- 5.1. To minimize erosion and sedimentation impacts, limit the extent and duration of winter excavation and earthwork activities. The maximum amount of disturbed earth shall not exceed a total of 5 acres from May 1' through October 15', or exceed one acre during winter months, unless the contractor demonstrates to the Department that the additional area of disturbance is necessary to meet the contractor's Critical Path Method (CPM) schedule, and the contractor has adequate resources available to ensure that environmental requirements will be met.
- 5.2. Construction performed any time between October 15' and May 1' of any year is considered winter construction. During winter construction:

• Stabilize all proposed vegetation areas which do not exhibit a minimum of 85% vegetative growth by October 15', or which are disturbed after October 15', in accordance with Table 1.

• Stabilize all ditches or swales which do not exhibit a minimum of 85% vegetative growth by October 15', or which are disturbed after October 15', in accordance with Table 1.

• Protect incomplete road surfaces, where base course gravels have not been installed, and where work has stopped for the season after October 15', in accordance with Table 1.

• Unless a winter construction plan has been approved by NHDOT, conduct winter excavation and earthwork such that no more than 1 acre of the project is without stabilization an any one time.
6. Wildlife Protection Measures
- 6.1. Report all observations of threatened and endangered species on the project site to the Department's Bureau of Environment by phone at 603-271-3226 or by email at Bureau16@dot.nh.gov, indicating in the subject line the project name, number, and that a threatened/endangered species was found.
- 6.2. Photograph the observed species and nearby elements of habitat or areas of land disturbance and provide them to the Department's Bureau of Environment at the above email address.
- 6.3. In the event that a threatened or endangered species is observed on the project during work, the species shall not be disturbed, handled, or harmed prior to receiving direction from the Bureau of Environment.
- 6.4. Utilize wildlife friendly erosion control methods when:

• Erosion control blankets are used,

• A protected species or habitat is documented,

• The proposed work is in or adjacent to a priority resource area, and/or when specifically requested by NHB or NHF&G

GUIDANCE ON SELECTING TEMPORARY SOIL STABILIZATION MEASURES
TABLE 1

APPLICATION AREAS	DRY MULCH METHODS				HYDRAULICALLY APPLIED MULCHES ²				ROLLED EROSION CONTROL BLANKETS ³			
	HMT	WC	SG	CB	HM	SMM	BFM	FRM	SNSB	DNSB	DNSCB	DNCB
SLOPES ¹												
STEEPER THAN 2:1	NO	NO	YES	NO	NO	NO	NO	YES	NO	NO	NO	YES
2:1 SLOPE	YES ¹	YES ¹	YES	YES	NO	NO	YES	YES	NO	YES	YES	YES
3:1 SLOPE	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES	YES	NO
4:1 SLOPE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO
WINTER STABILIZATION CHANNELS	4T/AC	YES	YES	YES	NO	NO	YES	YES	YES	YES	YES	YES
LOW FLOW CHANNELS	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES
HIGH FLOW CHANNELS	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES

ABBREV.	STABILIZATION MEASURE	ABBREV.	STABILIZATION MEASURE	ABBREV.	STABILIZATION MEASURE
HMT	HAY MULCH & TACK	HM	HYDRAULIC MULCH	SNSB	SINGLE NET STRAW BLANKET
WC	WOOD CHIPS	SMM	STABILIZED MULCH MATRIX	DNSB	DOUBLE NET STRAW BLANKET
SG	STUMP GRINDINGS	BFM	BONDED FIBER MATRIX	DNSCB	2 NET STRAW-COCONUT BLANKET
CB	COMPOST BLANKET	FRM	FIBER REINFORCED MEDIUM	DNCB	2 NET COCONUT BLANKET

- NOTES:
1. All slope stabilization options assume a slope length ≤ 10 times the horizontal distance component of the slope, in feet.
2. Do not apply products containing polyacrylamide (PAM) directly to, or within 100 feet of any surface water without NHDES approval.
3. Install all methods in Table 1 per the manufacturer's recommendation for time of year and steepness of slope.



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GIRL BROOK TRAIL REHABILITATION

Hanover, New Hampshire

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(SHEET 05 OF 05)

Project No.
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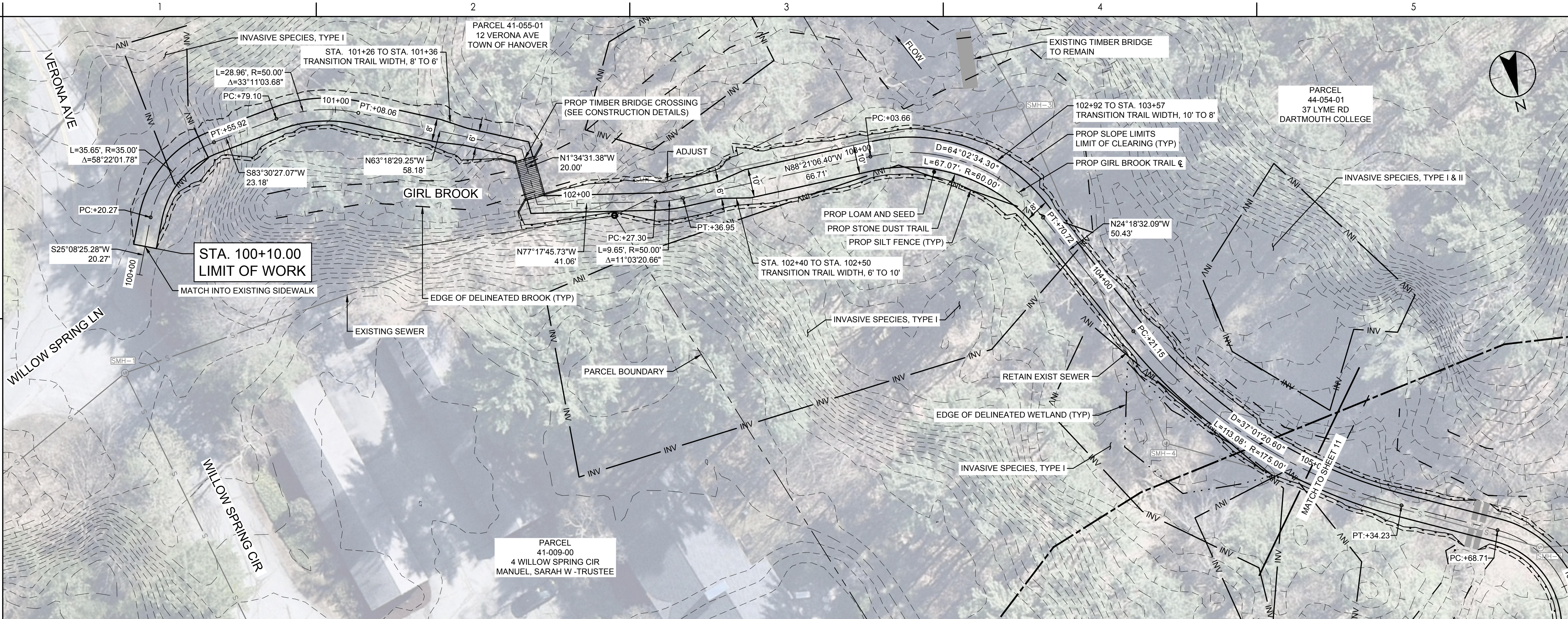
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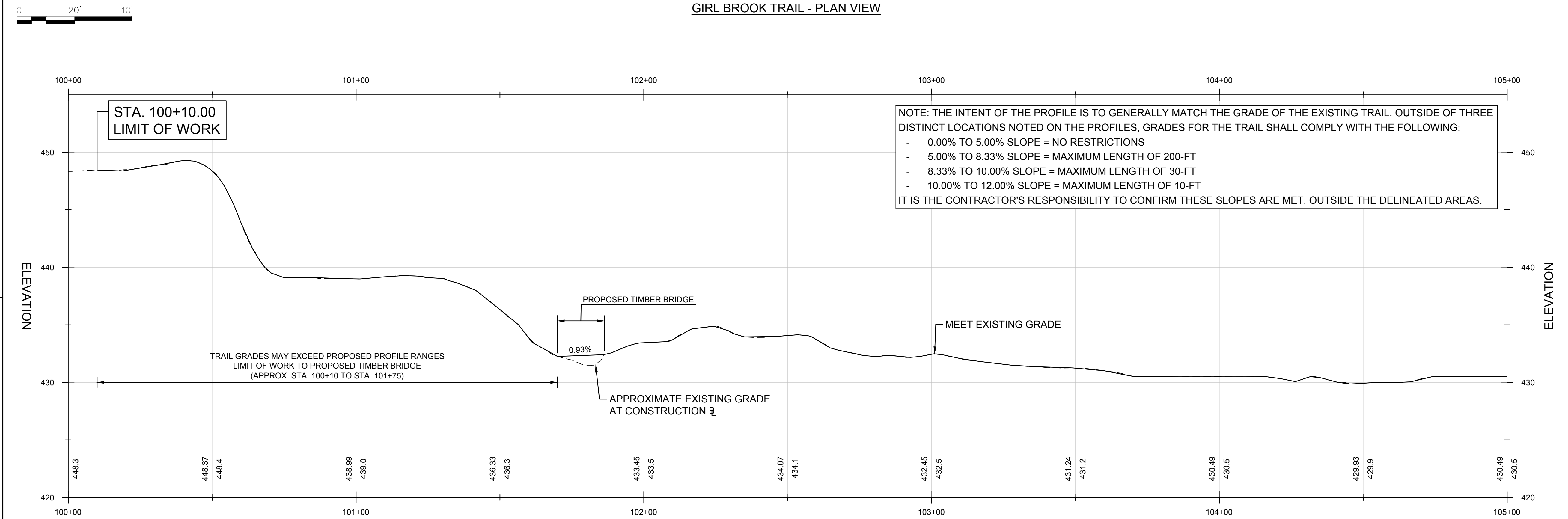
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GIRL BROOK TRAIL - PLAN VIEW



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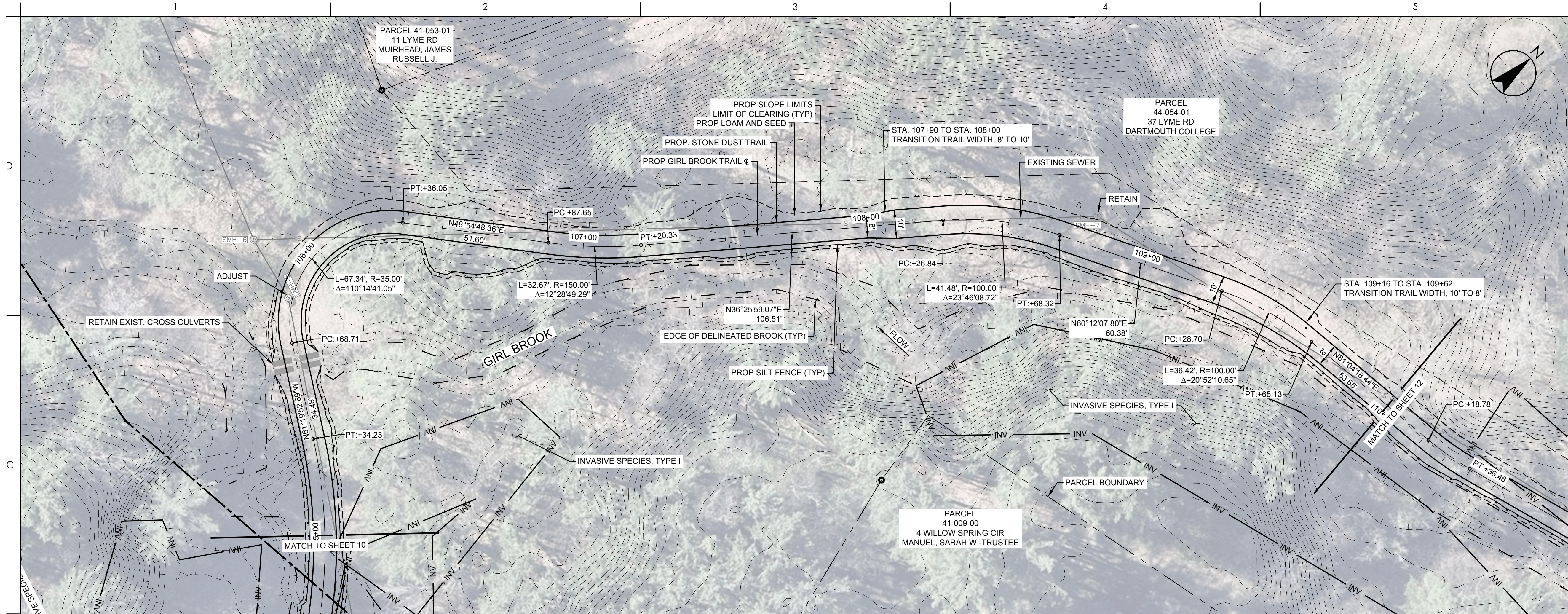
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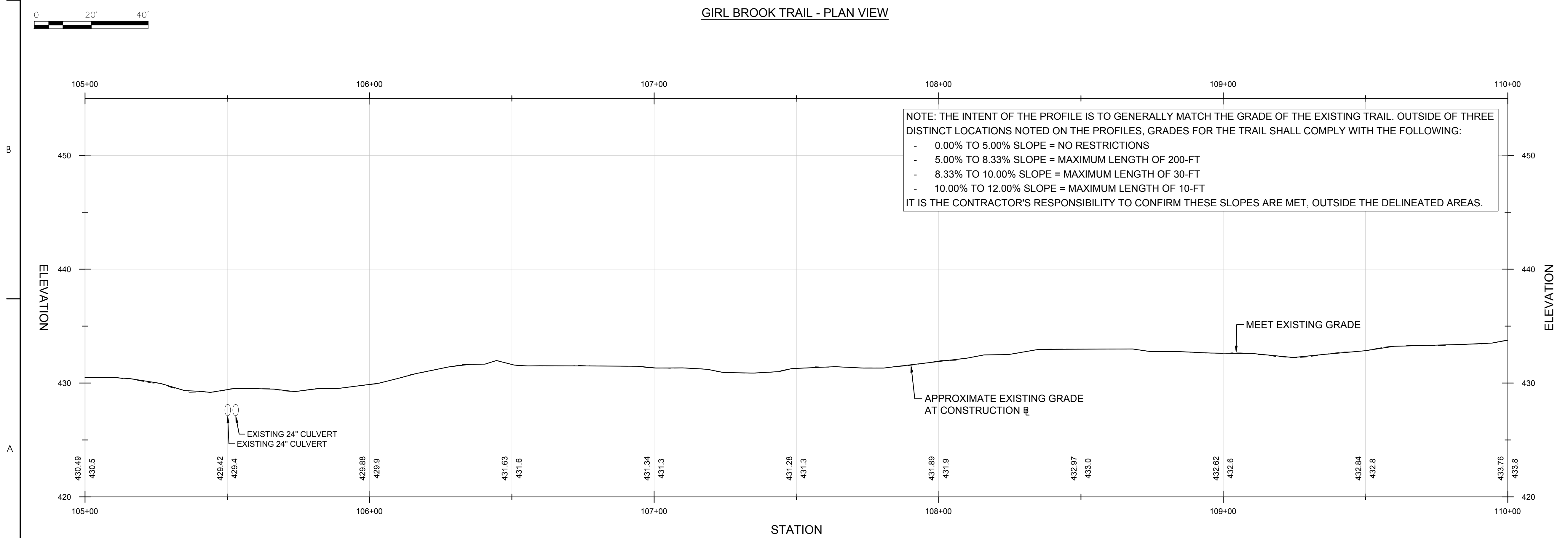
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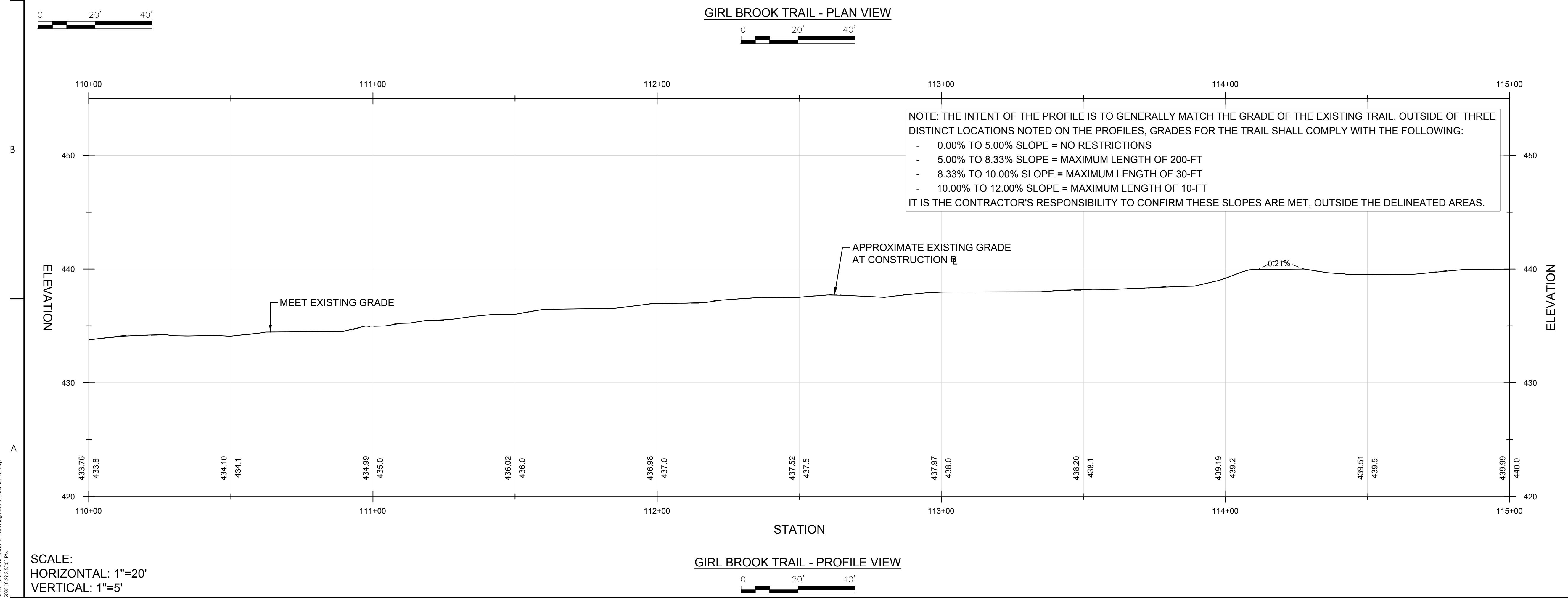
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GEN-03



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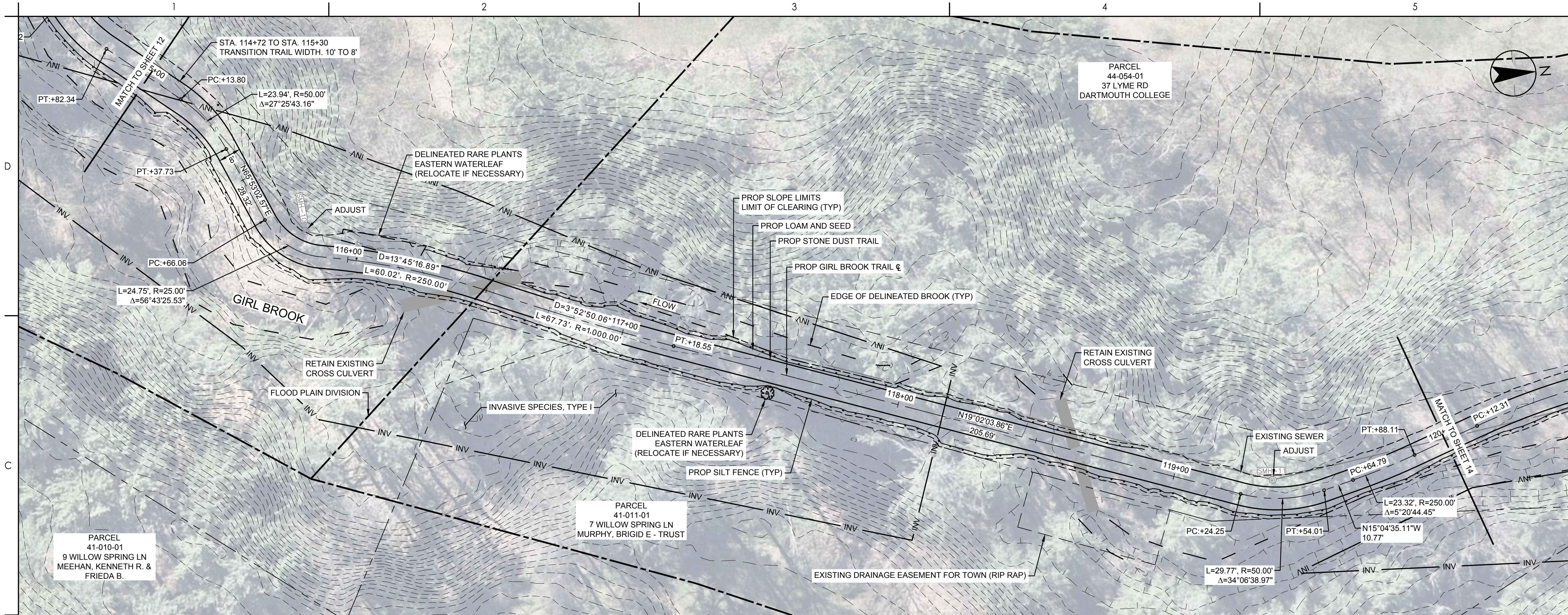
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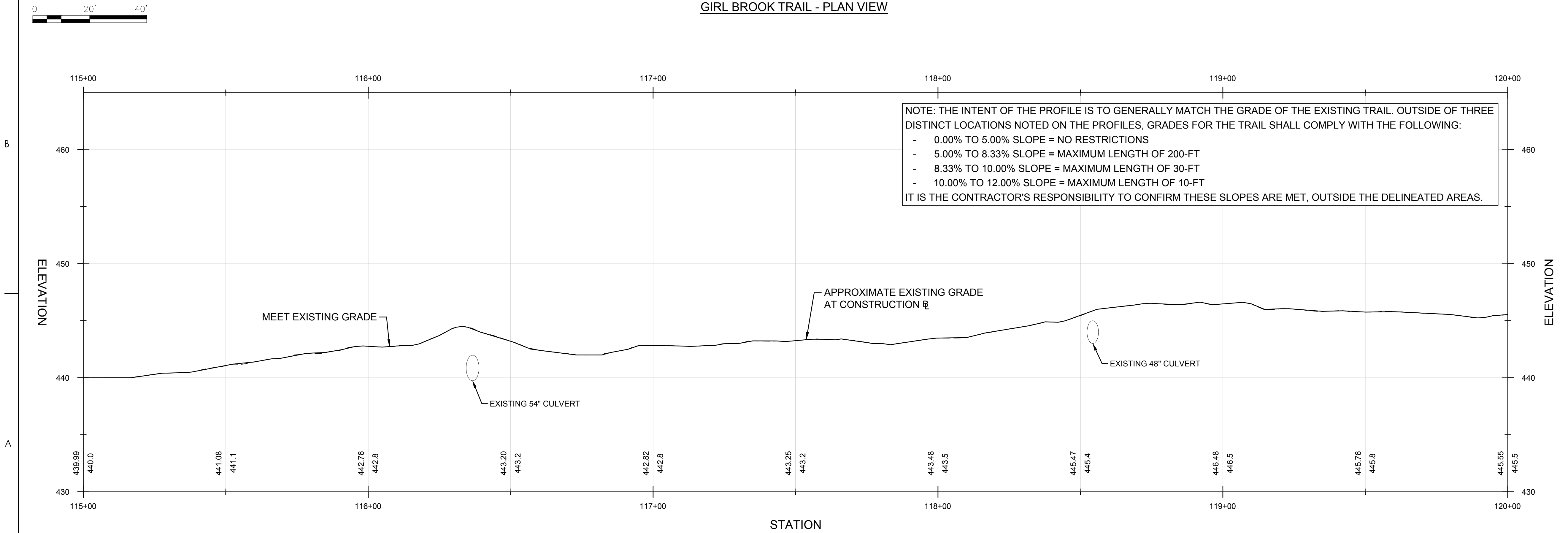
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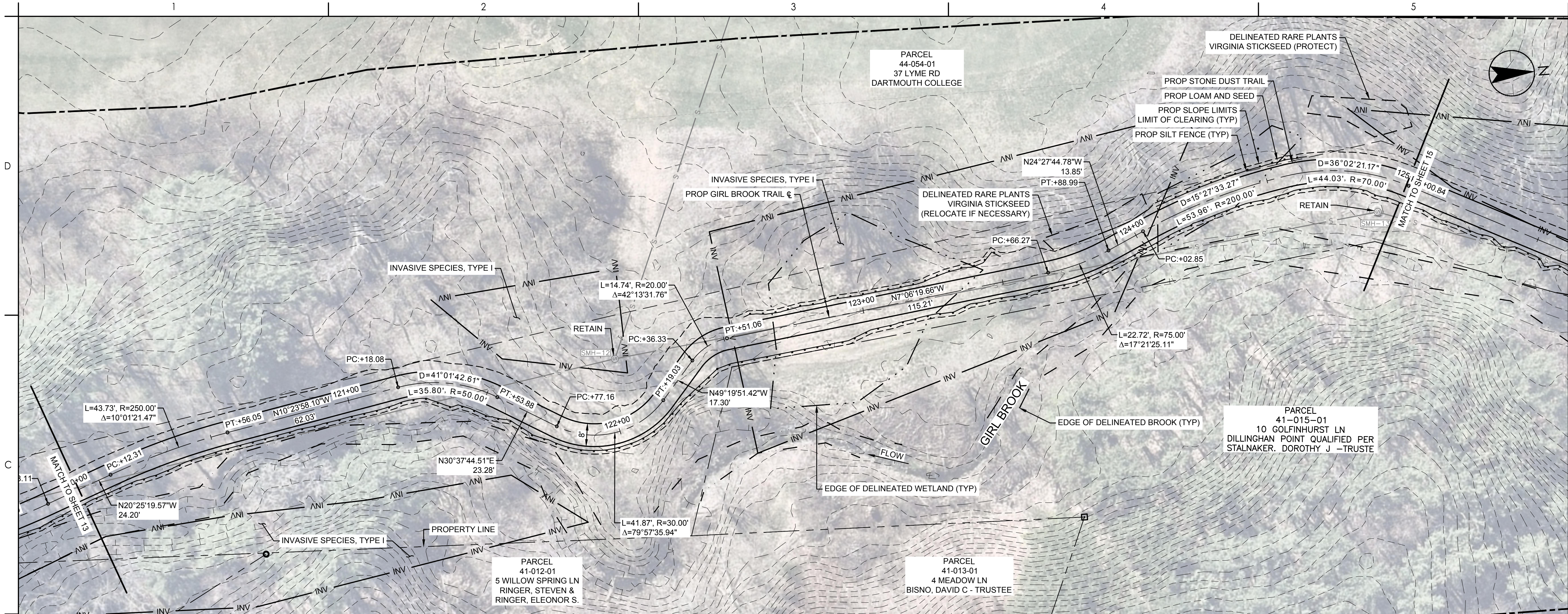
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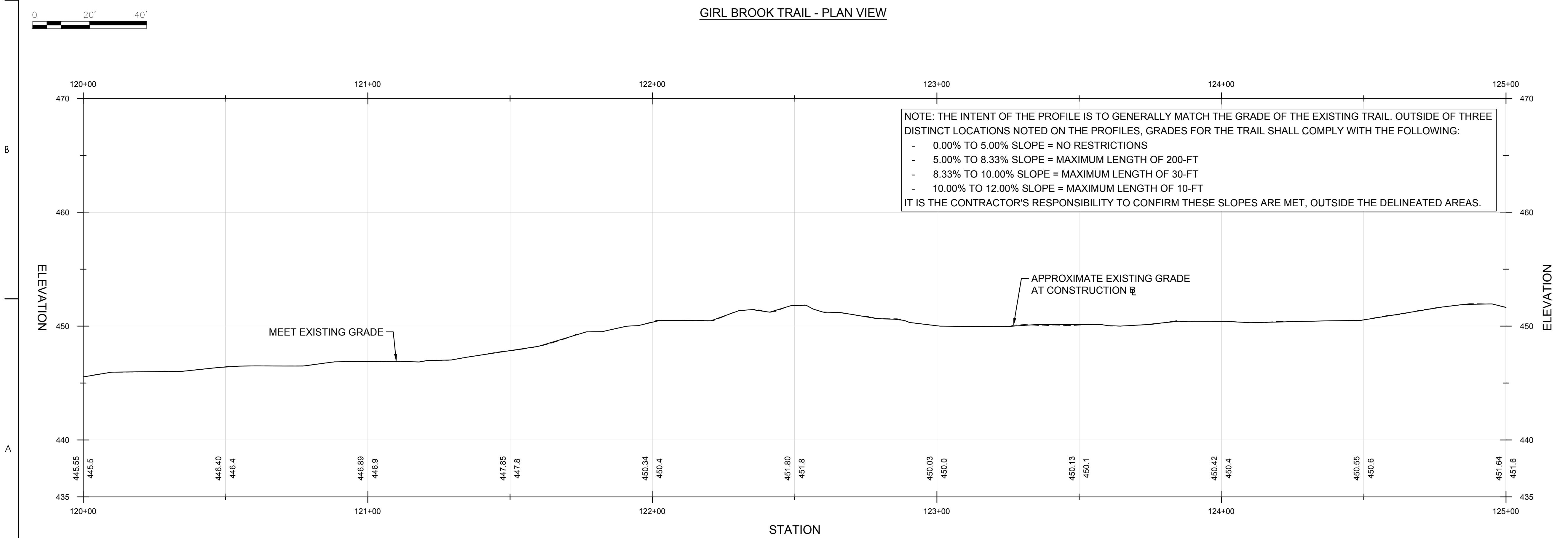
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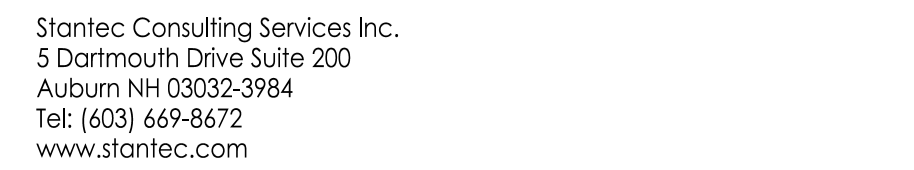


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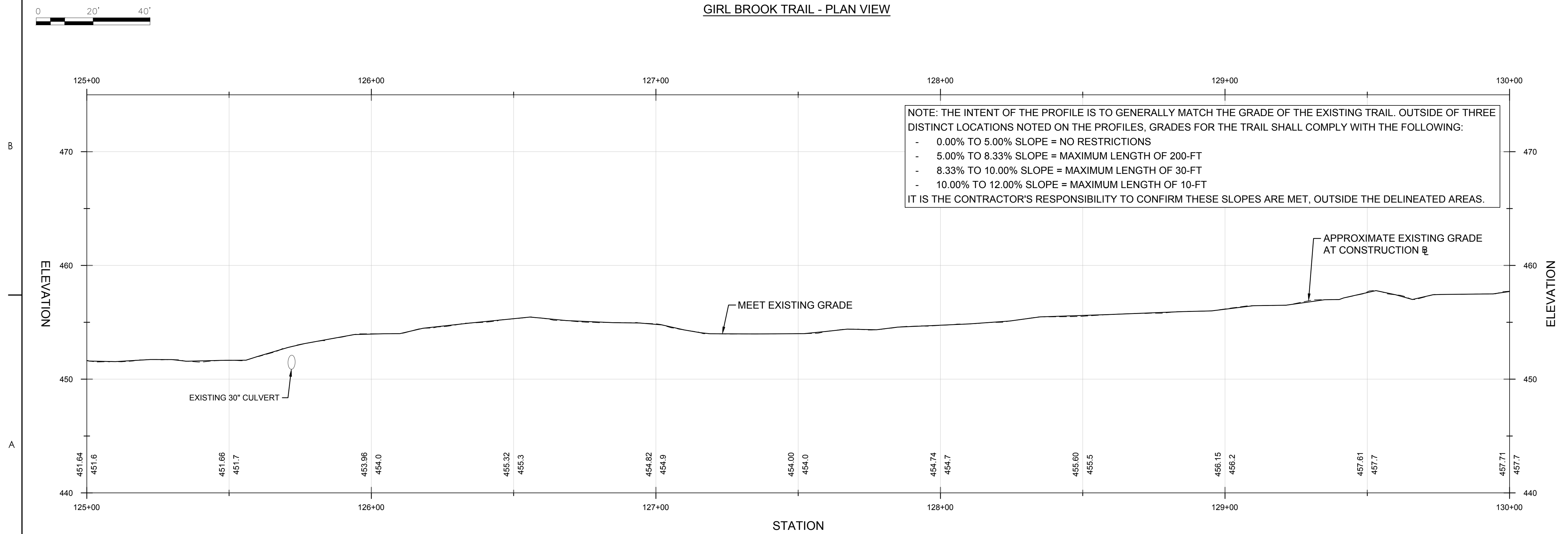


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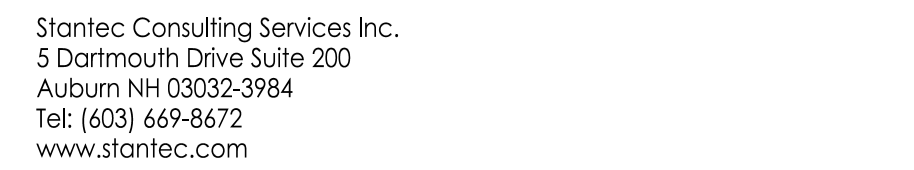
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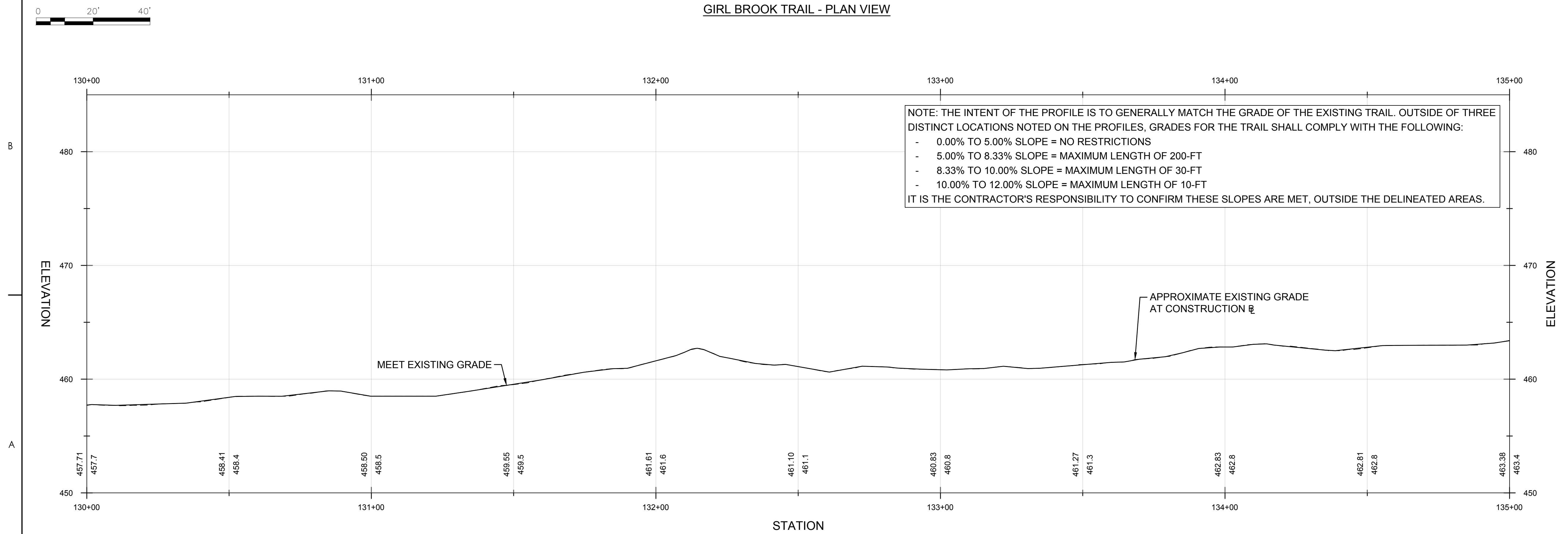
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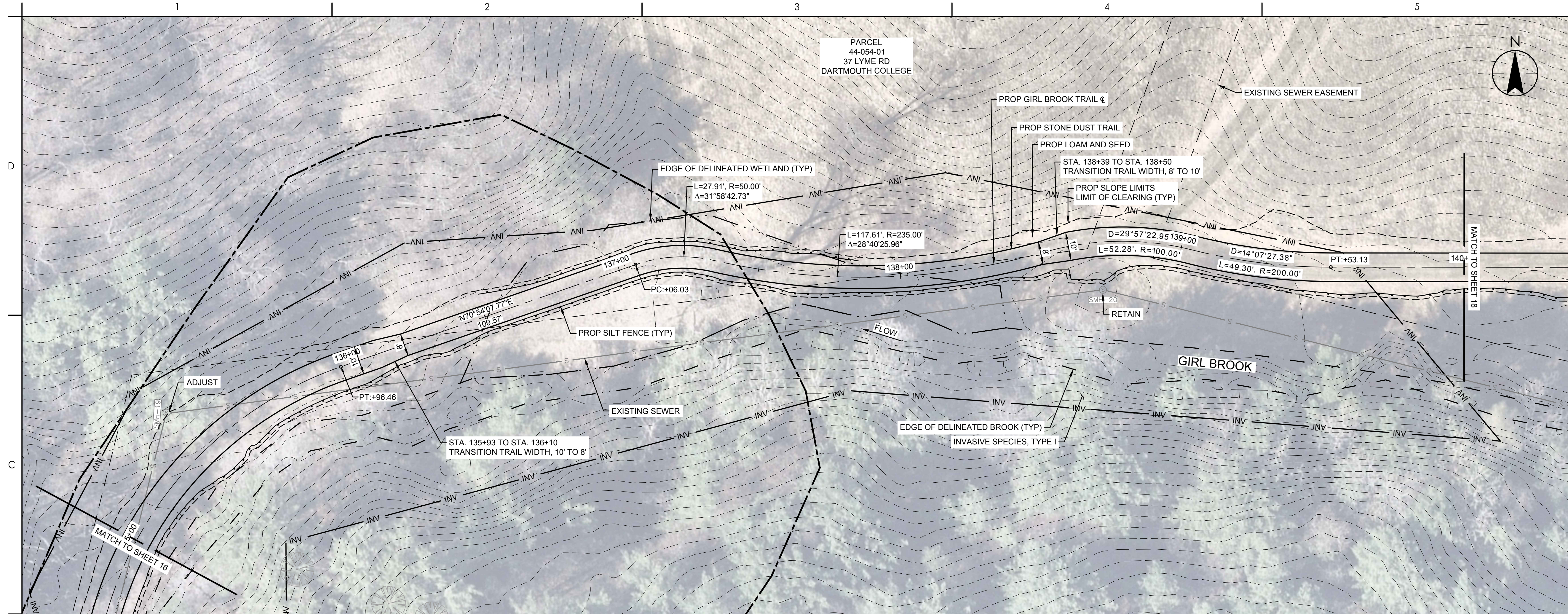
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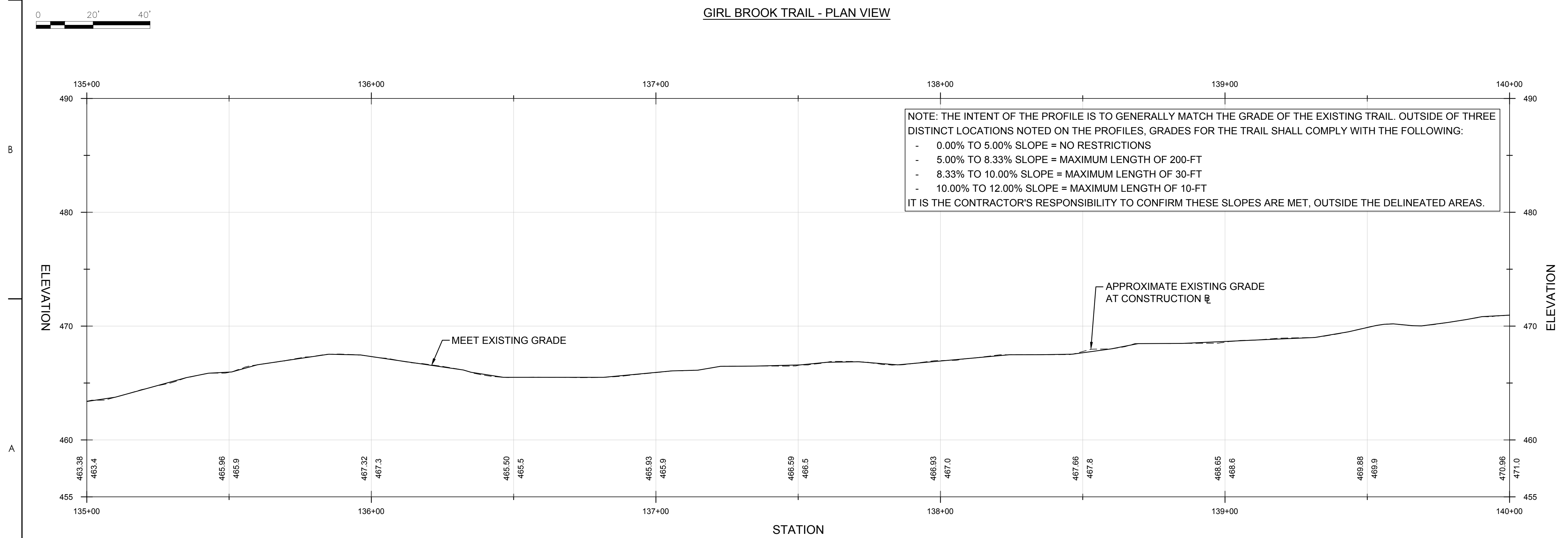
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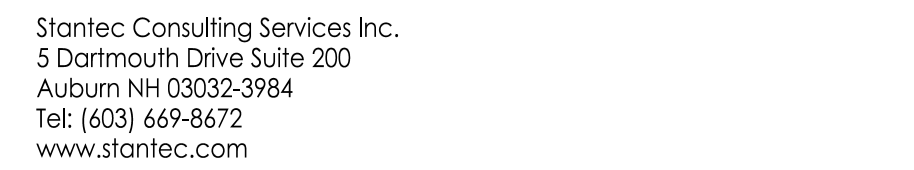


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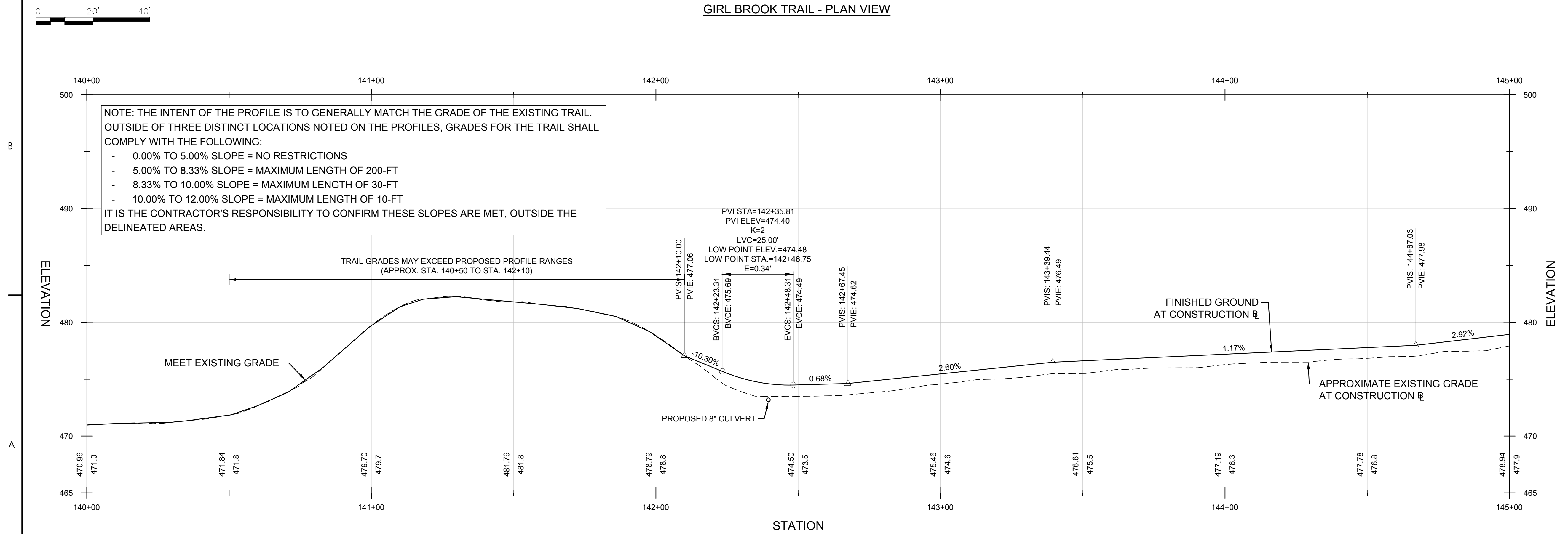


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Hanover, New Hampshire

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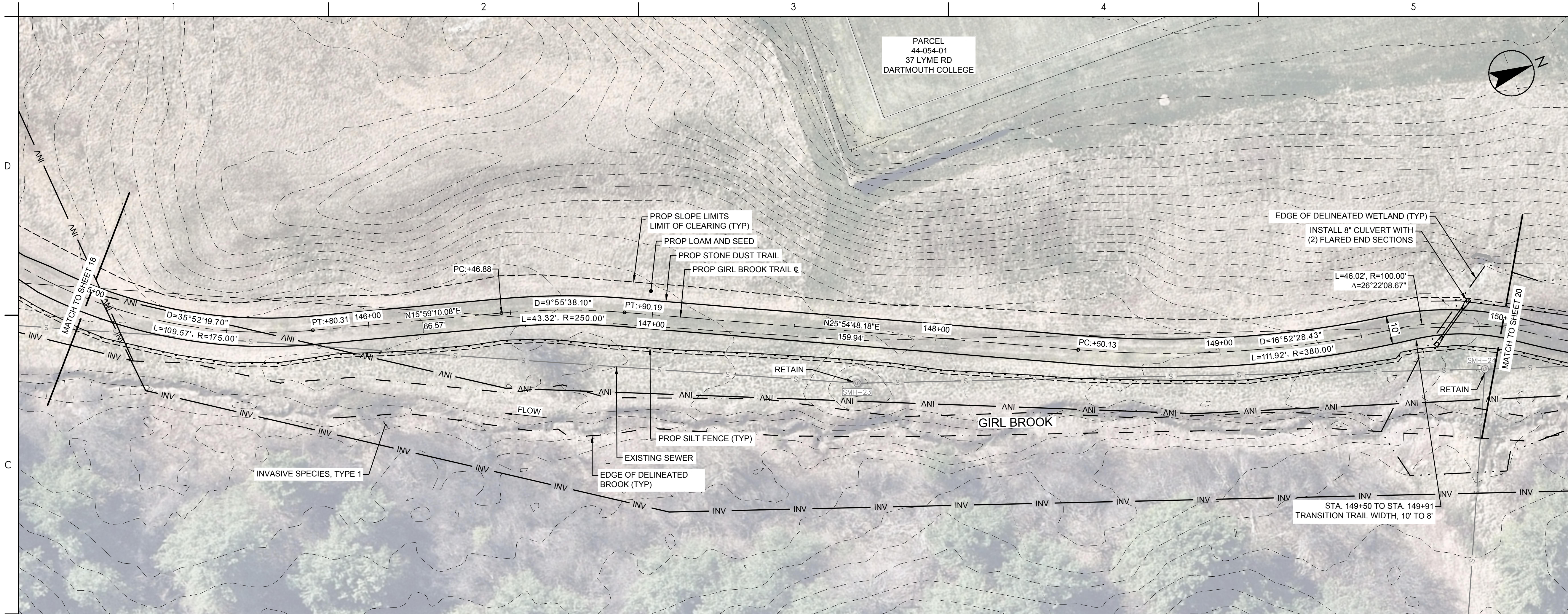
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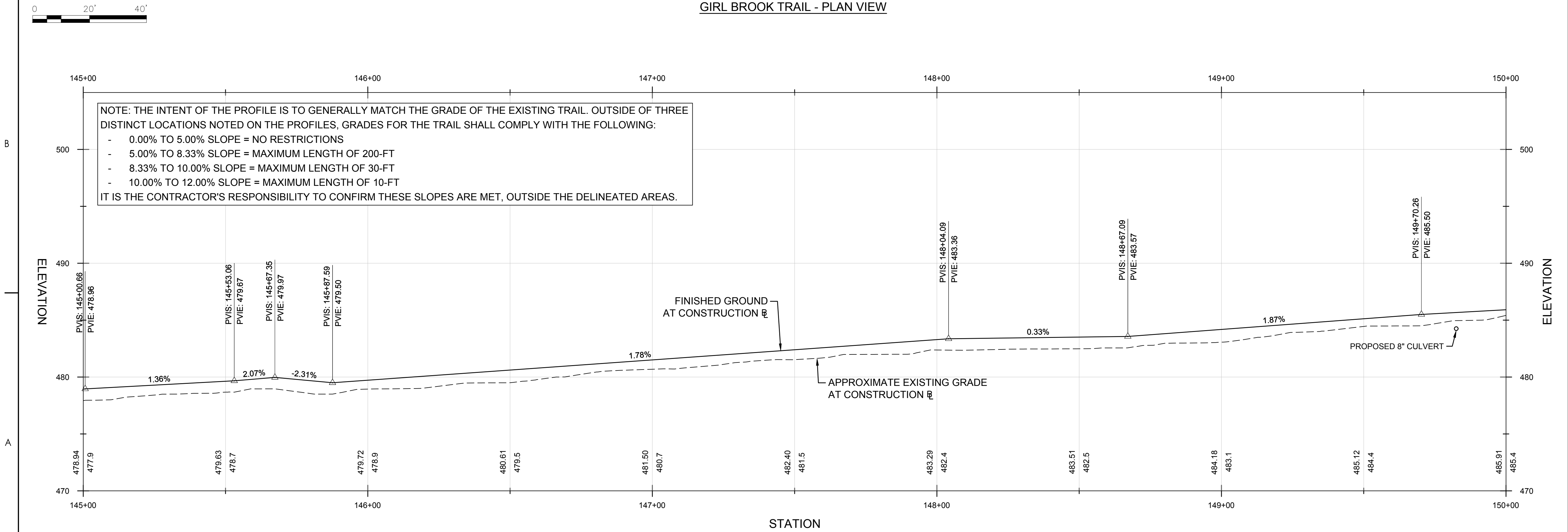
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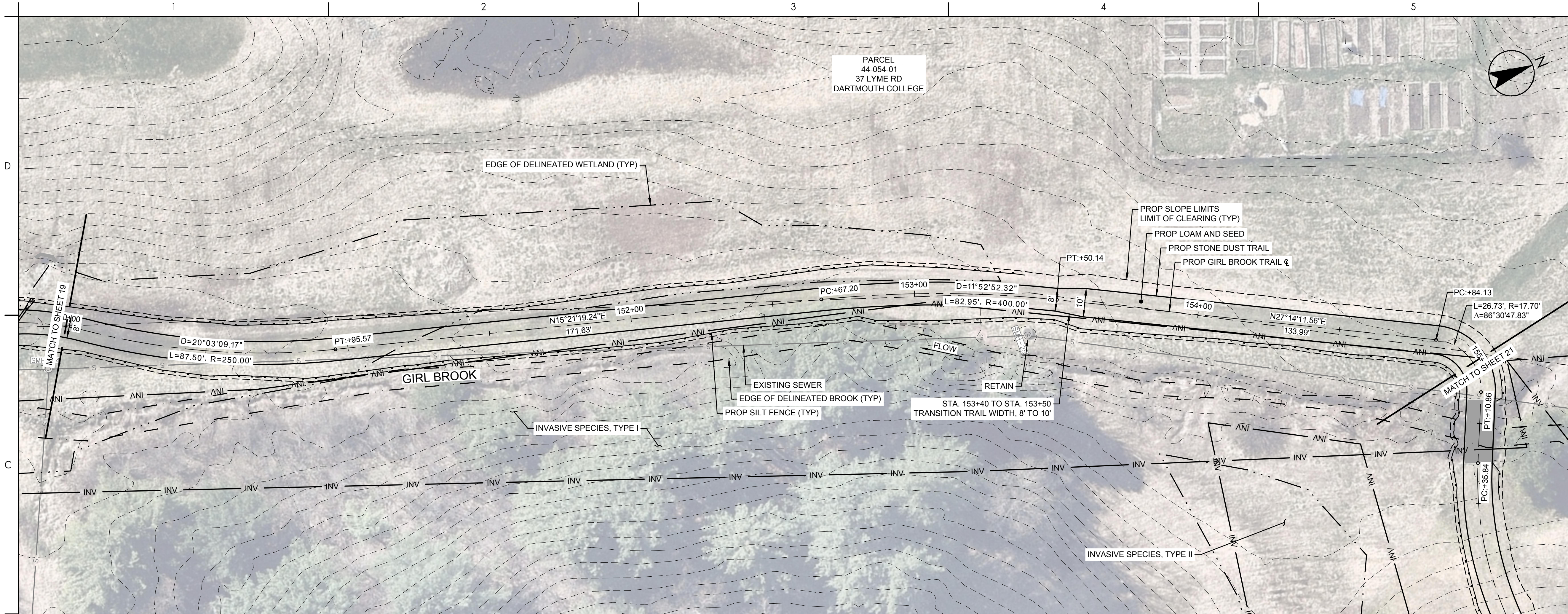
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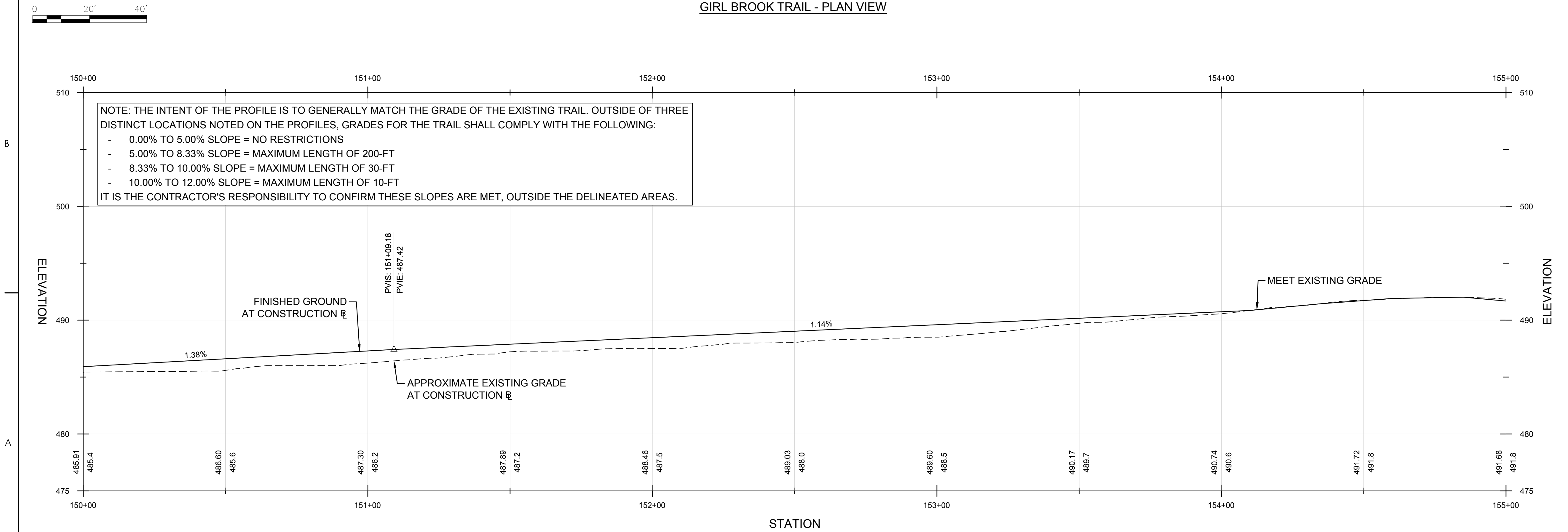
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TOWN OF HANOVER, NH

GIRL BROOK TRAIL REHABILITATION

Hanover, New Hampshire

Title
GENERAL PLAN & PROFILE
(SHEET 12 OF 12)

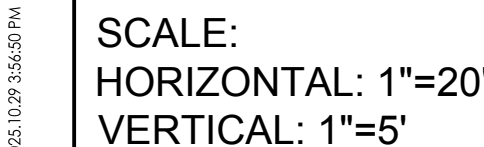
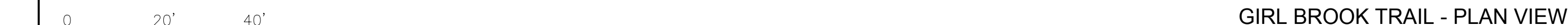
Project No.
179450927

Scale
AS NOTED

Revision 0 Sheet 21 of 21

Drawing No.

GEN-12



GIRL BROOK TRAIL - PROFILE VIEW

NOTE: THE INTENT OF THE PROFILE IS TO GENERALLY MATCH THE GRADE OF THE EXISTING TRAIL. OUTSIDE OF THREE DISTINCT LOCATIONS NOTED ON THE PROFILES, GRADES FOR THE TRAIL SHALL COMPLY WITH THE FOLLOWING:

- 0.00% TO 5.00% SLOPE = NO RESTRICTIONS
- 5.00% TO 8.33% SLOPE = MAXIMUM LENGTH OF 200-FT
- 8.33% TO 10.00% SLOPE = MAXIMUM LENGTH OF 30-FT
- 10.00% TO 12.00% SLOPE = MAXIMUM LENGTH OF 10-FT

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THESE SLOPES ARE MET, OUTSIDE THE DELINEATED AREAS.