



395 TOWN HILL ROAD
N/F
WMB REALTY II LLC
VOL: 240 PG: 187

D = 1°13'34"
R = 20262.06'
L = 433.57'
CB = N17°57'56"E
C = 433.59'

EROSION & SEDIMENTATION CONTROL NOTES:

- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE TOWN PRIOR TO CONSTRUCTION.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL", DATED 2002, AS AMENDED AND THE TOWN REGULATIONS.
- ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED OR REPLACED BY THE CONTRACTOR DURING THE CONSTRUCTION PERIOD AS NECESSARY OR AS REQUIRED BY THE ENGINEER OR TOWN.
- ALL ON-SITE EROSION AND SEDIMENT CONTROLS ARE REQUIRED TO BE INSPECTED WITHIN 24-HOURS AFTER A RAIN EVENT OF AT LEAST A HALF-INCH, AND MAINTAINED, REPLACED OR INCREASED AS REQUIRED BY SPECIFIC FIELD CONDITIONS.
- SEDIMENT REMOVED FROM ANY CONTROL STRUCTURES SHALL BE DISPOSED OF IN A MANNER WHICH IS CONSISTENT WITH THE INTENT OF THE PLAN.
- ADDITIONAL EROSION CONTROL MEASURES WILL BE INSTALLED DURING THE CONSTRUCTION PERIOD IF DEEMED NECESSARY OR REQUIRED BY THE ENGINEER OR TOWN.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR IMPLEMENTING ALL EROSION AND SEDIMENTATION CONTROL DEVICES AS SHOWN ON THESE PLANS OR AS ORDERED BY THE ENGINEER.
- ALL DISTURBED AREAS ARE TO BE RAKED, SEEDED AND FERTILIZED PER "TURF ESTABLISHMENT" SPECIFICATION IN CTDOT 818, AT THE COMPLETION OF PROJECT.
- AREAS OUTSIDE OF PAVED AREAS, WALKS, AND BUILDINGS ARE TO RECEIVE A MINIMUM 4" OF TOPSOIL.
- THE FOLLOWING DATES FOR SEEDING SHALL BE USED:
SPRING: APRIL 15 TO JUNE 15
FALL: AUGUST 15 TO SEPTEMBER 15
- THE FOLLOWING GRASS SEED MIXTURES SHALL BE APPLIED AT A RATE NO LESS THAN 100 LBS. PER ACRE:

SPECIES	PROPORTION BY WEIGHT (POUNDS)	MINIMUM PURITY (PERCENT)	MINIMUM GERMINATION (PERCENT)
VELVET BENTGRASS, (AGROSTIS CANINA)	25	96	85
RED FESCUE (FESTUCA RUBRA L. SSP. RUBRA)	35	97	80
PARTRIDGE PEA (CHAMAECRISTA FASCICULATA)	10	95	90
INDIAN GRASS (SORGHASTRUM NUTANS)	15	95	90
CANADA WILDRYE (ELYMUS CANADENSIS)	5	95	90
KENTUCKY BLUE GRASS (POA PRATENSIS)	10	95	90

- TEMPORARY GRASS SEEDING, IF NECESSARY, SHALL BE PERENNIAL RYE GRASS (LOLIUM PERENNE) APPLIED AT A RATE OF 100 LBS. PER ACRE.

EROSION & SEDIMENTATION CONTROL PLAN:

- ALL EROSION AND CONTROL MEASURES WILL BE INSTALLED AT THE PROJECT SITE PRIOR TO CONSTRUCTION WHEREVER POSSIBLE.
- AN ANTI-TRACKING APRON WILL BE INSTALLED AT THE ENTRANCE TO THE CONSTRUCTION SITE IN ORDER TO PREVENT THE TRANSPORT OF SEDIMENTS OFF THE CONSTRUCTION SITE BY TRUCK AND CONSTRUCTION EQUIPMENT TRAFFIC.
- AN EROSION CONTROL SYSTEM SHALL BE INSTALLED AROUND ALL ON-SITE STOCKPILES OF SOIL.
- DUST CONTROL MEASURES SHALL BE APPLIED THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED.
- DUST CONTROL MEASURES WILL BE APPLIED DURING THE CONSTRUCTION PERIOD UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED, AS REQUIRED BY FIELD CONDITIONS.
- TEMPORARY SEDIMENT TRAPS WILL BE INSTALLED AS NECESSARY DURING CONSTRUCTION ACTIVITIES. ALL TEMPORARY STORMWATER DISCHARGE WILL BE DIRECTED TO THESE TRAPS.

GENERAL LANDSCAPE NOTES:

- ALL LANDSCAPE MATERIALS AND METHODS SHALL COMPLY WITH THE TOWN'S REGULATIONS AND REQUIREMENTS.
- ALL AREAS OF THE PROJECT SITE AFFECTED BY CONSTRUCTION OPERATIONS AND NOT COVERED BY BUILDINGS, ROADS, PARKING LOTS, WALKS, PLANTING BEDS, OR OTHER PERMANENT IMPROVEMENTS SHALL BE FINE GRADED, FERTILIZED AND SEEDED WITH A PERENNIAL TURF TYPE GRASS SEED MIX.
- SOIL PREPARATION SHALL BE LIMITED TO AREAS TO BE PLANTED WITHIN SEVEN (7) DAYS.
- SPREAD TOPSOIL THAT IS FERTILE, FRIABLE, NATURAL LOAM WITHIN LAWN AREAS TO A MINIMUM DEPTH OF 4 INCHES UNLESS OTHERWISE NOTED. REMOVE ALL STONES, STICKS, WEEDS, CLODS, LUMPS, ROOTS, RUBBISH AND OTHER EXTRANEOUS MATTER OVER 1 INCH IN ANY DIMENSION WITHIN 4" OF FINISH GRADE.
- PROTECT EXISTING LAWN AREAS AND CREATE A SMOOTH TRANSITION BETWEEN THEM AND NEW WORK. REPAIR ANY DAMAGE TO THE SATISFACTION OF THE OWNERS REPRESENTATIVE.
- SECURE ACCEPTANCE OF FINE GRADING BY THE OWNERS REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF SODDING OR SEEDING.
- MOISTEN PREPARED LAWN AREAS BEFORE PLANTING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE TO DRY OFF BEFORE PLANTING OF LAWNS. DO NOT CREATE A MUDDY SOIL CONDITION.
- RESTORE PREPARED AREAS TO SPECIFIED CONDITION IF ERODED OR OTHERWISE DISTURBED AFTER FINE GRADING AND PRIOR TO PLANTING.
- PLANT MATERIAL SHALL BE INSTALLED AFTER FINAL GRADES AREA ESTABLISHED AND PRIOR TO PLANTING OF LAWNS, UNLESS OTHERWISE ACCEPTABLE TO OWNER'S REPRESENTATIVE. IF PLANTING OF TREES AND SHRUBS OCCURS AFTER LAWN WORK, PROTECT LAWN AREAS AND PROMPTLY REPAIR DAMAGE TO LAWNS RESULTING FROM PLANTING OPERATIONS.
- PROVIDE TREES, SHRUBS, AND ALL OTHER PLANT MATERIAL OF GENUS, SPECIES, VARIETY, HEIGHT AND CALIPER SHOWN ON PLAN, UNLESS OTHERWISE APPROVED.
- PLANT MATERIAL SHALL BE INSTALLED IN THE FOLLOWING STEPS:
 - EXCAVATE PITS, BEDS, AND TRENCHES WITH SLOPING SIDES AND A FLAT BOTTOM. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION.
 - EXCAVATIONS FOR BALLED AND BURLAPPED (B&B) TREES AND SHRUBS SHALL BE 2 TO 3 TIMES THE WIDTH BUT NO DEEPER THAN THE ROOT BALL.
 - PLACE PLANT MATERIAL IN HOLE, CLIP AND ROLL DOWN OR REMOVE THE WIRE CAGE, BURLAP AND NYLON STRING.
 - PRUNE CLEANLY ANY DEAD OR CRUSHED ROOTS AND STRAIGHTEN OR CUT ENCIRCLING ROOTS IF PRESENT.
 - USING THE SAME SOIL AS DUG FROM THE HOLE, FILL UNDER AND AROUND THE ROOT BALL, GENTLY PRESS INTO PLACE. FILL THE HOLE PARTIALLY WITH WATER. CONTINUE TO PLACE SOIL INTO THE HOLE UNTIL THE SURFACE LEVEL IS JUST BELOW THE ROOT COLLAR.
 - CREATE A SOIL BERM AROUND THE TRUNK TWO (2) TIMES THE WIDTH OF THE ROOT BALL, ADD 3" OF SHREDED BARK MULCH OR APPROVED EQUAL OVER THE SOIL BERM STAYING AT LEAST 3" AWAY FROM THE ROOT COLLAR.
- ALL PLANT MATERIALS SHALL BE INSPECTED FOR DEFECTS OR DAMAGE BEFORE PLANTING. SUBSTANDARD PLANTS SHALL BE RETURNED TO, AND REPLACED BY THE CONTRACTOR. ACCEPTABLE PLANTS ARE TO BE PLANTED PER THE SPECIFICATIONS OF THE PLANTING PLAN. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROVIDE FOR THE SAFEKEEPING AND MAINTENANCE OF THESE PLANTS FOR THE DURATION OF SITE CONSTRUCTION ACTIVITY. ONCE PLANTED, ALL MACHINERY SHALL AVOID THESE PLANTED AREAS WHICH SHOULD BE DEMARCATED CLEARLY BY FLAGGED FIELD STAKES. PROVISIONS FOR REGULAR WATERING AND INSPECTIONS SHALL BE MADE BY THE OWNER, OR NURSERY CONTRACTOR FOR THE DURATION OF THE PLANT'S FIRST YEAR IN THE GROUND.
- ALL PLANT MATERIAL PLACEMENT IS SUBJECT TO FIELD ADJUSTMENT IN RESPONSE TO SITE CONDITIONS.
- ALL PLANT MATERIALS ARE SUBJECT TO REPLACEMENT BY SUITABLE ALTERNATIVE MATERIALS AGREED BETWEEN OWNER & CONTRACTOR, NURSERY CONTRACTOR, AND APPROPRIATE AGENCIES.

CONSTRUCTION SEQUENCE

- INSTALL CONSTRUCTION ENTRANCES WITH DRIVEWAY AREA AS SHOWN AND INSTALL EROSION & SEDIMENT CONTROL MEASURES AS INDICATED. SEE DETAILS.
- CLEAR AND GRUB ALL TREES, SHRUBS, AND BRUSH WITHIN CONSTRUCTION LIMITS. ALL EXCESS AND UNSUITABLE MATERIALS ARE TO BE REMOVED FROM THE SITE. ON-SITE BURIAL OF TREE TRUNKS, STUMPS, OR BRUSH IS NOT PERMITTED.
- STRIP TOPSOIL, STOCKPILE AND STABILIZE WITH SILT FENCE AND/OR HAY BALES. ALL MATERIAL SHALL BE STOCKPILED OUTSIDE THE REGULATED UPLAND REVIEW AREA SHOWN ON THE PLAN.
- GRADE SITE FOR ACCESS DRIVE PARKING AREA, SWALES AND SIDE SLOPES.
- INSTALL PROCESSED AGGRAGATE AND PAVEMENT.
- INSTALL SIGNS, PAVEMENT MARKINGS, TRAIL HEAD SIGN POST AND EVERGREEN SCREENING TREES.
- IN AREAS OF CONSTRUCTION DISTURBANCE, SPREAD TOPSOIL, SEED, AND MULCH WITH HAY OR STRAW.
- MAINTAIN ALL SEDIMENT AND EROSION CONTROL MEASURES THROUGHOUT PROJECT DURATION.

WETLAND ACTIVITIES

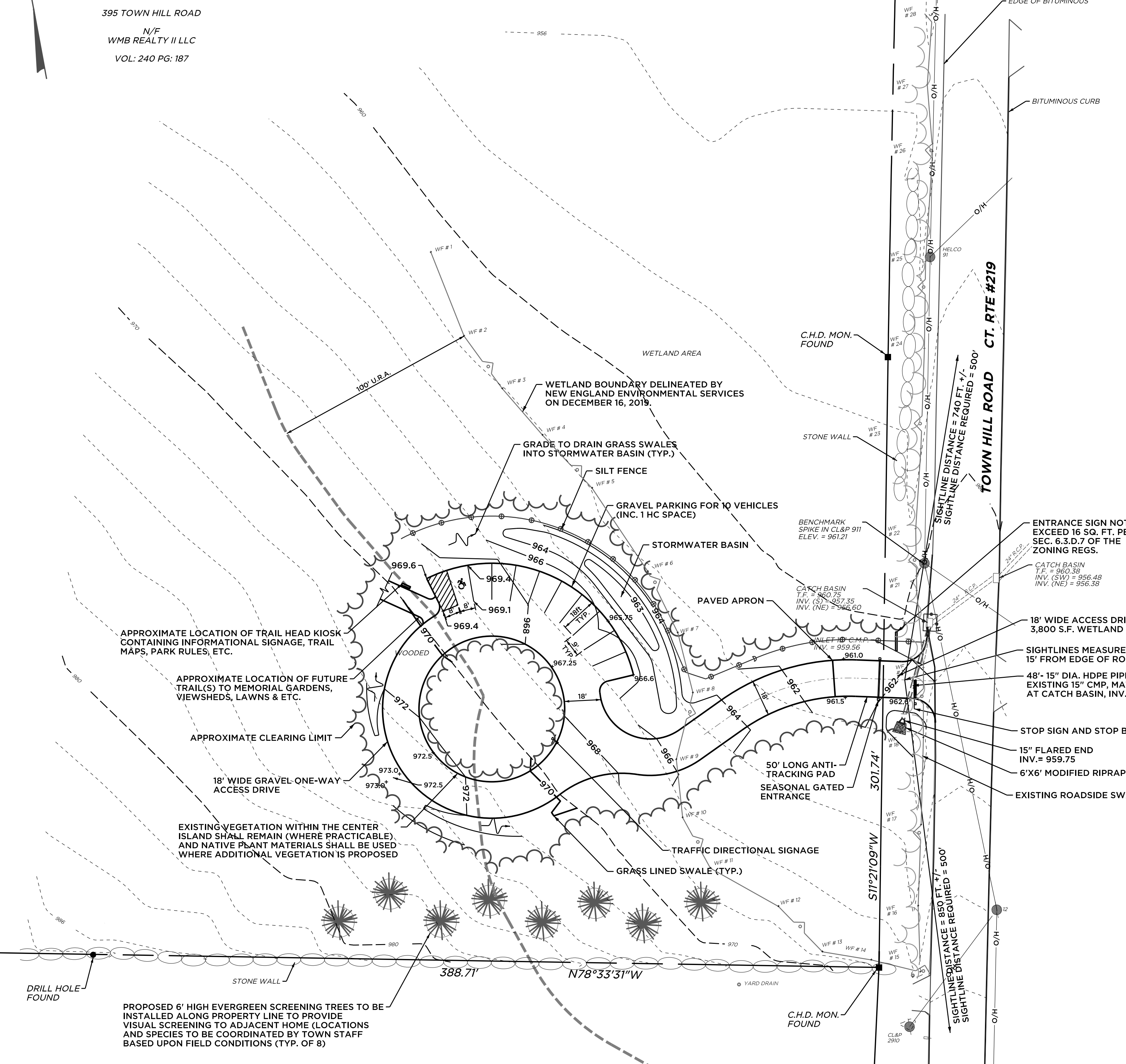
WETLAND DISTURBANCE = 3,800 SQUARE FEET
UPLAND REVIEW DISTURBANCE = 14,700 SQUARE FEET

NEW ENGLAND ENVIRONMENTAL SERVICES
BLACKLEDGE RIVER NURSERY
December 19, 2019
Mr. Kevin Grindle, ASLA, PLA
Anchor Engineering Services
41 Sequin Drive
Glastonbury, CT 06033
Re: 395 Town Hill Road
New Hartford, Connecticut

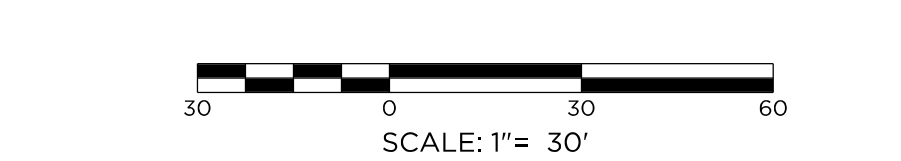
Dear Mr. Grindle:
On December 16, 2019, I delineated the wetland boundary on a 4 acre parcel (400' x 400') at 395 Town Hill Road in the Town of New Hartford, Connecticut. The wetland boundary was marked with pink flags numbered 1-28.
The wetland soil type is Ridgebury. Ridgebury is a poorly drained soil formed in a compact glacial till. The topsoil and subsoil has a very fine sandy loam texture. The substratum (unweathered glacial till) has a gravelly sandy loam texture. Surface stones are abundant in the wetland. A road drainage swale (non-treatment watershed) occurs at the base of road fill (wetland flag 15 to 25).
The wetland is wooded. The dominant plant species in the wetland include White Pine, Hemlock, Red Maple, Mountain Laurel, Winterberry, Speckled Alder, Spicebush, Highbush Blueberry, Burning Bush, Shrub Cabbage, Common Fern, Wood Fern and Violet.
The upland soils are Woodbridge and Paxton. The following is a description of each soil:
Woodbridge is a moderately well drained soil formed in a compact glacial till. The topsoil and subsoil has a fine sandy loam texture. The substratum (unweathered compact glacial till) has a gravelly sandy loam texture.
Paxton is a well drained soil formed in a compact glacial till. The topsoil and subsoil has a fine sandy loam texture. The substratum (unweathered compact glacial till) has a gravelly sandy loam texture.
If you have any questions, feel free to contact me.

Very truly yours,
New England Environmental Services
R. Richard Staraki
Professional Wetlands Scientist #1391
Registered Professional Soil Scientist #1975

RRS:sh
107 SHORE ROAD, LYME, CONNECTICUT 06271
860-919-1970 RICH@ANCHORENGINEERING.COM WWW.RICHSTARAKI.COM



417 TOWN HILL ROAD
N/F
ROBERT R. & LEAH A. DROUIN
VOL: 284 PG: 73



- MAP REFERENCES & NOTES:
- MAP OF LAND OWNED BY ROLLIN HOSMER NORRIS, TRUSTEE, R.H. NORRIS REAL ESTATE TRUST, TOWN HILL ROAD & STUB HOLLOW ROAD, NEW HARTFORD, CONN. SCALE: 1"=100'. DATE: JUNE, 1985. SHEET 1 OF 1. BY: NASCIMBENI & JAHNE SURVEYORS, P.C.
 - CONNECTICUT STATE HIGHWAY DEPARTMENT RIGHT OF WAY MAP, TOWN OF NEW HARTFORD, TOWN HILL ROAD FROM OLD SOUTH ROAD NORTHERLY ABOUT 8500 FEET ROUTE NO. 219. SCALE: 1"=40'. NUMBER 91-05. SHEETS: 2 & 3 OF 4. DATE: JAN. 31, 1939. R.W. THOMPSON, ENGINEER.
 - FIELD SURVEY PERFORMED BY ANCHOR ENGINEERING SERVICES, INC. ON DECEMBER 16, 2019.

ANCHOR
a Barton's Logistics company
Civil Engineering • Environmental Consulting • Land Surveying • Construction Management

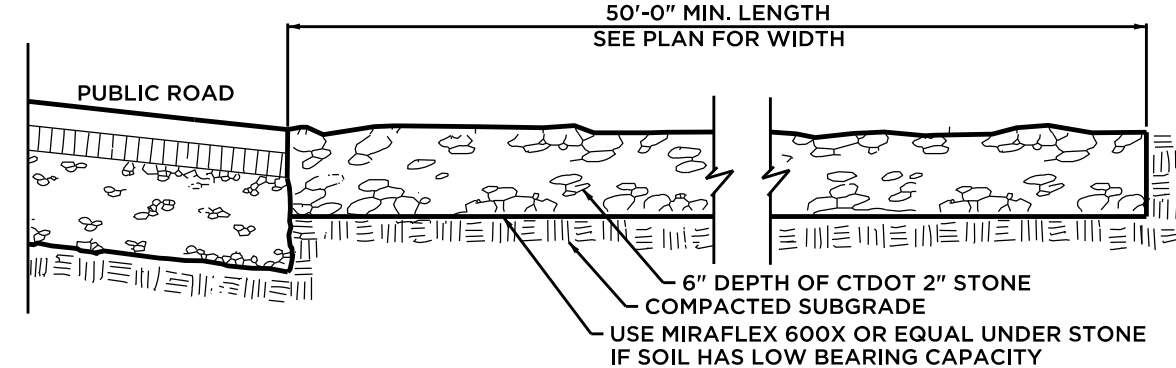
PROJ. ENGINEER KRK
PROJ. MANAGER KRK
OFFICE REVIEW MLK

SITE DEVELOPMENT PLANS
PREPARED FOR
FOR
395 TOWN HILL ROAD
NEW HARTFORD, CT

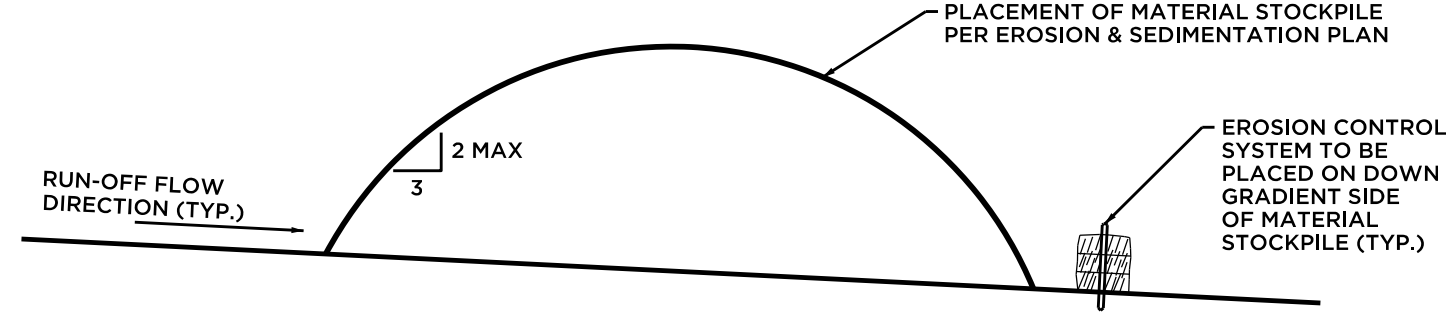
REVISIONS

PROJECT 1449-02
DATE 02/03/21
SHEET NO. 1 OF 2

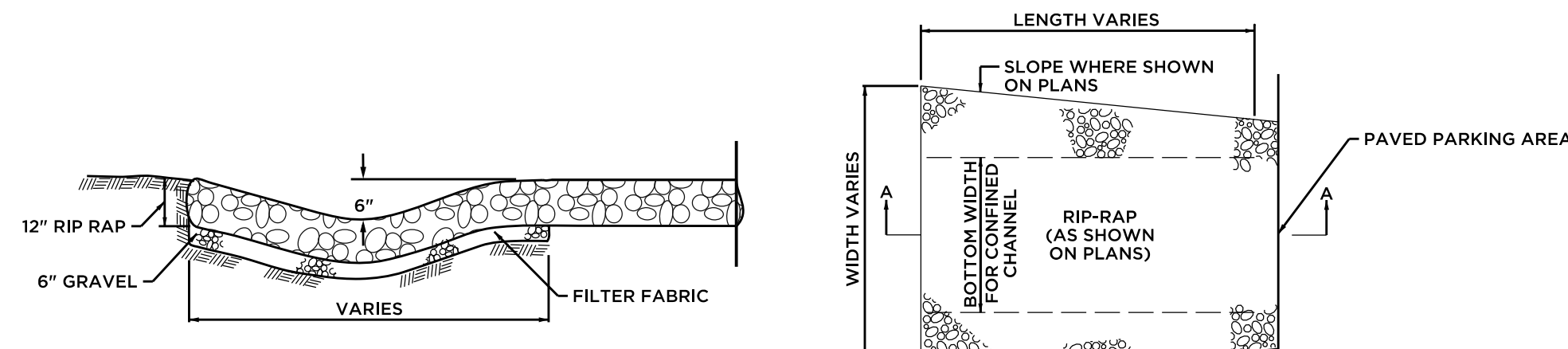
SCALE: 1"= 30'



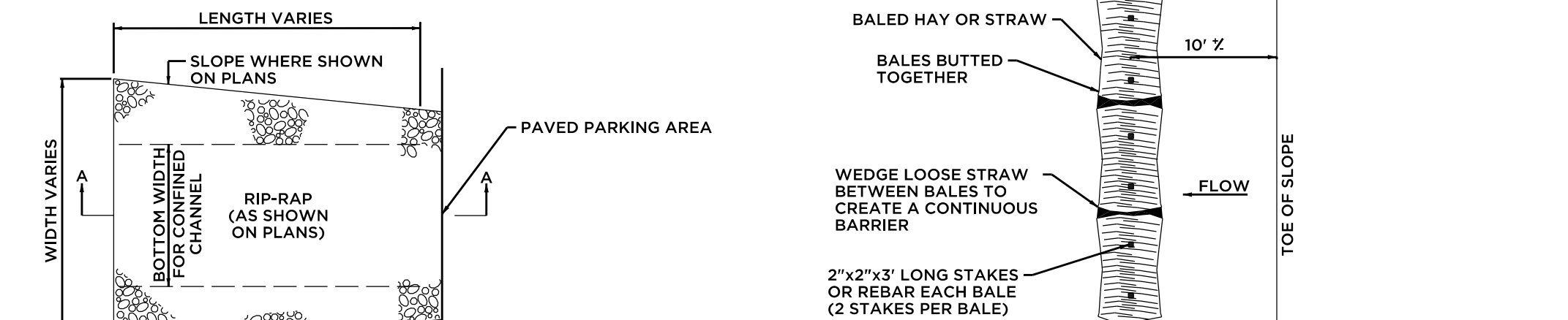
ANTI-TRACKING PAD DETAIL
NOT TO SCALE



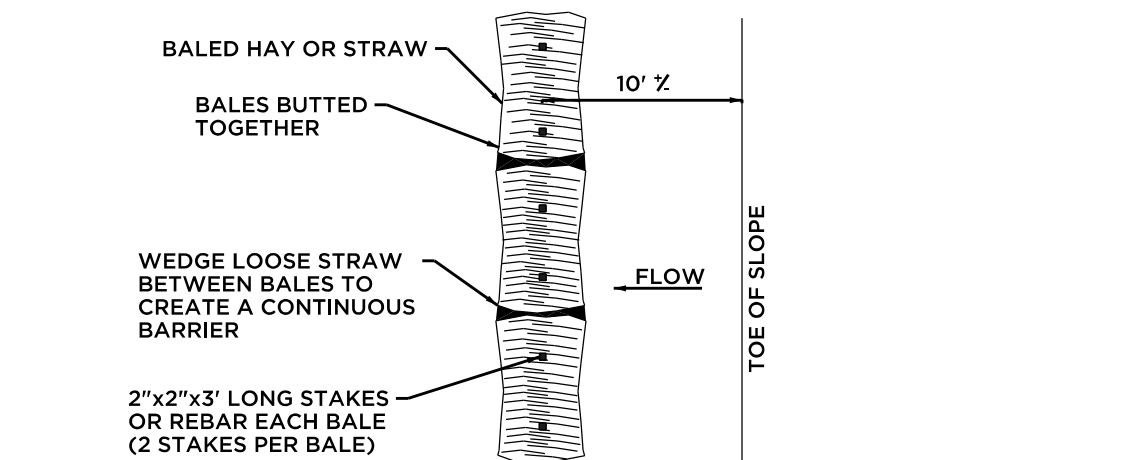
SOIL STOCKPILE DETAIL
NOT TO SCALE



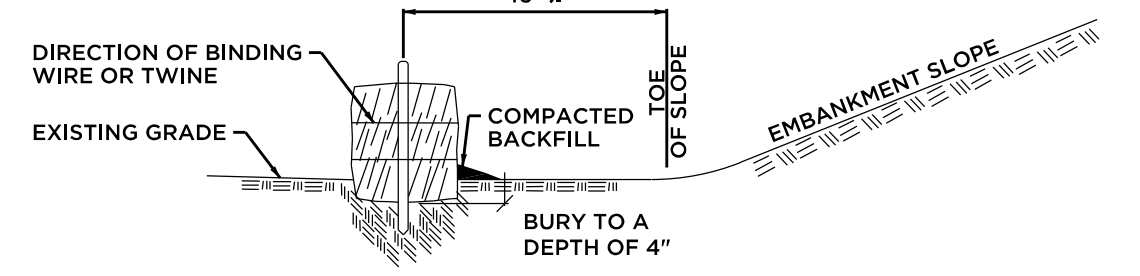
SECTION A-A
NOT TO SCALE



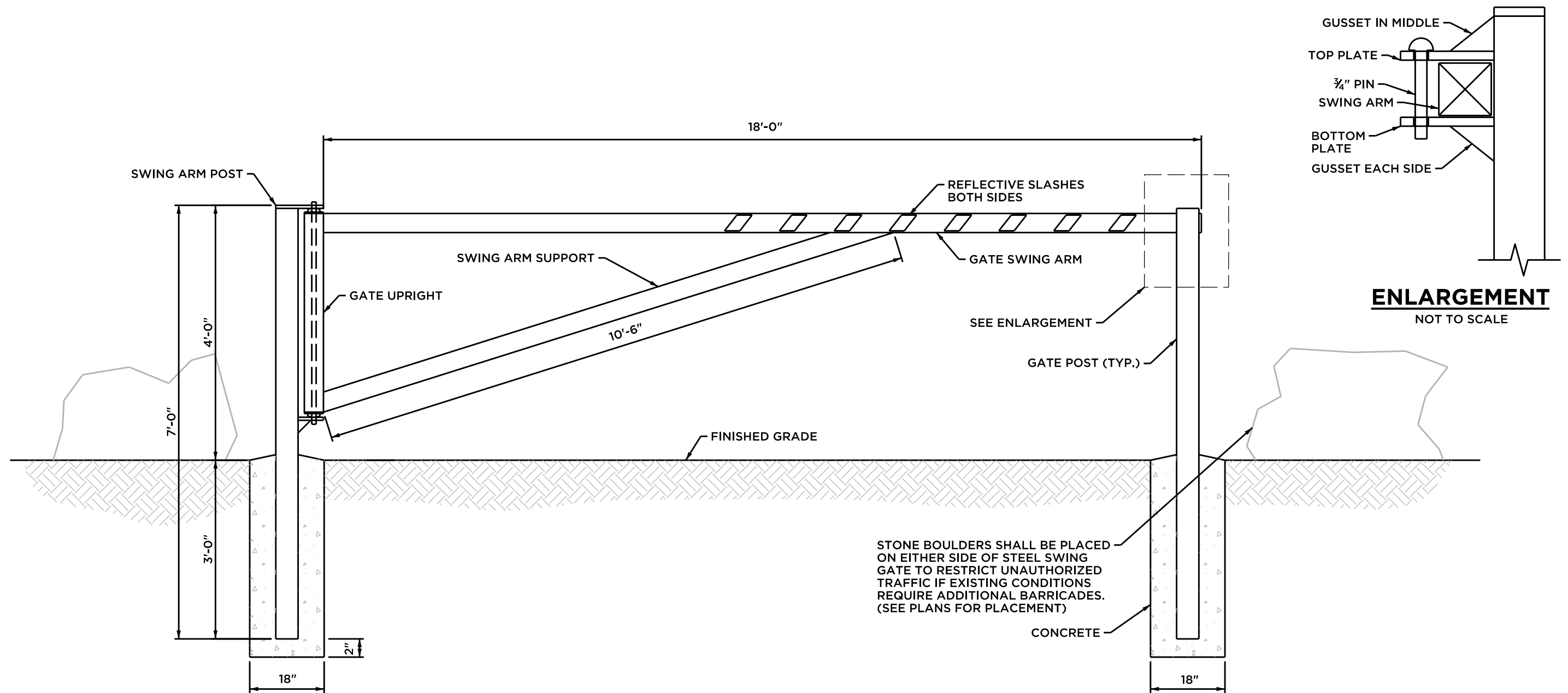
PLAN



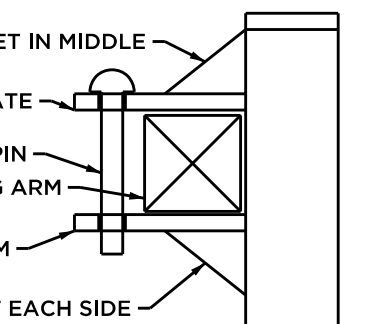
PLAN



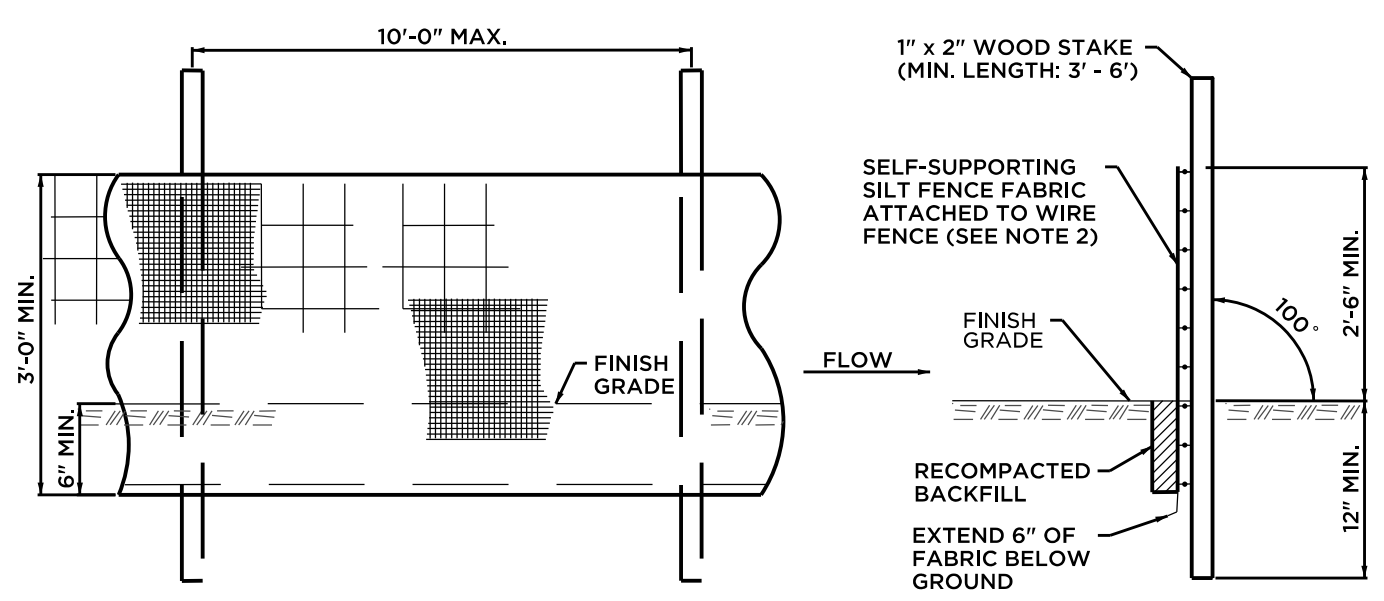
SECTION AT TOE OF SLOPE



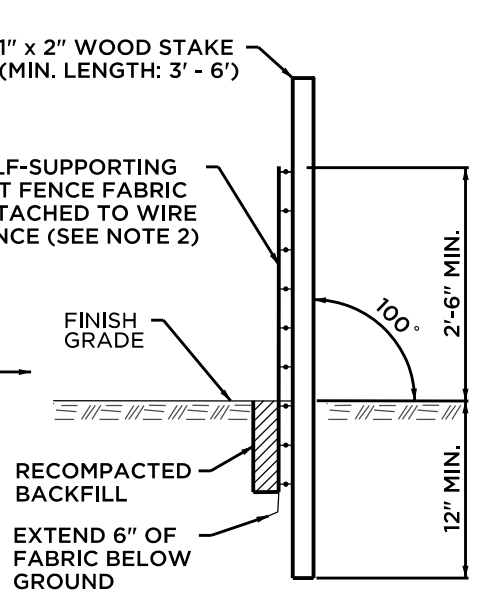
STEEL PIPE SWING GATE DETAIL
NOT TO SCALE



ENLARGEMENT
NOT TO SCALE



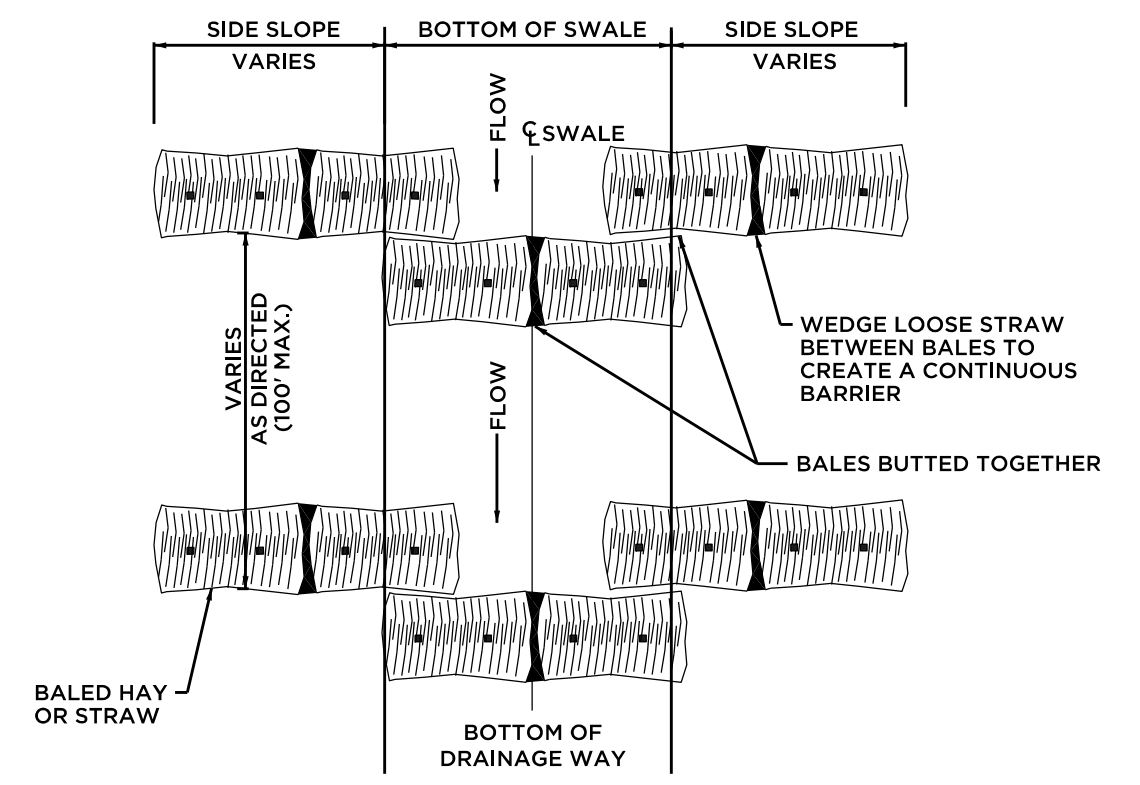
ELEVATION



SECTION

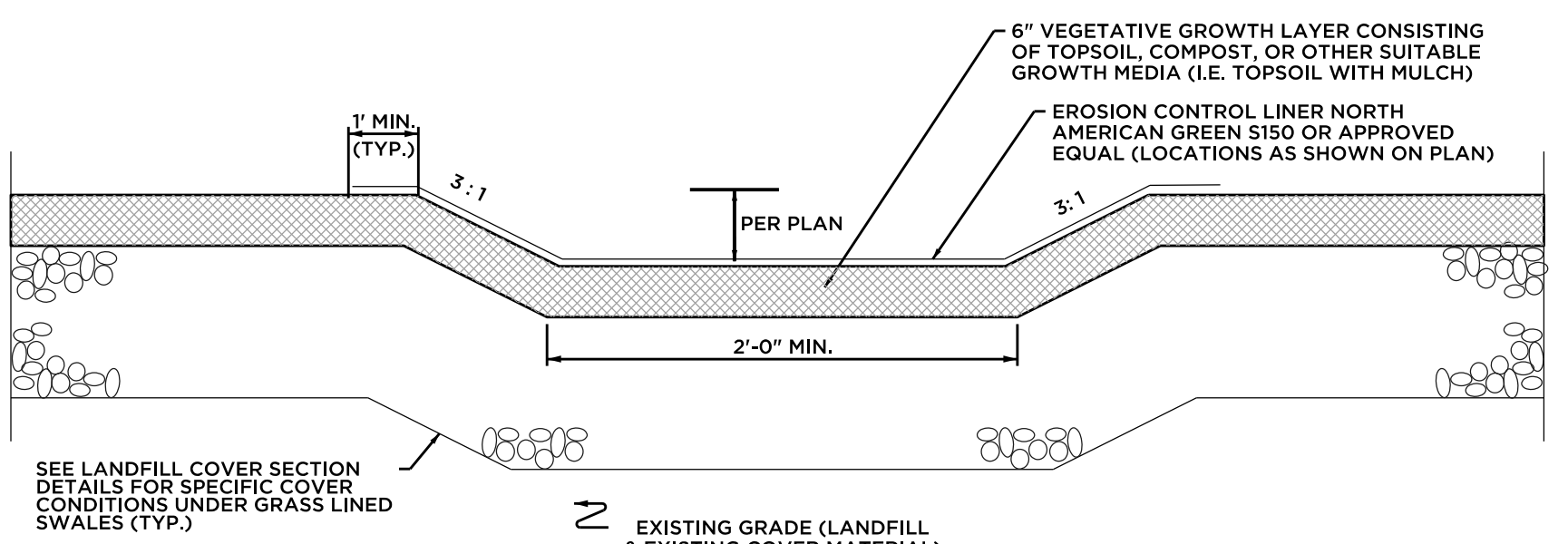
- NOTES:
1. INSTALL SILT FENCE & WOOD STAKES AS RECOMMENDED BY MANUFACTURER.
 2. SILT FENCE SUBJECT TO HEAVY LOADS SHALL BE REINFORCED WITH FARM FENCING & STEEL POSTS (0.5 # STEEL/L.F.). THE MINIMUM POST LENGTH SHALL BE 5'-0\"/>
 3. SILT FENCE FABRIC SHALL BE A PERVIOUS SHEET OF WOVEN PROPYLENE, NYLON, POLYESTER OR POLYETHYLENE FILAMENTS AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER.

SILT FENCE
NOT TO SCALE

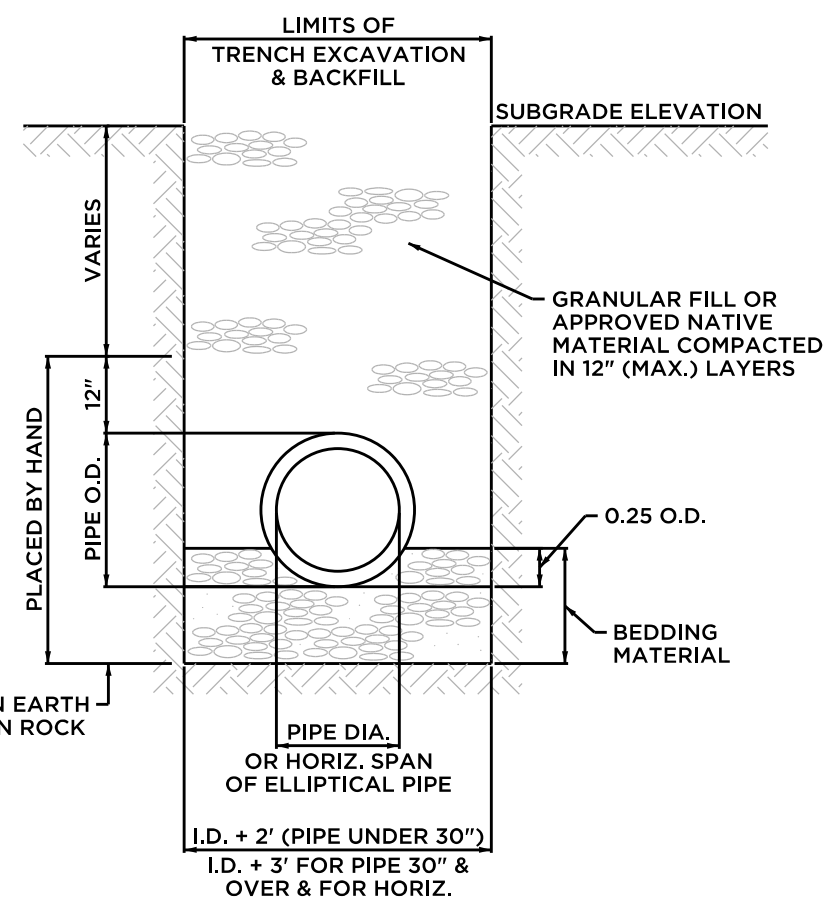


PLAN

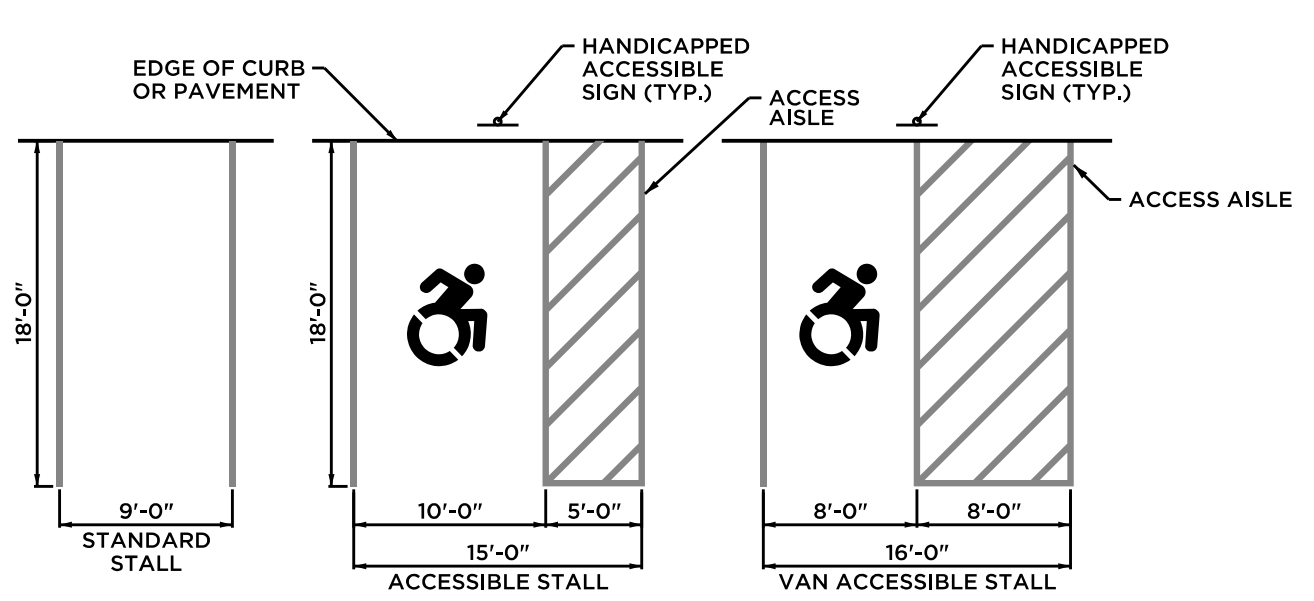
SECTION AT SWALE



TYPICAL GRASS SWALE & DETENTION BASIN SECTION
NOT TO SCALE

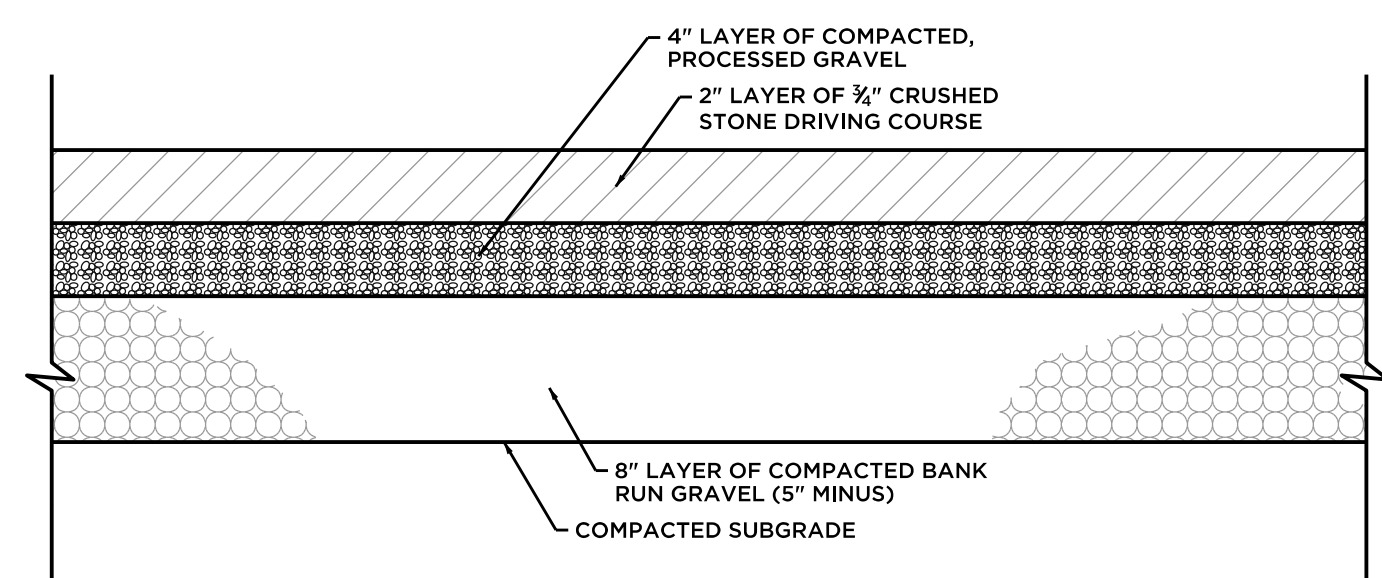


TRENCHING & BACKFILLING
NOT TO SCALE

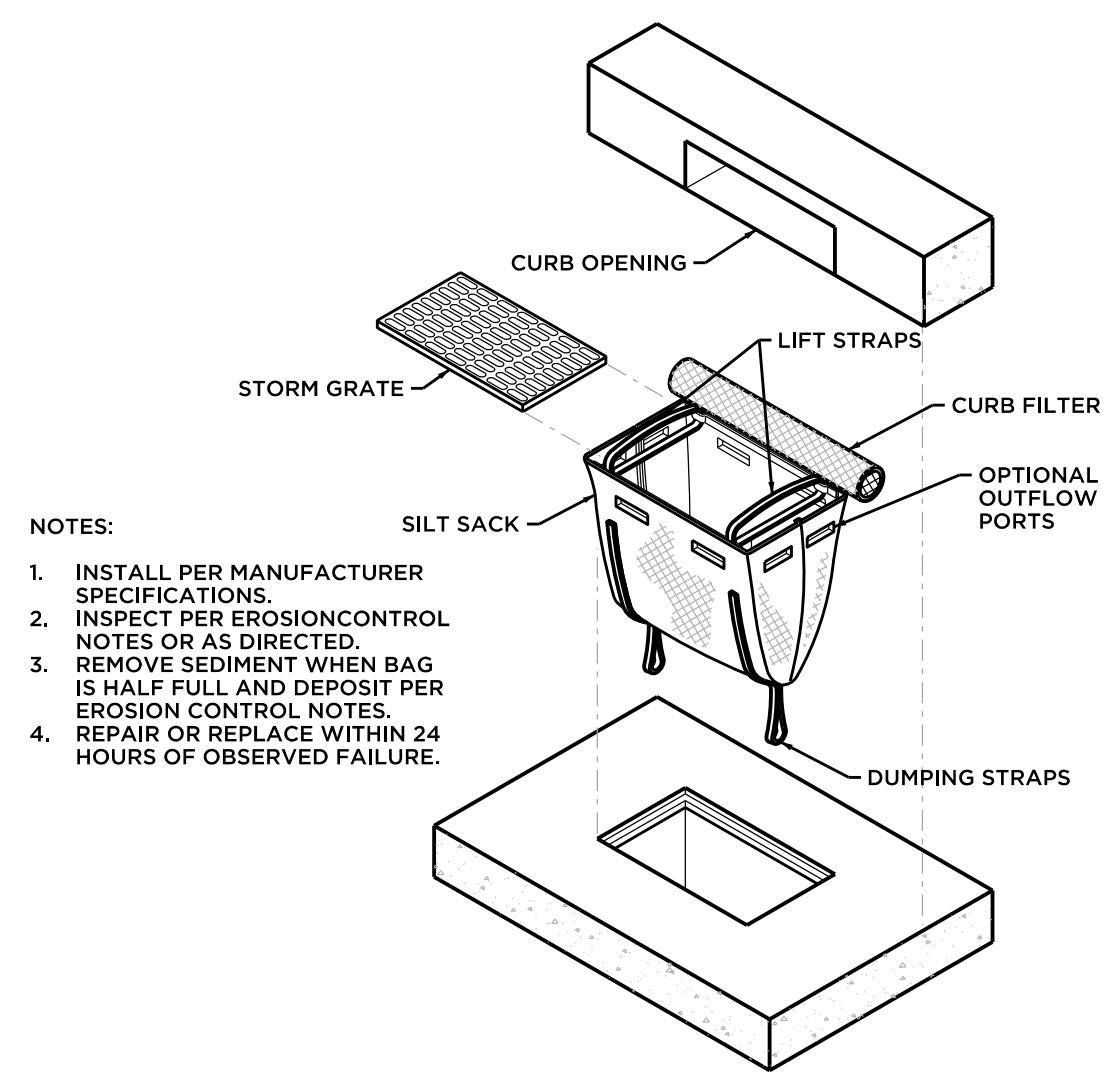


PARKING STALL DETAILS
NOT TO SCALE

- GENERAL NOTES:
1. ACCESS AISLES SHALL ADJOIN AN ACCESSIBLE ROUTE.
 2. ACCESS AISLES (CROSS HATCH) SERVING CAR PARKING SPACES SHALL BE 60 INCHES (1525 mm) MINIMUM IN WIDTH. ACCESS AISLES SERVING VAN PARKING SPACES SHALL BE 96 INCHES (2440 mm) MINIMUM IN WIDTH. TWO PARKING SPACES SHALL BE PERMITTED TO SHARE A COMMON ACCESS AISLE. IF A CAR AND A VAN SPACE SHARE A COMMON ACCESS AISLE, THAT AISLE SHALL BE 96 INCHES MINIMUM IN WIDTH.
 3. PARKING SPACES MAY HAVE ACCESS AISLES PLACED ON EITHER SIDE OF THE CAR OR VAN PARKING SPACE. VAN PARKING SPACES THAT ARE ANGGLED SHALL HAVE ACCESS AISLES LOCATED ON THE PASSENGER SIDE OF THE PARKING SPACE.
 4. ACCESSIBLE PARKING SPACES SHALL BE IDENTIFIED BY ABOVE GRADE SIGNS IN ACCORDANCE WITH DETAILS.

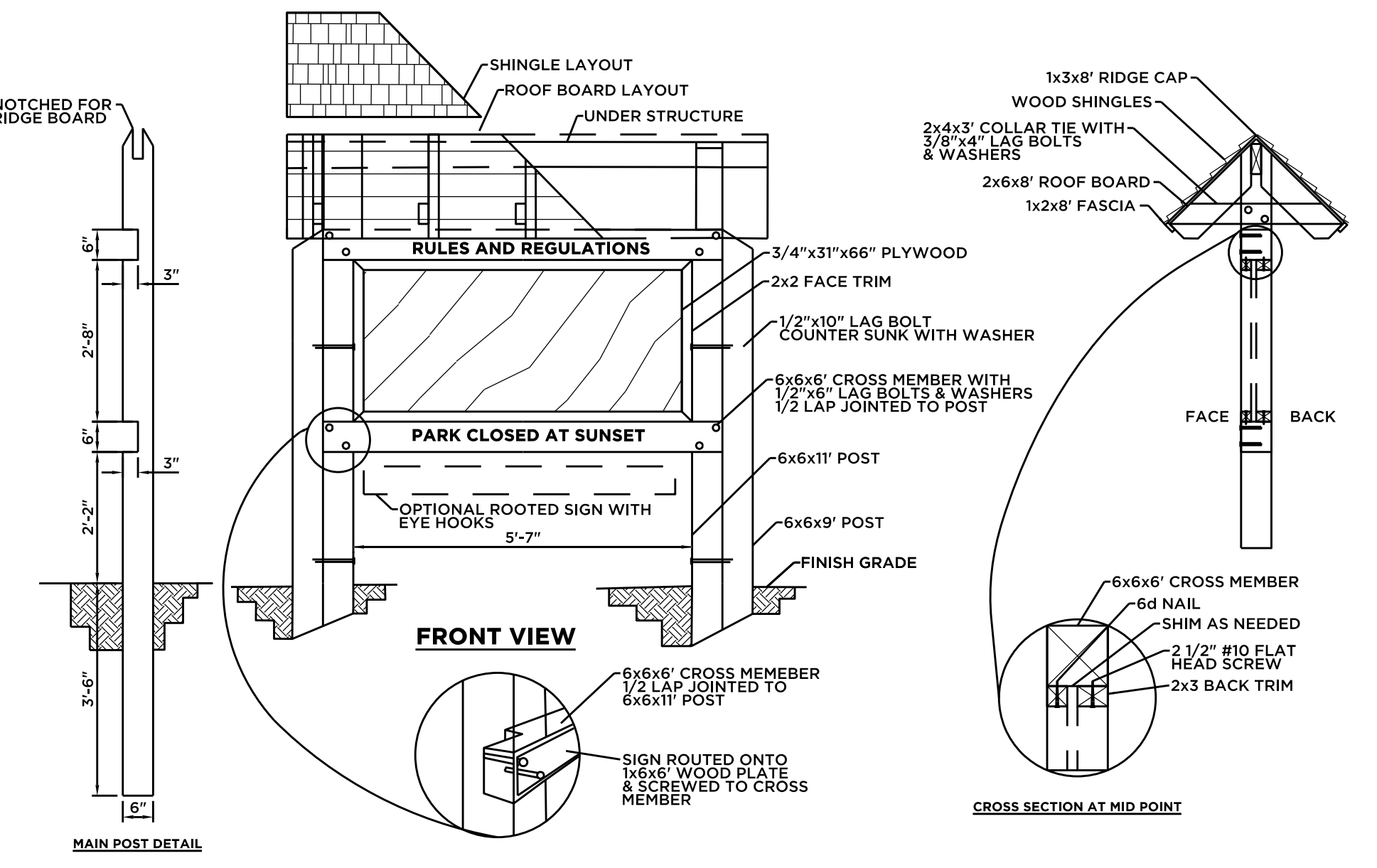


GRAVEL DRIVEWAY DETAIL
NOT TO SCALE

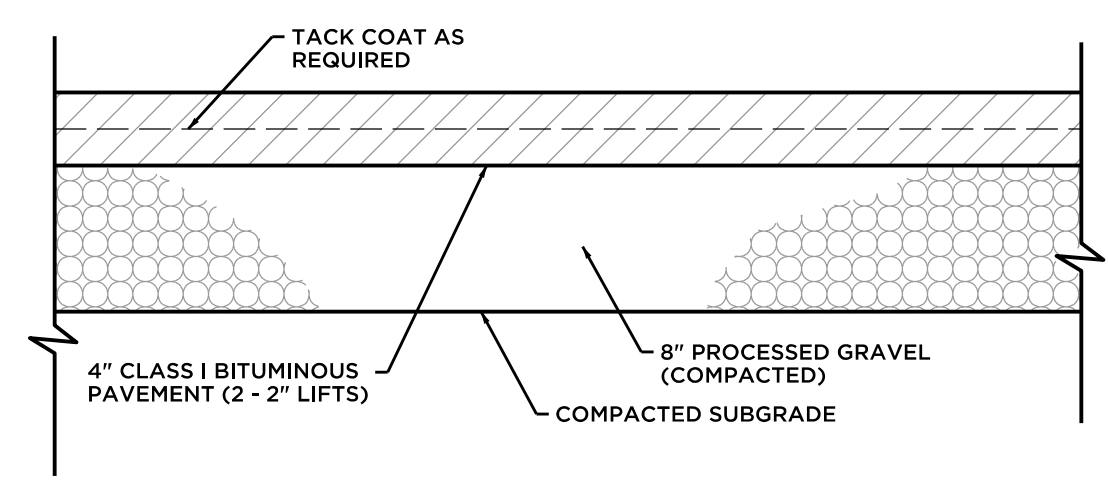


INLET SEDIMENT CONTROL DEVICE
NOT TO SCALE

- NOTES:
1. INSTALL PER MANUFACTURER SPECIFICATIONS.
 2. INSPECT PER EROSION CONTROL NOTES OR AS DIRECTED.
 3. REMOVE SEDIMENT WHEN BAG IS HALF FULL AND DEPOSIT PER EROSION CONTROL NOTES.
 4. REPAIR OR REPLACE WITHIN 24 HOURS OF OBSERVED FAILURE.



TRAIL HEAD KIOSK
NOT TO SCALE



BITUMINOUS PAVEMENT
NOT TO SCALE

		41 Sequin Drive Glastonbury, CT 06033 Phone: (860) 633-9370 Fax: (860) 633-5971 www.anchorengr.com	
		Civil Engineering • Environmental Consulting • Land Surveying • Construction Management	
PROJ. ENGINEER	KRK	SITE IMPROVEMENT DETAILS PREPARED FOR FOR 395 TOWN HILL ROAD 395 TOWN HILL ROAD NEW HARTFORD, CT	
PROJ. MANAGER	KRK		
OFFICE REVIEW	MLK		
REVISIONS		PROJECT	DATE
		1449-02	02/03/21
		SCALE: AS NOTED	SHEET NO. 2 OF 2

**Drainage Summary Report
Proposed Trail Parking Area
395 Town Hill Road, New Hartford, CT
January 21, 2021**

PROJECT DESCRIPTION

The project is located on the west side of Town Hill Road on a property proposed for use as a town park with walking trails. The proposal includes the construction of an access drive from Town Hill Road (CT RT 219) at the southern end of the property. The driveway will provide access to a proposed gravel parking area for users of the trails and the park.

EXISTING CONDITIONS

The parcel is currently undeveloped and wooded. It contains a wooded wetland area across the frontage of the parcel along Town Hill Road which includes a road drainage swale at the base of the road fill. Approximately 150 feet north of the southeast property corner is an existing 15" diameter corrugated metal pipe within the State right-of-way that collects the runoff from the swale and discharges to an existing catch basin approximately 18 feet to the north. A new swale begins after the catch basin and continues north along the property frontage.

The property slopes from the southwest to the northeast and stormwater sheet flows toward the wooded wetlands and is collected by the existing swales that tie into the CT Route 219 storm drainage.

PROPOSED CONDITIONS

The proposed driveway apron onto Town Hill Road will be paved for a length of 50 feet. The remainder of the driveway and the parking area will be gravel. A stormwater basin is proposed along the northern edge of the parking area. The gravel drive and parking will sheet flow into the basin, allowing the stormwater to collect and provide infiltration and treatment storage.

The Water Quality Volume (WQV) calculation is attached. To be conservative in the calculation, the gravel area was considered as impervious. The required WQV is 654 cubic feet and the stormwater basin will provide 825 cubic feet at a one-foot depth to elevation 964. The berm at the stormwater basin is at elevation 964 and during larger storms, any excess flow not infiltrated into the basin will sheet flow across the grass berm which will act as a level spreader distributing the flow to the wetland to the northeast as it flows in the existing condition.

The existing 15" diameter corrugated metal pipe within the State right-of-way will be replaced with a 15" diameter HDPE pipe under the proposed driveway apron and connect to the existing catch basin as in the existing conditions. The 10-year flow calculations and watershed plan are attached.

January 21, 2021

TIME OF CONCENTRATION (Tc) OR TRAVEL TIME (Tt)

15" DIAMETER DRIVEWAY

Sheet Flow

- 1.- Surface Description
- 2.- Manning's Roughness Coeff. "n"
- 3.- Flow Length, L (total L ≤ 300ft)
- 4.- Two-year 24-hr. rainfall, P2
- 5.- Land Slope, S

6.- $T_t = \frac{0.007 (nL)^1}{P_2^{0.5} S^{0.4}}$ hr

Segment ID			
	0.15		
ft	125	245	
inch	3.6		
ft/ft	0.016		
hr	0.20	+	0.20

Shallow Concentrated Flow

- 7.- Surface Description (paved or Unpaved)
- 8.- Flow Length, L
- 9.- Watercourse Slope, S
- 10.- Average Velocity, V *

11.- $T = \frac{L}{3600V}$

Segment ID	Unpaved	Unpaved	
ft	430	570	
ft/ft	0.042	0.05	
ft/s	3.31	3.61	
hr	0.04	+	0.04

Channel Flow

- 12.- Cross Sectional Area, a
- 13.- Wetted Perimeter, Pw
- 14.- Hydraulic Radius $r = a/Pw$
- 15.- Channel Slope, S
- 16.- Manning's Roughness Coeff. "n"

17.- $V = \frac{.49r^{2/3} S^{0.5}}{n}$

- 18.- Flow Length, L

19.- $T = \frac{L}{3600V}$

Segment ID		
ft ²		
ft		
ft		
ft/ft		
ft/s		
ft		
hr		0.00

20.- Watershed Or Subarea Tc or (add Tt from steps 6,11,and 19) hrs. **0.28**

= min **17**

* Average Velocity:

Unpaved $V = 16.1345(S)^{0.5}$ ft/s

Paved $V = 20.3284(S)^{0.5}$ ft/s

NOAA Atlas 14, Volume 10, Version 3
Location name: New Hartford, Connecticut, USA*
Latitude: 41.8651°, Longitude: -73.0019°
Elevation: 961.21 ft**
* source: ESRI Maps
** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

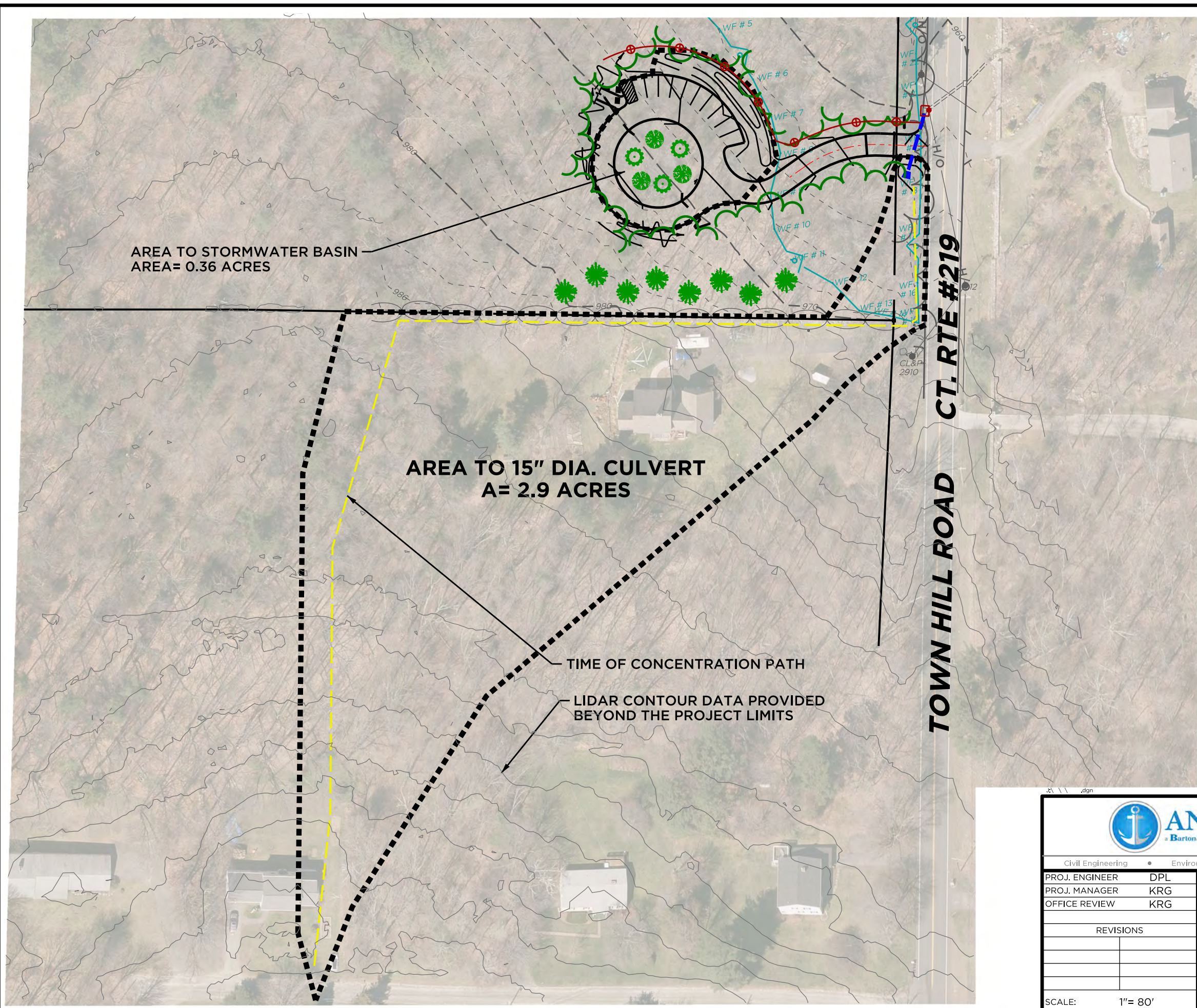
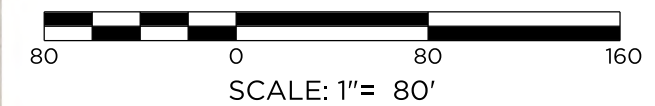
NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps & aerials](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	4.37 (3.38-5.60)	5.21 (4.02-6.68)	6.58 (5.06-8.47)	7.70 (5.89-9.98)	9.25 (6.86-12.6)	10.4 (7.58-14.5)	11.7 (8.22-16.8)	13.0 (8.71-19.3)	14.8 (9.60-22.9)	16.3 (10.3-25.7)
10-min	3.10 (2.39-3.97)	3.69 (2.84-4.73)	4.66 (3.58-5.99)	5.46 (4.17-7.07)	6.56 (4.86-8.90)	7.39 (5.37-10.3)	8.26 (5.82-11.9)	9.19 (6.18-13.7)	10.5 (6.80-16.2)	11.5 (7.30-18.2)
15-min	2.43 (1.88-3.11)	2.89 (2.23-3.71)	3.65 (2.81-4.70)	4.28 (3.27-5.54)	5.14 (3.81-6.98)	5.80 (4.22-8.05)	6.48 (4.56-9.34)	7.21 (4.85-10.7)	8.23 (5.33-12.7)	9.05 (5.73-14.3)
30-min	1.65 (1.28-2.12)	1.97 (1.52-2.52)	2.48 (1.91-3.19)	2.91 (2.23-3.77)	3.50 (2.59-4.75)	3.94 (2.86-5.48)	4.41 (3.11-6.35)	4.91 (3.30-7.30)	5.60 (3.63-8.66)	6.16 (3.90-9.74)
60-min	1.04 (0.807-1.34)	1.24 (0.960-1.60)	1.57 (1.21-2.02)	1.84 (1.41-2.39)	2.21 (1.64-3.00)	2.50 (1.81-3.46)	2.79 (1.97-4.02)	3.10 (2.09-4.61)	3.55 (2.30-5.48)	3.90 (2.47-6.16)
2-hr	0.680 (0.530-0.866)	0.805 (0.626-1.03)	1.01 (0.780-1.29)	1.18 (0.906-1.52)	1.41 (1.05-1.91)	1.58 (1.16-2.19)	1.77 (1.26-2.55)	1.98 (1.34-2.93)	2.29 (1.49-3.52)	2.54 (1.61-4.00)
3-hr	0.524 (0.410-0.665)	0.621 (0.485-0.789)	0.780 (0.606-0.994)	0.911 (0.705-1.17)	1.09 (0.820-1.48)	1.23 (0.904-1.70)	1.37 (0.985-1.99)	1.54 (1.04-2.28)	1.80 (1.17-2.77)	2.02 (1.28-3.17)
6-hr	0.332 (0.261-0.418)	0.399 (0.313-0.503)	0.508 (0.398-0.644)	0.599 (0.466-0.764)	0.725 (0.548-0.977)	0.817 (0.607-1.13)	0.918 (0.667-1.34)	1.04 (0.707-1.54)	1.24 (0.808-1.90)	1.41 (0.898-2.20)
12-hr	0.202 (0.160-0.253)	0.249 (0.197-0.312)	0.326 (0.257-0.410)	0.390 (0.305-0.494)	0.478 (0.364-0.643)	0.542 (0.406-0.750)	0.613 (0.450-0.893)	0.704 (0.479-1.03)	0.849 (0.556-1.30)	0.977 (0.625-1.52)
24-hr	0.119 (0.095-0.148)	0.150 (0.119-0.187)	0.201 (0.159-0.251)	0.243 (0.192-0.306)	0.301 (0.231-0.404)	0.343 (0.260-0.475)	0.391 (0.290-0.571)	0.453 (0.309-0.663)	0.556 (0.365-0.846)	0.647 (0.415-1.01)
2-day	0.067 (0.054-0.083)	0.086 (0.069-0.106)	0.117 (0.093-0.145)	0.142 (0.113-0.178)	0.178 (0.138-0.238)	0.203 (0.155-0.281)	0.232 (0.174-0.340)	0.272 (0.186-0.396)	0.338 (0.223-0.513)	0.398 (0.257-0.617)
3-day	0.049 (0.039-0.060)	0.063 (0.050-0.077)	0.085 (0.068-0.106)	0.104 (0.083-0.130)	0.130 (0.101-0.174)	0.149 (0.114-0.205)	0.170 (0.128-0.249)	0.199 (0.137-0.290)	0.249 (0.164-0.377)	0.294 (0.190-0.455)
4-day	0.039 (0.032-0.048)	0.051 (0.041-0.062)	0.069 (0.055-0.085)	0.084 (0.067-0.104)	0.105 (0.082-0.139)	0.119 (0.092-0.165)	0.137 (0.103-0.200)	0.160 (0.110-0.232)	0.200 (0.132-0.302)	0.236 (0.153-0.365)
7-day	0.027 (0.022-0.033)	0.034 (0.028-0.042)	0.046 (0.037-0.056)	0.056 (0.045-0.069)	0.069 (0.054-0.091)	0.079 (0.061-0.108)	0.090 (0.068-0.130)	0.105 (0.072-0.152)	0.130 (0.086-0.196)	0.152 (0.099-0.235)
10-day	0.022 (0.018-0.027)	0.027 (0.022-0.033)	0.036 (0.029-0.044)	0.043 (0.035-0.053)	0.053 (0.042-0.070)	0.060 (0.047-0.082)	0.068 (0.052-0.099)	0.079 (0.055-0.114)	0.097 (0.065-0.146)	0.114 (0.074-0.175)
20-day	0.016 (0.013-0.019)	0.019 (0.015-0.022)	0.023 (0.019-0.028)	0.027 (0.022-0.033)	0.032 (0.025-0.041)	0.036 (0.028-0.048)	0.040 (0.030-0.056)	0.045 (0.031-0.065)	0.054 (0.036-0.081)	0.062 (0.040-0.095)
30-day	0.013 (0.011-0.016)	0.015 (0.012-0.018)	0.018 (0.015-0.022)	0.021 (0.017-0.025)	0.024 (0.019-0.031)	0.026 (0.020-0.035)	0.029 (0.022-0.041)	0.033 (0.023-0.047)	0.038 (0.026-0.057)	0.043 (0.028-0.065)
45-day	0.011 (0.009-0.013)	0.012 (0.010-0.015)	0.014 (0.012-0.017)	0.016 (0.013-0.019)	0.018 (0.014-0.023)	0.020 (0.015-0.026)	0.022 (0.016-0.030)	0.024 (0.017-0.034)	0.027 (0.018-0.040)	0.030 (0.020-0.046)
60-day	0.010 (0.008-0.011)	0.011 (0.009-0.013)	0.012 (0.010-0.015)	0.013 (0.011-0.016)	0.015 (0.012-0.019)	0.017 (0.013-0.022)	0.018 (0.013-0.025)	0.020 (0.014-0.028)	0.022 (0.015-0.032)	0.023 (0.015-0.036)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.



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