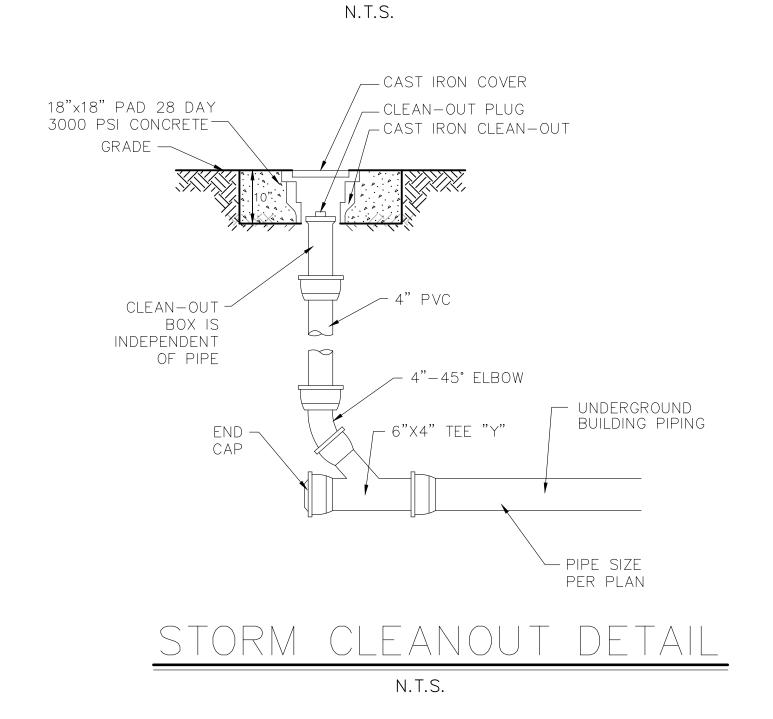
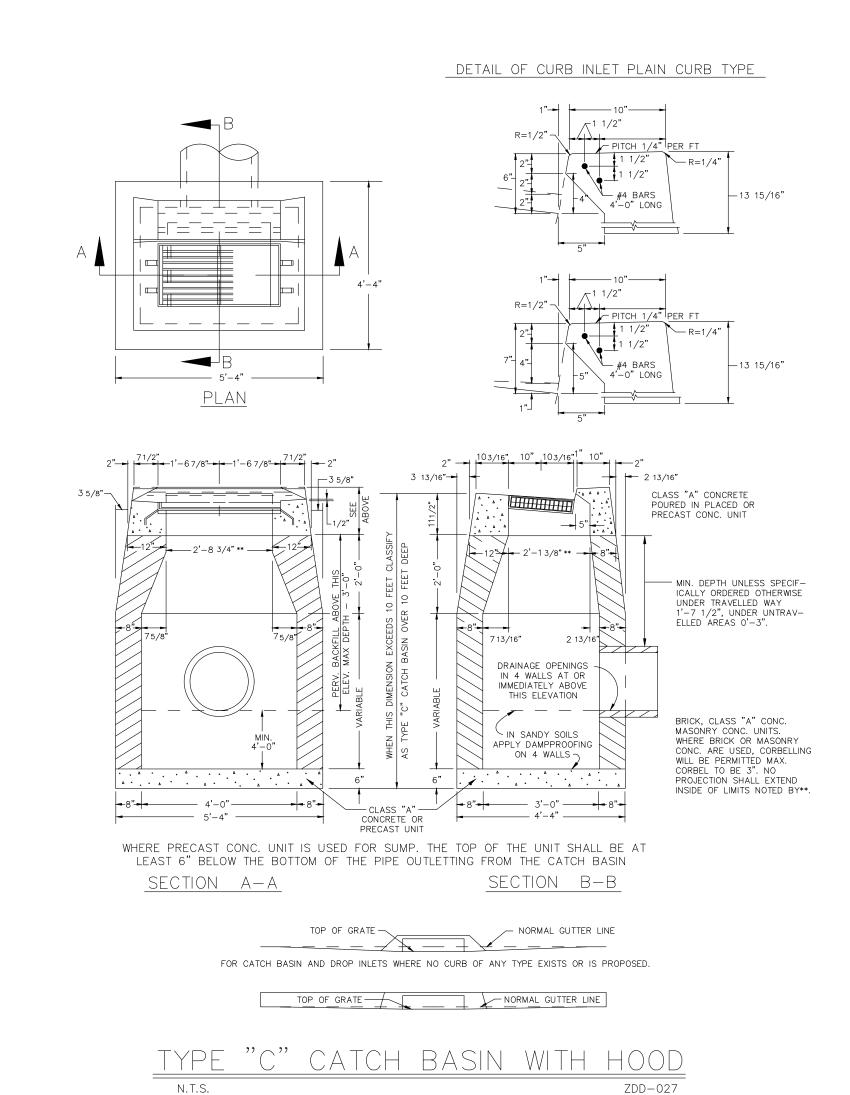
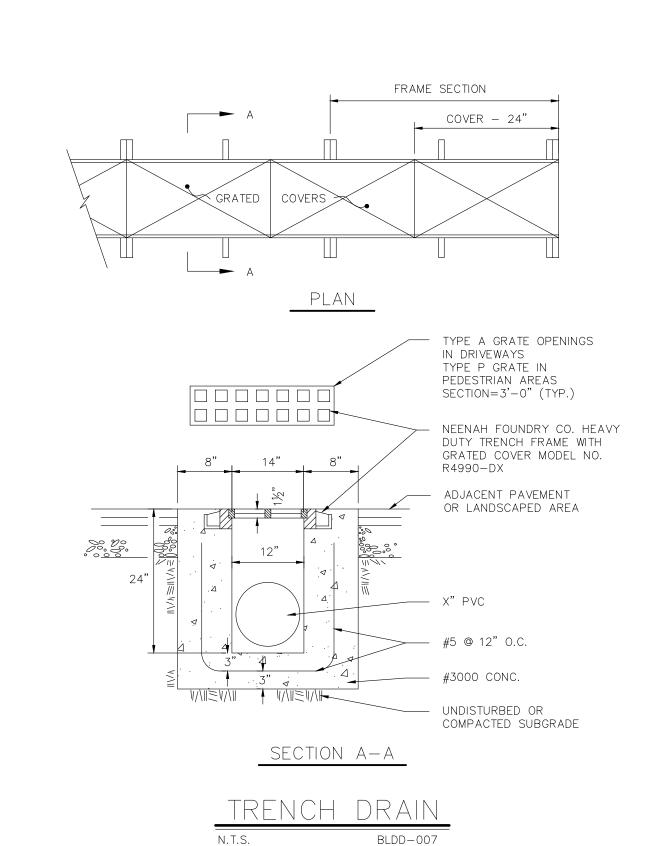
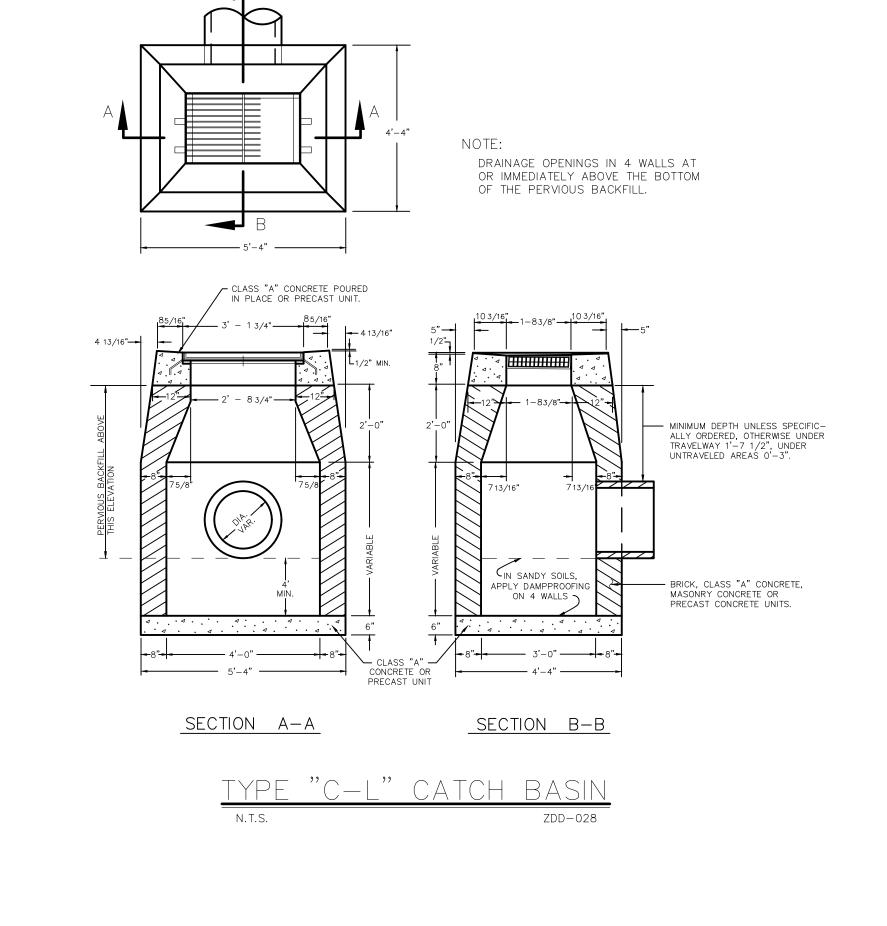


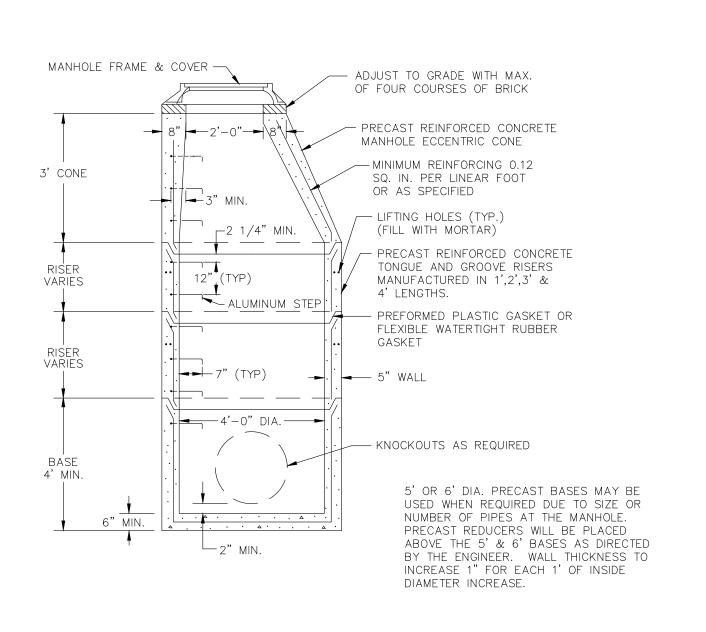
# BACKFLOW PREVENTOR DETAIL



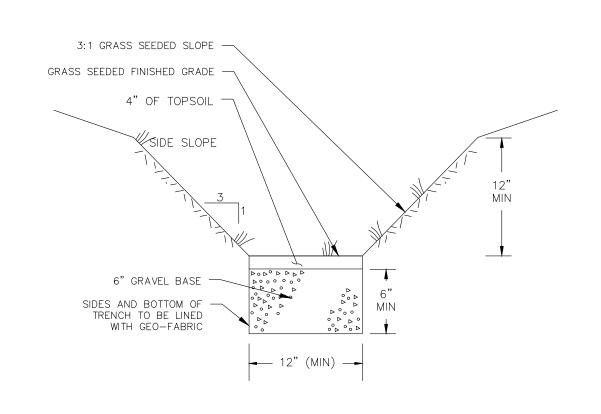












GRASS SWALE DETAIL

N.T.S.

FOR PERMITTING PURPOSES ONLY NOT RELEASED FOR CONSTRUCTION

100 Constitution Plaza 10th Floor Hartford, CT 06103 (860) 249-2200



ED S

80

J.P.D. Designed T.L.B. Drawn R.M.R. Reviewed N.T.S. Scale 2302349 Project No. 06/17/2024 Date

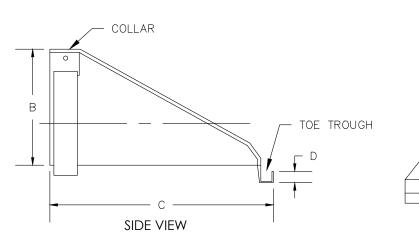
DN2302349-10 **GRADING AND** DRAINAGE

DETAILS

Sheet No.

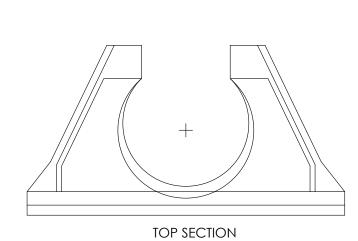
CAD File:

C2.100



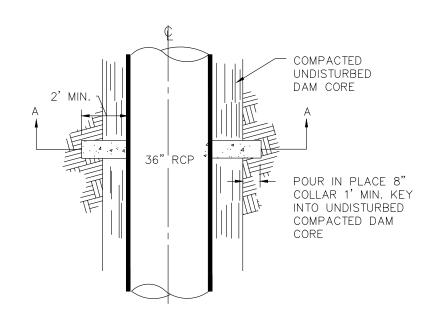
TOP SECTION

N.T.S



6" 6" 6" 6" 6" 6"

### HDPE FLARED END DETAIL



NOTES:
1. CONCRETE SHALL BE TYPE "C" PER SECTION 3.01, FORM 814

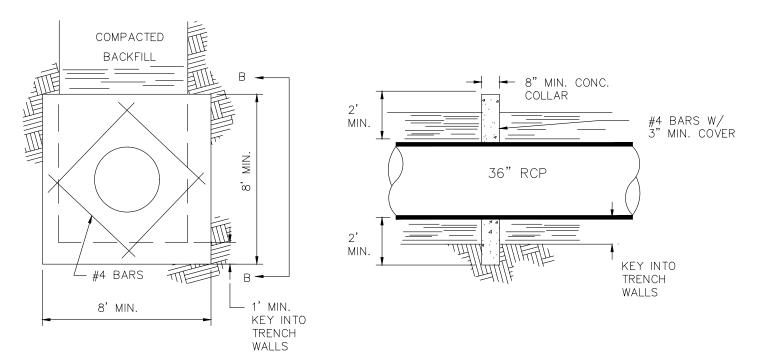
2. REINFORCING STEEL SHALL BE #4 BARS 3" MIN. CLEARANCE PER SEC. SPEC 3.02

3. POUR COLLAR IN PLACE AGAINST EXCAVATED KEY IN COMPACTED CORE

4. INSTALL 2 COLLARS 16' ON CENTER INSIDE COMPACTED IMPERVIOUS CORE

5. COMPACT PIPE BEDDING & BACKFILL WITH IMPERVIOUS CORE MATERIAL TO DAM CORE REQUIREMENTS WITH SUITABLE COMPACTION EQUIPMENT

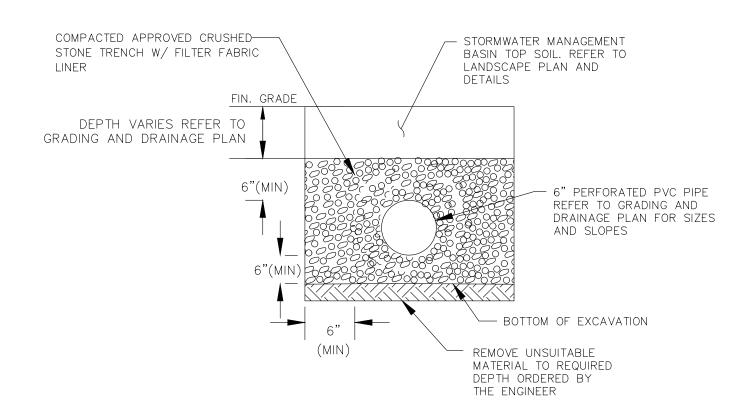
PLAN



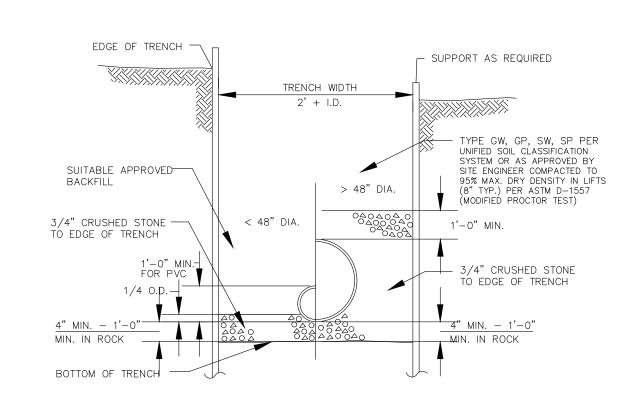
SECTION A-A

SECTION B-B

ANTI-SEED COLLAR



SURFACE STORMWATER MANAGEMENT BASIN UNDERDRAIN



## TYPICAL STORM SEWER TRENCH SECTION

TOP OF EMBANKMENT

8'-0"

ANTI-SEEPAGE COLLAR

BOTTOM OF KEY TRENCH

4'

ANTI-SEEPAGE COLLAR

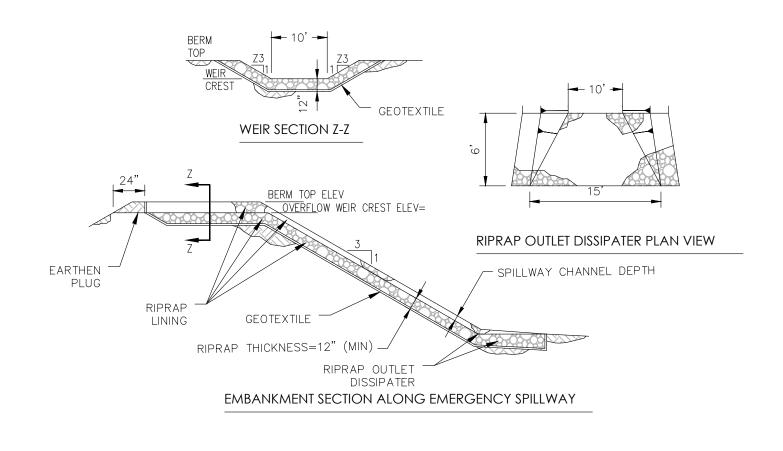
NOTES:

1. CLAY CORE SHALL BE COMPOSED OF IMPORTED CL, CH, MH OR CL-ML SOILS WITH A PERMEABILITY LESS THAN OR EQUAL TO 1.0×10 -6 CM/S. MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DENSITY PER ASTM-D 1557; WITHIN ± 3% OPTIMUM MOISTURE CONTENT.

2. SCARIFY EXISTING GROUND OF LEAFY LITTER AND ORGANIC MATTER PRIOR TO PLACING BERM OR IMPERVIOUS CLAY CORE.

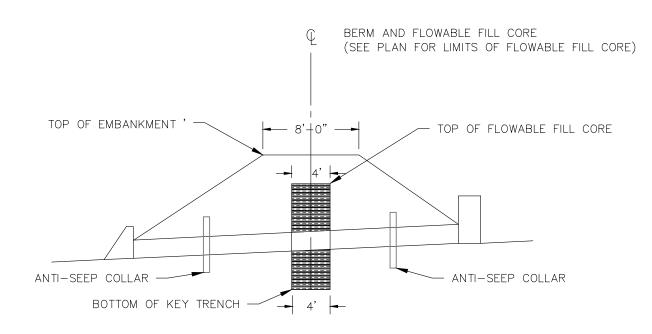
IMPERMEABLE CORE - CLAY OPTION

N.T.S



# STORMWATER MANAGMEN BASIN EMERGENCY SPIILLWAY WITH RIPRAP LINING DETAIL

N.T.S PADEP-7-12



NOTES:

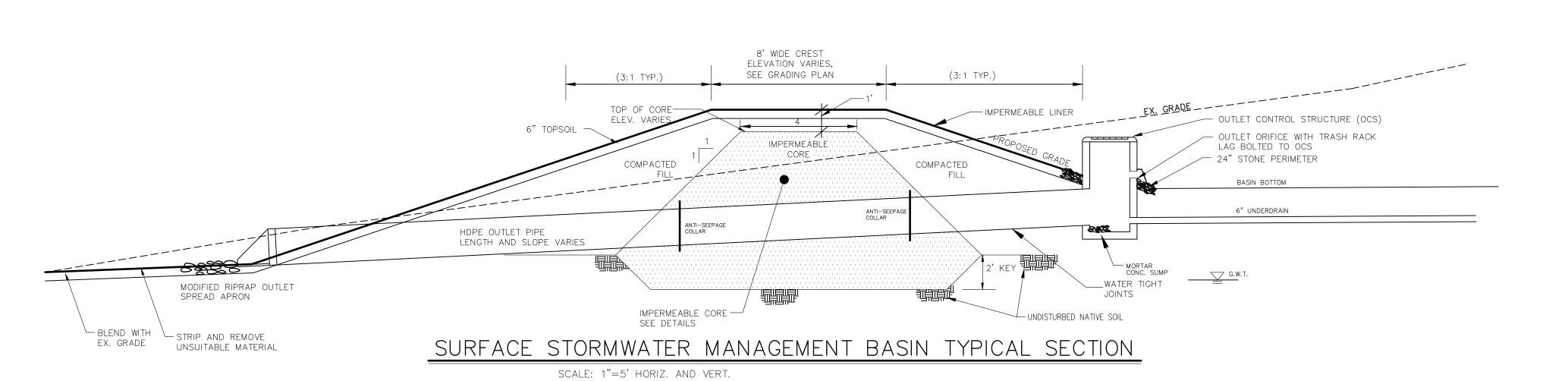
1. CONTRACTOR MAY ADD ¾" STONE TO FLOWABLE FILL MIX. CRUSHED STONE TO BE MAXIMUM OF 30% BY VOLUME OF MIX. CONTRACTOR TO ARRANGE FOR TESTING LAB TO TAKE 4 CYLINDER SAMPLES FOR COMPRESSIVE STRENGTH TESTING AT 7 AND 28 DAYS. REFERENCE RFI 011 RESPONSE DATE 4/1/19 FOR CONCRETE COMPRESSIVE STRENGTH REQUIREMENTS.

SCARIFY EXISTING GROUND OF LEAFY LITTER AND ORGANIC MATTER PRIOR TO PLACING BERM OR IMPERVIOUS FLOWABLE FILL CORE.
 ANTI-SEEP COLLARS CAN BE OMITTED FROM BASIN NO. 1 IF FLOWABLE FILL CORE IS INSTALLED TO A TOP ELEVATION OF 42.5' AND A BOTTOM ELEVATION OF 35.2' FOR 8 L.F. CENTERED ON THE OUTLET PIPE FOR BASIN NO. 1.
 ANTI-SEEP COLLARS CAN BE OMITTED FROM BASIN NO. 2 IF FLOWABLE FILL CORE IS INSTALLED TO A BOTTOM

IMPERMEABLE CORE — FLOWABLE FILL OPTION

ELEVATION OF 32.2' FOR 8 L.F. CENTERED ON THE OUTLET PIPE FOR BASIN NO. 2.

N.T.S



FOR PERMITTING PURPOSES ONLY
NOT RELEASED FOR CONSTRUCTION

Architectu Engineerir Environme Land Surv

100 Constitution Plaza 10th Floor Hartford, CT 06103 (860) 249-2200



LIGHT MANUFACTURIN

16 FLANDERS ROAD

1 YAME CONNECTION

ED

S

SIONS te Desc.

Designed
Drawn
Reviewed

Designed J.P.D.
Drawn T.L.B.
Reviewed R.M.R.
Scale N.T.S.
Project No. 2302349
Date 06/17/2024
CAD File:

Title

GRADING AND

DRAINAGE

Sheet No.

DETAILS

C2.101

N.T.S.





#### SC-310 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- 4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED. TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
- TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE
- TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS: THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER
- THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE. THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- 9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

#### IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

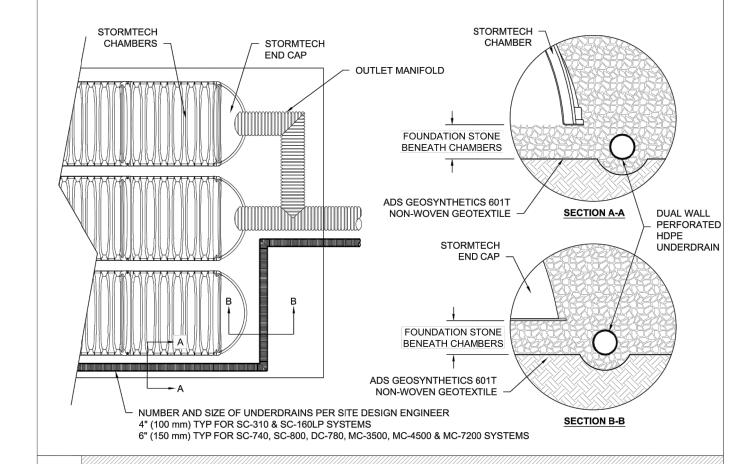
- 1. STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- 2. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS STORMTECH RECOMMENDS 3 BACKFILL METHODS: STONESHOOTER LOCATED OFF THE CHAMBER BED
- BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE. BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- 4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- 5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- 6. MAINTAIN MINIMUM 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- 7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
- 8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE
- 9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

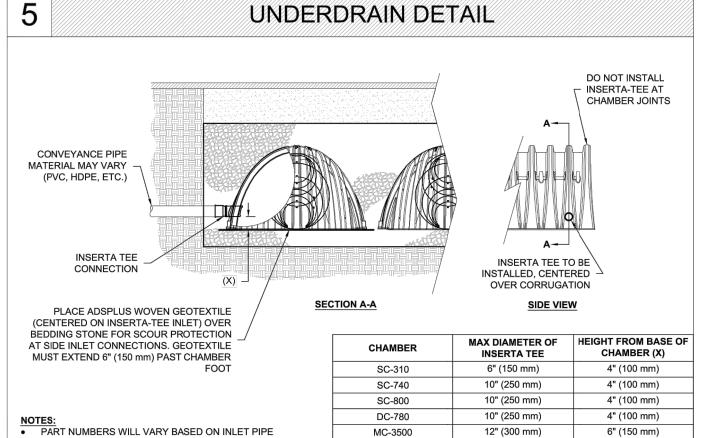
#### NOTES FOR CONSTRUCTION EQUIPMENT

- 1. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
- NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS. NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE". WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION
- 3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER

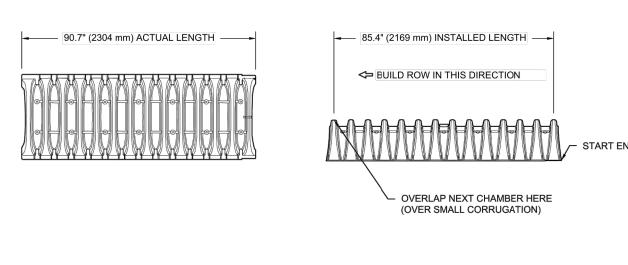
CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

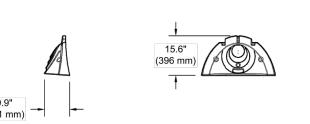


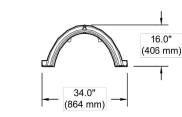


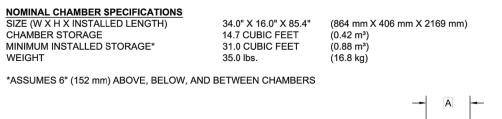
MC-4500

INSERTA-TEE SIDE INLET DETAIL









PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B" PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T'

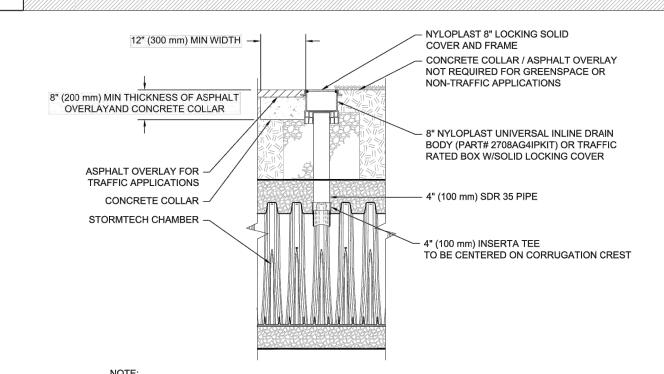
PART#	STUB	Α	В	С
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	
SC310EPE06B / SC310EPE06BPC	6 (13011111)	9.6 (244 11111)		0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	
SC310EPE08B / SC310EPE08BPC	8 (200111111)	11.9 (302 11111)		0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	
SC310EPE10B / SC310EPE10BPC	10 (250 11111)	12.7 (323 11111)		0.7" (18 mm)
SC310ECEZ*	12" (300 mm)	13.5" (343 mm)		0.9" (23 mm)

\* FOR THE SC310ECEZ THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL. NOTE: ALL DIMENSIONS ARE NOMINAL

SC-310 TECHNICAL SPECIFICATIONS

#### INSTALL FLAMP ON 12" (300 mm) ACCESS PIPE PART#: SC31012RAMP OPTIONAL INSPECTION PORT STORMTECH HIGHLY RECOMMENDS FLEXSTORM INSERTS IN ANY UPSTREAM STRUCTURES WITH OPEN GRATES SC-310 END CAP ELEVATED BYPASS MANIFOLD SUMP DEPTH TBD BY SITE DESIGN ENGINEER OR MANHOLE (24" [600 mm] MIN RECOMMENDED) - ONE LAYER OF ADSPLUS625 WOVEN GEOTEXTILE BETWEEN - 12" (300 mm) HDPE ACCESS PIPE REQUIRED USE EZ END CAP PART #: SC310ECEZ 4' (1.2 m) MIN WIDE CONTINUOUS FABRIC WITHOUT SEAMS

SC-310 ISOLATOR ROW PLUS DETAIL



INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST

4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)

## **INSPECTION & MAINTENANCE**

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
  - A. INSPECTION PORTS (IF PRESENT) REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD. MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL) A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
- ; i) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3. STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN VACUUM STRUCTURE SUMP AS REQUIRED STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS. STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

- 1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- 2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

### ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
С	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE.  MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 <sup>1</sup> A-1, A-2-4, A-3  OR  AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
В	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE <sup>5</sup>	AASHTO M43¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
А	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE <sup>5</sup>	AASHTO M43¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2,3</sup>

1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE". STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.

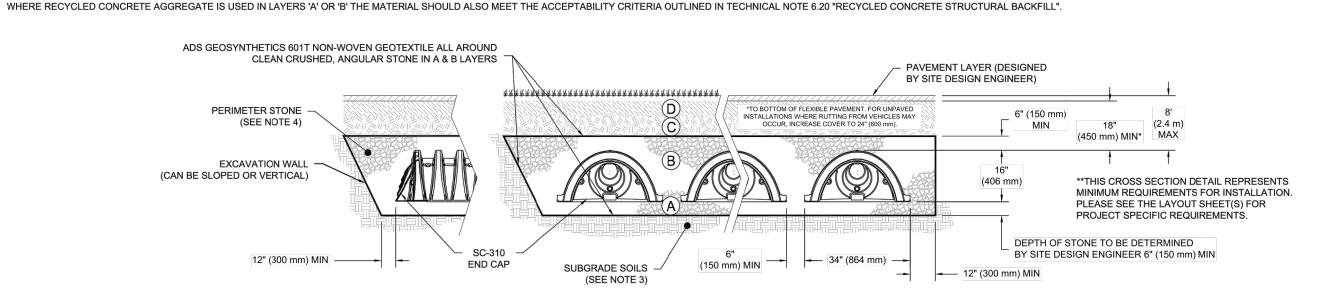
8" (200 mm)

12" (300 mm)

12" (300 mm)

INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON

WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGNS, CONTACT STORMTECH FOR ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



MATERIALS. CONTACT STORMTECH FOR MORE

INLET MUST BE RAISED AS NOT ALL INVERTS ARE

CONTACT ADS ENGINEERING SERVICES IF INSERTA TEE

- 1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION
- CHAMBERS". 2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION
- 3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- 4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION
- TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS. TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
- TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR

SC-310 CROSS SECTION DETAIL

FOR PERMITTING PURPOSES ONLY NOT RELEASED FOR CONSTRUCTION

RE

**DETAILS** 

Project No

CAD File:

DN2302349-10

**GRADING AND** 

DRAINAGE

T.L.B.

R.M.R.

N.T.S.

2302349

06/17/2024

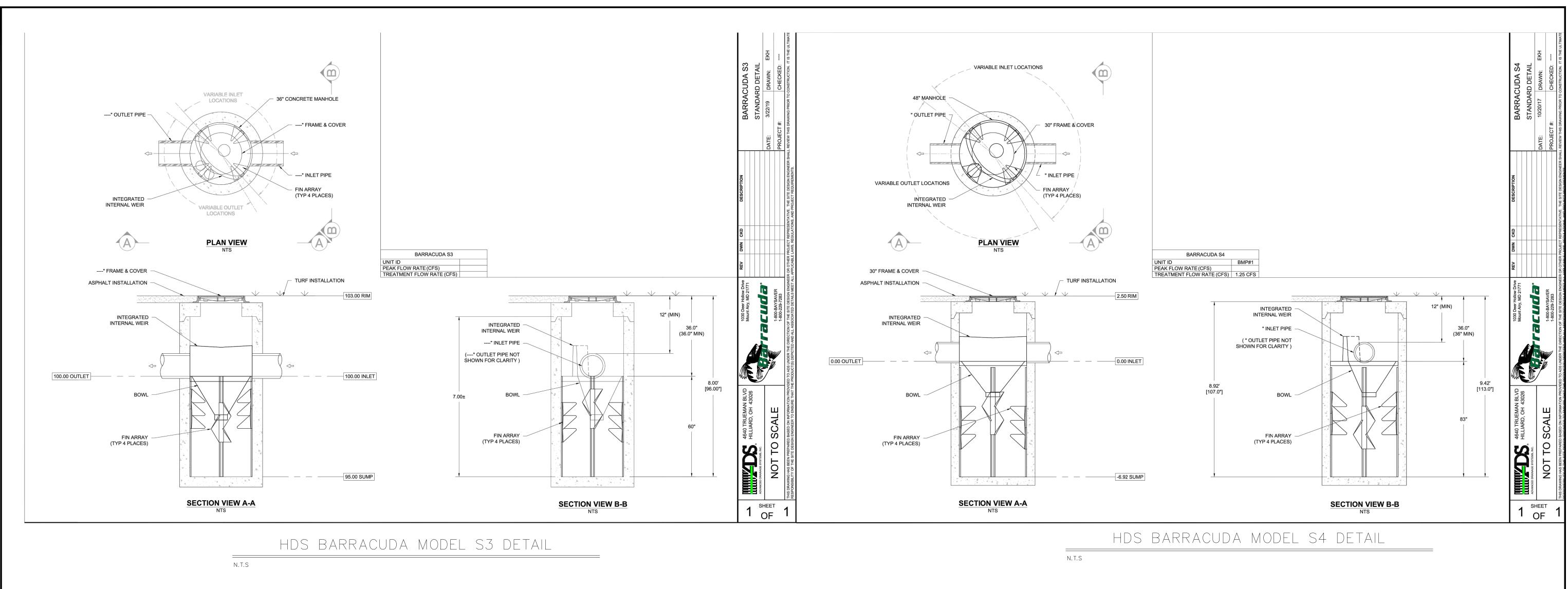
100 Constitution Plaza

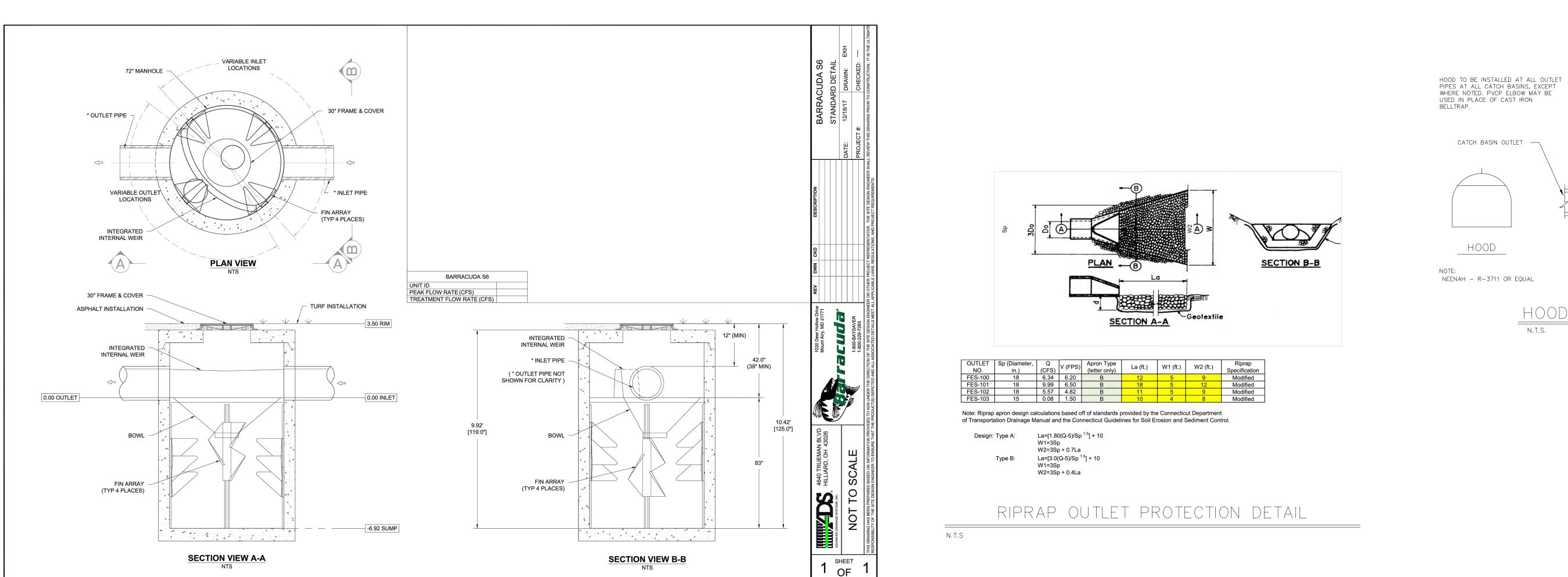
10th Floor

Hartford, CT 06103

(860) 249-2200

ш





FOR PERMITTING PURPOSES ONLY NOT RELEASED FOR CONSTRUCTION

Archited Archited Archited Archited Archited Sulph Floor Hartford, CT 06103 (860) 249-2200



TURING

296 FLANDERS ROAD

DNS Desc.

CTDD-004

Designed J.P.D.
Drawn T.L.B.
Reviewed R.M.R.
Scale N.T.S.

Drawn T.L.B.

Reviewed R.M.R.

Scale N.T.S.

Project No. 2302349

Date 06/17/2024

CAD File:
 DN2302349-10

GRADING AND DRAINAGE

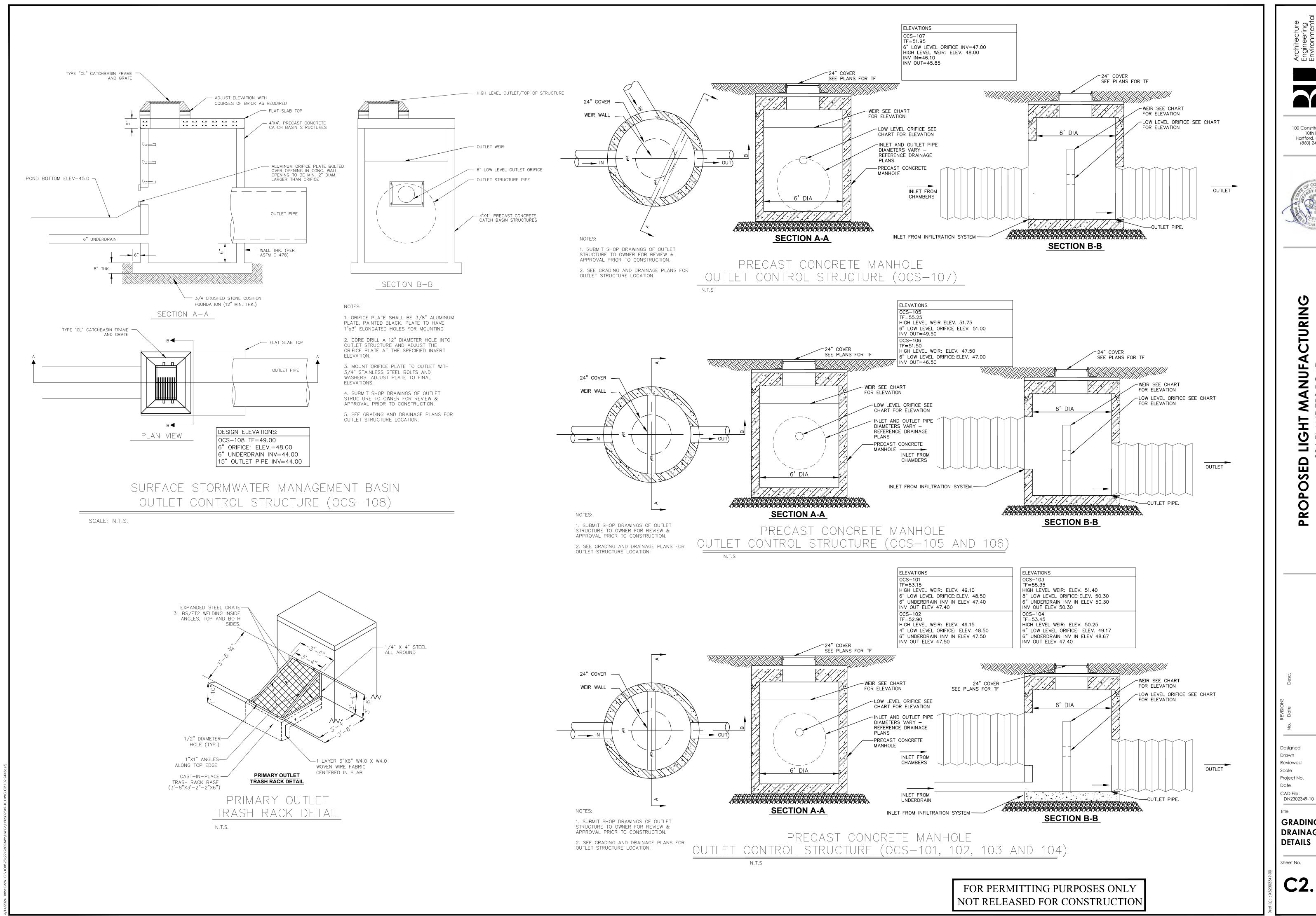
eet No.

DETAILS

C2.103

N.T.S

HDS BARRACUDA MODEL S6 DETAIL

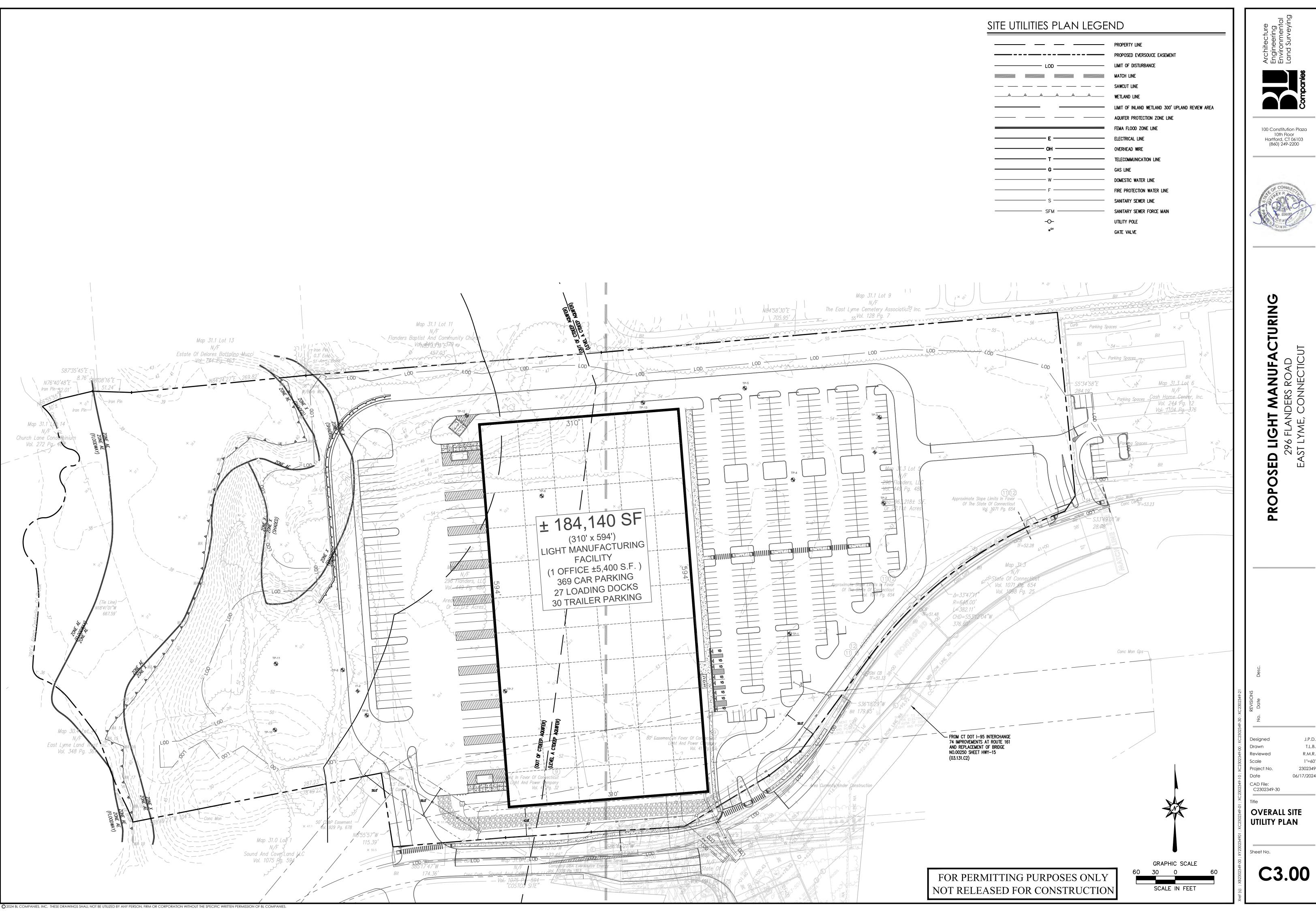




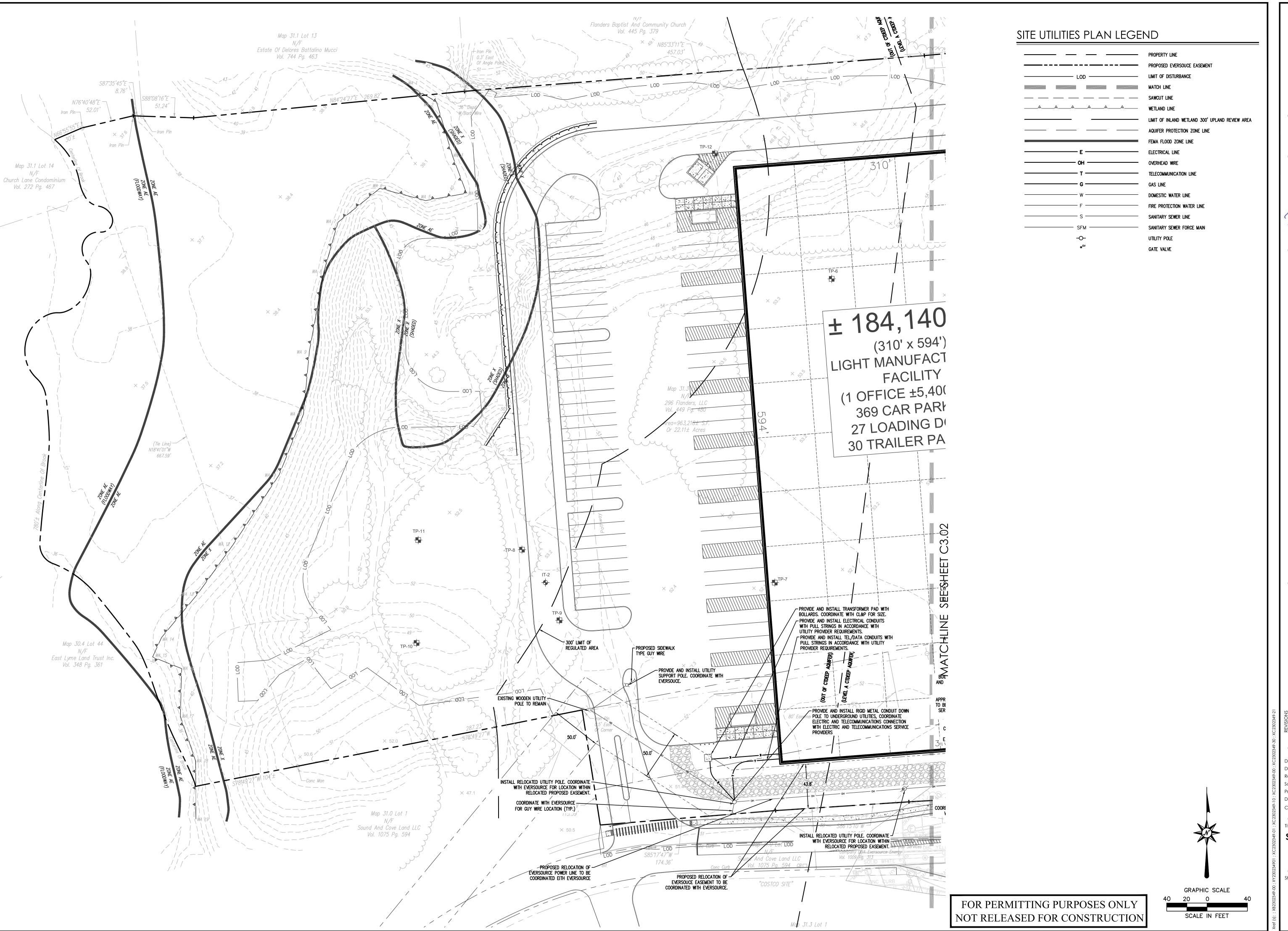
J.P.D. R.M.R. N.T.S. 2302349 06/17/2024

**GRADING AND** DRAINAGE

C2.104







1024 BL COMPANIES, INC. THESE DRAWINGS SHALL NOT BE UTILIZED BY ANY PERSON, FIRM OR CORPORATION WITHOUT THE SPECIFIC WRITTEN PERMISSION OF BL COMPANIES.



100 Constitution Plaza 10th Floor Hartford, CT 06103 (860) 249-2200



MANUFACTURING

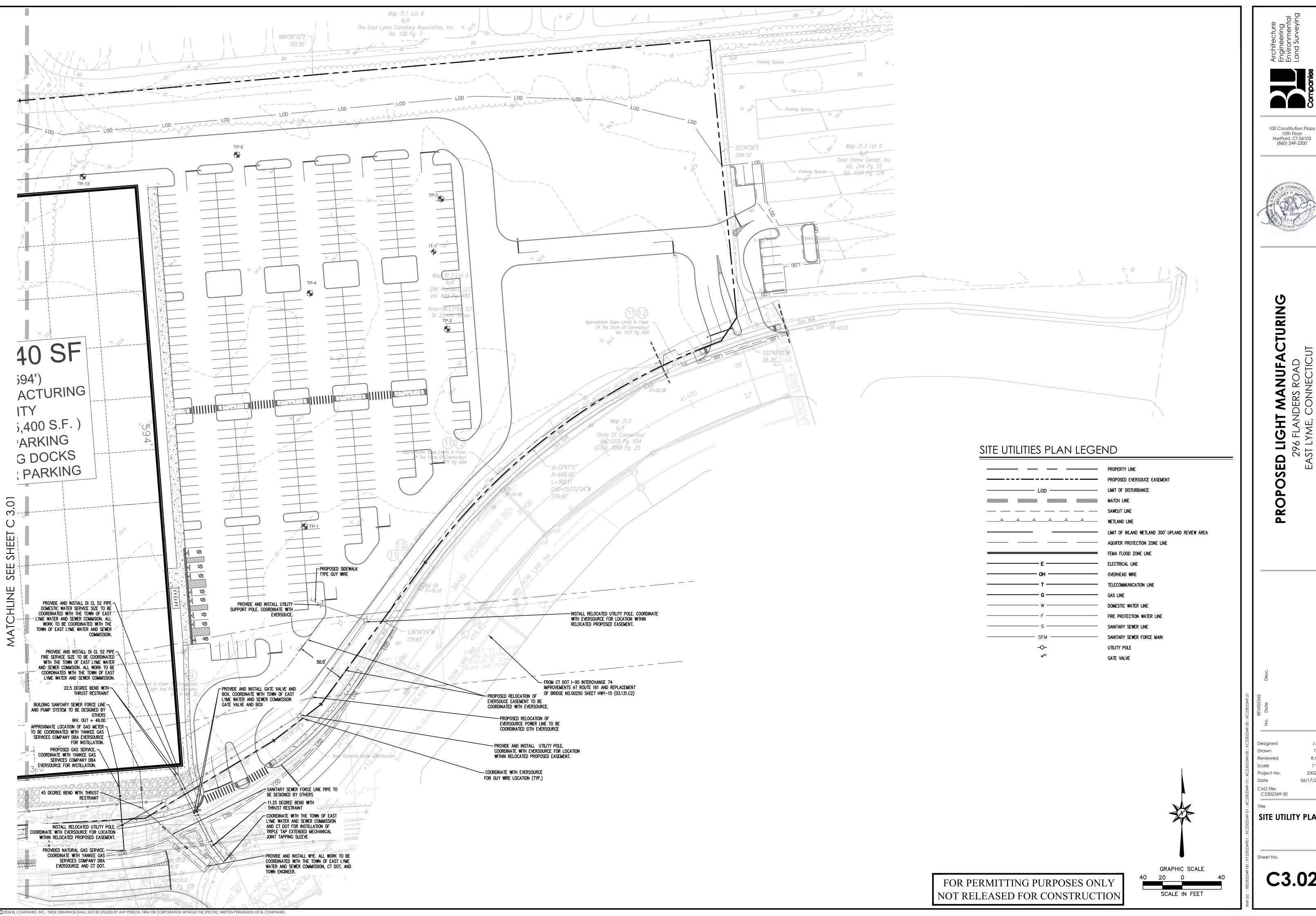
SED

R.M.R. 2302349 C2302349-30

T.L.B.

SITE UTILITY PLAN

C3.01





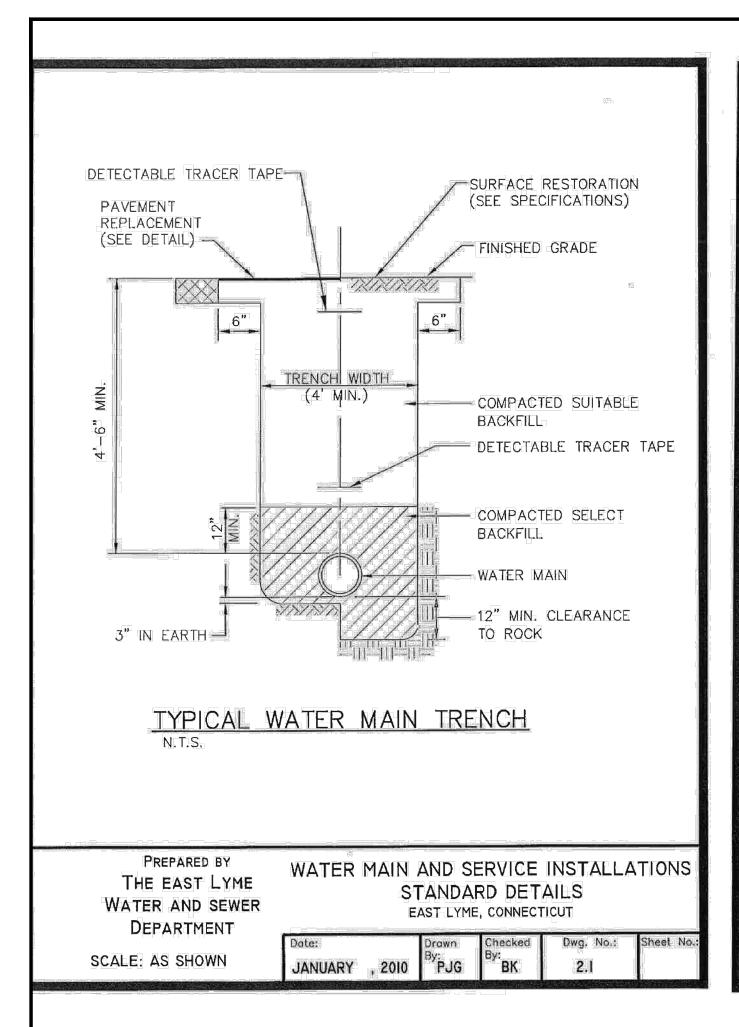


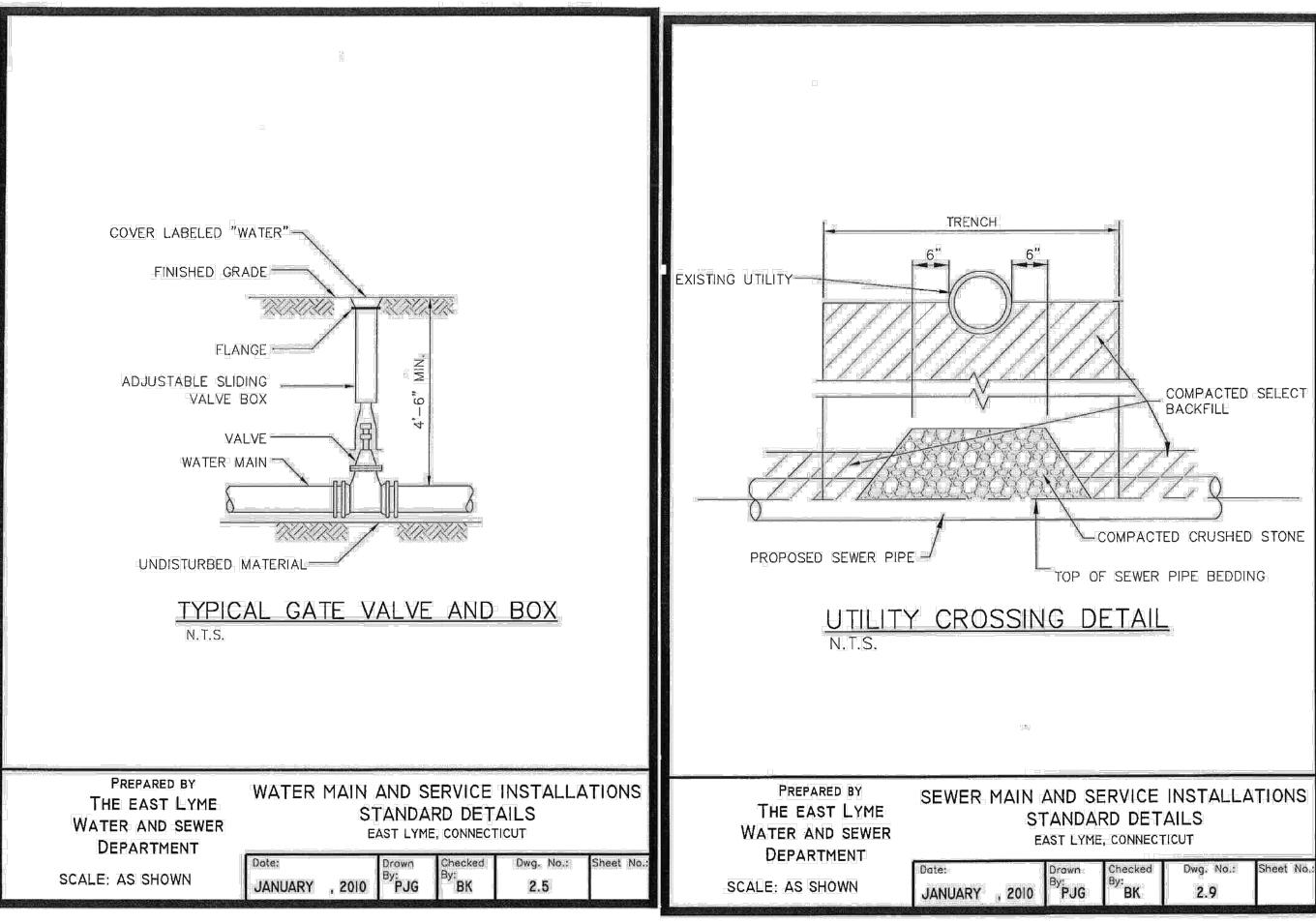
T.L.B. R.M.R.

2302349 06/17/2024

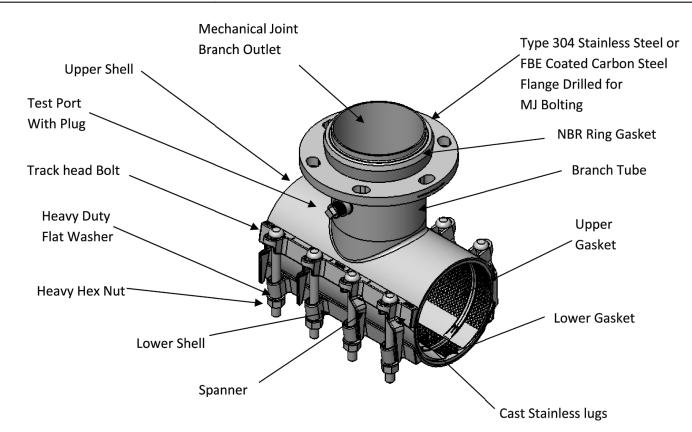
SITE UTILITY PLAN

C3.02









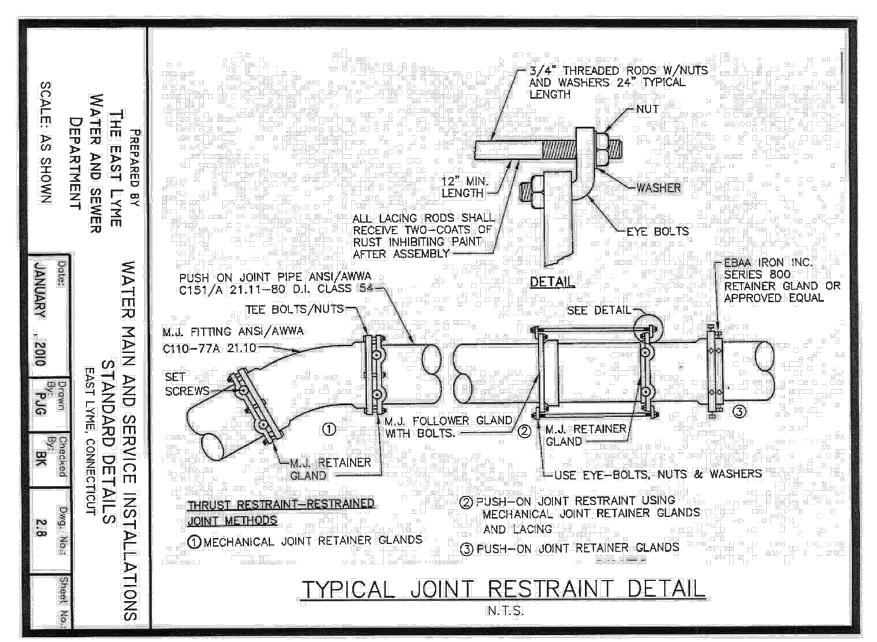
Flange: Type 304 Stainless Steel 18-8 or Fusion Bonded Epoxy (FBE) Coated Carbon Steel 18-8 Stainless Steel Schedule 5 or Schedule 10 wall thickness **Branch Tube: Upper Shell:** 10, 11 or 12 Gage 18-8 Stainless Steel depending on diameter Lower Shell: 10, 11 or 12 Gage 18-8 Stainless Steel depending on diameter **Upper Gasket** Patent pending one piece matte gasket with integrated aperture seal and circumferential seal beads for a 360 degree seal. Lower Gasket Matte gasket with matching circumferential seal beads for a 360 degree seal. **Alignment Lugs:** 18-8 Stainless Steel

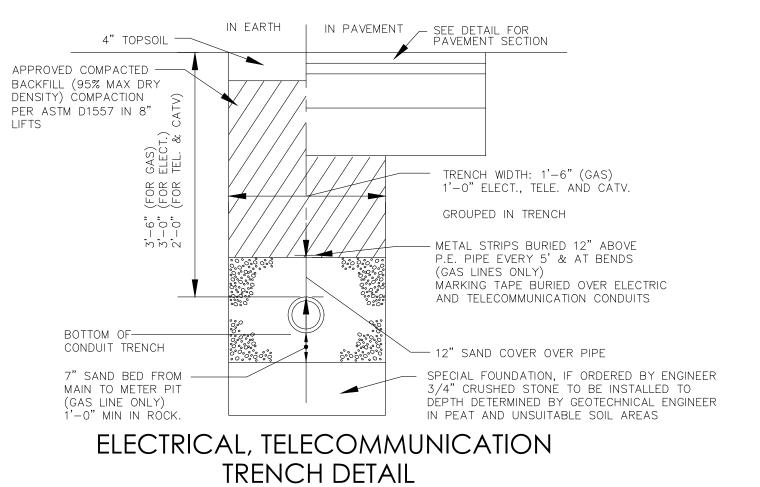
**Test Port:** 

Material: Nitrile Butadiene Rubber (NBR) Approved NSF-61, 18-8 Stainless Steel bridging spanner integrally molded into gasket, Spanners:

> 18-8 Stainless Steel ¾ Inch NPT Female Vent Port with 18-8 Stainless Steel Pipe Plug

TRIPLE TAP MECHANICAL JOINT TAPPING SLEEVE N.T.S.





FOR PERMITTING PURPOSES ONLY NOT RELEASED FOR CONSTRUCTION

100 Constitution Plaza 10th Floor Hartford, CT 06103 (860) 249-2200



296 FLANDERS ROAD
ST LYME, CONNECTICUT ED

0

Designed Drawn R.M.R. Reviewed Scale 2302349 Project No. 06/17/2024 Date CAD File:

J.P.D.

T.L.B.

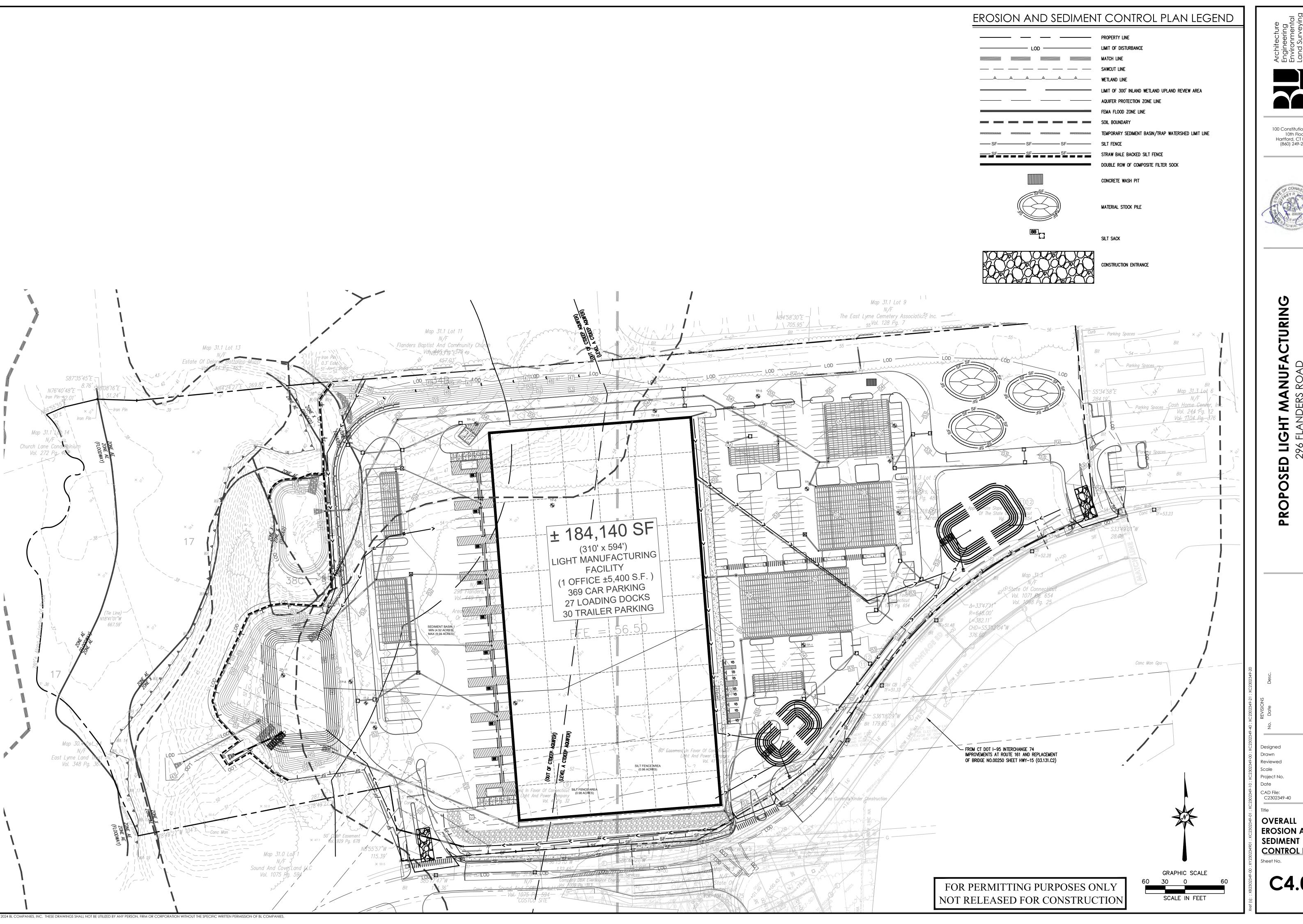
N.T.S.

DN2302349-10 SITE UTILITY

DETAILS

Sheet No.

C3.100

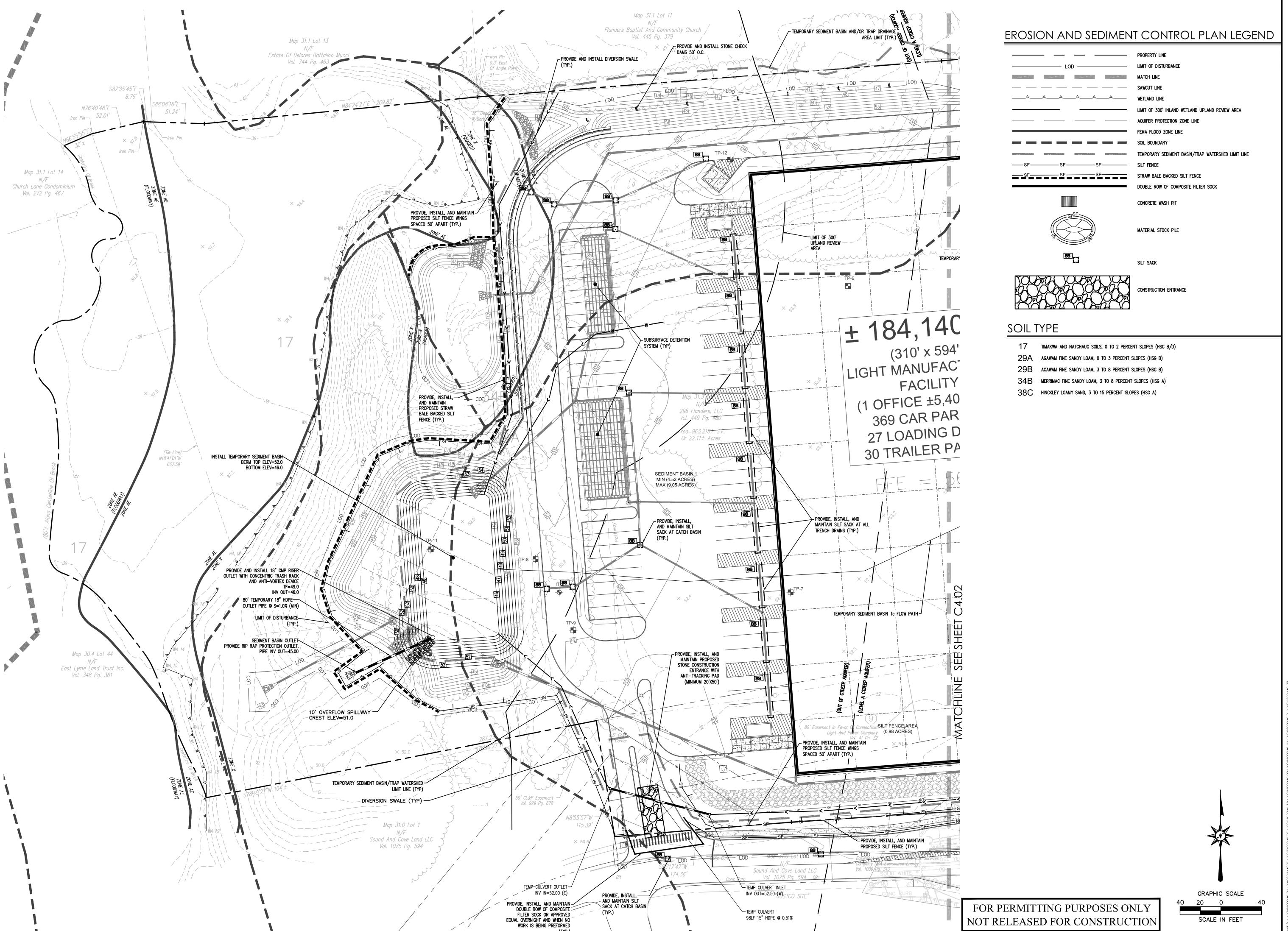






ED LIGHT MANUFACTURING 296 FLANDERS ROAD EAST LYME, CONNECTICUT

**EROSION AND** CONTROL PLAN







**MANUFACTURIN** 

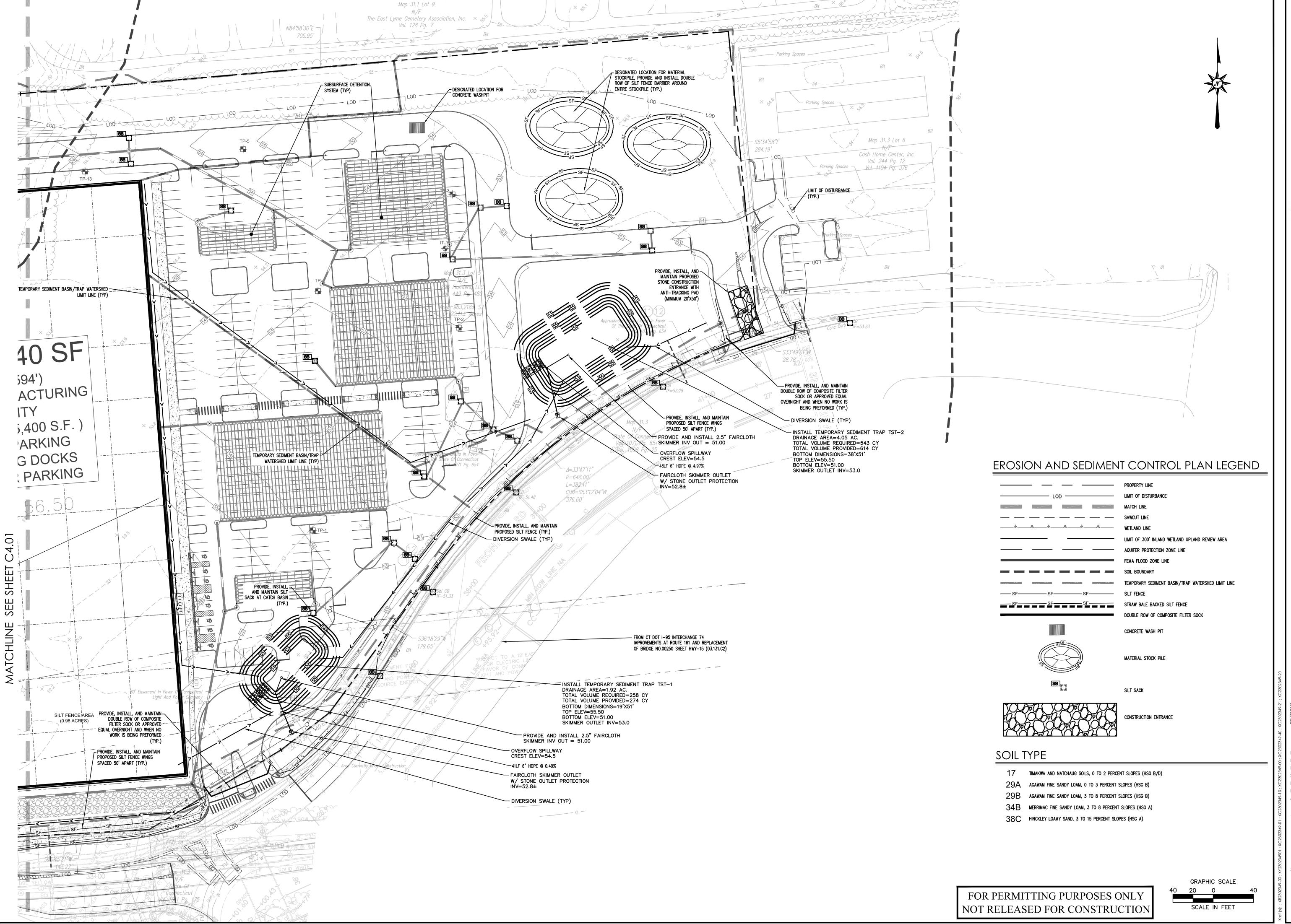
Designed C2302349-40

**EROSION AND** SEDIMENT

T.L.B. R.M.R.

2302349

**CONTROL PLAN** 





MANUFA SED

Designed

T.L.B. R.M.R. 2302349 06/17/2024

C2302349-40 **EROSION AND** 

SEDIMENT CONTROL PLAN

SEDIMENT AND EROSION CONTROL NOTES - CONNECTICUT

SEDIMENT & EROSION CONTROL NARRATIVE

THE SEDIMENT AND EROSION CONTROL PLAN WAS DEVELOPED TO PROTECT THE EXISTING ROADWAY AND STORM DRAINAGE SYSTEMS, ADJACENT PROPERTIES, AND ANY ADJACENT WETLAND AREA AND ANY ADJACENT WATER COURSE FROM SEDIMENT LADEN SURFACE RUNOFF AND EROSION. A CONSTRUCTION SEQUENCE IS PROVIDED TO PROVIDE SURFACE RUNOFF EROSION CONTROLS PRIOR TO THE BEGINNING OF PROJECT DEMOLITION AND/OR CONSTRUCTION.

THE ANTICIPATED STARTING DATE FOR CONSTRUCTION IS SPRING 2025 WITH COMPLETION ANTICIPATED FALL 2026 APPROPRIATE SEDIMENT AND EROSION CONTROL MEASURES AS DESCRIBED HEREIN SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ALL DEMOLITION OR CONSTRUCTION ACTIVITY. SCHEDULE WORK TO MINIMIZE THE LENGTH OF TIME THAT BARE SOIL WILL BE EXPOSED.

THE CONTRACTOR SHALL INSTALL ALL SPECIFIED SEDIMENT AND EROSION CONTROL MEASURES AND WILL BE REQUIRED TO MAINTAIN THEM IN THEIR INTENDED FUNCTIONING CONDITION. THE AGENTS OF THE MUNICIPALITY INLAND WETLANDS & WATERCOURSES COMMISSION AND/OR CIVIL ENGINEER SHALL HAVE THE AUTHORITY TO REQUIRE SUPPLEMENTAL MAINTENANCE OR ADDITIONAL MEASURES IF FIELD CONDITIONS ARE ENCOUNTERED BEYOND WHAT WOULD NORMALLY BE ANTICIPATED.

CONSTRUCTION SEQUENCE THE FOLLOWING CONSTRUCTION SEQUENCE IS RECOMMENDED:

- 1. CONTACT MUNICIPALITY INLAND WETLANDS & WATERCOURSES COMMISSION AGENT AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO COMMENCEMENT OF ANY DEMOLITION, CONSTRUCTION OR REGULATED ACTIVITY ON THIS PROJECT.
- 2. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD AND APPROVED BY THE MUNICIPALITY INLAND WETLANDS & WATERCOURSES COMMISSION AGENT PRIOR TO THE START OF WORK ON THE SITE. INSTALL TREE PROTECTION AND PERIMETER SILT FENCE.
- 3. CONSTRUCT STONE CONSTRUCTION ENTRANCE ANTI-TRACKING PADS AT CONSTRUCTION ENTRANCES/EXITS AND INSTALL FILTER FABRIC AROUND GRATES OF CATCH BASINS OR INSTALL SILT SACKS ON CATCH BASIN INLETS ON OFF SITE ROADS. INSTALL SILT FENCE AND OTHER EROSION CONTROL DEVICES INDICATED ON THESE PLANS AT PERIMETER OF PROPOSED SITE DISTURBANCE AND INSTALL ALL EROSION CONTROL MEASURES AND TREE PROTECTION INDICATED ON THESE PLANS. INSTALL SEDIMENT BASINS AND SEDIMENT TRAPS IF REQUIRED AT LOW AREAS OF SITE OR AS ORDERED BY THE ENGINEER OR AS SHOWN ON THESE PLANS.
- 4. CLEAR AND GRUB SITE. STOCKPILE CHIPS. STOCKPILE TOPSOIL. INSTALL SEDIMENT AND EROSION CONTROLS AT STOCKPILES.
- 5. BUILDING AND SITE DEMOLITION AND REMOVAL. PAVEMENT REMOVAL.
- 6. INSTALL SILT FENCE, CONSTRUCT DIVERSION SWALES AND SEDIMENT BASINS AND SEDIMENT TRAPS. COMMENCE INSTALLATION OF STORM DRAINAGE SYSTEM.
- 7. COMMENCE EARTHWORK. CONSTRUCT FILL SLOPE, ROADWAY AND RETAINING, WALLS. INSTALL ADDITIONAL SEDIMENT AND EROSION CONTROLS AS WORK PROGRESSES AND CONTINUE STORM DRAINAGE SYSTEM CONSTRUCTION. TOPSOIL AND SEED SLOPES WHICH HAVE ACHIEVED FINAL SITE GRADING.
- 8. CONSTRUCTION STAKING OF ALL BUILDING CORNERS, UTILITIES, ACCESS DRIVES, AND PARKING AREAS.
- 9. ROUGH GRADING AND FILLING OF SUBGRADES AND SLOPES.
- 10. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT
- 11. BEFORE DISPOSING OF SOIL OR RECEIVING BORROW FOR THE SITE, THE CONTRACTOR MUST PROVIDE EVIDENCE THAT EACH SPOIL OR BORROW AREA HAS A SEDIMENT AND EROSION CONTROL PLAN APPROVED BY THE MUNICIPALITY INLAND WETLANDS & WATERCOURSES COMMISSION AND WHICH IS BEING IMPLEMENTED AND MAINTAINED. THE CONTRACTOR SHALL ALSO NOTIFY THE MUNICIPALITY INLAND WETLANDS & WATERCOURSES COMMISSION IN WRITING OF ALL RECEIVING SPOIL AND BORROW AREAS WHEN THEY HAVE BEEN IDENTIFIED.
- 12. CONTINUE INSTALLATION OF STORM DRAINAGE AS SUBGRADE ELEVATIONS ARE ACHIEVED.
- 13. BUILDING FOUNDATION SUBGRADE AND PAD SUBGRADE PREPARATION.
- 14. BUILDING FOUNDATION CONSTRUCTION. BEGIN BUILDING SUPERSTRUCTURE
- 15. THROUGHOUT CONSTRUCTION SEQUENCE, REMOVE SEDIMENT FROM BEHIND SILT FENCES, HAY BALES AND OTHER EROSION CONTROL DEVICES, AND FROM SEDIMENT BASINS AND SEDIMENT TRAPS AS REQUIRED. REMOVAL SHALL BE ON A PERIODIC BASIS (EVERY SIGNIFICANT RAINFALL OF 0.25 INCH OR GREATER). INSPECTION OF SEDIMENT AND EROSION CONTROL MEASURES SHALL BE ON A WEEKLY BASIS AND AFTER EACH RAINFALL OF 0.25 INCHES OR GREATER. SEDIMENT COLLECTED SHALL BE DEPOSITED AND SPREAD EVENLY UPLAND ON SLOPES DURING CONSTRUCTION.
- 16. INSTALL SANITARY LATERAL AND UTILITIES. COMPLETE STORM DRAINAGE SYSTEM.
- 17. INSTALL SITE LIGHTING AND TRASH ENCLOSURE.
- 18. COMPLETE GRADING TO SUBGRADES AND CONSTRUCT PARKING AREA SUBGRADE
- 19. CONSTRUCT CURBS, PAVEMENT STRUCTURE AND SIDEWALKS.
- 20. CONDUCT FINE GRADING.
- 21. CONSTRUCT OFF SITE ROADWAY AND SIGNAL IMPROVEMENTS 22. PAVING OF PARKING AREAS AND DRIVEWAYS
- 23. FINAL FINE GRADING OF SLOPE AND NON-PAVED AREAS.
- 24. PLACE 4" TOPSOIL ON SLOPES AFTER FINAL GRADING IS COMPLETED. FERTILIZE SEED AND MULCH. SEED MIXTURE TO BE INSTALLED APRIL 15 JUNE 1 OR AUGUST 15 - OCTOBER 1. USE EROSION CONTROL BLANKETS AS REQUIRED OR ORDERED FOR SLOPES GREATER THAN 3:1 AND AS SHOWN ON LANDSCAPE PLANS OR EROSION CONTROL PLANS. FOR TEMPORARY STABILIZATION BEYOND SEEDING DATES USE ANNUAL RYE AT 4.0 LBS/1,000 S.F. FERTILIZE WITH 10-10-10 AT 1.0 LBS. OF NITROGEN PER 1,000 S.F. AND LIME AT 100 LBS/1,000 S.F. (MAX.).
- 25. LANDSCAPE ISLANDS, INTERIOR NON-PAVED AREAS, AND PERIMETER AREAS.
- 26. INSTALL SIGNING AND PAVEMENT MARKINGS
- 27. CLEAN STORM DRAINAGE PIPE STRUCTURES, DETENTION SYSTEMS AND WATER QUALITY DEVICES OF DEBRIS AND SEDIMENT.
- 28. UPON DIRECTION OF THE MUNICIPALITY INLAND WETLANDS & WATERCOURSES COMMISSION AGENT, SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED FOLLOWING STABILIZATION OF THE SITE.

#### OPERATION REQUIREMENTS

CLEARING AND GRUBBING OPERATIONS

- 1. ALL SEDIMENT AND EROSION CONTROL MEASURES. INCLUDING THE CONSTRUCTION OF TEMPORARY SEDIMENTATION BASINS AND STONE CONSTRUCTION ENTRANCE ANTI-TRACKING PADS, WILL BE INSTALLED PRIOR TO THE START OF CLEARING AND GRUBBING AND DEMOLITION OPERATIONS.
- 2. FOLLOWING INSTALLATION OF ALL SEDIMENT AND EROSION CONTROL MEASURES, THE CONTRACTOR SHALL NOT PROCEED WITH GRADING, FILLING OR OTHER CONSTRUCTION OPERATIONS UNTIL THE ENGINEER HAS INSPECTED AND APPROVED ALL INSTALLATIONS.
- 3. THE CONTRACTOR SHALL TAKE EXTREME CARE DURING CLEARING AND GRUBBING OPERATIONS SO AS NOT TO DISTURB UNPROTECTED WETLAND AREAS OR SEDIMENT AND EROSION CONTROL DEVICES.
- 4. FOLLOWING THE COMPLETION OF CLEARING AND GRUBBING OPERATIONS. ALL AREAS SHALL BE STABILIZED WITH TOPSOIL AND SEEDING OR CRUSHED STONE AS SOON AS PRACTICAL

#### ROUGH GRADING OPERATIONS

- 1. DURING THE REMOVAL AND/OR PLACEMENT OF EARTH AS INDICATED ON THE GRADING PLAN, TOPSOIL SHALL BE STRIPPED AND APPROPRIATELY STOCKPILED
- 2. ALL STOCKPILED TOPSOIL SHALL BE SEEDED, MULCHED WITH HAY, AND ENCLOSED BY A SILTATION FENCE.

- 1. PRIOR TO FILLING, ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE PROPERLY IMPLEMENTED, MAINTAINED AND FULLY INSTALLED, AS DIRECTED BY THE ENGINEER AND AS SHOWN ON THIS PLAN.
- 2. ALL FILL MATERIAL ADJACENT TO ANY WETLAND AREAS, IF APPLICABLE TO THIS PROJECT, SHALL BE GOOD QUALITY, WITH LESS THAN 5% FINES PASSING THROUGH A #200 SIEVE (BANK RUN). SHALL BE PLACED IN LIFT THICKNESSES NOT GREATER THAN THAT SPECIFIED IN PROJECT SPECIFICATIONS AND/OR THE PROJECT GEOTECHNICAL REPORT. LIFTS SHALL BE COMPACTED TO 95% MAX. DRY DENSITY MODIFIED PROCTOR OR AS SPECIFIED IN THE CONTRACT
- SPECIFICATIONS OR IN THE GEOTECHNICAL REPORT. . AS GENERAL GRADING OPERATIONS PROGRESS, ANY TEMPORARY DIVERSION DITCHES SHALL BE RAISED OR LOWERED, AS NECESSARY, TO DIVERT SURFACE RUNOFF TO THE SEDIMENT BASINS OR SEDIMENT TRAPS.
- PLACEMENT OF DRAINAGE STRUCTURES, UTILITIES, AND BUILDING CONSTRUCTION OPERATIONS.
- 1. SILT FENCES SHALL BE INSTALLED AT THE DOWNHILL SIDES OF BUILDING EXCAVATIONS, MUD PUMP DISCHARGES, AND UTILITY TRENCH MATERIAL STOCKPILES. HAY BALES/STRAW BALES MAY BE USED IF SHOWN ON THE SEDIMENT AND EROSION CONTROL PLANS OR IF DIRECTED BY THE CIVIL ENGINEER.
- FINAL GRADING AND PAVING OPERATIONS
- 1. ALL INLET AND OUTLET PROTECTION SHALL BE PLACED AND MAINTAINED AS SHOWN ON SEDIMENT AND EROSION CONTROL PLANS AND DETAILS, AND AS DESCRIBED IN SPECIFICATIONS AND AS DESCRIBED HEREIN.
- 2. NO CUT OR FILL SLOPES SHALL EXCEED 2:1 EXCEPT WHERE STABILIZED BY ROCK FACED EMBANKMENTS OR EROSION CONTROL BLANKETS, OR JUTE MESH AND VEGETATION. ALL SLOPES SHALL BE SEEDED, AND ANY ROAD OR DRIVEWAY SHOULDER AND BANKS SHALL BE STABILIZED IMMEDIATELY UPON COMPLETION OF FINAL GRADING UNTIL TURF IS ESTABLISHED.
- 3. PAVEMENT SUB-BASE AND BASE COURSES SHALL BE INSTALLED OVER AREAS TO BE PAVED AS SOON AS FINAL SUB-GRADES ARE ESTABLISHED AND UNDERGROUND UTILITIES AND STORM DRAINAGE SYSTEMS HAVE BEEN INSTALLED.
- 4. AFTER CONSTRUCTION OF PAVEMENT, TOPSOIL, FINAL SEED, MULCH AND LANDSCAPING, REMOVE ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES ONLY AFTER ALL AREAS HAVE BEEN PAVED AND/OR GRASS HAS BEEN WELL ESTABLISHED AND THE SITE IS STABLE AND HAS BEEN INSPECTED AND APPROVED BY THE MUNICIPALITY INLAND WETLANDS & WATERCOURSES COMMISSION.

### INSTALLATION OF SEDIMENTATION AND EROSION CONTROL MEASURES

- DIG A SIX INCH TRENCH ON THE UPHILL SIDE OF THE DESIGNATED FENCE LINE LOCATION.
- B. POSITION THE POST AT THE BACK OF THE TRENCH (DOWNHILL SIDE), AND HAMMER THE POST AT LEAST 1.5 FEET INTO THE GROUND.
- C. LAY THE BOTTOM SIX INCHES OF THE FABRIC INTO THE TRENCH TO PREVENT UNDERMINING BY STORM WATER RUN-OFF.
- D. BACKFILL THE TRENCH AND COMPACT.

- HAY BALES/STRAW BALES
- BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE, ORIENTED PARALLEL TO THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE
- B. BALES SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER TO A MINIMUM DEPTH OF FOUR INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AGAINST THE BARRIER.
- C. EACH BALE SHALL BE SECURELY ANCHORED BY AT LEAST TWO (2) STAKES.
- D. THE GAPS BETWEEN BALES SHALL BE WEDGED WITH STRAW TO PREVENT WATER LEAKAGE.

ON-SITE AT ALL TIMES FOR INSPECTION BY CT DEEP, LOCAL AUTHORITIES OR ENGINEER.

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 ENSURE THAT RUN-OFF WILL FLOW EITHER THROUGH OR OVER THE BARRIER, BUT NOT AROUND IT.

#### OPERATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES

- ALL SILTATION FENCES SHALL BE INSPECTED AS A MINIMUM WEEKLY OR AFTER EACH RAINFALL. ALL DETERIORATED FABRIC AND DAMAGED POSTS SHALL BE REPLACED AND PROPERLY REPOSITIONED IN ACCORDANCE WITH THIS PLAN.
- B. SEDIMENT DEPOSITS SHALL BE REMOVED FROM BEHIND THE FENCE WHEN THEY REACH A MAXIMUM HEIGHT OF ONE FOOT.
- II. HAY BALES/STRAW BALES A. ALL HAY BALE/STRAW BALE RINGS SHALL BE INSPECTED FOLLOWING EACH RAINFALL. REPAIR OR REPLACEMENT SHALL BE PROMPTLY MADE AS NEEDED.
- B. DEPOSITS SHALL BE REMOVED AND CLEANED-OUT IF ONE HALF OF THE ORIGINAL HEIGHT OF THE BALES BECOMES FILLED WITH SEDIMENT.
- SEDIMENT BASINS/SEDIMENT TRAPS CONTRACTOR TO KEEP WEEKLY CHECKLIST LOGS FOR INSPECTIONS OF ALL SEDIMENT AND EROSION CONTROL DEVICES AND HAVE THEM READILY AVAILABLE
- B. ALL SEDIMENT BASINS AND/OR SEDIMENT TRAPS SHALL BE INSPECTED FOLLOWING EACH RAINFALL. REPAIR OF SLOPES SHALL BE PROMPTLY MADE AS
- C. SEDIMENT DEPOSITS SHALL BE REMOVED FROM SEDIMENT BASINS AND/OR SEDIMENT TRAPS WHEN THEY REACH A MAXIMUM HEIGHT OF ONE FOOT UNLESS OTHERWISE INDICATED ON THE EROSION CONTROL PLANS AND DETAILS TO BE AT A SPECIFIC ELEVATION PER CLEAN OUT MARKERS.
- D. SEDIMENT SHALL BE DISPOSED OF ON-SITE OR AS DIRECTED BY THE ENGINEER AND LOCAL GOVERNING OFFICIALS. SEE SEDIMENT AND EROSION CONTROL NOTES HEREIN REGARDING DISPOSAL REQUIREMENTS FOR OFF SITE SPOIL DISPOSAL.
- SEDIMENT AND EROSION CONTROL PLAN 1. HAY BALE/STRAW BALE FILTERS WILL BE INSTALLED AT ALL CULVERT OUTLETS IF CULVERT OUTLETS ARE APPLICABLE TO THIS PROJECT AND SILTATION FENCE INSTALLED ALONG THE TOE OF ALL CRITICAL CUT AND FILL SLOPES.
- 2. CULVERT DISCHARGE AREAS WILL BE PROTECTED WITH RIP RAP CHANNELS. ENERGY DISSIPATORS WILL BE INSTALLED AS SHOWN ON THESE PLANS AND AS
- 3. CATCH BASINS WILL BE PROTECTED WITH HAY BALE/STRAW BALE FILTERS, SILT SACKS, SILTATION FENCE, OR OTHER INLET PROTECTION DEVICES PER DETAILS,
- THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED. 4. ALL SEDIMENT AND EROSION CONTROL MEASURES WILL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE 2023 CONNECTICUT
- GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION. 5. SEDIMENT AND EROSION CONTROL MEASURES WILL BE INSTALLED PRIOR TO DEMOLITION AND/OR CONSTRUCTION WHENEVER POSSIBLE.
- 6. ALL CONTROL MEASURES WILL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE DEMOLITION AND CONSTRUCTION PERIOD UNTIL THE SITE IS DETERMINED TO BE STABILIZED BY THE AUTHORITY HAVING JURISDICTION.
- 7. ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING THE CONSTRUCTION PERIOD, IF NECESSARY OR REQUIRED OR AS DIRECTED BY THE CIVIL ENGINEER OR BY THE AUTHORITY HAVING JURISDICTION.
- 8. SEDIMENT REMOVED FROM EROSION CONTROL STRUCTURES WILL BE DISPOSED IN A MANNER WHICH IS CONSISTENT WITH THE INTENT AND REQUIREMENTS OF THE SEDIMENT AND EROSION CONTROL PLANS, NOTES, AND DETAILS.
- 9. OWNER'S CONSTRUCTION REPRESENTATIVE IS ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS SEDIMENT AND EROSION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN. NOTIFICATION OF THE MUNICIPALITY INLAND WETLANDS & WATERCOURSES COMMISSION OFFICE OR AUTHORITY HAVING JURISDICTION OF ANY TRANSFER OF THIS RESPONSIBILITY AND FOR CONVEYING A COPY OF THE SEDIMENT AND EROSION CONTROL PLAN IF

#### SEDIMENT AND EROSION CONTROL NOTES

THE TITLE TO THE LAND IS TRANSFERRED.

- . THE SEDIMENT AND EROSION CONTROL PLAN IS ONLY INTENDED TO DESCRIBE THE SEDIMENT AND EROSION CONTROL TREATMENT FOR THIS SITE. SEE SEDIMENT AND EROSION CONTROL DETAILS AND CONSTRUCTION SEQUENCE. REFER TO SITE PLAN FOR GENERAL INFORMATION AND OTHER CONTRACT PLANS FOR APPROPRIATE INFORMATION.
- 2. OWNER'S CONSTRUCTION REPRESENTATIVE IS RESPONSIBLE FOR IMPLEMENTING THIS SEDIMENT AND EROSION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE PROPER INSTALLATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED WITH CONSTRUCTION ON THE SITE OF THE REQUIREMENTS AND OBJECTIVES OF THIS PLAN, INFORMING THE AUTHORITY HAVING JURISDICTION OR COUNTY SOILS CONSERVATION DISTRICT OR INLAND WETLANDS AGENCY OF ANY TRANSFER OF THIS RESPONSIBILITY, AND FOR CONVEYING A COPY OF THE SEDIMENT & EROSION CONTROL PLAN IF THE
- 3. AN EROSION CONTROL BOND MAY BE REQUIRED TO BE POSTED WITH MUNICIPALITY INLAND WETLAND & WATERCOURSES AGENCY TO ENSURE IMPLEMENTATION OF THE SEDIMENT AND EROSION CONTROL MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POSTING OF THIS BOND AND FOR INQUIRIES TO THE MUNICIPALITY FOR INFORMATION ON THE METHOD, TYPE AND AMOUNT OF THE BOND POSTING UNLESS OTHERWISE DIRECTED BY THE OWNER.
- 4. VISUAL SITE INSPECTIONS SHALL BE CONDUCTED WEEKLY, AND AFTER EACH MEASURABLE PRECIPITATION EVENT OF 0.25 INCHES OR GREATER BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN SEDIMENT AND EROSION CONTROL, TO ASCERTAIN THAT THE SEDIMENT AND EROSION CONTROL (E&S) BMPS ARE OPERATIONAL AND EFFECTIVE IN PREVENTING POLLUTION. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT, AND INCLUDE: A) A SUMMARY OF THE SITE CONDITIONS, E&S BMPS, AND COMPLIANCE; AND
- C) TURBIDITY TESTING AS REQUIRED BY THE GENERAL PERMIT (NPDES). 5. THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT AND EROSION CONTROLS IN ACCORDANCE WITH 2023 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL LATEST EDITION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND AS DIRECTED BY THE MUNICIPALITY INLAND WETLANDS & WATERCOURSES COMMISSION. THE CONTRACTOR SHALL KEEP A COPY OF THE GUIDELINES ON-SITE FOR REFERENCE DURING CONSTRUCTION.
- 6. ADDITIONAL AND/OR ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE CONTRACTOR, OWNER, SITE ENGINEER, MUNICIPALITY INLAND WETLANDS & WATERCOURSES COMMISSION, OR GOVERNING AGENCIES. THE CONTRACTOR SHALL CONTACT THE OWNER AND APPROPRIATE GOVERNING AGENCIES FOR APPROVAL IF ALTERNATIVE CONTROLS OTHER THAN THOSE SHOWN ON THE PLANS
- 7. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROLS BEFORE AND AFTER EACH STORM (0.25 INCHES OR GREATER RAINFALL), OR AT LEAST WEEKLY. TO VERIFY THAT THE CONTROLS ARE OPERATING PROPERLY AND MAKE REPAIRS WHERE NECESSARY.
- 8. THE CONTRACTOR SHALL KEEP A SUPPLY OF SEDIMENT AND EROSION CONTROL MATERIAL (HAY BALES, SILT FENCE, JUTE MESH, RIP RAP, ETC.) ON-SITE FOR MAINTENANCE AND EMERGENCY REPAIRS.
- 9. PROTECT EXISTING TREES THAT ARE TO BE SAVED BY FENCING AT THE DRIP LINE OR AS SHOWN WITH SNOW FENCE, ORANGE SAFETY FENCE, OR EQUIVALENT FENCING. ANY LIMB TRIMMING SHOULD BE DONE BEFORE CONSTRUCTION BEGINS IN THAT AREA; FENCING SHALL BE MAINTAINED AND REPAIRED DURING
- 10. INSTALL PERIMETER SEDIMENT AND EROSION CONTROLS PRIOR TO CLEARING OR CONSTRUCTION. ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE LIMIT OF DISTURBANCE, WHICH SHALL BE MARKED WITH SILT FENCE, SAFETY FENCE, HAY BALES, RIBBONS, OR OTHER MEANS PRIOR TO CLEARING. CONSTRUCTION ACTIVITY SHALL REMAIN ON THE UPHILL SIDE OF THE SILT FENCE UNLESS WORK IS SPECIFICALLY CALLED FOR ON THE DOWNHILL SIDE OF THE FENCE.
- 11. STONE CONSTRUCTION ENTRANCE ANTI-TRACKING PADS SHALL BE INSTALLED AT START OF CONSTRUCTION AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION. THE LOCATION OF THE TRACKING PADS MAY CHANGE AS VARIOUS PHASES OF CONSTRUCTION ARE COMPLETED. 12. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR USE IN FINAL LANDSCAPING. ALL EARTH STOCKPILES SHALL HAVE HAY BALES OR SILT FENCE AROUND
- THE LIMIT OF PILE. PILES SHALL BE TEMPORARILY SEEDED IF PILE IS TO REMAIN IN PLACE FOR MORE THAN ONE (1) MONTH. 13. SEDIMENT BASINS AND SEDIMENT TRAPS SHALL PROVIDE 134 CUBIC YARDS OF SEDIMENT STORAGE PER ACRE CONTRIBUTING TO THE BASIN. PROVIDE BASIN
- VOLUMES FOR ALL DISTURBANCE ON SITE. 14. COMPLY WITH REQUIREMENTS OF CGS SECTION 22A 430B, FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES AND WITH CT DEEP RECORD KEEPING
- AND INSPECTION REQUIREMENTS. 15. STONE CONSTRUCTION ENTRANCE ANTI-TRACKING PADS SHALL BE INSTALLED PRIOR TO ANY ON SITE EXCAVATION AND SHALL BE MAINTAINED DURING ALL
- 16. MINIMIZE LAND DISTURBANCES. SEED AND MULCH DISTURBED AREAS WITH TEMPORARY MIX AS SOON AS PRACTICABLE (ONE WEEK MAXIMUM UNSTABILIZED PERIOD) USING PERENNIAL RYEGRASS AT 40 LBS PER ACRE. MULCH ALL CUT AND FILL SLOPES AND SWALES WITH LOOSE HAY AT A RATE OF 2 TONS PER ACRE. IF NECESSARY. REPLACE LOOSE HAY ON SLOPES WITH EROSION CONTROL BLANKETS OR JUTE CLOTH. MODERATELY GRADED AREAS, ISLANDS, AND TEMPORARY CONSTRUCTION STAGING AREAS MAY BE HYDROSEEDED WITH TACKIFIER.
- 17. MAINTAIN EXISTING PAVED AREAS FOR CONSTRUCTION STAGING FOR AS LONG AS POSSIBLE.

DEMOLITION, EXCAVATION AND CONSTRUCTION ACTIVITIES.

B) THE DATE, TIME, AND THE NAME OF THE PERSON CONDUCTING THE INSPECTION

- 18. SILT FENCE AND OTHER SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH CONTRACT DRAWINGS AND MANUFACTURER'S RECOMMENDATIONS PRIOR TO WORK IN ANY UPLAND AREAS.
- 19. EXCAVATED MATERIAL FROM TEMPORARY SILT TRAPS MUST BE STOCKPILED ON UPHILL SIDE OF SILT FENCE.
- 20. INSTALL SILT FENCE ACCORDING TO MANUFACTURER'S INSTRUCTION, PARTICULARLY, BURY LOWER EDGE OF FABRIC INTO GROUND. SILT FENCE SHALL BE TENCATE ENVIROFENCE, PROPEX GEOTEX OR EQUIVALENT APPROVED BY THE CIVIL ENGINEER. FILTER FABRIC USED SHALL BE TENCATE 140N OR 170N, OR APPROVED EQUIVALENT. SEE SPECIFICATIONS FOR FURTHER INFORMATION.
- 21. WHERE INDICATED ON SEDIMENT AND EROSION CONTROL PLANS USE NEW HAY/STRAW BALES AND REPLACE THEM WHENEVER THEIR CONDITION DETERIORATES BEYOND REASONABLE USABILITY. STAKE BALES SECURELY INTO GROUND AND BUTT TIGHTLY TOGETHER TO PREVENT UNDERCUTTING AND BYPASSING.
- 22. INSTALL TEMPORARY DIVERSION DITCHES, PLUNGE POOLS, SEDIMENT BASINS, SEDIMENT TRAPS, CONCRETE WASH PITS AND DEWATERING PITS AS SHOWN AND AS NECESSARY DURING VARIOUS PHASES OF CONSTRUCTION TO CONTROL RUNOFF UNTIL UPHILL AREAS ARE DETERMINED TO BE STABILIZED BY THE AUTHORITY HAVING JURISDICTION. LOCATION OF TEMPORARY SEDIMENT BASINS WILL REQUIRE REVIEW AND APPROVAL BY THE CIVIL ENGINEER AND AUTHORITY HAVING JURISDICTION.
- 23. DIRECT ALL DEWATERING PUMP DISCHARGE TO A SEDIMENT CONTROL DEVICE SUCH AS TEMPORARY PITS, SEDIMENT TRAP, SEDIMENT BASINS OR GRASS FILTERS WITHIN THE APPROVED LIMIT OF DISTURBANCE. DISCHARGE TO STORM DRAINAGE SYSTEM OR SURFACE WATERS FROM SEDIMENT CONTROLS SHALL BE CLEAR.
- 24. SWEEP AFFECTED PORTIONS OF OFF SITE ROADS ONE OR MORE TIMES A DAY (OR LESS FREQUENTLY IF TRACKING IS NOT A PROBLEM) DURING CONSTRUCTION. OTHER DUST CONTROL MEASURES TO BE USED AS NECESSARY INCLUDE WATERING DOWN DISTURBED AREAS, USING CALCIUM CHLORIDE, AND COVERING LOADS
- 25. PERIODICALLY CHECK ACCUMULATED SEDIMENT LEVELS IN THE SEDIMENT BASINS AND SEDIMENT TRAPS DURING CONSTRUCTION AND CLEAN ACCUMULATED SILT

- WHEN NECESSARY OR WHEN ONE FOOT OF SEDIMENT HAS ACCUMULATED OR PER SPECIFIC CLEANOUT MARKER ELEVATION. CLEAN ACCUMULATED SEDIMENT FROM CATCH BASIN SUMPS AS NECESSARY AND AS DIRECTED BY THE CIVIL ENGINEER OR OWNER'S CONSTRUCTION REPRESENTATIVE. REMOVE ACCUMULATED SEDIMENT FROM BEHIND HAY/STRAW BALES AND SILT FENCE WHEN LEVEL REACHES HALF THE HEIGHT OF THE BALE OR ONE FOOT AT SILT FENCE. DISPOSE OF SEDIMENT LEGALLY EITHER ON OR OFF SITE.
- 26. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION. THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT
- 27. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG OR EQUIVALENT SEDIMENT
- REMOVAL FACILITY, OVER UNDISTURBED VEGETATED AREAS. 28. ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF UTILITY AND STORM PIPE TRENCHES SO AS TO ALLOW THE TRENCH TO INTERCEPT ALL
- SILT LADEN RUNOFF 29. CONTRACTOR SHALL ONLY EXCAVATE AS MUCH UTILITY AND STORM PIPE TRENCH WORK AS CAN BE COMPLETED, BACKFILLED AND STABILIZED IN ONE DAY SO
- 30. ANY STOCKPILES OF STRIPPED MATERIALS ARE TO BE PERIODICALLY SPRAYED WITH WATER OR A CRUSTING AGENT TO STABILIZE POTENTIALLY WIND-BLOWN MATERIAL. HAUL ROADS BOTH INTO AND AROUND THE SITE ARE TO BE SPRAYED AS NEEDED TO SUPPRESS DUST. TRUCKS HAULING IMPORT FILL MATERIAL ARE TO BE TARPED TO AID IN THE CONTROL OF AIRBORNE DUST. DURING HIGH WIND EVENTS (20 TO 30 MPH SUSTAINED) CONSTRUCTION ACTIVITY SHALL BE LIMITED OR CEASED IF DUST CANNOT BE CONTROLLED BY WETTING.

AS TO LIMIT THE AMOUNT OF OPEN, DISTURBED TRENCHING.

- 31. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM OF 70% UNIFORM PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING OR OTHER MOVEMENTS UNLESS OTHERWISE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.
- 32. MAINTAIN ALL PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD. UPON COMPLETION OF WORK SWEEP PARKING LOT AND REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS WHEN AUTHORIZED BY AUTHORITY HAVING JURISDICTION. FILE NOT (NOTICE OF TERMINATION) WITH AUTHORITY HAVING JURISDICTION RESPONSIBLE FOR REGULATING STORM WATER DISCHARGES FROM



100 Constitution Plaza Hartford, CT 06103

(860) 249-2200



2

ш S

Designed Reviewed Scale Project No. 06/17/2024

J.P.D.

T.L.B. R.M.R.

N.T.S

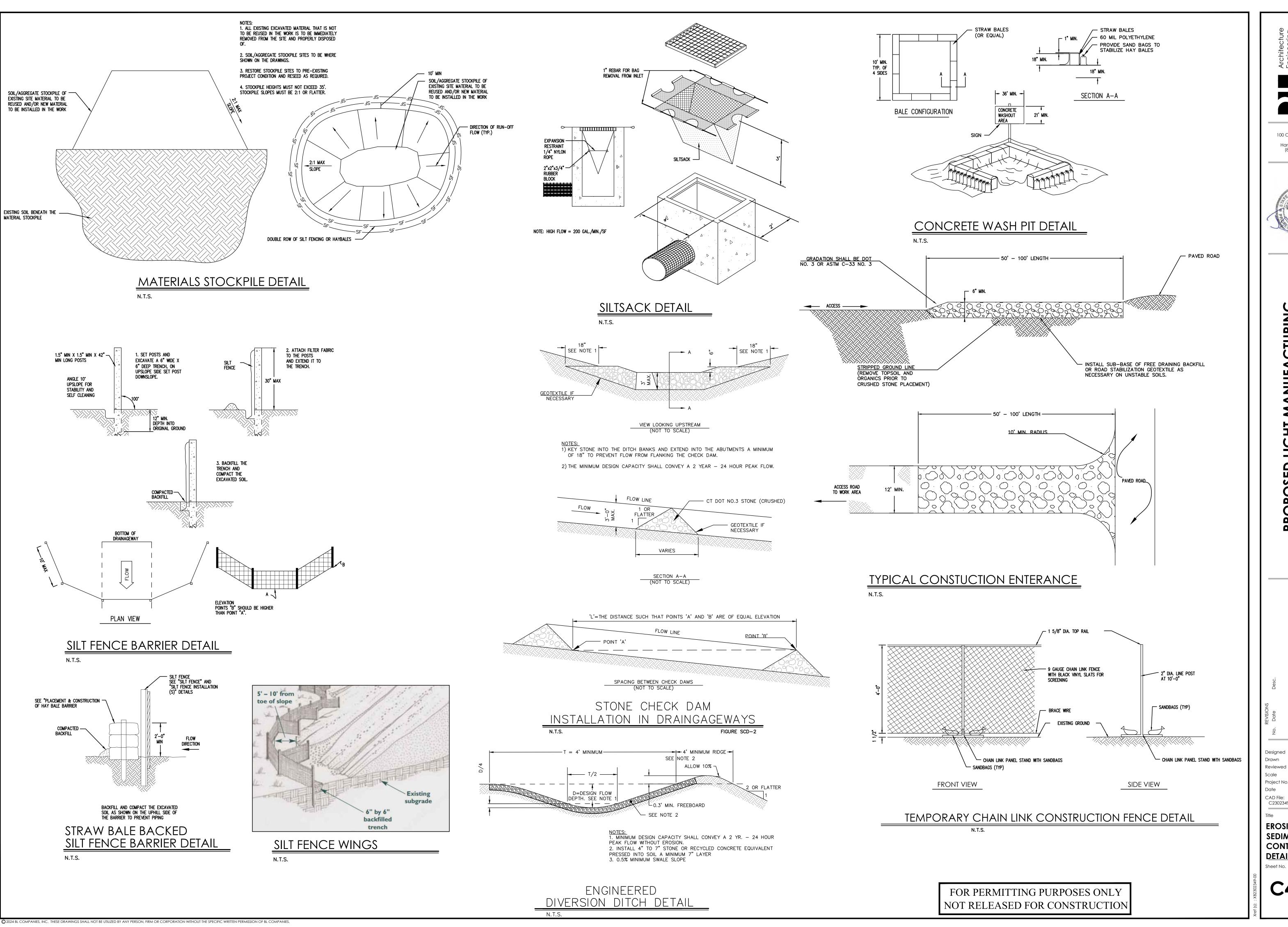
2302349

CAD File C2302349-410

**EROSION AND SEDIMENT** CONTROL NOTES

FOR PERMITTING PURPOSES ONLY

NOT RELEASED FOR CONSTRUCTION





TURIN

ED S 80

J.P.D. T.L.B. R.M.R. N.T.S. 2302349

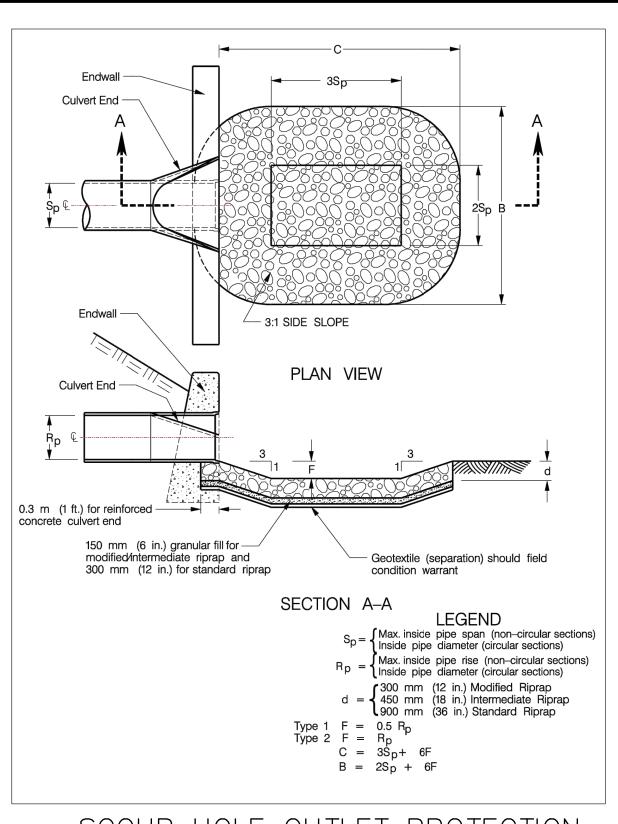
Reviewed Project No. 06/17/2024

C2302349-410 **EROSION AND** 

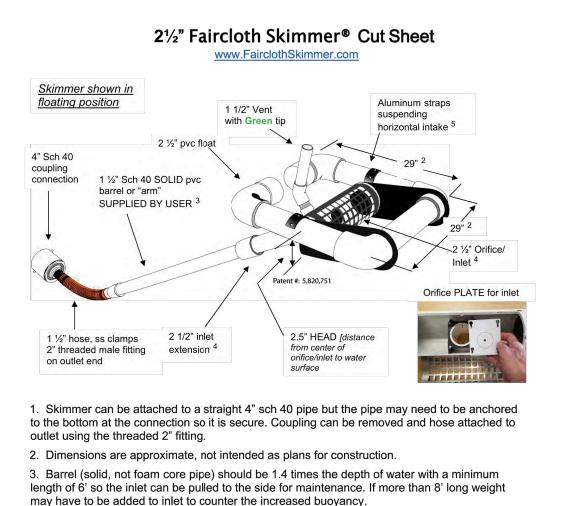
**SEDIMENT** CONTROL **DETAILS** 

TEMPORARY SEDIMENTATION BASIN -OUTLET WITH CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE

N.T.S.



SCOUR HOLE OUTLET PROTECTION



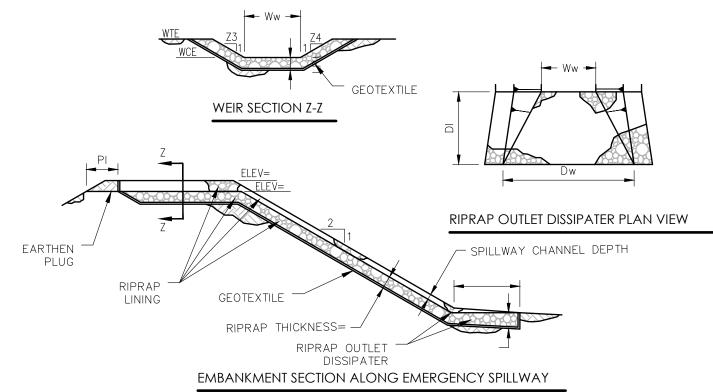
4. Orifice/inlet tapers down from 2 ½" maximum inlet to a 1½" barrel and hose. Barrel is smaller to reduce buoyancy and tendency to lift inlet but is sufficient for flow through inlet because of slope. The orifice/inlet can be reduced using the plate and cutter provided to control the outflow rate – see #6.

5. Horizontal intake is 5" pipe between the straps with aluminum screen door for access to the 2½" inlet and orifice inside.

6. Capacity: 6,234 cubic feet per day maximum with 2½" inlet and 2.5 head. Inlet can be reduced by installing a smaller orifice using the plate and cutter provided to adjust flow rate for the particular drawdown time required. Please use the sizing template at www.fairclothskimmer.com

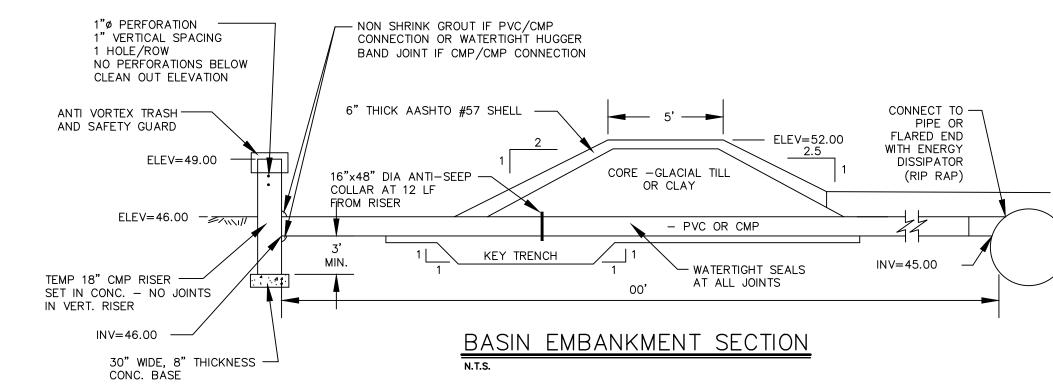
7. Ships assembled. User glues inlet extension and barrel, installs vent, cuts orifice in plate and attaches to outlet pipe or structure. Includes float, flexible hose, rope, and orifice plate and cutter. Does NOT include 1 ½" Sch 40 SOLID pvc barrel or "arm" SUPPLIED BY USER.

SEDIMENT TRAP SKIMMER



DIMENSION PI SHALL BE 5' MINIMUM.

### SEDIMENT BASIN EMERGENCY SPIILLWAY WITH RIPRAP LINING DETAIL



CLEAN OUT STAKES MUST BE PLACED AT HALF DISTANCES FROM POINT OF CONCENTRATED INFLOWS TO TEMPORARY RISERS. WHEN SEDIMENT HAS ACCUMULATED TO THE CLEAN OUT ELEVATION ON ANY STAKE, THE SEDIMENT MUST BE REMOVED TO RESTORE BASIN CAPACITIES.

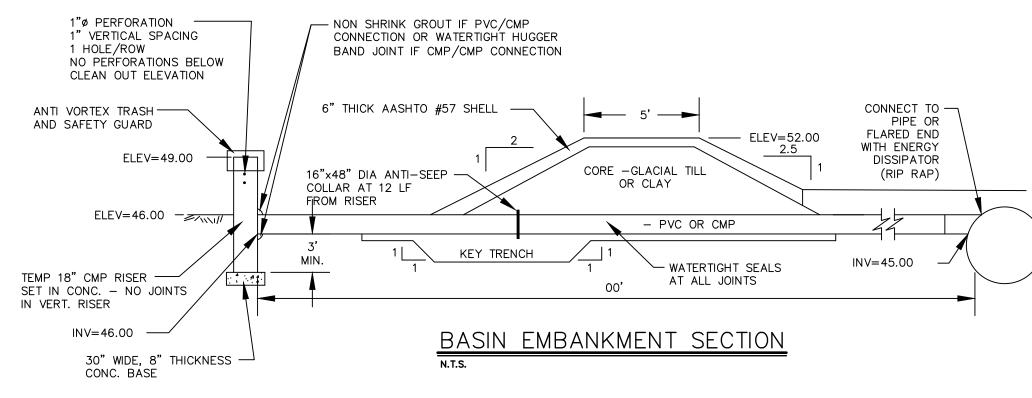
SEDIMENTATION BASINS AND TRAPS MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.

ALL RISER PIPE CONNECTION SEALS SHALL BE WATERTIGHT.

TEMPORARY SEDIMENT BASIN BLEC-001

DISPLACED RIPRAP WITHIN THE SPILLWAY AND/OR OUTLET CHANNEL SHALL BE REPLACED IMMEDIATELY.

PADEP-7-12



Designed Drawn R.M.R. Reviewed Scale 2302349 Project No. 06/17/2024 Date

J.P.D.

T.L.B.

N.T.S.

100 Constitution Plaza

Hartford, CT 06103 (860) 249-2200

N N

ED

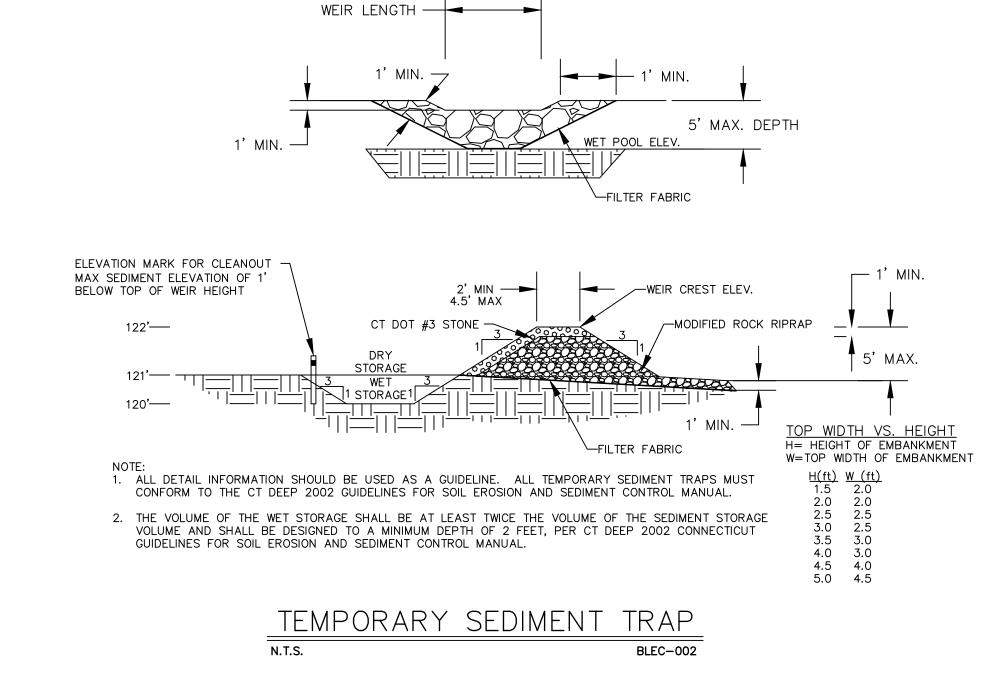
S

0

CAD File: C2302349-410

**EROSION AND SEDIMENT** CONTROL **DETAILS** 

Sheet No.

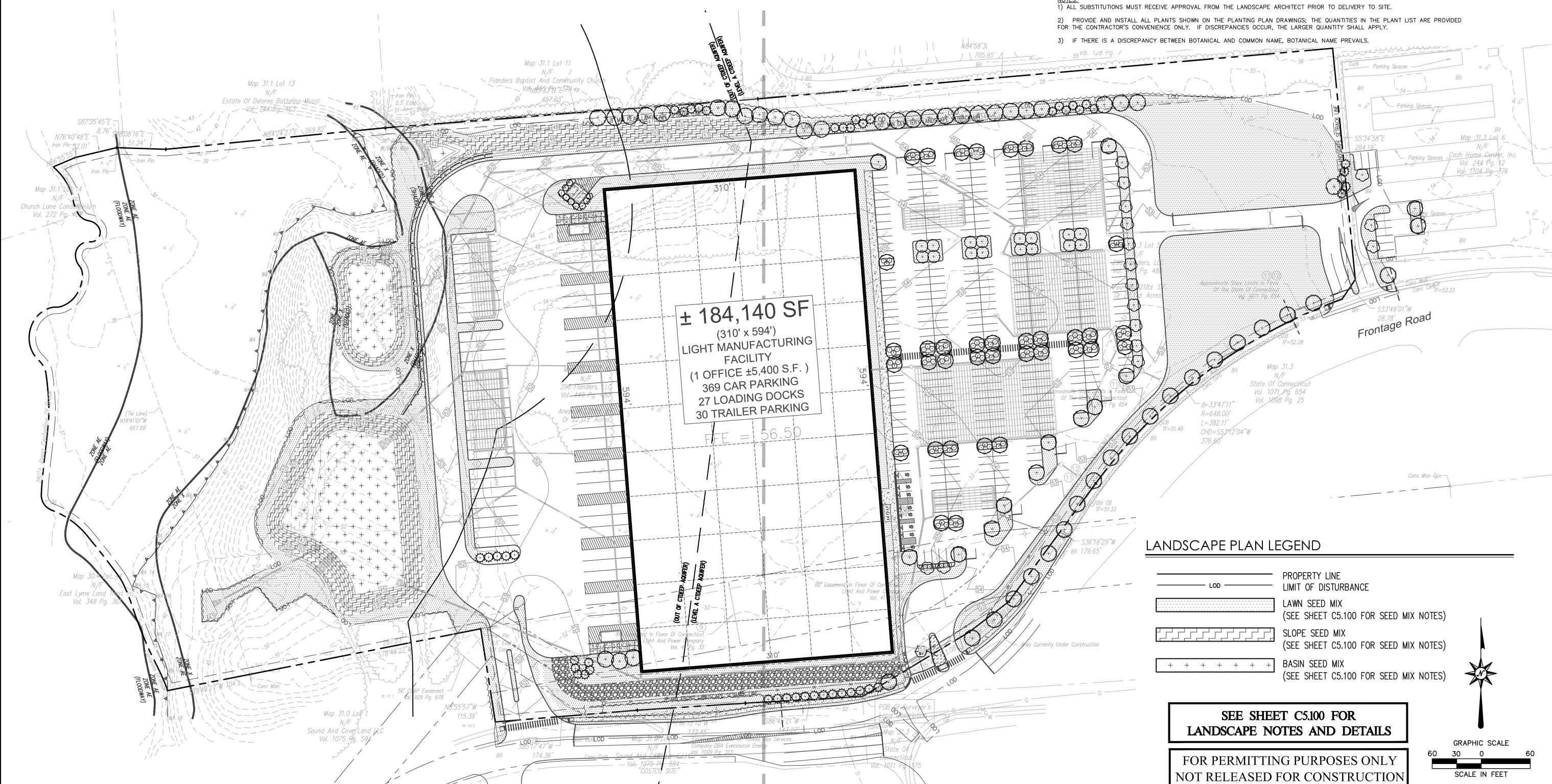


FOR PERMITTING PURPOSES ONLY NOT RELEASED FOR CONSTRUCTION

	(GATEWAY PLANNED DEVELOPMENT DIS ANUFACTURING FACILITIES (SPECIAL PE	STRICT) AND GCMD (GATEWAY COMMONS MASTER DEVELOPMENT PLAN)		
: LIGHT MA TEM #	ITEM	REQUIREMENTS	PROPOSED	VARIANCE
1	BUFFERS 11A.7.1.D.	A BUFFER CONSISTING OF A PUBLIC GREEN SPACE A MINIMUM OF 50' WIDE AND A LANDSCAPED AREA MEETING THE STANDARDS OF A BUFFER BETWEEN CONTRASTING USES SHALL BE REQUIRED BETWEEN THE CEMETERY AND ANY OTHER USE.	EXISTING 50 FEET DENSE VEGETATION ALONG PROPERTY LINE BETWEEN CEMETERY TO REMAIN, ADDITIONAL PLANTINGS PROP.	NO
	INTERIOR PARKING AREAS	A MINIMUM OF 3 CANOPY TREES, 2 UNDERSTORY TREES AND 6 SHRUBS FOR EACH 24 P.K. SPACES.  369 P.K. SPACES = 46 CANOPY TREES, 31 UNDERSTORY TREES AND 93 SHRUBS REQ.	OU CANOPY TREES, 32 UNDERSTORY TREES AND THE	NO
2	11A.7.2	THE MINIMUM LANDSCAPED AREA WITHIN THE PARKING LOT SHALL BE NO LESS THAN 10% OF THE TOTAL PAVED PARKING AND VEHICULAR CIRCULATION AREA TOTAL PAVED PARKING AND V.C.A. = ±133,006 S.F. 10% = ±13,300 S.F. REQ.		NO
3	STREET TREE 11A.7.3	STREET TREES SHALL BE REQUIRED ALONG ALL ROADS WITHIN THE DISTRICT SPACED 25-35FT O.C. AND PLACED 4 FT FROM THE CURB LINE OF THE ROAD.  705 FT STREET FRONTAGE(EXCLUDE PAVEMENT AREA AND EXISTING EVERGREEN ROW OF TREES TO REMAIN ) / 35 = 20 STREET TREES REQ.	20 STREET TREES PLANTED 35' O.C. ALONG ROADS.	NO
4	FRONT LANDSCAPING 24.6.E.2.	EACH LOT WILL BE PROVIDED WITH A LANDSCAPED STRIP MORE THAN 6 FT IN WIDTH ALONG THE STREET LINE. AT A MINIMUM, ONE DECIDUOUS SHADE OR EVERGREEN TREE, WILL BE PLANTED FOR EACH 20 FT OF LOT FRONTAGE OR FRACTION THEREOF.	8 FT LANDSCAPED STRIP PLANTED AT LEAST 1 SHADE TREE OR EVERGREEN TREE PLANTED 20 FT O.C.	NO
5	BUFFER STRIP 24.6.E.3.	A MINIMUM 10 FT WIDTH LANDSCAPED BUFFER STRIP WILL BE REQUIRED ALONG ALL LOT BOUNDARIES ABUTTING ANY OTHER LOT.	10 FT WIDTH EVERGREEN BUFFER PROPOSED BETWEEN BOUNDARIES ABUTTING ANY OTHER LOT	NO
6	PARKING AREA LANDSCAPING 24.6.E.4.	ALL OFF STREET PARKING AREAS OF 30 OR MORE SPACES WILL INCLUDE A MINIMUM OF 15 S.F. OR INTERIOR LANDSCAPING FOR EACH P.K. SPACE 369 X 15 = 5,520 S.F. REQ.	±17,030 S.F. PROP.	NO
7	PARKING AREA LANDSCAPING 24.6.E.5.	SCREENING — ALL OUTSIDE STORAGE AREA, LOADING BAYS, MACHINERY AND EQUIPMENT INSTALLATIONS, AND DISPOSAL CONTAINERS WILL BE FULLY SCREENED FROM VIEW FROM ANY STREET BY LANDSCAPE NOT LESS THAN 6 FT IN HT.	6-7 FT HT EVERGREEN SCREENING PROP. ALONG OUTSIDE STORAGE AREA, LOADING BAYS, MACHINERY AND EQUIPMENT INSTALLATIONS, AND DISPOSAL CONTAINERS.	NO
		Map 31.1 Lot 13  N/F  Estate Of Delores Battalino Mucci  Vol. 744 Pa. 463	F F F F F F F F F F F F F F F F F F F	Map 31.1 Lot 11 N/F  Flanders Baptist And Communi VONNIGTSTP9 45 457.03'
Мар	100 Pin 52.01'  100 Pin 52.01'  100'55'55'  100 Pin 10	16"E		48

LOCATION: TOWN	OF EAST LYME, NEW LONDON COU	INTY, CONNECTICUT		
ZONE: GPDD (GA	TEWAY PLANNED DEVELOPMENT D	STRICT) AND GCMD (GATEWAY COMMONS MASTER DEVELOPMENT PLAN)		
USE: LIGHT MAN	JFACTURING FACILITIES (SPECIAL I	PERMIT USE)		
ITEM #	ITEM	REQUIREMENTS	PROPOSED	VARIAN
1	BUFFERS	A LANDSCAPED BUFFER CONSISTING OF NATIVE EVERGREEN AND DECIDUOUS SPECIES SHALL BE REQUIRED ALONG THE OUTER PERIMETER OF THE MDP AREA TO PROVIDE SUITABLE VISUAL SCREENING	EVERGREEN AND DECIDUOUS SCREENING PROP.	NO
2	LANDSCAPED BUFFER WIDTH	MINIMUM WIDTH OF THE REQUIRED LANDSCAPED BUFFER  a. 6 FT ALONG ANY PUBLIC STREET OR HIGHWAY  b. 20 FT ALONG ANY ABUTTING NONRESIDENTIALLY ZONED PROPERTY  c. 50 FT ALONG ANY ABUTTING RESIDENTIALLY ZONED PROPERTY	COMPLIED WITH CODE REQUIREMENTS	NO
3	PARKING AREA LANDSCAPING	A MINIMUM OF 3 CANOPY TREES, 2 UNDERSTORY TREES AND 6 SHRUBS SHALL BE REQUIRED WITHIN EACH PARKING AREA FOR EVERY 30 P.K. SPACES MINIMUM LANDSCAPED AREA = 10% OF THE TOTAL PAVED PARKING AREA	COMPLIED WITH CODE REQUIREMENTS	NO
4	STREET TREE	STREET TREES CONSISTING OF NATIVE EVERGREEN AND DECIDUOUS SPECIES SHALL BE REQUIRED ALONG ALL PUBLIC STREETS SPACED AT AN INTERVAL NO MORE THAN 50 FEET O.C. AND PLACED WITHIN THE PUBLIC R-O-W WHERE POSSIBLE	STREET TREES PLANTED 35' O.C. ALONG ROADS.	NO
5	SCREENING	OUTSIDE STORAGE AREAS, LOADING BAYS, MACHINERY AND EQUIPMENT, AND DISPOSAL CONTAINERS SHALL BE SCREENED FROM VIEW FROM ANY PUBLIC STREET OR PUBLIC PLAZA.	COMPLIED WITH CODE REQUIREMENTS	NO

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
CANOPY T	REES						
+	AR	6	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2"-2.5" CAL.	B&B	
+	GT	50	GLEDITSIA TRIACANTHOS INERMIS 'IMPCOLE'	IMPERIAL®HONEY LOCUST	2"-2.5" CAL.	В&В	
EVERGRE	EN TREE	:S					
<del>+</del>	JV	47	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	6'-7' HT.	В&В	
+	PS	25	PINUS STROBUS	WHITE PINE	6'-7' HT.	B&B	
$\overline{\bigcirc}$	то	9	THUJA OCCIDENTALIS 'NIGRA'	BLACK ARBORVITAE	6-7' HT.	B&B	
STREET T	REE						
+	ZG	20	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE JAPANESE ZELKOVA	2.5" CAL (8FT HT MIN)	B&B	
JNDERST	ORY TRE	ES					
+	AG	16	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE APPLE SERVICEBERRY	1.5"-2" CAL.	В&В	
+	CF	16	CORNUS FLORIDA 'WHITE'	WHITE FLOWERING DOGWOOD	1.5"-2" CAL.	В&В	
SHRUBS							
+	IGS	8	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY HOLLY	5 GAL ( MIN 24" HT)	CONT.	
$\overline{\odot}$	JHB	111	JUNIPERUS HORIZONTALIS 'BLUE CHIP'	BLUE CHIP CREEPING JUNIPER	3 GAL.	CONT.	
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACII
PERENNIA	LS	51	HEMEROCALLIS X 'HAPPY DAYS'	1	T	CONT.	36" o.



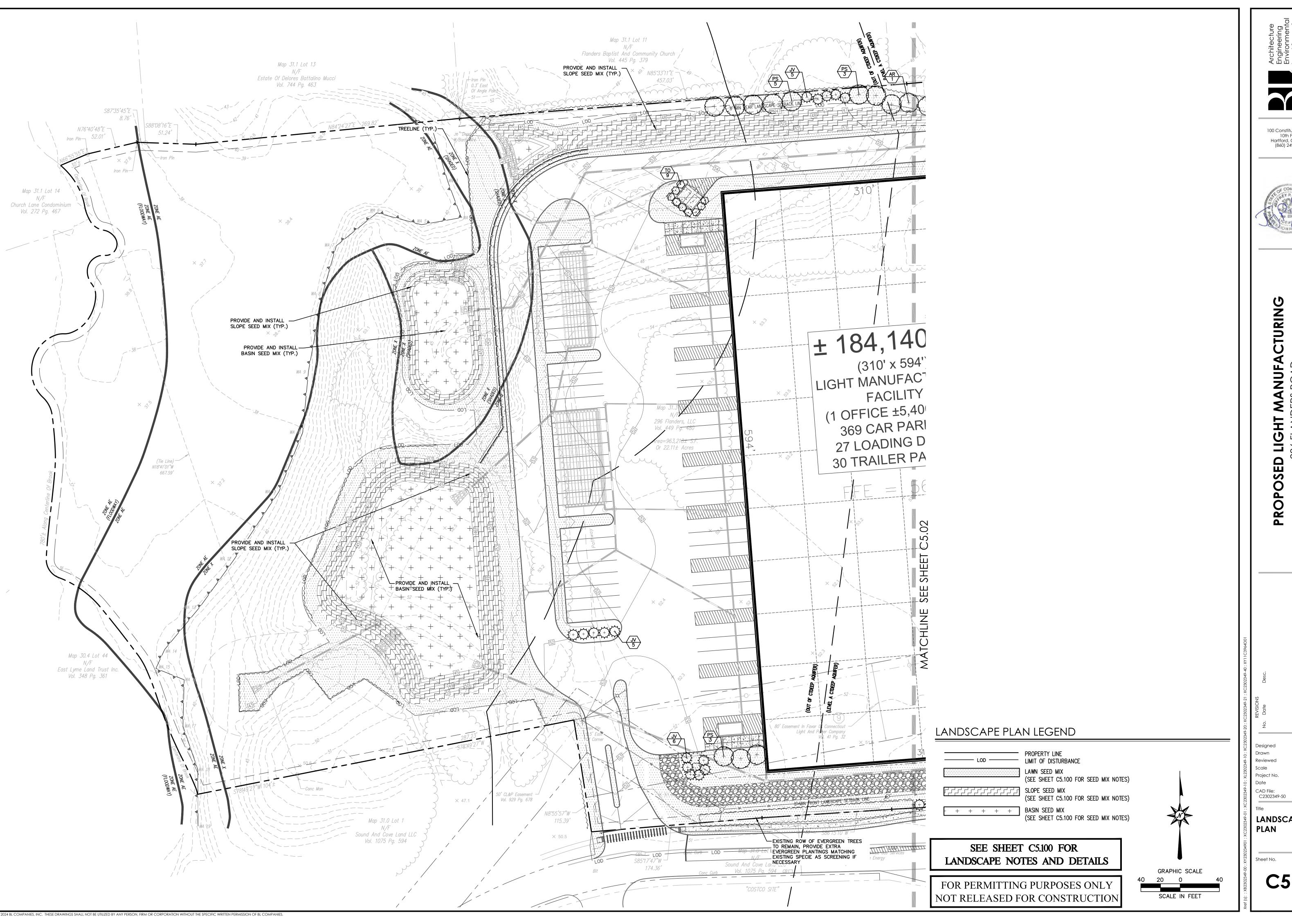




ED LIGHT MANUFACTURING 296 FLANDERS ROAD EAST LYME, CONNECTICUT SED

C2302349-50

**OVERALL** LANDSCAPING PLAN

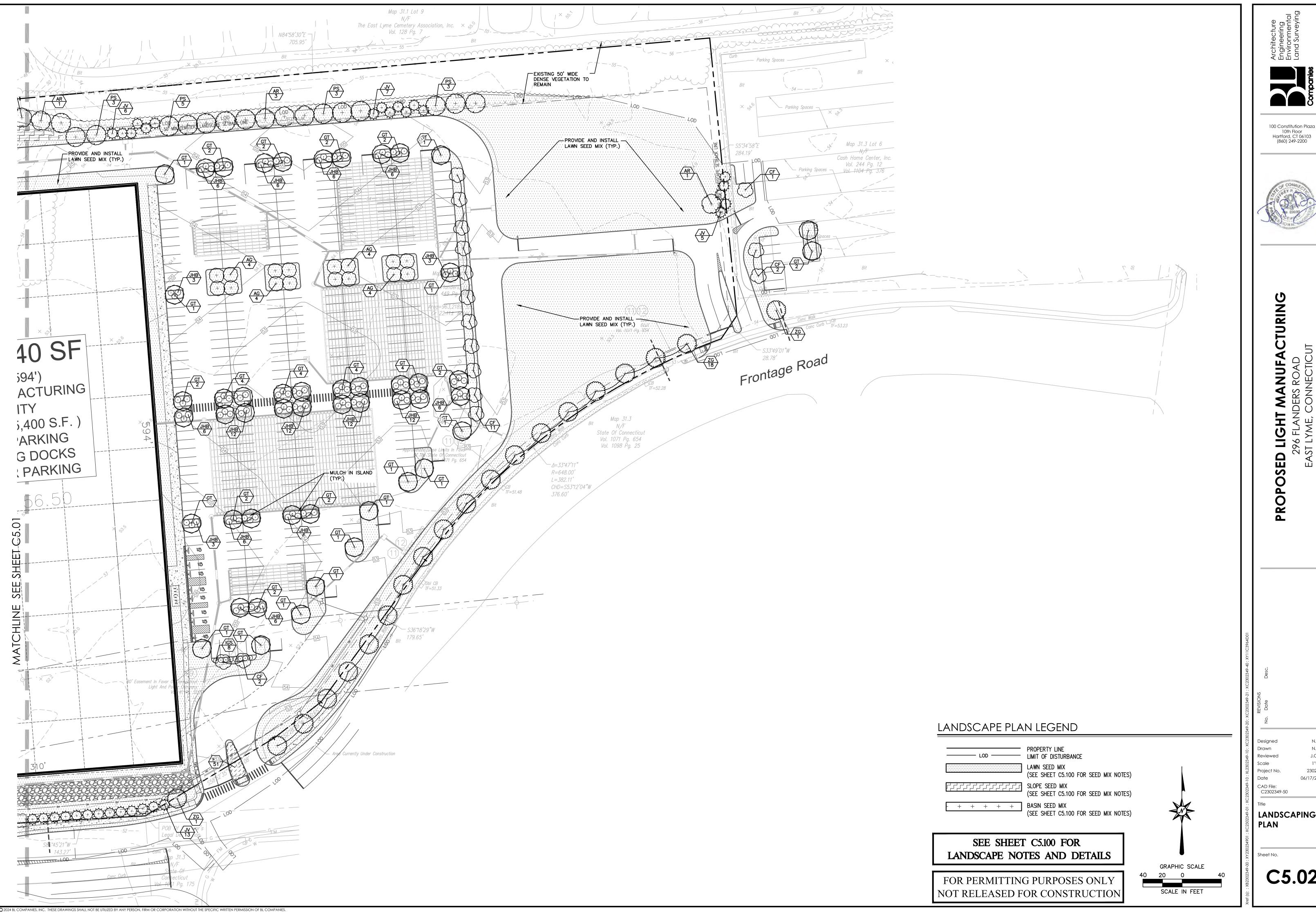






SED LIGHT MANUFACTURING
296 FLANDERS ROAD
EAST LYME, CONNECTICUT

LANDSCAPING







2302349

LANDSCAPING

COORDINATE PLANT MATERIAL LOCATIONS WITH SITE UTILITIES. UTILITY LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. EXERCISE CARE WHEN DIGGING IN AREAS OF POTENTIAL CONFLICT WITH UNDERGROUND OR OVERHEAD UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DUE TO CONTRACTOR'S NEGLIGENCE AND SHALL REPLACE OR REPAIR ANY DAMAGE AT CONTRACTOR'S EXPENSE.

THE LOCATIONS FOR PLANT MATERIAL ARE APPROXIMATE AND ARE SUBJECT TO FIELD ADJUSTMENT DUE TO UTILITY LOCATIONS AND SITE CONDITIONS. THE CONTRACTOR SHALL ACCURATELY STAKE OUT THE LOCATIONS FOR ALL PLANTS FOR THE REVIEW, ADJUSTMENT, AND APPROVAL BY OWNER OR LANDSCAPE ARCHITECT PRIOR TO PLANTING.

THE CONTRACTOR SHALL GUARANTEE THAT ALL PLANTS SHALL BE HEALTHY AND FREE OF DISEASE FOR A PERIOD OF ONE YEAR OR JUNE 1ST OF THE YEAR FOLLOWING INSTALLATION, WHICHEVER IS LONGER, AFTER SUBSTANTIAL COMPLETION AND ACCEPTANCE BY OWNER OR LANDSCAPE ARCHITECT. CONTRACTOR SHALL REPLACE ANY DEAD OR UNHEALTHY PLANTS AT CONTRACTOR'S EXPENSE. PLANT MATERIAL REPLACEMENTS SHALL BE GUARANTEED FOR ONE FULL YEAR FROM DATE OF REPLACEMENT. REPLACEMENT PLANTS SHALL BE THE SAME AS SPECIFIED FOR THE ORIGINAL PLANTING. REPLACEMENTS SHALL BE MADE AS MANY TIMES AS NECESSARY TO ENSURE HEALTHY PLANTS. FINAL ACCEPTANCE SHALL BE MADE IF ALL PLANTS MEET THE GUARANTEE REQUIREMENTS INCLUDING MAINTENANCE. MAINTENANCE RESPONSIBILITIES INCLUDE CULTIVATING, SPRAYING, WEEDING, WATERING, TIGHTENING GUYS, PRUNING, FERTILIZING, MULCHING, AND ANY OTHER OPERATIONS NECESSARY TO MAINTAIN PLANT VIABILITY. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING AND CONTINUE UNTIL THE END OF THE GUARANTEE PERIOD. DURING THE LANDSCAPE MAINTENANCE PERIOD (GUARANTEE) THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF ANY SITE CONSTRAINTS (PHYSICAL, ENVIRONMENT, ETC.) OR MAINTENANCÉ DEFICIENCIES THAT MAY AFFECT LANDSCAPE VEGETATION ESTABLISHMENT.

THE CONTRACTOR SHALL SUPPLY ALL LABOR, PLANTS, AND MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE WORK SHOWN ON THE DRAWINGS AND LISTED IN THE PLANT SCHEDULE. IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN IN THE PLANT SCHEDULE AND THOSE REQUIRED BY THE DRAWINGS, THE LARGER SHALL APPLY. ALL PLANTS SHALL BE ACCLIMATED BY THE SUPPLY NURSERY TO THE LOCAL HARDINESS ZONE AND BE CERTIFIED THAT THE PLANTING MATERIAL HAS BEEN GROWN FOR A MINIMUM OF TWO YEARS AT THE SOURCE AND OBTAINED WITHIN 200 MILES OF PROJECT SITE UNLESS OTHERWISE APPROVED BY OWNER OR LANDSCAPE ARCHITECT.

6. PLANTS SHALL HAVE TAGS THAT IDENTIFY PLANT GENUS, SPECIES, CULTIVAR (IF APPLICABLE), PLANT COMMON NAME, NAME OF SOURCE NURSERY, AND SIZE OF PLANT FOR REVIEW OF OWNER OR LANDSCAPE ARCHITECT.

NO PLANT SHALL BE PLACED IN THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT. STAKING THE LOCATION OF ALL TREES AND SHRUBS SHALL BE COMPLETED PRIOR TO PLANTING FOR APPROVAL BY THE OWNER OR

8. FINAL GRADES SHALL BLEND SMOOTHLY WITH EXISTING GRADES, AND TOP AND BOTTOM OF SLOPES SHALL BE ROUNDED.

9. ALL TREE AND SHRUB MASSINGS SHALL BE MULCHED TO A DEPTH OF 3". ANNUAL AND PERENNIAL BEDS SHALL BE MULCHED TO A DEPTH OF 2". MULCH SHALL BE UNCOLORED TRIPLE-SHREDDED HARDWOOD BARK MULCH, AGED AT LEAST 6 MONTHS.

10. IF TREE STAKING IS PROPOSED, TREE STAKING MUST BE COMPLETED THE SAME DAY AS THE TREE IS INSTALLED. ALL TREES SHALL BE STAKED OR GUYED PER DETAIL.

11. LANDSCAPE PLANTING AREAS MUST BE FREE DRAINING. PAVEMENT, COMPACTED SUBGRADE, DEAD OR DYING PLANT MATERIAL, BLASTED ROCK, STONES GREATER THAN 1" IN DIAMETER, AND ANY OTHER MATERIAL HARMFUL TO PLANT GROWTH AND DEVELOPMENT SHALL BE REMOVED FROM AREAS TO BE LANDSCAPED AS REQUIRED BY PLANTING DETAILS OR SPECIFICATIONS.

DEPTH: PLANTING SOIL SHALL BE INSTALLED AT A MINIMUM DEPTH OF 4" OR AS NOTED IN THE LANDSCAPE DETAILS. PLANTING SOIL SHALL BE UTILIZED IN ALL PLANTING AREAS INCLUDING SEEDED AREAS.

TESTING: CONTRACTOR SHALL SUBMIT (2) SOIL SAMPLES PER SOIL STOCKPILE TO A CERTIFIED TESTING LABORATORY TO DETERMINE ACIDITY, ORGANIC CONTENT, MECHANICAL ANALYSIS, AVAILABLE NUTRIENTS (N,P,K,Ca,Ma,S,Fe,Mn,Zn,Cu,B,AI,Pb) AND NECESSARY AMENDMENTS TO SOIL. THE CONTRACTOR SHALL SUBMIT THE TEST RESULTS TO THE OWNER OR LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL TEST RESULTS SHALL RECOMMEND AMENDMENTS THAT WILL ALTER THE SOIL CHARACTERISTICS SUCH THAT THE CHARACTERISTICS DESCRIBED BELOW ARE ACHIEVED AND THE SPECIFIED PLANTS (CONTRACTOR TO PROVIDE LIST TO TESTING LABORATORY) WILL ACHIEVE PROPER GROWTH THAT IS NEITHER DEFICIENT NOR EXCESSIVE. THE CONTRACTOR SHALL INCORPORATE THESE AMENDMENTS AT NO INCREASE IN CONTRACT PRICE.

CHARACTERISTICS: PLANTING SOIL MAY CONSIST OF EXISTING ON-SITE SOILS, AMENDED ON-SITE SOILS, OR IMPORTED SOILS MEETING THE FOLLOWING

- A. NOT TO CONTAIN MATERIALS HARMFUL TO PLANT LIFE, TO BE CLEAN, FERTILE, FRIABLE, AND WELL DRAINING. ALL PLANTING SOIL SHALL BE FREE OF ANY SUBSOIL EARTH CLODS, SODS, STONES OVER 1" IN ANY DIMENSION, STICKS, ROOTS, WEEDS, LITTER AND OTHER DELETERIOUS MATERIAL. PLANTING SOIL SHALL BE UNIFORM IN QUALITY AND TEXTURE.
- B. PLANTING SOIL SHALL HAVE THE FOLLOWING OPTIMUM RANGES UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE

3% - 6% FOR LAWN OR GRASS AREAS. 4% - 8% FOR TREE AND SHRUB PLANTERS. 8%-16% FOR RETENTION OR DETENTION BASINS.

(BY LOSS OF IGNITION AT 375 C METHOD OF TESTING)

- C. NUTRIENT LEVELS SHALL BE ACHIEVED BY THE CONTRACTOR'S ADDITION OF AMENDMENTS TO THE PLANTING SOIL TO MEET THE OPTIMUM NUTRIENT LEVELS SPECIFIED IN THE TESTING LABORATORY REPORT FOR EACH OF PLANTS TO BE INSTALLED.
- SOIL SHALL BE COMPACTED TO A SURFACE PENETRATION RESISTANCE OF 75-125 LBS/SQ.IN. SOIL MAY BE TREATED FOR WEEDS WITH PRE-EMERGENT OR POST-EMERGENT HERBIĆIDE, AS NEEDED AND AS APPROPRIATE FOR THE APPLICATION SEASON OR LOCATION, OR ELIMINATE GROWTH OF UNWANTED PLANT MATERIAL. APPLY HERBICIDES IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. HERBICIDE APPLICATOR MUST BE LICENSED IN THE STATE OF CONNECTICUT, AND PERFORM APPLICATIONS IN ACCORDANCE WITH LOCAL REQUIREMENTS, PERMITTING STIPULATIONS, AND ANY OTHER RESTRICTIONS INCLUDING AND IN
- EXCESS OF STATE AND FEDERAL REGULATIONS. F. PROPOSED TOPSOIL SHALL MEET THE USDA SOILS TEXTURAL PERCENTAGES OF SAND, SILT, AND CLAY FOR FOLLOWING CLASSIFICATIONS: LOAM
- SANDY LOAM WHERE SAND DOES NOT EXCEED 70% AND CLAY IS NOT LESS THAN 5%. - SANDY CLAY LOAM WHERE SAND DOES NOT EXCEED 70% AND CLAY IS LESS THAN 28%. G. BIORETENTION SOILS: SOIL TO BE INSTALLED IN RETENTION BASINS, PONDS, OR OTHER STORMWATER MANAGEMENT ENVIRONS SHALL
- MEET THE ABOVE DESCRIBED CHARACTERISTICS AND AS FOLLOWS: - SOIL SHALL NOT CONTAIN MORE THAN 20% CLAY AND LESS THAN 40% SILT.
- SOIL SHALL HAVE AN INFILTRATION RATE BETWEEN 1/2" AND 3" PER HOUR. H. MODIFICATION TO THE PLANTING SOIL CHARACTERISTICS DESCRIBED ABOVE MAY BE SUBMITTED FOR APPROVAL BY THE LANDSCAPE ARCHITECT. CONTRACTOR MUST DEMONSTRATE PROPOSED CHARACTERISTICS ARE EQUAL TO OR SUPERIOR TO THE SPECIFIED CHARACTERISTICS WITH RESPECT TO SUPPORTING PLANT GROWTH, AND STORMWATER MANAGEMENT.

APPLY FERTILIZER AND OTHER AMENDMENTS AS RECOMMENDED FOR EACH PLANTING AREA BY SOIL ANALYSIS. APPLY AMENDMENTS IN A MANNER CONSISTENT WITH MANUFACTURER'S RECOMMENDATIONS. ANY ORGANIC AMENDMENTS SHALL HAVE A PH BETWEEN 4.5 AND 5.5 UNLESS OTHERWISE

13. PLANT REQUIREMENTS: ALL PLANTS SHALL CONFORM IN SIZE AND GRADE TO THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1 (LATEST EDITION). ALL PLANTS SHALL MEET THE ADDITIONAL REQUIREMENTS SET FORTH BELOW AND IN WRITTEN SPECIFICATIONS AS APPLICABLE. ALL TREES AND SHRUBS SHALL HAVE BEEN GROWN AT A COMMERCIAL NURSERY WITHIN 200 MILES OF THE PROJECT SITE UNLESS OTHERWISE APPROVED BY OWNER OR LANDSCAPE ARCHITECT. THEY SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY. THEY SHALL BE HEALTHY, SYMMETRICAL, EVENLY AND DENSELY BRANCHED, AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF BARK INJURY, DISEASE, AND INSECT PESTS. ALL TREES SHALL HAVE A STRAIGHT TRUNK WITH A SINGLE MAIN LEADER UNLESS OTHERWISE CHARACTERISTIC OF THE SPECIES OR VARIETY. THE OWNER OR LANDSCAPE ARCHITECT WILL ALLOW SUBSTITUTIONS ONLY UPON WRITTEN APPROVAL. SIZES SHALL CONFORM TO THE MEASUREMENT SPECIFIED ON THE DRAWINGS. PLANTS LARGER THAN SPECIFIED MAY BE USED IF APPROVED, BUT THE USE OF SUCH PLANTS SHALL NOT INCREASE THE CONTRACT PRICE. ALL OVERSTORY TREES PLANTED ALONG PARKING AREAS, SIDEWALKS AND PEDESTRIAN ACCESSES SHALL NOT BRANCH BELOW 7' FEET IF THE TREE CALIPER IS 3" INCHES OR GREATER. ALL PLANT MATERIALS ARE SUBJECT TO INSPECTION AND ACCEPTANCE BY THE OWNER OR LANDSCAPE ARCHITECT AT THE NURSERY SOURCE. THE CONTRACTOR SHALL COORDINATE SOURCE VISITS WITH THE LANDSCAPE ARCHITECT AND SHALL ACCOMPANY THE OWNER AND/OR LANDSCAPE ARCHITECT FOR ALL INSPECTIONS. CERTIFICATES OF COMPLIANCE WITH SPECIFICATIONS ARE REQUIRED FOR ALL PLANTS.

14. INSPECTION AND REVIEW: ALL PLANT MATERIAL SHALL BE SUBJECT TO INSPECTION AND ACCEPTANCE BY THE OWNER OR LANDSCAPE ARCHITECT AT THE NURSERY SOURCE OR PLACE OF GROWTH. THE CONTRACTOR SHALL COORDINATE WITH THE LANDSCAPE ARCHITECT ON A SCHEDULE FOR SOURCE VISITS AND ACCOMPANY THE OWNER OR LANDSCAPE ARCHITECT FOR ALL SOURCE INSPECTIONS. CERTIFICATES OF COMPLIANCE ARE REQUIRED FOR ALL PLANT MATERIALS. PHOTOGRAPHIC REVIEW OF PLANT MATERIAL IS ACCEPTABLE IF APPROVED BY LANDSCAPE ARCHITECT. PHOTOGRAPHS MUST BE PROVIDED IN QUANTITY AND VARIETY TO ALLOW LANDSCAPE ARCHITECT SUFFICIENT INFORMATION TO MAKE A REASONABLE DETERMINATION AS TO THE PLANTS' QUALITY. OWNER AND LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT PLANT MATERIAL DELIVERED TO THE SITE BUT PREVIOUSLY ACCEPTED IF DAMAGED OR NOT PROPERLY MAINTAINED DURING THE DELIVERY PROCESS.

15. PLANTING SEASONS (UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT)

PLANTINGS

SEED MIXES

<u>SPRING</u> APRIL 1 TO JUNE 15 SEPTEMBER 1 TO OCTOBER 15 PER MANUFACTURERS RECOMMENDATIONS OR AS LISTED IN SEED MIX NOTES

16. SEEDING MIXTURES: REFER TO SEED MIX NOTES. SEEDED AREA SHALL BE ACCEPTED WHEN SEED AREA ACHIEVES 90% COVERAGE.

17. ALL SLOPES STEEPER THAN 3:1 RECEIVING A SEED MIX SHALL BE COVERED WITH AN EROSION CONTROL BLANKET OF STRAW FIBER AND BIODEGRADABLE OR PHOTODEGRADABLE NETTING.

- 18. UNLESS OTHERWISE NOTED IN DRAWING SET, NEW TREELINES SHALL EQUAL CLEARING AND GRUBBING LIMIT FOR CONSTRUCTION.
- 19. ALL DISTURBED AREAS NOT OTHERWISE DEVELOPED SHALL BE SEEDED WITH THE LAWN SEED MIX.

#### SEED MIX NOTES

A. LAWN SEEDING MIX: 15 % PERENNIAL RYEGRASS (BLEND OF 3 IMPROVED HYBRIDS)

25 % FINE LEAF OR CREEPING FESCUE (BLEND OF 3 IMPROVED HYBRIDS)

60 % KENTUCKY BLUEGRASS (BLEND OF 3 IMPROVED HYBRIDS)

SEEDING RATE: 5 LBS/1,000 S.F.

SEEDING DATES: AUGUST 15 - OCTOBER 1 AND APRIL 15 - JUNE 30 UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT.

B. SLOPE SEED MIX:

NEW ENGLAND CONSERVATION/WILDLIFE MIX NEW ENGLAND WETLAND PLANTS INC. OR APPROVED EQUAL

> SPECIES: VIRGINIA WILD RYE (ELYMUS VIRGINICUS), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), BIG BLUESTEM (ANDROPOGON GERARDII), CREEPING RED FESCUE (FESTUCA RUBRA), SWITCH GRASS (PANICUM VIRGATUM), PARTRIDGE PEA (CHAMAECRISTA FASCICULATA), PANICLEDLEAD TICK TREFOIL (DESMODIUM PANICULATUM), INDIAN

TUBEROSA), BLACK EYE SUSAN (RUDBECKIA HIRTA), COMMON SNEEZEWEED (HELENIUM AUTUNALE), HEATH ASTER (ASTERPILOSUS/SYMPHYOTRICHUM PILOSUM), EARLY GOLDENROD (SOLIDAGO JUNCEA), UPLAND BENTGRASS (AGROSTIS PERENNANS).

GRASS, (SORGHASTRUM NUTANS), BLUE VERVAIN (VERBENA HASTATA), BUTTERFLY MILKWEED (ASCLEPIAS

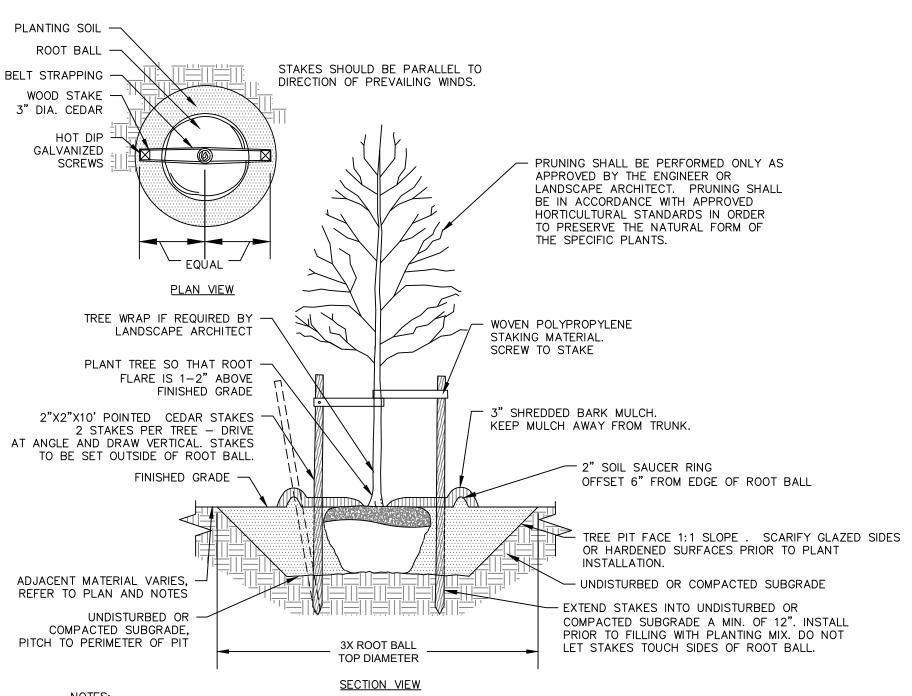
APPLICATION RATE: 25 LBS/ ACRE (1 LB PER 1,750 SF) SEEDING DATES: AUGUST 15 - OCTOBER 1 AND APRIL 15 - JUNE 30 UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT

NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASIN AND MOIST SITES

NEW ENGLAND WETLAND PLANTS INC. OR APPROVED EQUAL

RIVER BANK WILD RYE (ELYMUS RIPARIOUS), CREEPING RED FESCUE (FESTUCA RUBRA), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), BIG BLUESTEM (ANDROPOGON GERARDII), SWITCH GRASS (PANICUM VIRGATUM), UPLAND BENTGRASS (AGROSTIS PERENNANS), NODDING BUR MARIGOLD (BIDENS CERNUA), BLUE VERVAIN (VERBENA HASTATA). HOLLOW-STEM JOE PYE WEED (EUPATORIUM FISTULOSUM). NEW ENGLAND ASTER (ASTER NOVAEANGLIAE), BONESET (EUPARTORIUM PERFOLIATUM), SOFT RUSH (JUNCUS EFFUSUS), WOOL GRASS (SCIRPUS CYPERINUS).

APPLICATION RATE: 35 LBS/ACRE: 1250 SQ FT/LB SEEDING DATES: AUGUST 15 - OCTOBER 1 AND APRIL 15 - JUNE 30 UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT



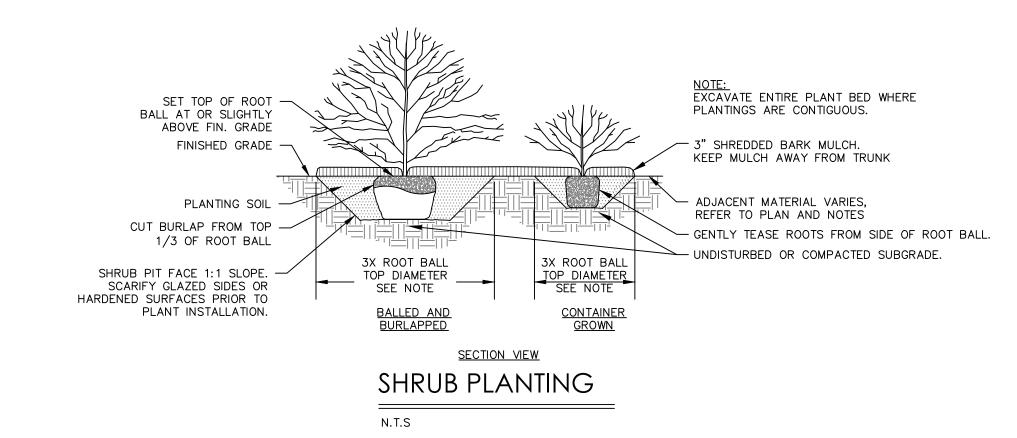
1. STAKING FOR TREES ON 4:1 SLOPES OR LESS THAN 3" CALIPER TO BE PERFORMED AT CONTRACTORS DISCRETION.

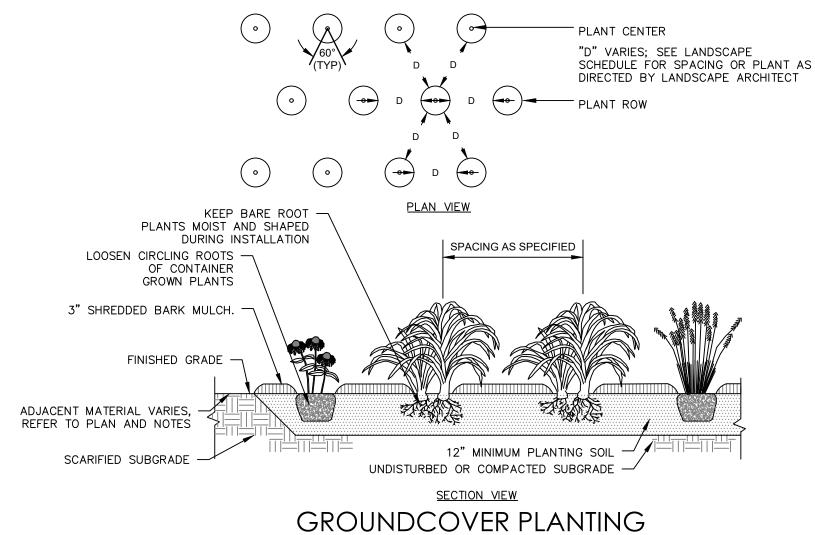
2. WOVEN POLYPROPYLENE STAKING MATERIAL SHALL BE DEEPROOT ARBORTIE (GREEN) OR APPROVED EQUIVALENT. MATERIAL SHALL BE LOOPED AROUND TREE THROUGH EACH OTHER, TWISTED, AND SECURED TO THE STAKE. INSTALL

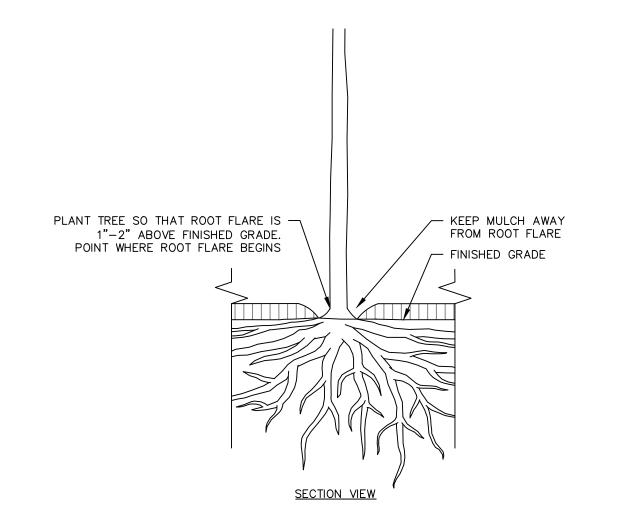
BEFORE IN HOLE, REMOVE BOTTOM OF CAGE. ONCE IN HOLE, REMOVE REST OF CAGE FROM ROOT BALL. REMOVE TWINE AND BURLAP FROM TOP 1/3 OF ROOT BALL - SCORE REMAINING 2/3 OF BURLAP. IF BURLAP IS SYNTHETIC OR HAS BEEN TREATED WITH ANTI-DESICCANT, COMPLETELY REMOVE IT FROM ROOT BALL.

#### DECIDUOUS TREE PLANTING

SPECIFIED MATERIAL IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS.





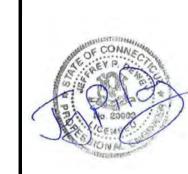


ROOT FLARE DIAGRAM

N.T.S

FOR PERMITTING PURPOSES ONLY NOT RELEASED FOR CONSTRUCTION

100 Constitution Plaza 10th Floor Hartford, CT 06103 (860) 249-2200



NUE ш S

N.Y.Y J.C.W NOT TO SCALE 2302349

C2302349-50 LANDSCAPE

**NOTES AND DETAILS** 

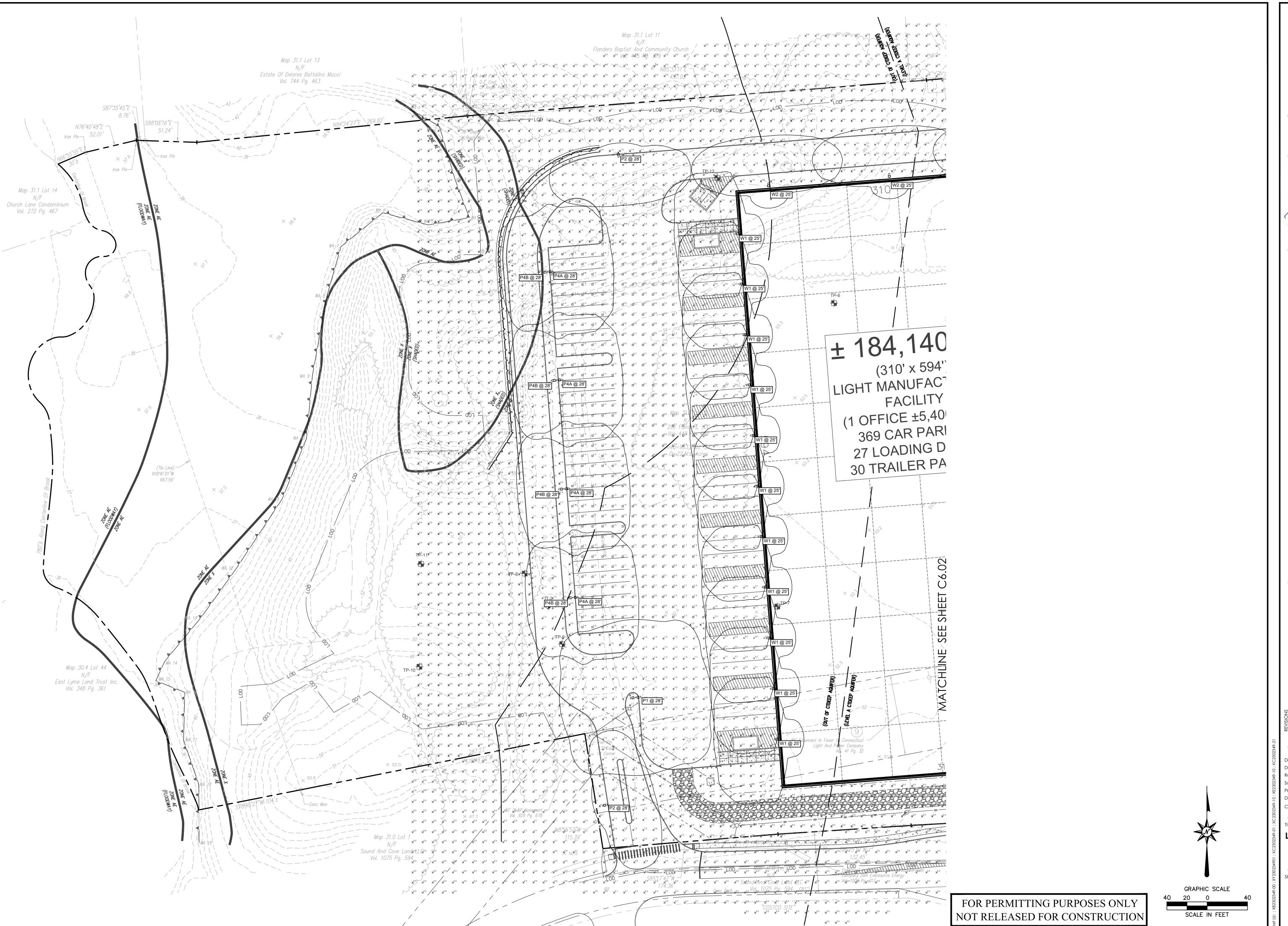




SED LIGHT MANUFACTURING
296 FLANDERS ROAD
EAST LYME, CONNECTICUT

C2302349-60

OVERALL LIGHTING PLAN



Architecture Engineering Environmental Land Surveying



100 Constitution Plaza 10th Floor Hartford, CT 06103 (860) 249-2200



UFACTURING DAD

296 FLANDERS ROA

REVISIONS Date Desc.

Designed
Drawn
Reviewed

signed

iwn
viewed F
ale
ject No. 230
te 06/17

Date 06/17/20
CAD File:
C2302349-60

Title

LIGHTING PLAN

Sheet No.





#### LIGHTING NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH ALL REQUIREMENTS OF ANY LOCAL APPLICABLE CODES OR ORDINANCES, PUBLIC UTILITY COMPANY REGULATIONS, STATE CODE, AND NATIONAL ELECTRICAL CODE WITH INTERIM AMENDMENTS THERETO.

2. ALL MATERIALS SHALL CONFORM TO THE LATEST ISSUE OF ALL APPLICABLE STANDARDS AS ESTABLISHED BY EEI, NEMA, ASTM, IPCEA, NATIONAL BOARD OF FIRE UNDERWRITERS, AND UNDERWRITERS LABORATORIES, INC.

3. THE CONTRACTOR SHALL TEST THE LIGHTING AFTER INSTALLATION WITH THE DEVELOPER/OWNER, AND PROVIDE TO DEVELOPER/OWNER WARRANTY AND MAINTENANCE INFORMATION. THE CONTRACTOR SHALL MAKE ADJUSTMENTS AND/OR MODIFICATIONS AS REQUIRED BY THE DEVELOPER/OWNER TO OBTAIN EVEN LIGHT DISTRIBUTION.

4. CONTRACTOR SHALL LEAVE ENTIRE ELECTRICAL SYSTEM INSTALLED BY THE CONTRACTOR IN PROPER WORKING CONDITION AND REPLACE WITHOUT ADDITIONAL CHARGE ALL WORK OR MATERIALS WHICH MAY DEVELOP DEFECTS WITHIN A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE BY THE OWNER.

5. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, BASES AND CONDUITS TO SITE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO DELIVERY OF MATERIAL TO SITE, ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW. IF ALTERNATIVE LIGHTING IS PROPOSED SUBMIT A PHOTOMETRIC FOOT—CANDLE LAYOUT ALONG WITH ANNUAL MAINTENANCE REQUIREMENTS AND ANTICIPATED COSTS. 6. LIGHTS ARE DESIGNED TO PROVIDE EVEN LEVELS OF ILLUMINATION AND AVOID GLARE ONTO NEIGHBORING PROPERTIES. ALL FIXTURES ON—SITE ARE FULL CUT OFF (NO LIGHT SPILLS UP) AND ALL FIXTURES ALONG THE PROPERTY LINE HAVE HOUSE SIDE SHIELDS (HS) TO PREVENT LIGHT FROM SPILLING ONTO NEIGHBORING PROPERTIES. FINAL DESIGN MAY VARY PENDING MANUFACTURER'S RECOMMENDATIONS.

7. ALL LIGHTING CONTROLS, PANELS, CIRCUIT BREAKERS ETC. ARE TO BE PROVIDED UNDER A SEPARATE CONTRACT BY BUILDING CONTRACTOR. CAREFUL COORDINATION IS REQUIRED BETWEEN SITE CONTRACTOR AND BUILDING CONTRACTOR TO PROVIDE A COMPLETE INSTALLATION FOR SITE LIGHTING.

8. THE CONTRACTOR WILL PROVIDE AND INSTALL ALL MATERIAL NECESSARY TO COMPLETE THE SITE LIGHTING SYSTEM INCLUDING BUT NOT LIMITED TO CONDUIT, BASES, ANCHOR BOLTS, POLES, SITE LIGHTS AND LAMPS. THE CONTRACTOR WILL COORDINATE WIRING AND POWERING OF LIGHTS WITH OWNER, ARCHITECT, AND BUILDING CONTRACTOR IF DIFFERENT FROM THE SITE CONTRACTOR.

9. ALL LIGHTS TO BE AS LISTED IN SCHEDULE OR APPROVED EQUIVALENT. LIGHTS SHALL BE MOUNTED ON STEEL POLES ATOP CONCRETE BASES THAT ARE SET 3' (CLEAR) BEHIND CURBS UNLESS OTHERWISE INDICATED ON CONTRACT DRAWINGS. ILLUMINATION ANALYSIS MODELED USING LIGHTING FIXTURES LISTED IN SCHEDULE. 10. LIGHT POLES AND BRACKETS TO BE AS SHOWN ON DETAILS OR APPROVED EQUIVALENT.

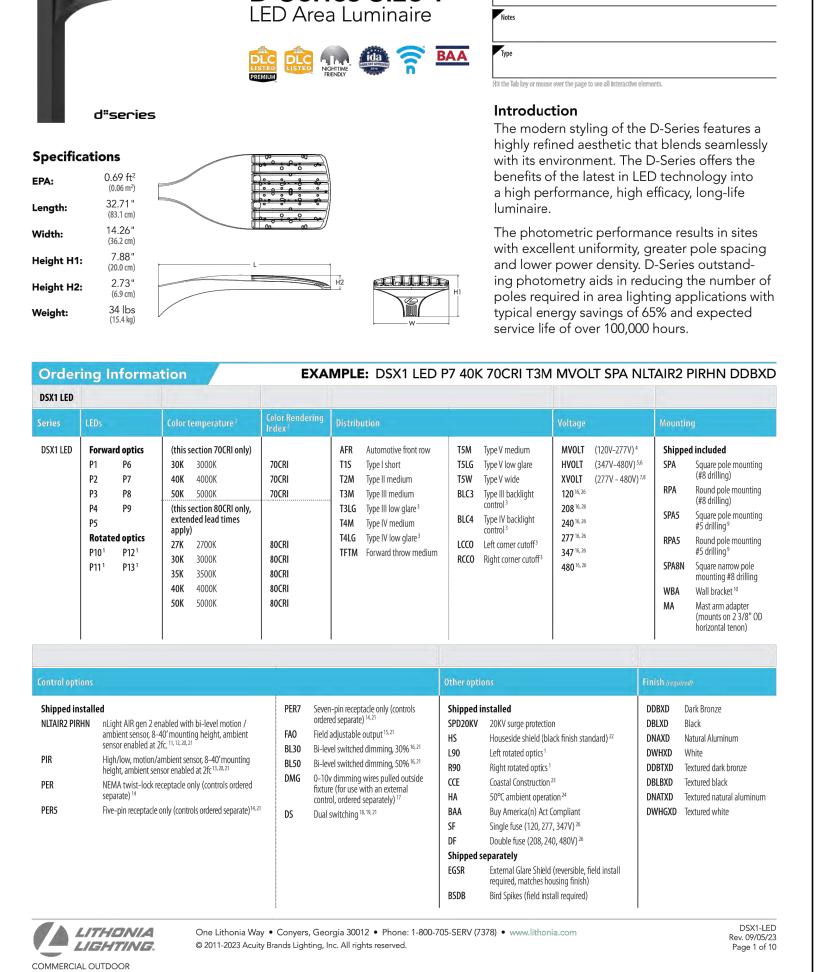
11. WIRE AND CABLE SHALL BE COPPER AND CONFORM TO THE FOLLOWING NEC TYPE THHN/THWN SOLID FOR NO. 12 AND NO. 10. NEC TYPE THHN/THWN STRANDED FOR NO. 8 AND LARGER. RIGID STEEL CONDUIT SHALL BE GALVANIZED. FITTINGS SHALL BE CAST FERROUS MATERIAL WITH A CADMIUM OR ZINC PLATED FINISH.

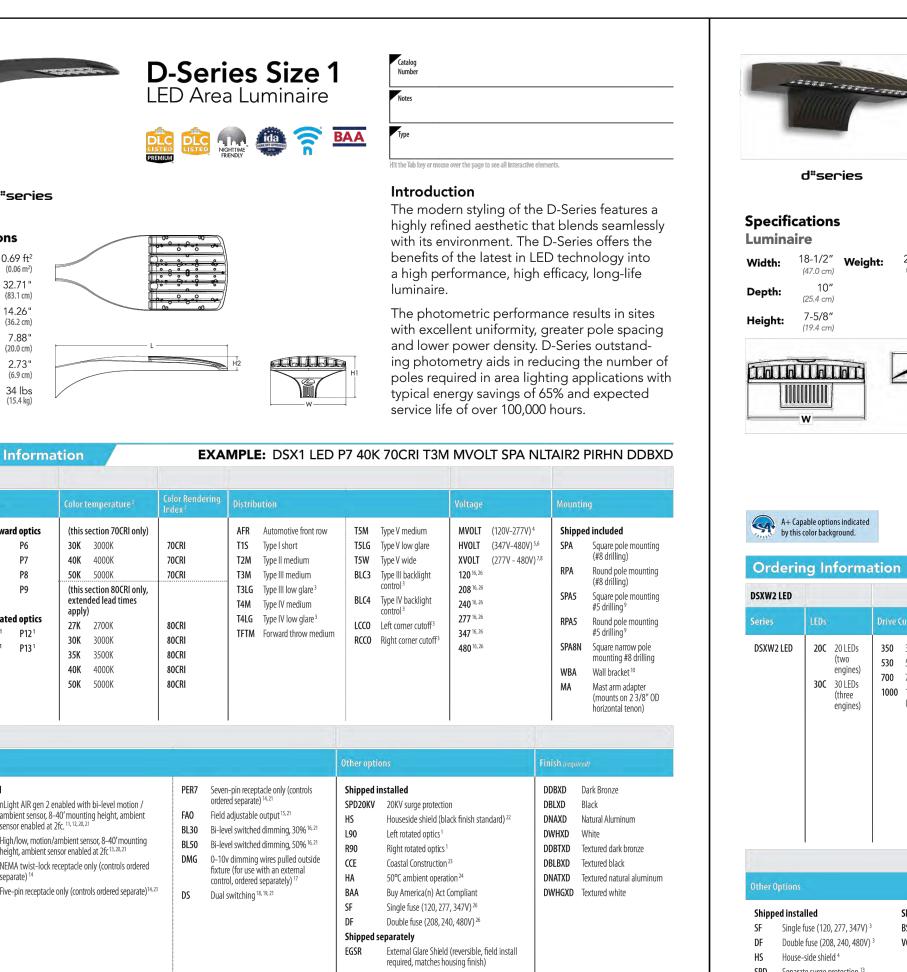
12. ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE TO NEC.

13. ALL LIGHTS WITH A 25-FT MOUNTING HEIGHT OR GREATER SHALL RECEIVE A FACTORY INSTALLED VIBRATION DAMPENER.

Schedule										
Symbol	Label	QTY	Manufacturer	Catalog	Description	Filename	Lamp Output	LLF	Input Power	Distribution
<u> </u>	P1 - <sup>-</sup>	TWIN C	ONFIGURATION	. SEE P1A AND F	P1B BELOW.					
<b>(</b>	P1A	10	Lithonia Lighting	DSX1 LED P4 30K 80CRI T5W	D-Series Size 1 Area Luminaire P4 Performance Package 3000K CCT 80 CRI Type 5 Wide	DSX1_LED_P4_3 0K_80CRI_T5W.i es	14819	0.9	123.94	TYPE VS, BUG RATING: B4 - U0 - G3
<b>0</b>	P1B	10	Lithonia Lighting	DSX1 LED P4 30K 80CRI T5W	D-Series Size 1 Area Luminaire P4 Performance Package 3000K CCT 80 CRI Type 5 Wide	DSX1_LED_P4_3 0K_80CRI_T5W.i es	14819	0.9	123.94	TYPE VS, BUG RATING: B4 - U0 - G3
<u> </u>	P2	6	Lithonia Lighting	DSX1 LED P4 30K 80CRI T2M HS	D-Series Size 1 Area Luminaire P4 Performance Package 3000K CCT 80 CRI Type 2 Medium Houseside Shield	DSX1_LED_P4_3 0K_80CRI_T2M_ HS.ies	11978	0.9	123.9373	TYPE III, MEDIUM, BUG RATING: B1 - U0 - G3
	P3	2	Lithonia Lighting	DSX1 LED P4 30K 80CRI T2M	D-Series Size 1 Area Luminaire P4 Performance Package 3000K CCT 80 CRI Type 2 Medium	DSX1_LED_P4_3 0K_80CRI_T2M.i es	13805	0.9	123.94	TYPE III, MEDIUM, BUG RATING: B2 - U0 - G3
ô• <b>0</b>	P4 - <sup>-</sup>	TWIN C	ONFIGURATION	. SEE P4A AND F	P4B BELOW.					
<b>^</b> >	P4A	4	Lithonia Lighting	DSX1 LED P5 30K 80CRI T4M HS	D-Series Size 1 Area Luminaire P5 Performance Package 3000K CCT 80 CRI Type 4 Medium Houseside Shield	DSX1_LED_P5_3 0K_80CRI_T4M_ HS.ies	13408	0.9	138.1649	TYPE IV, MEDIUM, BUG RATING: B1 - U0 - G3
<b>○•□</b> >	P4B	4	Lithonia Lighting	DSX1 LED P2 30K 80CRI T2M	D-Series Size 1 Area Luminaire P2 Performance Package 3000K CCT 80 CRI Type 2 Medium	DSX1_LED_P2_3 0K_80CRI_T2M.i es	8407	0.9	67.79	TYPE III, MEDIUM, BUG RATING: B2 - U0 - G3
^	W1	11	Lithonia Lighting	DSX1 LED P5 30K 80CRI T4M	D-Series Size 1 Area Luminaire P5 Performance Package 3000K CCT 80 CRI Type 4 Medium	DSX1_LED_P5_3 0K_80CRI_T4M.i es	15586	0.9	138.16	TYPE IV, MEDIUM, BUG RATING: B2 - U0 - G4
Â	W2	3	Lithonia Lighting	DSX1 LED P4 30K 80CRI T2M	D-Series Size 1 Area Luminaire P4 Performance Package 3000K CCT 80 CRI Type 2 Medium	DSX1_LED_P4_3 0K_80CRI_T2M.i es	13805	0.9	123.94	TYPE III, MEDIUM, BUG RATING: B2 - U0 - G3
Â	W3	8	Lithonia Lighting	DSXW2 LED 20C 700 30K T2M MVOLT	DSXW2 LED WITH 2 LIGHT ENGINES, 20 LED's, 700mA DRIVER, 3000K LED, TYPE 2 MEDIUM OPTIC	DSXW2_LED_20 C_700_30K_T2M _MVOLT.ies	4991	1	47	TYPE III, MEDIUM, BUG RATING: B1 - U0 - G2

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
LOADING DOCK	+	2.9 fc	3.7 fc	1.6 fc	2.3:1	1.8:1
PARKING (EAST)		1.5 fc	2.7 fc	0.8 fc	3.4:1	1.9:1
PARKING (TRUCK)		1.2 fc	2.6 fc	0.4 fc	6.5:1	3.0:1
SITE/LANDSCAPE	Ж	0.3 fc	4.0 fc	0.0 fc	N/A	N/A
SPILL	X	0.0 fc	1.0 fc	0.0 fc	N/A	N/A
DRIVEWAY	$\Diamond$	1.3 fc	2.1 fc	0.4 fc	5.3:1	3.3:1







**D-Series Size 2** 

BAA BABA

5-1/2" **BBW** 

Back Box (BBW)

**\*\*** Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

1 lbs • All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency

• This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1

 This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and

control options marked by a shaded background<sup>1</sup> To learn more about A+,

visit <u>www.acuitybrands.com/aplus</u>.

1. See ordering tree for details.

of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

2. A+ Certified Solutions for ROAM require the order

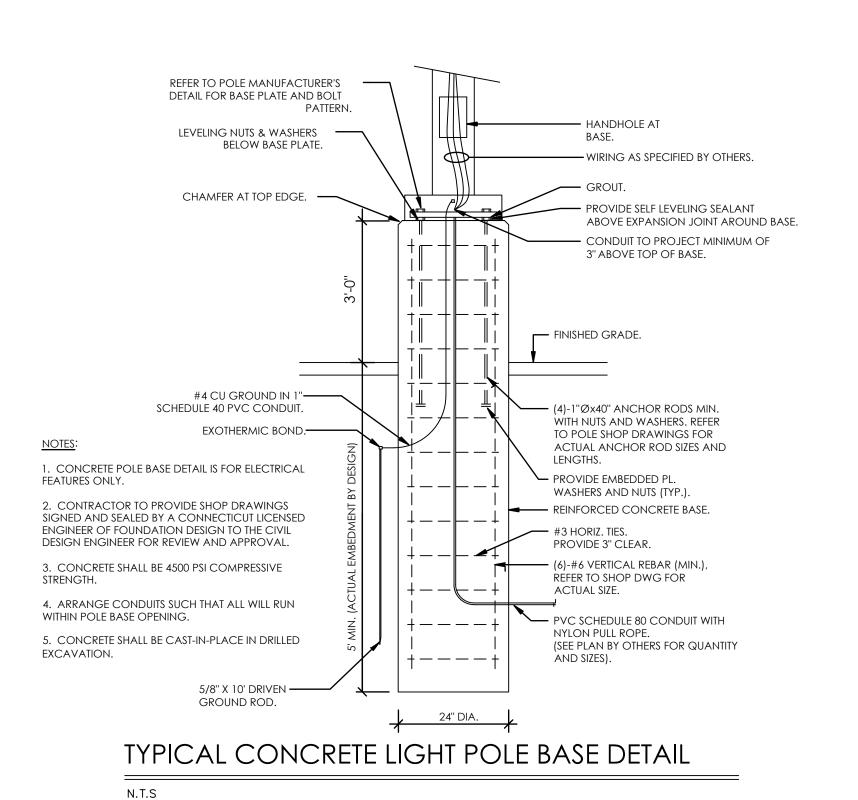
DSXW2 LED								
Series	LEDs	Drive Current	Color temperature	Distribution	Voltage	Mounting	Control Opt	
DSXW2 LED	20C 20 LEDs (two engines) 30C 30 LEDs (three engines)	350 350 mA 530 530 mA 700 700 mA 1000 1000 mA <sup>1</sup> (1 A)	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted <sup>2</sup>	T2S Type II Short T2M Type II Medium T3S Type III Short T3M Type III Medium T4M Type IV Medium TFTM Forward Throw Medium	MVOLT <sup>3</sup> 120 <sup>4</sup> 208 <sup>4</sup> 240 <sup>4</sup> 277 <sup>4</sup> 347 <sup>4,5</sup> 480 <sup>4,5</sup>	Shipped included (blank) Surface mounting bracket  Shipped separately <sup>6</sup> BBW Surface- mounted back box (for conduit entry)	Shipped in PE PER PER5 PER7 DMG PIR PIRH PIR1FC3V	Photoelectric cell, button type <sup>7</sup> NEMA twist-lock receptacle only (control ordered separate) <sup>8</sup> Five-wire receptacle only (control ordered separate) <sup>8</sup> Seven-wire receptacle only (control ordered separate) <sup>8</sup> 9  0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) 180° motion/ambient light sensor, <15' mtg ht <sup>10,11</sup> 180° motion/ambient light sensor, 15-30' mtg ht <sup>10,11</sup> Motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc <sup>11,12</sup>

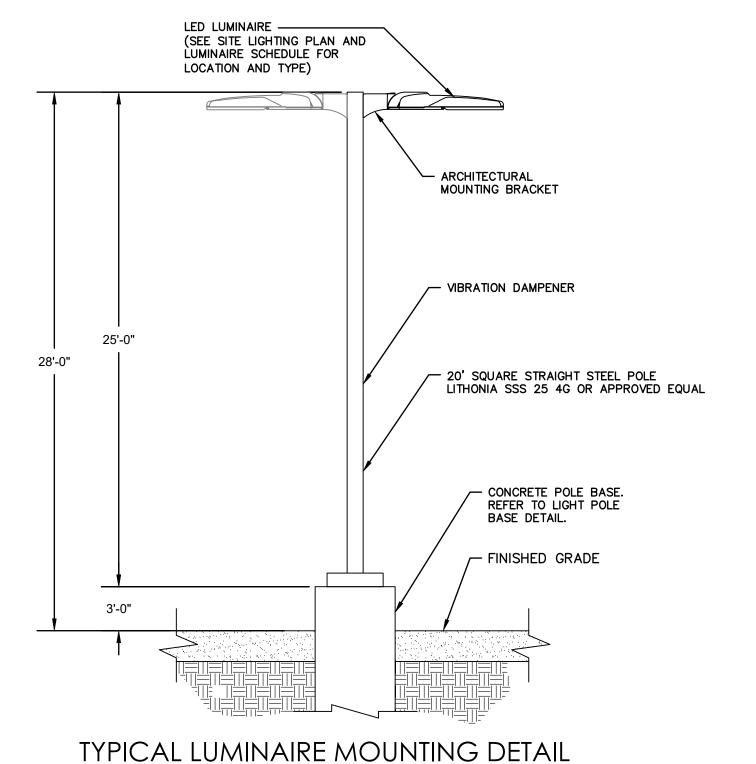
)ther	Options .			Finish treq	uited)				
Shipp	ed installed	Shippe	ed separately 13	DDBXD	Dark bronze	DSSXD	Sandstone	DWHGXD	Textured white
SF	Single fuse (120, 277, 347V) <sup>3</sup>	BSW	Bird-deterrent spikes	DBLXD	Black	DDBTXD	Textured dark bronze	DSSTXD	Textured sandstone
DF	Double fuse (208, 240, 480V) 3	VG	Vandal guard	DNAXD	Natural aluminum	DBLBXD	Textured black		
HS	House-side shield 4			DWHXD	White	DNATXD	Textured natural aluminum		
SPD	Separate surge protection 13								



One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com © 2012-2024 Acuity Brands Lighting, Inc. All rights reserved.

DSXW2-LED Rev. 03/26/24





N.T.S

FOR PERMITTING PURPOSES ONLY

NOT RELEASED FOR CONSTRUCTION

024 BL COMPANIES, INC. THESE DRAWINGS SHALL NOT BE UTILIZED BY ANY PERSON, FIRM OR CORPORATION WITHOUT THE SPECIFIC WRITTEN PERMISSION OF BL COMPANIE:

100 Constitution Plaza 10th Floor Hartford, CT 06103 (860) 249-2200

NUF GHT / FLAND YME, C ш S

Designed

C2302349-60

T.L.B. R.M.R.

2302349

06/17/2024

LIGHTING NOTES AND DETAILS