

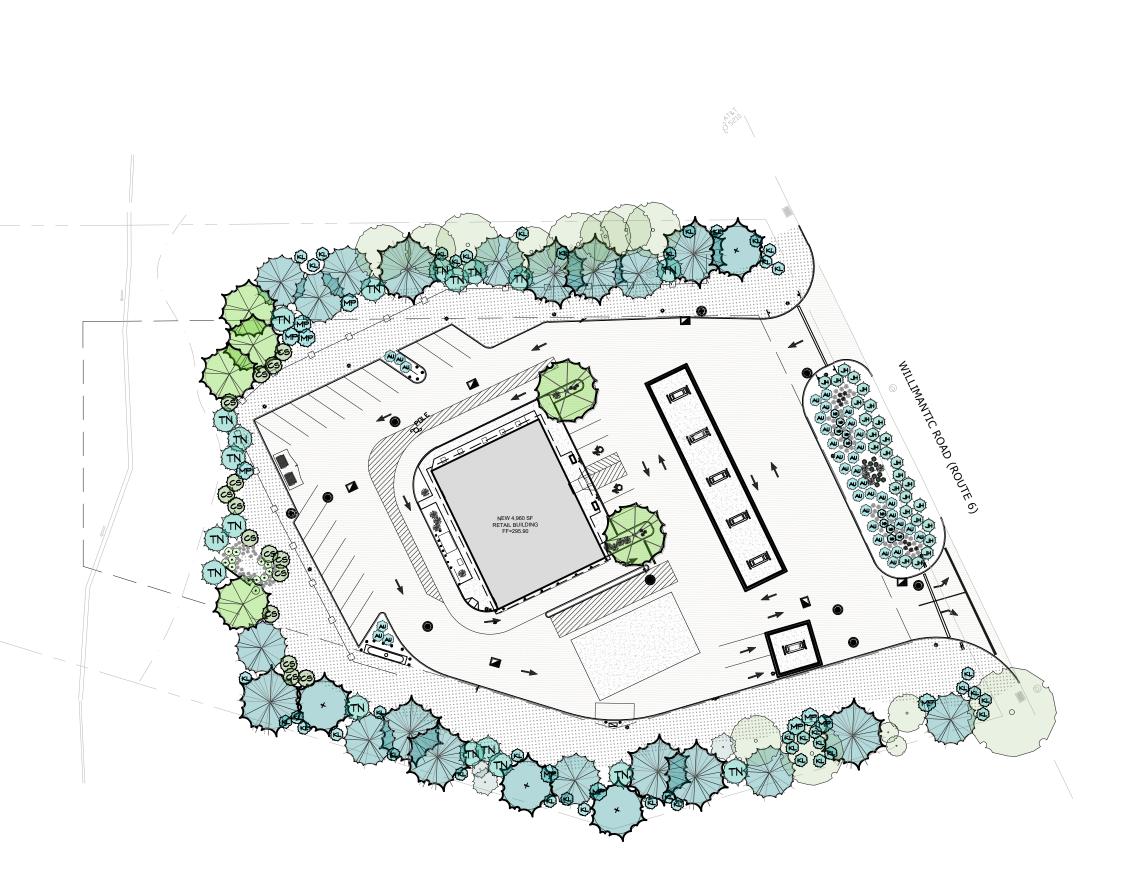
# ABBREVIATIONS

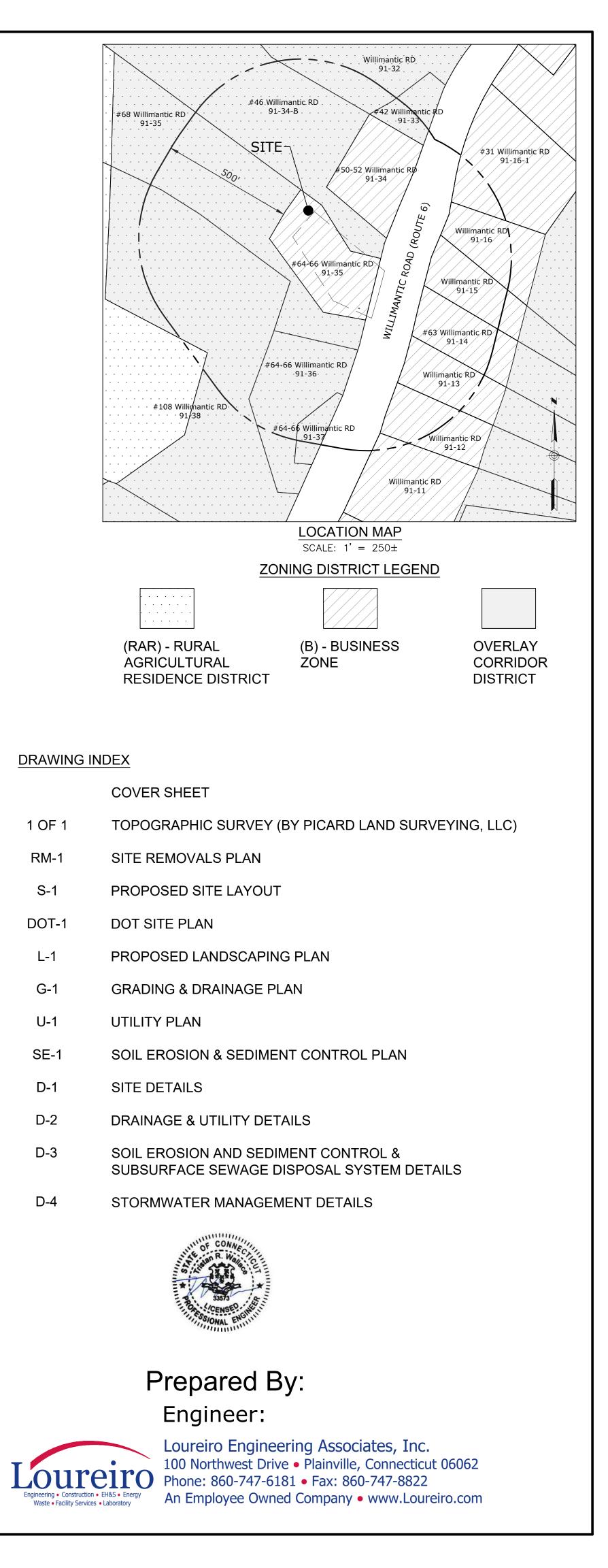
EXIST.	EXISTING
BIT.	BITUMINOUS
CONC.	CONCRETE
PVMT	PAVEMENT
R25'	RADIUS 25'

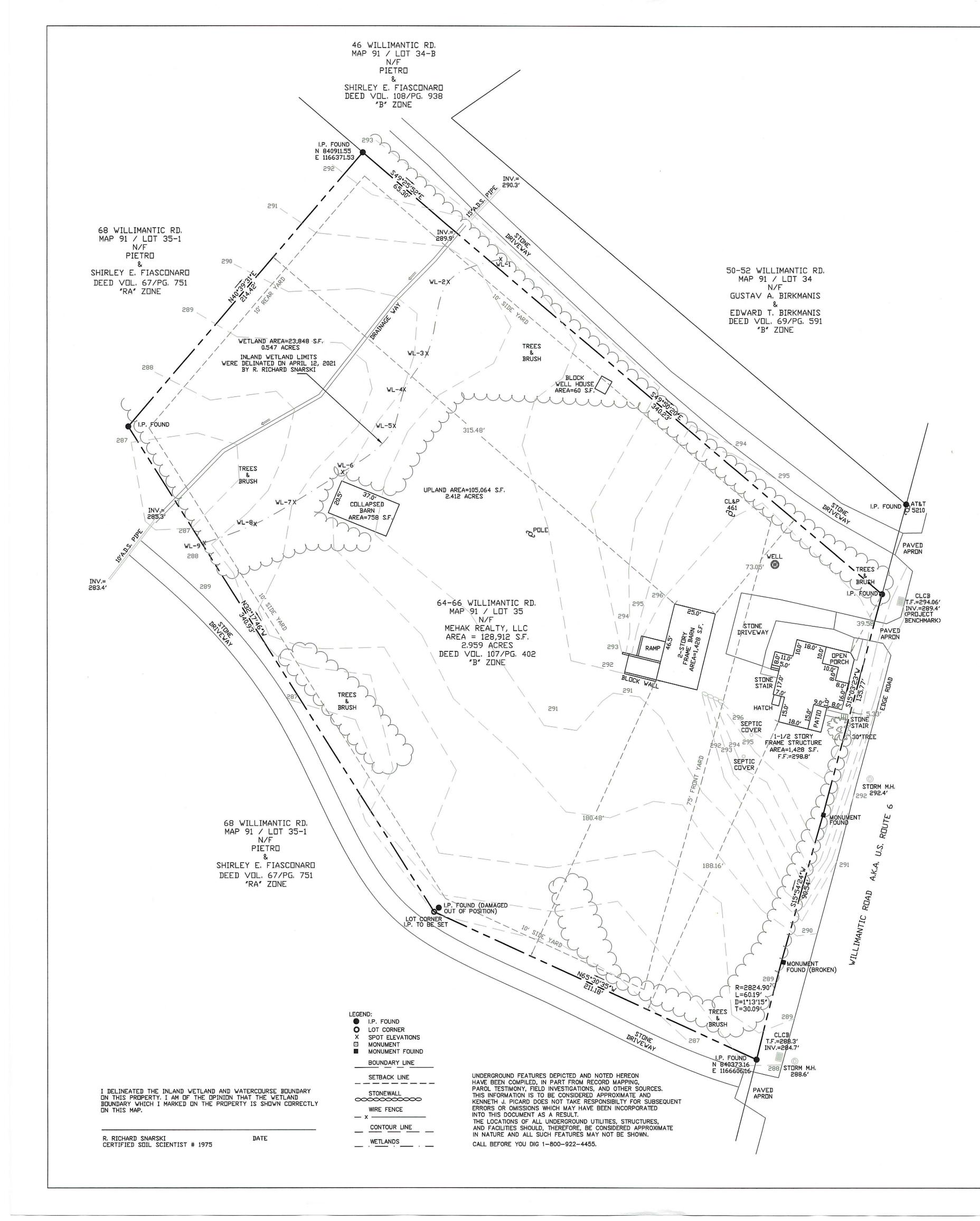
# MEHAK REALTY LLC **CONVENIENCE STORE &** FUELING STATION

64-66 WILLIMANTIC ROAD CHAPLIN, CONNECTICUT

OCTOBER 19, 2021 REVISED DECEMBER 16, 2021



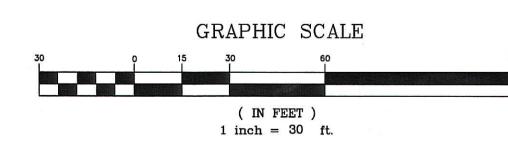


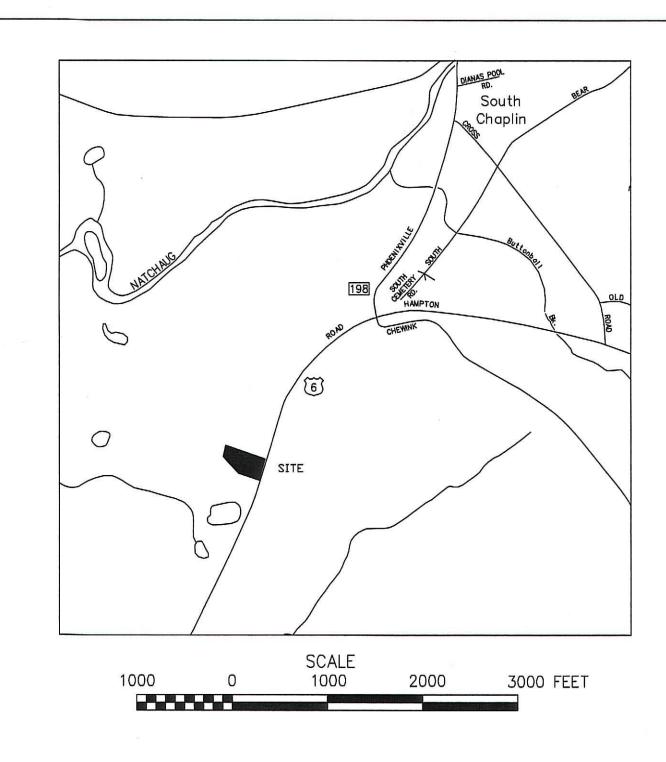


### EXISTING STRUCTURE AREAS #64-66 WILLIMANTIC RUAD

	DESCRIPTION
	HOUSE
	BARN
	BARN (COLLAPSED)
	WELL HOUSE
1	TOTAL

ZONING INFORMATION TABLE	#64-66 WILLIMANTIC	ROAD
'B' ZONING	DISTRICT	
	REQUIRED	EXISTING
MINIMUM LOT AREA	87,120 S.F.	128,912 S.F.
INIMUM FRONTAGE	200 FEET	286.50 FEET
STREET SETBACK-WILLIMANTIC ROAD (HOUSE)	75 FEET	5.33 FEET
SIDE YARD SETBACK - NORTH (HOUSE)	10 FEET	39.58 FEET
SIDE YARD SETBACK - SOUTH (HOUSE)	10 FEET	188.16 FEET
SIDE YARD SETBACK - NORTH (BARN)	10 FEET	73.05 FEET
SIDE YARD SETBACK - SOUTH (BARN)	10 FEET	180.48 FEET
REAR YARD SETBACK - WEST (BARN)	10 FEET	315.48 FEET
AXIMUM BUILDING HEIGHT	35 FEET	18± FEET





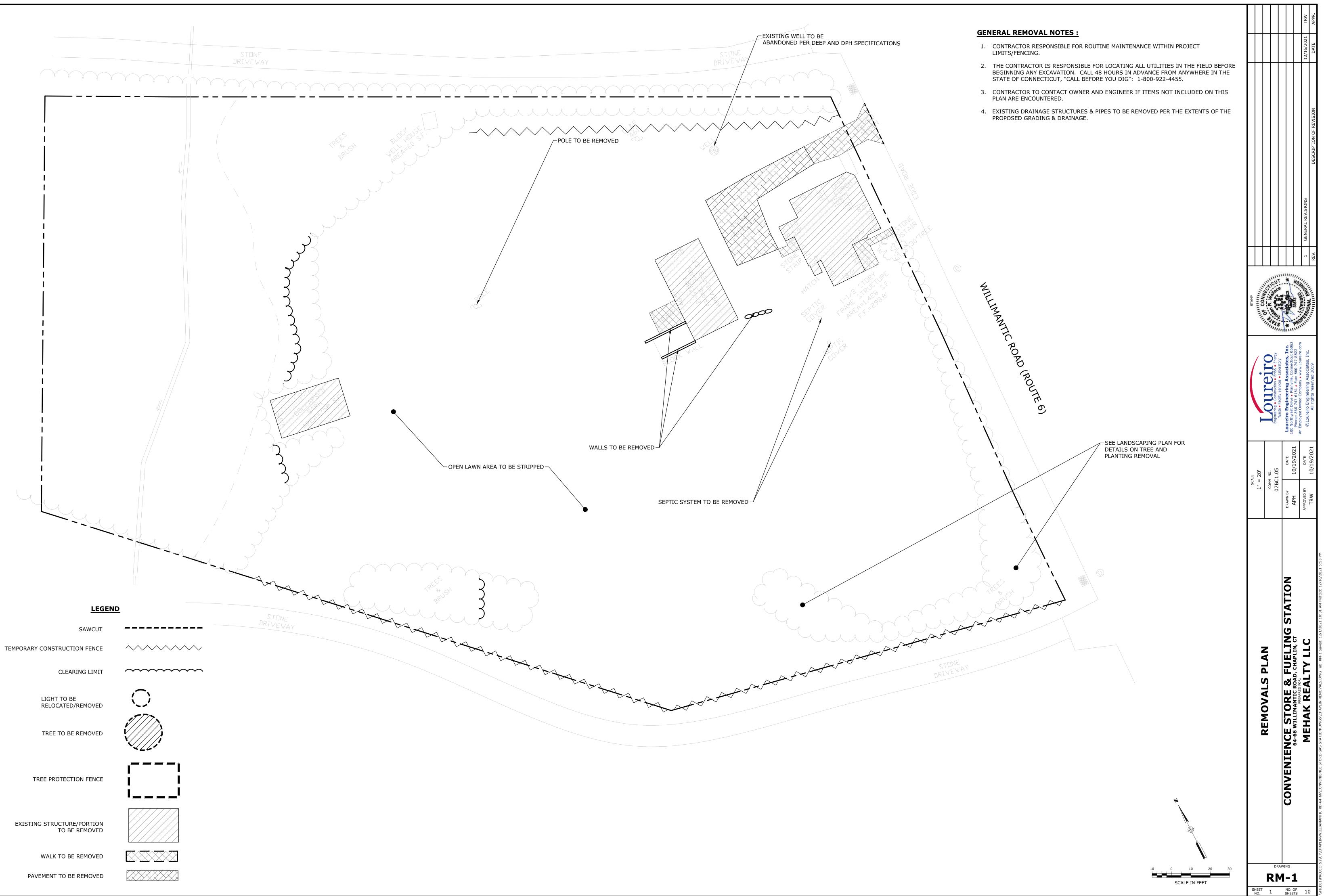
	BUILDING COVERAGE
	1,428 S.F.
	1,162 S.F.
	758 S.F.
_	60 S.F.
	3,408 S.F.

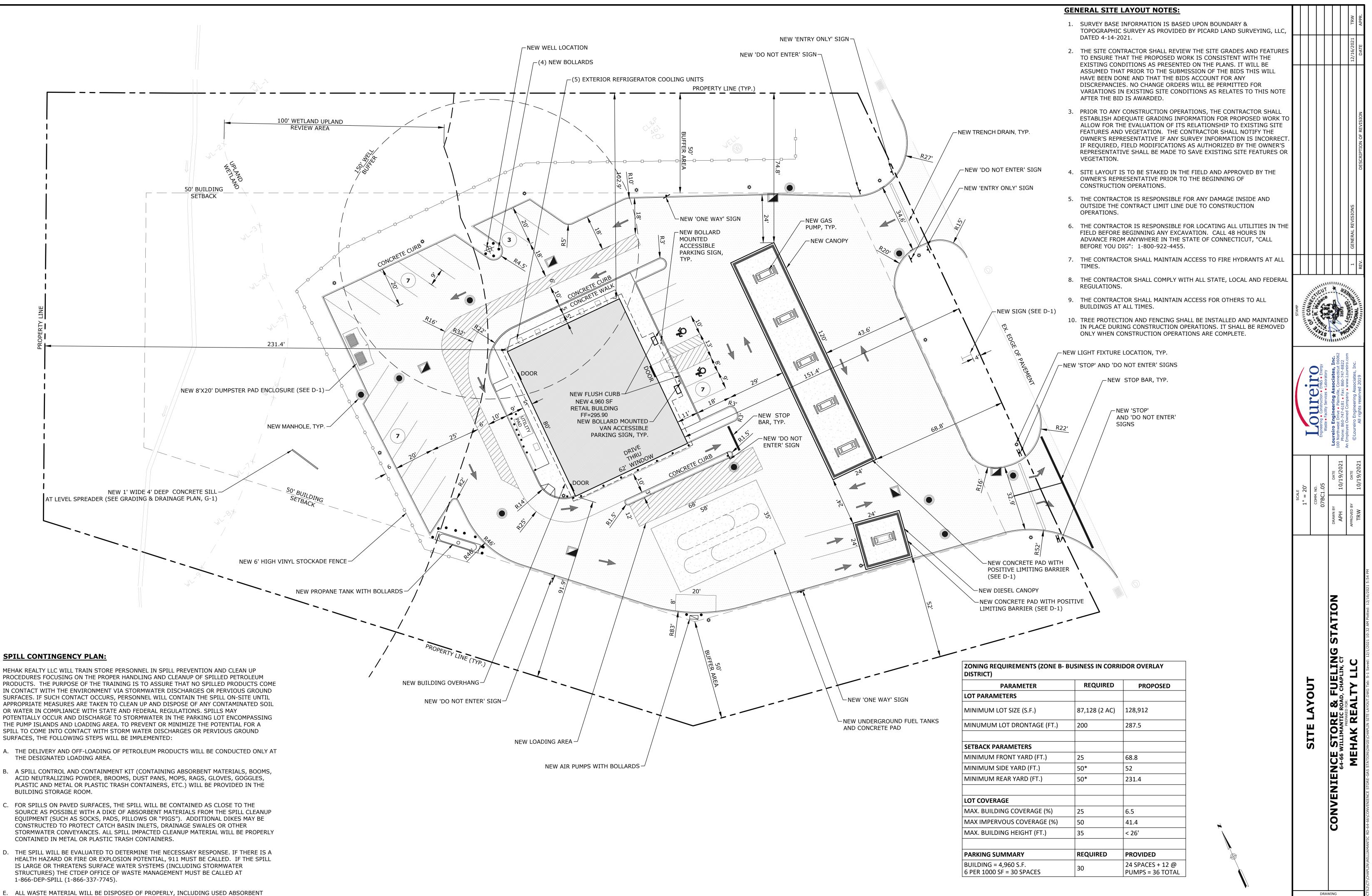
### NOTES:

- THIS SURVEY AND MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT
- ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996. THIS MAP SHOWS A PROPERTY SURVEY DEPICTING THE EXISTING STRUCTURES 2. AND OTHER IMPROVEMENTS IN RELATION TO THE EXISTING BOUNDARY LINES
- UNDER THE PROPERTY/BOUNDARY SURVEY CATEGORY. 3. BOUNDARY DETERMINATION/OPINION IS A DEPENDENT RESURVEY
- AS NOTED. SEE NOTE 9.
- 4. THIS SURVEY CONFORMS TO A CLASS A-2. 5. THE HORIZONTAL DATUM IS NAD 83 WITH 1996 ADJUSTMENTS.
- THE VERTICAL DATUM IS N.A.V.D. 88.
- 6. THIS PROPERTY IS IN "B" ZONE.
- 7. LOT AREA = 128,912 S.F. / 2.959 ACRES.
- 8. PROPERTY IS NOT IN FLOOD ZONE.
- 9. REFERENCE IS MADE TO THE FOLLOWING MAPS:
- A. CONNECTICUT STATE HIGHWAY DEPARTMENT RIGHT OF WAY MAP TOWN OF CHAPLIN WILLIMANTIC- DANIELSON ROAD FROM THE WINDHAM TOWN LINE EASTERLY TO SHERMAN'S COR. ROUTE U.S. 6 STATE MAP # 331 SHEET 3 OF 3 SCALE: 1" = 40' DATED: AUG. 31, 1931 PREPARED BY: CONN. STATE HIGHWAY DEPT. MAP NO. 331 ON FILE AT THE CONN. D.O.T. OFFICE NEWINGTON, CT.
- B. CONNECTICUT STATE HIGHWAY DEPARTMENT RIGHT OF WAY MAP TOWN OF CHAPLIN MAP SHOWING WILLIMANTIC DANIELSON & WILLIMANTIC PUTNAM ROADS IN THE VICINITY OF SHERMAN'S CORNER ROUTES No. 3 & 101 STATE MAP # 184 SHEET 3 OF 3 SCALE: 1" = 40' DATED: FEB. 28, 1929
- PREPARED BY: CONN. STATE HIGHWAY DEPT. MAP NO. 184 ON FILE AT THE CONN. D.O.T. OFFICE NEWINGTON, CT.
- C. TOWN OF CHAPLIN PLAN SHOWING LAND AND EASEMENT AQUIRED FROM WILLIAM & CATHERINE BOLOTIN BY THE STATE OF CONNECTICUT ROUTE U.S. 6 STATE MAP: SHEET 1 AND 2 OF 2 SCALE: 1'' = 40' DATED: JUNE 1954 REVISED: JUNE 1955 PREPARED BY: CONN. STATE HIGHWAY DEPT. MAP VOL. 1 / PAGE 95 ON FILE AT THE CHAPLIN TOWN CLERK'S OFFICE.
- D. BOUNDARY SURVEY PREPARED FOR CAROL TETZLAFF ROUTE #6 CHAPLIN, CONNECTICUT SCALE: 1" = 100' DATED: JANUARY 27, 2000 REVISED: AUGUST 28, 2000 PREPARED BY: DATUM ENGINEERING MAP VOL. 10 / PAGE 70 ON FILE WITH THE CHAPLIN TOWN CLERKS OFFICE.
- E. EXISTING CONDITIONS PLAN PREPARED FOR: BESTWAY FOOD & FUEL ROUTE #6 CHAPLIN, CONNECTICUT SCALE: 1" = 30' DATED: SEPTEMBER 23, 2019 PREPARED BY: PAUL ARCHER MAP PROVIDED BY OWNER.

10. THE STONEWALLS SHOWN AS BOUNDARIES MAY HAVE IRREGULARITIES OF COURSE AND WIDTH BETWEEN THE PRINCIPAL POINTS OF COURSE INDICATED.

		REVISIONS			2 
				PROPERTY	SURVEY
				PREPARE	D FOR
				MEHAK RE	ALTY, LLC
NO.	DATE	DESCRIPTION	BY	64-66 WILLIN	MANTIC ROAD
				A.K.A CONN ASSESSOR'S MA	
		O MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY		CHAPLIN, CO	DNNECTICUT
	т	CORRECT AS NOTED HEREON.	SUPPLY OF CONNECTION	DRAWN BY: K.J.P.	CHECKED BY:
		GNATURE AND AN EMBOSSED SEAL.	Contraction of the second	SCALE: 1 INCH = 30 FEET	
		NNETH J. PICARD L.S. 18143 ICARD LAND SURVEYING, LLC	No states	DATE: APRIL 14, 2021	
		459 JONES HOLLOW ROAD MARLBOROUGH, CT 06447	THE WO SURVEY OF THE	EXISTING CONDITIONS	SHEET: 1 OF 1





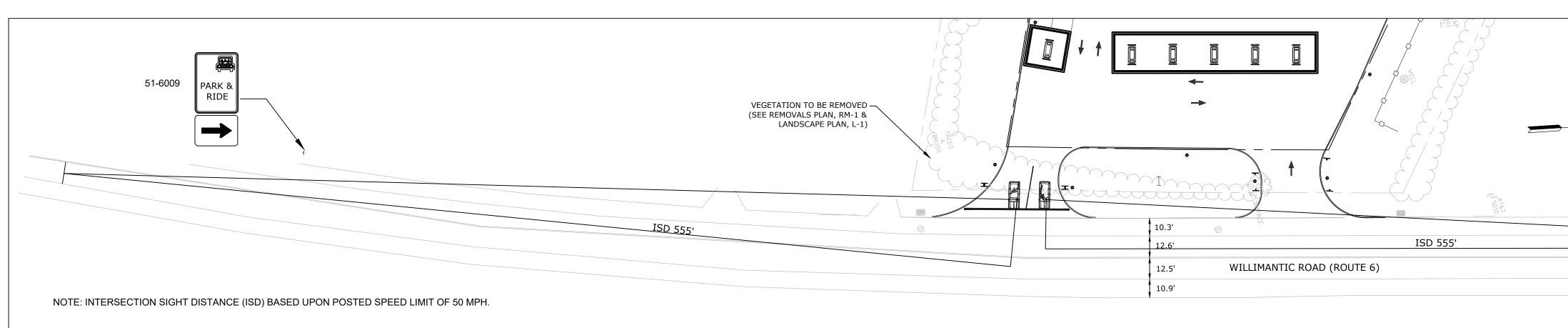
### **SPILL CONTINGENCY PLAN:**

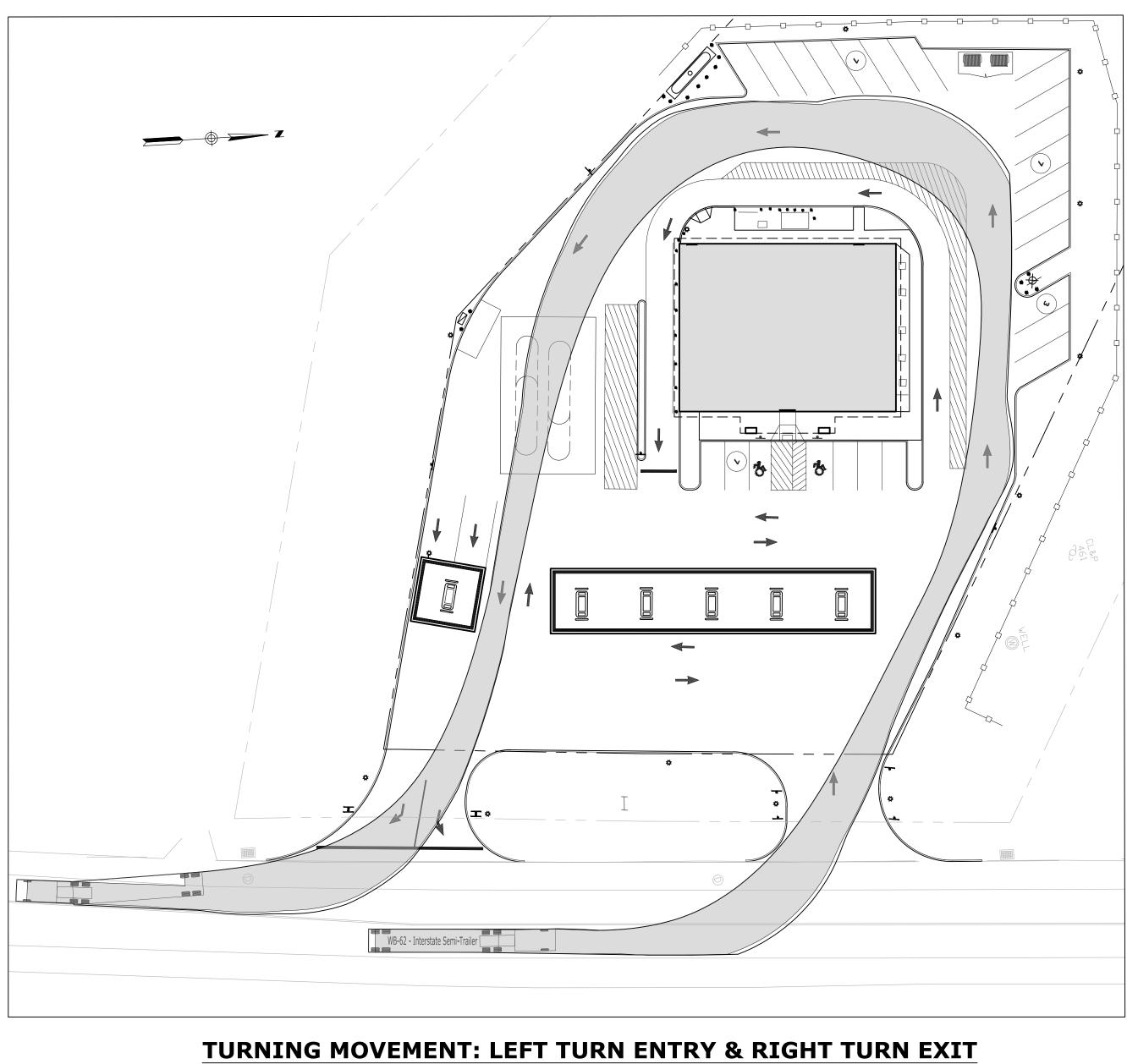
PROCEDURES FOCUSING ON THE PROPER HANDLING AND CLEANUP OF SPILLED PETROLEUM IN CONTACT WITH THE ENVIRONMENT VIA STORMWATER DISCHARGES OR PERVIOUS GROUND SURFACES. IF SUCH CONTACT OCCURS, PERSONNEL WILL CONTAIN THE SPILL ON-SITE UNTIL APPROPRIATE MEASURES ARE TAKEN TO CLEAN UP AND DISPOSE OF ANY CONTAMINATED SOIL OR WATER IN COMPLIANCE WITH STATE AND FEDERAL REGULATIONS. SPILLS MAY POTENTIALLY OCCUR AND DISCHARGE TO STORMWATER IN THE PARKING LOT ENCOMPASSING THE PUMP ISLANDS AND LOADING AREA. TO PREVENT OR MINIMIZE THE POTENTIAL FOR A SPILL TO COME INTO CONTACT WITH STORM WATER DISCHARGES OR PERVIOUS GROUND

- E. ALL WASTE MATERIAL WILL BE DISPOSED OF PROPERLY, INCLUDING USED ABSORBENT MATERIALS.

**S-1** 

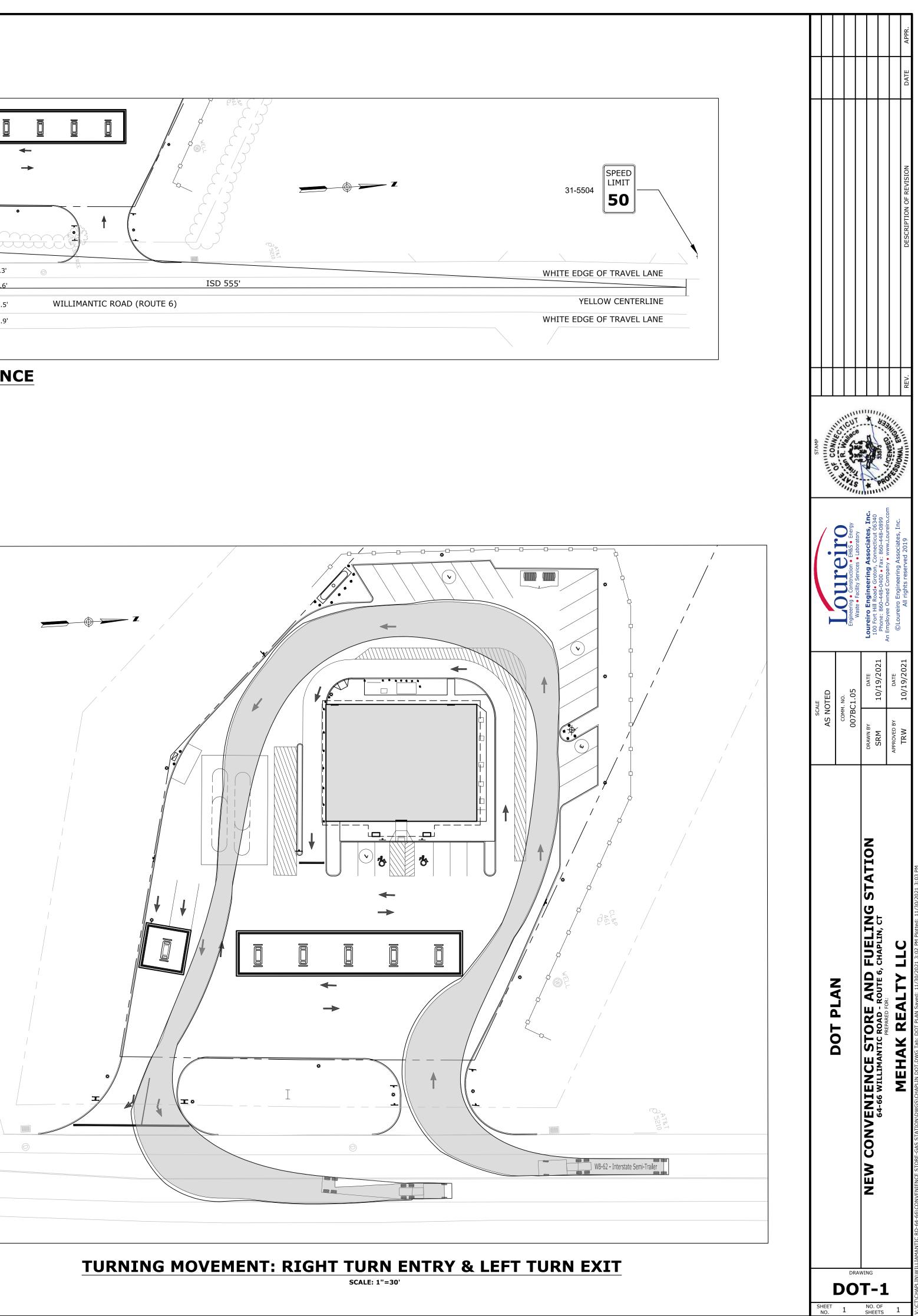
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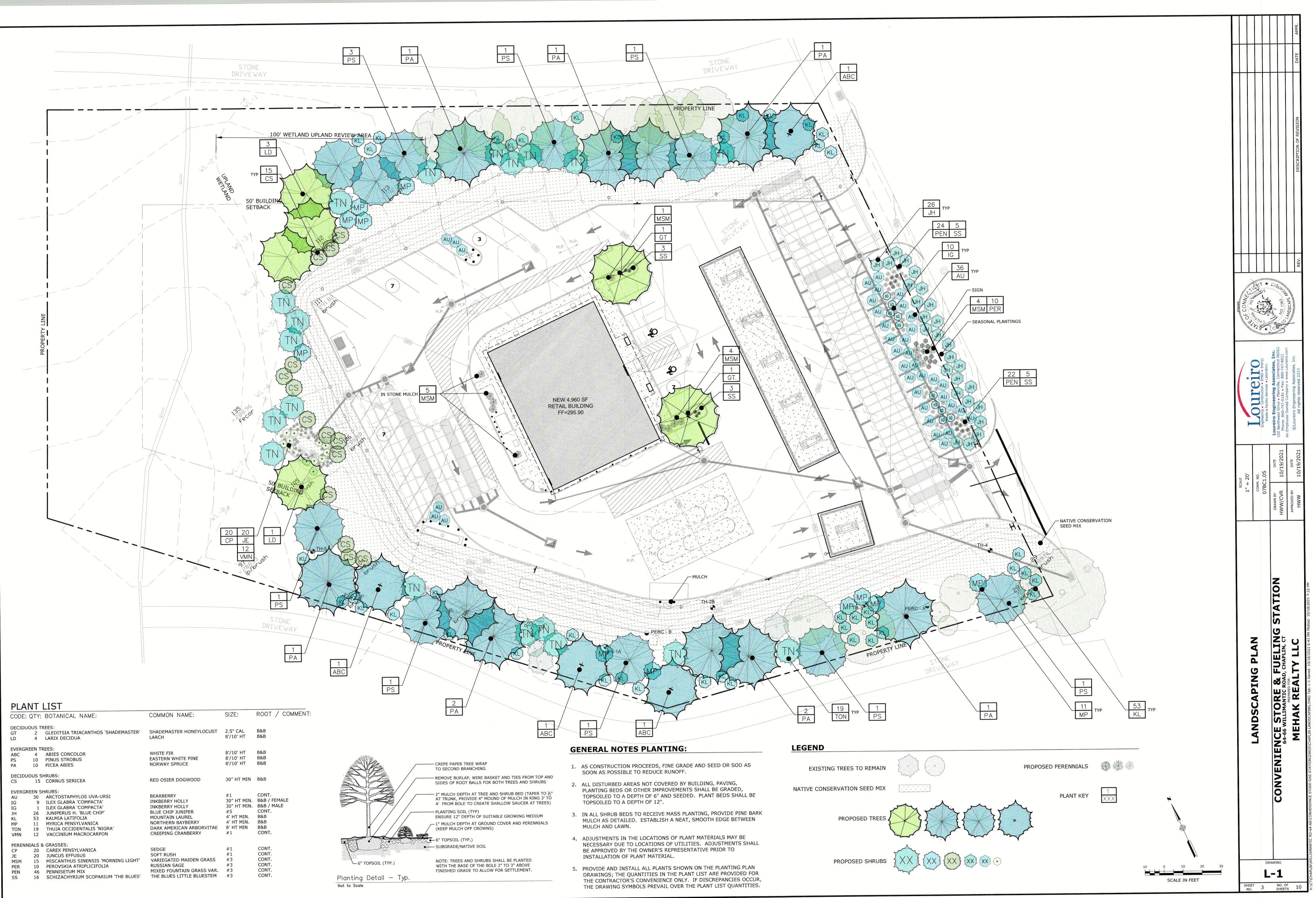




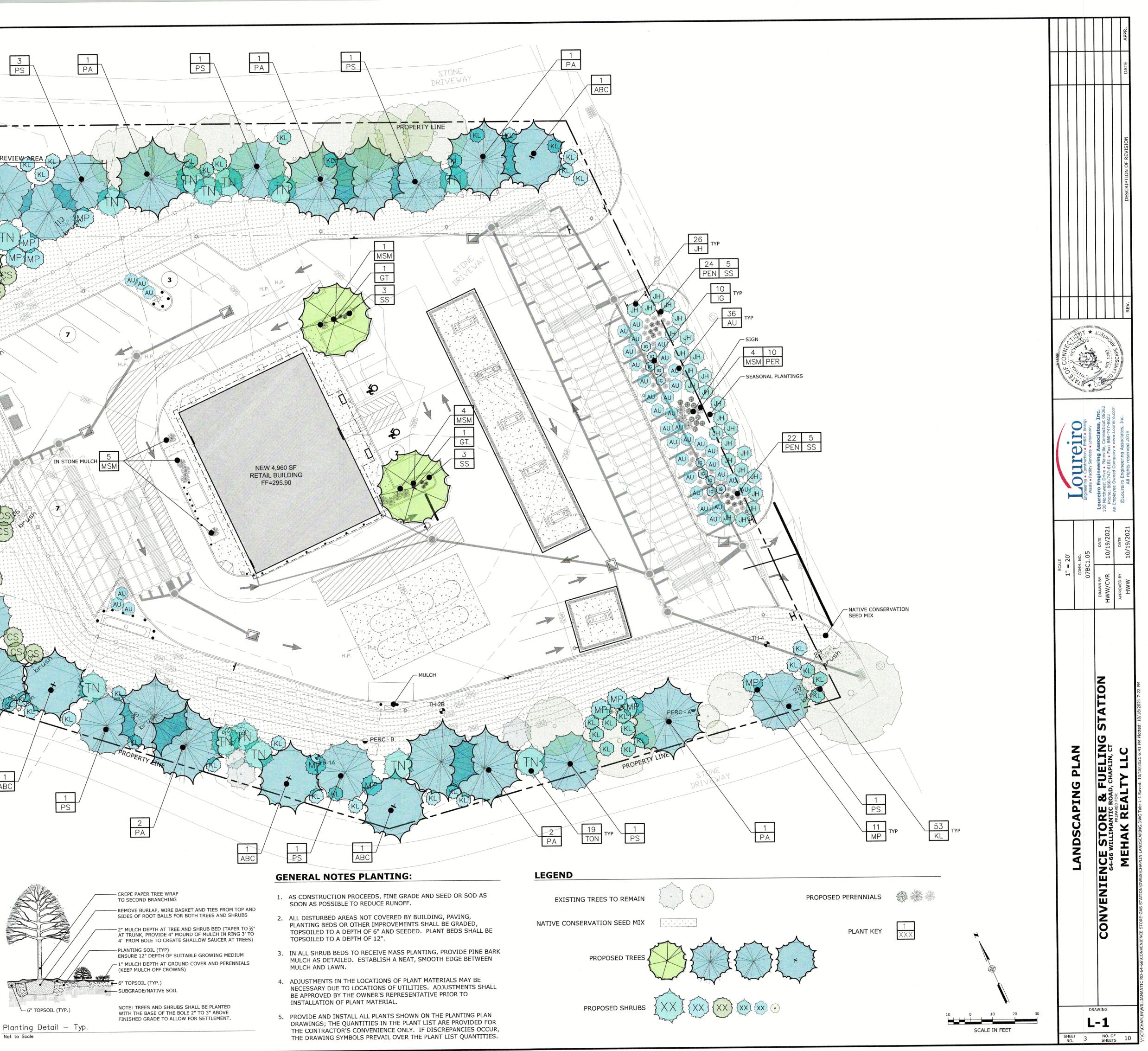
SCALE: 1"=30'

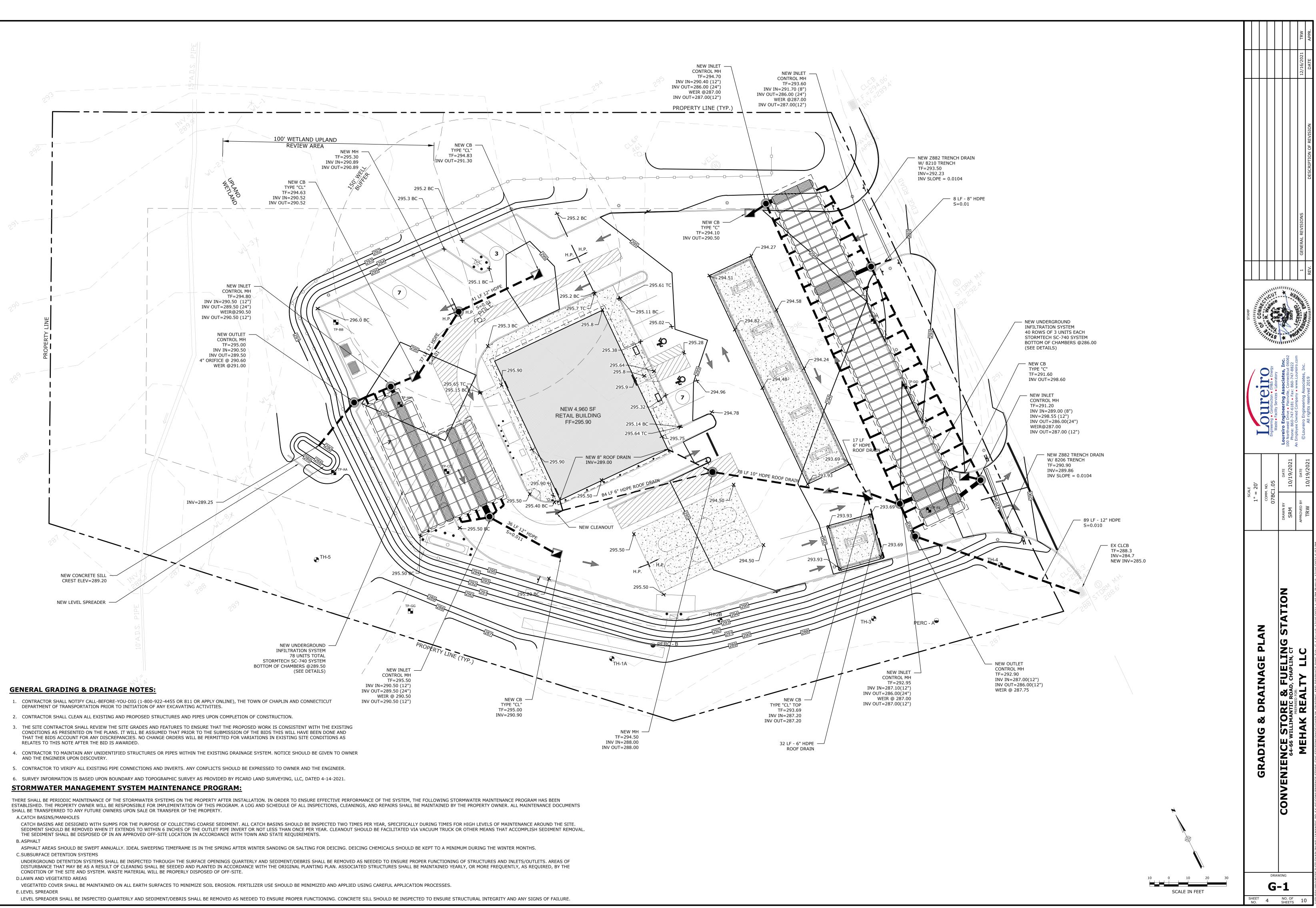
SIGHTLINE DISTANCE

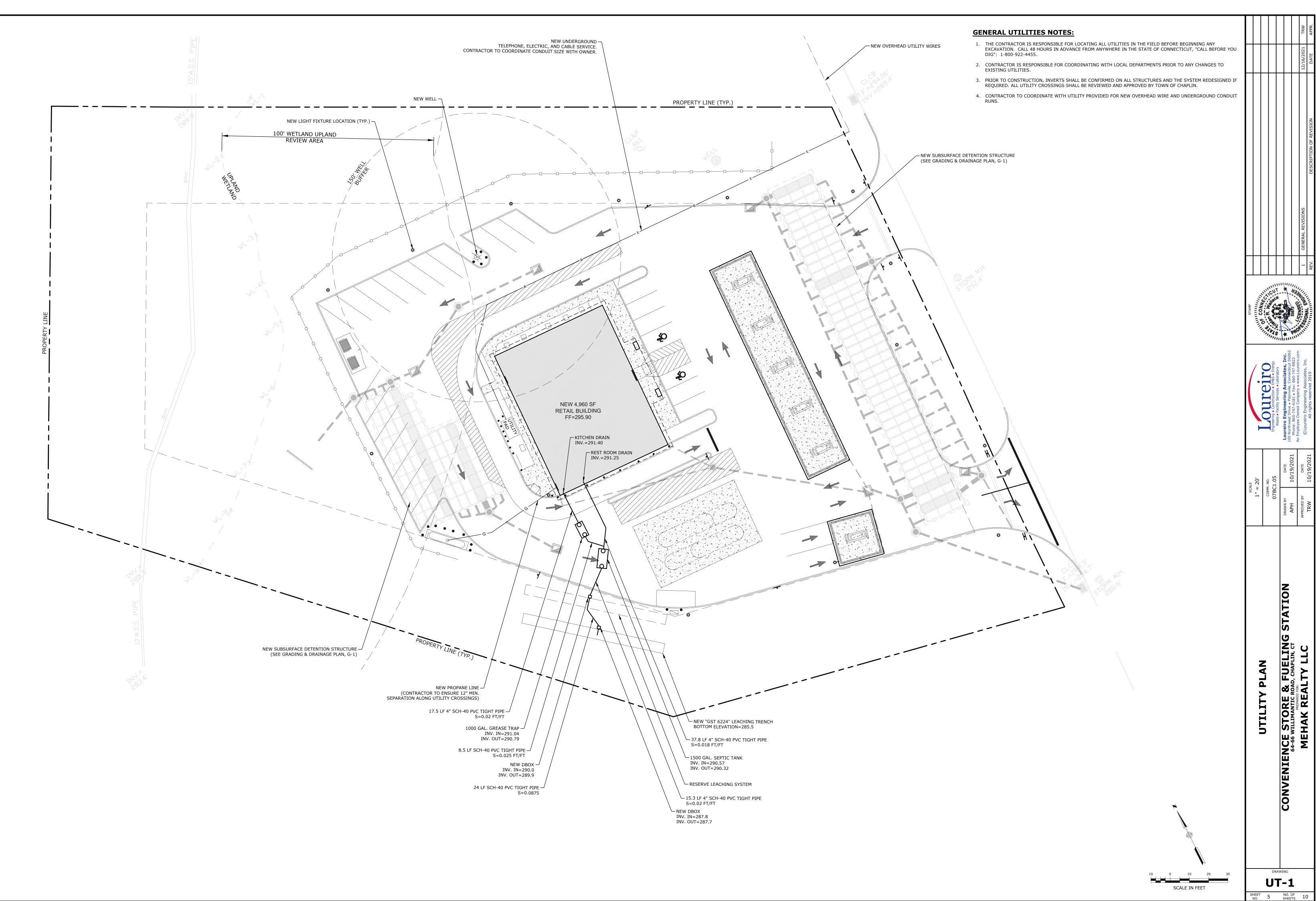




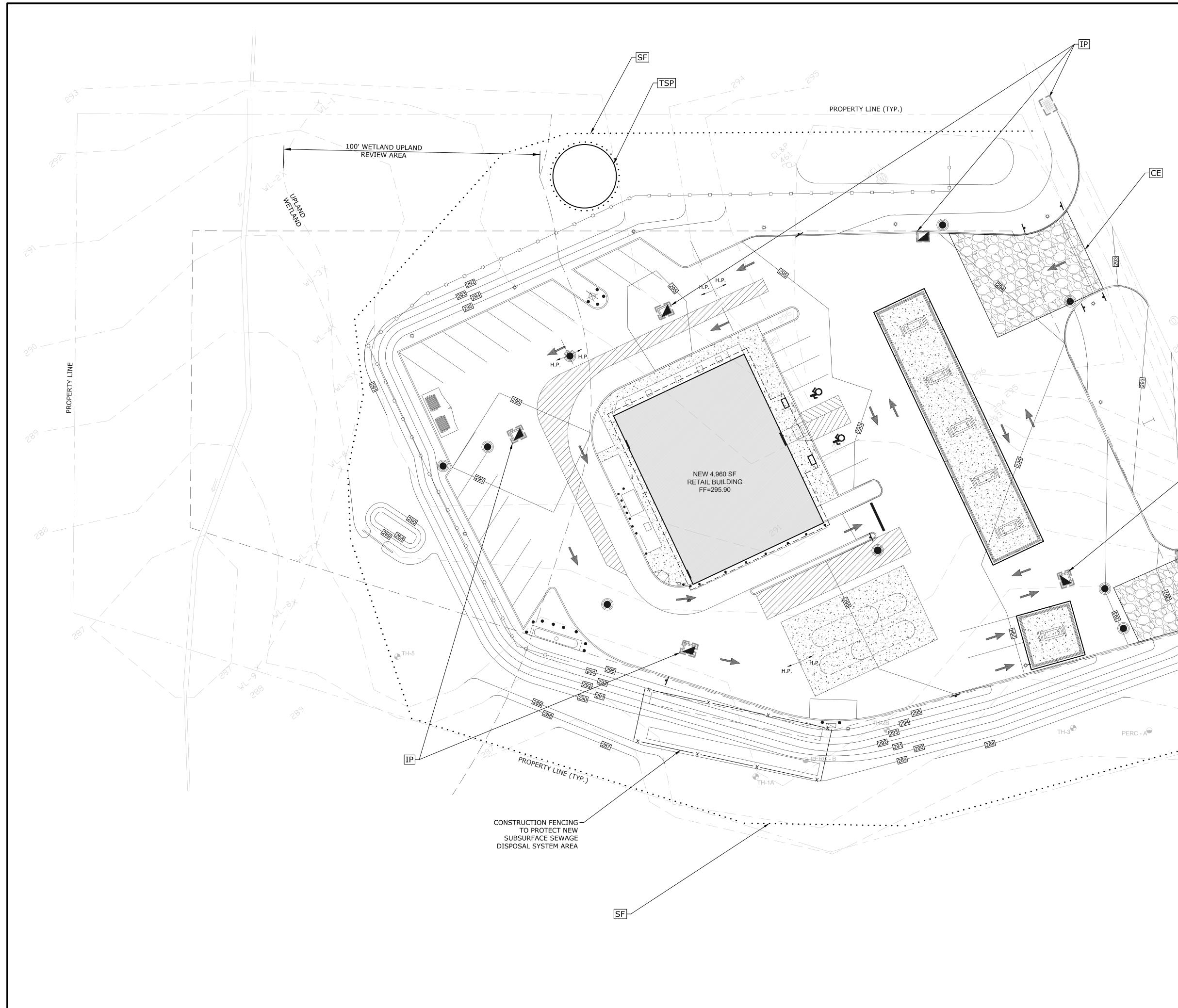
PLANT LIST			
CODE: QTY: BOTANICAL NAME:	COMMON NAME:	SIZE:	ROOT / COMMENT:
DECIDUOUS TREES: GT 2 GLEDITSIA TRIACANTHOS 'SHADEMASTER' LD 4 LARIX DECIDUA	SHADEMASTER HONEYLOCUST LARCH	2.5" CAL 8'/10' HT	B&B B&B
EVERGREEN TREES: ABC 4 ABIES CONCOLOR PS 10 PINUS STROBUS PA 10 PICEA ABIES	WHITE FIR EASTERN WHITE PINE NORWAY SPRUCE	8'/10' HT 8'/10' HT 8'/10' HT	B&B B&B B&B
DECIDUOUS SHRUBS: CS 15 CORNUS SERICEA	RED OSIER DOGWOOD	30" HT MIN	B&B
EVERGREEN SHRUBS:			CONT
AU30ARCTOSTAPHYLOS UVA-URSIIG9ILEX GLABRA 'COMPACTA'IG1ILEX GLABRA 'COMPACTA'JH26JUNIPERUS H. 'BLUE CHIP'KL53KALMIA LATIFOLIAMP11MYRICA PENSYLVANICATON19THUJA OCCIDENTALIS 'NIGRA'VMN12VACCINIUM MACROCARPON	BEARBERRY INKBERRY HOLLY INKBERRY HOLLY BLUE CHIP JUNIPER MOUNTAIN LAUREL NORTHERN BAYBERRY DARK AMERICAN ARBORVITAE CREEPING CRANBERRY	#1 30" HT MIN. 30" HT MIN. #5 4' HT MIN. 4' HT MIN. 8' HT MIN #1	-
PERENNIALS & GRASSES:			CONT
CP 20 CAREX PENSYLVANICA JE 20 JUNCUS EFFUSUS	SEDGE SOFT RUSH	#1 #1	CONT. CONT.
JE 20 JUNCUS EFFUSUS MSM 15 MISCANTHUS SINENSIS 'MORNING LIGHT'	VARIEGATED MAIDEN GRASS	#3	CONT.
PER 10 PEROVSKIA ATRIPLICIFOLIA	RUSSIAN SAGE	#3	CONT.
PEN 46 PENNISETUM MIX SS 16 SCHIZACHYRIUM SCOPARIUM 'THE BLUES'	MIXED FOUNTAIN GRASS VAR. THE BLUES LITTLE BLUESTEM	#3 #3	CONT. CONT.





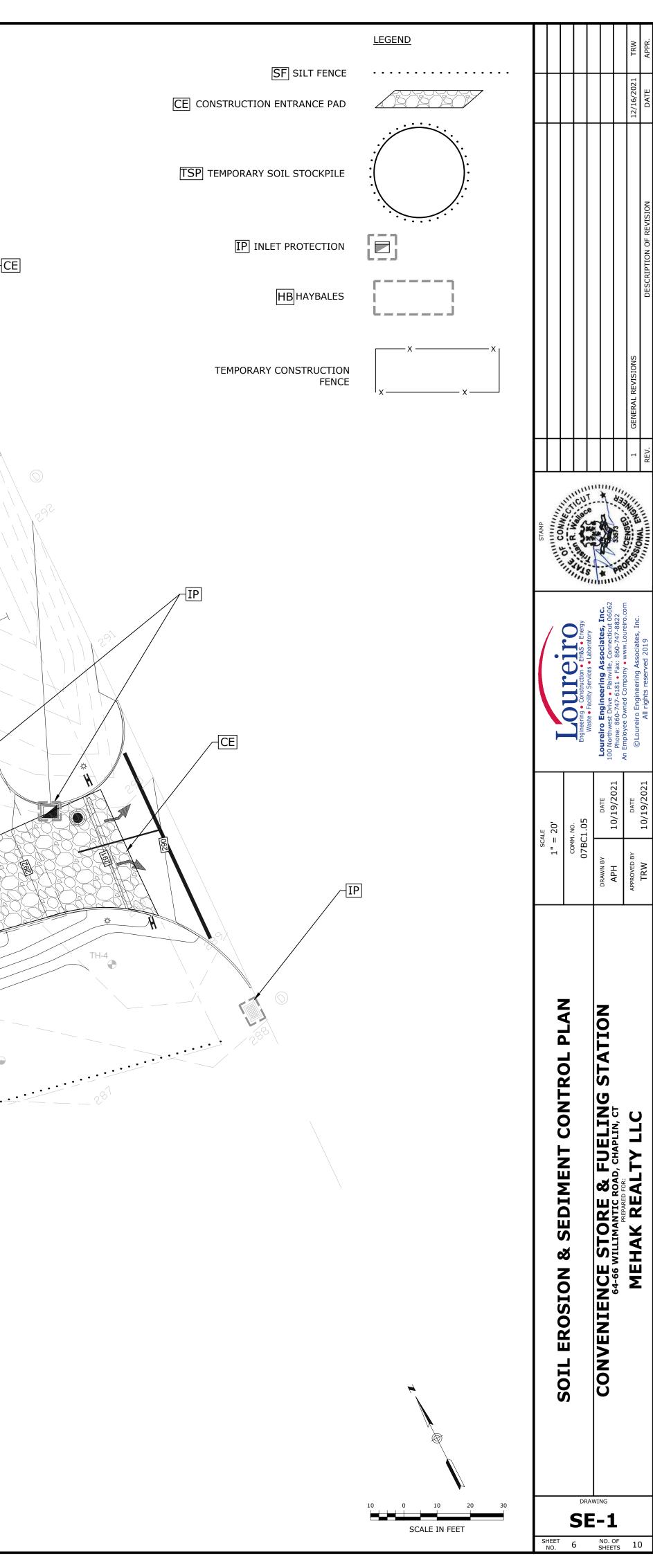


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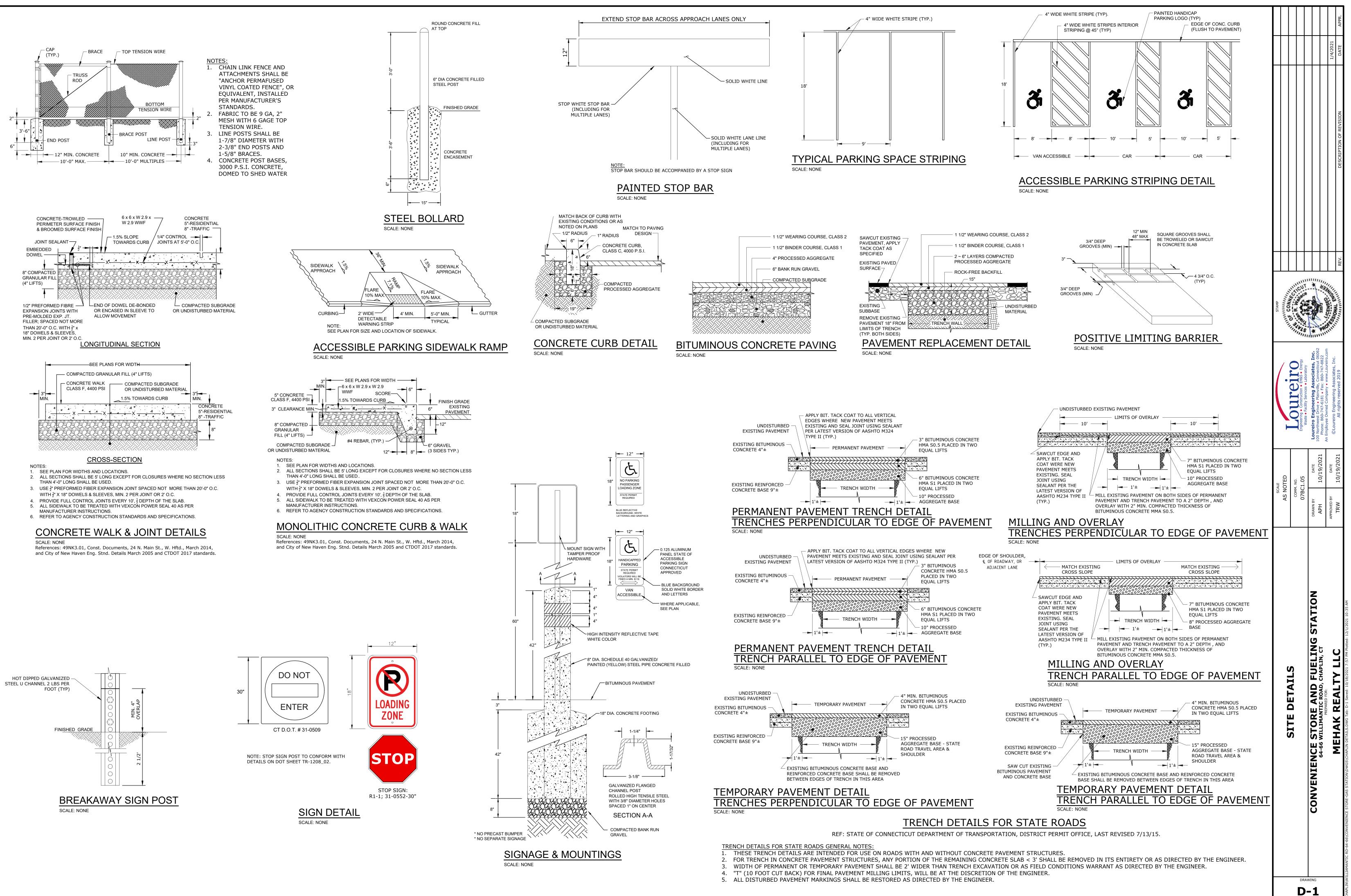


GENERAL SOIL EROSION AND SEDIMENT CONTROL NOTES:

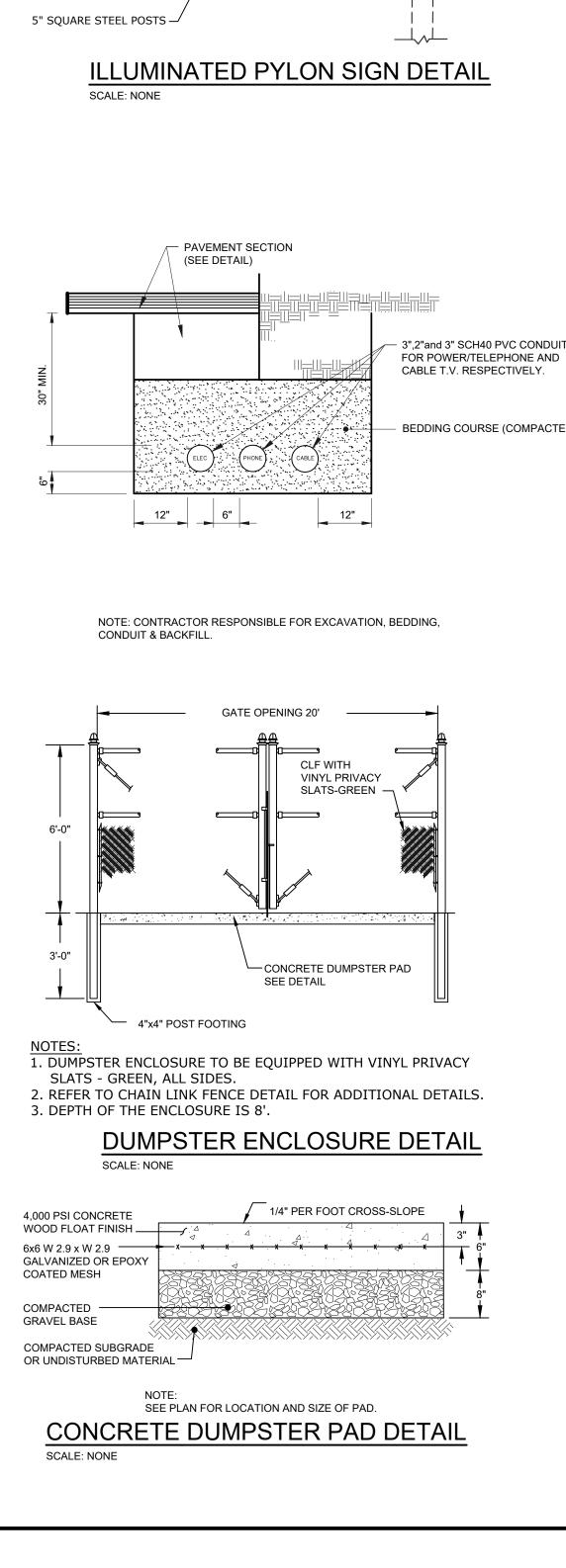
SEE DETAIL SHEET D-3 FOR SOIL EROSION AND SEDIMENT CONTROL NARRATIVE AND DETAILS.

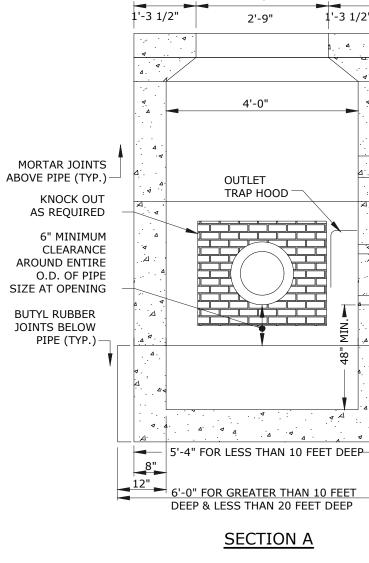


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HEET 7 NO. OF 10

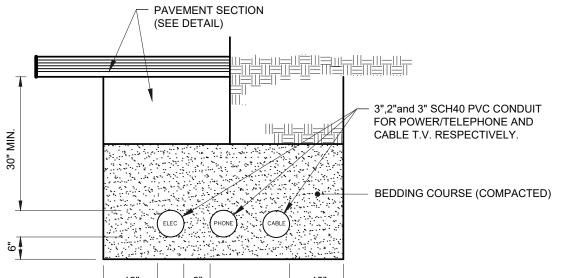


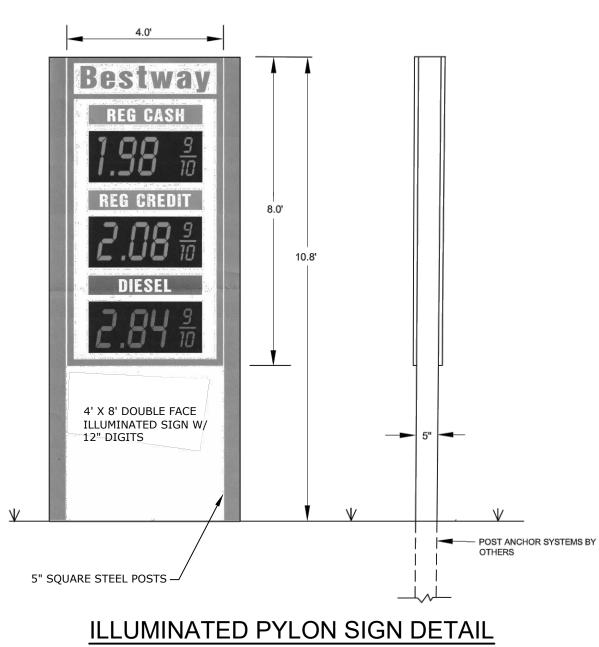


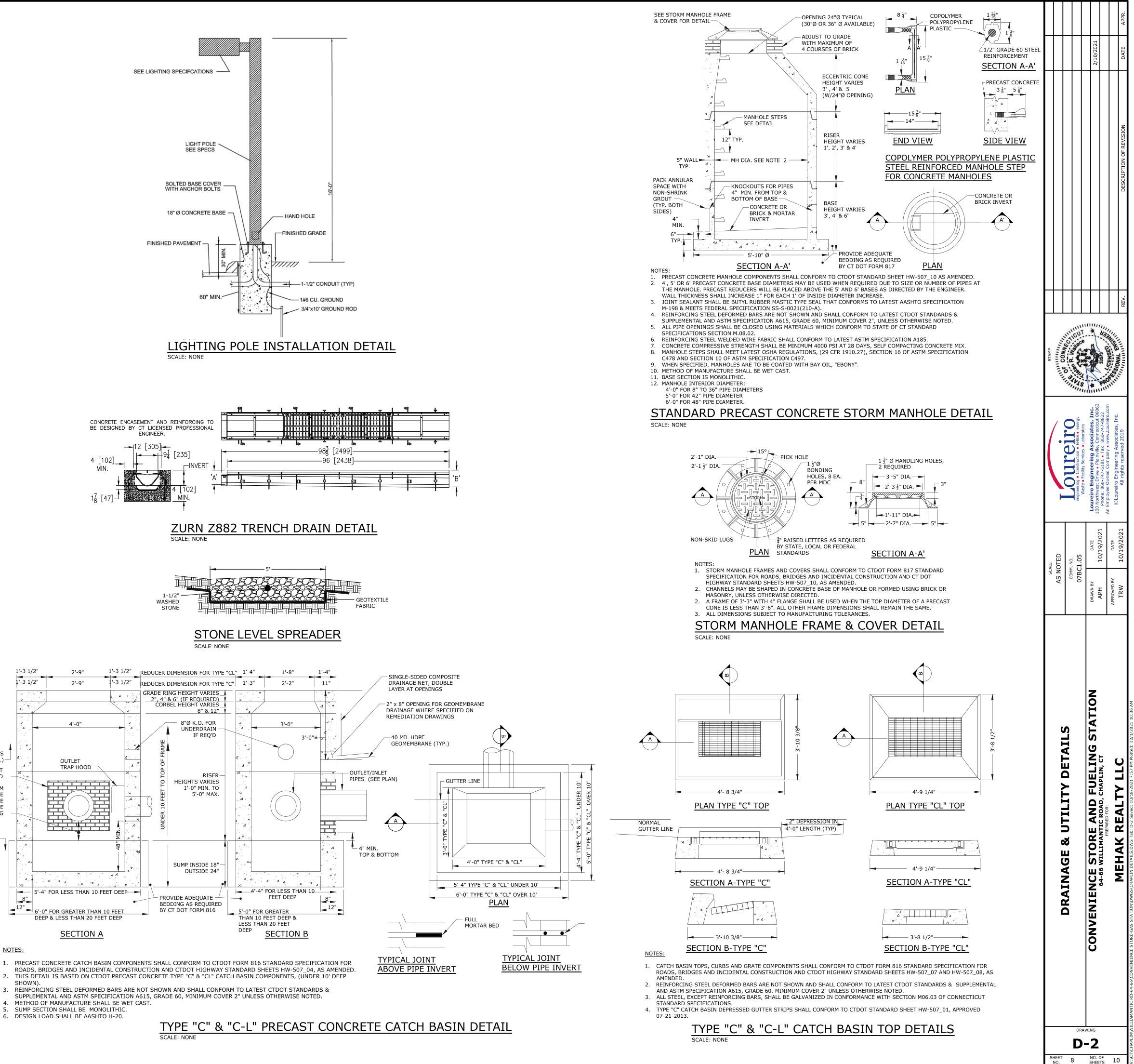
NOTES:

SHOWN)

1'-3 1/2"







# SOIL EROSION AND SEDIMENT CONTROL NOTES:

All applicable regulations and requirements of the State of Connecticut Department of Energy & Environmental Protection (DEEP) and the local land use requirements shall be adhered to including the placement of the proposed SE&SC barriers as specified herein. When the construction work is completed, the Contractor shall clean the SE&SC barriers and restore the natural drainage areas affected by his operations to their original condition unless otherwise noted.

Prior to construction, all SE&SC barriers shall be placed to confine sediment as shown on drawings and where otherwise required based on the Contractor's means/methods and construction sequencing. All SE&SC barriers shall be left in place and maintained until the work has been completed and surfaces stabilized.

It shall be the responsibility of the Contractor to monitor the condition of the SE&SC structures. If the effectiveness or integrity of any structures is found to be insufficient or if the structures are damaged in any way, the Contractor shall make whatever repairs are necessary to ensure that proper erosion control is maintained. Monitoring of the erosion control structures is particularly important following periods of rainfall. All repairs of erosion control structures shall be made by the Contractor as soon as the damage is discovered.

If additional SE&SC control structures are necessary to minimize erosion and sedimentation, as determined in the field, the Contractor shall install said additional structures as required.

In addition to the above general provisions, the Contractor shall comply with the following special requirements:

Land disturbance shall be kept to a minimum; restabilization shall be scheduled as soon as practicable following construction. Project sequencing will be necessary to minimize SE&SC control liabilities. The Contractor shall sequence his operations so as to provide manageable work areas with limited opportunity for soil erosion to occur.

2. All graded areas are to be covered as soon as possible after construction work is completed Interim seeding, mulching and/or erosion control blankets may be required throughout construction for stabilization of disturbed areas. Woodchips and mulch may be used throughout the entirety of the operation.

3. All other areas affected by construction and not to be filled are to be restored to original grade with topsoil and seeded as shown on the drawings.

4. For specific details on the design, application and installation of the erosion and sedimentation control structures the Contractor shall refer to the Connecticut guidelines for Soil Erosion and Sediment Control, dated May 2002, as amended or otherwise replaced.

5. Perimeter SE&SC barriers for this site include provisions for the use of hay bales, staked silt fence, filter socks and/or mulch berms. The Contractor shall inspect regularly to ensure the placement is maintained.

6. Fabric for silt fence shall consist of woven polypropylene, 36" in width and fastened to hardwood posts with three, one inch wide crown staples. Posts shall be of sound hardwood, forty eight inches (48") in length with a minimum cross section of 1.125 square inches. Staked hay bales may be substituted for silt fence. All SE&SC barriers shall be installed as shown on this drawing and at the toe of all slopes located down gradient of the construction work.

Sediment removed from SE&SC barriers and structures shall be disposed of in a manner which is consistent with the intent of the plan.

8. The Contractor shall be responsible for implementing the erosion and sediment control requirements of the local requirements. Their responsibility includes the installation and maintenance of all required SE&SC control measures, informing all parties engaged on the construction site of the requirements and objectives of the plan, and notifying the local Planning and Zoning offices of any transfers of this responsibility.

9. The Contractor is responsible for notifying the local land use agency and other appropriate authorities at least 72 hours prior to the start of any construction activity.

10. The Contractor shall use approved methods and materials for prevention of dispersion of dust including misting, chemical application and/or mulch surfacing.

11. The Contractor shall inspect all erosion control measures daily during construction and after each significant rain storm event. Damage shall be repaired immediately.

12. All dewatering shall incorporate the use of filter bags on discharge ends.

The Contractor shall be fully responsible for ownership of all soil erosion and sediment controls as necessary to protect this site. During the progress of construction, interim erosion controls may be necessary based on the Contractors means, methods and sequencing. The erosion control measures presented on these plans represent the minimum controls deemed necessary based on the expected final project grades and features. Interim measures required to stabilize the site during construction shall be installed by the Contractor as needed based upon his assessment of the site through his own site inspections and observations. All Contractor provided soil erosion and sediment control measures shall be designed and installed by the contractor in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control as amended or otherwise replaced.

In the event that a rain event occurs and the Contractor provided SE&SC controls fail to maintain the site in a stabilized condition, the Contractor shall be fully responsible for any and all remediation, mitigation or other damage that may occur.

### **RECOMMENDED PROJECT SEQUENCING:**

Low Impact Construction practices should be adopted to further mitigate erosion and sedimentation. Install perimeter SE&SC - clear brush upon the land surface as needed to facilitate the construction activities defined. Install all perimeter SE&SC as noted on plan.

- 1. Install utilities as necessary and construct foundations.
- Simultaneous with building construction, loam and seed all disturbed areas.
- 3. Place pavement base material or hot mix asphalt to stabilize the parking area.

# **POST-CONSTRUCTION MAINTENANCE SCHEDULE:**

Primary Contact for SE&SC Matters: Ahmed Choudhry, (860) 608-9636

The stormwater management area is inclusive of drainage structures and a subsurface detention system. Drainage structures and detention system visually inspected monthly and during or after significant rain events in general accordance with the state of Connecticut department of energy & environmental protection (DEEP) guidelines and requirements.

Observations of sediment accumulation, debris build-up, erosion at outlet locations, and condition of structures shall be included in these inspections.

Inspection of the roof drains at the building and canopy shall be performed.

Should unsatisfactory conditions be observed, appropriate actions will be taken to remedy the unsatisfactory conditions in a timely manner. Stormwater management features will be cleaned as needed. Any debris and sediments built up over 2 inches shall be removed. Any debris built up in front of outlets shall be removed.

# SUBSURFACE SEWAGE DISPOSAL CONSTRUCTION NOTES:

- TANK SHALL BE A 1500 GALL TWO CHAMBER TANK AND THE GREASE INTERCEPTOR A SINGLE CHAMBER PROPERLY SIZED FILTER AND SHALL BE CERTIFIED FOR HAVING WATERTIGHT JOINTS AND PIPE AND GREASE INTERCEPTORS MUCH BE APPROVED BY THE CT. DEPARTMENT OF PUBLIC HEALTH.
- INSTALLED OVER THE INLET AND OUTLET ACCESS PORTS IN ACCORDANCE WITH THE CURRENT STATE OF SEWER GASES AND TO PREVENT INDIVIDUALS FROM FALLING INTO THE TANK.
- FOR A PERMIT.
- WHERE INSTALLED UNDER PAVEMENT OR AREAS OF HEAVY VEHICLE ACTIVITY AS MANUFACTURED BY, 'SUPERIOR PRECAST CONCRETE", PORTLAND, CT.
- 6. THE BOTTOM OF ALL LEACHING TRENCHES SHALL BE LEVEL THROUGHOUT. ANY PITCH IN THE LEACHING TRENCH SHALL NOT EXCEED 1 INCH IN 50 FEET.
- INSTALLER SHALL VERIFY ALL BENCHMARKS SHOW ON THE PLAN PRIOR TO BEGINNING WORK ON THE SYSTEM.
- BE DISTURBED DURING CONSTRUCTION.
- 9. FOR THE LOCATION OF UTILITIES, THE CONTRACTOR SHALL CONTACT CALL BEFORE YOU DIG, 1-800-922-4455.
- SMEARS, SMOOTH SPOTS, AND COMPRESSED SOIL.
- REMOVED AND PROPERLY DISPOSED OF OFF SITE PRIOR TO CONSTRUCTION.
- CONSTRUCTION FENCING TO PREVENT VEHICLE AND MATERIAL STOCKPILES BEING USED IN THIS AREA. CONTRACTOR SHALL USE APPROPRIATE MEASURES TO PREVENT DAMAGE TO THE LEACHING SYSTEM LOAMED, SEEDED, AND STABILIZED IMMEDIATELY FOLLOWING THE COMPLETION OF THE INSTALLATION.
- LOCAL HEALTH DISTRICT.
- STRIPPING OF THE TOPSOIL
- THE FILL MATERIAL.
- 17. THE AREA FOR THE PRIMARY AND RESERVE SYSTEM SHALL BE STUMPED AND STRIPPED ONLY DURING PERIODS WHEN THE SOIL IS DRY AND NO MORE THAN TWO WEEKS PRIOR TO THE PLACEMENT OF THE LEACHING TRENCHES.
- 18. ALL ROOF AND SURFACE WATER RUNOFF SHALL BE DIRECTED AWAY FORM THE AREA OF THE LEACH FIELD
- 19. ALL SOLID PIPE BETWEEN THE DISTRIBUTION BOX AND LEACHING SYSTEM, AND SEGMENTS OF THE LEACHING SYSTEM SHALL BE 4 INCH DIAMETER PVC MEETING ASTM D-3034 SDR-35.
- 20. ROOF WATER DOWN SPOUTS SHALL BE PIPED SEPARATELY AND SHALL NOT BE CONNECTING TO FOOTING OR CURTAIN DRAINS.
- CONSTRUCTION STAKEOUT WORK.
- MARSHALL'S OFFICE.
- 24. 24 INCH DIAMETER CONCRETE MANHOLES WITH HEAVY DUTY CAST IRON COVERS, H-20 LOAD RATED, SHALL BE PLACED TO GRADE OVER THE INLET AND OUTLET CLEANOUTS OF THE SEPTIC AND GREASE INTERCEPTOR TANKS.
- 25. THERE SHALL BE NO WELLS WITHIN 75 FEET OF THE PROPOSED LEACHING SYSTEM, THERE ARE NO KNOWN SEPTIC SYSTEMS WITHIN 75 FEET OF THE PROPOSED WELL.
- 26. THE LEACHING SYSTEM SHALL BE PROPERLY BACKFILLED AND GRADED BY A LICENSED SYSTEM INSTALLER
- 27. AN ENGINEER'S AS-BUILT DRAWING IS TO BE SUBMITTED TO THE LOCAL HEALTH DISTRICT FOLLOWING
- THE FINAL INSPECTION AND APPROVAL OF THE SEPTIC SYSTEM INSTALLATION 28. A TOTALIZING FLOW METER SHALL BE INSTALLED ON THE FINISHED WATER SUPPLY SYSTEM.

### BASIS OF SANITARY DESIGN

SUBSURFACE SEWAGE DISPOSAL SYSTEM DESIGN COMPLETED BY FRANK C. MAGNOTTA, CONSULTING ENGINEER, DATED OCTOBER, 18, 2019 PEAK DAILY FLOW RATE: 5040 SF X 0.2 GPD PER SF = 1080 GPD DESIGN PERCOLATION RATE: 1-10 MIN/INCH RELA: 1080 GPD/0.8 SF/GPD = 1350 SF OF ELA

USE - 75 LF TRENCH OF GEOMETRIX GST-6224 SYSTEM @ 18.1 SF /LF OF TRENCH = 1357 SF, (13' O.C.) A FULL "SOIL AIR" SYSTEM SHALL BE INSTALLED AND USED WITH THIS SEPTIC SYSTEM MLSS = NEED NOT BE DETERMINED, RESTRICTIVE LAYER GREATER THAN 60 INCHES. A TOTALIZING FLOW METER SHALL BE INSTALLED ON THIS WATER SYSTEM TO MONITOR THE DAILY WATER CONSUMPTION FOR THIS PROJECT.

and the second se	
7 -	
1	CT DPH APPROVED
1	GEO-TEXTILE FABRIC
-	8" MIN. IN LAWNS
1	
	77777777777
1.1	CT DOT #6 5
] [	/ / 2" OVER TO
1	ASTM C-33
77.	
<i>k</i> −2"+	62"
MIN.	

THE SEPTIC TANK AND GREASE TRAP SHALL BE H-20 LOAD RATED PRECAST CONCRETE TANKS. THE SEPTIC 1,000 GALLON TANK CONFORMING TO SEC. V OF THE "TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS" AS AMENDED AND MANUFACTURER BY "SUPERIOR PRECAST CONCRETE", PORTLAND, CT OR APPROVED EQUAL. THESE TANKS SHALL BE PROPERLY BAFFLED AT THE INLET AND OUTLET WITH A CONNECTIONS IN ACCORDANCE WITH THE ABOVE TECHNICAL STANDARDS. NON-CONCRETE SEPTIC TANKS

WHERE COVER OVER THE TANKS EXCEEDS 12", RISER MANHOLES, COCERS AND SAFETY DEVICES SHALL BE HEALTH CODE REGULATIONS. ALL ORIGINAL SEPTIC TANK COVERS SHALL BE KEPT TO PREVENT THE ESCAPE

AN ADDITIONAL TEST PIT (#6) SHALL BE EXCAVATED BY THE DEVELOPER AND WITNESSED BY THE LOCAL HEALTH DISTRICT PRIOR TO ISSUANCE OF A PERMIT TO CONSTRUCT THE SEPTIC SYSTEM. REFER TO THE HEALTH DISTRICT APPROVAL MEMO DATED DECEMBER 26, 2019 STATING THE CONDITIONS OF APPROVAL

DISTRIBUTION BOXES SHALL BE PRECAST CONCRETE, HAVE A MIN. OF 4 OPENINGS, AND BE H-20 RATED

NEW PIPE BETWEEN THE BUILDING AND SEPTIC TANK SHALL BE IN ACCORDANCE TO SECTION 19-13-B103 OF THE PUBLIC HEALTH CODE. PIPE SLOPE SHALL BE A MINIMUM OF 1/4 INCH PER FOOT OR 2.1 PERCENT.

8. ALL PINTS SHOW ON THE PLAN AS BOUNDARY CORNERS, SURVEY STAKES, BENCHMARKS, ETC., SHALL NOT

10. THE SIDES AND BOTTOMS OF ALL LEACHING TRENCH EXCAVATIONS SHALL BE HAND RAKED TO ELIMINATE

11. ALL TREES AND STUMPS WITHIN THE DRIP LINE WITHIN 10 FEET OF THE LEACHING SYSTEM SHALL BE

12. THE AREA WITHIN 15 FEET OF THE PRIMARY AND RESERVE LEACHING TRENCHES SHALL BE RINGED WITH AND/OR EROSION OF THE DISTURBED AREAS DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE

13. NO REVISIONS TO THE DESIGN ARE TO BE MADE WITHOUT THE APPROVAL OF THE DESIGN ENGINEER AND

14. CONSTRUCTION STAKEOUT OF THE SEPTIC SYSTEM SHALL BE PERFORMED BY A SURVEYOR PRIOR TO

15. ALL TOPSOIL IN THE AREAS TO BE FILLED SHALL BE REMOVED AND STOCKPILED PRIOR TO PLACEMENT OF

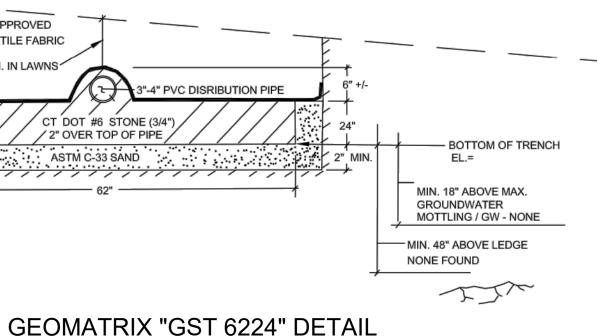
16. BACKWASH FROM WATER TREATMENT SYSTEMS OR DEWATERING SHALL NOT BE DISCHARGED TO THE SEPTIC SYSTEM BUT SHALL GO TO A LEACHING SYSTEM DEDICATED SOLELY FOR THIS PURPOSE.

21. A BENCHMARK SHALL BE SET WITHIN 15 FEET OF THE LEACHING SYSTEM BY A SURVEYOR AT THE TIME OF

22. NO FUEL TANKS SHALL BE BURIED ON SITE WITHOUT APPROVAL FROM THE HEALTH DEPARTMENT AND FIRE

23. LOW WATER CONSUMPTION PLUMBING FIXTURES AND 1.6 GALLON/FLUSH TOILETS SHALL BE USED.

WITHIN TWO WORKING DAYS FOLLOWING THE LOCAL HEALTH DISTRICT FINAL INSPECTION AND APPROVAL.



### "- 4" TOPSOTI /FTLI 4"-23" ORANGE-BROWN SANDY LOAM FILL 23"-28" BURIED FILL ORANGE-BROWN SANDY LOAM W/ SOME 28"-39" **GRAVEL & COBBLES** 39"-112" MEDIUM-COARSE SAND AND GRAVEL W/ COBBLES, TAN/GRAY NO LEDGE, MOTTLING, WATER OR RESTRICTIVE LAYER TEST PIT-28 0"- 9" 1 TOPSOIL 9"-33" ORANGE-BROWN FINE SANDY LOAM, VERY FINE TAN SAND W/ SILT 51"-100" FINE-COARSE SAND AND GRAVEL W/ COBBLES, TAN/GRAY NO LEDGE OR WATER, MOTTLING @ 72" DATED: DECEMBER 4, 2009 OBSERVED: BRUCE FITZBACK

SSDS TEST PIT RESULTS

DATED: DECEMBER 4, 2009

OBSERVED: JEFF POLHEMUS

RFORMED BY J&D ENGINEERS, LLC

TOPSOIL, ORGANIC MATTER, ROOTS 11"-29" COARSE SANDY GRAVEL, ROCKS UP TO 29"-48" FINE SANDY GRAVEL, MANY ROOTS, MOD. COMPACT 48"-77" SANDY GRAVEL, ROCKS UP TO 8" DIA. 77"-81" COARSE SAND, MOTTLED 81"-83" COARSE SAND NO LEDGE, MOTTLING, WATER OR RESTRICTIVE

)"- 12" TOPSOIL, ORGANIC MATTER, ROOTS 12"-31" FINE SANDY LOAM, ROOTS 31"-89" COARSE SANDY GRAVEL, ROCKS

NO LEDGE, MOTTLING, WATER OR RESTRICTIVE LAYER

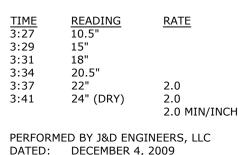
### PERCOLATION TESTS RESULTS PERFORMED BY J&D ENGINEERS, LLC DATED: DECEMBER 4, 2009

## <u>PERC - A</u> DEPTH: 30"

10:57

11:02

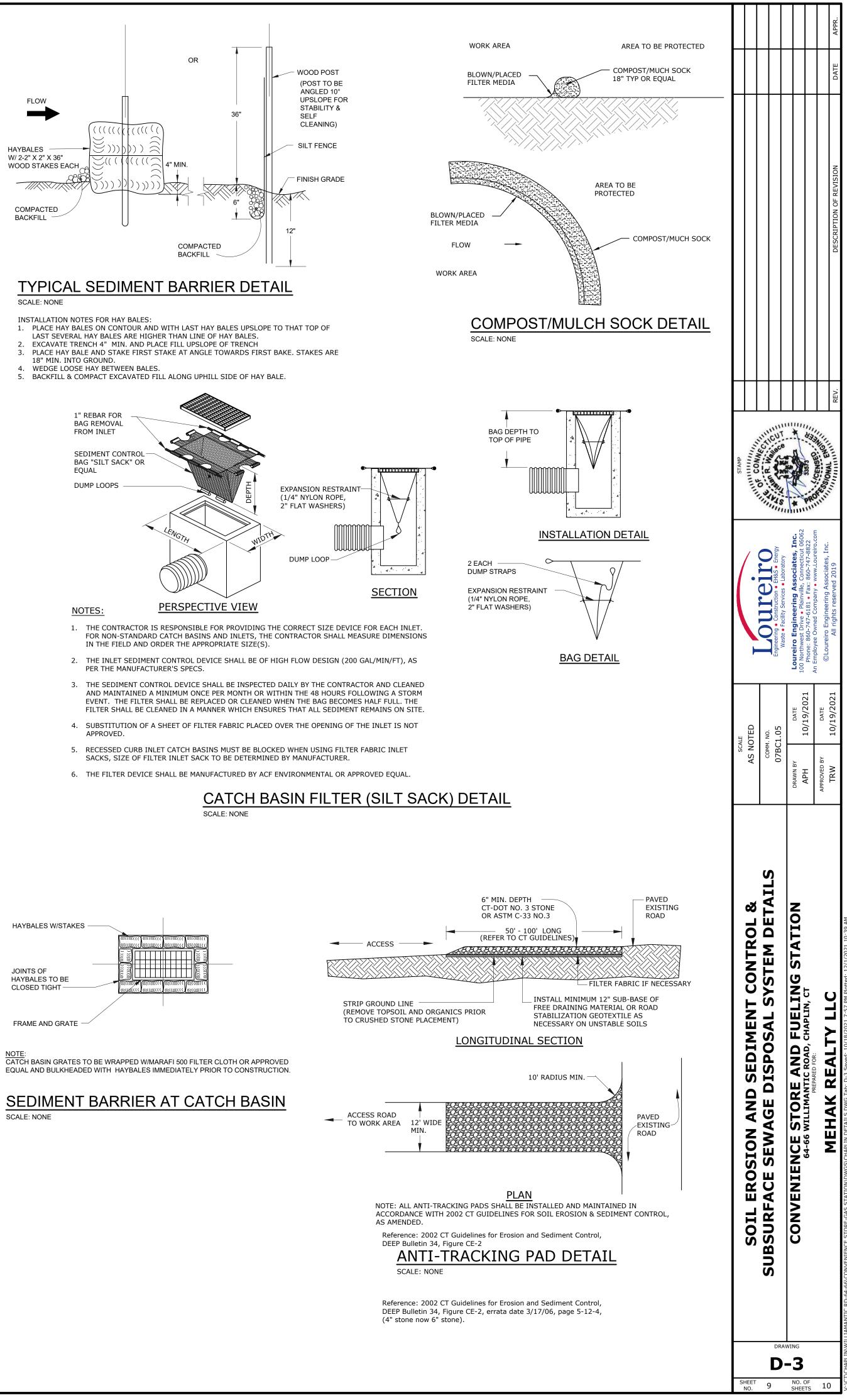
11:07

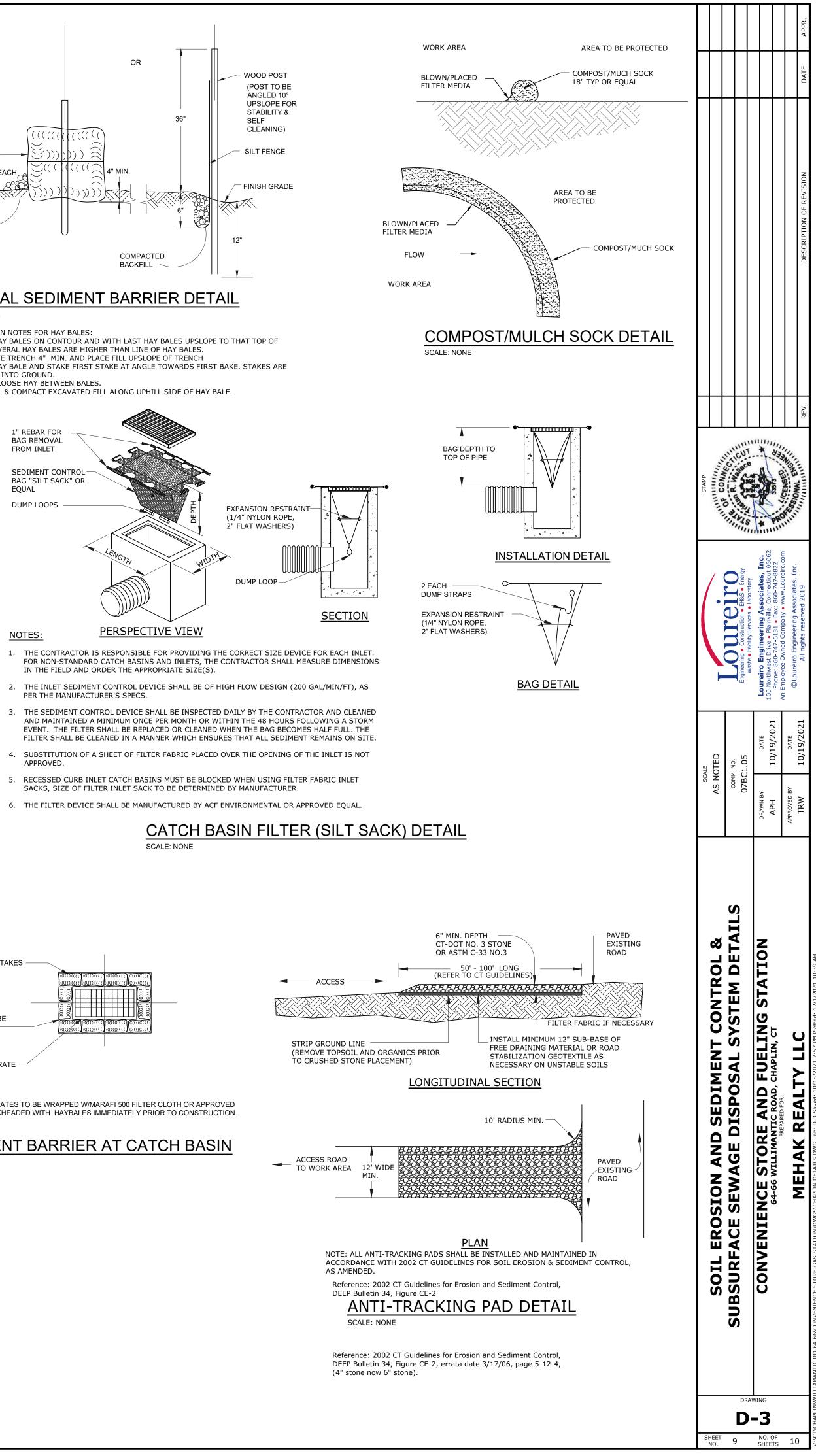


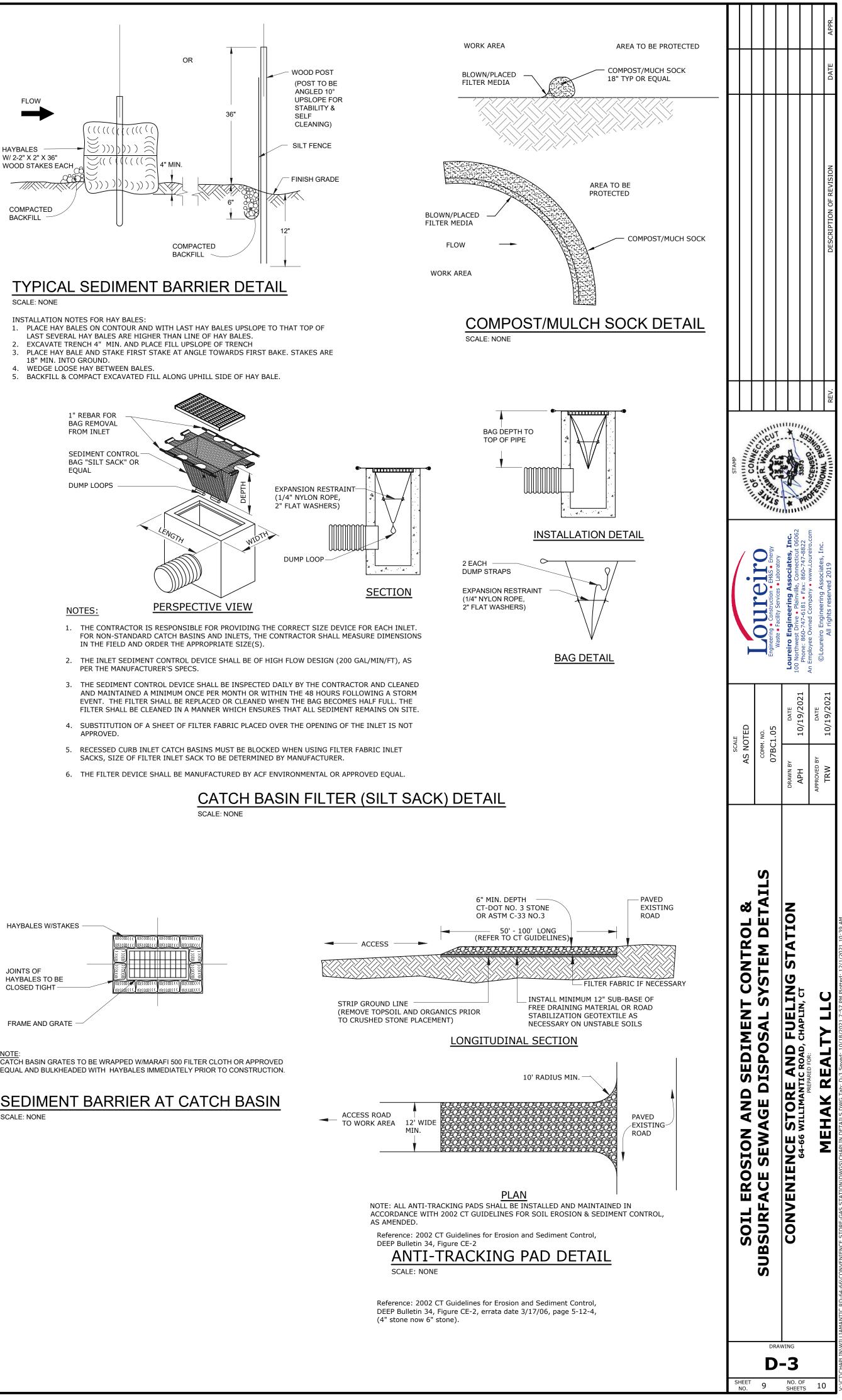
PERC - B DEPTH: 45' READING 36.5" <u>TIME</u> 10:17 RATE 10:22 38.0" 10:27 39.0" 10:32 40.0" 10:37 41.0" 10:42 41 75' 10:47 42.25' 10:52 42.75" 43.25" 43.75"

10 MIN/INCH

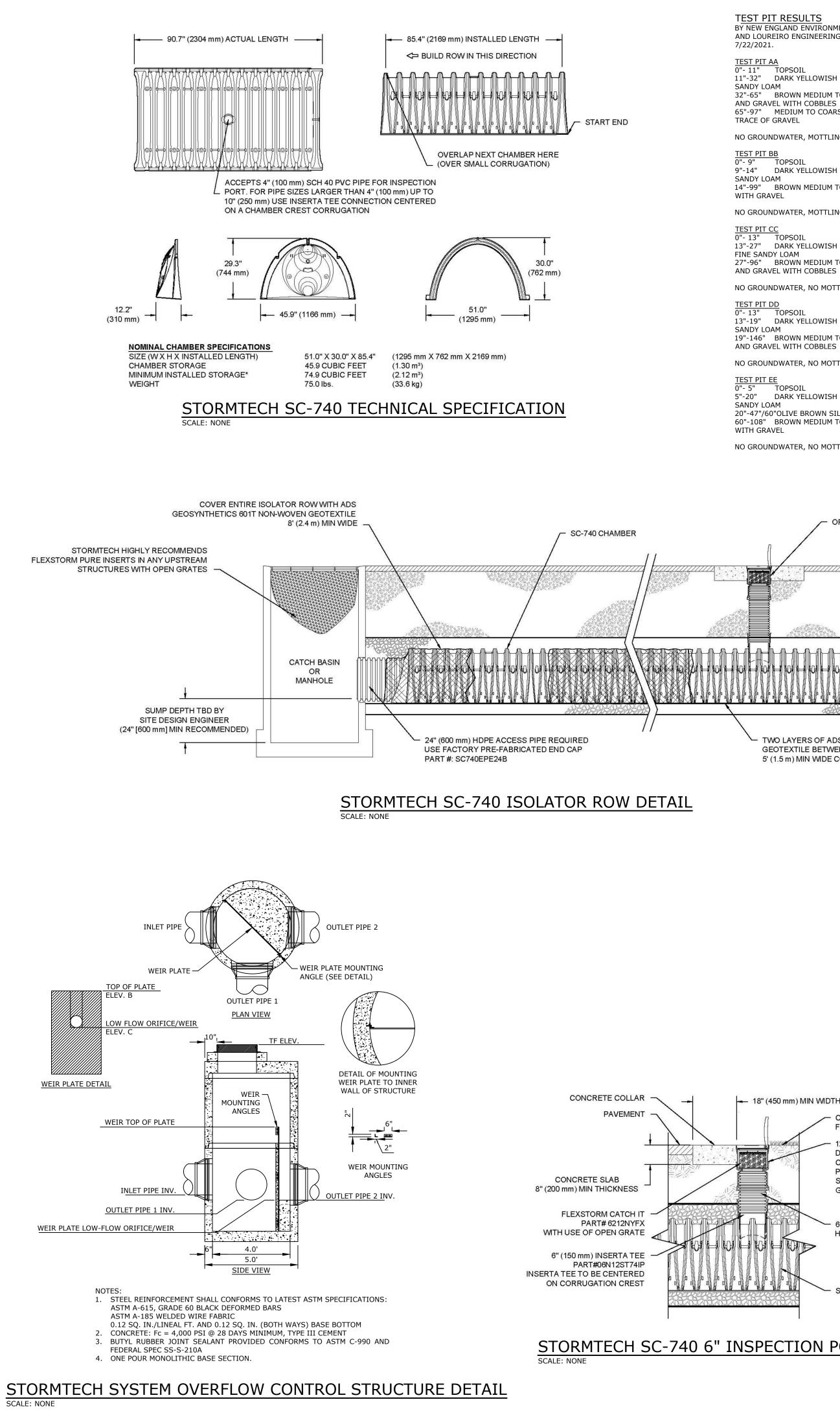
44.25"







CONTRACTOR TO REVIEW INSTALL AND SPECIFICATIONS GUIDELINES PER GEOMETRIX SYSTEMS LLC.



# TEST PIT RESULTS BY NEW ENGLAND ENVIRONMENTAL SERVICES

AND LOUREIRO ENGINEERING ASSOCIATES ON 7/22/2021.

# TEST PIT AA 0"- 11" TOPSOIL

11"-32" DARK YELLOWISH BROWN GRAVELLY SANDY LOAM 32"-65" BROWN MEDIUM TO COARSE SAND AND GRAVEL WITH COBBLES 65"-97" MEDIUM TO COARSE SAND WITH TRACE OF GRAVEL

NO GROUNDWATER, MOTTLING @58", NO LEDGE TEST PIT BB 0"- 9" TOPSOIL

9"-14" DARK YELLOWISH BROWN GRAVELLY SANDY LOAM 14"-99" BROWN MEDIUM TO COARSE SAND WITH GRAVEL

### NO GROUNDWATER, MOTTLING @51", NO LEDGE

TEST PIT CC 0"- 13" TOPSOIL 13"-27" DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM

### 27"-96" BROWN MEDIUM TO COARSE SAND AND GRAVEL WITH COBBLES

NO GROUNDWATER, NO MOTTLING, NO LEDGE

# TEST PIT DD 0"- 13" TOPSOIL

13"-19" DARK YELLOWISH BROWN VERY FINE SANDY LOAM 19"-146" BROWN MEDIUM TO COARSE SAND

# AND GRAVEL WITH COBBLES

NO GROUNDWATER, NO MOTTLING, NO LEDGE <u>TEST PIT EE</u> 0"- 5" TOPSOIL

### 5"-20" DARK YELLOWISH BROWN VERY FINE

SANDY LOAM 20"-47"/60"OLIVE BROWN SILTY SAND

### 60"-108" BROWN MEDIUM TO COARSE SAND WITH GRAVEL

NO GROUNDWATER, NO MOTTLING, NO LEDGE

OPTIONAL INSPECTION PORT SC-740 END CAP

> TWO LAYERS OF ADS GEOSYNTHETICS 315WTK WOVEN GEOTEXTILE BETWEEN FOUNDATION STONE AND CHAMBERS 5' (1.5 m) MIN WIDE CONTINUOUS FABRIC WITHOUT SEAMS

# <u>TEST PIT FF</u> 0"- 16" T

TOPSOIL 16"-33" DARK YELLOWISH BROWN VERY FINE SANDY LOAM

33"-65" BROWN MEDIUM TO VERY COARSE SAND AND GRAVEL WITH COBBLES 65"-101" COARSE TO VERY COARSE SAND

WITH TRACE OF GRAVEL 101"-157" BROWN MEDIUM TO VERY COARSE SAND AND GRAVEL WITH COBBLES AND STONES NO GROUNDWATER, NO MOTTLING, NO LEDGE

# TEST PIT GG 0"- 14" TOPSOIL

14"-28" DARK YELLOWISH BROWN GRAVELLY FINE SANDY LOAM 28"-72" BROWN MEDIUM TO COARSE SAND

### WITH GRAVEL AND COBBLES NO GROUNDWATER, MOTTLING @71", NO LEDGE

# TEST PIT HH 0"- 13" TOPSOIL

13"-32" DARK YELLOWISH BROWN GRAVELLY SANDY LOAM 32"-99" BROWN MEDIUM TO COARSE SAND AND GRAVEL

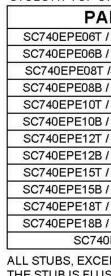
NO GROUNDWATER, MOTTLING @68", NO LEDGE

PERMEA	BILITY TEST F	RESULTS
TEST HOLE #	SAMPLE DEPTH (INCHES)	PERMEABILITY (FEET/DAY)
AA	4.50	40
BB	4	43
СС	4	28
DD	7	134
EE	5	98
FF	12	73
GG	4	114
НН	4	101

### NOTE:

1. SOIL SAMPLES COLLECTED BY NEW ENGLAND ENVIRONMENTAL SERVICES, ON 7/22/2021.

2. PERMEABILITY TESTS WERE CONDUCTED USING FALLING HEAD METHOD.



1-888-892-2694.

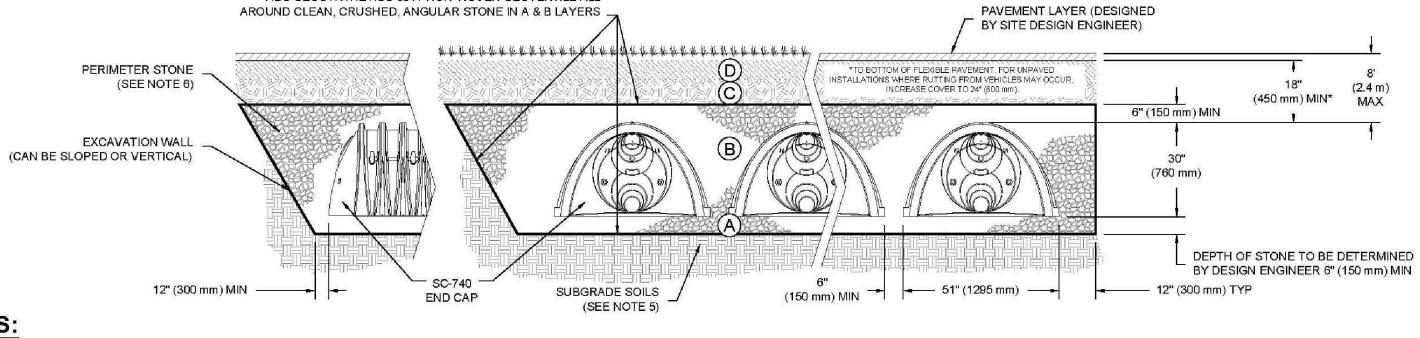
NOTE: ALL DIMENSIONS ARE NOMINAL

# ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL	COMPACTION / DENSITY
			CLASSIFICATIONS	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, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE, 23

- ANGULAR NO. 4 (AASHTO M43) STONE".
- EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

# ADS GEOSYNTHETICS 601T NON-WOVEN GEOTEXTILE ALL



NOTES:

- 1. SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- 2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- 3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- 4. THE "SITE DESIGN ENGINEER" REFERS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE STORMTECH CHAMBERS FOR THIS PROJECT.
- 5. 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.
- 6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- 7. 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.

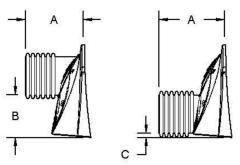
STORMTECH SC-740 6" INSPECTION PORT DETAIL

DRAIN BODY W/SOLID HINGED COVER OR GRATE PART# 2712AG06N SOLID COVER: 1299CGC GRATE: 1299CGS 6" (150 mm) ADS N-12 HDPE PIPE 

- SC-740 CHAMBER

CONCRETE COLLAR NOT REQUIRED FOR UNPAVED APPLICATIONS 12" (300 mm) NYLOPLAST INLINE

- 18" (450 mm) MIN WDTH



### STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B" STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "

I NUMBERS ENDIN	GWINI		
STUB	A	В	С
G!! (150 mana)	10.0 <sup>11</sup> (277 mana)	18.5" (470 mm)	
	10.9 (277 mm)		0.5" (13 mm)
0" (200 mana)	10.0% (210 mana)	16.5" (419 mm)	
8 (200 mm)	12.2 (310 mm)		0.6" (15 mm)
10" (250 mana)	12.411 (2.40 mana)	14.5" (368 mm)	
10 (250 mm)	13.4 (340 mm)		0.7" (18 mm)
1.0" (200 mana)	1 4 7" (272 mana)	12.5" (318 mm)	
12 (300 mm)	14.7 (373 mm)		1.2" (30 mm)
1 Ell (275 mana)	10 4" (467 mm)	9.0" (229 mm)	
15 (375 mm)	18.4 (407 mm)		1.3" (33 mm)
19" (450 mm)	10.7"/500 mm)	5.0" (127 mm)	( <u>****</u> )
10 (450 mm)			1.6" (41 mm)
24" (600 mm)	18.5" (470 mm)		0.1" (3 mm)
	<b>STUB</b> 6" (150 mm) 8" (200 mm) 10" (250 mm) 12" (300 mm) 15" (375 mm) 18" (450 mm)	STUB A   6" (150 mm) 10.9" (277 mm)   8" (200 mm) 12.2" (310 mm)   10" (250 mm) 13.4" (340 mm)   12" (300 mm) 14.7" (373 mm)   15" (375 mm) 18.4" (467 mm)   18" (450 mm) 19.7" (500 mm)	$ \begin{array}{c} \mbox{6" (150 mm)} \\ \mbox{6" (150 mm)} \\ \mbox{10.9" (277 mm)} \\ \mbox{10.9" (219 mm)} \\ \mbox{10.9" (219 mm)} \\ \mbox{10.9" (229 mm)} \\ \mbo$

ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT

\* FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

# STORMTECH STUD LOCATION IN END CAPS

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, 2. 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. 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION

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