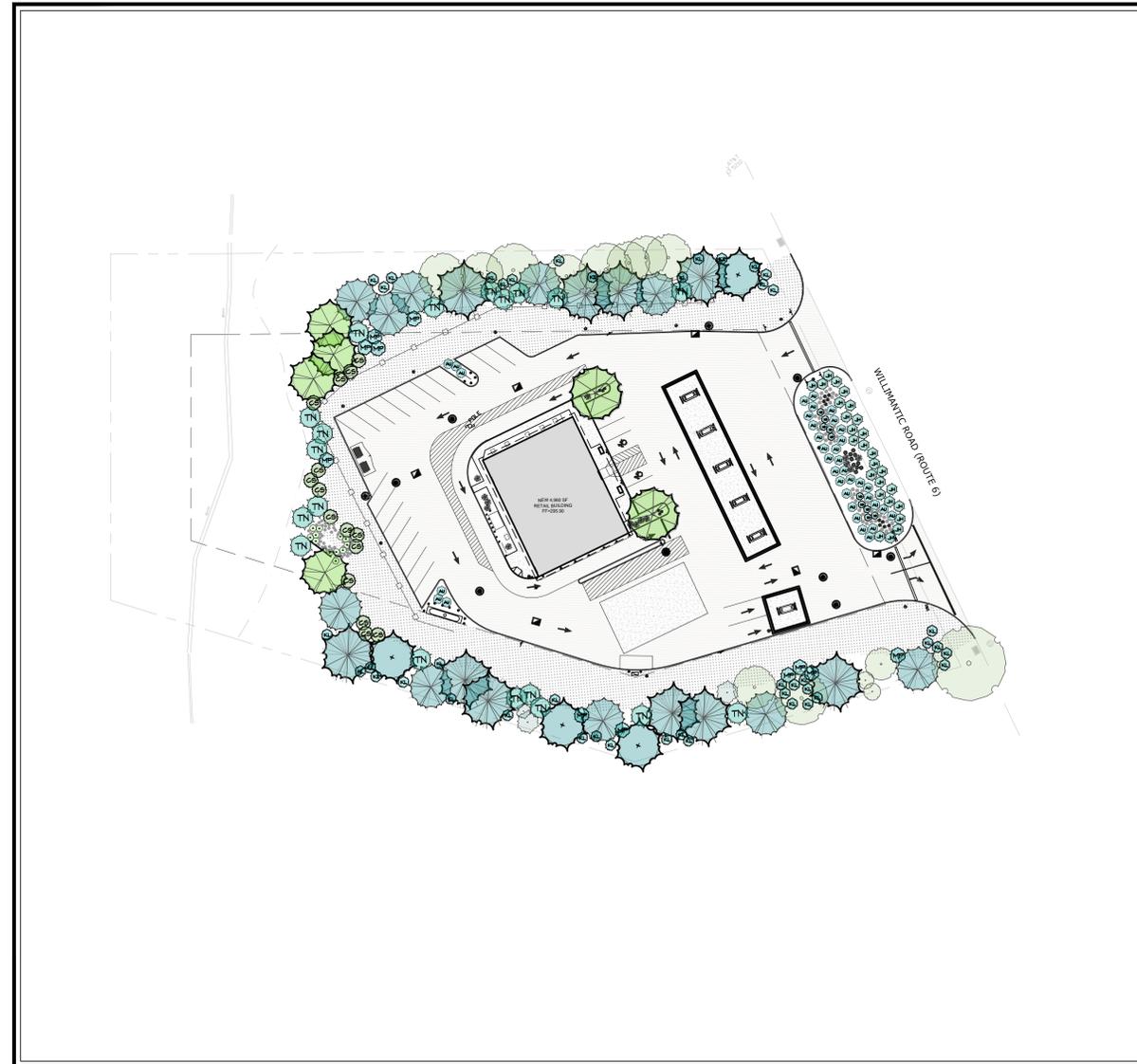


MEHAK REALTY LLC

CONVENIENCE STORE & FUELING STATION

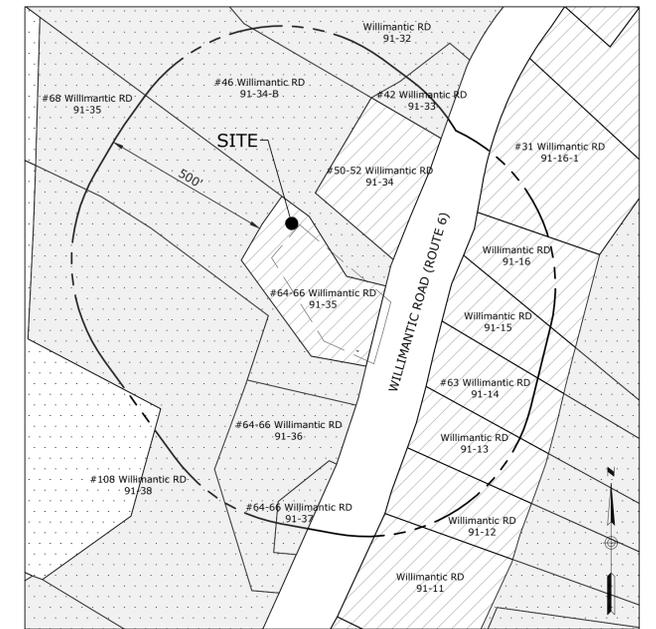
64-66 WILLIMANTIC ROAD
CHAPLIN, CONNECTICUT

OCTOBER 19, 2021
REVISED DECEMBER 16, 2021



ABBREVIATIONS

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



LOCATION MAP
SCALE: 1" = 250±

ZONING DISTRICT LEGEND

		
(RAR) - RURAL AGRICULTURAL RESIDENCE DISTRICT	(B) - BUSINESS ZONE	OVERLAY CORRIDOR DISTRICT

DRAWING INDEX

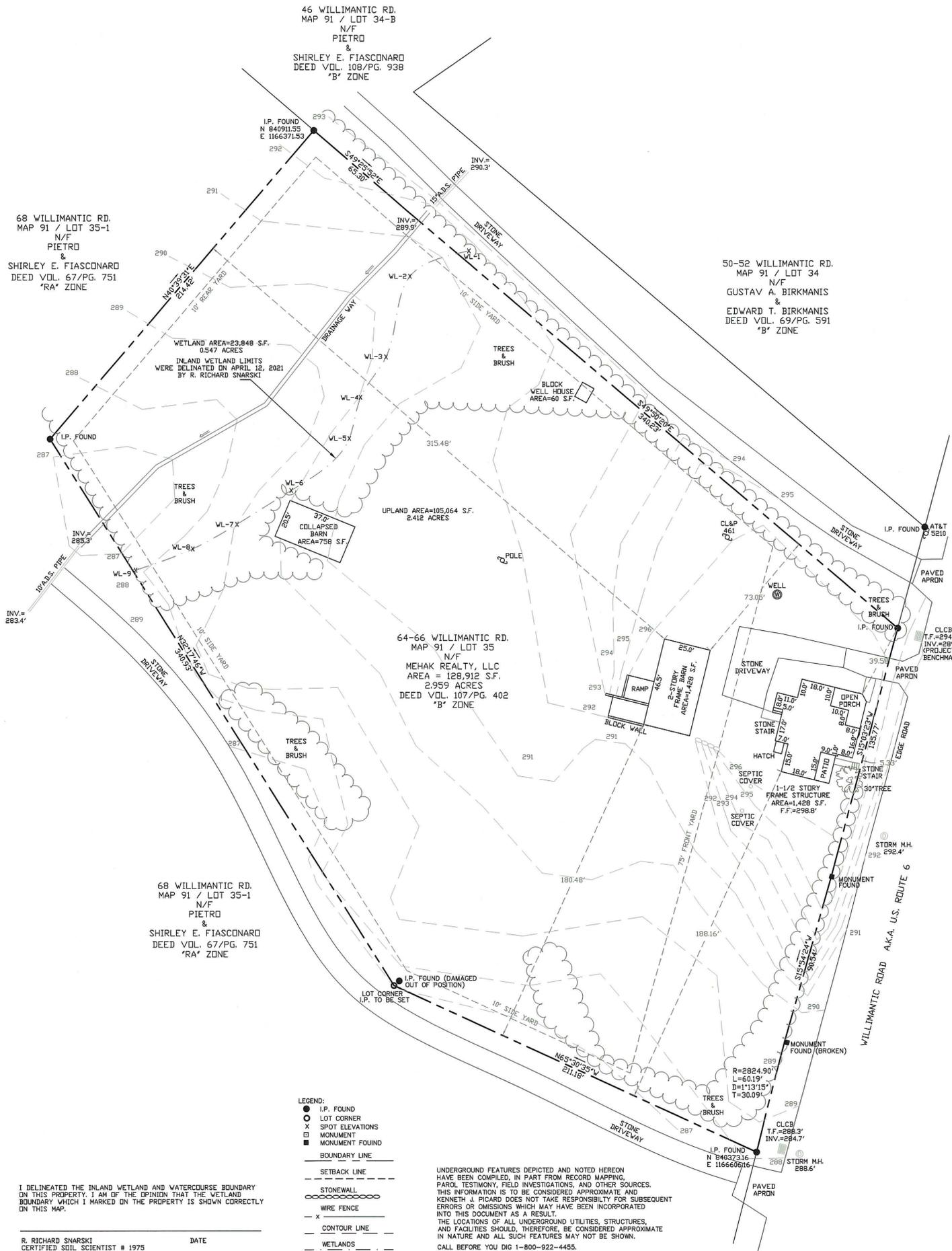
	COVER SHEET
1 OF 1	TOPOGRAPHIC SURVEY (BY PICARD LAND SURVEYING, LLC)
RM-1	SITE REMOVALS PLAN
S-1	PROPOSED SITE LAYOUT
DOT-1	DOT SITE PLAN
L-1	PROPOSED LANDSCAPING PLAN
G-1	GRADING & DRAINAGE PLAN
U-1	UTILITY PLAN
SE-1	SOIL EROSION & SEDIMENT CONTROL PLAN
D-1	SITE DETAILS
D-2	DRAINAGE & UTILITY DETAILS
D-3	SOIL EROSION AND SEDIMENT CONTROL & SUBSURFACE SEWAGE DISPOSAL SYSTEM DETAILS
D-4	STORMWATER MANAGEMENT DETAILS



Prepared By:
Engineer:



Loureiro Engineering Associates, Inc.
100 Northwest Drive • Plainville, Connecticut 06062
Phone: 860-747-6181 • Fax: 860-747-8822
An Employee Owned Company • www.Loureiro.com



46 WILLIMANTIC RD.
MAP 91 / LOT 34-B
N/F
PIETRO
&
SHIRLEY E. FIASCONARD
DEED VOL. 108/PG. 938
"B" ZONE

68 WILLIMANTIC RD.
MAP 91 / LOT 35-1
N/F
PIETRO
&
SHIRLEY E. FIASCONARD
DEED VOL. 67/PG. 751
"RA" ZONE

50-52 WILLIMANTIC RD.
MAP 91 / LOT 34
N/F
GUSTAV A. BIRKMANIS
&
EDWARD T. BIRKMANIS
DEED VOL. 69/PG. 591
"B" ZONE

64-66 WILLIMANTIC RD.
MAP 91 / LOT 35
N/F
MEHAK REALTY, LLC
AREA = 128,912 S.F.
2,959 ACRES
DEED VOL. 107/PG. 402
"B" ZONE

68 WILLIMANTIC RD.
MAP 91 / LOT 35-1
N/F
PIETRO
&
SHIRLEY E. FIASCONARD
DEED VOL. 67/PG. 751
"RA" ZONE

- LEGEND:
- I.P. FOUND
 - LOT CORNER
 - × SPOT ELEVATIONS
 - MONUMENT
 - MONUMENT FOUND
 - BOUNDARY LINE
 - - - SETBACK LINE
 - STONEWALL
 - WIRE FENCE
 - - - CONTOUR LINE
 - WETLANDS

UNDERGROUND FEATURES DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART FROM RECORD MAPPING, PAROL TESTIMONY, FIELD INVESTIGATIONS, AND OTHER SOURCES. THIS INFORMATION IS TO BE CONSIDERED APPROXIMATE AND KENNETH J. PICARD DOES NOT TAKE RESPONSIBILITY FOR SUBSEQUENT ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT. THE LOCATIONS OF ALL UNDERGROUND UTILITIES, STRUCTURES, AND FACILITIES SHOULD, THEREFORE, BE CONSIDERED APPROXIMATE IN NATURE AND ALL SUCH FEATURES MAY NOT BE SHOWN. CALL BEFORE YOU DIG 1-800-922-4455.

I DELINEATED THE INLAND WETLAND AND WATERCOURSE BOUNDARY ON THIS PROPERTY. I AM OF THE OPINION THAT THE WETLAND BOUNDARY WHICH I MARKED ON THE PROPERTY IS SHOWN CORRECTLY ON THIS MAP.

R. RICHARD SNARSKI
CERTIFIED SOIL SCIENTIST # 1975

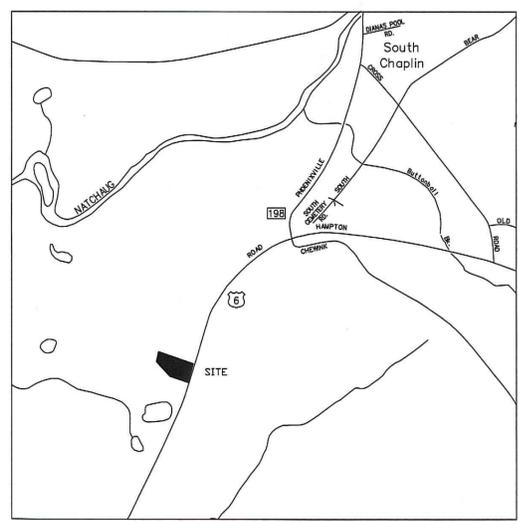
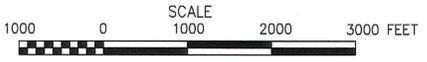
EXISTING STRUCTURE AREAS #64-66 WILLIMANTIC ROAD

DESCRIPTION	BUILDING COVERAGE
HOUSE	1,428 S.F.
BARN	1,168 S.F.
BARN (COLLAPSED)	758 S.F.
WELL HOUSE	60 S.F.
TOTAL	3,408 S.F.

ZONING INFORMATION TABLE #64-66 WILLIMANTIC ROAD

"B" ZONING DISTRICT

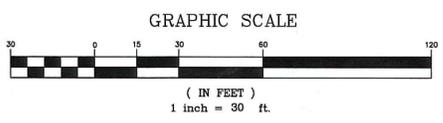
	REQUIRED	EXISTING
MINIMUM LOT AREA	87,120 S.F.	128,912 S.F.
MINIMUM FRONTAGE	200 FEET	286.50 FEET
STREET SETBACK-WILLIMANTIC ROAD (HOUSE)	75 FEET	53.33 FEET
SIDE YARD SETBACK - NORTH (HOUSE)	10 FEET	39.58 FEET
SIDE YARD SETBACK - SOUTH (HOUSE)	10 FEET	188.16 FEET
SIDE YARD SETBACK - NORTH (BARN)	10 FEET	73.05 FEET
SIDE YARD SETBACK - SOUTH (BARN)	10 FEET	180.48 FEET
REAR YARD SETBACK - WEST (BARN)	10 FEET	315.48 FEET
MAXIMUM BUILDING HEIGHT	35 FEET	18± FEET



- 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 AND OTHER IMPROVEMENTS IN RELATION TO THE EXISTING BOUNDARY LINES UNDER THE PROPERTY/BOUNDARY SURVEY CATEGORY.
 - BOUNDARY DETERMINATION/OPINION IS A DEPENDENT RESURVEY AS NOTED. SEE NOTE 9.
 - THIS SURVEY CONFORMS TO A CLASS A-2.
 - THE HORIZONTAL DATUM IS NAD 83 WITH 1996 ADJUSTMENTS. THE VERTICAL DATUM IS N.A.V.D. 88.
 - THIS PROPERTY IS IN "B" ZONE.
 - LOT AREA = 128,912 S.F. / 2,959 ACRES.
 - PROPERTY IS NOT IN FLOOD ZONE.
 - REFERENCE IS MADE TO THE FOLLOWING MAPS:
 - 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.
 - 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.
 - TOWN OF CHAPLIN PLAN SHOWING LAND AND EASEMENT ACQUIRED FROM WILLIAM & CATHERINE SOLOTTI 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.
 - BOUNDARY SURVEY PREPARED FOR CAROL TETZLAFF ROUTE #8 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 CLERK'S OFFICE.
 - EXISTING CONDITIONS PLAN PREPARED FOR: BESTWAY FOOD & FUEL ROUTE #8 CHAPLIN, CONNECTICUT SCALE: 1" = 30' DATED: SEPTEMBER 23, 2019 PREPARED BY: PAUL ARCHER MAP PROVIDED BY OWNER.
 - THE STONEWALLS SHOWN AS BOUNDARIES MAY HAVE IRREGULARITIES OF COURSE AND WIDTH BETWEEN THE PRINCIPAL POINTS OF COURSE INDICATED.

REVISIONS

NO.	DATE	DESCRIPTION	BY



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

Kenneth J. Picard

KENNETH J. PICARD L.S. 18143
PICARD LAND SURVEYING, LLC
459 JONES HOLLOW ROAD
MARLBOROUGH, CT 06447



PROPERTY SURVEY
PREPARED FOR
MEHAK REALTY, LLC

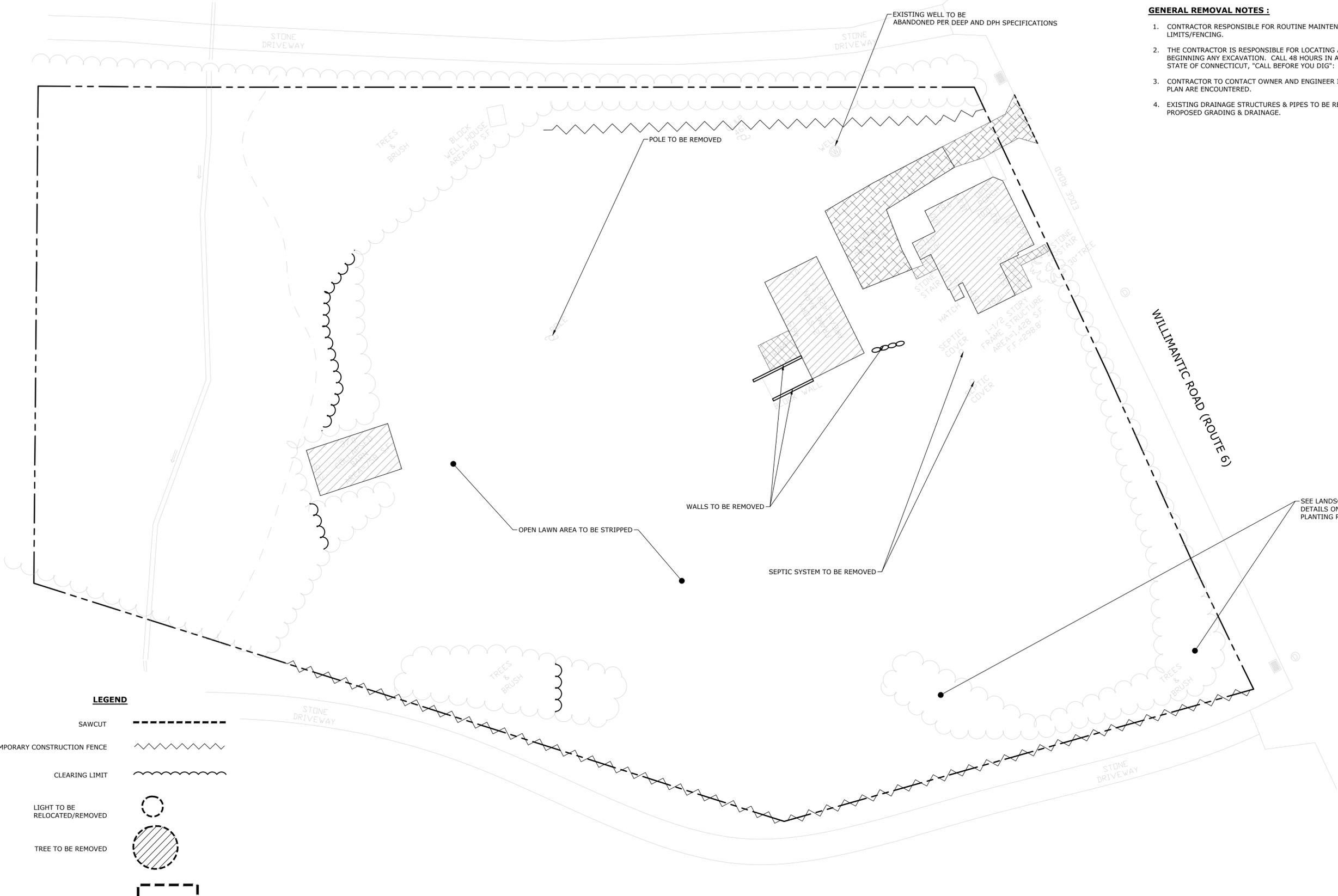
64-66 WILLIMANTIC ROAD
A.K.A. CONN. ROUTE #6
ASSESSOR'S MAP 91 / LOT 35
CHAPLIN, CONNECTICUT

DRAWN BY: K.J.P. CHECKED BY:

SCALE: 1 INCH = 30 FEET

DATE: APRIL 14, 2021

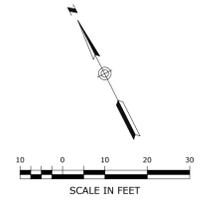
EXISTING CONDITIONS SHEET: 1 OF 1



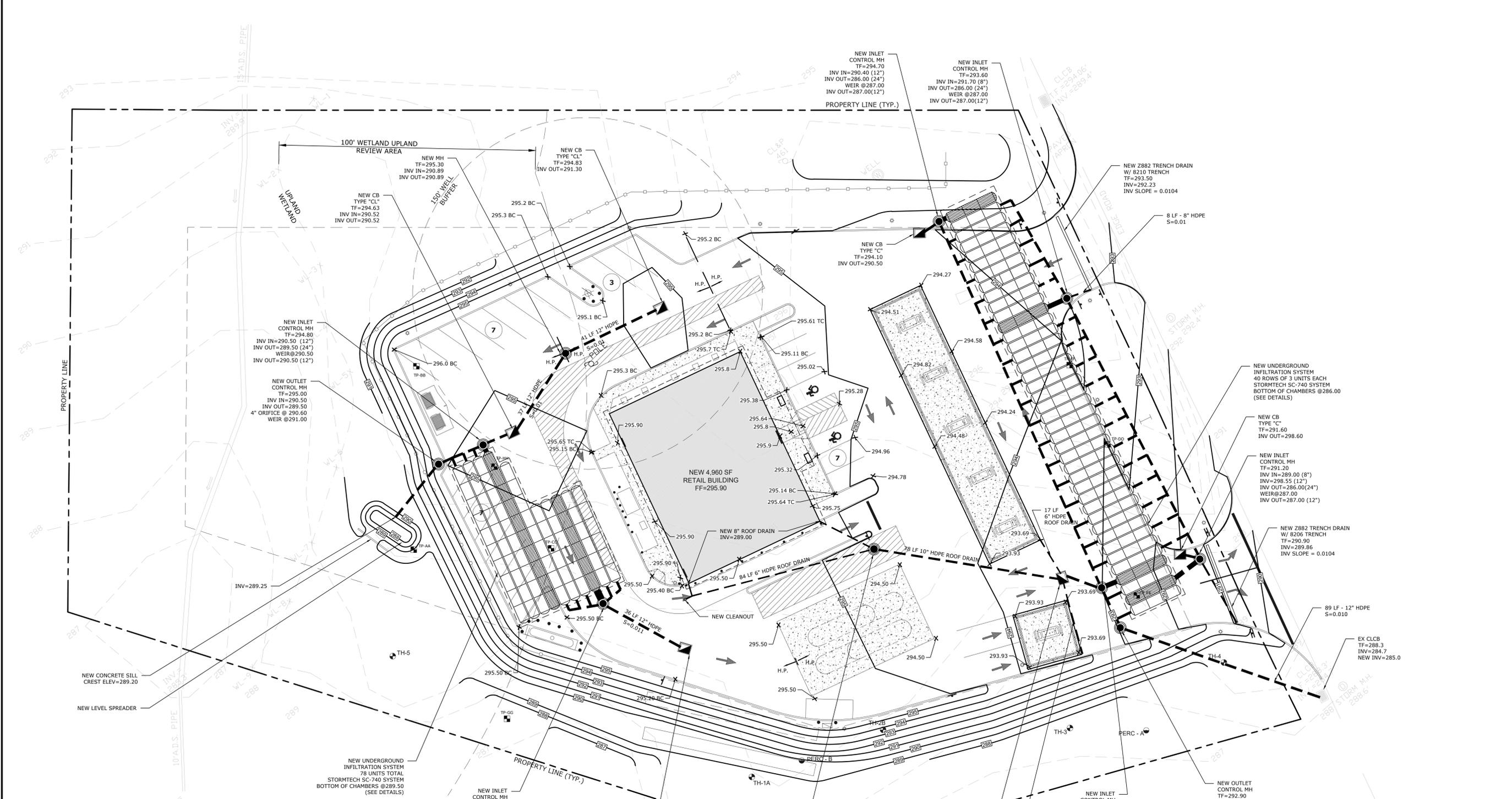
- GENERAL REMOVAL NOTES :**
1. CONTRACTOR RESPONSIBLE FOR ROUTINE MAINTENANCE WITHIN PROJECT LIMITS/FENCING.
 2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES IN THE FIELD BEFORE BEGINNING ANY EXCAVATION. CALL 48 HOURS IN ADVANCE FROM ANYWHERE IN THE STATE OF CONNECTICUT, "CALL BEFORE YOU DIG": 1-800-922-4455.
 3. CONTRACTOR TO CONTACT OWNER AND ENGINEER IF ITEMS NOT INCLUDED ON THIS PLAN ARE ENCOUNTERED.
 4. EXISTING DRAINAGE STRUCTURES & PIPES TO BE REMOVED PER THE EXTENTS OF THE PROPOSED GRADING & DRAINAGE.

LEGEND

- SAWCUT
- TEMPORARY CONSTRUCTION FENCE
- CLEARING LIMIT
- LIGHT TO BE RELOCATED/REMOVED
- TREE TO BE REMOVED
- TREE PROTECTION FENCE
- EXISTING STRUCTURE/POROTION TO BE REMOVED
- WALK TO BE REMOVED
- PAVEMENT TO BE REMOVED



REMOVALS PLAN		SCALE 1" = 20'	CONTRACT NO. 07BCL05	DATE 10/19/2021	DATE 10/19/2021
CONVENIENCE STORE & FUELING STATION 64-66 WILLIAMTIC ROAD, CHAPLIN, CT		DRAWN BY APH		APPROVED BY TRW	
MEHAK REALTY LLC		DRAWING RM-1		NO. OF SHEETS 10	
PROJECT: 64-66 WILLIAMTIC RD - CONVENIENCE STORE, GAS STATION, DRIVEWAY, UTILITIES REMOVALS, DRIVEWAY		DATE: 12/16/2021		DATE: 12/16/2021	
DRAWING NO. 1		NO. OF SHEETS 10		DATE: 12/16/2021	



GENERAL GRADING & DRAINAGE NOTES:

- CONTRACTOR SHALL NOTIFY CALL-BEFORE-YOU-DIG (1-800-922-4455 OR 811 OR APPLY ONLINE), THE TOWN OF CHAPLIN AND CONNECTICUT DEPARTMENT OF TRANSPORTATION PRIOR TO INITIATION OF ANY EXCAVATING ACTIVITIES.
- CONTRACTOR SHALL CLEAN ALL EXISTING AND PROPOSED STRUCTURES AND PIPES UPON COMPLETION OF CONSTRUCTION.
- THE SITE CONTRACTOR SHALL REVIEW THE SITE GRADES AND FEATURES TO ENSURE THAT THE PROPOSED WORK IS CONSISTENT WITH THE EXISTING CONDITIONS AS PRESENTED ON THE PLANS. IT WILL BE ASSUMED THAT PRIOR TO THE SUBMISSION OF THE BIDS THIS WILL HAVE BEEN DONE AND THAT THE BIDS ACCOUNT FOR ANY DISCREPANCIES. NO CHANGE ORDERS WILL BE PERMITTED FOR VARIATIONS IN EXISTING SITE CONDITIONS AS RELATES TO THIS NOTE AFTER THE BID IS AWARDED.
- CONTRACTOR TO MAINTAIN ANY UNIDENTIFIED STRUCTURES OR PIPES WITHIN THE EXISTING DRAINAGE SYSTEM. NOTICE SHOULD BE GIVEN TO OWNER AND THE ENGINEER UPON DISCOVERY.
- CONTRACTOR TO VERIFY ALL EXISTING PIPE CONNECTIONS AND INVERTS. ANY CONFLICTS SHOULD BE EXPRESSED TO OWNER AND THE ENGINEER.
- SURVEY INFORMATION IS BASED UPON BOUNDARY AND TOPOGRAPHIC SURVEY AS PROVIDED BY PICARD LAND SURVEYING, LLC, DATED 4-14-2021.

STORMWATER MANAGEMENT SYSTEM MAINTENANCE PROGRAM:

THERE SHALL BE PERIODIC MAINTENANCE OF THE STORMWATER SYSTEMS ON THE PROPERTY AFTER INSTALLATION. IN ORDER TO ENSURE EFFECTIVE PERFORMANCE OF THE SYSTEM, THE FOLLOWING STORMWATER MAINTENANCE PROGRAM HAS BEEN ESTABLISHED. THE PROPERTY OWNER WILL BE RESPONSIBLE FOR IMPLEMENTATION OF THIS PROGRAM. A LOG AND SCHEDULE OF ALL INSPECTIONS, CLEANINGS, AND REPAIRS SHALL BE MAINTAINED BY THE PROPERTY OWNER. ALL MAINTENANCE DOCUMENTS SHALL BE TRANSFERRED TO ANY FUTURE OWNERS UPON SALE OR TRANSFER OF THE PROPERTY.

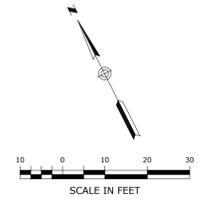
A. CATCH BASINS/MANHOLES
 CATCH BASINS ARE DESIGNED WITH SUMPS FOR THE PURPOSE OF COLLECTING COARSE SEDIMENT. ALL CATCH BASINS SHOULD BE INSPECTED TWO TIMES PER YEAR, SPECIFICALLY DURING TIMES FOR HIGH LEVELS OF MAINTENANCE AROUND THE SITE. SEDIMENT SHOULD BE REMOVED WHEN IT EXTENDS TO WITHIN 6 INCHES OF THE OUTLET PIPE INVERT OR NOT LESS THAN ONCE PER YEAR. CLEANOUT SHOULD BE FACILITATED VIA VACUUM TRUCK OR OTHER MEANS THAT ACCOMPLISH SEDIMENT REMOVAL. THE SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED OFF-SITE LOCATION IN ACCORDANCE WITH TOWN AND STATE REQUIREMENTS.

B. ASPHALT
 ASPHALT AREAS SHOULD BE SWEEP ANNUALLY. IDEAL SWEEPING TIMEFRAME IS IN THE SPRING AFTER WINTER SANDING OR SALTING FOR DEICING. DEICING CHEMICALS SHOULD BE KEPT TO A MINIMUM DURING THE WINTER MONTHS.

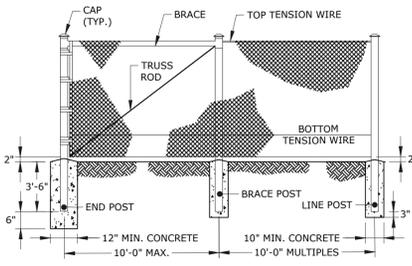
C. SUBSURFACE DETENTION SYSTEMS
 UNDERGROUND DETENTION SYSTEMS SHALL BE INSPECTED THROUGHOUT THE SURFACE OPENINGS QUARTERLY AND SEDIMENT/DEBRIS SHALL BE REMOVED AS NEEDED TO ENSURE PROPER FUNCTIONING OF STRUCTURES AND INLETS/OUTLETS. AREAS OF DISTURBANCE THAT MAY BE AS A RESULT OF CLEANING SHALL BE SEEDED AND PLANTED IN ACCORDANCE WITH THE ORIGINAL PLANTING PLAN. ASSOCIATED STRUCTURES SHALL BE MAINTAINED YEARLY, OR MORE FREQUENTLY, AS REQUIRED, BY THE CONDITION OF THE SITE AND SYSTEM. WASTE MATERIAL SHALL BE PROPERLY DISPOSED OF OFF-SITE.

D. LAWN AND VEGETATED AREAS
 VEGETATED COVER SHALL BE MAINTAINED ON ALL EARTH SURFACES TO MINIMIZE SOIL EROSION. FERTILIZER USE SHOULD BE MINIMIZED AND APPLIED USING CAREFUL APPLICATION PROCESSES.

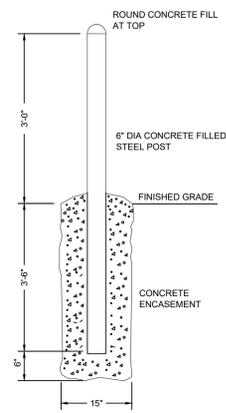
E. LEVEL SPREADER
 LEVEL SPREADER SHALL BE INSPECTED QUARTERLY AND SEDIMENT/DEBRIS SHALL BE REMOVED AS NEEDED TO ENSURE PROPER FUNCTIONING. CONCRETE SILL SHOULD BE INSPECTED TO ENSURE STRUCTURAL INTEGRITY AND ANY SIGNS OF FAILURE.



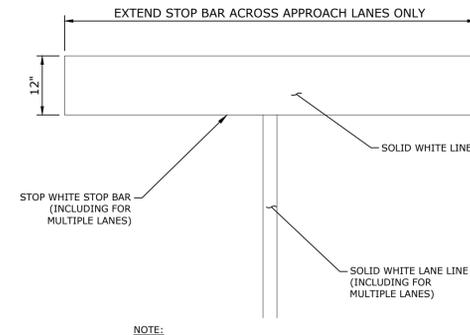
GRADING & DRAINAGE PLAN	
CONVENIENCE STORE & FUELING STATION	
64-66 WILLIAMAMONTIC RD, CHAPLIN, CT	
MEHAK REALTY LLC	
SCALE: 1" = 20' CON. NO. 07BCL05 DATE: 10/19/2021 DRAWN BY: SRM APPROVED BY: TRW	SHEET NO. 4 NO. OF SHEETS 10 DATE: 12/16/2021 REV. 1 DESCRIPTION OF REVISION: GENERAL REVISIONS



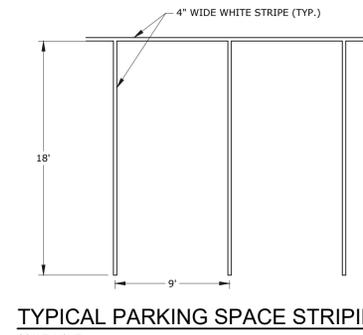
- NOTES:**
- CHAIN LINK FENCE AND ATTACHMENTS SHALL BE "ANCHOR PERMAFUSED VINYL COATED FENCE" OR EQUIVALENT, INSTALLED PER MANUFACTURER'S STANDARDS.
 - FABRIC TO BE 9 GA, 2" MESH WITH 6 GAGE TOP TENSION WIRE.
 - LINE POSTS SHALL BE 1-7/8" DIAMETER WITH 2-3/8" END POSTS AND 1-5/8" BRACES.
 - CONCRETE POST BASES, 3000 P.S.I. CONCRETE, DOMED TO SHED WATER



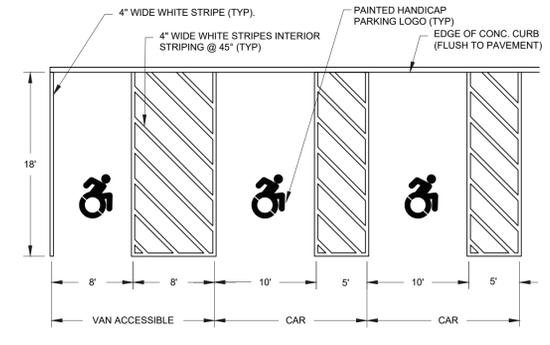
STEEL BOLLARD
SCALE: NONE



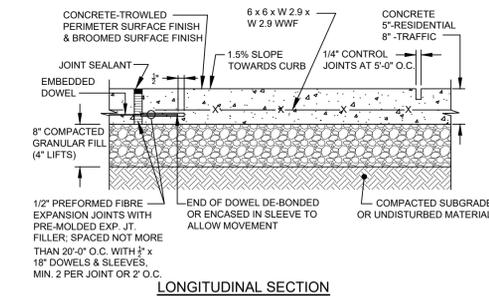
PAINTED STOP BAR
SCALE: NONE



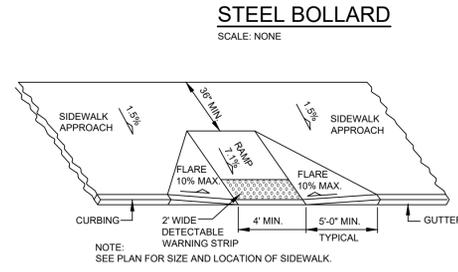
TYPICAL PARKING SPACE STRIPING
SCALE: NONE



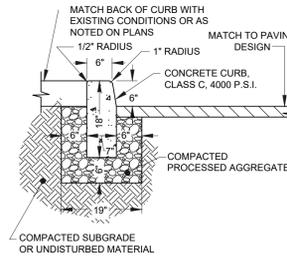
ACCESSIBLE PARKING STRIPING DETAIL
SCALE: NONE



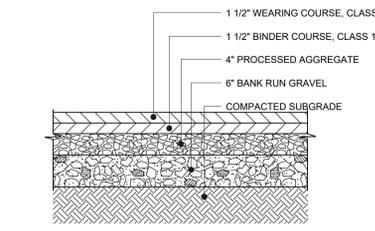
LONGITUDINAL SECTION



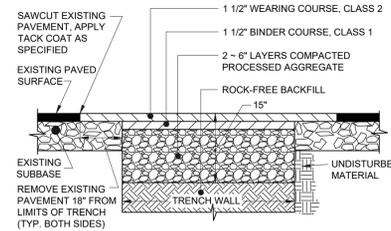
ACCESSIBLE PARKING SIDEWALK RAMP
SCALE: NONE



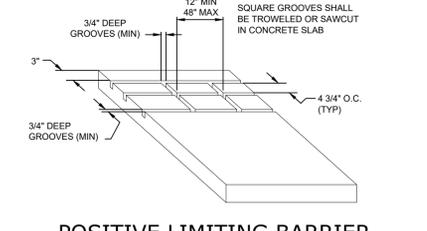
CONCRETE CURB DETAIL
SCALE: NONE



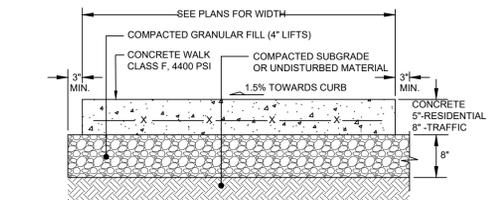
BITUMINOUS CONCRETE PAVING
SCALE: NONE



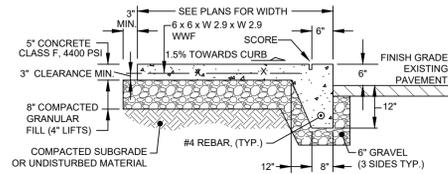
PAVEMENT REPLACEMENT DETAIL
SCALE: NONE



POSITIVE LIMITING BARRIER
SCALE: NONE



CROSS-SECTION



ACCESSIBLE PARKING SIDEWALK RAMP

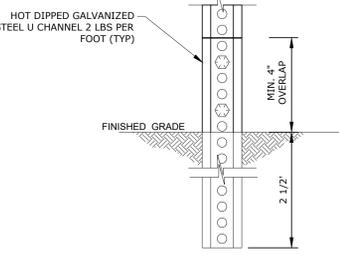
- NOTES:**
- SEE PLAN FOR WIDTHS AND LOCATIONS.
 - ALL SECTIONS SHALL BE 9' LONG EXCEPT FOR CLOSURES WHERE NO SECTION LESS THAN 4'-0" LONG SHALL BE USED.
 - USE 3/8" PREFORMED FIBER EXPANSION JOINT SPACED NOT MORE THAN 20'-0" O.C. WITH 3/2" X 18" DOWELS & SLEEVES, MIN. 2 PER JOINT OR 2' O.C.
 - PROVIDE FULL CONTROL JOINTS EVERY 10' ± DEPTH OF THE SLAB.
 - ALL SIDEWALK TO BE TREATED WITH VEXCON POWER SEAL 40 AS PER MANUFACTURER INSTRUCTIONS.
 - REFER TO AGENCY CONSTRUCTION STANDARDS AND SPECIFICATIONS.

CONCRETE WALK & JOINT DETAILS

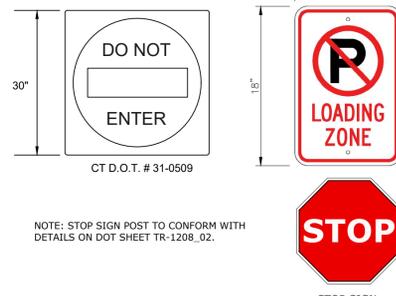
SCALE: NONE
References: 49NK3.01, Const. Documents, 24 N. Main St., W. Hfd., March 2014, and City of New Haven Eng. Stnd. Details March 2005 and CTDOT 2017 standards.

MONOLITHIC CONCRETE CURB & WALK

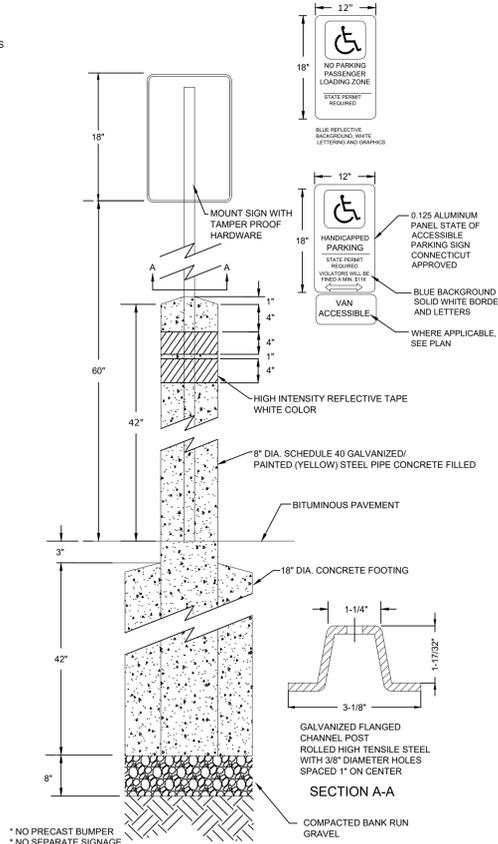
SCALE: NONE
References: 49NK3.01, Const. Documents, 24 N. Main St., W. Hfd., March 2014, and City of New Haven Eng. Stnd. Details March 2005 and CTDOT 2017 standards.



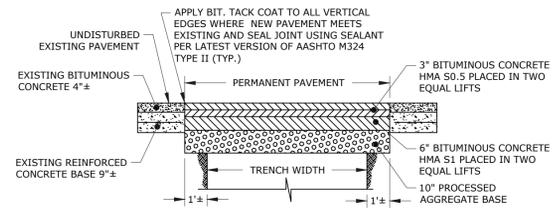
BREAKAWAY SIGN POST
SCALE: NONE



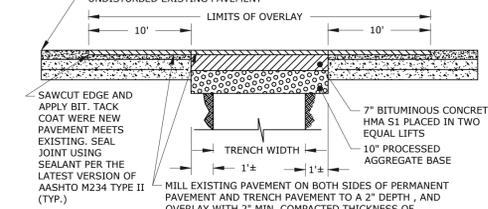
SIGN DETAIL
SCALE: NONE



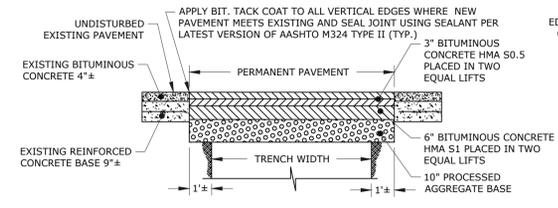
SIGNAGE & MOUNTINGS
SCALE: NONE



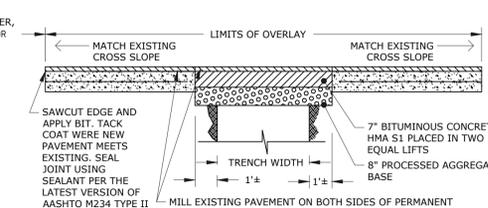
**PERMANENT PAVEMENT TRENCH DETAIL
TRENCHES PERPENDICULAR TO EDGE OF PAVEMENT**
SCALE: NONE



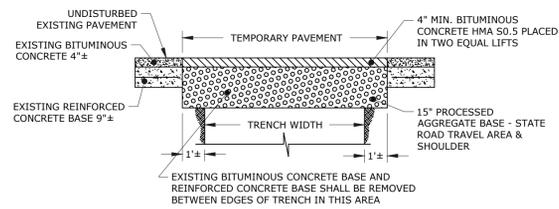
**MILLING AND OVERLAY
TRENCHES PERPENDICULAR TO EDGE OF PAVEMENT**
SCALE: NONE



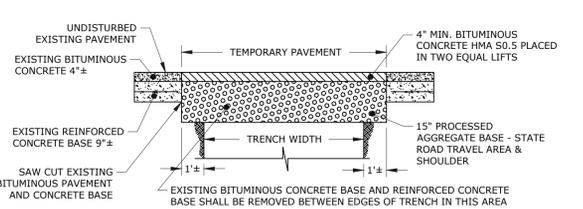
**PERMANENT PAVEMENT TRENCH DETAIL
TRENCH PARALLEL TO EDGE OF PAVEMENT**
SCALE: NONE



**MILLING AND OVERLAY
TRENCH PARALLEL TO EDGE OF PAVEMENT**
SCALE: NONE



**TEMPORARY PAVEMENT DETAIL
TRENCHES PERPENDICULAR TO EDGE OF PAVEMENT**
SCALE: NONE



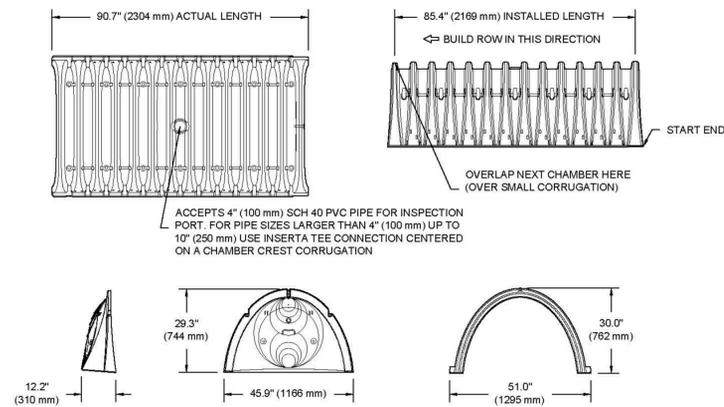
**TEMPORARY PAVEMENT DETAIL
TRENCH PARALLEL TO EDGE OF PAVEMENT**
SCALE: NONE

TRENCH DETAILS FOR STATE ROADS

REF: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION, DISTRICT PERMIT OFFICE, LAST REVISED 7/13/15.

- TRENCH DETAILS FOR STATE ROADS GENERAL NOTES:**
- THESE TRENCH DETAILS ARE INTENDED FOR USE ON ROADS WITH AND WITHOUT CONCRETE PAVEMENT STRUCTURES.
 - FOR TRENCH IN CONCRETE PAVEMENT STRUCTURES, ANY PORTION OF THE REMAINING CONCRETE SLAB < 3' SHALL BE REMOVED IN ITS ENTIRETY OR AS DIRECTED BY THE ENGINEER.
 - WIDTH OF PERMANENT OR TEMPORARY PAVEMENT SHALL BE 2' WIDER THAN TRENCH EXCAVATION OR AS FIELD CONDITIONS WARRANT AS DIRECTED BY THE ENGINEER.
 - "T" (10 FOOT CUT BACK) FOR FINAL PAVEMENT MILLING LIMITS, WILL BE AT THE DISCRETION OF THE ENGINEER.
 - ALL DISTURBED PAVEMENT MARKINGS SHALL BE RESTORED AS DIRECTED BY THE ENGINEER.

DATE	1/4/2021
DESCRIPTION OF REVISION	
REV	
Loureiro Engineering & Construction • 2035 • Energy 100 Northwold Drive • Plainville, Connecticut 06062 Phone: 860-747-6818 • Fax: 860-747-8822 All rights reserved 2019	
SCALE	AS NOTED
CONV. NO.	07BC1.05
DATE	10/19/2021
DRAWN BY	APH
APPROVED BY	TRW
DATE	10/19/2021
SITE DETAILS CONVENIENCE STORE AND FUELING STATION 64-66 WILLIAMSON ROAD CHAPLIN, CT MEHAK REALTY LLC 1001 WILSON ROAD, SUITE 100 CHAPLIN, CT 06220	
DRAWING	D-1
SHEET NO.	7
NO. OF SHEETS	10



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m ³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m ³)
WEIGHT	75.0 lbs.	(33.6 kg)

STORMTECH SC-740 TECHNICAL SPECIFICATION
SCALE: NONE

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"-5" TOPSOIL
5"-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
- TEST PIT EE**
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
- TEST PIT FF**
0"-16" 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 GRAVEL AND COBBLES
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

PERMEABILITY TEST RESULTS

TEST HOLE #	SAMPLE DEPTH (INCHES)	PERMEABILITY (FEET/DAY)
AA	4.50	40
BB	4	43
CC	4	28
DD	7	134
EE	5	98
FF	12	73
GG	4	114
HH	4	101

- NOTE:
- SOIL SAMPLES COLLECTED BY NEW ENGLAND ENVIRONMENTAL SERVICES, ON 7/22/2021.
 - PERMEABILITY TESTS WERE CONDUCTED USING FALLING HEAD METHOD.

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

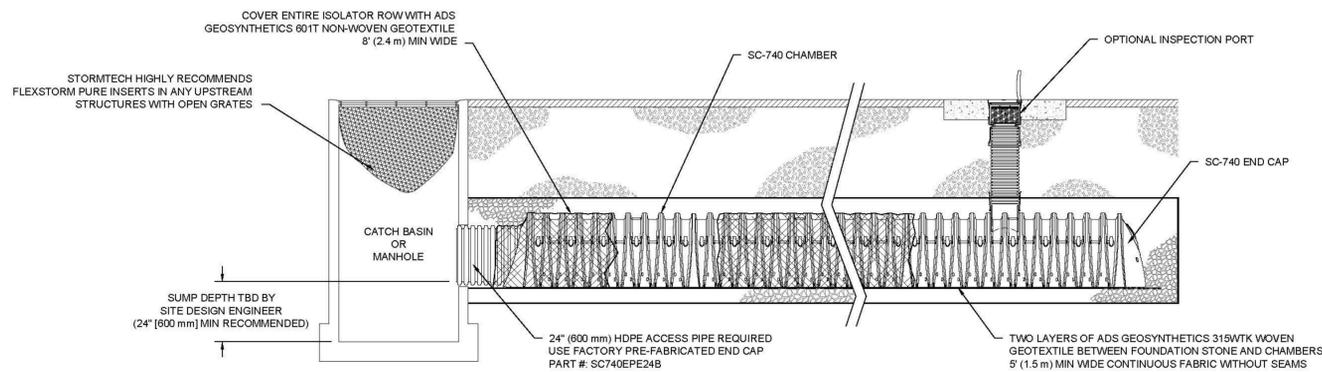
PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE08B / SC740EPE08BPC	---	---	---	0.5" (13 mm)
SC740EPE08T / SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC	---	---	---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC	---	---	---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC	---	---	---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC	---	---	---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC	---	---	---	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

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 1-888-892-2894.

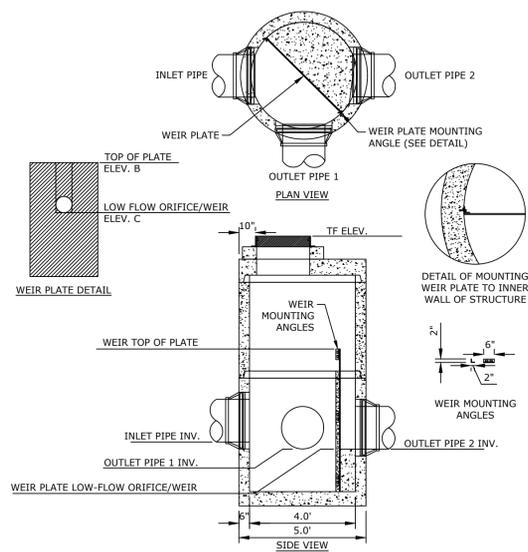
* FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

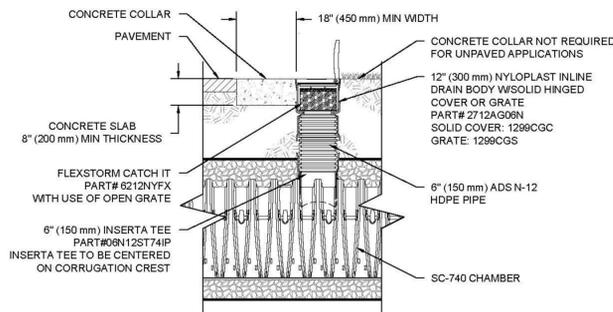
STORMTECH STUD LOCATION IN END CAPS
SCALE: NONE



STORMTECH SC-740 ISOLATOR ROW DETAIL
SCALE: NONE



- NOTES:
- STEEL REINFORCEMENT SHALL CONFORM TO LATEST ASTM SPECIFICATIONS: ASTM A-615, GRADE 60 BLACK DEFORMED BARS
 - CONCRETE: Fc = 4,000 PSI @ 28 DAYS MINIMUM, TYPE III CEMENT
 - BUTYL RUBBER JOINT SEALANT PROVIDED CONFORMS TO ASTM C-990 AND FEDERAL SPEC SS-S-010A
 - ONE POUR MONOLITHIC BASE SECTION.

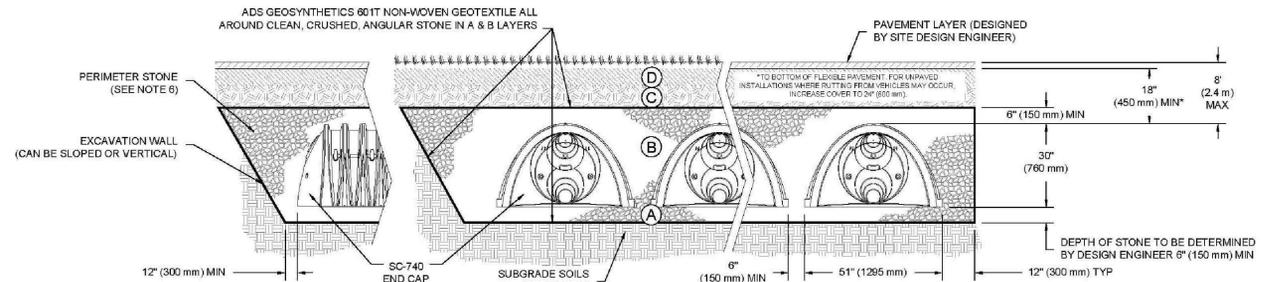


STORMTECH SC-740 6" INSPECTION PORT DETAIL
SCALE: NONE

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 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	
C	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 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL COVER 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).
B	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 ¹ 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 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{1,2}

- PLEASE NOTE:
- 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 COMPACTIONED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 - 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 EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



NOTES:

- 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".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE "SITE DESIGN ENGINEER" REFERS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE STORMTECH CHAMBERS FOR THIS PROJECT.
- 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.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- 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 SYSTEM OVERFLOW CONTROL STRUCTURE DETAIL
SCALE: NONE

AS NOTED
CONV. NO. 07BCL05
DATE 10/19/2021
DRAWN BY APH
APPROVED BY TRW

SCALE AS NOTED
DATE 10/19/2021
DATE 10/19/2021

STORMWATER MANAGEMENT DETAILS
CONVENIENCE STORE AND FUELING STATION
64-66 WILLIAMSBURY ROAD, CHAPLIN, CT
MEHAK REALTY LLC

DRAWING D-4
SHEET NO. 10 NO. OF SHEETS 10

APPR. DATE 2/10/2021
DESCRIPTION OF REVISION
REV.