DUTTON ASSOCIATES, LLC

67 EASTERN BOULEVARD GLASTONBURY, CONNECTICUT 06033 TEL: (860)-633-9401 FAX: (860)-633-8851 EMAIL: JIMD@DUTTONASSOCIATESLLC.COM

TOWN OF GLASTE	NBURY
OCD	

LETTER OF TRANSMITTAL

DATE: 01/27/2021	JOB NUMBER: 21081
ATTENTION: SUZANNE	
RE: 52 NATIONAL	

COPIES	DATE	DESCRIPTION	
10	01/24/2022	SITE DEVELOPMENT PYMS	
1	01/27/2022	SITE PUAN CHECKLIST	
3	01/24/2012	SITE DEVELOPMENT PYTHS SITE PURN CHTCKLIST DRAINAGE COMPUTATIONS	

HEDULE THIS ITEM FOR I WWILL INKOMMAL
CALL OR EMBIL MANY QUESTIONS
THANK YOU

cc:	
CC:	
CG:	
CC:	

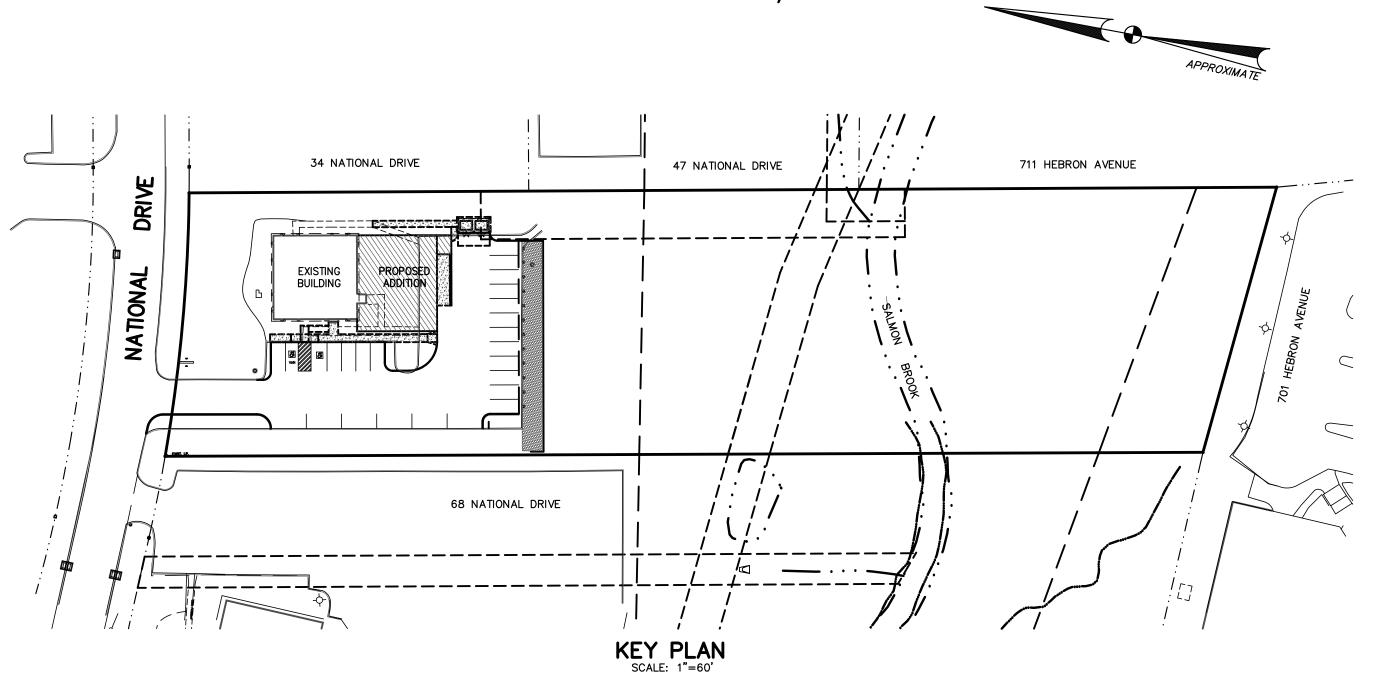
JAMES W. DUTTON, L.S.

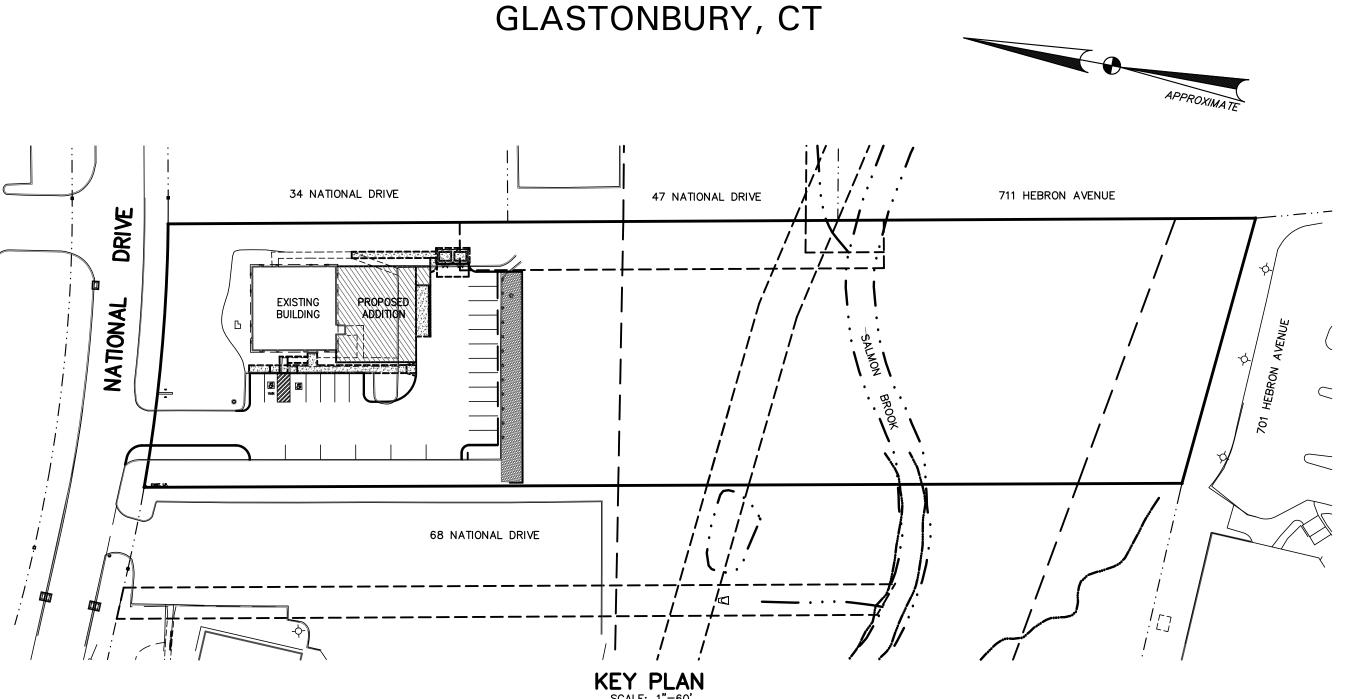
IF ENCLOSURES ARE NOT AS NOTED, KINDLY NOTIFY US AT ONCE

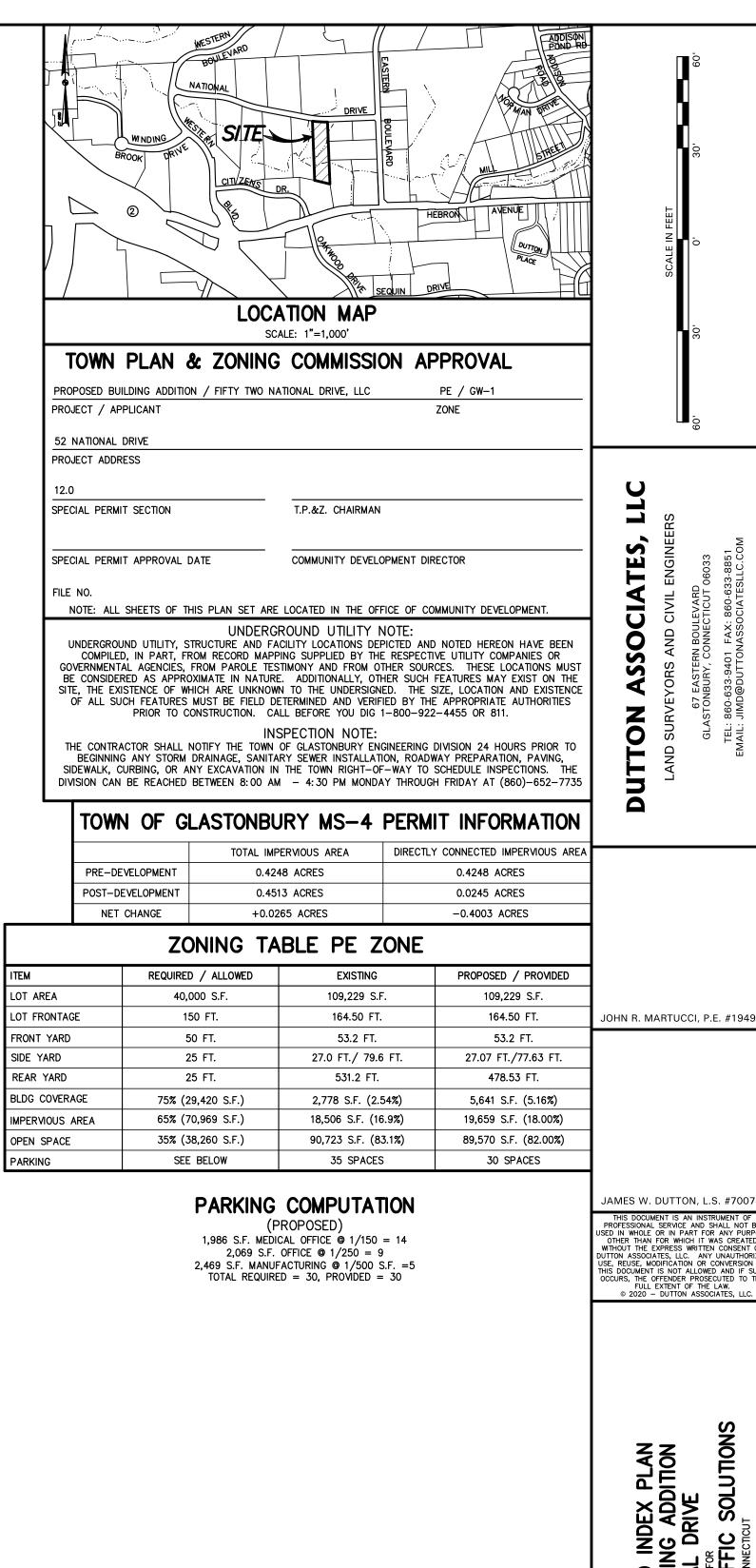
PROPOSED BUILDING ADDITION

MAP E5 STREET 4680 LOT S0003A 52 NATIONAL DRIVE GLASTONBURY, CONNECTICUT

PREPARED FOR: **LEGEND** FIFTY TWO NATIONAL DRIVE, LLC **EXISTING** PROPOSED IRON PIN CONCRETE MONUMENT PREPARED BY DUTTON ASSOCIATES, LLC RAINAGE EASEMENT AREA 67 EASTERN BOULEVARD







ABBREVIATIONS

SPOT ELEVATION

TLAND LIMIT LINE

TREE / SHRUB

BUILDING

BUILDING WITH OVERHANG

STEPS/HATCHWAY

— — — EDGE OF BITUMINOUS PAVEMENT — — — —

DOUBLE YELLOW LINE SOLID WHITE LINE

WATER SERVICE LINE

WATER MAIN WATER GATE/CURB STOP **HYDRANT** SANITARY SEWER LINE

SANITARY MANHOLE STORM DRAIN LINE

DRAINAGE MANHOLE CULVERT END STORM DRAIN STRUCTURE

SEDIMENT BARRIER

TOPSOIL STOCKPILE AREA CRUSHED STONE

TSA

— E — E — E — UNDERGROUND ELECTRIC UTILITY

 $\sim\sim\sim\sim\sim$

— s — s — s —

____ D ____ D ____ D ____

BITUMINOUS CONCRETE LIP CURB BITUMINOUS BASEMENT FLOOR ELEVATION CATCH BASIN CONCRETE CURE CONCRETE EXISTING FLOW LINE GARAGE FLOOR ELEVATION HYDRANT INVERT NOW OR FORMERLY PAGE REAR YARD SANITARY MANHOL SO. NEW ENGLAND TELE SIDE YARD TOP OF GRATE TOP OF FRAME TOP FND. TOP FOUNDATION ELEVATION

VOLUME

WATER GATE

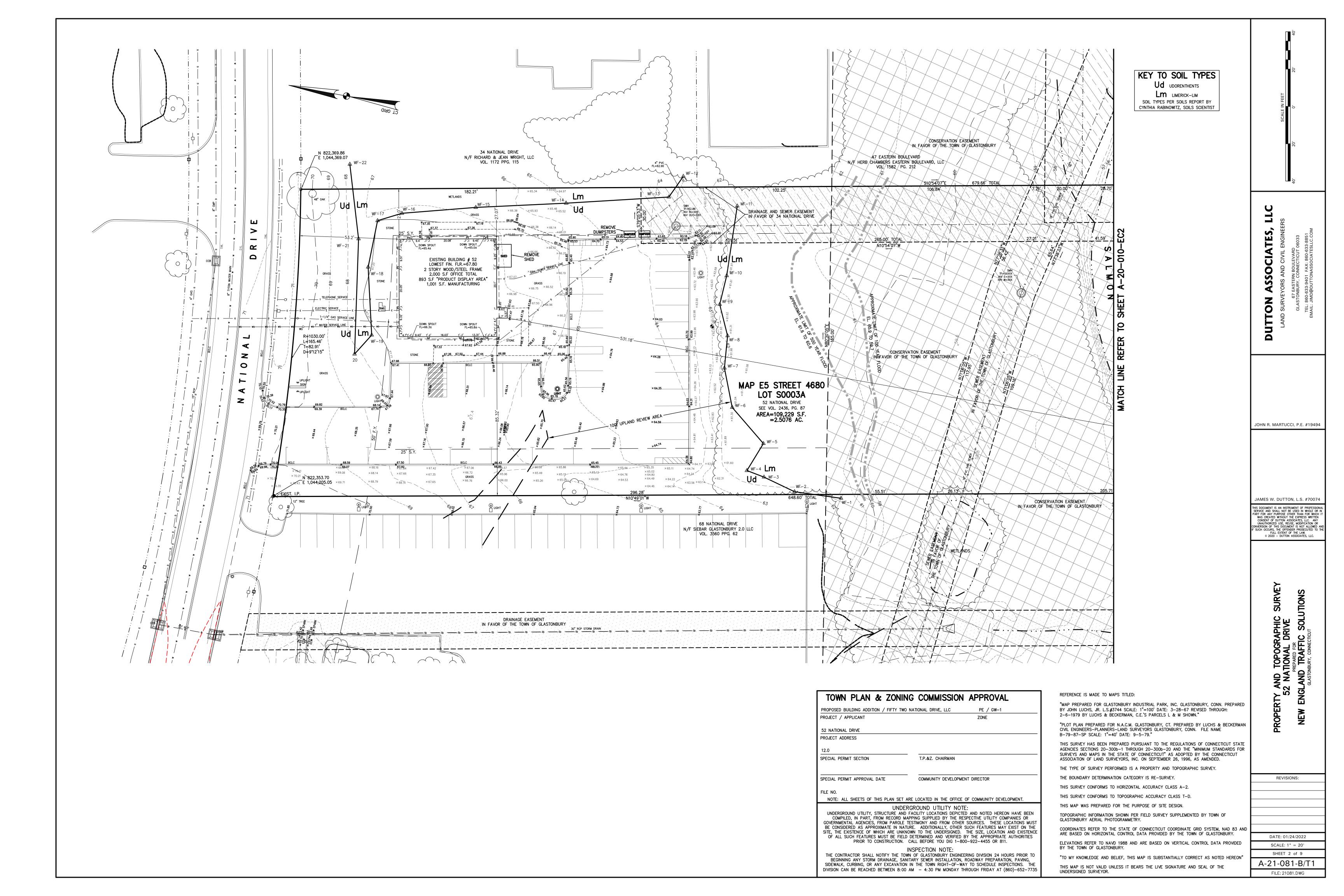
VOL.

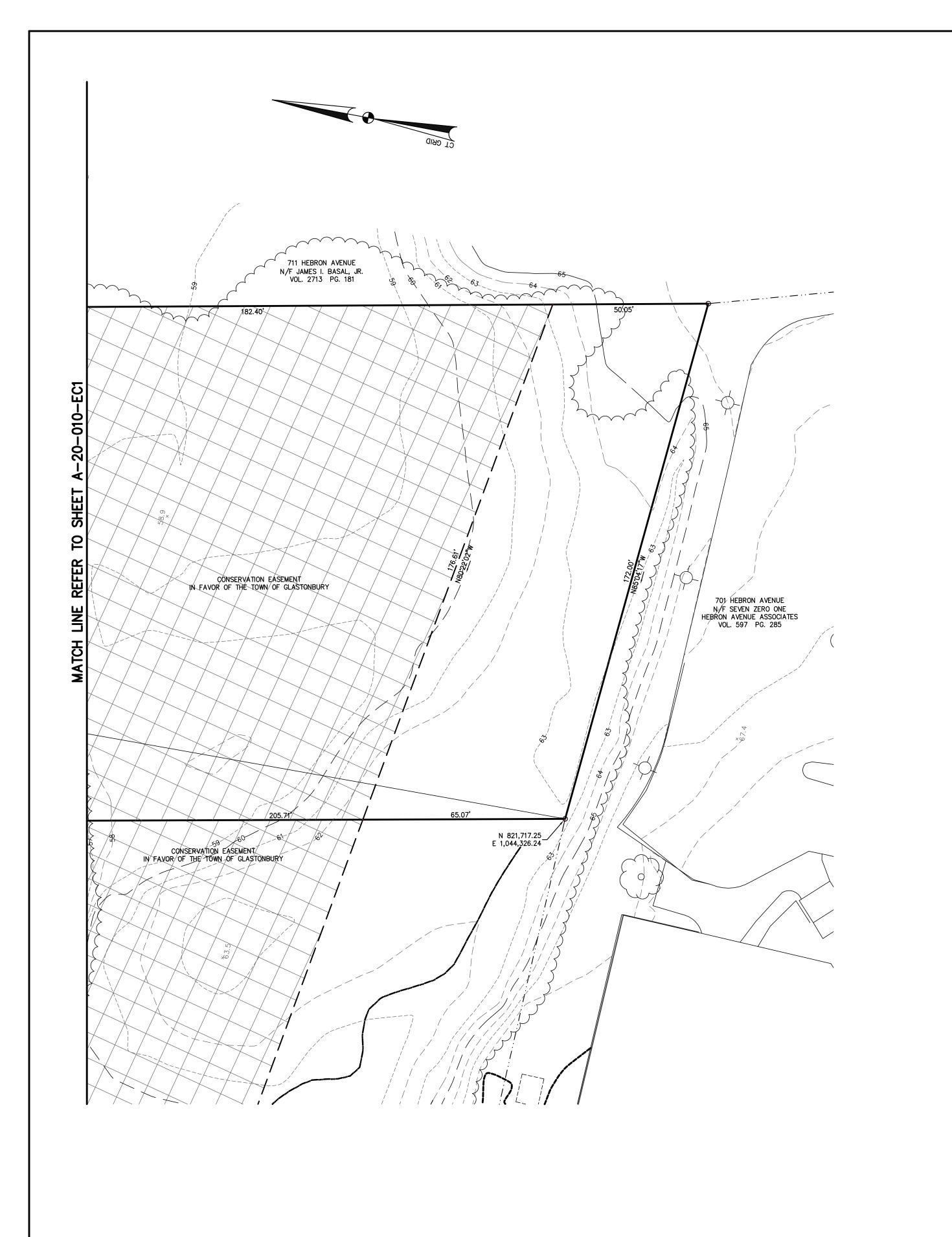
PLAN **REVISIONS:** 1 OF 9 A-21-081-I 2 & 3 OF 9 PROPERTY BOUNDARY & TOPOGRAPHIC SURVEY 4 & 5 OF 9 6 OF 9 4-21-081-G/ES 7, 8 & 9 OF 9 DATE: 01/24/2022 SCALE: AS SHOWN SHEET 1 of 9 A-21-081-I

FILE: 21081.DWG

PLAN INDEX

IWWCC INFORMAL SUBMISSION 01/24/2022





PROPOSED BUILDING ADDITION / FIFTY TWO NATIONAL DRIVE, LLC PROJECT / APPLICANT ZONE 52 NATIONAL DRIVE PROJECT ADDRESS

T.P.&Z. CHAIRMAN SPECIAL PERMIT SECTION

SPECIAL PERMIT APPROVAL DATE

NOTE: ALL SHEETS OF THIS PLAN SET ARE LOCATED IN THE OFFICE OF COMMUNITY DEVELOPMENT.

COMMUNITY DEVELOPMENT DIRECTOR

UNDERGROUND UTILITY NOTE: UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIÉS, FROM PAROLE TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO THE UNDERSIGNED. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455 OR 811.

INSPECTION NOTE:
THE CONTRACTOR SHALL NOTIFY THE TOWN OF GLASTONBURY ENGINEERING DIVISION 24 HOURS PRIOR TO BEGINNING ANY STORM DRAINAGE, SANITARY SEWER INSTALLATION, ROADWAY PREPARATION, PAVING, SIDEWALK, CURBING, OR ANY EXCAVATION IN THE TOWN RIGHT-OF-WAY TO SCHEDULE INSPECTIONS. THE DIVISION CAN BE REACHED BETWEEN 8:00 AM - 4:30 PM MONDAY THROUGH FRIDAY AT (860)-652-7735



Dutton Associates, LLC 67 Eastern Boulevard Glastonbury, CT 06033 LOCATION: 52 National Drive, Glastonbury Connecticut

SOILS AND WETLANDS REPORT

INSPECTION DATE: 9/26/2011 MAP PROVIDED: topographic CONTOUR INTERVAL SHOWN: SCALE SHOWN:

SOIL MOISTURE CONDITIONS: moist to wet PROPERTY LINES IDENTIFIABLE: approximate NUMBERING OF WETLAND FLAGS: #1-#11, #12-22

This site inspection was conducted to evaluate the presence of inland-wetlands and watercourses. A detailed classification of the soils was not part of this study. Field observations of the wetland and upland soils together with the classification system of the National Cooperative Soil Survey, USDA, and the County Soil Legend were used in this investigation to identify the soil series names.

In conducting field investigations, soil borings are taken from which many important soil properties are observed, as follows: seasonal soil moisture condition OR the presence of free water and its depth, for each horizon in the soil profile, the thickness, color and texture are also observed. The areas shown on soil maps are called soil map units. Some map units consist of one kind of soil while others consist of two or more kinds of soil. A few have little or no soil material at all. The information in this report is based on examination and interpretation of soils with the use of a hand auger and shovel. Wetland delineation is based on prevailing conditions at the time of investigation and best professional judgment. Field conditions may change over time.

COMMENTS: This property is situated on the south side of National Drive and comprises a front portion with an existing commercial building surrounded by mowed grass and a paved parking area. The parcel is below the grade of National Drive by 6-7 feet. South of the parking area, the land drops another few feet into woodland which continues to the south to the Salmon Brook.

This document is an instrument of professional service and shall not be used in whole or in part for any purpose other than for which it was created without the express written consent of dutton associates, luc. Any unauthorized use, reuse, modification or conversion of this document is not allowed an if such occurs, the offence prosecuted to the full extent of the Law.

Wetlands were identified in the woodlands and in the east and north of the site.

Wetlands were identified in the woodlands and in the east and north of the site. Disturbed wetland soils were found in the northerly and easterly areas. Wetland soils associated with Salmon Brook are mapped as Limerick and Lim series.

Most of the soils at the site are disturbed except for the soils in the wooded areas. Soil descriptions are provided below for your information.

SOIL SERIES DEPTH TO REDOXIMORPHIC FEATURES: DEPTH TO BEDROCK: DEPTH TO SEASONAL HIGH WATER TABLE: 0"-8"

LIMERICK-LIM 9 INCHES 10 FEET

The Limerick and Lim soils developed in sediment deposited on flood plains along the major rivers. The texture is dominantly silt loam but may be very fine sandy loam. It is not uncommon to find buried surface horizons or layers of muck below 30 inches.

SOIL TYPE: UDORTHENTS

Sometimes known as "Made Land", this map unit consists of areas ranging from excessively drained to very poorly drained. It is composed of cut or borrow areas, filled areas, and areas consisting of both cut and fill. These soils may be found in urban, sub- urban or rural areas. The cut or borrow areas consist of places where the surface layer and the subsoil have been removed.

If there are any questions, please do not hesitate to contact me.

Yours truly,

Cynthia M. Rabinowitz Soil Scientist/Landscape Designer Permaculture Design Consultant

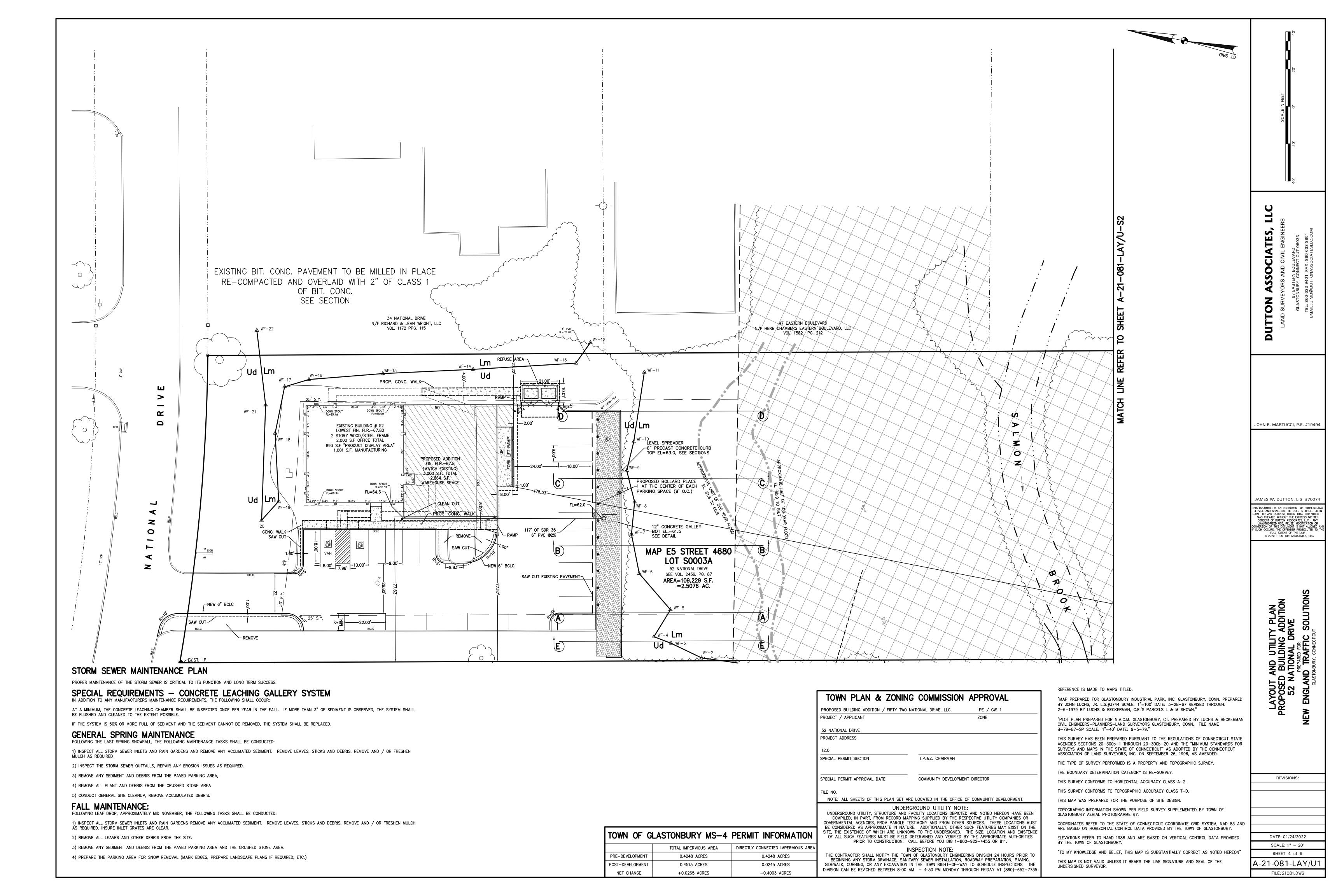
ASSOCIATES, UTTON

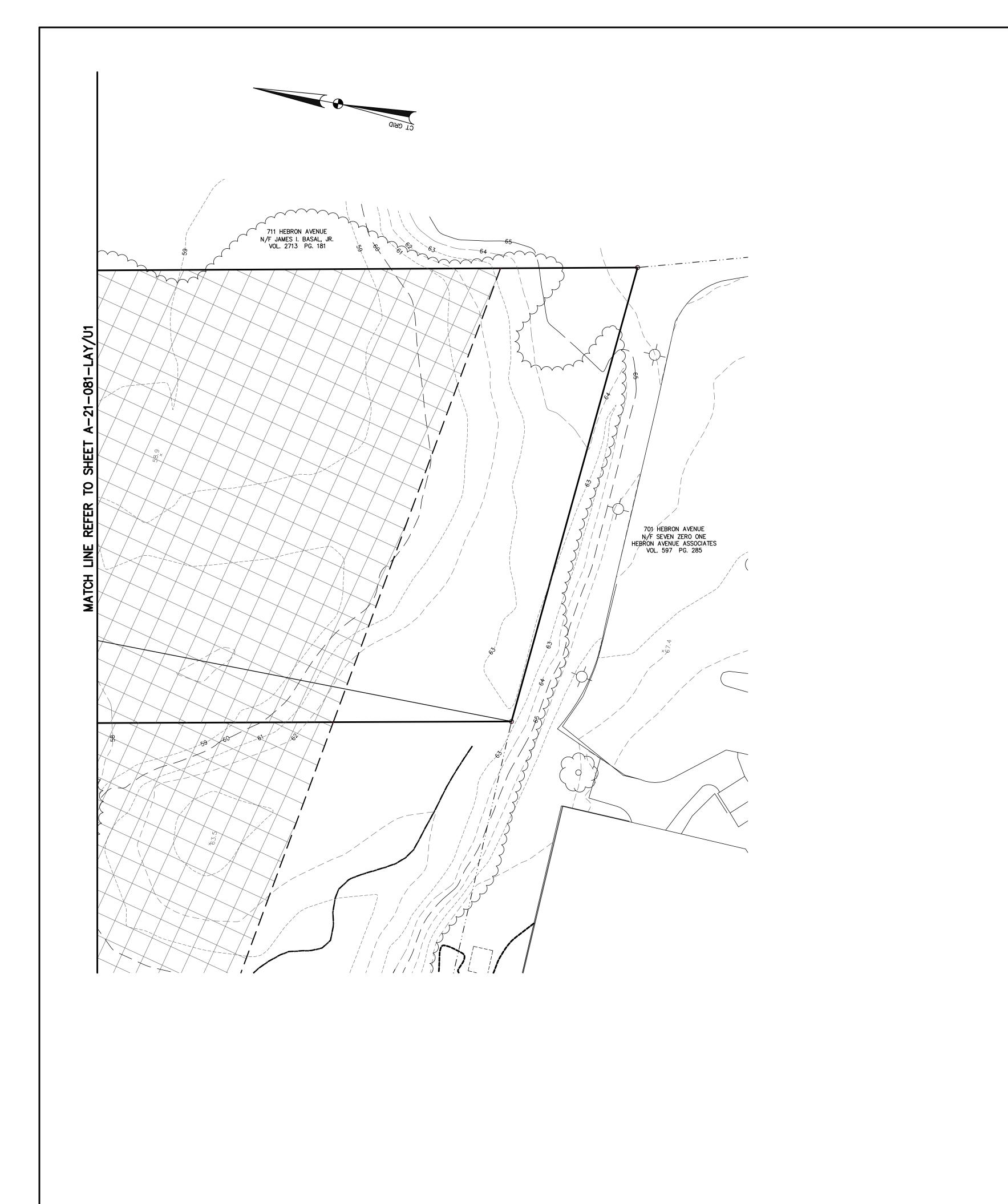
JOHN R. MARTUCCI, P.E. #19494

REVISIONS:

DATE: 01/24/2022 SCALE: 1" = 20' SHEET 3 of 9

A-21-081-B/T2 FILE: 21081.DWG





PROPOSED BUILDING ADDITION / FIFTY TWO NATIONAL DRIVE, LLC PE / GW-1 PROJECT / APPLICANT 52 NATIONAL DRIVE PROJECT ADDRESS SPECIAL PERMIT SECTION T.P.&Z. CHAIRMAN

SPECIAL PERMIT APPROVAL DATE

NOTE: ALL SHEETS OF THIS PLAN SET ARE LOCATED IN THE OFFICE OF COMMUNITY DEVELOPMENT.

UNDERGROUND UTILITY NOTE:

UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROLE TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO THE UNDERSIGNED. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455 OR 811.

COMMUNITY DEVELOPMENT DIRECTOR

INSPECTION NOTE:

THE CONTRACTOR SHALL NOTIFY THE TOWN OF GLASTONBURY ENGINEERING DIVISION 24 HOURS PRIOR TO BEGINNING ANY STORM DRAINAGE, SANITARY SEWER INSTALLATION, ROADWAY PREPARATION, PAVING, SIDEWALK, CURBING, OR ANY EXCAVATION IN THE TOWN RIGHT-OF-WAY TO SCHEDULE INSPECTIONS. DIVISION CAN BE REACHED BETWEEN 8:00 AM - 4:30 PM MONDAY THROUGH FRIDAY AT (860)-652-7735

ASSOCIATES, DUTTON

JOHN R. MARTUCCI, P.E. #19494

JAMES W. DUTTON, L.S. #70074

THIS DOCUMENT IS AN INSTRUMENT OF PROFESSIONA SERVICE AND SHALL NOT BE USED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN FOR WHICH I WAS CREATED WITHOUT THE EXPRESS WRITTEN CONSENT OF DUTTON ASSOCIATES, LLC. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR CONVERSION OF THIS DOCUMENT IS NOT ALLOWED AN IF SUCH OCCURS, THE OFFENDER PROSECUTED TO THE FULL EXTENT OF THE LAW.

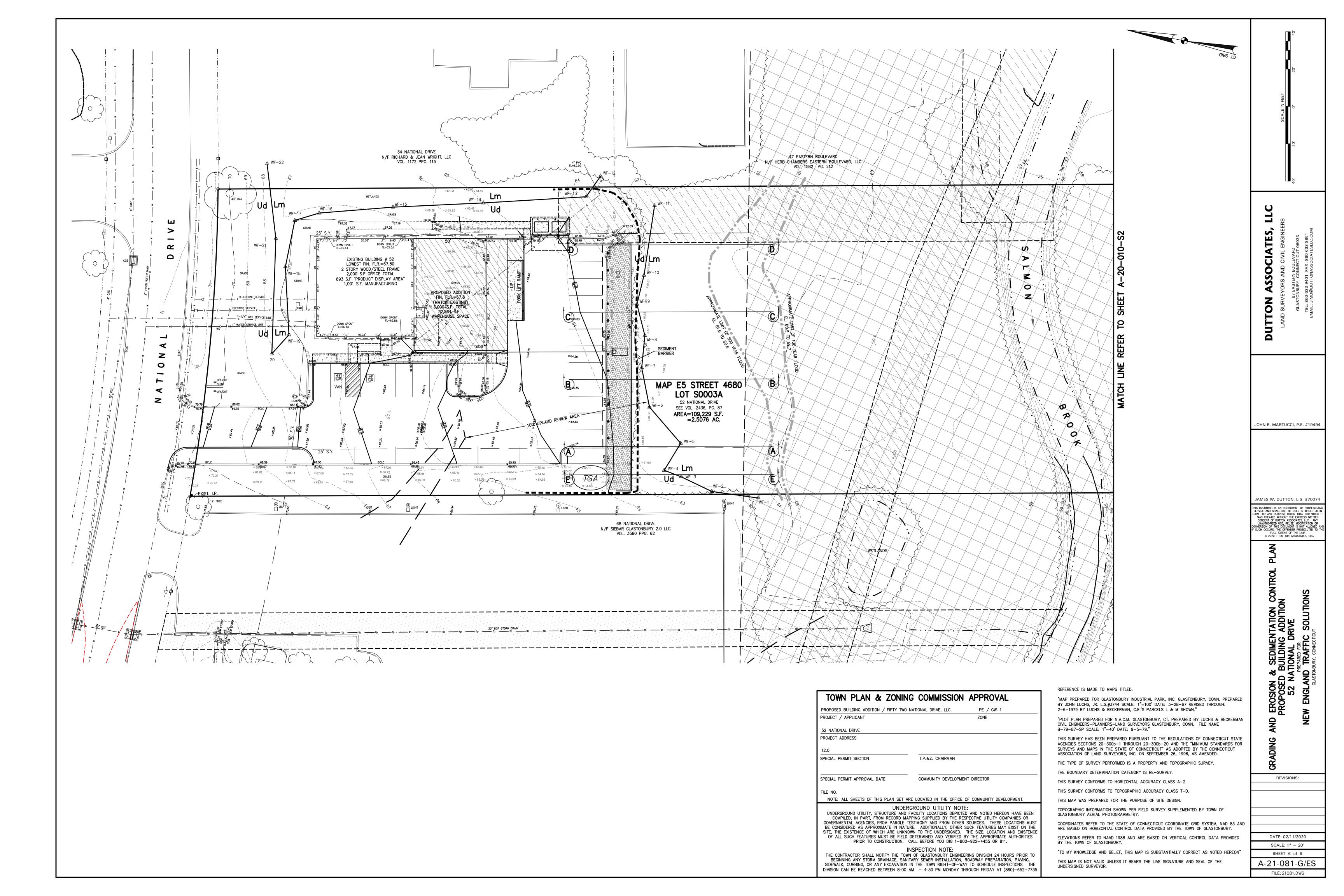
© 2018 — DUTTON ASSOCIATES, LLC.

REVISIONS:

DATE: 01/24/2022 SCALE: 1" = 20'

SHEET 5 of 9 A-21-081-LAY/U2

FILE: 21081.DWG



TOPSOILING:

TOPSOIL SHALL BE FRIABLE AND LOAMY (LOAM, SANDY LOAM OR SILT LOAM) AND SHALL BE FREE OF DEBRIS, TRASH, STUMPS, ROCKS, ROOTS AND NOXIOUS WEEDS. IT SHALL GIVE EVIDENCE OF BEING ABLE TO SUPPORT HEALTHY VEGETATION AND CONTAIN NO SUBSTANCE THAT IS POTENTIALLY TOXIC TO PLANT GROWTH.

ALL TOPSOIL SHALL BE TESTED BY A RECOGNIZED LABORATORY AND SHALL MEET THE FOLLOWING REQUIREMENTS:

ORGANIC MATTER: NOT LESS THAN 1.5% BY WEIGHT. Ph RANGE: 6.0-7.5 (IF LESS THAN 6.0, LIME SHALL BE APPLIED AS REQUIRED). SOLUBLE SALTS: SHALL NOT EXCEED 500 ppm.

APPLICABLE EROSION AND SEDIMENTATION CONTROLS (SEDIMENT BARRIERS, ETC.) SHALL BE IN PLACE AND IN GOOD CONDITION PRIOR TO PLACING TOPSOIL.

TOPSOIL SHALL NOT BE APPLIED WHILE IN A FROZEN OR MUDDY CONDITION.

TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED TO A MINIMUM COMPACTED DEPTH OF 4". SURFACE IRREGULARITIES SHALL BE CORRECTED AT TIME OF PLACEMENT TO AVOID DEPRESSIONS AND WATER POCKETS.

TOPSOIL SHALL BE COMPACTED ONLY ENOUGH TO ENSURE GOOD CONTACT WITH THE UNDERLYING SOIL AND TO OBTAIN A UNIFORM SEEDBED. OVER COMPACTING SHALL BE AVOIDED.

PERMANENT VEGETATIVE COVER:

THE PURPOSE OF PERMANENT VEGETATIVE COVER IS TO STABILIZE EXPOSED SOIL, REDUCE DAMAGE FROM WIND & WATER EROSION AND ENHANCE THE ENVIRONMENT.

TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED ON ALL SOIL STOCKPILE AREAS WHICH WILL BE IN PLACE FOR MORE THAN 21 DAYS BETWEEN AUGUST 1 AND JUNE 15.

PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED AS SOON AS POSSIBLE ON AREAS WHERE CONSTRUCTION HAS BEEN COMPLETED.

PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED BETWEEN THE PRIME SEEDING DATES OF APRIL 15 THROUGH JUNE 15 AND AUGUST 15 THROUGH SEPTEMBER 15.

IF TEMPORARY VEGETATIVE COVER CANNOT BE ESTABLISHED BETWEEN THE PRIME SEEDING DATES. THE AREA SHALL BE STABILIZED TO THE EXTENT POSSIBLE WITH TEMPORARY MULCH UNTIL THE NEXT PRIME SEEDING

REFER TO THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL INFORMATION.

1. APPLICABLE EROSION AND SEDIMENTATION CONTROLS (SEDIMENT BARRIERS, ETC.) SHALL BE INSTALLED PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.

2. REMOVE LOOSE ROCK AND LARGE STONES, DEBRIS, TRASH, STUMPS AND OTHER NOXIOUS MATERIALS.

3. UNLESS HYDROSEEDED, APPLY LIME PER SOIL TEST OR AT THE RATE OF 135 LB PER 1000 S.F.

4. UNLESS HYDROSEEDED, APPLY FERTILIZER PER SOIL TEST OR AT THE RATE OF 7.5 LB PER 1000 S.F. OF 10-10-10 FERTILIZER AND 7 LB PER 1000 S.F. OF 38-0-0 OF SLOW RELEASE NITROGEN FOR TOPDRESSING.

5. UNLESS HYDROSEEDED, LIME AND FERTILIZER SHALL BE WORKED INTO SOIL TO A DEPTH OF 4". WHEN HYDROSEEDING, THE SOIL SHALL BE TILLED AS DESCRIBED BELOW. LIME AND FERTILIZER MAY BE

APPLIED SIMULTANEOUSLY WITH THE SEED.

6. TILLAGE SHALL RESULT IN A UNIFORM CONTOUR, FREE FROM DEPRESSIONS AND WATER POCKETS.

1. SELECT AN APPROPRIATE SEED MIXTURE FROM THE LIST BELOW. ALTERNATE SEED MIXES SHALL BE APPROVED BY THE ENVIRONMENTAL PLANNER. APPLY PROPER INOCULANT WHEN USING LEGUME SEED.

2. SEED SHALL BE APPLIED UNIFORMLY BY BROADCASTING, DRILLING OR HYDRAULIC APPLICATION.

3. UNLESS HYDROSEEDED OR "CULTIPACKER" TYPE SEEDER IS USED, COVER THE SEEDS WITH NOT MORE THAN 1/4 INCH OF SOIL. THE SEEDBED SHALL BE FIRMED FOLLOWING SEEDING WITH A ROLLER OR LIGHT DRAG.

4. UNLESS HYDROSEEDED, APPLY MULCH AS REQUIRED IMMEDIATELY AFTER SEEDING.

5. SEEDING SHALL OCCUR BETWEEN APRIL 15 TO JUNE 15 AND / OR AUGUST 15 TO SEPTEMBER 15.

6. WHEN HYDROSEEDING, SEEDING RATES SHALL BE INCREASED BY 10 % (400% FOR LEGUMES).

FIBER MULCH SHALL BE USED WHEN HYDROSEEDING EXCEPT FOR CRITICAL AREAS WHICH SHALL BE MULCHED WITH STRAW MULCH.

RECOMMENDED SEED MIXES:

SHADY SITE: SUNNY / PARTIAL SHADE CREEPING RED FESCUE - 1.10 LB/1000 S.F. KENTUCKY BLUEGRASS - 0.50 LB/1,000 S.F. PERENNIAL RYEGRASS - 0.10 LB/1000 S.F. CREEPING RED FESCUE - 0.50 LB/1,000 S.F. PERENNIAL RYEGRASS - 0.1 LB/1,000 S.F.

MULCHING:

THE PURPOSE OF MULCHING IS TO PROTECT THE SOIL, CONTROL RUNOFF AND PROMOTE PLANT GROWTH.

ALL AREAS WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING.

MULCH SHALL BE USED ON ALL DISTURBED AREAS FOR PROTECTION FROM EROSION WHICH WILL BE EXPOSED FOR MORE THAN 21 DAYS AND CANNOT BE SEEDED WITHIN THE PRIME SEEDING DATES.

THE MATERIALS USED FOR MULCHING SHALL BE STRAW OR HAY FREE FROM COARSE MATTER AND WEEDS.

WHEN HYDROSEEDING, MULCH SHALL BE APPLIED SIMULTANEOUSLY WITH THE SEED. MULCH MATERIAL AND APPLICATION RATE SHALL BE AS RECOMMENDED BY THE MANUFACTURER.

MULCH SHALL BE APPLIED UNIFORMLY BY HAND OR BLOWER AT A RATE OF 90 LB/1000 S.F.

CRITICAL AREAS (SLOPES OVER 3 HORIZ. TO 1 VERT.) AND/OR AREAS IDENTIFIED ON THE PLAN SHALL BE MULCHED WITH HAY OR STRAW MULCH.

1. IF REQUIRED, MULCH SHALL BE ANCHORED IMMEDIATELY FOLLOWING APPLICATION.

2. STRAW AND HAY MULCH ON SLOPES IN EXCESS OF 5% SLOPE AND/OR AREAS AS DIRECTED BY THE ENVIRONMENTAL PLANNER SLOPE BE ANCHORED IN ACCORDANCE WITH CHAPTER 7 OF THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, REVISED 1988..

EROSION CONTROL NOTES:

ALL EROSION AND SEDIMENTATION CONTROL METHODS SHALL BE IN ACCORDANCE WITH THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL, JAN. 2002 UNLESS SPECIFICALLY NOTED OTHERWISE ON THESE PLANS.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED WITHIN THE PROPER SEQUENCE DURING CONSTRUCTION (I.E. SEDIMENT BARRIERS INSTALLED DOWNSLOPE OF AREAS TO BE DISTURBED PRIOR TO DISTURBANCE).

ALL DISTURBED AREAS SHALL BE COVERED WITH 6 INCHES OF TOPSOIL, SEEDED AND MULCHED IMMEDIATELY UPON COMPLETION OF FINAL GRADING. ALL CATCH BASIN GRATES SHALL BE PROTECTED FROM SEDIMENT ENTERING THE INLET BY USE OF FILTER FABRIC AROUND THE GRATE OF RINGED

WITH SEDIMENT BARRIERS.

THE CONTRACTOR SHALL KEEP A SUPPLY OF EROSION AND SEDIMENTATION CONTROL TOOLS AND SUPPLIES ON SITE (HAY BALES, STONE, SHOVELS,

ALL SOIL STOCKPILE AREAS SHALL BE ENCIRCLED WITH SEDIMENT BARRIERS. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED ON ANY

THE CONTRACTOR SHALL INSPECT THE EROSION AND SEDIMENTATION CONTROLS WEEKLY AND PRIOR TO A PREDICTED RAIN EVENT. THE EROSION

EROSION AND SEDIMENTATION CONTROL MEASURES ARE SUBJECT TO REVIEW AND APPROVAL BY THE TOWN OF GLASTONBURY ENVIRONMENTAL

ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED AS DIRECTED BY THE TOWN OF GLASTONBURY ENVIRONMENTAL PLANNER TO ADDRESS FIELD CONDITIONS.

SUGGESTED SEED MIXES:

PERMANENT SEEDING: 60% (BARON) KENTUCKY BLUEGRASS 20% (JAMESTOWN II) CHEWINGS FESCUE 20% (PALMER II) PERENNIAL RYEGRASS APPLY AT 170 LB/AC.

TEMPORARY SEEDING: ANNUAL RYEGRASS (LOLIUM MULTIFLORUM) APPLY AT 40 LB/ACRE.

EROSION CONTROL NARRATIVE:

STOCKPILE AREA WHICH IS TO REMAIN MORE THAN 21 DAYS.

AND SEDIMENTATION CONTROLS SHALL BE REPAIRED OR MAINTAINED AS REQUIRED.

PROJECT INFORMATION:

TOTAL PROJECT AREA: 109,229 S.F. TYPE OF DEVELOPMENT: ADDITION TO THE EXISTING BUILDING, AND AN UPDATED PARKING LOT. UNDERLYING ZONE: PLANNED EMPLOYMENT (PE)

THE WATER WILL DRAIN INTO THE WETLANDS JUST SOUTH OF THE LEVEL SPREADER.

AREA OF DISTURBANCE: 24,853 S.F. REGULATED ACTIVITY: NONE TOPOGRAPHY: DRAINS PRETTY UNIFORMLY FROM THE STREET IN THE NORTHERLY PART OF THE SITE TO THE WETLANDS IN

THE SOUTHERLY SECTION OF THE SITE. THERE ARE NO CONCERNING HIGH OR LOW SPOTS ON THE SITE. SOILS: UDORENTHENTS (UD), LIMERICK-LIM (LM) VEGETATION: THERE ARE A COUPLE OF TREES ON THE NORTHERLY PART OF THE SITE. THEE IS A CONSERVATION EASEMENT ON THE SOUTHERLY SECTION OF THE SITE WITH THE FOREST EXTENDING PAST THE WETLANDS BUT NOT

REACHING THE EXISTING PARKING LOT. THE SITE HAS SOME LANDSCAPING AROUND THE EXISTING BUILDING AND THE REST OF THE SITE IS GRASS/LAWN. DRAINAGE: THE DRAINAGE SYSTEM WILL MOSTLY CONSIST OF 2" CRUSHED STONE ALONG THE SOUTHERLY LINE OF THE PARKING LOT. THE STONE WILL HAVE A PRE-CAST CONCRETE LEVEL SPREADER. A NEW ROOF DRAIN WILL BE INSTALLED FROM THE EXISTING DOWN SPOUT AND LEAD INTO A CONCRETE GALLEY ON THE WESTERLY SIDE OF THE CRUSHED STONE.

EROSION & SEDIMENTATION CONCERNS:

WIND EROSION

TOPSOIL AND OTHER SIGNIFICANT MATERIAL EXCAVATED FROM THE SITE WILL NEED TO BE STOCKPILED AT A SUITABLE LOCATION ON SITE. PROPER WIND EROSION CONTROLS (SEEDING OR PLASTIC COVERS, ETC.) SHALL BE PROVIDED AT THE ON SITE STOCKPILE AREA AS REQUIRED. ADDITIONALLY, DURING THE MASS EXCAVATION PROCESS, EQUIPMENT AND SUPPLIES (SUCH AS A WATER TRUCK AND CALCIUM CHLORIDE) SHALL BE KEPT ON SITE TO MANAGE DUST AND WIND EROSION.

2. WATER EROSION

EROSION FROM WATER IS ALWAYS A CONCERN ON ANY CONSTRUCTION PROJECT. THE CONTRACTOR SHALL BE WATCHFUL OF PREDICTED RAIN EVENTS AND BE PREPARED TO ADDRESS ISSUES AS THEY ARISE. THE PLAN INCLUDES CONTROL MEASURES WHICH SHOULD ADDRESS ALL EVENTS. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE PROPERLY MAINTAINED.

SOIL STOCKPILE

ALL EXCAVATED SOILS SHALL BE STOCKPILED ON SITE AT A SUITABLE LOCATION.

KEY ELEMENTS TO SUCCESS:

1. PROPER INSTALLATION.

EROSION AND SEDIMENTATION CONTROLS CANNOT BE EFFECTIVE IF THEY ARE NOT INSTALLED CORRECTLY. THE CONTRACTOR SHOULD BE FAMILIAR WITH THE PROPOSED INSTALLATION PROCEDURES FOR EROSION AND SEDIMENTATION

2. BE PREPARED

THE EROSION AND SEDIMENTATION CONTROL PLAN REQUIRES THE CONTRACTOR TO KEEP ON SITE A SUPPLY OF TOOLS AND MATERIALS FOR EROSION AND SEDIMENTATION CONTROL EMERGENCIES. ADDITIONALLY, THE PLAN REQUIRES THE CONTRACTOR TO MONITOR THE WEATHER AND INSPECT THE EROSION & SEDIMENTATION CONTROLS PRIOR TO A PREDICATED RAIN EVENT. FAILURE TO BE PREPARED WILL RESULT IN AN EROSION & SEDIMENTATION CONTROL DISASTER.

3. EFFICIENT AND TIMELY CONSTRUCTION

THIS IS ONE OF THE MOST EFFECTIVE WAYS TO REDUCE THE DAMAGE FROM EROSION AND SEDIMENTATION. EFFICIENT CONSTRUCTION REDUCES THE TIME PERIOD IN WHICH THE SITE IS SUBJECT TO EROSIVE FORCES AND THE POTENTIAL FOR DAMAGE. PROPER SEQUENCING OF CONSTRUCTION IS ALSO VERY IMPORTANT. PROPER SEQUENCE OF CONSTRUCTION REDUCES THE NEED TO DISTURB AREAS MULTIPLE TIMES.

THE CONTRACTOR SHOULD REVIEW THE PLAN AND DETERMINE THE EQUIPMENT AND MANPOWER NEEDS TO COMPLETE THE CONSTRUCTION IN THE MOST EFFICIENT MANOR. A SAMPLE CONSTRUCTION SCHEDULE AND SEQUENCE IS PROVIDED BELOW.

PROPOSED CONSTRUCTION SEQUENCE:

1. INSTALL SEDIMENT BARRIERS WHERE POSSIBLE.

- 2. INSTALL CONSTRUCTION ENTRANCE.
- 3. REMOVE VEGETATION, STRIP AND STOCKPILE TOPSOIL REMOVE EXISTING BIT. CONC.
- PAVEMENT AND OTHER SITE ITEMS AS INDICATED ON THE PLAN.
- 4. INSTALL SITE LIGHTING AND OTHER UTILITIES AS REQUIRED
- 5. BEGIN BUILDING ADDITION CONSTRUCTION AND RENOVATIONS.
- 6. INSTALL PAVEMENT BASE
- 7. PAVE NEW BIT. CONC PARKING AS REQUIRED.
- 8. SPREAD TOPSOIL, SEED, MULCH AND INSTALL LANDSCAPING.

9. FINAL SITE CLEAN-UP.

SUGGESTED CONSTRUCTION SEQUENCE & SCHEDULE

OPERATION / WEEKS	1	2	3	4	5	6	7	8	9	10	11	12
E & S CONTROLS												
STRIP TOPSOIL/DEMO												
BUILDING ADDITION/RENOVATION												
LIGHTING & UTILITIES						************	************	***********	***********	************	******	
PAVEMENT BASE												
PAVING												
TOPSOIL, SEED, MULCH												
LANDSCAPING												
FINAL CLEAN-UP												

CONSTRUCTION NOTES:

UNDERGROUND UTILITY STRUCTURE FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING AND INFORMATION PROVIDED BY OTHERS. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES AND STRUCTURES MAY EXIST IN THE AREA, THE EXISTENCE OF WHICH IS UNKNOWN TO DUTTON ASSOCIATES, LLC. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION.

PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES AT CROSSING AND CONNECTION POINTS. ANY CONFLICT OR DISCREPANCY WITH THE PLANS SHALL BE REPORTED TO THE ENGINEER SO THAT ADJUSTMENTS TO THE DESIGN CAN BE MADE.

PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL REQUEST AN UNDERGROUND UTILITY MARK OUT BY CALLING THE CONNECTICUT UNDERGROUND UTILITY PROTECTION PLAN (PHONE 1-800-922-4455).

THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS AND ARRANGE FOR ALL NECESSARY INSPECTIONS FOR THE WORK TO BE

THE CONTRACTOR IS RESPONSIBLE FOR PAYMENT OF ALL PERMIT AND/OR INSPECTION FEES.

THE CONDITIONS OF APPROVAL ARE A PART OF THIS PLAN, THE CONTRACTOR SHALL CONFORM TO ALL APPLICABLE CONDITIONS.

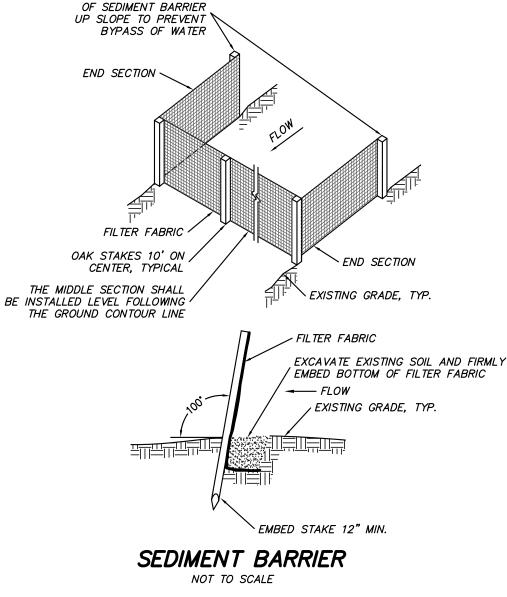
CONSTRUCTION WASTE AND/OR DEBRIS SHALL BE DISPOSED OF ONLY AT APPROVED LOCATIONS AND IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL LAWS AND/OR REGULATIONS.

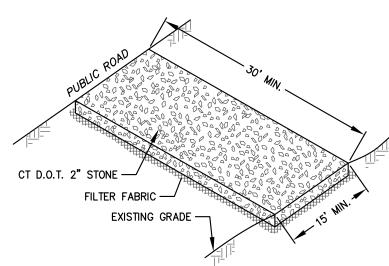
CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH; THE NOTES AND DETAILS ON THESE PLANS, IF NOT ON SAID PLAN THE TOWN OF GLASTONBURY STANDARD DETAILS AND SPECIFICATIONS AND IF NOT INCLUDED IN ABOVE, THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION, FORM 814A AS APPLICABLE.

THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING STRUCTURES, SERVICES AND/OR PROPERTY CAUSED BY HIM DURING CONSTRUCTION. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER OF THE DAMAGED PROPERTY AT THE CONTRACTORS EXPENSE.

TURN END SECTIONS

PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH OUTSIDE UTILITY COMPANIES PROVIDING SERVICE TO THE SITE. CONFLICTS WITH SUCH UTILITIES SHALL BE REPORTED TO THE ENGINEER SO THAT ADJUSTMENTS TO THE DESIGN CAN BE MADE.





CONSTRUCTION ENTRANCE

TOWN PLAN & ZONING COMMISSION APPROVAL

PROPOSED BUILDING ADDITION / FIFTY T	WO NATIONAL DRIVE, LLC PE / GW-1
PROJECT / APPLICANT	ZONE
52 NATIONAL DRIVE	
PROJECT ADDRESS	
12.0	
SPECIAL PERMIT SECTION	T.P.&Z. CHAIRMAN
SPECIAL PERMIT APPROVAL DATE	COMMUNITY DEVELOPMENT DIRECTOR
FILE NO.	

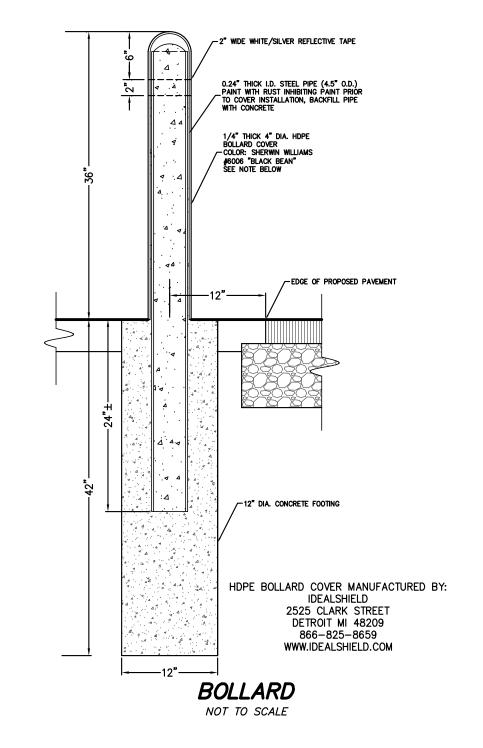
UNDERGROUND UTILITY NOTE UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROLE TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO THE UNDERSIGNED. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES

NOTE: ALL SHEETS OF THIS PLAN SET ARE LOCATED IN THE OFFICE OF COMMUNITY DEVELOPMENT.

INSPECTION NOTE: THE CONTRACTOR SHALL NOTIFY THE TOWN OF GLASTONBURY ENGINEERING DIVISION 24 HOURS PRIOR TO BEGINNING ANY STORM DRAINAGE, SANITARY SEWER INSTALLATION, ROADWAY PREPARATION, PAVING, SIDEWALK, CURBING, OR ANY EXCAVATION IN THE TOWN RIGHT-OF-WAY TO SCHEDULE INSPECTIONS. THE DIVISION CAN BE REACHED BETWEEN 8:00 AM - 4:30 PM MONDAY THROUGH FRIDAY AT (860)-652-7735

PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455 OR 811.

TEST #: 1	DATE: 11/17/2	2021	NUMBER: T	P-1	DATE:	03/09/2020
DEPTH OF H	OLE: 36"		WITNESS:	JWD/DH	LEDGE:	NONE
DEPTH OF W	ATER, PRESOAK: 2	29.5"±	DEPTH:	62"	WATER:	© 56"
DEPTH OF W	ATER, TEST: 27"±	,	SOIL PROFIL	E:	MOTTLII	NG: NONE
TIME	READING	CHANGE	0"-36"	SILTY LO	AM	
10: 30	5-1/2"	<i>8"</i>	36"-56"	GREY MEI	DIUM SA	ND
10: 40	<u>13-1/2"</u>	<i></i>	56"-62"	GREY CO.	ARSE SA	ND/GRAVEL
10:50	<u>16-1/2"</u>	2"				,
11:00	18-1/2"_	2"				
11:10	20-1/2"					
11: 20	22-1/4"	1"				
11: 30	<u>23-1/4"</u>	1/2"				
11: 40	<u>23-3/4"</u>	1/2"				
11:50	24-1/4"_	3/4"	GF	Rouni	DWA	TER
12:00	<i>25"</i>	1/2"	MON	IITORI	NG	DATA
12:10	<u>25-1/2"</u>	1/2"				TION = 66.0
12: 20	<i>26"</i>	1/2"	11 #1 10		DING	
12: 30	<u>26-1/2"</u>	1/2"	DATE		T)	GROUNDWATER ELEVATION
12: 40		1/2"	03/16/202	0 6.	83	59.2
12: 50	<u>27-1/2"</u>	1/2"	03/23/202	0 6.	55	59.4
1:00	28"	1/2"	03/30/202	0 5.	71	60.3
1:10	<u>28-1/2"</u>	1/2"	04/06/202	0 6.	37	59.6
1: 20	<u>29"</u>		04/13/202		09	59.9
1:30	DRY	icu.				60.3
DESIGN	RATE=20 MIN/IN	UM .	04/20/202			
			04/27/202		65	60.4
			05/04/202	.0 5.	85	60.2
			05/11/202	_ _	35	59.65



0

ON

JOHN R. MARTUCCI, P.E. #19494

This document is an instrument of professional service, and shall not be used, whole or in part, for any project other tha for which it was created without the expres written consent of DUTTON ASSOCIATES, LLC

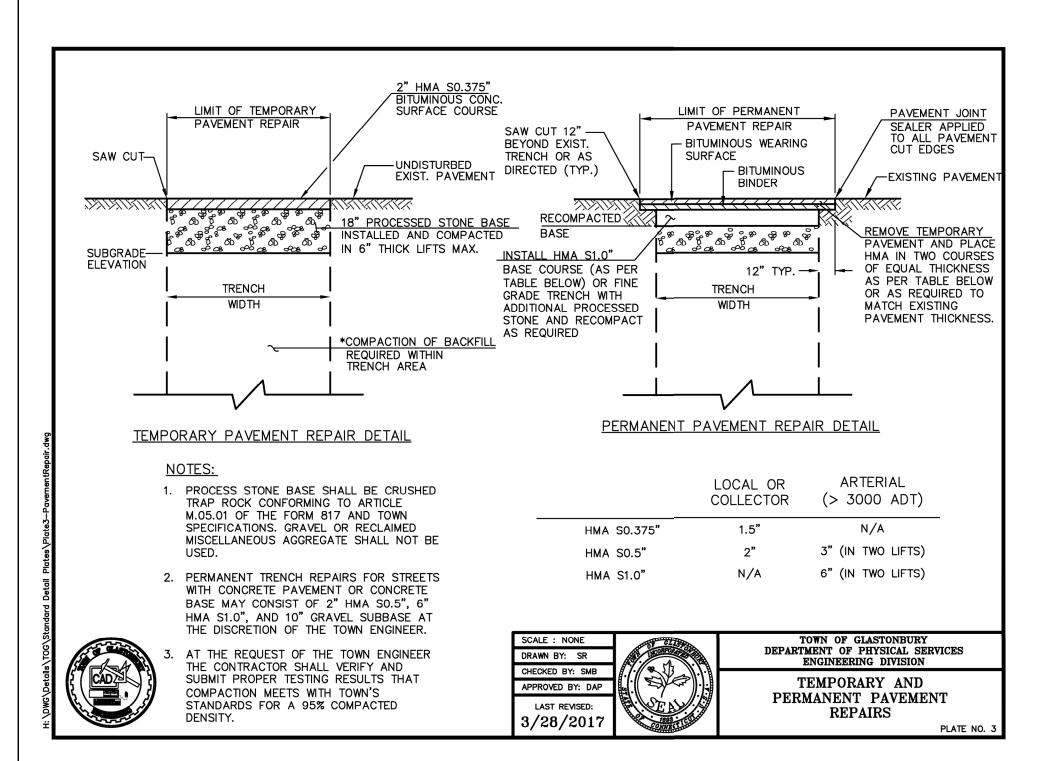
written consent of DUTION ASSOCIATES, LLC.
Any unauthorized use, reuse, modification of conversion of this document shall be at the user's sole risk without liability or legal exposure to DUTTON ASSOCIATES, LLC.

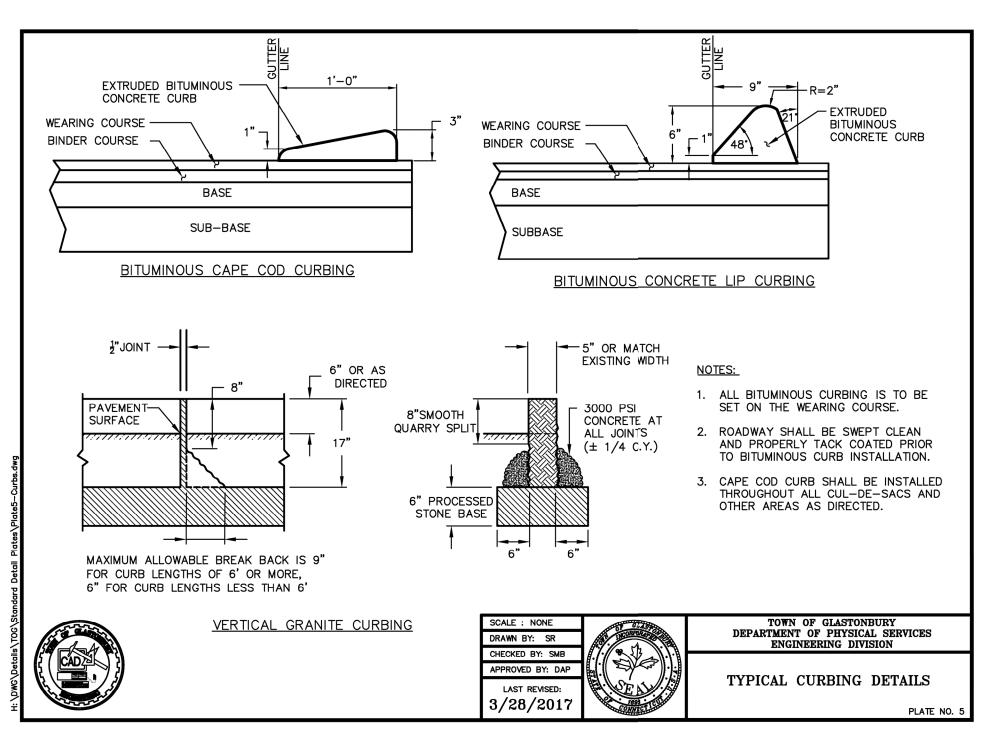
© 2020 — DUTTON ASSOCIATES, LLC.

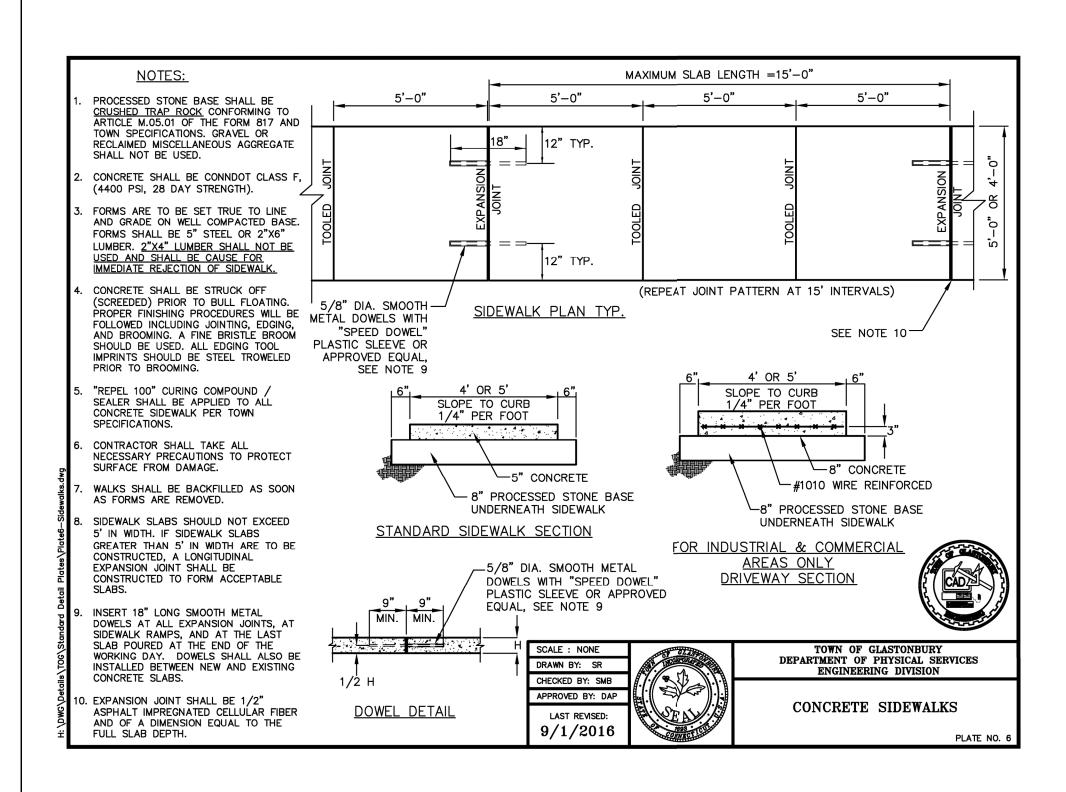
REVISIONS:

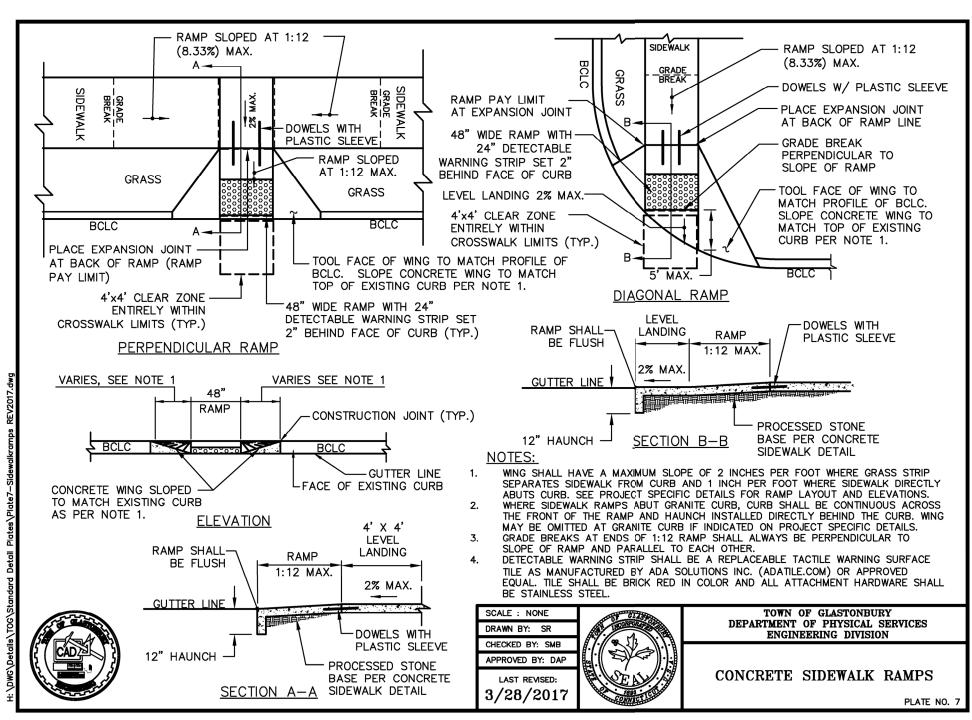
DATE: 01/24/2022 SCALE: AS SHOWN SHEET 7 of 9

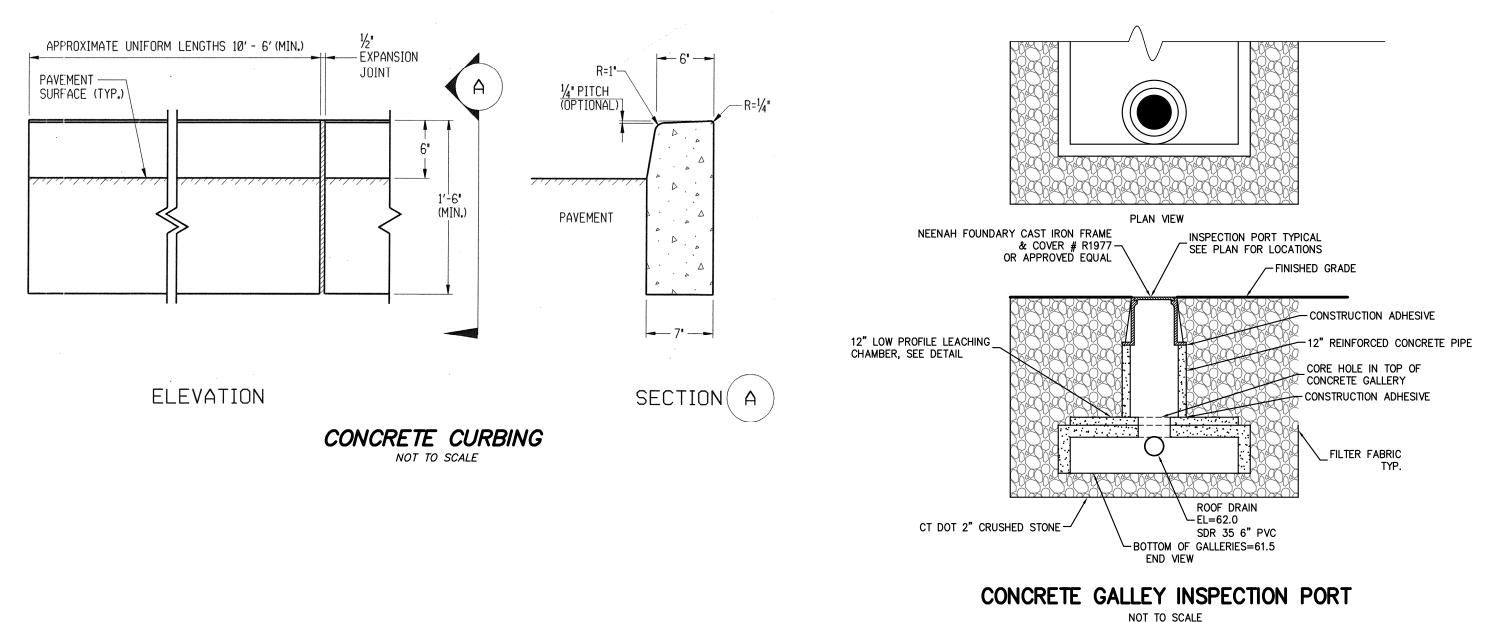
A-21-081-D1 FILE: 21081.DWG

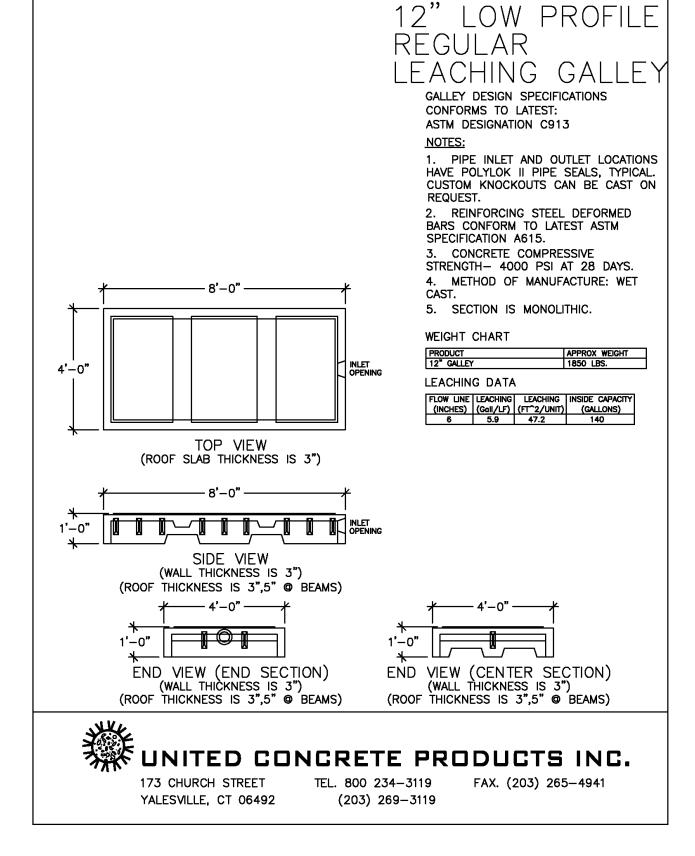


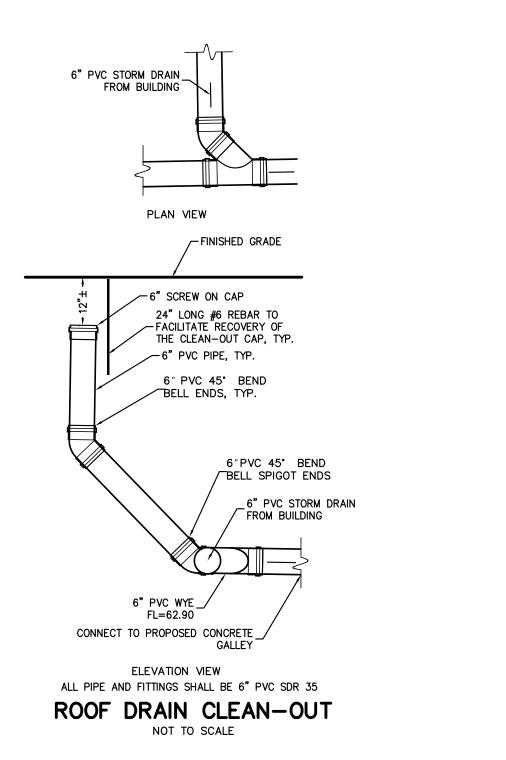












T.P.&Z. CHAIRMAN

NOTE: ALL SHEETS OF THIS PLAN SET ARE LOCATED IN THE OFFICE OF COMMUNITY DEVELOPMENT.

UNDERGROUND UTILITY NOTE:

UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN

COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR

GOVERNMENTAL AGENCIES, FROM PAROLE TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST

BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO THE UNDERSIGNED. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES

PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455 OR 811.

INSPECTION NOTE:

THE CONTRACTOR SHALL NOTIFY THE TOWN OF GLASTONBURY ENGINEERING DIVISION 24 HOURS PRIOR TO

BEGINNING ANY STORM DRAINAGE. SANITARY SEWER INSTALLATION, ROADWAY PREPARATION, PAVING,

SIDEWALK, CURBING, OR ANY EXCAVATION IN THE TOWN RIGHT-OF-WAY TO SCHEDULE INSPECTIONS. THE

DIVISION CAN BE REACHED BETWEEN 8:00 AM - 4:30 PM MONDAY THROUGH FRIDAY AT (860)-652-7735

COMMUNITY DEVELOPMENT DIRECTOR

PE / GW-1

ZONE

PROPOSED BUILDING ADDITION / FIFTY TWO NATIONAL DRIVE, LLC

PROJECT / APPLICANT

52 NATIONAL DRIVE

SPECIAL PERMIT SECTION

SPECIAL PERMIT APPROVAL DATE

PROJECT ADDRESS

ASSOCIATE NO

JOHN R. MARTUCCI, P.E. #19494

This document is an instrument of professional service, and shall not be used, i whole or in part, for any project other thar for which it was created without the express written consent of DUTTON ASSOCIATES, LLC

Any unauthorized use, reuse, modification of conversion of this document shall be at the user's sole risk without liability or legal exposure to DUTTON ASSOCIATES, LLC.

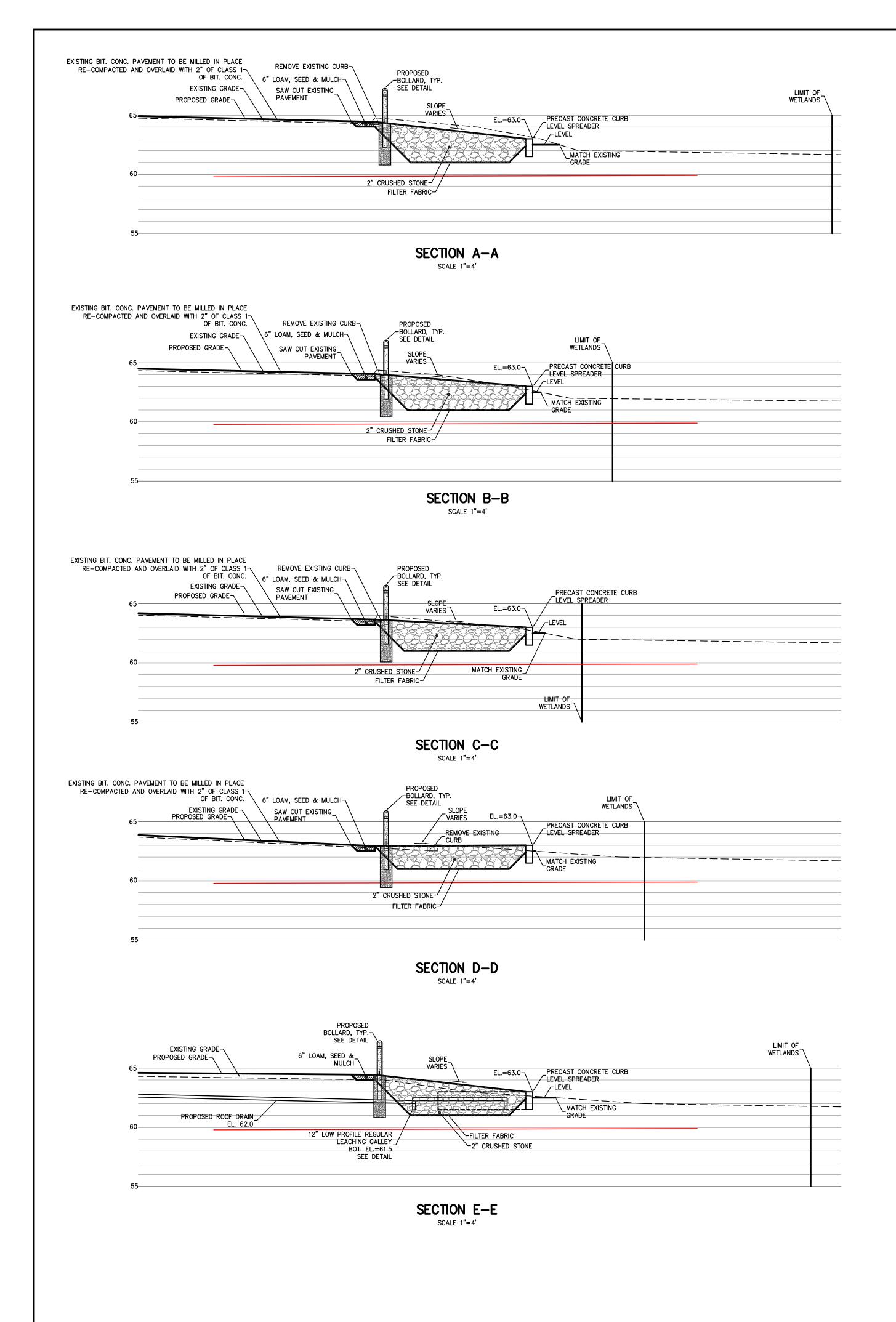
© 2020 — DUTTON ASSOCIATES, LLC.

GENERAL NOTES AND DETIALS
PROPOSED BUILDING ADDITION
52 NATIONAL DRIVE
PREPARED FOR
NEW ENGLAND TRAFFIC SOLUTIONS

REVISIONS:

DATE: 01/24/2022 SCALE: AS SHOWN SHEET 8 of 9 A-21-081-D2

FILE: 21081.DWG



PROPOSED BUILDING ADDITION / FIFTY TWO NATIONAL DRIVE, LLC PE / GW-1 PROJECT / APPLICANT ZONE 52 NATIONAL DRIVE PROJECT ADDRESS T.P.&Z. CHAIRMAN SPECIAL PERMIT SECTION SPECIAL PERMIT APPROVAL DATE COMMUNITY DEVELOPMENT DIRECTOR

NOTE: ALL SHEETS OF THIS PLAN SET ARE LOCATED IN THE OFFICE OF COMMUNITY DEVELOPMENT.

UNDERGROUND UTILITY NOTE: UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROLE TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO THE UNDERSIGNED. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455 OR 811.

INSPECTION NOTE:
THE CONTRACTOR SHALL NOTIFY THE TOWN OF GLASTONBURY ENGINEERING DIVISION 24 HOURS PRIOR TO BEGINNING ANY STORM DRAINAGE, SANITARY SEWER INSTALLATION, ROADWAY PREPARATION, PAVING, SIDEWALK, CURBING, OR ANY EXCAVATION IN THE TOWN RIGHT-OF-WAY TO SCHEDULE INSPECTIONS. DIVISION CAN BE REACHED BETWEEN 8:00 AM - 4:30 PM MONDAY THROUGH FRIDAY AT (860)-652-7735

> ASSOCIATES, **DUTTON**

JOHN R. MARTUCCI, P.E. #19494

This document is an instrument of professional service, and shall not be used, in whole or in part, for any project other than for which it was created without the express, written consent of DUTTON ASSOCIATES, LLC.
Any unauthorized use, reuse, modification or conversion of this document shall be at the user's sole risk without liability or legal exposure to DUTTON ASSOCIATES, LLC.

© 2020 — DUTTON ASSOCIATES, LLC.

REVISIONS:

DATE: 01/24/2022 SCALE: AS SHOWN SHEET 9 of 9

A-21-081-D3 FILE: 21081.DWG

DRAINAGE REPORT

52 National Drive Building Addition

PREPARED FOR

New England Traffic Solutions

PREPARED BY

DUTTON ASSOCIATES, LLC

67 EASTERN BOULEVARD

GLASTONBURY, CT 06033

DATED: JANUARY 24th, 2022

INDEX

Water Quality Volume worksheet Drainage Area Volume worksheet	
Drainage Area Volume worksheet	
Water Quality Volume map	
Drainage area map	

SUMMARY

SITE DESCRIPTION:

The site, 52 National Drive is a 2.5086-acre parcel located on the southerly side of National Drive. The parcel was created in 1667 as an "industrial subdivision" by the Town of Glastonbury. It was first developed in 1980 by Tyrol & Wethey in 1980 as an office development. Much of the site is wetlands (1.65 acres 65.8%) and Salmon Brook crosses the property about 2/3rds back from National Drive. The Salmon Brook sanitary sewer interceptor line also crosses the property just northerly of the brook. The rear portion of the property is encumbered by a private conservation easement (1.991 acres). Additionally, the site contains a drainage easement in favor of the easterly abutter along its easterly property line. Wetland soils have been delineated by Cynthis Rabinowitz, Soils Scientist and field surveyed by Dutton Associates, LLC. The soils are Limerick, upland soils are undeaths as the site has been disturbed from the wetland limits north to National Drive.

PROPOSAL

The site is currently under contract for purchase by New England Traffic Solutions who assembles and sells traffic control boxes and signals. No manufacturing occurs. The buyer needs additional warehouse space and is proposing a 3,000 s.f. warehouse addition to the existing building on its south side. The existing parking area contains enough parking to service the completed facility and no additional pavement is proposed. When the site was first constructed, no provisions were made with regard to stormwater quality. In addition to the proposed building addition, the plan contains new stormwater quality enhancements in accordance with the water quality manual. No detention systems are proposed due to its proximately to Salmon Brook. The plan includes a modest 1,153 s.f. increase in impervious area, mainly from the building addition.

The proposed stormwater quality enhancements consist of a stone infiltration area with a level spreader for flows exceeding the water quality treatment volume. The system is located along the edge of the existing parking area. The existing curb along the edge of the parking area will be removed to allow sheet flow into the stone infiltration area. Additionally, the roof drains from the existing building will be piped into a concrete leaching chamber located within the infiltration area.

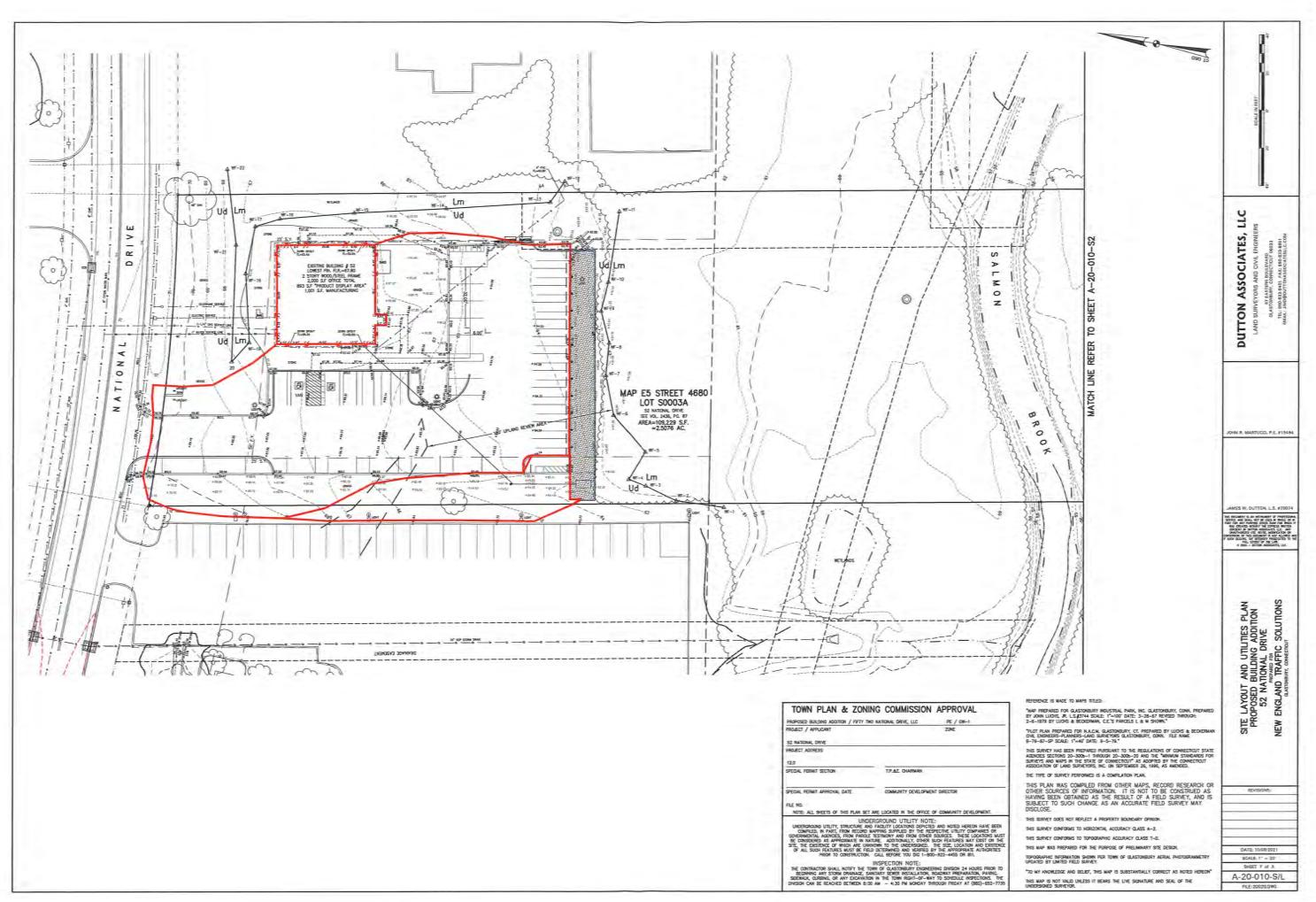
Because the site is being "redeveloped "and the existing site contains more than 40% impervious area outside of the inland wetland limits, the required water quality volume for treatment is reduces to 50% (per town WQV memo). The minimum WQV required is 1560 X .50 = 780 CU-FT, the system as currently proposed provides 991 CU FT of WQV storage, see the chart below.

Total WQV Area	Impervious Coverage	100% WQV	WQV provided
39,354 sq. ft.	18,637 sq. ft. (47.35%)	1,560 cu. ft.	991 cu. Ft.

PREPARED BY	DATE PREPARED	DUTTON ASSOCIATES, 1 67 EASTERN BOULEVARD	LLC	JOB NUMBER	PAGE NUMBER	
CHECKED BY	GLASTONBURY, CONNECTICUT 06033 TEL: (860)-633-9401 FAX: (860)-633-8851 EMAIL: JIMD@DUTTONASSOCIATESLLC.COM			CLIENT NAME	TOTAL PAGES	
	NON Calc:					
	M BN = (1)/18	(A) <u>(</u> 2)				
	A= 39,350	4 Ft2 = 0,9034ac				
	I = 18,63	1 Etg = 41.32				
JZ	=0,05+0,0	09(I)=0,05t0,009(47.35	5)=0,	476		
W	w = <u>w</u>	,476)(0,903ac) =0,036 ac-	ft \$156	0 523		
		12				
			The state of the s			
-						
			111 (111 (111 (111 (111 (111 (111 (111			
111111111111111111111111111111111111111						

PREPARED BY	DATE PREPARED	DUTTON ASSOCIATES, LLC 67 EASTERN BOULEVARD	NUMBER	PAGE NUMBER
HECKED BY	DATE CHECKED GLASTONBURY, CONNECTICUT 06033 TEL: (860)-633-9401 FAX: (860)-633-8851 EMAIL: JIMD@DUTTONASSOCIATESLLC.COM		TOTAL PAGES	
<u> </u>	Drainage	tra Volume		
				HIRITIC CONTROL DESIGNATION CONTROL CO
secti A-A	on a	Aga Voluma 0.47ft ²		mi lumini in praesi e e
36 1	moth	746.64 Ft3		
B-B	21	01 522		
361/4	ngth	766.08 = +3		
C-C	2),	5482		
36.14	moth 32	796.14 543	Here II	
13-1	2 longth 20	68 ft2 > 507.19 5+3	-	
E-E	20.	4762		
	~~	E = 2810,05 ft3		
Communication of the Communica				
Stor	e voids = 35	9/5		
Gal	ey =12==	1'x4' * 8' x 1 units = 32 Ft3		
			1	
20	10.05 - 32	= 2778,05 ft3 x 35% voids = (972.3 ft		
			(0000	
Gal	emelor ul	= 140 gal/onit x 15t3 x 1 unit = (18.7 ft3)	
Joi V		gai		
1				
) to	tal volume	= 9911 Ft3		
		=1560 ft3 (need 780 ft3 of store		
	oral NW	=1560ft3 need 780 ft3 of store	19P /	
		And the second s	The Second Control of Second	
			1100	





Town of Glastonbury Engineering Division Development Plan Review Checklist

PROJECT INFORM	ΠA	TION
----------------	----	------

Approval Type:

Special Permit Other:

Design Engineer Firm:

Project Name:

Project Address:

DuttonAssociatesLLC Proposed building addition B2 National Drive, Glastenbry, Ct

Submittal Date:

Review Date:

Reviewed By:

GENERAL PLAN CHECKLIST

Maps prepared in accordance with the "Minimum Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996, as amended.

Coordinate System Identified (NAD 83, NAVD 88 required)

Label NAD83 coordinates and identify control points and bench marks

Location Plan (1" = 1000', including outline of property or site area)

North Arrow, Plan Scale, Date

Sealed by a CT Licensed Land Surveyor or Professional Engineer as Applicable

Note indicating Contractor requirement to "Call-Before-You-Dig" prior to any construction

Complete legend identifying existing and proposed features

Town Approval block included on all sheets to be filed

Separate sheet included in plan set for Town approval motions and Department review memos

Parcel boundary closure check performed by Engineering

Addresses assigned to any newly created or combined parcels

Street Names identified for private roads or private drives to be named for addressing purposes

Standard Inspection Note on all applicable sheets stating:

NOTE:

THE CONTRACTOR SHALL NOTIFY THE TOWN OF GLASTONBURY ENGINEERING DIVISION 24 HOURS PRIOR TO BEGINNING ANY STORM DRAINAGE; SANITARY SEWER INSTALLATION, ROADWAY PREPARATION, PAVING, SIDEWALK, CURBING, OR ANY EXCAVATION IN THE TOWN RIGHT-OF-WAY TO SCHEDULE INSPECTIONS. THE DIVISION CAN BE REACHED BETWEEN 8:00 AM-4:30 PM MONDAY THRU FRIDAY AT (860) 652-7735.

SITE DEVELOPMENT PLAN CHECKLIST Plans certified by CT Licensed Land Surveyor and Professional Engineer Existing structures with indication of protection or removal. Existing curb cuts to be closed and restored. Wetlands and watercourses with 100' upland review area with Soil Scientist Certification FEMA Flood boundary derived from Flood Profile Data from the most current FIS (as applicable) Proposed building lines, building footprint, finished floor elevations Existing ground contours at 2 foot intervals (or 1 foot intervals in Flood Zone areas) with spot elevations at highpoints and depressions, based on NAVD 1988. Include a minimum of two (2) benchmarks per sheet. Note source of topographic information and limits of field survey. Proposed finished ground contours at 2 foot intervals (or 1 foot intervals in Flood Zone areas) with spot elevations at highpoints and depressions, based on NAVD 1988. Depict grading for the entire site. Proposed limits of clearing, with specimen trees noted for protection Existing and proposed storm drainage facilities, including structure types, pipe size, slopes, materials, invert elevations, and connections to existing drainage systems, wetlands or watercourses, water quality treatment measures per 2004 DEEP Stormwater Quality Manual. SEE SEPARATE SHEETS FOR ADDITIONAL DRAINAGE REQUIREMENTS Proposed foundation drains showing invert levels of the drain at the building connection and the outlet (piped discharges into the public right-of-way are prohibited by ordinance) Existing and proposed water and sanitary sewer facilities, including all bends, valves, manholes, hydrants, and appurtenances with pipe sizes, slopes, materials and invert elevations within structures SEE SEPARATE SHEET FOR ADDITIONAL SEWER REQUIREMENTS Proposed location of all other utilities (if known) including, but not limited to, natural gas, telephone and electrical (include equipment installation) Retaining walls with top and bottom of walls elevations noted. Confirm no grading or impacts on to abutting private property. Parking areas, including parking requirements table, appropriate aisle and space dimensions, # ADA spaces Sight line adequate (200' minimum) at proposed driveway locations. Traffic control devices, pavement markings and signs. Sidewalks and sidewalk ramps Sidewalks continuous through driveways, 8" reinforced sidewalk at new commercial drives. Check for current Town details. Plantings minimum 10 feet away from sidewalks to avoid root intrusion, minimize plant obstruction complaints Guide rail and protective fencing as required for grading Erosion and Sediment controls per 2002 E&S Control Guidelines (including narrative, area of disturbance in acres, phasing as required, construction entrance, silt fence, sediment basins, etc.). Obtain CT DEEP Construction General Permit for projects that disturb 5 acres or more.

STORMWATER MANAGEMENT REPORT CHECKLIST

Report signed by CT Licensed Professional Engineer

Narrative summarizing the proposed project, design methods used, and table of pre- and post-development flows at appropriate downstream locations showing zero net increase in runoff from the site for the 2, 10, 25, 50 and 100-year storm events. Summarize WQV required for the project area and the WQV retained by the proposed improvements.

Hydrographs and calculations identifying peak runoff, velocities and timing of peak flows from the site at critical locations in the watershed as outlined in the CTDOT Drainage Manual, latest revision. Supporting information for the drainage analysis including, but not limited to, runoff coefficients, time of concentration flow paths, drywell design, etc.

Confirm use of SCS hydrology methods for proposed detention, including latest NOAA Rainfall rates and Type III rainfall distribution.

Inventory and evaluation of hydraulic structures both on-site and in the downstream zone of influence (as defined in the Public Improvement Standards) to identify flow capacity, pipe velocities, hydraulic grade line elevations and physical condition

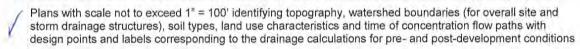
Identification of drainage structures and watercourses that are inadequate for existing or future conditions

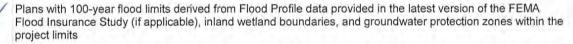
Hydraulic grade line computations for enclosed drainage systems indicating a minimum headwater clearance of one (1) below top of frame for existing and proposed structures.

Detention basin design information that includes stage-storage-discharge curves or tables, outlet control data, flood routing calculations, subsurface conditions and maximum water surface elevations

Outlet protection, riprap sizing, channel sizing, and channel lining calculations

Gutter flow analysis and ponding calculations for low points (when requested by the Town Engineer)





Computations of the <u>required</u> Water Quality Volume (WQV) to be retained on site for the project area and for the area draining to each proposed treatment system, include pre and post development impervious area and directly connected impervious area (DCIA). For redevelopment of sites that are currently developed with DCIA of 40% or more, one-half of the WQV from the site must be retained, for all other sites the full WQV must be retained.)

Computations of the WQV <u>actually retained</u> by the proposed treatment system(s). NOTE: Only storage below the low-flow orifice of an outlet control structure can be considered retained for computation of the WQV. Slow release of the WQV over a 24 to 48 hour period via infiltration or a small diameter orifice will also be considered as retained for the purposes of these computations.

WQV surface elevations clearly labeled and depicted on appropriate cross sections and details within the plan set. WQV retained by each proposed treatment system labeled on the plans.

Town of Glastonbury MS4 DCIA tracking table accurately filled out and affixed to the site plan and/or drainage plan sheets within the plan set.

Town of Glastonbury Engineering Division Development Plan Review Checklist

STORM DRAINAGE PLAN CHECKLIST

Plans certified by CT Licensed Professional Engineer

Existing and proposed storm drainage facilities, including structure types, pipe size, slopes, materials, invert elevations, and connections to existing drainage systems, wetlands or watercourses

Outlet protection properly detailed, labeled with length, width, depth, type of riprap, geotextile, etc.

Water Quality Volume treatment measures provided in compliance with Town Standards and the Town MS4

Maintenance plan and schedule for all public and private stormwater management facilities <u>including party</u> responsible for maintenance shown on the site plan or utility plan as applicable

Deep sump catch basins for water quality where applicable. 2 foot sump for detention basin outlet structures.

Channels and swales properly sized, lining specified and computed

Appropriate details for non-standard structures

No concentrated stormwater discharges to neighboring properties or public roadway

Infiltration or subsurface detention facilities properly sized per drainage computations. Include overflow to town system where possible, inspection ports for maintenance, above groundwater elevation per test pits.

Test pit data shown on plan for infiltration and subsurface detention systems

STORM DRAINAGE STORAGE / TREATMENT PLAN CHECKLIST

Basin - Forebay sized for WQV

Basin - Bottom sloped at 1% toward outlet, Side slopes 4:1 or flatter for ease of maintenance

Basin - Underdrain to ensure complete emptying of basin in 48 hours

Basin - Emergency spillway sized properly with stable discharge point

Underground Storage - detailed layout of proposed system (plan and section views)

Underground Storage - relevant manufacturer details with storage computations

Cross sections through basin or chamber depicting WQV and storm event water surface elevations

2 foot sump for outlet structures, outlet structure details / elevations consistent with drainage computations

Town of Glastonbury Engineering Division Development Plan Review Checklist

Appropriate details for non-standard structures.

Plans certified by CT Licensed Land Surveyor and Professional Engineer Existing and proposed sanitary sewer facilities, including all bends, manholes, appurtenances with pipe sizes, slopes, materials and invert elevations within structures Existing sewer laterals identified properly per record drawings Minimum cover 4 feet for public sewer Sewer laterals properly designed and specified per Town Standards (6-inch PVC minimum, cleanouts as required) Sampling manhole provided for all commercial and industrial buildings at street line (unless lateral connects directly to an existing manhole) Grease Trap or AGRU for Class III or IV Food Service Establishments (FOG Requirements) 75 foot separation of pump chamber, septic tanks, or grease trap from wells Appropriate sewer easement for Town facilities (25 foot wide). Must provide access to all structures with load bearing surface, grade of 15% or less. Consider need for construction easements. Bolted covers noted for off-road public sewer manholes