PROPOSED RESIDENTIAL DEVELOPEMENT

105 BRIDGE ROAD
HADDAM, CT

DECEMBER 2, 2021

ISSUED FOR SITE PLAN APPROVAL

OWNER

Prepared For:

BRIDGE ROAD 105, LLC
75 BYSIEWICZ DRIVE
MIDDLETOWN, CT 06457

CONSULTANTS

Prepared By:

benesch

120 Hebron Avenue
Glastonbury, CT 06033
P 860-633-8341
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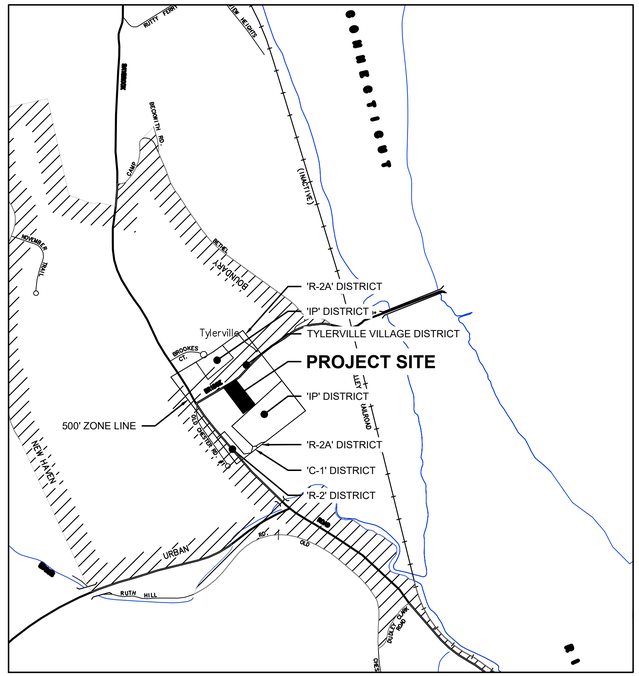
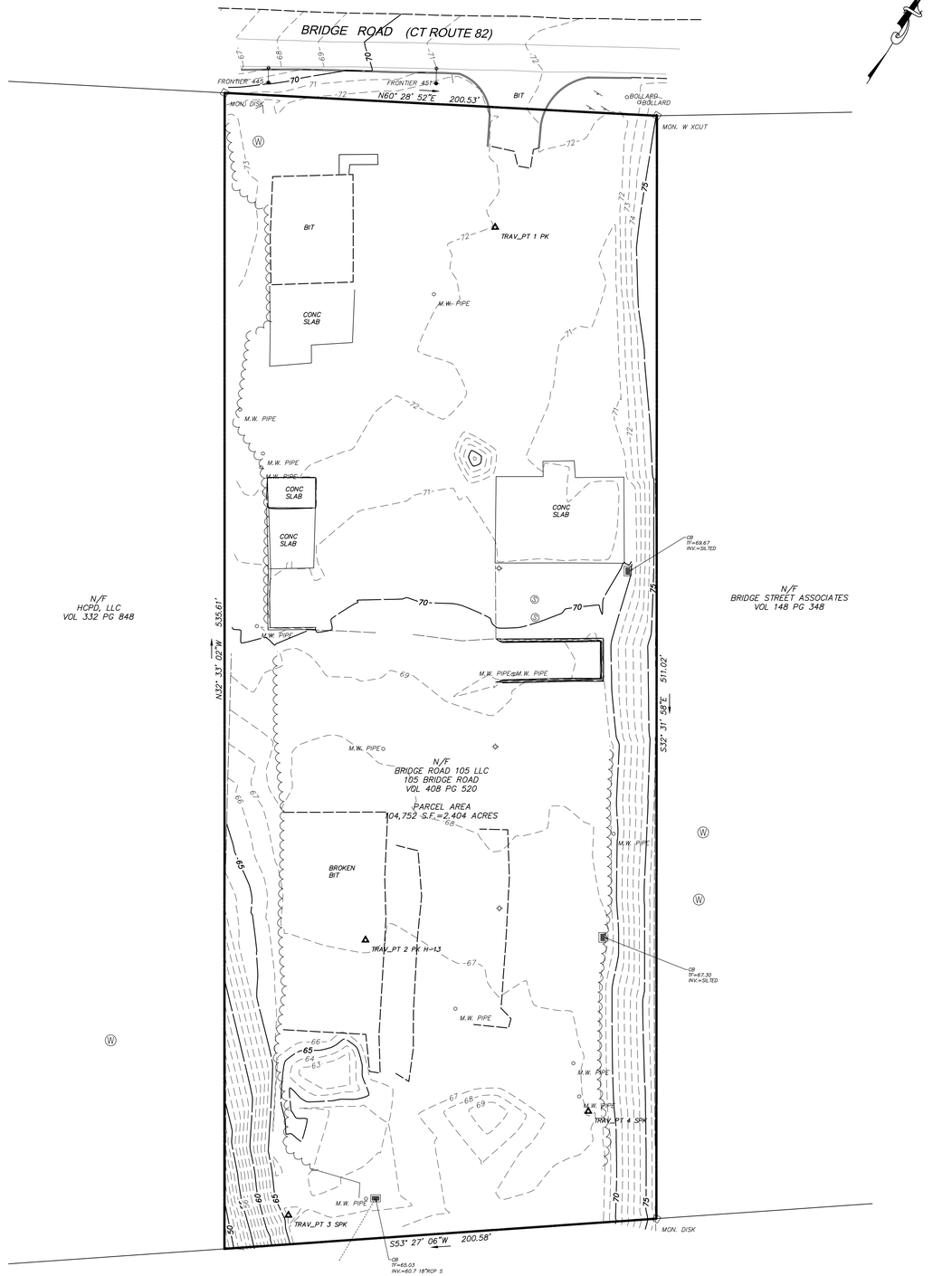
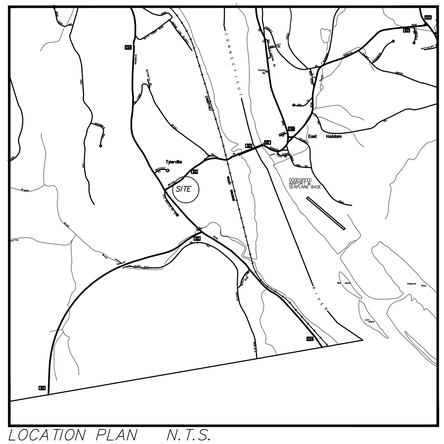
www.Benesch.com

LIST OF DRAWINGS

LOCATION MAP







LOCATION PLAN N.T.S.

LEGEND

UTILITY SERVICES (UNDERGROUND OR OVERHEAD)

- E — ELECTRIC SERVICE
- G — GAS PIPES
- SAN — SANITARY SEWER PIPES
- STORM WATER PIPES (LESS THAN 12")
- STORM WATER PIPES (12" OR LARGER)
- STM — STEAM PIPES (SUPPLY & COND.)
- T — TELEPHONE SERVICE
- W — WATER PIPES
- COM — COMMUNICATION/FIBER OPTIC SERVICE
- FP — FIRE PROTECTION PIPES
- UG — UG — UNKNOWN UTILITY SERVICE
- OH — OVERHEAD WIRES

PROPERTY/BOUNDARY LINES

- PROPERTY/BOUNDARY LINES (CLASS A-2)
- PROPERTY/BOUNDARY LINES (CLASS D)
- EASEMENT LINES

FEATURE LINES

- CURBED ROADWAY
- EDGE OF PAVED ROAD/DRIVE
- BUILDING ROOFLINE (AERIAL PHOTOS)
- RETAINING WALL
- STOCKADE FENCE
- CHAIN LINK/WIRE FENCE
- TREE/VEGATATION LINE
- STONE WALL
- SURFACE WATER (WATERCOURSE)
- WETLANDS LIMIT
- UNKN — UNKN — EDGE OF LANDSCAPING
- INTERMEDIATE CONTOUR
- INDEX CONTOUR

SYMBOL LEGEND

- CATCH BASIN
- ROUND DRAIN
- SQUARE DRAIN
- STORM DRAIN MANHOLE
- ELECTRIC MANHOLE
- SANITARY MANHOLE
- STEAM MANHOLE
- TELEPHONE MANHOLE
- WATER MANHOLE
- MANHOLE (OF UNKNOWN TYPE)
- HAND HOLE (SQ. / REC.)
- W.G. WATER VALVE
- G.G. GAS VALVE
- HYDRANT
- COMBO STANDPIPE
- GUY WIRE
- SIGN (SINGLE POST)
- SIGN (DOUBLE POST)
- BORING (AS DRILLED)
- BORING (AS STAKED)
- x 427.3 SPOT ELEVATION
- WF-f WETLANDS FLAG
- PROPERTY MONUMENT
- UTILITY MONUMENT (SET AS 2' OFFSET)
- IRON PIPE OR REBAR FOUND
- IRRIGATION CONTROL BOX
- EMERGENCY PHONE
- TRAFFIC CONTROLLER CABINET
- UTILITY POLE
- UTILITY POLE W/ LIGHT
- STREET LIGHT
- LIGHT POST
- BOLLARD LIGHT
- BOULDER / ROCK
- CONIFER SHRUB
- DECIDUOUS SHRUB
- DECIDUOUS TREE (SAPLING)
- DECIDUOUS TREE
- CONIFER TREE

ABBREVIATIONS

A/C	AIR CONDITIONER
AT&T	AMERICAN TELEPHONE & TELEGRAPH COMPANY
BIT.	BITUMINOUS
BLK.	BLACK
CB	CATCH BASIN
COM	COMMUNICATION
CON.	CONIFER
CONC.	CONCRETE
CNG	CONNECTICUT NATURAL GAS
CL	CENTERLINE
CLF	CHAIN LINK FENCE
CL&P	CONNECTICUT LIGHT & POWER COMPANY
CP	CONTROL POINT
DEC.	DECIDUOUS
DMH	DRAINAGE MANHOLE
E	EAST OR ELECTRIC
EL	ELECTRIC
ELEV	ELEVATION
EMH	ELECTRIC MANHOLE
F.L.	FLOW LINE
FND.	FOUND
GRAN.	GRANITE
GSTC	GRANITE STONE CURB
HELCO	HARTFORD ELECTRIC COMPANY
HYD.	HYDRANT
H.H.	HAND HOLE
L.P.	LIGHT POLE
MH	MANHOLE
M	METER
M.W.	MONITOR WELL
N	NORTH
NAD	NORTH AMERICAN DATUM
NAVD	NATIONAL AMERICAN VERTICAL DATUM
NE	NORTHEAST
N/F	NOW OR FORMERLY
NW	NORTHWEST
PVC	POLYVINYL CHLORIDE
P.I.V.	POST INDICATOR VALVE
RET.	RETAINING
RCP	REINFORCED CONCRETE PIPE
R.L.	RAIN LEADER
S	SOUTH OR SUPPLY
SE	SOUTHEAST
SW	SOUTHWEST
SAN.	SANITARY
SMH	SANITARY MANHOLE
SNET	SOUTHERN NEW ENGLAND TELEPHONE
SQ.	SQUARE
STM	STEAM
TMH	TELEPHONE MANHOLE
TEL.	TELEPHONE
T.F.	TOP OF FRAME
UNK.	UNKNOWN
W	WATER OR WEST
W.G.	WATER GATE

SURVEY NOTES

1. THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300B-1 THRU 20-300B-20 AND THE "MINIMUM STANDARDS OF ACCURACY, CONTENT & CERTIFICATION FOR SURVEYS AND MAPS, AS AMENDED OCTOBER 26, 2018.
   - 1.1. THE TYPE OF SURVEY IS A PROPERTY/BOUNDARY, TOPOGRAPHIC AND GENERAL LOCATION SURVEY.
   - 1.2. THE BOUNDARY DETERMINATION CATEGORY IS DEPENDENT RESURVEY.
   - 1.3. THE ACCURACIES ARE AS FOLLOWS:

HORIZONTAL CONTROL	CLASS "A-2"
VERTICAL CONTROL	CLASS "V-2"
BOUNDARY	CLASS "A-2"
TOPOGRAPHY	CLASS "T-2"

2. THE COORDINATES AND ELEVATIONS DEPICTED ON THE PLAN REPRESENT THE NAD '83 AND THE NAVD '88 DATUMS. COORDINATES WERE ESTABLISHED ON THE SITE BASED UPON GPS OBSERVATIONS TAKEN ON MAY 2021 USING TRIMBLE ONSS RTK R10 RECEIVERS AND SOLUTIONS PROVIDED THROUGH THE KEYNET NETWORK.
3. UNDERGROUND UTILITIES (IF DEPICTED) HAVE BEEN COMPILED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. THIS INFORMATION IS TO BE CONSIDERED APPROXIMATE AND ALFRED BENESCH & COMPANY DOES NOT TAKE RESPONSIBILITY FOR SUBSEQUENT ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THIS PLAN AS A RESULT. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCES OF WHICH ARE UNKNOWN TO ALFRED BENESCH & COMPANY. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION. CALL "CALL BEFORE YOU DIG" 1-800-922-4455.
4. THE SUBJECT PROPERTY'S CURRENT DEED CAN BE FOUND IN VOLUME 408 PAGE 520 OF THE TOWN OF HADDAM LAND RECORDS.
5. THE PROPERTY IS LOCATED IN THE "I-1" ZONE PER TOWN.
6. THE PROPERTY LIES WITHIN THE "ZONE 'X' – AREAS OF 0.2% ANNUAL CHANCE FLOOD." PER THE FEMA FLOOD INSURANCE RATE MAP MIDDLESEX COUNTY, CONNECTICUT (ALL JURISDICTIONS) PANEL 253 OF 450 MAP NUMBER: 09007C0253G EFFECTIVE DATE: AUGUST 28, 2008.
7. TOTAL PARCEL AREA IS 104,752 SQ. FT. = 2.404 AC.

STATE OF CONNECTICUT
DAVID A. CARICCHIO
No. 70036
LICENSED LAND SURVEYOR

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS DEPICTED AND NOTED HEREON.

12/01/2021

DAVID A. CARICCHIO, P.L.S. No. 70036 DATE
ALFRED BENESCH & COMPANY, GLASTONBURY, CONNECTICUT
(not valid without original signature and embossed seal)

REVISIONS		
No.	DATE	DESCRIPTION

SURVEY BOOK: 06-
SURVEYOR: NDC
DRAWN: DAC
CHECKED: RS
APPROVED: WW

SCALE: HORZ.: 1" = 30'
VERT.:
SURVEY DATUM: HORZ.: NAD 1983
VERT.: NAVD 1988

GRAPHIC SCALE 30 0 30 60

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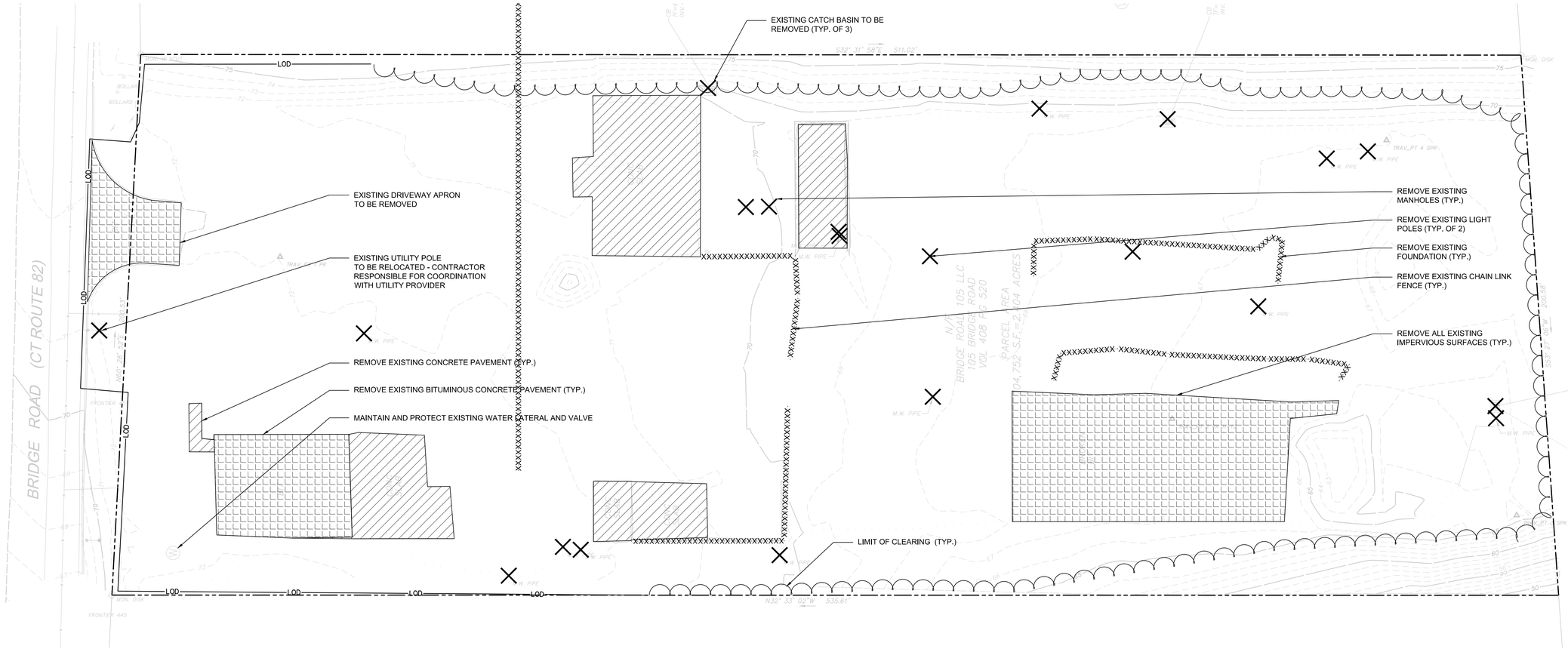
BOUNDARY-TOPOGRAPHIC SURVEY
PREPARED FOR
BRIDGE ROAD 105, LLC
105 BRIDGE ROAD (CT ROUTE 82)
HADDAM CONNECTICUT

PROJ. No.: 70673
DATE: MAY 2021

SV.01

PAPER SPACE LAYOUT NAME:
TWISTVIEW:
VIEWPORT NAME:
LAYER MANAGER NAME:
PLOT TABLE: STB

File Location/Name - Y:\Glastonbury\70600S\70673.01_Bridge_Road_105\Survey\ACAD\70673 BASE.dwg
Date of Plot: December 01, 2021 - 1:22 AM



SITE PREPARATION NOTES:

1. CONTRACTOR SHALL NOTIFY "CALL BEFORE YOU DIG" (1-800-922-4455) AND VERIFY UTILITY MARK-OUT WITH THE OWNER PRIOR TO THE INITIATION OF ANY SITE DISTURBANCE.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFICATION OF THE LOCATION AND NATURE OF ALL SUBSURFACE UTILITIES AT THE PROJECT WHICH MAY BE AFFECTED BY THE WORK. COORDINATE WITH RESPECTIVE UTILITY OWNERS AND PERFORM VERIFICATION OF TYPE, LOCATION, AND INVERTS AS REQUIRED.
3. PROTECT ALL IMPROVEMENTS NOT INCLUDED WITHIN THE LIMITS OF WORK. ANY IMPROVEMENT WHICH IS DAMAGED SHALL BE REPAIRED OR REPLACED IN-KIND TO THE OWNER'S SATISFACTION.
4. DURING DEMOLITION, PROTECT ALL ADJACENT CURBING, SIDEWALKS, RAMPS, ABOVE-GRADE AND BELOW-GRADE UTILITIES, DRAINAGE STRUCTURES, LIGHT BASES, AND OTHER IMPROVEMENTS POTENTIALLY AFFECTED BY THE WORK. CLEARLY DELINEATE THE LIMITS OF WORK AND MARK, BARRICADE, OR OTHERWISE IDENTIFY THOSE IMPROVEMENTS THAT ARE TO BE PROTECTED AND/OR AVOIDED. ANY IMPROVEMENT WHICH IS DAMAGED SHALL BE REPAIRED OR REPLACED IN-KIND TO THE OWNER'S SATISFACTION.
5. THE LOCATIONS OF EXISTING SITE FEATURES AS SHOWN HAVE BEEN OBTAINED FROM MAPS, SURVEYS, FIELD INSPECTIONS, AND OTHER AVAILABLE INFORMATION. THEY MUST BE CONSIDERED APPROXIMATE BOTH TO LOCATION, SIZE, AND AS-BUILT CONDITION AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL FIELD CONDITIONS.
6. THE DIMENSIONS SHOWN ON THE PLANS, INCLUDING THE INTENDED DIMENSIONS OF THE WORK, MAY VARY FROM ACTUAL EXISTING CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASUREMENTS TO VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS AS WELL AS OTHER DIMENSIONS HE MAY DEEM APPROPRIATE TO FACILITATE THE COMPLETION OF THE WORK. NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
7. IMPLEMENTING WORKER SAFETY AND/OR HEALTH PROTOCOLS THAT ADDRESS COMPLIANCE WITH RULES, LAWS, AND REGULATIONS PERTAINING TO CONSTRUCTION SAFETY AND/OR THE POTENTIAL AND/OR ACTUAL RISK OF EXPOSURE TO SITE-SPECIFIC PHYSICAL OR CHEMICAL HAZARDS IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
8. PRIOR TO THE TERMINATION, ABANDONMENT, OR REMOVAL OF ANY UTILITY, VERIFY THAT APPLICABLE NOTIFICATIONS HAVE BEEN MADE TO THE UTILITY OWNER/OPERATOR AND THAT THE UTILITY HAS BEEN PROPERLY TERMINATED, CAPPED, OR PLUGGED AS REQUIRED.
9. PROVIDE PAVEMENT SAWCUT AT THE EDGE OF EACH PAVEMENT REMOVAL AREA TO ESTABLISH A CLEAN EDGE WHERE NEW WORK WILL MEET EXISTING PAVEMENT. SAWCUT SHALL BE A MINIMUM OF 12 INCHES FROM EDGE OF PAVEMENT REMOVAL.
10. UNLESS OTHERWISE INDICATED, ALL DISTURBED AREAS SHALL BE RESTORED WITH SIX (6) INCHES OF LOAM, SEEDED, FERTILIZED, AND MULCHED. PROVIDE ADDITIONAL EROSION CONTROLS AS REQUIRED.

DEMOLITION PLAN LEGEND

- PROPERTY LINE
- OBJECT TO BE REMOVED
- REMOVE BITUMINOUS CONCRETE PAVEMENT
- REMOVE CONCRETE PAVEMENT
- REMOVE FENCE / WALL
- LIMIT OF CLEARING

0 20' 40'
1" = 20'

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Prepared for:

Bridge Road 105, LLC
75 Bysiewicz Drive
Middletown, CT 06457

105 BRIDGE ROAD APARTAMENTS

105 BRIDGE ROAD
HADDAM, CT

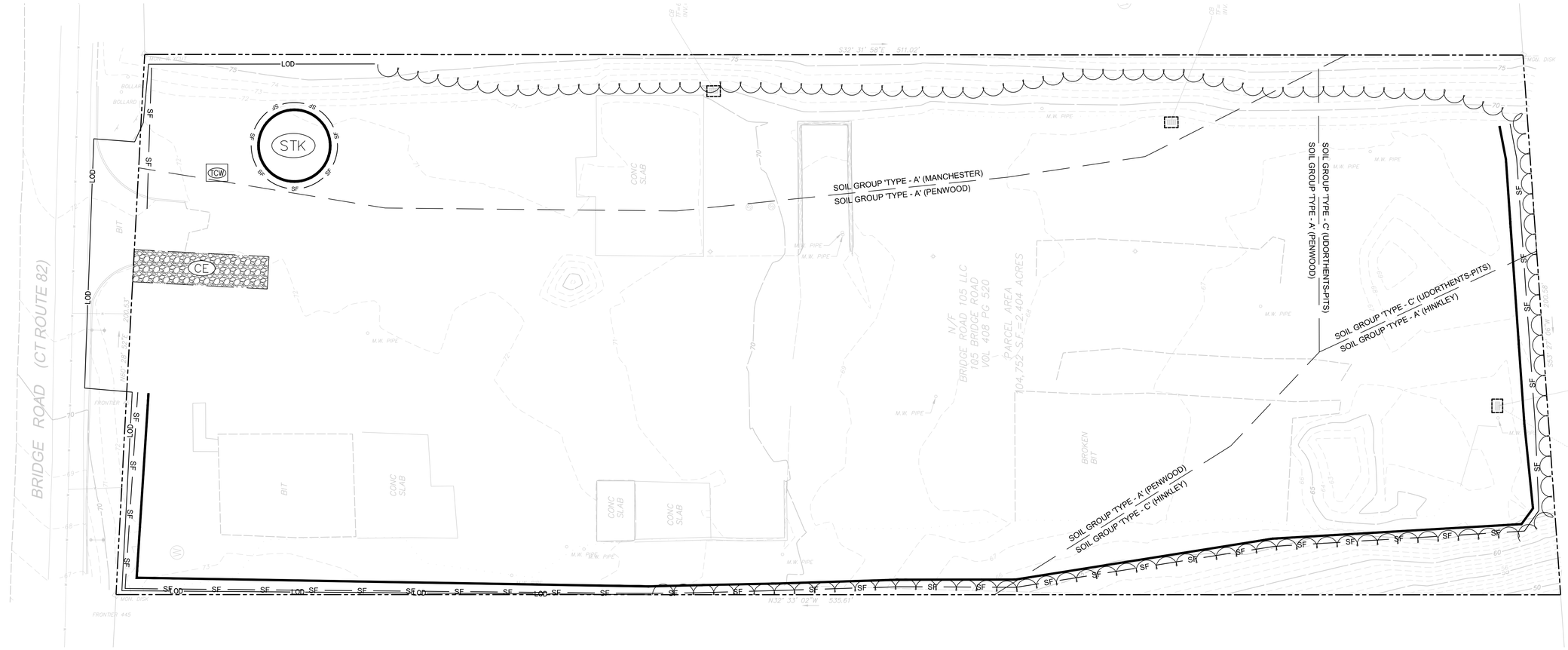
DATE:	REVISION:
12/2/2021	

STATE OF CONNECTICUT
WILLIAM G. WALTER
LICENSED
PROFESSIONAL ENGINEER

PROJECT NO.: 70673.01
SCALE: AS SHOWN
DATE: 12.02.2021
DRAWN BY: JCO, GL
CHECKED BY: WW

DEMOLITION PLAN

DRAWING NO.:
C-1.0



EROSION AND SEDIMENT CONTROL NOTES:

1. THIS PLAN IS FOR EROSION AND SEDIMENTATION (E&S) CONTROL ONLY. SEE OTHER PLANS FOR THE SCOPE OF CONSTRUCTION WORK.
2. THE MEASURES SPECIFIED HEREON ARE THE MINIMUM REQUIREMENTS FOR E&S CONTROL AND ARE SHOWN IN GENERAL SIZE AND LOCATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL E&S CONTROL MEASURES ARE CONFIGURED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO ANY RESOURCE AREAS. ALL EROSION CONTROLS SHALL BE INSTALLED PRIOR TO ANY SITE WORK. CONTROLS SHOULD BE INSPECTED WEEKLY AND AFTER EACH RAINFALL. EXCAVATED MATERIAL SHOULD NOT BE DISPOSED OF IN THE WETLAND AREA. PROVIDE ADDITIONAL E&S MEASURES AS REQUIRED TO CONTROL EROSION AND SILTATION THROUGHOUT THE DURATION OF THE CONSTRUCTION AS CONDITIONS DICTATE AND/OR AS DIRECTED BY THE OWNER OR THE ENGINEER.
3. MONITOR AND INSPECT ALL E&S MEASURES IN AN ONGOING MANNER THROUGHOUT THE WORK AND TAKE CORRECTIVE MEASURES, AS REQUIRED, TO MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO ANY RESOURCE AREAS.
4. ANY EROSION AND SEDIMENTATION MEASURE IMPLEMENTED BEYOND THAT SHOWN HEREON SHALL CONFORM TO APPLICABLE SECTIONS OF THE STATE OF CONNECTICUT'S 2002 "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL."
5. ANY STOCKPILED MATERIAL SHALL BE SUBJECT TO EROSION CONTROL MEASURES THAT INCLUDE A MINIMUM OF SILT FENCE OR HAY BALE BARRIER. COVER STOCKPILES IF SIGNIFICANT RAINFALL IS PREDICTED.
6. PROVIDE TEMPORARY SEEDING WITH MULCH ON ALL EXPOSED SOIL AREAS WHERE WORK WILL BE SUSPENDED FOR LONGER THAN 30 DAYS. APPLY SEED AND MULCH WITHIN THE FIRST 7 DAYS OF SUSPENDING WORK. WHEN SEEDING IS NOT POSSIBLE DUE TO SEASONAL WEATHER CONDITIONS OR OTHER FACTORS, PROVIDE TEMPORARY STRUCTURAL SOIL PROTECTION SUCH AS MULCH, WOODCHIPS, EROSION CONTROL MATTING, OR COMPOST.
7. ALL TEMPORARY SLOPES IN EXCESS OF 3 (HORIZONTAL) TO 1 (VERTICAL) SHALL BE STABILIZED WITH EROSION CONTROL MATTING OR APPROVED EQUIVALENT.
8. NO RUNOFF SHALL BE ALLOWED TO ENTER ANY STORMWATER SYSTEM OR EXIT THE SITE PRIOR TO TREATMENT FOR SEDIMENT REMOVAL.
9. THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AND SHALL NOT ALLOW THE ACCUMULATION OF RUBBISH OR CONSTRUCTION DEBRIS. ALL TRASH SHALL BE CLEANED ON A DAILY BASIS AND THE SITE SHALL BE LEFT IN A NEAT CONDITION AT THE END OF EACH WORK DAY.
10. TAKE ALL NECESSARY PRECAUTIONS TO AVOID THE SPILLAGE OF FUEL OR OTHER POLLUTANTS AND ADHERE TO ALL APPLICABLE POLICIES AND REGULATIONS RELATED TO SPILL PREVENTION, CONTROL, AND RESPONSE.
11. FOR DUST CONTROL, PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER AND MAINTAIN ADEQUATE MOISTURE LEVELS.
12. SWEEP ADJACENT ROADWAYS IF MUD OR SOIL IS TRACKED ON TO THEM, OR AS DIRECTED BY THE ENGINEER.
13. AN ANTI-TRACKING APRON SHALL BE INSTALLED AT THE SITE ACCESS AS SHOWN ON THE PLAN AND SHALL BE MAINTAINED AT ALL TIMES.

SUGGESTED CONSTRUCTION SEQUENCE:

1. CONDUCT A PRE-CONSTRUCTION MEETING WITH THE OWNER AND ENGINEER PRIOR TO ANY CONSTRUCTION ACTIVITY.
2. INSTALL CONSTRUCTION ENTRANCE(S) AND PLACE CATCH BASIN FILTER INSERTS IN EXISTING CATCH BASINS.
3. INSTALL PERIMETER E&S CONTROLS AND REQUEST PRE-CONSTRUCTION INSPECTION FROM THE ENGINEER.
4. STRIP TOPSOIL AND IMPERVIOUS SURFACES AND PLACE EROSION CONTROLS AS NECESSARY.
5. PERFORM DEMOLITION AND BULK EARTHWORK OPERATIONS.
6. BEGIN CONSTRUCTION OF FOUNDATIONS.
7. CONSTRUCT UTILITIES.
8. BOX OUT PARKING LOT WITH IMPORTED BASE MATERIALS.
9. CONSTRUCT BOTTOM COURSE OF BITUMINOUS PAVEMENT.
10. CONSTRUCT LANDSCAPING AND OTHER SITE AMENITIES.
11. CONSTRUCT CURBING AND TOP COURSE OF BITUMINOUS PAVEMENT.
12. AT THE CONCLUSION OF CONSTRUCTION, COMPLETE THE INSTALLATION OF POST-CONSTRUCTION STIE STABILIZATION MEASURES AS SHOWN ON THE DRAWINGS.

TEMPORARY E&S MEASURES MAINTENANCE SCHEDULE

E&S MEASURE	MAINTENANCE MEASURES	SCHEDULE
FILTER INSERTS IN DRAINAGE SYSTEM	CLEAN CATCH BASIN GRATE, REMOVE SEDIMENT/DEBRIS FROM FILTER INSERTS	WEEKLY & WITHIN 24 HOURS AFTER STORM GENERATING A DISCHARGE
HAY BALES/ SILT FENCE BARRIER	REPAIR/REPLACE WHEN FAILURE OBSERVED, REMOVE SILT WHEN ACCUMULATION REACHES APPROX. HALF HEIGHT OF BARRIER	WEEKLY & WITHIN 24 HOURS AFTER STORM GENERATING A DISCHARGE
TARP TEMPORARY STOCKPILES	ENSURE TARP IS SECURED OVER STOCKPILE AT THE END OF EACH DAY	DAILY
CONSTRUCTION ENTRANCE	SWEEP PAVED ROADWAY ADJACENT TO SITE ENTRANCE AS NECESSARY, REFRESH STONE AS NECESSARY, REMOVE SILTED GRAVEL	WEEKLY
MOISTEN EXPOSED SOILS	PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER ON UNPAVED TRAVELWAYS AND KEEP TRAVELWAYS DAMP	DAILY

SEDIMENTATION AND EROSION CONTROL PLAN LEGEND

- EXISTING PROPERTY LINES
- SILT FENCE BARRIER
- HAY BALE BARRIER
- CATCH BASIN FILTER INSERT
- TEMPORARY CONCRETE WASHOUT
- TEMPORARY STOCKPILE
- CONSTRUCTION ENTRANCE

0 20' 40'
1" = 20'

Prepared by:

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Prepared for:

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105 BRIDGE ROAD APARTAMENTS

105 BRIDGE ROAD
HADDAM, CT

DATE:	REVISION:
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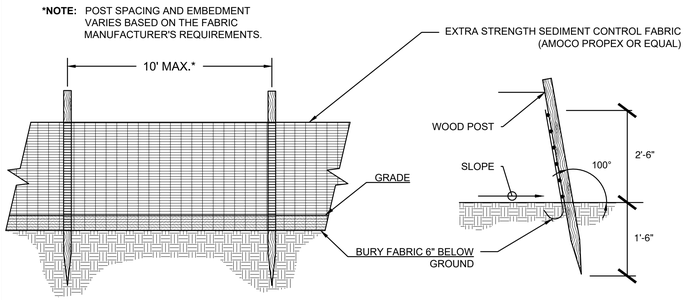
STATE OF CONNECTICUT
WILLIAM G. WALTER
LICENSED
PROFESSIONAL ENGINEER

PROJECT NO.: 70673.01
SCALE: AS SHOWN
DATE: 12.02.2021
DRAWN BY: JCO, GL
CHECKED BY: WW

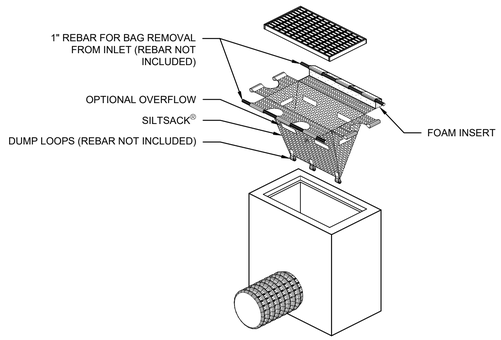
EROSION AND SEDIMENTATION CONTROL PLAN

DRAWING NO.:
C-1.1



SILT FENCE BARRIER (SF)

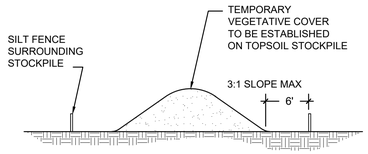
N.T.S.



'SILTSACK' SEDIMENT CONTROL DEVICE, TERRAFIX GEOSYNTHETICS INC. TORONTO, ONTARIO, CA WWW.TERRAFIXGEO.COM

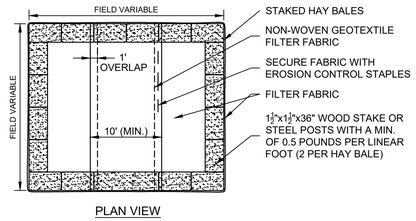
SILT SACK DETAIL (SS)

N.T.S.

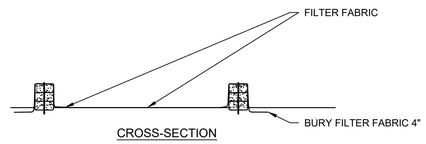


TEMPORARY STOCKPILE (STK)

N.T.S.



PLAN VIEW



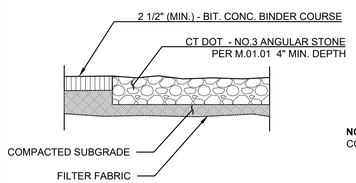
CROSS-SECTION

NOTES:

1. CONSTRUCT WASHOUT AREA LARGE ENOUGH TO ENSURE MATERIALS WILL BE CONTAINED WHERE WASTE CONCRETE CAN SOLIDIFY IN PLACE AND EXCESS WATER CAN SAFELY EVAPORATE.
2. WASHOUT AREA SHALL BE LARGE ENOUGH TO RETAIN ALL LIQUID AND WASTE CONCRETE MATERIALS FROM WASHOUT OPERATION.
3. WEEKLY INSPECTIONS OF WASHOUT AREAS SHALL BE CONDUCTED TO ASSESS THE HOLDING CAPACITY AND FUNCTIONALITY OF THE WASHOUT AREA.

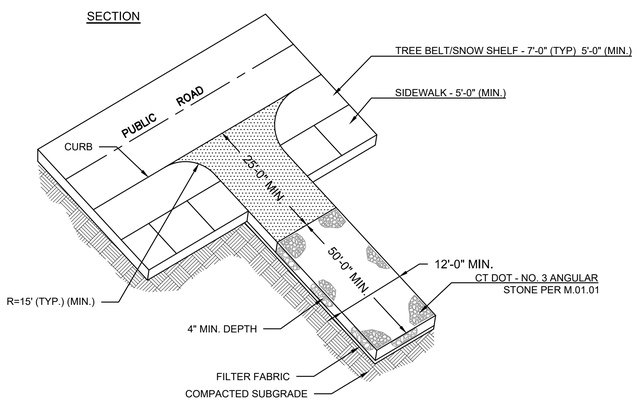
TEMPORARY CONCRETE WASHOUT AREA (CWA)

N.T.S.



NOTE: LOCATION TO BE DETERMINED IN THE FIELD BY THE CONSTRUCTION ADMINISTRATOR

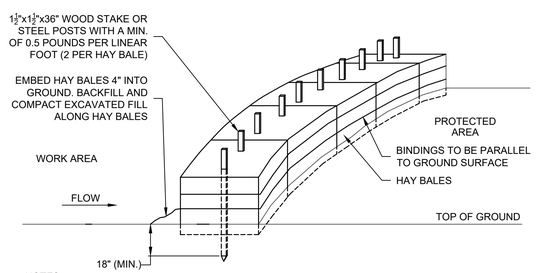
SECTION



PLAN

CONSTRUCTION ENTRANCE (CE)

N.T.S.



NOTES:

1. HAY BALES SHALL BE MADE OF HAY OR STRAW WITH 40 POUND MIN. WEIGHT AND 120 POUND MAX. WEIGHT HELD TOGETHER BY TWINE OR WIRE.
2. PLACE HAY BALES ON CONTOUR AND WING THE LAST HAY BALES UP SLOPE SO THAT THE TOP OF THE LAST SEVERAL HAY BALES ARE HIGHER THAN THE LINE OF HAY BALES.
3. DRIVE FIRST STAKE IN EACH BALE TOWARD THE PREVIOUSLY LAID BALE TO FORCE THEM TOGETHER.
4. PUT ONE HAY BALE PERPENDICULAR ALONG HAY BALE BARRIER EACH 100 FEET.

HAY BALE BARRIER (HB)

N.T.S.

EROSION AND SEDIMENTATION CONTROL NARRATIVE:

DESCRIPTION

THE PROJECT CONSISTS OF REDEVELOPING THE EXISTING PROPERTY LOCATED AT 105 BRIDGE ROAD IN HADDAM, CONNECTICUT. THE PROPOSED WORK INCLUDES TWO (2) NEW 12-UNIT RESIDENTIAL BUILDINGS. EACH UNIT WILL BE A TWO (2) BEDROOM APARTMENT WHICH YIELDS A TOTAL OF 48 BEDROOMS FOR THE SITE. THE PROJECT ALSO INCLUDES A COMMUNAL LEASING OFFICE / CLUBHOUSE AT THE ENTRANCE TO THE SITE AS WELL AS PAVED PARKING, LANDSCAPE AND STORM WATER ENHANCEMENTS, AND UTILITY UPGRADES.

DESIGN AND CRITERIA - PER STATE OF CONNECTICUT
ALL WORK ASSOCIATED WITH EROSION CONTROL SHALL BE PERFORMED PER THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL AS AMENDED.

A. **GEOTEXTILE SILT FENCE (SF) -** SHALL BE NON-WOVEN MATERIAL, MINIMUM 36" HIGH AND FASTENED TO WOOD STAKES. SILT FENCE SHALL BE INSTALLED WITH END RUNS TURNED UP GRADE AT 45 DEGREES FOR A DISTANCE OF 10 FEET (SEE DETAIL THIS SHEET).

B. **TEMPORARY SEEDING (TS)**

1. CONTRACTOR SHALL SCARIFY THE SOIL TO A DEPTH OF 2" BEFORE APPLYING FERTILIZER, LIMESTONE AND SEED.
2. SEED MAY BE APPLIED BY HAND OR MECHANICALLY. SEED APPLICATION SHALL BE UNIFORM. SEED RATE SHALL BE IN ACCORDANCE WITH THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL AS AMENDED (INCREASE SEEDING RATES BY 10% WHEN HYDROSEEDING, LIMESTONE, FERTILIZER AND SEED MAY BE APPLIED IN SLURRY.)
3. CONTRACTOR SHALL MULCH AREA (MS) IMMEDIATELY FOLLOWING SEEDING. (NOTE: IN THE EVENT SEEDING OPERATIONS ARE NOT FEASIBLE DUE TO SEASONAL RESTRICTIONS OR EXTENDED INCLEMENT WEATHER PATTERNS, THE CONTRACTOR SHALL INSTALL AN EROSION CONTROL BLANKET OVER EXPOSED SOILS.)

C. **PERMANENT SEEDING (PS)**

1. CONTRACTOR SHALL APPLY TOPSOIL AND FINE GRADE ALL AREAS BEFORE THE APPLICATION OF PERMANENT SEED. APPLY LIMESTONE AND FERTILIZER AS NEEDED, IN ACCORDANCE WITH SOIL TESTS.
2. REMOVE ALL SURFACE STONES ½ INCH AND LARGER. REMOVE ALL OTHER DEBRIS AND RAKE SEED BED.
3. APPLY SEED WITHIN 7 DAYS AFTER ESTABLISHING FINAL GRADES. SEE PLANTING PLAN.

D. **STRAW BALE BARRIER (HB) -** SHALL BE MADE OF STRAW WITH 40 POUNDS MINIMUM WEIGHT AND 120 POUNDS MAXIMUM WEIGHT, HELD TOGETHER BY TWINE OR WIRE. (SEE DETAIL THIS SHEET.)

E. **CONSTRUCTION ENTRANCE (CE) -** SHALL BE AN ANGULAR STONE PAD, A MINIMUM OF 12' WIDE AND 50' LONG. (SEE DETAIL THIS SHEET.)

APPLICATION/GENERAL PROCEDURES

SOIL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED PRIOR TO ANY SITE DISTURBANCE, AND DEVELOPMENT WILL PROCEED ACCORDING TO A SPECIFIC CONSTRUCTION SEQUENCE. THE OBJECTIVE IS TO MAXIMIZE THE REDUCTION OF SEDIMENT-LADEN RUNOFF THROUGH IMPLEMENTATION OF CONVENTIONAL SOIL SEDIMENTATION AND EROSION CONTROL PRACTICES CURRENTLY RECOMMENDED BY THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL

A. EARTHWORK WILL BE SCHEDULED FOR PERIODS WHEN SOIL SATURATION IS LOW AND SOIL LOSS HAZARD IS AT A MINIMUM.

B. SUSPEND EARTHWORK FOR MAJOR STORM EVENTS AND IMPLEMENT ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES AS NECESSARY.

C. THERE SHALL BE NO CUTS OR FILL LEFT EXPOSED FOR LONGER THAN 30 DAYS. THE ESTABLISHED PROCEDURE OF TEMPORARILY SEEDING AND/OR COVER WITH EROSION PROTECTION (MAT OR STRAW) SHALL BE FOLLOWED TO INSURE MINIMAL SOIL LOSS.

D. THE DISCHARGE OF UNTREATED STORMWATER TO ANY ADJACENT ROADWAYS, DRAINAGE INLETS, OR PROPERTIES IS NOT ALLOWED.

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Alfred Benesch & Company
120 Hebron Avenue
Glastonbury, Connecticut 06033
860-633-8341

Prepared for:

Bridge Road 105, LLC
75 Bysiewicz Drive
Middletown, CT 06457

BRIDGE ROAD APARTAMENTS
105 BRIDGE ROAD
HADDAM, CT

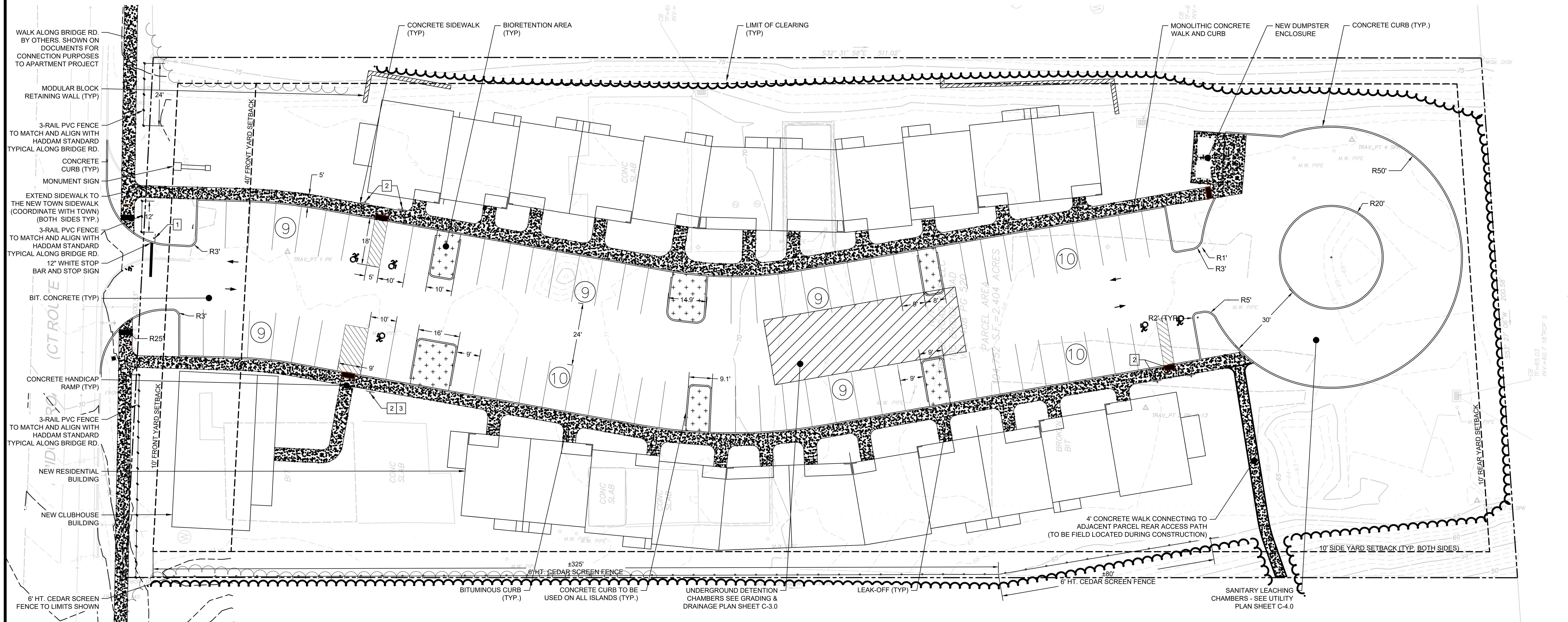
DATE:	REVISION:
12/2/2021	

STATE OF CONNECTICUT · WILLIAM G. WALTER · LICENSED PROFESSIONAL ENGINEER

PROJECT NO.: 70673.01
SCALE: AS SHOWN
DATE: 12.02.2021
DRAWN BY: JCO, GL
CHECKED BY: WW

EROSION AND SEDIMENTATION CONTROL NOTES AND DETAILS

DRAWING NO.:
C-1.2



LAYOUT AND MATERIALS NOTES:

1. NOTIFY "CALL BEFORE YOU DIG" (1-800-922-4455) AND VERIFY UTILITY MARK-OUT WITH THE OWNER PRIOR TO THE INITIATION OF ANY SITE DISTURBANCE.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFICATION OF THE LOCATION AND NATURE OF ALL SUBSURFACE UTILITIES AT THE PROJECT WHICH MAY BE AFFECTED BY THE WORK. COORDINATE WITH RESPECTIVE UTILITY OWNERS AND PERFORM VERIFICATION OF TYPE, LOCATION, AND INVERTS AS REQUIRED.
3. THE LOCATIONS OF EXISTING SITE FEATURES AS SHOWN HAVE BEEN OBTAINED FROM MAPS, SURVEYS, FIELD INSPECTIONS, AND OTHER AVAILABLE INFORMATION. THEY MUST BE CONSIDERED APPROXIMATE BOTH TO LOCATION, SIZE, AND AS-BUILT CONDITION AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL FIELD CONDITIONS.
4. THIS DRAWING IS INTENDED TO DEPICT THE LOCATION AND LAYOUT OF CONSTRUCTION AND IS INTENDED TO BE USED IN CONJUNCTION WITH APPLICABLE SPECIFICATION SECTIONS.
5. IMPLEMENTING WORKER SAFETY AND/OR HEALTH PROTOCOLS THAT ADDRESS COMPLIANCE WITH RULES, LAWS, AND REGULATIONS PERTAINING TO CONSTRUCTION SAFETY AND/OR THE POTENTIAL AND/OR ACTUAL RISK OF EXPOSURE TO SITE-SPECIFIC PHYSICAL OR CHEMICAL HAZARDS IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
6. UNLESS OTHERWISE SPECIFIED, MISCELLANEOUS CONCRETE PADS SHALL BE CONSTRUCTED PER SIDEWALK DETAIL.
7. THE DIMENSIONS SHOWN ON THE PLANS, INCLUDING THE INTENDED DIMENSIONS OF THE WORK, MAY VARY FROM ACTUAL EXISTING CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASUREMENTS TO VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS AS WELL AS OTHER DIMENSIONS HE MAY DEEM APPROPRIATE TO FACILITATE THE COMPLETION OF THE WORK. NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
8. ALL NON-ACCESSIBLE PARKING SPACES ARE 9' X 18' EXCEPT COMPACT SPACES WHICH ARE 8' X 18'. VERIFY OVERALL LAYOUT DIMENSIONS BASED ON THESE DIMENSIONS AND THE NUMBER OF SPACES INDICATED. FIELD-ADJUST OVERALL LAYOUT DIMENSION IN CONCERT WITH THE ENGINEER IF REQUIRED.
9. ALL DRIVE AISLES ARE 24' WIDE, UNLESS OTHERWISE NOTED.
10. DIMENSIONS INDICATED ARE TO FACE OF CURB, PAVEMENT EDGE, EDGE OR CENTERLINE OF IMPROVEMENT, OR AS OTHERWISE NOTED.
11. ENGAGE A CONNECTICUT-LICENSED LAND SURVEYOR TO PERFORM LAND-SURVEYING SERVICES REQUIRED, INCLUDING, BUT NOT LIMITED TO VERIFICATION AND LAYOUT OF BASELINES, PROPOSED IMPROVEMENTS, DIMENSIONS AND ELEVATIONS. REPORT DISCREPANCIES TO THE ENGINEER.
12. PROVIDE FOR THE LAYOUT AND STAKING/MARKING OF THE PROPOSED LOCATION OF ALL PROPOSED SITE IMPROVEMENTS, INCLUDING FURNISHINGS. OBTAIN ENGINEER'S APPROVAL OF THE LAYOUT PRIOR TO PROCEEDING WITH THE WORK.
13. UNLESS OTHERWISE INDICATED, LINES ARE PARALLEL OR PERPENDICULAR TO LINE FROM WHICH THEY ARE MEASURED.
14. RADII AT PARKING STALLS 2' UNLESS NOTED OTHERWISE.

ZONING TABLE

ZONE: TVD (TYLERVILLE VILLAGE DISTRICT)
ADDITIONAL ZONING: GATEWAY OVERLAY ZONE
SURROUNDING ZONES: TVD TO THE NORTH, EAST, AND WEST
IP (INDUSTRIAL PARK) TO THE SOUTH

USE:
EXISTING: VACANT LOT
PROPOSED: MULTI-FAMILY RESIDENTIAL

ITEM	REQUIREMENTS	PROPOSED
MINIMUM LOT AREA	20,000 S.F.	104,755 SF (2.4 ACRES)
MINIMUM LOT FRONTAGE	50 FT	200.54 FT
MAXIMUM BUILDING HEIGHT	35 FT	2 STORIES, <35 FT
FRONT SETBACK	10 FT MIN. 40 FT MAX.	14.3 FT
SIDE SETBACKS (ONLY COMMERCIAL AND INDUSTRIAL USES APPLY)	10 FT MIN.	15.4 FT
MAX. BUILDING COVERAGE	50%	18,480 SF = 17.6%
MAX. IMPERV. PARKING COVERAGE	30%	29,608 SF = 28.3%
MAX. TOTAL LOT IMPERV. COVERAGE	80%	53,521 SF = 51.1%
MIN. OPEN SPACE BET. BUILDINGS	20 FT	65 FT
SIGNAGE REQUIREMENT	24 S.F. MAX.	24 S.F
PARKING COUNT SUGGESTION	2 SPACES PER UNIT (MULTI-FAMILY DWELLING) 42 UNITS = 84 SPACES	75 TOTAL SPACES

ZONING NOTES:
1. SECTION 21 GENERAL PARKING REQUIREMENTS - THE PARKING COUNT IS SUGGESTED, NOT REQUIRED. ADDITIONALLY, PER SECTION 21.6 HAS THE ABILITY TO PROVIDE WAIVERS AND EXEMPTIONS FOR PARKING IN TYLERVILLE VILLAGE DISTRICT.

SIGN TABLE

SIGN #	MUTCD # CONNDOT #	SIGN
①	R1-1 31-0536	STOP (30" x 30")
②	NA 31-0629(P)	VIOLATORS WILL BE FINED MIN $150 / HANDICAPPED PARKING / STATE PERMIT REQUIRED (12" x 24")
③	R7-8A NA	VAN ACCESSIBLE (12" x 6")

LAYOUT & MATERIALS LEGEND

- PROPERTY LINE
- CURBING
- FENCE
- PAVEMENT SAWCUT LINE
- ⑧ PARKING COUNT SYMBOL
- PARKING SIGN
- LIGHT FIXTURE

0 20' 40'
1" = 20'

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Prepared for:
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Middletown, CT 06457

105 BRIDGE ROAD APARTAMENTS
105 BRIDGE ROAD HADDAM, CT

DATE:	REVISION:
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STATE OF CONNECTICUT · WILLIAM G. WALTER · LICENSED · PROFESSIONAL ENGINEER

PROJECT NO.: 70673.01
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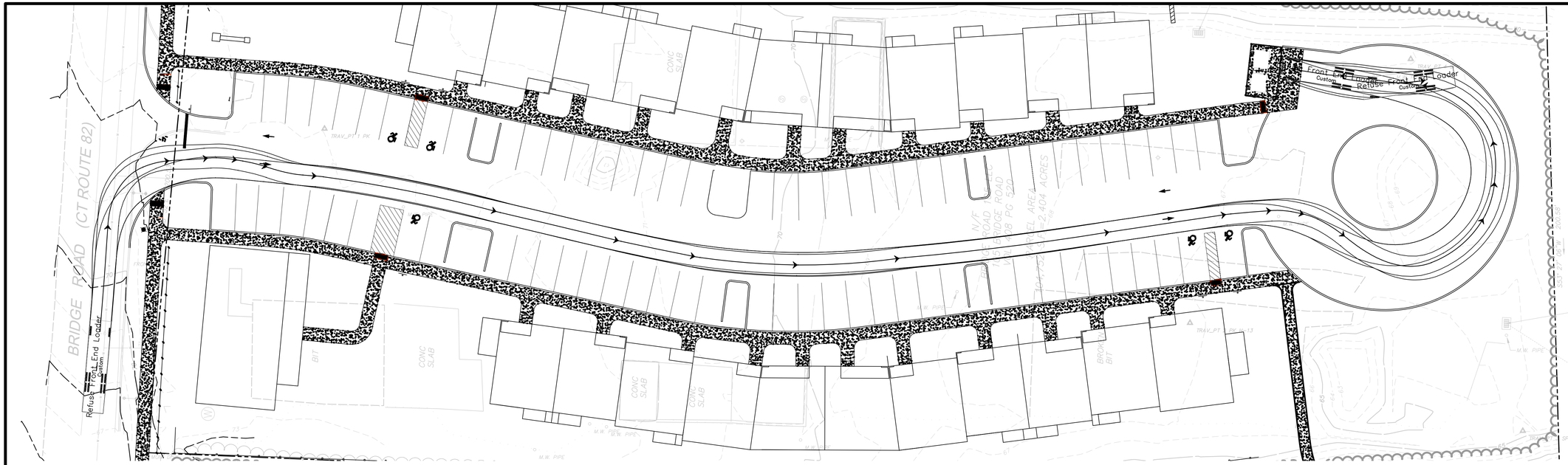
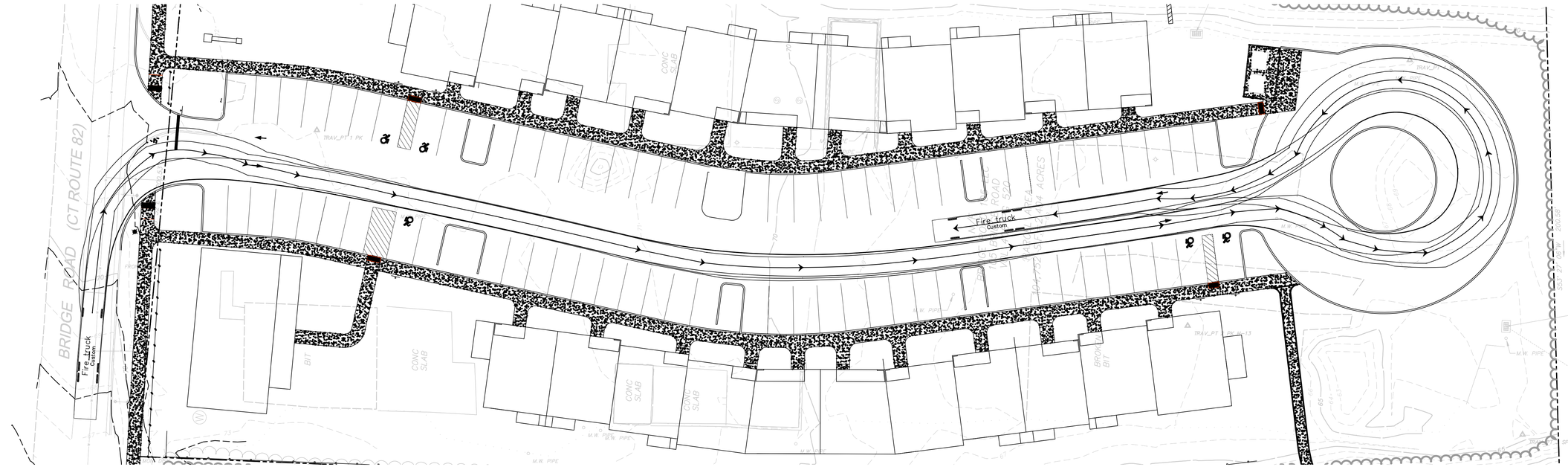
CHECKED BY: WW

LAYOUT & MATERIALS PLAN

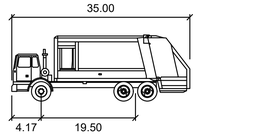
DRAWING NO.: C-2.0



REFUSE FRONT END LOADER TURNING MOVEMENT

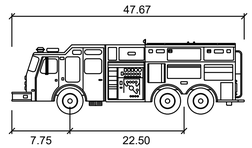


FIRE TRUCK TURNING MOVEMENT



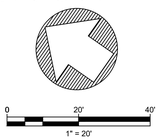
Refuse Front End Loader

	feet
Width	: 8.00
Track	: 8.00
Steering Angle	: 28.8



Ladder Fire Truck

	feet
Width	: 8.33
Track	: 8.50
Steering Angle	: 45.0



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105 BRIDGE ROAD APARTAMENTS

105 BRIDGE ROAD
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STATE OF CONNECTICUT
WILLIAM G. WALTER
LICENSED
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PROJECT NO.: 70673.01
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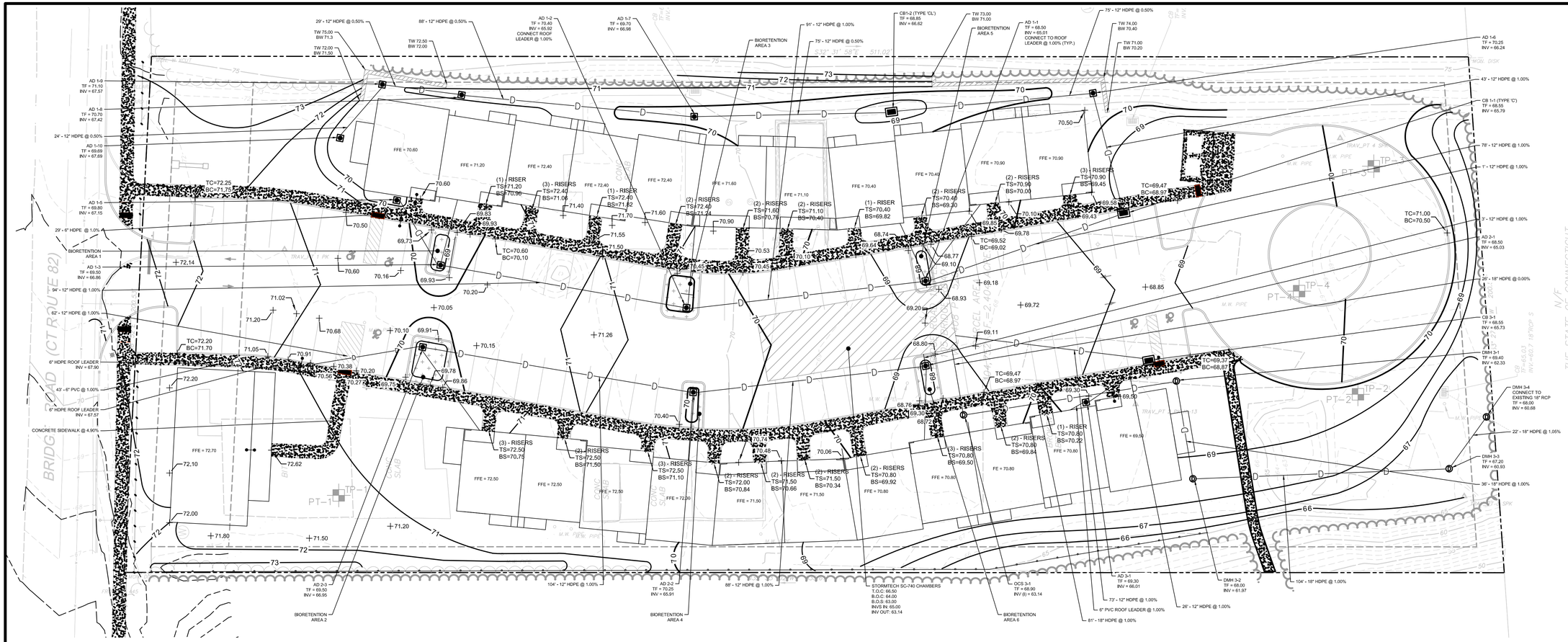
DRAWN BY: JCO, GL
CHECKED BY: WW

TURNING MOVEMENT PLAN

DRAWING NO.:
C-2.1



DRAINAGE NOTES:

1. FUNCTIONAL COMPLETION OF STORM WATER DETENTION SYSTEMS AND STRUCTURES SHALL PRECEDE SITE DEVELOPMENT OF AREAS, ROADS, OR LOTS CONTRIBUTING TO THESE SYSTEMS.
2. CERTIFIED 'AS-BUILTS' VS 'AS-APPROVED' PLANS OF THE STORM WATER DETENTION-DISCHARGE SYSTEM SHALL BE SUBMITTED FOLLOWING ITS CONSTRUCTION AND PRIOR TO BOND RELEASE.
3. ALL PIPES ARE TO BE 12" HDPE WITH A MINIMUM 1.0% SLOPE AND 1 FT OF COVER UNLESS OTHERWISE NOTED.
4. CONTRACTOR IS RESPONSIBLE TO ENSURE ADEQUATE SIZING OF MANHOLES TO ACCEPT PROPOSED PIPES.
5. ALL EXISTING UTILITY LINES TO BE ABANDONED SHALL BE ABANDONED ACCORDING TO UTILITY COMPANY REQUIREMENTS.
6. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH APPLICABLE STANDARDS.
7. DAMAGE TO EXISTING UTILITIES AS A RESULT OF THE CONTRACTOR'S OR ANY OF HIS SUBCONTRACTOR'S ACTIVITIES DURING THE CONSTRUCTION PROCESS SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEWATERING DURING THE EXECUTION OF HIS WORK.
9. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS DEVELOPED FROM THE BEST AVAILABLE INFORMATION. THE ACTUAL LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF EXCAVATION ACTIVITIES.
10. ALL STORM PIPES WITHIN 25' OF THE SANITARY LEACHING SYSTEM SHALL BE 'TIGHT PIPE' WHICH EXHIBIT ACCEPTABLE WALL STRENGTH AND WATERTIGHT JOINTS.

ACCESSIBILITY NOTES:

1. SLOPES ALONG THE ACCESSIBLE ROUTE SHALL BE LESS THAN 1:20 (5%) AND THE CROSS SLOPES SHALL NOT EXCEED 1:50 (2%). CHANGES IN LEVELS SHALL NOT BE GREATER THAN $\frac{1}{4}$ INCH.
2. SLOPES ALONG THE HANDICAP ACCESSIBLE RAMP SHALL NOT EXCEED 1:12 (8.3%) AND THE CROSS SLOPE SHALL NOT EXCEED 1:50 (2%). CHANGES IN LEVEL SHALL NOT BE GREATER THAN $\frac{1}{4}$ INCH.
3. LANDINGS SHALL NOT HAVE A SLOPE GREATER THAN 1:50 (2%) IN ANY DIRECTION.
4. SLOPES WITHIN THE HCP PARKING SPACE SHALL NOT EXCEED 1:50 (2%) IN ANY DIRECTION.

RAIN GARDEN MAINTENANCE SCHEDULE

MAINTENANCE MEASURE	ACTIVITY	SCHEDULE
1	• INSPECT FOR DAMAGE • NOTE SIGNS OF HYDROCARBON BUILDUP, AND REMOVE IF DETECTED • MONITOR FOR SEDIMENT ACCUMULATION • EXAMINE TO ENSURE THAT INLET AND OUTLET DEVICES ARE FREE OF DEBRIS AND OPERATION	ANNUAL INSPECTION
2	• REPAIR UNDERCUT OR ERODED AREAS	AS-NEEDED MAINTENANCE
3	• CLEAN AND REMOVE DEBRIS FROM INLET AND OUTLET STRUCTURES • MOW SIDES AND BOTTOM SEEDMIX	SPING AND FALL
4	• REMOVE SEDIMENT WHEN THE RAIN GARDEN VOLUME HAS BEEN SIGNIFICANTLY REDUCED OR WHEN SIGNIFICANT ALGAL GROWTH IS OBSERVED	10-YEAR MAINTENANCE

CATCH BASIN MAINTENANCE SCHEDULE

MAINTENANCE MEASURE	ACTIVITY	SCHEDULE
1	• INSPECT AND CLEAN WHEN THE SUMP IS HALF FULL OF SILT AND/OR DEBRIS	SEMI-ANNUALLY

GRADING AND DRAINAGE LEGEND

- PROPERTY LINE
- LOD — LIMIT OF DISTURBANCE LINE
- 65 — MAJOR CONTOUR
- 66 — MINOR CONTOUR
- D — PROPOSED DRAINAGE PIPE
- BIORETENTION AREA
- PROPOSED AREA DRAIN
- PROPOSED CATCH BASIN
- PROPOSED DRAINAGE MANHOLE
- +47.30 — PROPOSED SPOT GRADE (+TC=51.70 BC=51.20)
- FLUSH CONDITION
- TEST PIT

0 20' 40'
1" = 20'

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105 BRIDGE ROAD APARTAMENTS

105 BRIDGE ROAD
HADDAM, CT

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STATE OF CONNECTICUT
WILLIAM G. WALTER
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PROJECT NO.: 70673.01
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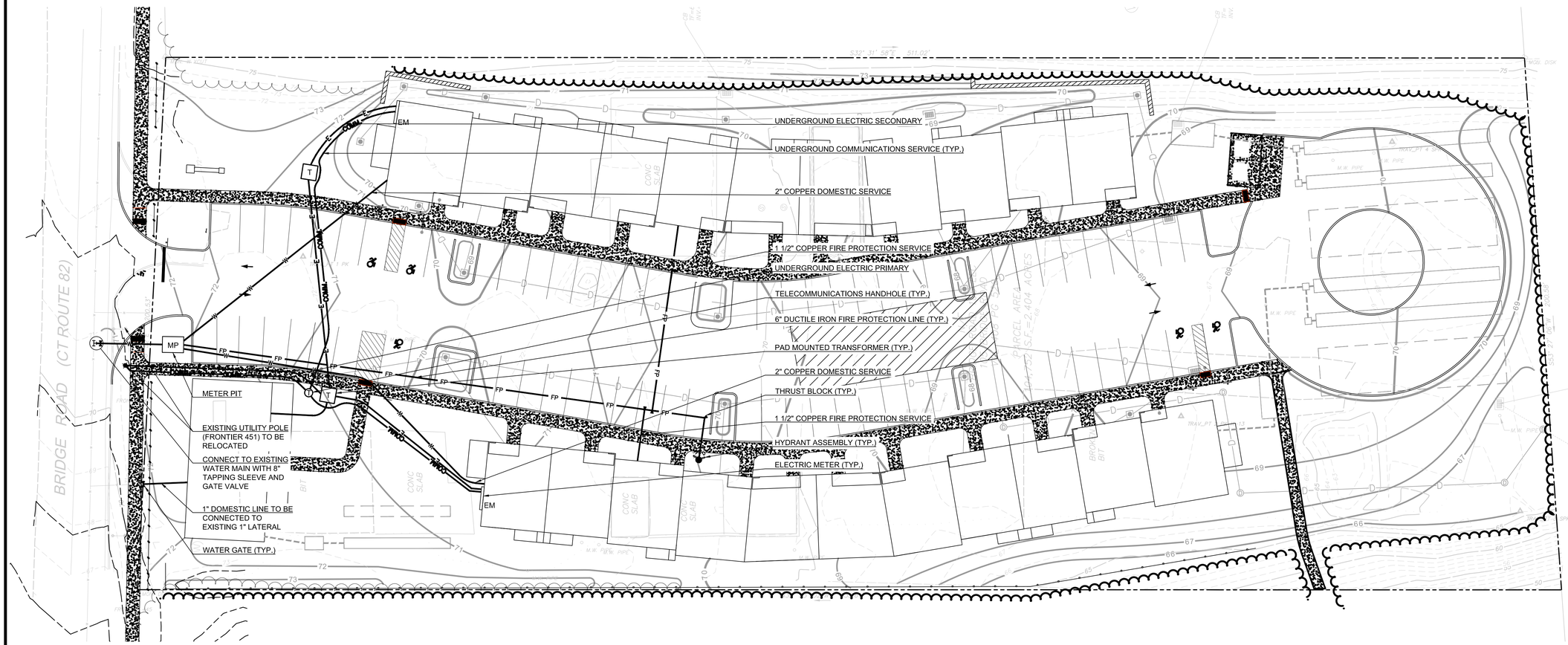
GRADING & DRAINAGE PLAN

DRAWING NO.:
C-3.0



UTILITY NOTES:

1. CONTRACTOR SHALL NOTIFY "CALL BEFORE YOU DIG" (1-800-922-4455) AND VERIFY UTILITY MARK-OUT WITH THE OWNER PRIOR TO THE INITIATION OF ANY SITE DISTURBANCE.
2. THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ON THE PLANS MAY VARY FROM ACTUAL EXISTING CONDITIONS IN THE FIELD. COORDINATE WITH RESPECTIVE UTILITY OWNERS AND PERFORM VERIFICATION OF TYPE, LOCATION AND INVERTS AS REQUIRED. VERIFY ALL TIE-IN POINTS, ROUTING, CONFLICTS, CROSSINGS, AND BUILDING CONNECTION POINTS TO FACILITATE THE COMPLETION OF THE WORK.
3. PERFORM EXPLORATORY EXCAVATIONS AS REQUIRED TO VERIFY THE AS-BUILT LOCATION OF EXISTING SUBSURFACE UTILITIES WHERE CROSSINGS OR OTHER POTENTIAL CONFLICTS ARE PRESENT.
4. ANY UTILITY LATERAL THAT IS NOT REUSED FOR THIS PROJECT, YET TIES INTO THE SITE SHALL BE REMOVED UP TO THE MAIN/TRUNK LINE IN THE STREET.
5. TRACER WIRE REQUIRED FOR TELECOMMUNICATIONS AND ELECTRIC ONLY. PROVIDE APPROPRIATE WIRE ACCESS POINTS.
6. FOR TELECOMMUNICATIONS AND ELECTRIC, WARNING TAPE SHALL BE INSTALLED 12-INCHES BELOW GRADE.
7. SEAL ALL CONDUIT ENDS WITH BLANK DUCT PLUGS. SECURE PULL ROPE TO DUCT PLUG.
8. ALL WORK ASSOCIATED WITH FIRE PROTECTION AND DOMESTIC WATER SHALL CONFORM TO APPLICABLE STANDARDS AND SPECIFICATIONS.
9. ALL WORK ASSOCIATED WITH ELECTRICAL SERVICE SHALL CONFORM TO THE EVERSOURCE STANDARDS AND SPECIFICATIONS. IF THERE ARE ANY CONFLICTS BETWEEN THE REQUIREMENTS INDICATED HEREON AND EVERSOURCE STANDARDS, EVERSOURCE STANDARDS SHALL PREVAIL.
10. ALL WORK ASSOCIATED WITH TELECOMMUNICATIONS SHALL CONFORM TO THE STANDARDS OF THE LOCAL TELECOMMUNICATIONS PROVIDER.
11. INSTALL CONDUIT, PULL ROPE, CAPS, WARNING TAPE, AND TRACER WIRE PER APPLICABLE SPECIFICATIONS, STANDARDS, AND CODES.
12. ALTHOUGH NOT SHOWN ON THE DRAWINGS, PROVIDE FOR THE INSTALLATION OF ALL JOINTS, COUPLINGS, RESTRAINTS, BENDS, ANGLES, AND OTHER APPURTENANCES TO ACHIEVE A COMPLETE, FUNCTIONAL WATER SUPPLY SYSTEM.

UTILITIES PLAN LEGEND

- PROPERTY LINE
- LIMIT OF DISTURBANCE (LOD)
- NATURAL GAS PIPE (G)
- UG ELECTRICAL (E)
- ELECTRICAL TRANSFORMER (T)
- COMMUNICATION LINE (COMM.)
- WATER SERVICE (DOMESTIC) (W)
- FIRE PROTECTION LINE (FP)
- SEWER LINE (S)
- GATE VALVE
- THRUST BLOCK
- HYDRANT

0 20' 40'
1" = 20'

Prepared by:

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UTILITY PLAN

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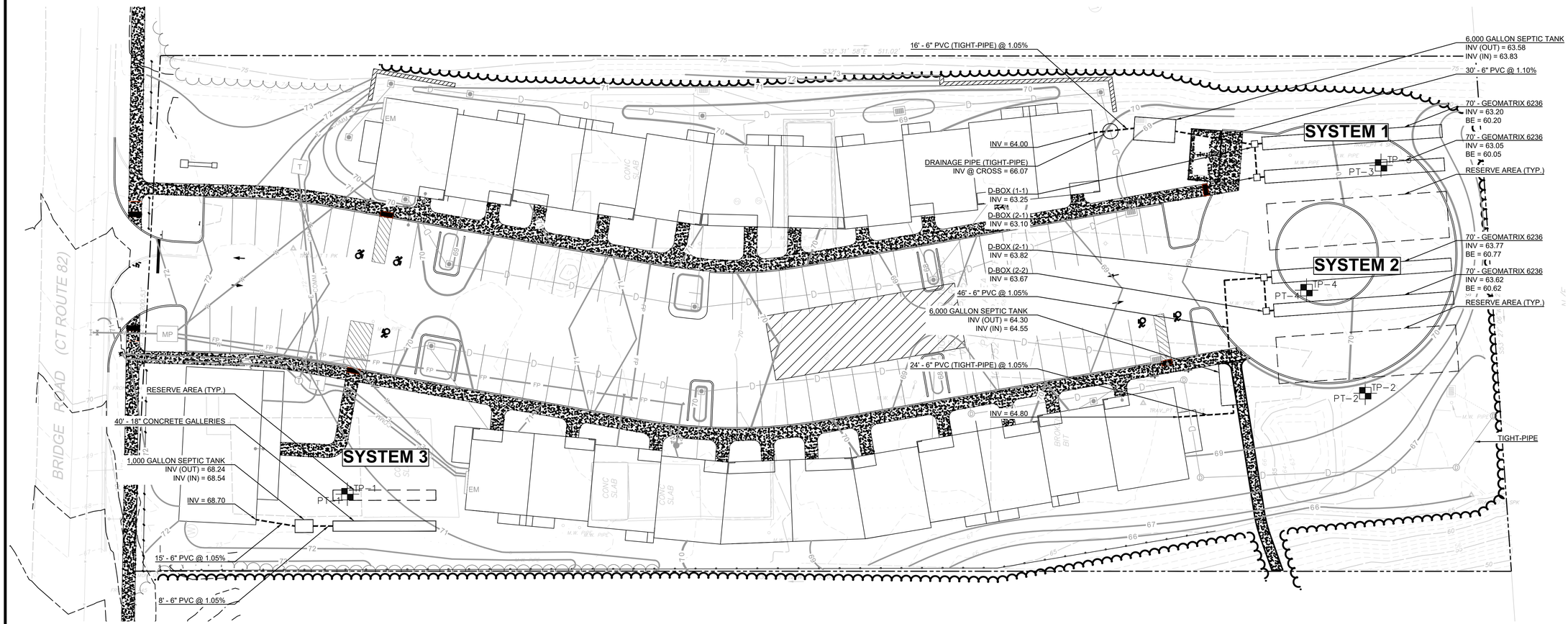
C-4.0



TEST PIT DATA:

DATE: 6/10/2021
TEST WITNESSED BY: WILL WALTER, PE (BENESCH)
RECORDED BY: RYAN GRENON
(TYLERVILLE VILLAGE DISTRICT)

TP - 1

0"-2"
PAVEMENT
2"-25"
ORANGE / BROWN LOAM AND SAND
25"-80"
COARSE SAND AND GRAVEL WITH COBBLES
80"-109"
MEDIUM - COARSE SAND AND GRAVEL

BOTTOM @ 109"

TP - 2

0"-2"
PAVEMENT
2"-20"
DISTURBED MISC. SANDY SOIL
20"-22"
ORIGINAL TOP SOIL
22"-31"
ORGANIC BROWN LOAMY SAND
31"-109"
LIGHT BROWN FINE / MEDIUM SAND

BOTTOM @ 109"

TP - 3

0"-20"
DISTURBED MISC. SANDY SOIL
20"-63"
VERY FINE SILTY SAND (FIRM)
63"-108"
TAN VERY FINE SILTY SAND

BOTTOM @ 108"

TP - 4

0"-3"
TOP SOIL
3"-21"
ORANGE BROWN LOAMY SAND
21"-107"

BOTTOM @ 107"

PERCOLATION TEST DATA:

CONDUCTED BY: CHRISTOPHER HOBERT (INDIGO)

PT 1
DATE: 5-3-2021
DEPTH =3 0"-45"
PRE-SOAK 9:38 AM

TIME (MINUTES)		DEPTH (INCHES)
0	@	2 3/8"
1	@	4 3/8"
2	@	6 1/4"
3	@	9 1/2"

PERCOLATION RATE: 0.57 MIN./INCH

PT 2
DATE: 5-3-2021
DEPTH = 26"-44"
PRE-SOAK 9:56 AM

TIME (MINUTES)		DEPTH (INCHES)
0	@	4"
1	@	7 3/4"
2	@	10 3/4"
3	@	12"
4	@	13 3/4"
5	@	14 3/4"

PERCOLATION RATE: 0.83 MIN./INCH

PT 3
DATE: 6-10-2021
DEPTH = 24"-38"
PRE-SOAK 10:31 AM

TIME (MINUTES)		DEPTH (INCHES)
0	@	4 3/4"
1	@	8 3/4"
2	@	11 3/4"

PERCOLATION RATE: 7.10 MIN./INCH

PT 4
DATE: 6-10-2021
DEPTH = 24"-38"
PRE-SOAK 11:12 AM

TIME (MINUTES)		DEPTH (INCHES)
0	@	4 3/4"
1	@	8 3/4"
2	@	11 3/4"

PERCOLATION RATE: 3.90 MIN./INCH

SYSTEM 1 / 2 - RESIDENTIAL BUILDING SEPTIC ANALYSIS

DESIGN FLOW (TECHNICAL STANDARDS - SECTION IV.A)
- 22 BEDROOMS X 150 GPD PER BEDROOM = 3,300 GPD

MLSS
- MLSS NOT REQUIRED; DEPTH TO RESTRICTIVE LAYER > 60 INCH

EFFECTIVE LEACHING AREA REQUIRED (TECHNICAL STANDARDS - SECTION VIII.F - TABLE 6)
- LESS THAN 10.1 MIN/INCH - 165 SF PER BEDROOM
- 3+ BEDROOM ELA = 495 + 165 (19) = 3,630 SF

EFFECTIVE LEACHING AREA PROVIDED (TECHNICAL STANDARDS - SECTION E.1 - PROPRIETARY LEACHING SYSTEMS)
- USE GEOMATRIX GST 6236 - 26.2 SF/LF, SPACED AT 13' O.C.
- REQUIRED MINIMUM LENGTH - 3,630 SF / 26.2 SF/LF = 138.5 LF
- TWO ROWS OF 70 LF @ 13' O.C.

SEPTIC TANK (CT DPH TECHNICAL STANDARDS - SECTION V.B.I)
- 1,250 GAL + 250 GAL/BEDROOM X (19 BEDROOM) = 6,000 GAL.

SYSTEM 3 - COMMUNITY CENTER SEPTIC ANALYSIS

DESIGN FLOW (TECHNICAL STANDARDS - SECTION IV.A)
- COMMUNITY CENTER = 2,000 SF X 20 GPD/SF = 180 GPD

MLSS
- MLSS NOT REQUIRED; DEPTH TO RESTRICTIVE LAYER > 60 INCH

EFFECTIVE LEACHING AREA REQUIRED (TECHNICAL STANDARDS - SECTION F.1 - TABLE 8)
- LESS THAN 10.1 MIN/INCH
- ELA = 180 GPD / 1.5 GPD/SF = 120 SF

EFFECTIVE LEACHING AREA PROVIDED (TECHNICAL STANDARDS - SECTION E.1 - PROPRIETARY LEACHING SYSTEMS)
- USE 18" CONCRETE GALLERIES (6.2 SF/LF SPACED @ 12' O.C.)
- REQUIRED MINIMUM LENGTH = 120 SF / 6.2 SF/LF = 19.4 LF
- PRIMARY = 1 ROW 40 LF

SEPTIC TANK (CT DPH TECHNICAL STANDARDS - SECTION V.B.I)
- 1,000 GAL

GENERAL NOTES (SEPTIC SYSTEM):

1. THE APPLICANT IS PROPOSING TO INSTALL THREE (3) CODE-COMPLIANT SEPTIC SYSTEMS, ONE (1) FOR EACH RESIDENTIAL BUILDING AND ONE (1) FOR THE COMMINITY CENTER.
2. NO PROPERTIES ARE SERVED BY A WELL AND A SUBSURFACE SEWAGE DISPOSAL SYSTEM. THERE ARE NO KNOWN POTABLE WATER SUPPLY WELLS WITHIN 75 FEET OF THE PROPOSED SEPTIC SYSTEMS.
3. THE USE OF A GARBAGE GRINDER **OR** A WATER SOFTENER IS NOT RECOMMENDED. IF A GARBAGE GRINDER IS INSTALLED, THE PROPOSED SEPTIC TANK SIZE SHALL BE INCREASED IN CONFORMANCE WITH THE PUBLIC HEALTH CODE.
4. NO PART OF THE SEPTIC SYSTEM SHALL BE INSTALLED WITHIN 25' OF ANY UPSLOPE FOOTING DRAIN OR WITHIN 50' OF ANY DOWNSLOPE DRAIN. NO PART OF THE PROPOSED SEPTIC SYSTEMS SHALL BE INSTALLED LESS THAN 25 FEET FROM ANY SURFACE DRAIN, UNLESS THAT DRAIN IS TIGHT-PIPE.
5. A MINIMUM OF 5 FEET OF SEPARATION MUST BE PROVIDED BETWEEN ANY PART OF THE SEPTIC SYSTEM AND ALL UNDERGROUND UTILITY TRENCHES AND 25 FEET FROM ANY WELL. EXCAVATIONS BETWEEN 5 TO 25 FEET FROM THE SEPTIC SYSTEM SHALL NOT BE BACKFILLED WITH FREE DRAINING MATERIAL. ANY WATER LINES SHALL BE A MINIMUM OF 10 FEET FROM ANY PART OF ANY SEPTIC SYSTEM.

GENERAL CONSTRUCTION NOTES (SEPTIC SYSTEM):

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CONNECTICUT PUBLIC HEALTH CODE, AS AMENDED.
2. A LICENSED SURVEYOR SHALL FIELD STAKE THE SEPTIC SYSTEMS.
3. NO WORK SHALL COMMENCE IN THE SYSTEM AREAS UNTIL A SEPTIC PERMIT HAS BEEN TAKEN OUT BY THE LICENSED INSTALLER.
4. THE LICENSED INSTALLER SHALL PERFORM SITE PREPARATION AND SHOULD CONTACT "CALL BEFORE YOU DIG" AT 1-800-922-4455 TO VERIFY ALL UTILITY LOCATIONS.
5. THE LICENSED INSTALLER SHALL BE ON SITE DURING SYSTEM CONSTRUCTION. THE SYSTEM SHALL BE INSTALLED IN CONFORMANCE TO THESE PLANS. ANY REQUESTED MODIFICATIONS SHALL BE DISCUSSED WITH THE ENGINEER PRIOR TO CONSTRUCTION. ALL MODIFICATIONS MUST BE APPROVED BY THE ENGINEER AND LOCAL HEALTH DISTRICT PRIOR TO CONSTRUCTION.
6. THE LICENSED INSTALLER SHALL BE RESPONSIBLE FOR PREPARING THE LEACHING AREA IN A WORKMANLIKE MANNER. ALL NECESSARY STEPS SHALL BE TAKEN TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOILS FROM OVER COMPACTION AND SILTATION ONCE EXPOSED.
7. THE INSTALLER SHALL NOTIFY THE ENGINEER AND LOCAL HEALTH OFFICIAL AT LEAST 24 HOURS IN ADVANCE OF BEING READY FOR A FINAL INSPECTION. THE ENGINEER AND SANITARIAN SHALL CONDUCT THE FINAL INSPECTION TOGETHER WITH THE LICENSED INSTALLER. NO DEVIATION FROM THE PLAN APPROVED BY THE SANITARIAN SHALL BE ALLOWED WITH PRIOR APPROVAL FROM THE SANITARIAN. THE SYSTEM SHALL NOT BE BACKFILLED WITHOUT THE APPROVAL AND CONSENT OF THE ENGINEER AND SANITARIAN.
8. A LICENSED ENGINEER OR SURVEYOR SHALL PREPARE A SEPTIC SYSTEM AS-BUILT DRAWING CERTIFYING THE SYSTEM IS CODE-COMPLIANT. THIS PLAN SHALL INCLUDE ALL ESSENTIAL ACCESS POINTS INCLUDING TANK MANHOLES, DISTRIBUTION BOXES AND LEACHING SYSTEM ENDS. THE AS-BUILT PLAN SHALL BE COMPLETED IN A TIMELY MANNER.
9. THE LEACHING SYSTEM SHALL BE PROPERLY COVERED BY THE LICENSED SYSTEM INSTALLER WITHIN TWO (2) WORKING DAYS FOLLOWING THE LOCAL HEALTH DISTRICT'S FINAL INSPECTION AND APPROVAL.
10. NO HEAVY EQUIPMENT SHALL BE DRIVEN OVER THE INSTALLED LEACHING SYSTEM AREAS UNTIL AREA IS BROUGHT TO FINAL GRADE AND PAVEMENT IS INSTALLED.
11. ALL COMPONENTS OF THE PROPOSED SEPTIC SYSTEM SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND PUBLIC HEALTH CODE REQUIREMENTS. A MINIMUM OF 12" OF COVER SHALL BE PROVIDED OVER ALL SEPTIC SYSTEM COMPONENTS.
12. THE LICENSED INSTALLER IS RESPONSIBLE TO INSTALL THE SUBSURFACE SEWAGE DISPOSAL SYSTEM IN ACCORDANCE WITH THE APPROVED PLAN.
13. H-20 RISERS TO GRADE SHALL BE INSTALLED ON ALL TANKS, DISTRIBUTION BOXES AND WHERE REQUIRED. STEEL WATERTIGHT LIDS AND CONCRETE RISER EXTENSIONS, OR EQUAL, SHALL BE PROVIDED IN VEHICULAR TRAVEL AREAS.
14. A TWO-PART H-20 CONCRETE SEPTIC TANK SHALL BE USED BUT MUST BE MADE 100% WATERTIGHT BY GASKETING AND MORTARING ALL JOINTS. IF A TWO-PART TANK IS USED , IT SHALL BE FILLED WITH WATER ABOVE THE JOINT AND INSPECTED BY THE ENGINEER AND/OR THE LOCAL HEALTH OFFICIAL WITHIN 24 HOURS. THE CONTRACTOR SHALL MONITOR THE WATER LEVEL IN THE TANK DURING THIS PERIOD AND SHALL PERMANENTLY REPAIR ANY LEAKS TO THE SATISFACTION OF THE ENGINEER AND THE LOCAL HEALTH OFFICIAL.
15. NO PART OF THE PROPOSED SEPTIC SYSTEM SHALL BE INSTALLED LESS THAN 25 ' FROM THE EXISTING BUILDING OR LESS THAN 15' FROM ANY PROPERTY LINE.
16. THE CONTRACTOR SHALL GRADE THE AREA IN THE VICINITY OF THE LEACHING FIELD IN SUCH A MANNER THAT ALL SURFACE RUNOFF IS SUFFICIENTLY DIRECTED AWAY FROM THE LEACHING FIELD AREA.

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Prepared for:

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105 BRIDGE ROAD APARTAMENTS

105 BRIDGE ROAD
HADDAM, CT

DATE:	REVISION:
12/2/2021	

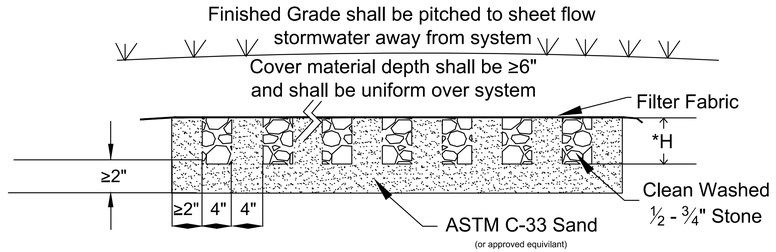
STATE OF CONNECTICUT
WILLIAM G. WALTER
LICENSED
PROFESSIONAL ENGINEER

PROJECT NO.: 70673.01
SCALE: AS SHOWN
DATE: 12.02.2021
DRAWN BY: JCO, GL
CHECKED BY: WW

SEPTIC PLAN

DRAWING NO.:
C-4.1

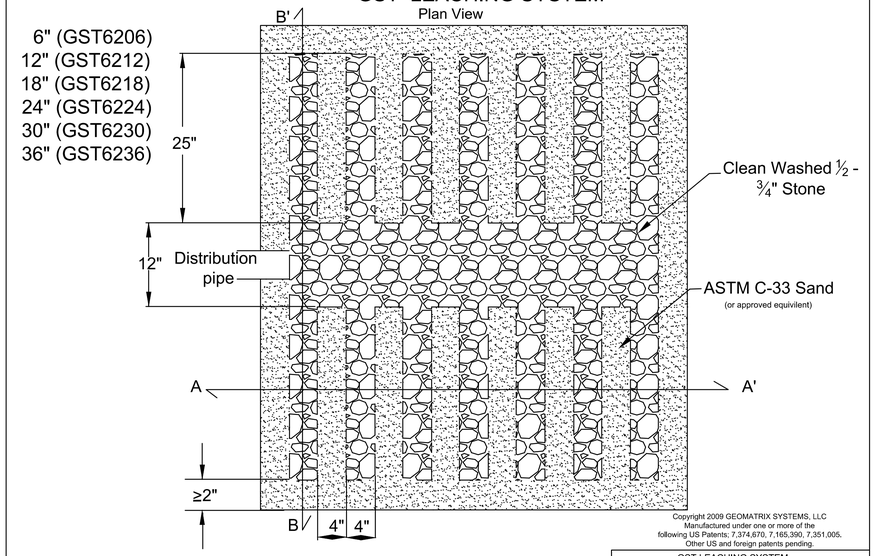
GEOMATRIX GST™ LEACHING SYSTEM
A-A' CROSS SECTION



*H= 6" (GST6206)
12" (GST6212)
18" (GST6218)
24" (GST6224)
30" (GST6230)
36" (GST6236)

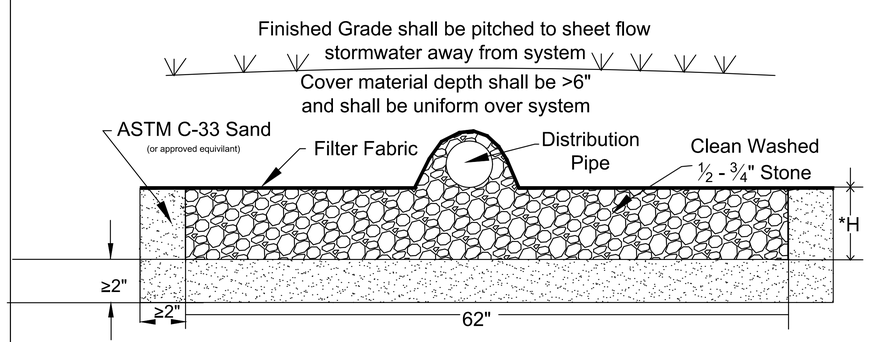
GEOMATRIX GST LEACHING SYSTEM A-A' Cross Section Geomatrix Systems, LLC., Old Saybrook, CT 860-510-0730	
SCALE: NONE	REV: C-04/28/09
DATE: 6/28/2007	ACAD NO. GEO ST LS PLAN VIEW.DWG
DRAWN BY: ERP	SHEET 2 OF 3

GST™ LEACHING SYSTEM
Plan View



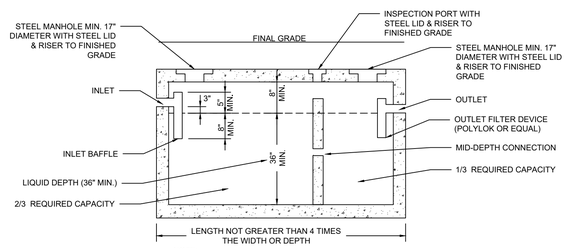
GST LEACHING SYSTEM Plan View Geomatrix Systems, LLC., Old Saybrook, CT 860-510-0730	
SCALE: NONE	REV: C-04/28/09
DATE: 6/28/2007	ACAD NO. GEO ST LS PLAN VIEW.DWG
DRAWN BY: ERP	SHEET 1 OF 3

GST™ LEACHING SYSTEM
B-B' CROSS SECTION



*H= 6" (GST6206)
12" (GST6212)
18" (GST6218)
24" (GST6224)
30" (GST6230)
36" (GST6236)

GST LEACHING SYSTEM B-B' Cross Section Geomatrix Systems, LLC., Old Saybrook, CT 860-510-0730	
SCALE: NONE	REV: C-04/28/09
DATE: 6/28/2007	ACAD NO. GEO GLS B-B'.DWG
DRAWN BY: ERP	SHEET 3 OF 3



NOTE:
STEEL MANHOLE LIDS SHALL INCLUDE PROVISIONS TO PREVENT UNAUTHORIZED ACCESS

SEPTIC TANK
SCALE: N.T.S.

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105 BRIDGE ROAD APARTAMENTS
105 BRIDGE ROAD
HADDAM, CT

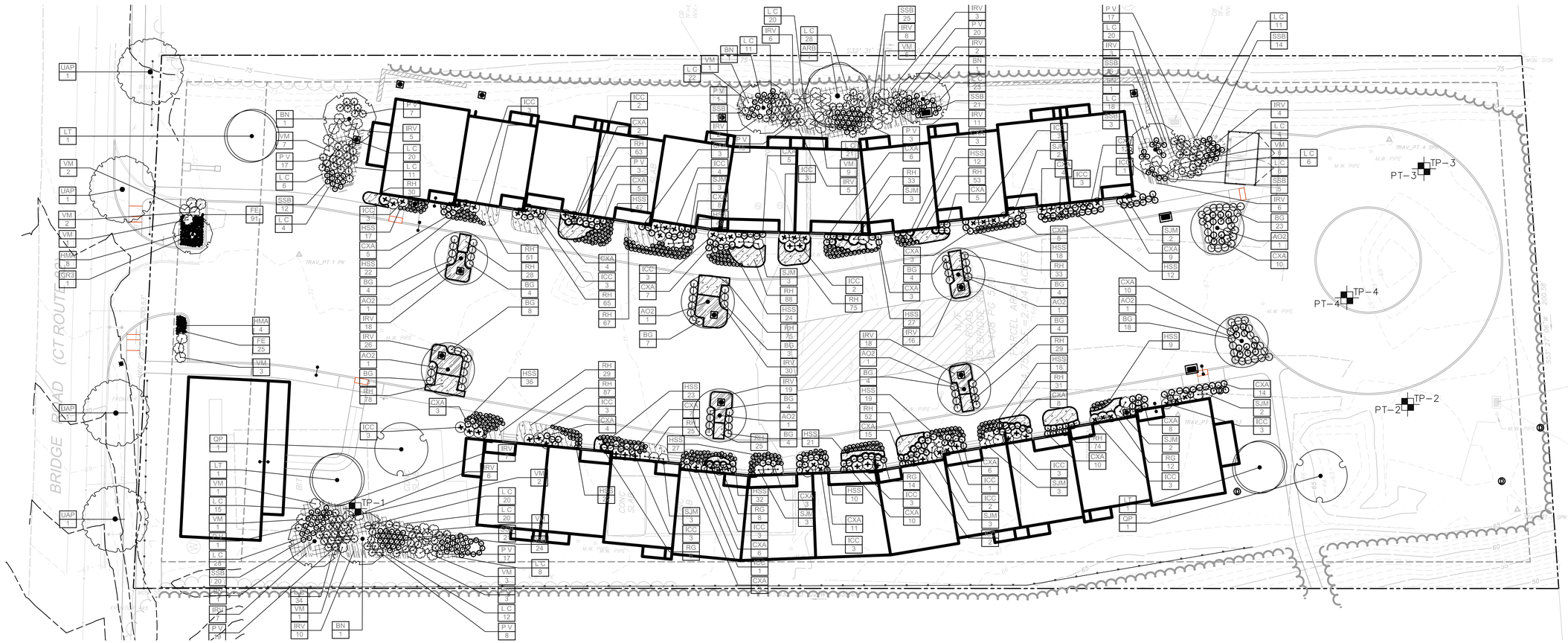
DATE:	REVISION:
12/2/2021	

STATE OF CONNECTICUT · WILLIAM G. WALTER · LICENSED PROFESSIONAL ENGINEER

PROJECT NO.: 70673.01
SCALE: AS SHOWN
DATE: 12.02.2021
DRAWN BY: JCO, GL
CHECKED BY: WW

SEPTIC DETAILS

DRAWING NO.:
C-4.2



PLANT SCHEDULE

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	ROOT	CAL.	REMARKS	SIZE
	AO2	8	ACER RUBRUM 'OCTOBER GLORY' / OCTOBER GLORY RED MAPLE	B & B	2-3" CAL.		
	ARB	1	ACER RUBRUM `BRANDYWINE` / RED MAPLE	B & B	3.5-4" CAL.	14-16' HT.	
	BN	6	BETULA NIGRA `HERITAGE` / RIVER BIRCH `HERITAGE`	B & B	MULTI-TRUNK	8-10' HT.	
	LT	3	LIRIODENDRON TULIPIFERA / TULIP POPLAR	B & B	3.5-4" CAL.	FULL SPECIMEN	
	QP	2	QUERCUS PHELLOS / WILLOW OAK	B & B	3.5-4" CAL.	FULL SPECIMEN	
	UAP	4	ULMUS AMERICANA `PRINCETON` / AMERICAN ELM	B & B	4-4.5" CAL.	16-18' HT.	
ORNAMENTAL TREES	CODE	QTY	BOTANICAL / COMMON NAME	ROOT	CAL.	REMARKS	SIZE
	CR3	1	CORNUS X `RUTGAN` / STELLAR PINK DOGWOOD	B & B	4-4.5" CAL.	10-12' HT.	
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	REMARKS	HEIGHT	SPREAD
	BG	94	BUXUS X `GREEN VELVET` / GREEN VELVET BOXWOOD	#2 CONT.			
	FE	116	FESTUCA GLAUCA `ELIJAH BLUE` / ELIJAH BLUE FESCUE	#1 CONT			
	ICC	63	ILEX CRENATA `COMPACTA` / DWARF JAPANESE HOLLY	CONT.	5` O.C.	24" MIN.	18-24"
	VM	47	VIBURNUM ACERIFOLIUM / MAPLELEAF VIBURNUM	5 GAL			
DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	REMARKS	HEIGHT	SPREAD
	SJM	29	SPIRAEA JAPONICA `MAGIC CARPET` / MAGIC CARPET SPIREA	#3 CONT.	18-24" HT,	18-24" SPR.	
GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	REMARKS	HEIGHT	SPREAD
	CXA	218	CALAMAGROSTIS X ACUTIFLORA / FEATHER REED GRASS	#3 CONT.	3.5-4" CAL.	18-24" HT.	
	HMA	12	HAKONECHLOA MACRA `ALL GOLD` / JAPANESE FOREST GRASS	#1 CONT.	12-15" HT.	12-15" SPR.	
	HSS	440	HELICTOTRICHON SEMPERVIRENS `SAPPHIRE` / BLUE OAT GRASS	#3 CONT.	15-18" HT.	15-18" SPR.	
	P V	128	PANICUM VIRGATUM / SWITCH GRASS	5 GAL	2` O.C.	2`	
	SSB	167	SCHIZACHYRIUM SCOPARIUM `THE BLUES` / THE BLUES LITTLE BLUESTEM	#1 CONT.	18-24" HT.	12-15" SPR.	
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	REMARKS	SPACING	
	IRV	215	IRIS VERSICOLOR / BLUE FLAG	FLAT			
	L C	368	LOBELIA CARDINALIS / CARDINAL FLOWER	FLAT			
	RG	40	RUDBECKIA FULGIDA `GOLDSTRUM` / CONEFLOWER	#1 CONT.	12-24" HT.	9-12" SPR.	
	RH	1,091	RUDBECKIA HIRTA / BLACK-EYED SUSAN	3 LB/ACRE			

0 20' 40'
1" = 20'

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105 BRIDGE ROAD
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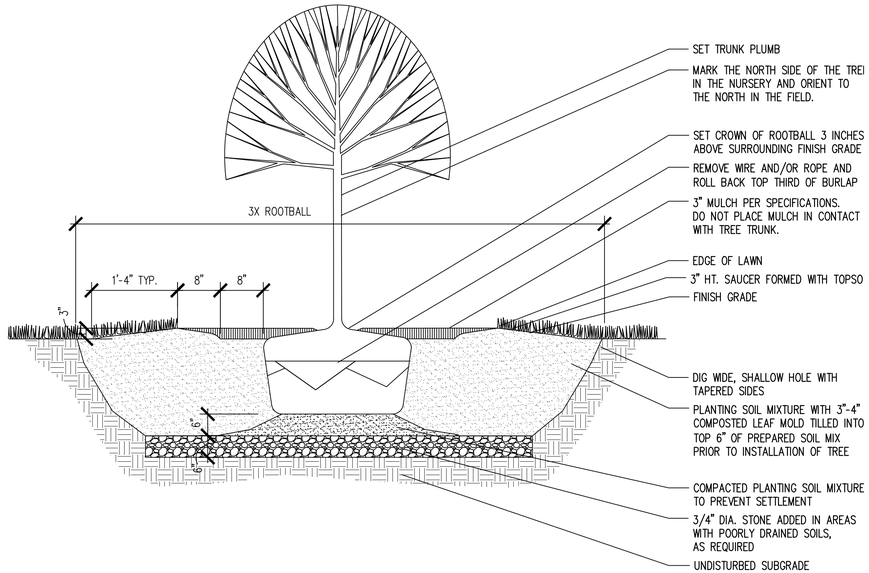
DATE:	REVISION:
12/2/2021	

STATE OF CONNECTICUT
RYAN C. WOOD
NO. 1088
REGISTERED LANDSCAPE ARCHITECT

PROJECT NO.: 70673.01
SCALE: AS SHOWN
DATE: 12.02.2021
DRAWN BY: JCO, GL
CHECKED BY: WW

LANDSCAPE PLAN

DRAWING NO.:
C-5.0

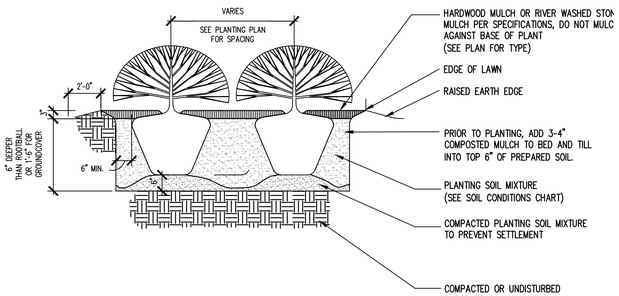


1 DECIDUOUS TREE PLANTING

1/2" = 1'-0"

NOTES:

1. FOR CONTAINER GROWN SHRUBS, GENTLY PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF CONTAINER.
2. FOR B&B SHRUBS, FOLD BURLAP FROM TOP OF ROOT BALL DOWN TO GROUND.
3. INCORPORATE COMMERCIALLY PREPARED MYCORRHIZA SPORES IN THE SOIL IMMEDIATELY AROUND THE ROOT BALL AT RATES SPECIFIED BY THE MANUFACTURER.
4. CONFIRM THAT WATER DRAINS OUT OF THE SOIL DURING THE DESIGN PHASE, DESIGN ALTERNATIVE DRAINAGE SYSTEMS, AS REQUIRED.



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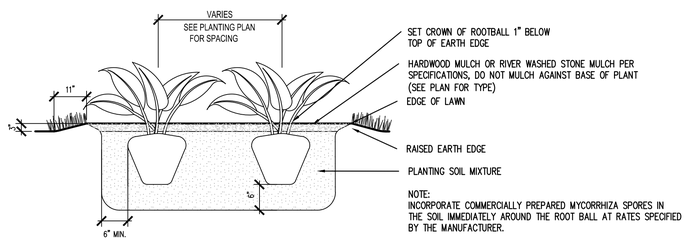
2 SHRUB PLANTING BED

N.T.S.



3 PERENNIAL PLANTING (continuous planting bed)

N.T.S.

1. THE LANDSCAPE PLAN AND DETAIL SHEET ARE FOR LANDSCAPING INFORMATION ONLY. REFER TO OTHER PLANS AND DETAILS FOR ALL OTHER INFORMATION. THE TERM "OWNER" SHALL REFER TO ANY INDIVIDUAL DULY AUTHORIZED TO ACT ON THE OWNER'S BEHALF.

2. EXERCISE CARE WHEN DIGGING IN AREAS OF POTENTIAL CONFLICT WITH UNDERGROUND OR OVERHEAD UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DUE TO CONTRACTOR'S NEGLIGENCE AND SHALL REPLACE OR REPAIR ANY DAMAGE AT CONTRACTOR'S EXPENSE. PRIOR TO DIGGING AND INSTALLATION OF PLANT MATERIAL, THE CONTRACTOR SHALL CONTACT "DIG SAFE" 72 HOURS BEFORE COMMENCEMENT OF WORK AT "811" AND VERIFY ALL UTILITY SYSTEM LOCATIONS.

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

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

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

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

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

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

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

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

11. LANDSCAPE PLANTING AREAS MUST BE FREE DRAINING. PAVEMENT, COMPACTED SUBGRADE, DEAD OR DYING PLANT MATERIAL, BLASTED ROCK, STONES GREATER THAN 1" IN DIAMETER, AND ANY OTHER MATERIAL HARMFUL TO PLANT GROWTH AND DEVELOPMENT SHALL BE REMOVED FROM AREAS TO BE LANDSCAPED AS REQUIRED BY PLANTING DETAILS OR SPECIFICATIONS.
PLANTING AREAS SHALL BE SCARIFIED TO A DEPTH OF 3" OR AS NOTED ON THE PLANTING DETAILS. SCARIFIED SOIL DEPTH SHALL NOT COUNT TOWARDS THE SOIL DEPTH MEASUREMENT.

12. PLANTING SOIL:
DEPTH: PLANTING SOIL SHALL BE INSTALLED AT A MINIMUM DEPTH OF 4" OR AS NOTED IN THE LANDSCAPE DETAILS.

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

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

A. NOT TO CONTAIN MATERIALS HARMFUL TO PLANT LIFE, TO BE CLEAN, FERTILE, FRIABLE, AND WELL DRAINING. ALL PLANTING SOIL SHALL BE FREE OF ANY SUBSOIL EARTH CLODS, SODS, STONES OVER 1" IN ANY DIMENSION, STICKS, ROOTS, WEEDS, LITTER AND OTHER DELETERIOUS MATERIAL. PLANTING SOIL SHALL BE UNIFORM IN QUALITY AND TEXTURE.
B. PLANTING SOIL SHALL HAVE THE FOLLOWING OPTIMUM RANGES UNLESS OTHERWISE APPROVED BY THE OWNER OR LANDSCAPE ARCHITECT.
   ORGANIC CONTENT — 3% - 6% FOR LAWN AREAS; 4% - 8% FOR TREE AND SHRUB PLANTERS.
   PH — 6.0 - 7.3
C. NUTRIENT LEVELS SHALL BE ACHIEVED BY THE CONTRACTOR'S ADDITION OF AMENDMENTS TO THE PLANTING SOIL TO MEET THE OPTIMUM NUTRIENT LEVELS SPECIFIED IN THE TESTING LABORATORY REPORT FOR EACH OF PLANTS TO BE INSTALLED.
D. SOIL SHALL BE COMPACTED TO A SURFACE PENETRATION RESISTANCE OF 75-125 LBS/SQ.IN.
E. SOIL MAY BE TREATED FOR WEEDS WITH PRE-EMERGENT OR POST-EMERGENT HERBICIDE, AS NEEDED AND AS APPROPRIATE FOR THE APPLICATION SEASON OR LOCATION, OR ELIMINATE GROWTH OF UNWANTED PLANT MATERIAL. APPLY HERBICIDES IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. HERBICIDE APPLICATOR MUST BE LICENSED IN THE COMMONWEALTH OF MASSACHUSETTS, AND PERFORM APPLICATIONS IN ACCORDANCE WITH LOCAL REQUIREMENTS, PERMITTING STIPULATIONS, AND ANY OTHER RESTRICTIONS INCLUDING AND IN EXCESS OF STATE AND FEDERAL REGULATIONS.
F. PROPOSED PLANTING SOIL SHALL MEET THE USDA SOILS TEXTURAL PERCENTAGES OF SAND, SILT, AND CLAY FOR FOLLOWING CLASSIFICATIONS:
   - LOAM
   - SANDY LOAM WHERE SAND DOES NOT EXCEED 70% AND CLAY IS NOT LESS THAN 5%
   - SANDY CLAY LOAM WHERE SAND DOES NOT EXCEED 70% AND CLAY LESS THAN 28%.
G. MODIFICATION TO THE PLANTING SOIL CHARACTERISTICS DESCRIBED ABOVE MAY BE SUBMITTED FOR APPROVAL BY THE LANDSCAPE ARCHITECT. CONTRACTOR MUST DEMONSTRATE PROPOSED CHARACTERISTICS ARE EQUAL TO OR SUPERIOR TO THE SPECIFIED CHARACTERISTICS WITH RESPECT TO SUPPORTING PLANT GROWTH, AND STORMWATER MANAGEMENT.

13. PLANTING AMENDMENTS:
APPLY FERTILIZER AND OTHER AMENDMENTS AS RECOMMENDED FOR EACH PLANTING AREA BY SOIL ANALYSIS. APPLY AMENDMENTS IN A MANNER CONSISTENT WITH MANUFACTURER'S RECOMMENDATIONS.

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

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

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

	SPRING	FALL
EVERGREEN TREES AND SHRUBS	APRIL 1 TO JUNE 15	SEPTEMBER 1 TO OCTOBER 15
DECIDUOUS TREES AND SHRUBS	APRIL 1 TO JUNE 15	SEPTEMBER 15 TO NOVEMBER 15
GROUNDCOVERS	APRIL 1 TO JUNE 15	SEPTEMBER 1 TO OCTOBER 15
PERENNIALS	MAY 15 TO JUNE 15	SEPTEMBER 1 TO OCTOBER 15
BULBS	N/A	SEPTEMBER 15 TO NOVEMBER 15
SEED MIXES	PER MANUFACTURERS RECOMMENDATIONS OR AS LISTED IN SEED MIX NOTES	

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

18. UNLESS OTHERWISE NOTED IN DRAWING SET, NEW TREELINES AND SEED MIX HATCHING SHALL EQUAL CLEARING AND GRUBBING LIMIT FOR CONSTRUCTION.

19. ALL DISTURBED AREAS NOT OTHERWISE DEVELOPED SHALL BE SEEDED WITH THE LAWN SEED MIX, OR MULCHED TO MATCH THE ADJACENT PLANT BEDS.

20. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING AND INSTALLING AN IRRIGATION SYSTEM THAT WILL SUPPORT ALL VEGETATION ON-SITE.

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BRIDGE ROAD APARTAMENTS
105 BRIDGE ROAD
HADDAM, CT

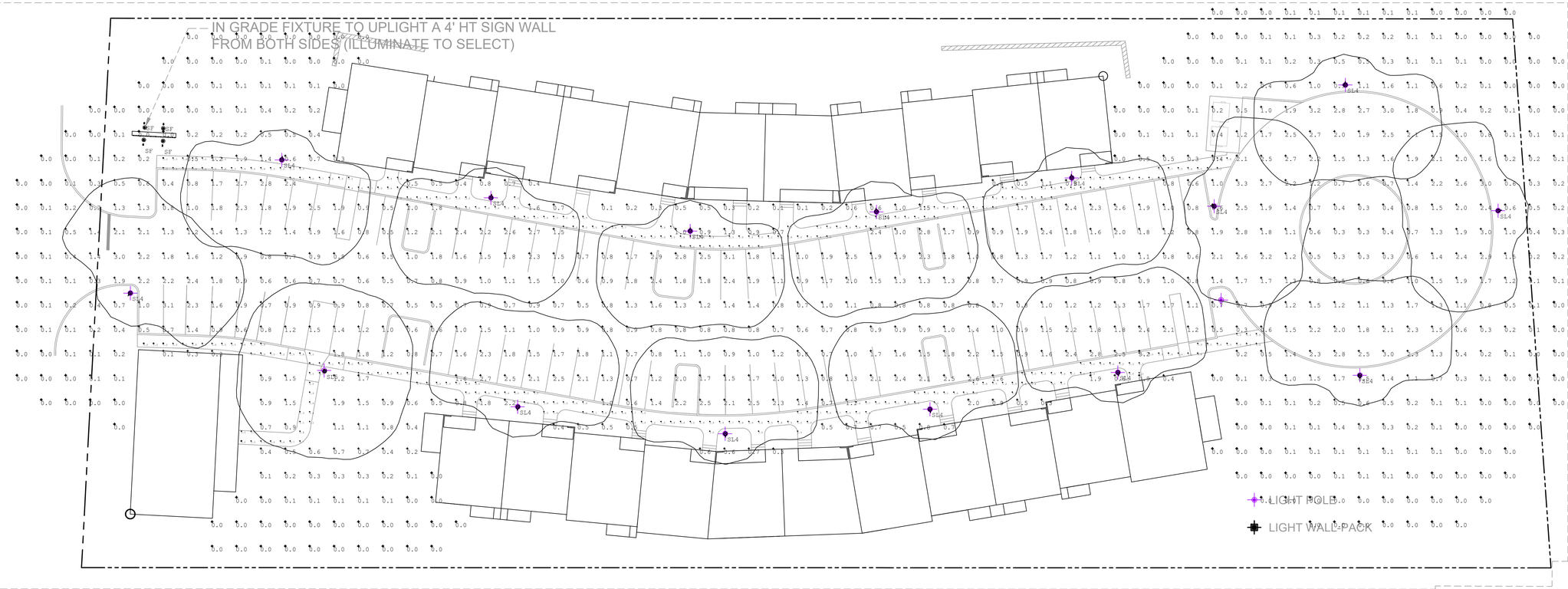
DATE:	REVISION:
12/2/2021	

STATE OF CONNECTICUT — RYAN C. DOLAN — NO. 0000 — REGISTERED LANDSCAPE ARCHITECT

PROJECT NO.: 70673.01
SCALE: AS SHOWN
DATE: 12.02.2021
DRAWN BY: JCO, GL
CHECKED BY: WW

LANDSCAPE DETAILS

DRAWING NO.:
C-5.1



Luminaire Schedule					
Qty	Label	Lum. Watts	Arrangement	LLF	Description
14	SL4	70.25	SINGLE	0.900	AAL PROV2-36L-615-3K7-4W-x-x-UNV Mounted on 12FT Pole
1	SL5	70.25	SINGLE	0.900	AAL PROV2-36L-615-3K7-5W-x-x-UNV Mounted on 12FT Pole
4	SF	20.3	SINGLE	0.900	Hubbell LBUL-20-120-3K (3FT 6IN Setback, 30 Degree Tilt)

Calculation Summary							
Label	Units	Avg	Max	Min	Avg/Min	Max/Min	Grid Height
Sidewalk	Fc	1.54	3.1	0.2	7.70	15.50	0
Signage	Fc	28.39	58.8	6.8	4.18	8.65	0.5
Site Calc	Fc	0.82	3.3	0.0	N.A.	N.A.	0
Parking & Drive Lane	Fc	1.50	3.3	0.4	3.75	8.25	

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105 BRIDGE ROAD APARTAMENTS

105 BRIDGE ROAD
HADDAM, CT

DATE:	REVISION:
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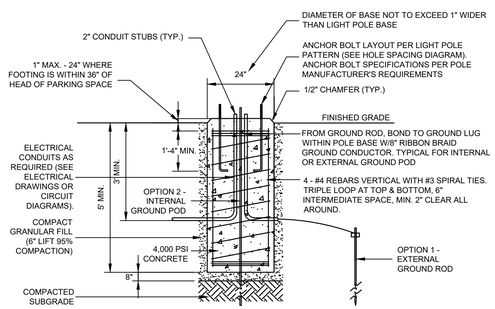
STATE OF CONNECTICUT
WILLIAM G. WALTER
LICENSED
PROFESSIONAL ENGINEER

PROJECT NO.: 70673.01
SCALE: AS SHOWN
DATE: 12.02.2021

DRAWN BY: JCO, GL
CHECKED BY: WW

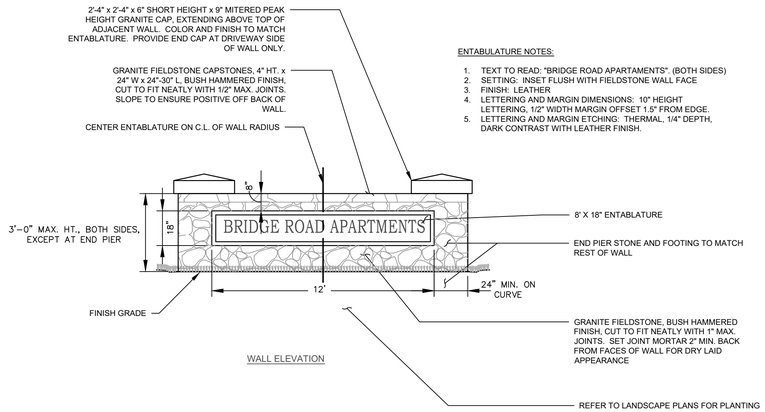
PHOTOMETRIC PLAN

DRAWING NO.:
C-6.0



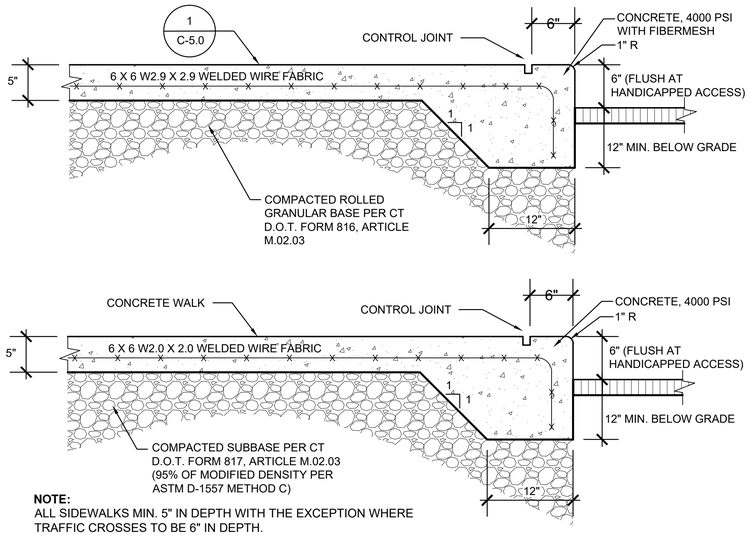
LIGHT POLE BASE

SCALE: NONE



STONE WALL AND ENTRANCE SIGN IN STONE WALL

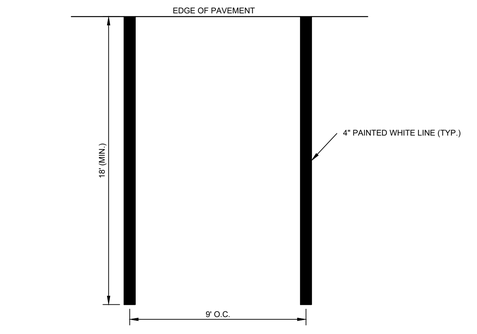
SCALE: NONE



NOTE:
ALL SIDEWALKS MIN. 5" IN DEPTH WITH THE EXCEPTION WHERE TRAFFIC CROSSES TO BE 6" IN DEPTH.
CONTRACTOR TO COMPLY WITH ALL A.D.A.REQUIREMENTS

MONOLITHIC CONCRETE SIDEWALK AND CURB

SCALE: NONE



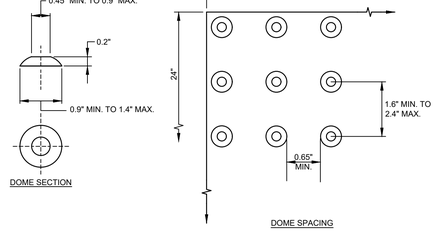
STANDARD PAINTED PARKING MARKINGS

SCALE: NONE
PVT-103-CT

1. MAXIMUM SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE SIDEWALK RAMP OR ACCESSIBLE ROUTE SHOULD NOT EXCEED 20:1.
2. CARE SHALL BE TAKEN TO ASSURE UNIFORM GRADE ON THE RAMP, FREE OF SAGS AND ABRUPT GRADE CHANGES.
3. ALL RAMPS SHALL BE CONSTRUCTED OF CONCRETE.
4. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP. THE SURFACE ALONG ACCESSIBLE ROUTES SHALL BE STABLE, FIRM AND SLIP RESISTANT IN COMPLIANCE WITH ADA ACCESSIBILITY GUIDELINES SECTION 4.5.
5. EXPANSION JOINTS IN CONCRETE SHALL MATCH THOSE IN ADJACENT SIDEWALKS BUT IN NO CASE SHALL THE SPACING BETWEEN EXPANSION JOINTS EXCEED 12' UNLESS OTHERWISE NOTED.
6. CURBING WITHIN THE LIMITS OF THE NEW SIDEWALK RAMP SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE REQUIREMENTS OF CONNDOT SPECIFICATIONS FORM 817 SECTIONS 8.11 AND 8.13.
7. HANDICAP RAMPS CONFORMING WITH CONNECTICUT GENERAL STATUTES, SEC. 7-118a, SHALL BE INCORPORATED IN ALL PROPOSED SIDEWALKS AT ALL STREET INTERSECTIONS, AND AT ALL OTHER LOCATIONS WHERE THE GRADE OF A DRIVEWAY OR OTHER FACILITY TAKES PRECEDENCE OVER THE GRADE OF THE PROPOSED SIDEWALK.
8. TRANSITION TO FULL HEIGHT CURB. INSTALL STONE CURBING IF ADJACENT CURBING IS STONE. INSTALL CONCRETE CURBING IF ADJACENT CURBING IS CONCRETE OR BITUMINOUS.
9. INSTALL THE EDGE OF THE DETECTABLE WARNING STRIP 6 INCHES FROM THE EDGE OF ROAD.
10. TO PERMIT WHEELCHAIR WHEELS TO ROLL BETWEEN DOMES OF THE DETECTABLE WARNING STRIPS, ALIGN DOMES ON A SQUARE GRID. IN THE DIRECTION OF PEDESTRIAN TRAVEL.

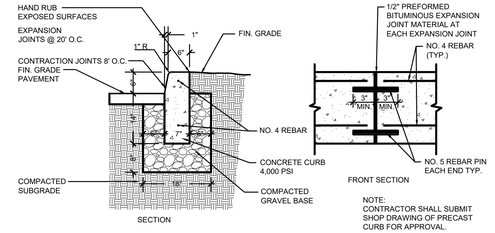
SIDEWALK RAMP NOTES

SCALE: NONE
HC-109-CT



DETECTABLE WARNING

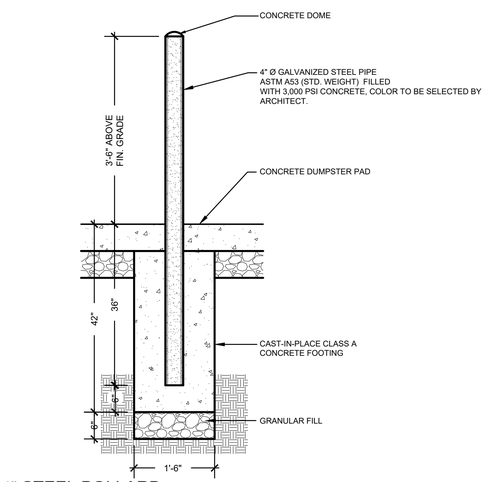
SCALE: NONE
HC-108-CT



NOTE:
CONTRACTOR SHALL SUBMIT SHOP DRAWING OF PRECAST CURB FOR APPROVAL.

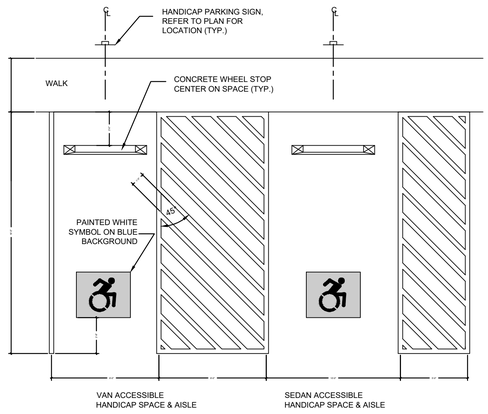
INTEGRAL CONCRETE CURB

SCALE: NONE



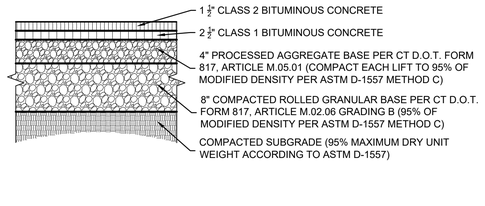
4" STEEL BOLLARD

SCALE: NONE



HANDICAP PARKING DETAIL

SCALE: NONE



BITUMINOUS CONCRETE PAVEMENT SECTION

SCALE: NONE

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105 BRIDGE ROAD APARTAMENTS
105 BRIDGE ROAD
HADDAM, CT

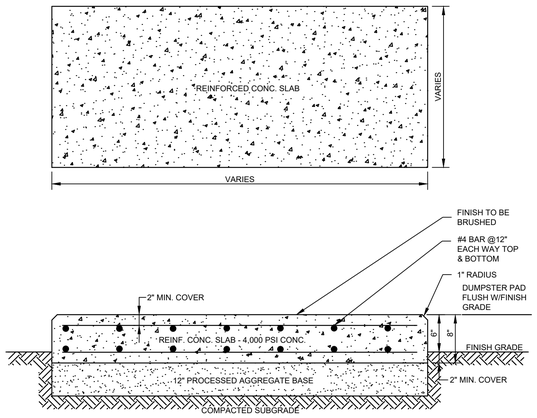
DATE:	REVISION:
12/2/2021	

STATE OF CONNECTICUT · WILLIAM G. WALKER · 18741 · LICENSED PROFESSIONAL ENGINEER

PROJECT NO.: 70673.01
SCALE: AS SHOWN
DATE: 12.02.2021
DRAWN BY: JCO, GL
CHECKED BY: WW

SITE DETAILS

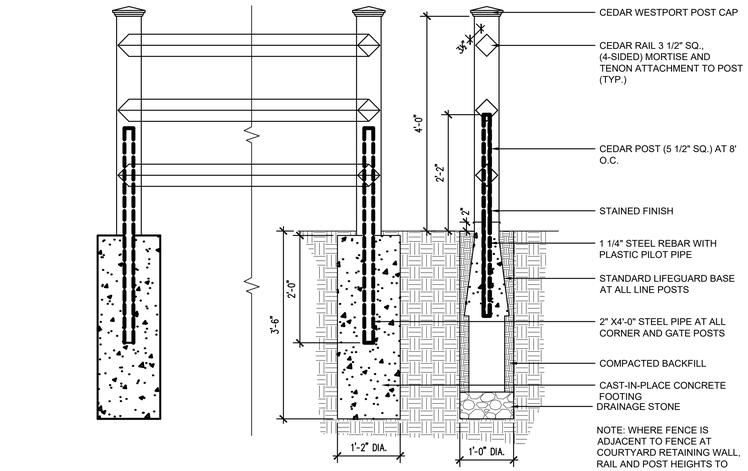
DRAWING NO.:
C-7.0



REINFORCED CONCRETE PAD

SCALE: NONE

PVT-107-CT



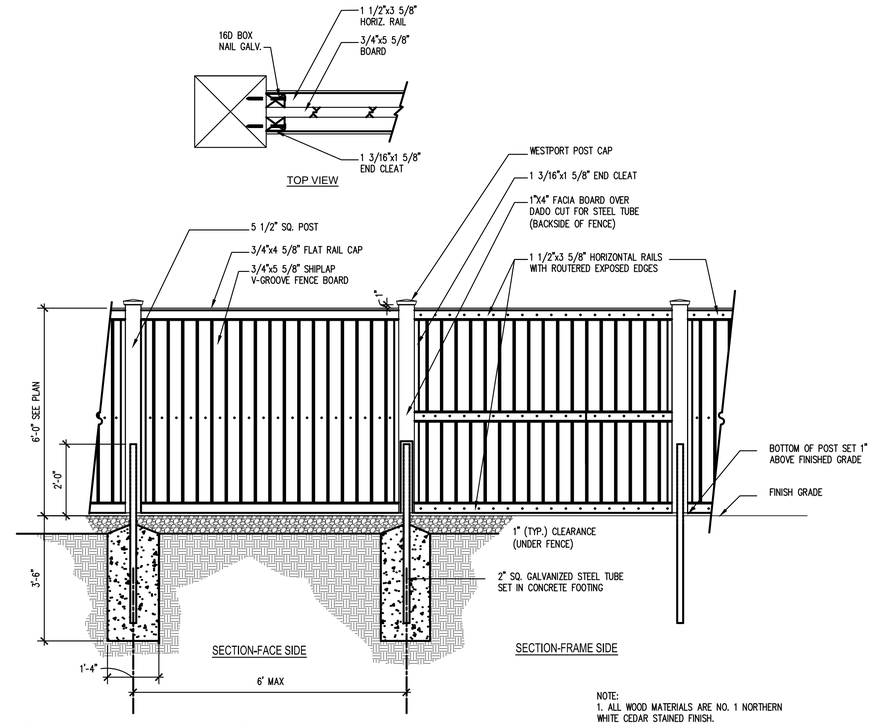
CORNER AND GATE POSTS

PVC RAIL FENCE (3-RAIL)

SCALE: 3/4" = 1'-0"

TYPICAL SIGN SUPPORT - BREAKAWAY TYPE II

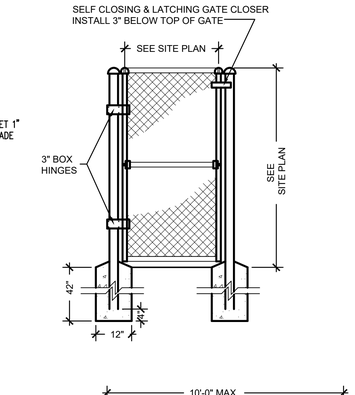
SCALE: NONE

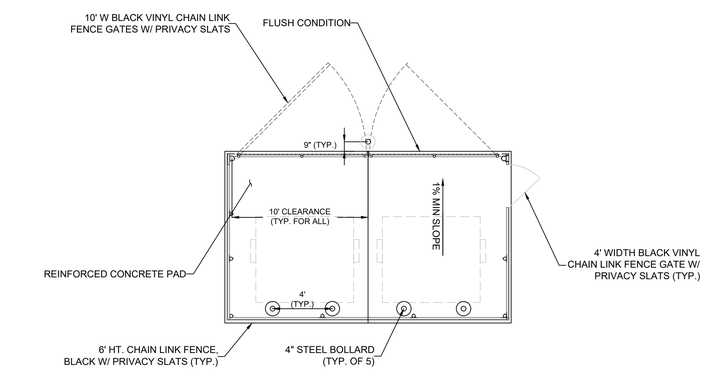


NOTE:
1. ALL WOOD MATERIALS ARE NO. 1 NORTHERN WHITE CEDAR STAINED FINISH.

CEDAR SCREEN FENCE (6 FOOT HEIGHT)

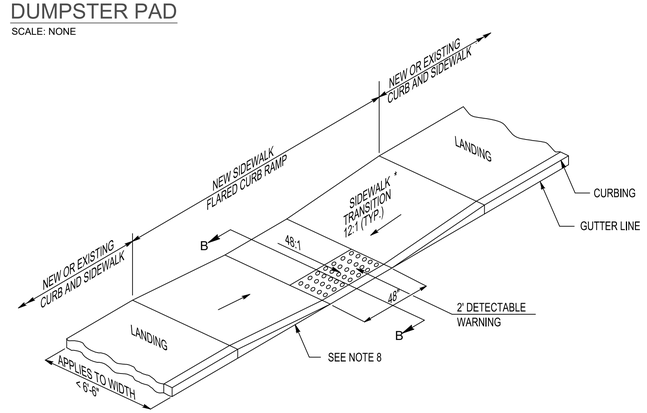
SCALE: 1/2" = 1'-0"





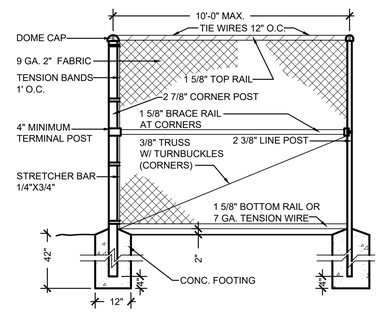
DUMPSTER PAD

SCALE: NONE



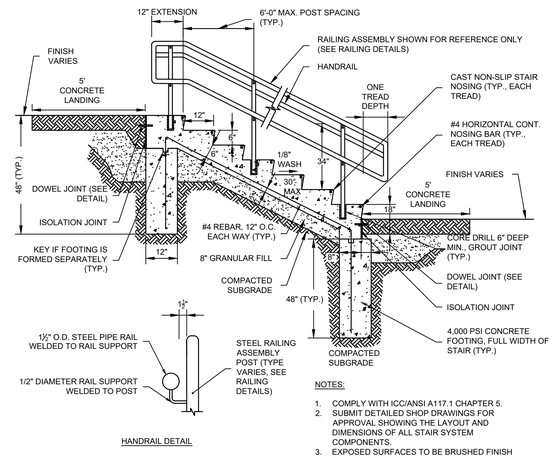
PARALLEL SIDEWALK RAMP (CONNDOT TYPE 1)

SCALE: NONE



CHAIN LINK FENCE & GATE

SCALE: NONE THERMALLY FUSED PVC COATING



NOTES:

1. COMPLY WITH ICC/ANSI A117.1 CHAPTER 5.
2. SUBMIT DETAILED SHOP DRAWINGS FOR APPROVAL SHOWING THE LAYOUT AND DIMENSIONS OF ALL STAIR SYSTEM COMPONENTS.
3. EXPOSED SURFACES TO BE BRUSHED FINISH TROWELED EDGES.
4. MINIMUM WIDTH TO BE 48" CLEAR HANDRAIL TO HANDRAIL.
5. MAXIMUM RADIUS OF CURVATURE AT THE LEADING EDGE OF TREADS SHALL BE 1/2".
6. CONSTRUCT CONCRETE LANDINDS PER SIDEWALK DETAIL.

CONCRETE STAIRS

SCALE: NONE

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105 BRIDGE ROAD APARTAMENTS

105 BRIDGE ROAD
HADDAM, CT

DATE:	REVISION:
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STATE OF CONNECTICUT · WILLIAM G. WALTER · LICENSED PROFESSIONAL ENGINEER

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SITE DETAILS

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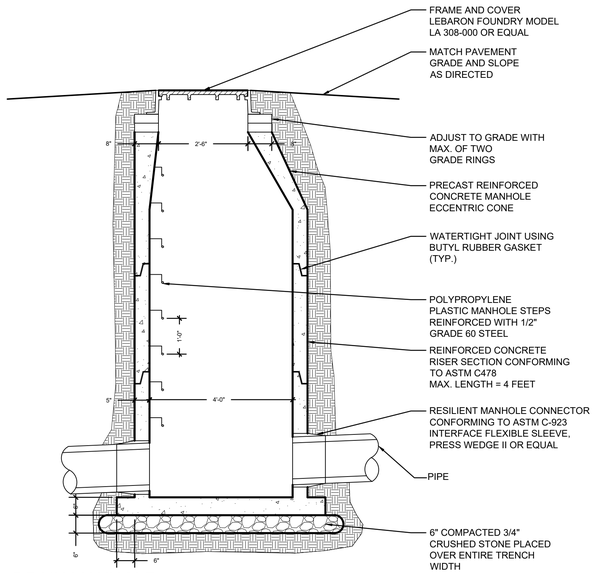
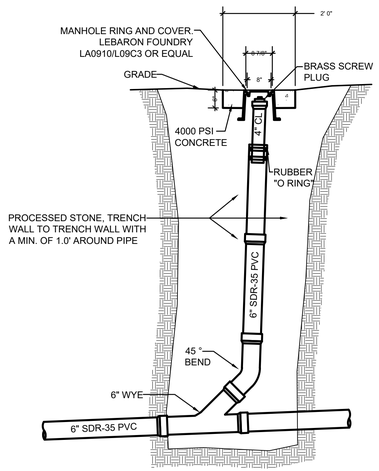


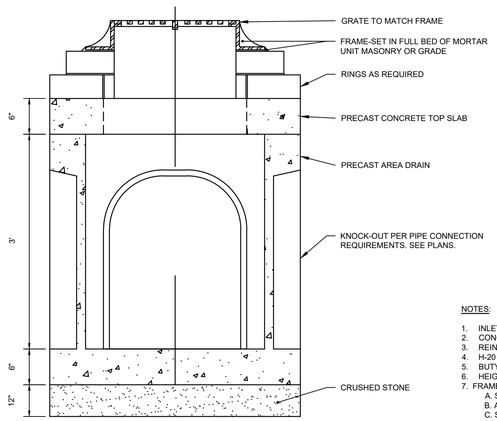
DRAIN MANHOLE

SCALE: NONE

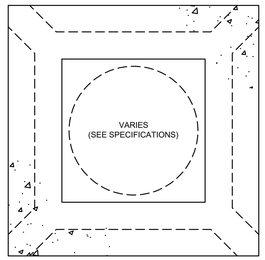


CLEANOUT TO GRADE

SCALE: NONE



ELEVATION



PLAN VIEW (TOP SLAB)

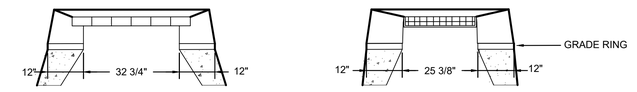
NOTES:

1. INLET SHALL BE 30"x30" CONCRETE AREA DRAIN, AS MANUFACTURED BY ARROW CONCRETE, OR ENGINEER APPROVED EQUAL.
2. CONCRETE STRENGTH SHALL BE 4,000 PSI AT 28 DAYS.
3. REINFORCING STEEL - ASTM 615 AND A82 OR A185 SPECIFICATIONS.
4. H-20 DESIGN LOADING PER AASHTO HS-20-44.
5. BUTYL RUBBER JOINT SEALANT - ASTM C990-91.
6. HEIGHT OF DRAIN BOX SHALL BE 3' (MODEL #ADBKO3) UNLESS DEPTH OF INVERT PIPE OUT REQUIRES THE USE OF 4' DRAIN BOX (MODEL #ADBKO4).
7. FRAME AND GRATE PAIR SHALL BE ONE OF THE FOLLOWING:
   A. STANDARD GRATE SHALL BE NEENAH INLET FRAME/GRATE R-2570 OR ENGINEER APPROVED EQUAL.
   B. ADA STANDARD GRATE SHALL BE NEENAH INLET FRAME/GRATE R-2569 OR ENGINEER APPROVED EQUAL.
   C. STANDARD BEEHIVE GRATE SHALL BE NEENAH INLET FRAME/BEEHIVE GRATE R-2564 OR ENGINEER APPROVED EQUAL.
8. WHERE NOT USED, THE KNOCKOUTS OF EACH AREA DRAIN SHALL BE FILLED WITH BLOCK / BRICK / MORTAR TO MAINTAIN STRUCTURAL INTEGRITY.

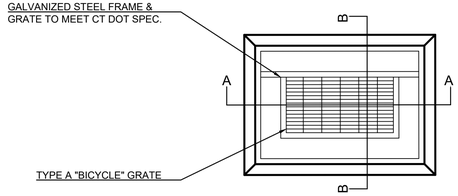
- SEE DRAWINGS FOR SPECIFIC LOCATIONS OF TYPE SELECTED.

CONCRETE AREA DRAIN

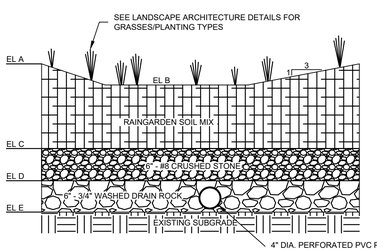
SCALE: NONE



TOP - TYPE 'CL'



- DESIGN LOADING AASHTO H-20-44
- PRE-CAST CONCRETE, 4,000 PSI MIN.
- IN PAVEMENT AREAS THE NORMAL CROSS SLOPE OF THE GUTTER SHALL BE VARIED TO MATCH THE CROSS SLOPE OF THE GRATE.
- THE TOP OF THE SUMP UNIT SHALL BE A MINIMUM OF 6" BELOW THE LOWEST INVERT.
- WHERE NOT USED, CATCH BASIN KNOCKOUT SPACES SHALL BE FILLED WITH BLOCK/BRICK /MORTAR



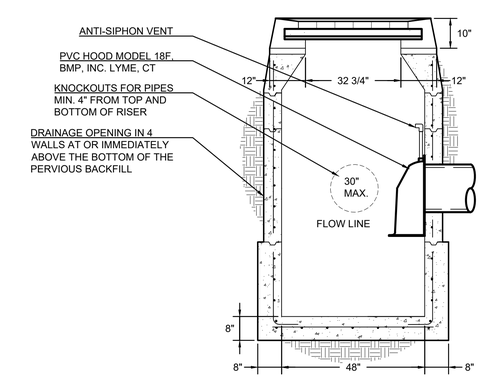
NOTES:

1. RAIN GARDEN SOIL MIX SHALL CONSIST OF 50% MASONRY SAND, 30% TOPSOIL, AND 20% COMPOST MATERIAL BY VOLUME. TOPSOIL SHALL BE SANDY LOAM BY USDA SOIL TEXTURE CLASSIFICATION. COMPOST MATERIAL SHALL COMPLY WITH SPECIFICATIONS.
2. INSTALL TOPSOIL IN A MANNER THAT ENSURES ADEQUATE INFILTRATION. PLACE IN TWO EQUAL LIFTS.
3. LIFTS SHOULD NOT BE COMPACTED, BUT RATHER PLACED IN A MANNER TO REDUCE EXCESSIVE EROSION OR SETTLEMENT. LIFTS MAY BE LIGHTLY WATERED TO ENCOURAGE NATURAL COMPACTION OR, IF NECESSARY, ROLLED WITH WATER-FILLED LANDSCAPE ROLLER. SLIGHTLY OVERFILL THE FACILITY ABOVE PROPOSED FINISHED GRADE TO ACCOMMODATE NATURAL SETTLEMENT.

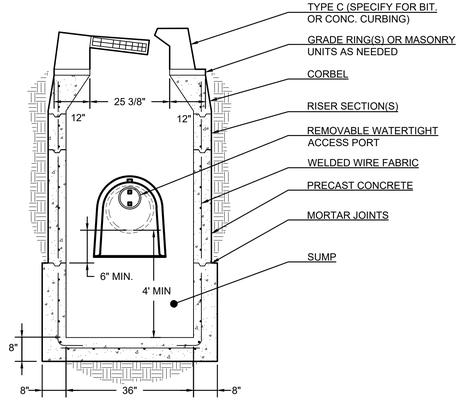
BIORETENTION AREA ID	EL A	EL B	EL C	EL D	EL E
1	69.83	69.00	68.00	67.50	67.00
2	69.78	69.00	68.00	67.50	67.00
3	70.45	70.00	69.00	68.50	68.00
4	70.40	70.00	69.00	68.50	68.00
5	68.74	68.00	67.00	66.50	66.00
6	68.72	68.00	67.00	66.50	66.00

BIORETENTION AREA

SCALE: NONE



VIEW A-A



VIEW B-B

PRECAST CATCH BASIN

SCALE: NONE

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105 BRIDGE ROAD APARTAMENTS

105 BRIDGE ROAD
HADDAM, CT

DATE:	REVISION:
12/2/2021	

STATE OF CONNECTICUT
WILLIAM G. WALKER
LICENSED
PROFESSIONAL ENGINEER

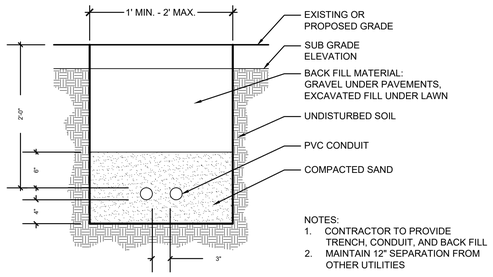
PROJECT NO.: 70673.01
SCALE: AS SHOWN
DATE: 12.02.2021

DRAWN BY: JCO, GL
CHECKED BY: WW

SITE DETAILS

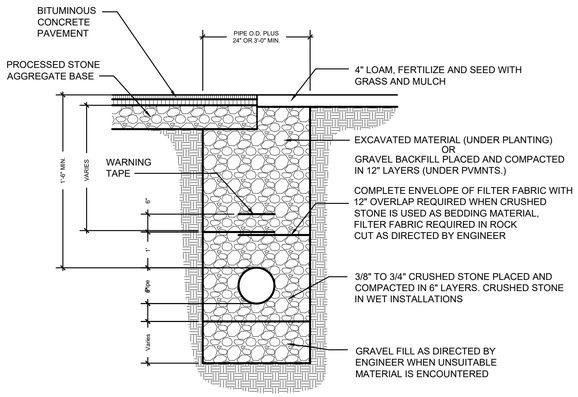
DRAWING NO.:

C-7.2



ELECTRICAL CONDUIT TRENCH

SCALE: NONE



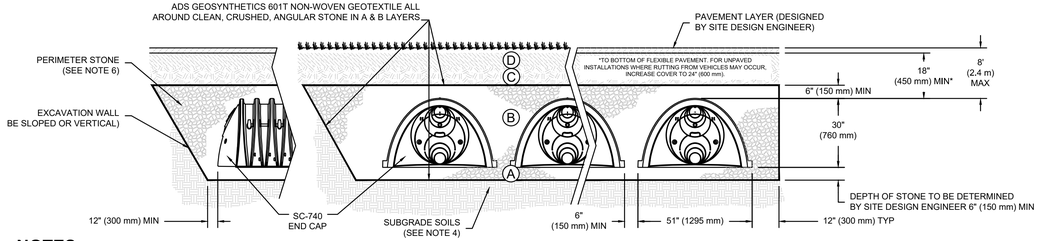
STORM TRENCH

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	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
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 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).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	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	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. [2 3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
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 EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

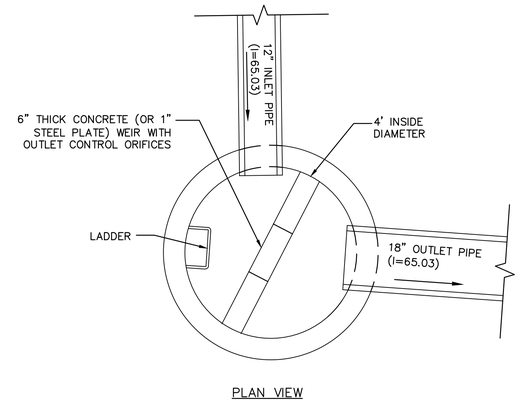


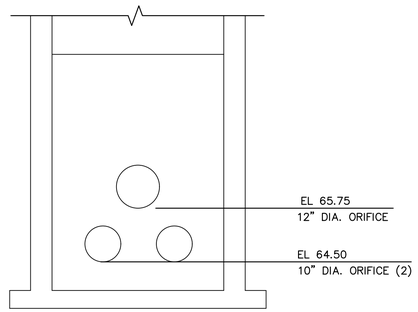
NOTES:

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 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.
5. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
6. 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 CHAMBER SYSTEM

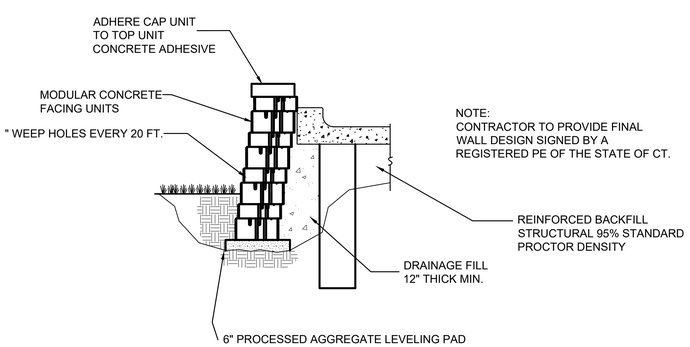
SCALE: NONE





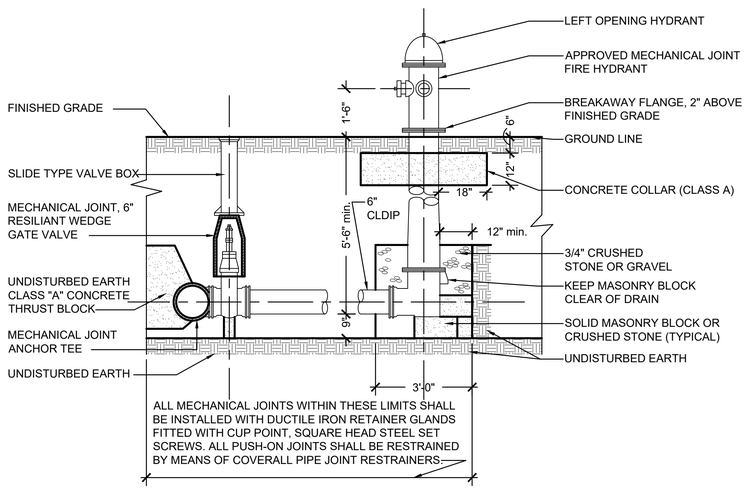
OUTLET CONTROL STRUCTURE

SCALE: NONE



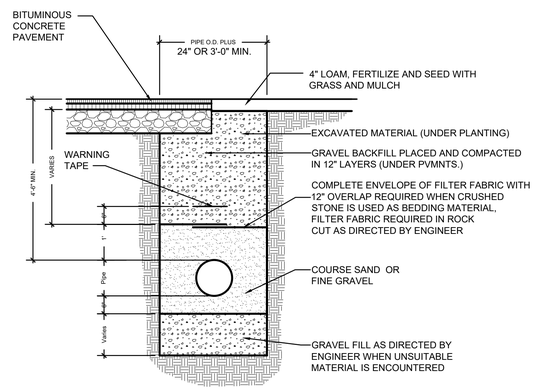
MODULAR BLOCK RETAINING WALL

SCALE: NONE



FIRE HYDRANT

SCALE: NONE



WATER TRENCH

SCALE: NONE

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105 BRIDGE ROAD APARTAMENTS

105 BRIDGE ROAD HADDAM, CT

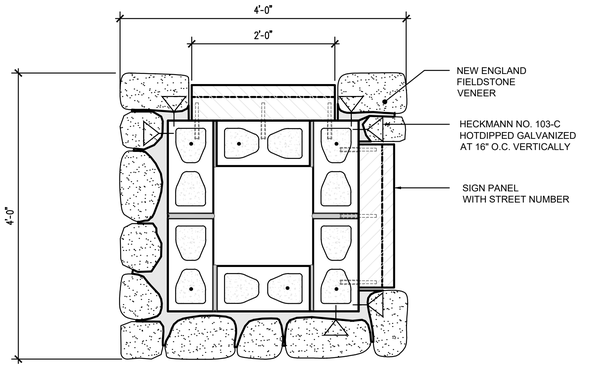
DATE:	REVISION:
12/2/2021	

STATE OF CONNECTICUT · WILLIAM G. WALTER · LICENSED PROFESSIONAL ENGINEER

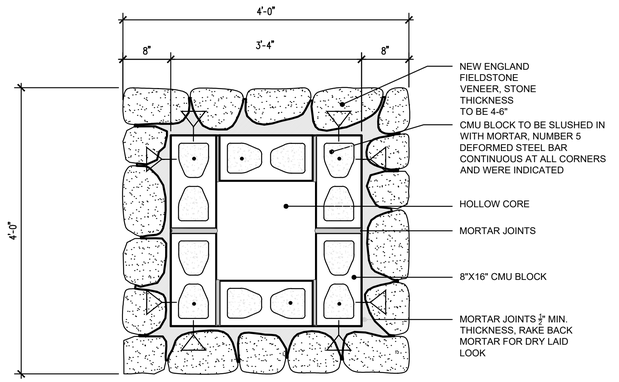
PROJECT NO.: 70673.01
SCALE: AS SHOWN
DATE: 12.02.2021
DRAWN BY: JCO, GL
CHECKED BY: WW

SITE DETAILS

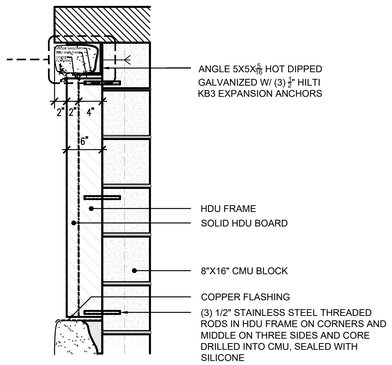
DRAWING NO.:
C-7.3



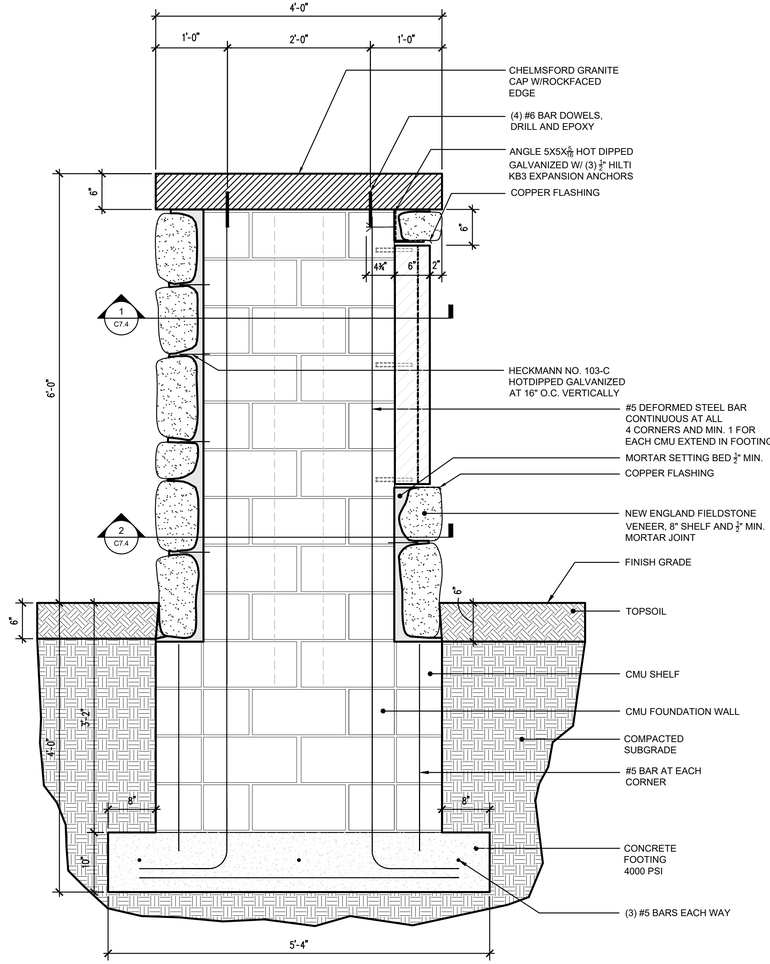
1 SECTION THROUGH SIGN AT LARGE COLUMN
1" = 1'-0"



2 SECTION THROUGH STONE AT LARGE COLUMN
1" = 1'-0"



3 SIGN MOUNTING SECTION
1" = 1'-0"



4 SECTION THROUGH LARGE COLUMN
1" = 1'-0"

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105 BRIDGE ROAD APARTAMENTS
105 BRIDGE ROAD
HADDAM, CT

DATE:	REVISION:
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STATE OF CONNECTICUT
WILLIAM G. WALKER
LICENSED
PROFESSIONAL ENGINEER

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DRAWN BY: JCO, GL
CHECKED BY: WW

SITE DETAILS

DRAWING NO.:
C-7.4

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	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
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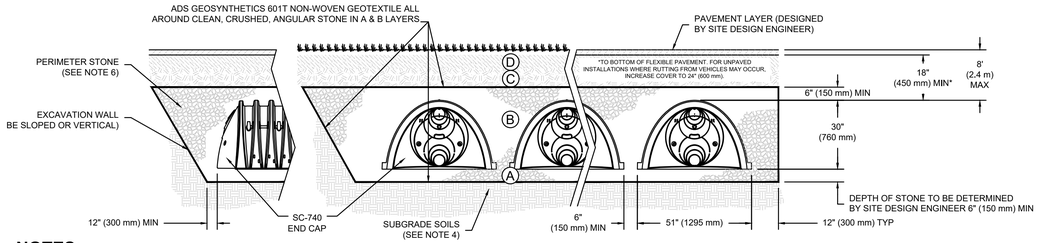

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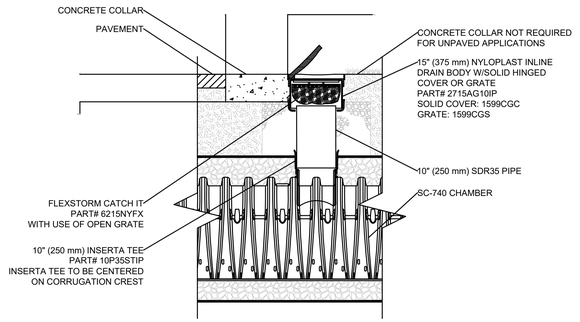

SC-740 INSPECTION PORT DETAIL
SCALE: NONE

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DATE:	REVISION:
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STATE OF CONNECTICUT · WILLIAM G. WALTER · LICENSED PROFESSIONAL ENGINEER

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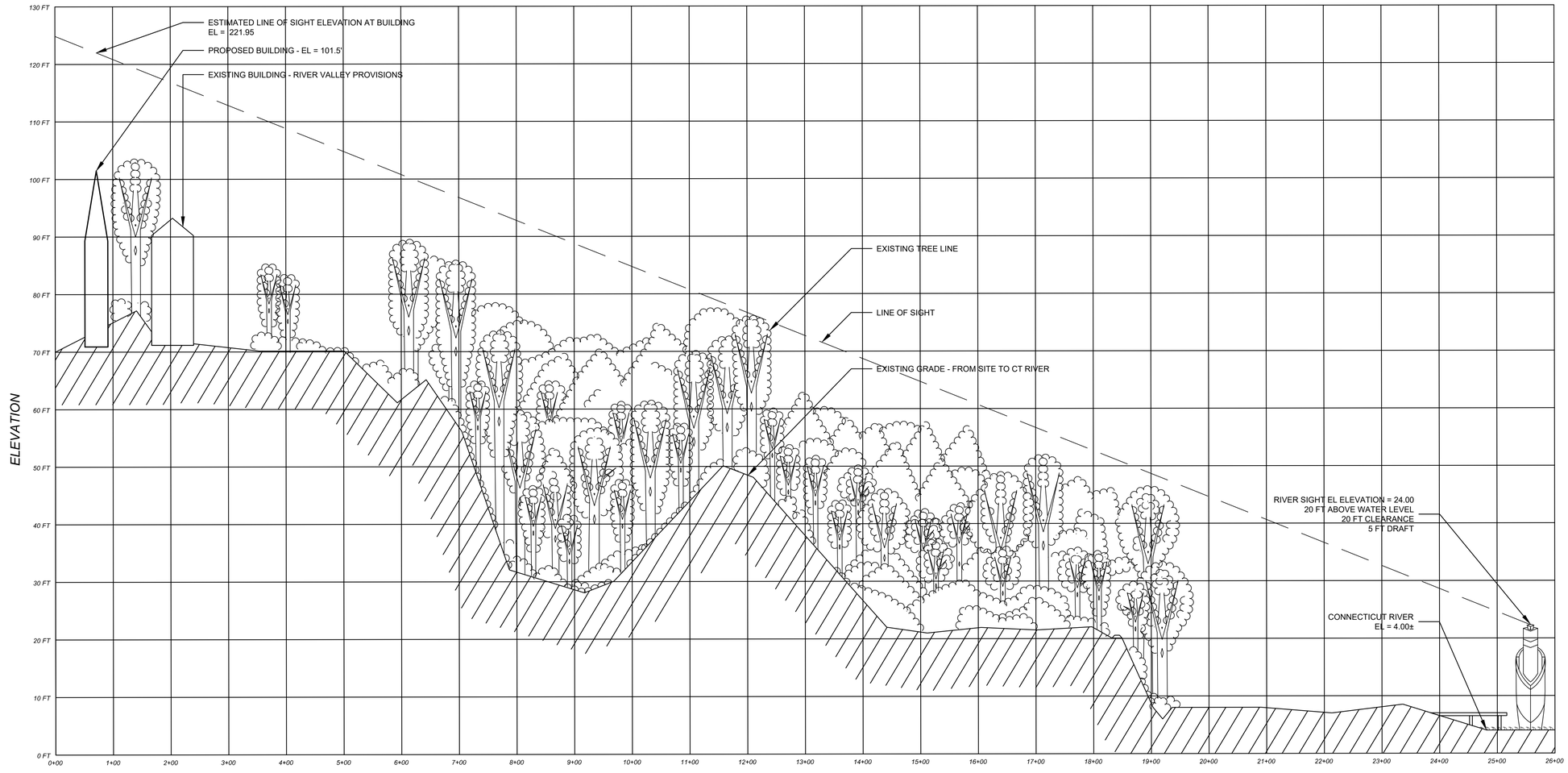
CHECKED BY: WW

SITE DETAILS

DRAWING NO.:
C-7.5



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105 BRIDGE ROAD
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CHECKED BY: WW

CONNECTICUT RIVER VIEW SECTION

DRAWING NO.:
C-8.0