



# CONNECTICUT PROTON THERAPY CENTER - OUTPATIENT FACILITY

932 NORTHROP RD. WALLINGFORD, CT 06492

## LOCAL APPROVALS

ISSUED: 12/01/2020

PROJECT #: **218320529**

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CONNECTICUT PROTON THERAPY CENTER -  
OUTPATIENT FACILITY

Proton International  
932 NORTHROP RD. WALLINGFORD, CT 06492

LOCAL APPROVALS	2020.12.01
Issue/Revision	YYYY.MM.DD

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Client/Project  
**CONNECTICUT PROTON  
THERAPY CENTER -  
OUTPATIENT FACILITY**

Proton International  
932 NORTHROP RD. WALLINGFORD, CT 06492

Title  
COVER SHEET

Project No. 218320529	Scale
Revision	Drawing No.

**G 000**

## PROJECT TEAM:

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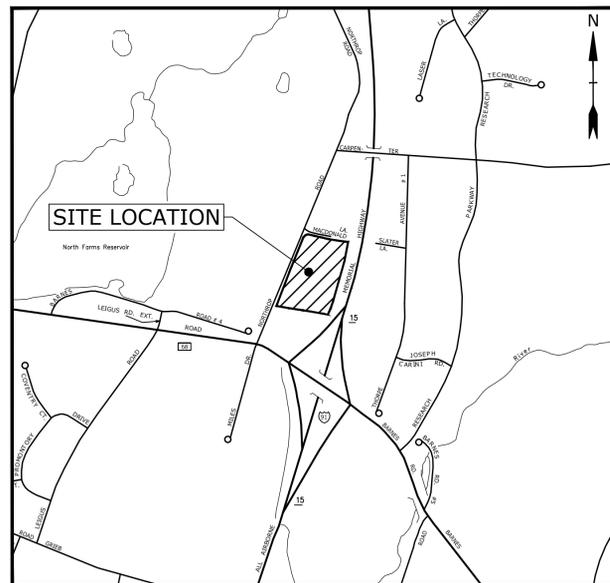
**CIVIL:**  
Tighe & Bond  
  
1000 Bridgeport Avenue  
Suite 320  
Shelton, CT 06484  
tel: (203) 712-1100

**BASE PLAN NOTES**

- THE EXISTING CONDITIONS INFORMATION SHOWN ON THE DRAWINGS IS BASED ON THE FOLLOWING PLAN ENTITLED: "LAND OF 932 NORTHROP ROAD, WALLINGFORD EQUITIES, LLC WALLINGFORD, CONNECTICUT, 06492 PROPERTY AND TOPOGRAPHIC SURVEY, DATED: 9/2/2020 AND PREPARED BY: MARTIN SURVEYING ASSOCIATES LLC, 201 CHRISTIAN LANE BERLIN, CT 06037. THE NORTH ARROW AND BEARINGS ARE BASED UPON THE CONNECTICUT STATE COORDINATE SYSTEM N.A.D. 1983 (2011). THE ELEVATIONS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) USING GEOID 12B.

**GENERAL NOTES**

- NOTIFY (CALL BEFORE YOU DIG AT 1-800-922-4455) AND OTHER UTILITY OWNERS IN THE AREA NOT ON THE (CALL BEFORE YOU DIG) LIST AT LEAST 72 HOURS PRIOR TO ANY DIGGING, TRENCHING, ROCK REMOVAL, DEMOLITION, BORING, BACKFILLING, GRADING, LANDSCAPING, OR ANY OTHER EARTH MOVING OPERATIONS.
- LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. IN ADDITION, SOME UTILITIES MAY NOT BE SHOWN. DETERMINE THE EXACT LOCATION OF UTILITIES BY TEST PIT OR OTHER METHODS, AS NECESSARY TO PREVENT DAMAGE TO UTILITIES AND/OR INTERRUPTIONS IN UTILITY SERVICE. PERFORM TEST PIT EXCAVATIONS AND OTHER INVESTIGATIONS TO LOCATE UTILITIES, AND PROVIDE THIS INFORMATION TO THE ENGINEER, PRIOR TO CONSTRUCTING THE PROPOSED IMPROVEMENTS. LOCATE ALL EXISTING UTILITIES TO BE CROSSED BY HAND EXCAVATION.
- NOT ALL OF THE UTILITY SERVICES TO BUILDINGS ARE SHOWN. THE CONTRACTOR SHALL ANTICIPATE THAT EACH PROPERTY HAS SERVICE CONNECTIONS FOR THE VARIOUS UTILITIES.
- BOLD TEXT AND LINES INDICATE PROPOSED WORK. LIGHT TEXT AND LINES INDICATE APPROXIMATE EXISTING CONDITIONS.
- TIGHE & BOND ASSUMES NO RESPONSIBILITY FOR ANY ISSUES, LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM TIGHE & BOND.
- EXCAVATE ADDITIONAL TEST PITS TO LOCATE EXISTING UTILITIES AS DIRECTED OR APPROVED BY THE ENGINEER.
- NOTIFY THE ENGINEER OF ANY UTILITIES IDENTIFIED DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE DRAWINGS OR THAT DIFFER IN SIZE OR MATERIAL.
- THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY; COORDINATION WITH THE OWNER, ALL SUBCONTRACTORS, AND WITH OTHER CONTRACTORS WORKING WITHIN THE LIMITS OF WORK, THE MEANS AND METHODS OF CONSTRUCTING THE PROPOSED WORK.
- OBTAIN, PAY FOR AND COMPLY WITH PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK. ARRANGE AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE JURISDICTIONAL AUTHORITIES.
- SHORE UTILITY TRENCHES WHERE FIELD CONDITIONS DICTATE AND/OR WHERE REQUIRED BY LOCAL, STATE AND FEDERAL HEALTH AND SAFETY CODES.
- FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. IF FIELD CONDITIONS ARE OBSERVED THAT VARY SIGNIFICANTLY FROM THOSE SHOWN ON THE DRAWINGS, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING FOR RESOLUTION OF THE CONFLICTING INFORMATION.
- PROTECT AND MAINTAIN ALL UTILITIES IN THE AREAS UNDER CONSTRUCTION DURING THE WORK. LEAVE ALL PIPES AND STRUCTURES WITHIN THE LIMITS OF THE CONTRACT IN A CLEAN AND OPERABLE CONDITION AT THE COMPLETION OF THE WORK. TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SAND AND SILT FROM DISTURBED AREAS FROM ENTERING THE DRAINAGE SYSTEM.
- NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICT, ERROR, AMBIGUITY, OR DISCREPANCY WITH THE PLANS OR BETWEEN THE PLANS AND ANY APPLICABLE LAW, REGULATION, CODE, STANDARD SPECIFICATION, OR MANUFACTURER'S INSTRUCTIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR SUPPORT OF EXISTING UTILITIES AND REPAIR OR REPLACEMENT COSTS OF UTILITIES DAMAGED DURING CONSTRUCTION, WHETHER ABOVE OR BELOW GRADE. REPLACE DAMAGED UTILITIES IMMEDIATELY AT NO ADDITIONAL COST TO THE OWNER AND AT NO COST TO THE PROPERTY OWNER.
- TAKE NECESSARY MEASURES AND PROVIDE CONTINUOUS BARRIERS OF SUFFICIENT TYPE, SIZE, AND STRENGTH TO PREVENT ACCESS TO ALL WORK AND STAGING AREAS AT THE COMPLETION OF EACH DAYS WORK.
- NO OPEN TRENCHES WILL BE ALLOWED OVER NIGHT. THE USE OF ROAD PLATES TO PROTECT THE EXCAVATION WILL BE CONSIDERED UPON REQUEST, BUT BACKFILLING IS PREFERRED.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY TRAFFIC CONTROL/SAFETY DEVICES TO ENSURE SAFE VEHICULAR AND PEDESTRIAN ACCESS THROUGH THE WORK AREA, OR FOR SAFELY IMPLEMENTING DETOURS AROUND THE WORK AREA. PERFORM TRAFFIC CONTROL IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED TRAFFIC CONTROL PLAN.
- MAINTAIN EMERGENCY ACCESS TO ALL PROPERTIES WITHIN THE PROJECT AREA AT ALL TIMES DURING CONSTRUCTION.
- WHEN WORKING IN THE ROAD, PROVIDE THE OWNER AND LOCAL FIRE/POLICE/SCHOOL AUTHORITIES A DETAILED PLAN OF APPROACH INDICATING METHODS OF PROPOSED TRAFFIC ROUTING ON A DAILY BASIS. PROVIDE COORDINATION TO ENSURE COMMUNICATION AND COORDINATION BETWEEN THE OWNER, CONTRACTOR AND LOCAL FIRE/POLICE/SCHOOL AUTHORITIES THROUGHOUT THE CONSTRUCTION PERIOD.
- REMOVE AND DISPOSE OF ALL CONSTRUCTION-RELATED WASTE MATERIALS AND DEBRIS IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS.
- THE TERM "DEMOLISH" USED ON THE DRAWINGS MEANS TO REMOVE AND DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- THE TERM "ABANDON" USED ON THE DRAWINGS MEANS TO LEAVE IN PLACE AND TAKE APPROPRIATE MEASURES TO DECOMMISSION AS SPECIFIED OR NOTED ON THE DRAWINGS.
- ALL PROPOSED WORK MAY BE ADJUSTED IN THE FIELD BY THE OWNER'S PROJECT REPRESENTATIVE TO MEET EXISTING CONDITIONS.
- THE PROPERTY IS LOCATED IN THE TOWN OF WALLINGFORD WATERSHED AREA. THE USE OF SODIUM CHLORIDE FOR ICE CONTROL IS PROHIBITED.
- REQUIRED PARKING FOR THIS SITE PLAN HAS BEEN REDUCED FROM 116 SPACES TO 50 SPACES PER APPROVED VARIANCE #20-032 GRANTED ON NOVEMBER 16, 2020.



**LOCATION MAP**  
SCALE: 1" = 1000'

**STANDARD LEGEND**

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE	---	---
RIGHT-OF-WAY LINE	---	---
EASEMENT LINE	---	---
LIMITS OF WORK	---	---
INTERMEDIATE CONTOURS	---	---
INDEX CONTOURS	--- 25 ---	--- 25 ---
SPOT GRADE	X 141.2	+ 32.0
MAGNITUDE & DIRECTION OF SLOPE	← 0.0%	← 0.0%
STORM DRAIN	SD	SD
STORM UNDERDRAIN	UD	UD
GRAVITY SANITARY SEWER	SS	SS
SANITARY SEWER FORCE MAIN	SFM	SFM
SANITARY SEWER LOW PRESSURE	SSLP	SSLP
SANITARY SEWER COMBINED	COMB	COMB
WATER SERVICE	W	W
POTABLE WATER	PW	PW
FIRE SERVICE	F	F
HIGH PRESSURE FIRE SERVICE	F-HP	F-HP
UNDERGROUND ELECTRIC	E	E
PRIMARY ELECTRIC SERVICE	PE	PE
SECONDARY ELECTRIC	SE	SE
OVERHEAD ELECTRIC	OE	OE
TELEPHONE SERVICE	T	T
TEL-DATA SERVICE	T-D	T-D
COMMUNICATIONS SERVICE	T-C	T-C
CABLE TV SERVICE	CTV	CTV
GAS SERVICE	G	G
CHILLED WATER RETURN	CWR	CWR
CHILLED WATER SUPPLY	CWS	CWS
HOT WATER RETURN	HWR	HWR
HOT WATER SUPPLY	HWS	HWS
STEAM CONDENSATE	C	C
LOW PRESSURE STEAM	LPS	LPS
MEDIUM PRESSURE STEAM	MPS	MPS
HIGH PRESSURE STEAM	HPS	HPS
OXYGEN SERVICE	O	O
OVERHEAD UTILITY (UNSPECIFIED)	OHW	OHW
CURB	=====	=====
EDGE OF PAVEMENT	-----	-----
DIRT ROAD	-----	-----
SIDEWALK	-----	-----
RETAINING WALL	-----	-----
STONE WALL	-----	-----
FENCE - UNSPECIFIED	X X X	X X X
FENCE - CHAIN LINK	X X X X X X X X X X	X X X X X X X X X X
FENCE - WOOD POST	O O O O O O O O O O	O O O O O O O O O O
GUARDRAIL	-----	-----
METAL BEAM RAIL	-----	-----
TRAIN TRACKS	-----	-----
STORM DRAIN STRUCTURES	MANHOLE (M) CATCH BASIN (CB)	MANHOLE (M) AREA DRAIN (AD) CATCH BASIN (CB)
SANITARY SEWER MANHOLE	(S)	(S)
WATER SERVICE STRUCTURES	HYDRANT (H) MANHOLE (M) VALVE (V)	HYDRANT (H) MANHOLE (M) VALVE (V)
GAS SERVICE STRUCTURES	MANHOLE (G) VALVE (V)	MANHOLE (G) VALVE (V)
ELECTRIC SERVICE STRUCTURES	UTILITY CO. POLE (#) MANHOLE (M) LIGHT (L)	UTILITY CO. POLE (#) MANHOLE (M) LIGHT (L)
TELECOMMUNICATIONS MANHOLE	(T)	(T)
TREELINE	-----	-----
TREE	EVERGREEN (EG) DECIDUOUS (D)	EVERGREEN (EG) DECIDUOUS (D)

**RESOURCE AREA LEGEND**

RESOURCE AREAS	
VEGETATED WETLAND LIMIT	-----
TOP OF BANK	-----
MEAN ANNUAL HIGH WATER	-----
LAND SUBJECT TO FLOODING	-----
100-FOOT BUFFER ZONE	-----
200-FOOT RIVERFRONT AREA	-----
LOCAL RESOURCE AREA	-----
LOCAL BUFFER ZONE - 1	-----
LOCAL BUFFER ZONE - 2	-----
WETLANDS WATER COURSE	-----
WETLAND FLAG	WF

**DEMOLITION / GEOTECHNICAL LEGEND**

DEMOLITION / GEOTECHNICAL	
EROSION & SEDIMENT CONTROL	-----
COFFERDAM	-----
TURBIDITY CURTAIN	-----
UTILITY TO BE ABANDONED	-----
UTILITY TO BE DEMOLISHED	-----
ITEM TO BE DEMOLISHED	-----
TEST PIT	-----
MONITORING WELL	-----
SOIL SAMPLE	-----
BORING	-----

**ABBREVIATIONS**

ABDN(D)	ABANDON(ED)
AC	ASBESTOS CEMENT PIPE
BC	BITUMINOUS CURB
BFP	BACK FLOW PREVENTOR
BIT	BITUMINOUS
BL	BASELINE
BLDG	BUILDING
BND	BOUND
BOC	BOTTOM OF CURB
BOT	BOTTOM
BS	BOTTOM OF STEP
BW	BOTTOM OF WALL
CATV	CABLE TELEVISION
CB	CATCH BASIN
CEM	CEMENT
CI	CAST IRON PIPE
CL	CENTERLINE
CLF	CHAIN LINK FENCE
CO	CLEAN OUT
CONC	CONCRETE
CPP	CORRUGATED POLYETHYLENE PIPE
CY	CUBIC YARD
DH	DRILL HOLE
DI	DUCTILE IRON PIPE
DIA	DIAMETER
DMH	DRAIN MANHOLE
E	EAST
EF	EACH FACE
EG	EXISTING GRADE
EL/ELEV	ELEVATION
ELEC	ELECTRIC
EMH	ELECTRIC MANHOLE
EOP	EDGE OF PAVEMENT
EW	EACH WAY
EXIST	EXISTING
FES	FLARED END SECTION
FF	FINISH FLOOR
FM	FORCE MAIN
G	GAS
GG	GAS GATE
GRAN	GRANITE
HC	HANDICAP
HDPE	HIGH DENSITY POLYETHYLENE
HMA	HOT MIX ASPHALT
HYD	HYDRANT
IN	INCHES
INV	INVERT
IP	IRON PIN
L	LENGTH OF CURB
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MON	MONUMENT
MJ	MECHANICAL JOINT

**ABBREVIATIONS CONT'D**

N	NORTH
NITC	NOT IN THIS CONTRACT
NTS	NOT TO SCALE
N/A	NOT APPLICABLE
N/F	NOW OR FORMERLY
OC	ON CENTER
OCS	OUTLET CONTROL STRUCTURE
OH	OVERHEAD
PB	PLANT BED
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCPP	PERFORATED CORRUGATED POLYETHYLENE PIPE
PERF	PERFORATED
PI	POINT OF INTERSECTION
PRC	POINT OF REVERSE CURVATURE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYLCHLORIDE
PVMT	PAVEMENT
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REV	REVISION
ROW	RIGHT OF WAY
RT	RIGHT
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
S	SOUTH
SAN	SANITARY
SCH	SCHEDULE
SF	SQUARE FOOT
SMH	SEWER MANHOLE
SS	STAINLESS STEEL
STA	STATION
STL	STEEL
STRM	STORM
T	TANGENT LENGTH
TC	TOP OF CURB
TEL	TEL-DATA
TP	TEST PIT
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
UP	UTILITY POLE
W	WATER
WG	WATER GATE
WV	WATER VALVE
XFMR	TRANSFORMER



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Title  
GENERAL NOTES, ABBREVIATIONS,  
LEGENDS AND LOCATION MAP

Project No. P5050-004  
Revision  
Scale  
NO SCALE  
Drawing No.

C-001

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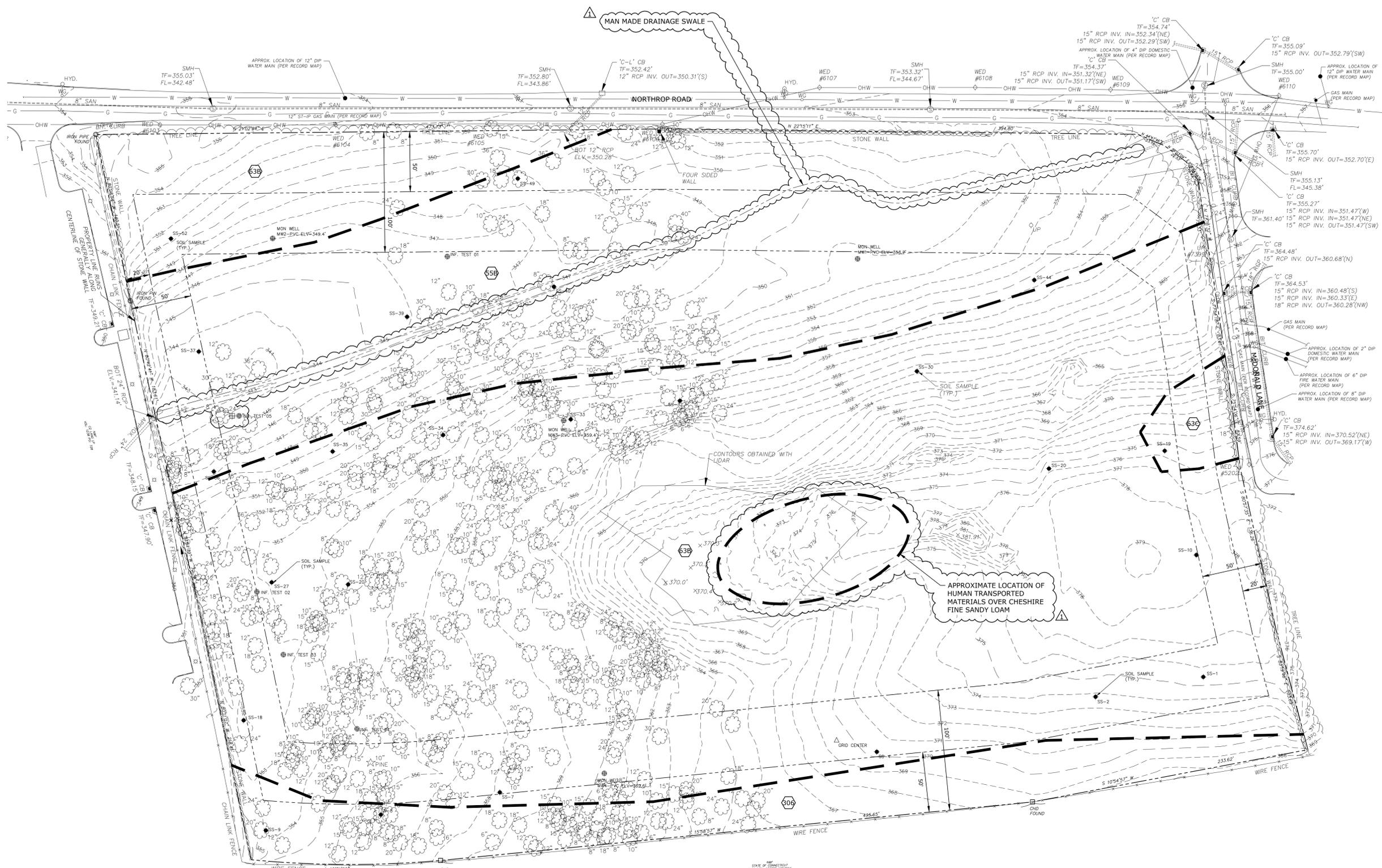


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Title  
**EXISTING CONDITIONS PLAN**

Project No. Scale  
P5050-004 1" = 40'  
Revision Drawing No.



**NATIONAL RESOURCES CONSERVATION SERVICE (NRCS) SOIL TYPES**

5B	WATCHAUG FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES
6B	CHESHIRE FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES
6C	CHESHIRE FINE SANDY LOAM, 8 TO 15 PERCENT SLOPES
10G	UDORTHENTS - URBAN LAND COMPLEX
11M	HUMAN TRANSPORTED MATERIAL

**EXISTING CONDITIONS PLAN LEGEND**

- PROPERTY LINE
- PARKING SETBACK LINE
- BUILDING SETBACK LINE
- SOILS
- MAN-MADE DRAINAGE SWALE
- SS-XX SOIL SAMPLE
- MON WELL MON-XXX
- SOILS TYPE

**EXISTING CONDITION PLAN NOTES**

- EXISTING CONDITIONS PLAN IS BASED ON THE FOLLOWING PLAN ENTITLED: "LAND OF 932 NORTHROP ROAD, WALLINGFORD EQUITIES, LLC WALLINGFORD, CONNECTICUT, 06492 PROPERTY AND TOPOGRAPHIC SURVEY, DATED: 9/2/2020, AND PREPARED BY: MARTIN SURVEYING ASSOCIATES LLC, 201 CHRISTIAN LANE BERLIN, CT 06037. THE NORTH ARROW AND BEARINGS ARE BASED UPON THE CONNECTICUT STATE COORDINATE SYSTEM N.A.D. 1983 (2011). THE ELEVATIONS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) USING GEOID 12B.
- SEE SHEET C-001 FOR GENERAL NOTES.
- SOIL INFORMATION SHOWN IS BASED ON FIELD OBSERVATIONS AND SOIL AUGERS PERFORMED BY RAINA VOLOVSKI, PWS, CPSS ON SEPTEMBER 3, 2019 AND IS CONSISTENT WITH THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) NATURAL RESOURCES CONSERVATION SERVICE (NRCS) SURVEY.

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MDS

Title  
**OVERALL SITE INDEX PLAN**

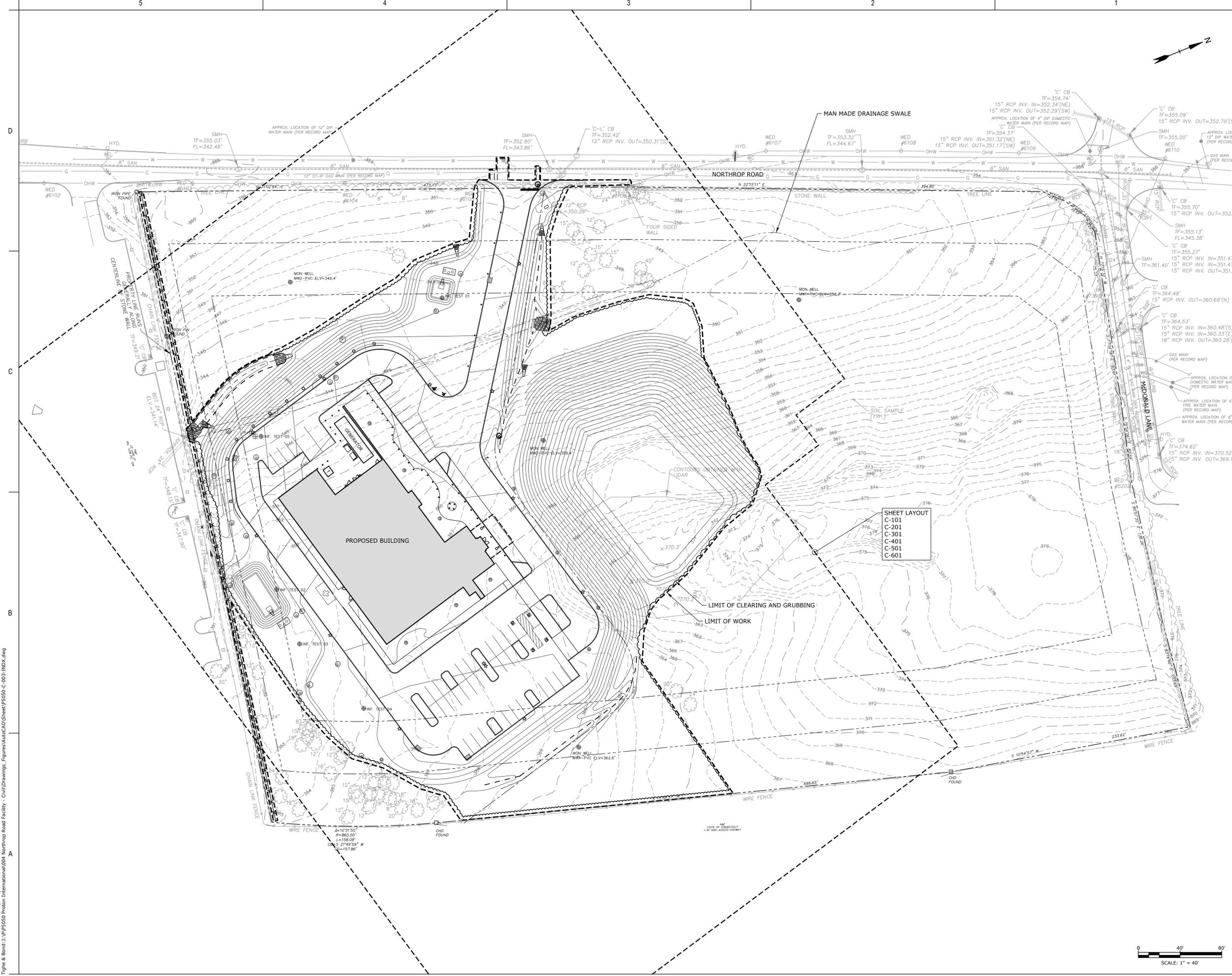
Project No.  
P5050-004

Scale  
1" = 40'

Revision

Drawing No.

**C-003**

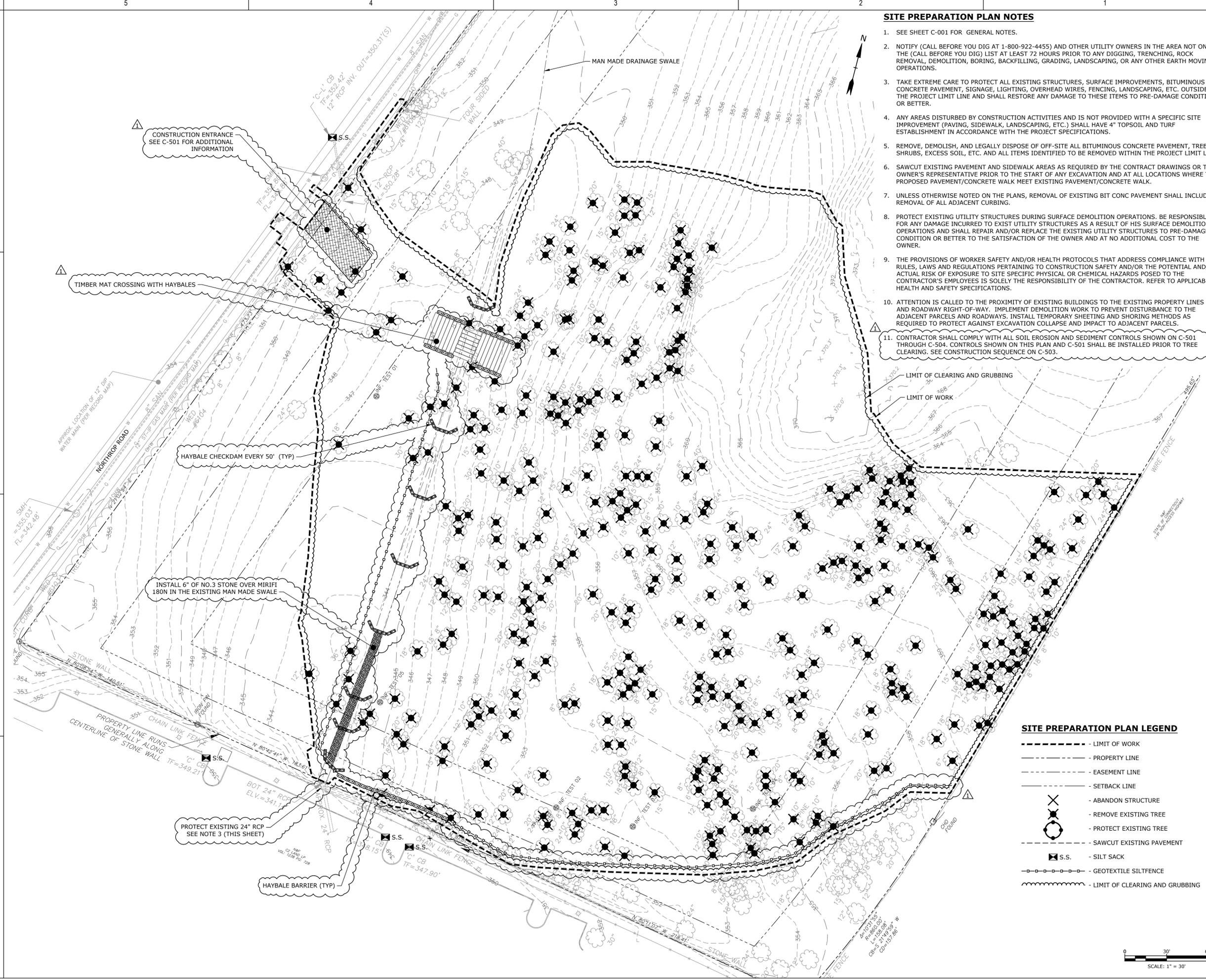


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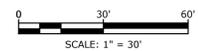
**SITE PREPARATION PLAN NOTES**

- SEE SHEET C-001 FOR GENERAL NOTES.
- NOTIFY (CALL BEFORE YOU DIG AT 1-800-922-4455) AND OTHER UTILITY OWNERS IN THE AREA NOT ON THE (CALL BEFORE YOU DIG) LIST AT LEAST 72 HOURS PRIOR TO ANY DIGGING, TRENCHING, ROCK REMOVAL, DEMOLITION, BORING, BACKFILLING, GRADING, LANDSCAPING, OR ANY OTHER EARTH MOVING OPERATIONS.
- TAKE EXTREME CARE TO PROTECT ALL EXISTING STRUCTURES, SURFACE IMPROVEMENTS, BITUMINOUS CONCRETE PAVEMENT, SIGNAGE, LIGHTING, OVERHEAD WIRES, FENCING, LANDSCAPING, ETC. OUTSIDE THE PROJECT LIMIT LINE AND SHALL RESTORE ANY DAMAGE TO THESE ITEMS TO PRE-DAMAGE CONDITION OR BETTER.
- ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES AND IS NOT PROVIDED WITH A SPECIFIC SITE IMPROVEMENT (PAVING, SIDEWALK, LANDSCAPING, ETC.) SHALL HAVE 4" TOPSOIL AND TURF ESTABLISHMENT IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- REMOVE, DEMOLISH, AND LEGALLY DISPOSE OF OFF-SITE ALL BITUMINOUS CONCRETE PAVEMENT, TREES, SHRUBS, EXCESS SOIL, ETC. AND ALL ITEMS IDENTIFIED TO BE REMOVED WITHIN THE PROJECT LIMIT LINE.
- SAWCUT EXISTING PAVEMENT AND SIDEWALK AREAS AS REQUIRED BY THE CONTRACT DRAWINGS OR THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF ANY EXCAVATION AND AT ALL LOCATIONS WHERE THE PROPOSED PAVEMENT/CONCRETE WALK MEET EXISTING PAVEMENT/CONCRETE WALK.
- UNLESS OTHERWISE NOTED ON THE PLANS, REMOVAL OF EXISTING BIT CONC PAVEMENT SHALL INCLUDE REMOVAL OF ALL ADJACENT CURBING.
- PROTECT EXISTING UTILITY STRUCTURES DURING SURFACE DEMOLITION OPERATIONS. BE RESPONSIBLE FOR ANY DAMAGE INCURRED TO EXIST UTILITY STRUCTURES AS A RESULT OF HIS SURFACE DEMOLITION OPERATIONS AND SHALL REPAIR AND/OR REPLACE THE EXISTING UTILITY STRUCTURES TO PRE-DAMAGED CONDITION OR BETTER TO THE SATISFACTION OF THE OWNER AND AT NO ADDITIONAL COST TO THE OWNER.
- THE PROVISIONS OF WORKER SAFETY AND/OR HEALTH PROTOCOLS THAT ADDRESS COMPLIANCE WITH THE 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 POSED TO THE CONTRACTOR'S EMPLOYEES IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. REFER TO APPLICABLE HEALTH AND SAFETY SPECIFICATIONS.
- ATTENTION IS CALLED TO THE PROXIMITY OF EXISTING BUILDINGS TO THE EXISTING PROPERTY LINES AND ROADWAY RIGHT-OF-WAY. IMPLEMENT DEMOLITION WORK TO PREVENT DISTURBANCE TO THE ADJACENT PARCELS AND ROADWAYS. INSTALL TEMPORARY SHEETING AND SHORING METHODS AS REQUIRED TO PROTECT AGAINST EXCAVATION COLLAPSE AND IMPACT TO ADJACENT PARCELS.
- CONTRACTOR SHALL COMPLY WITH ALL SOIL EROSION AND SEDIMENT CONTROLS SHOWN ON C-501 THROUGH C-504. CONTROLS SHOWN ON THIS PLAN AND C-501 SHALL BE INSTALLED PRIOR TO TREE CLEARING. SEE CONSTRUCTION SEQUENCE ON C-503.



**SITE PREPARATION PLAN LEGEND**

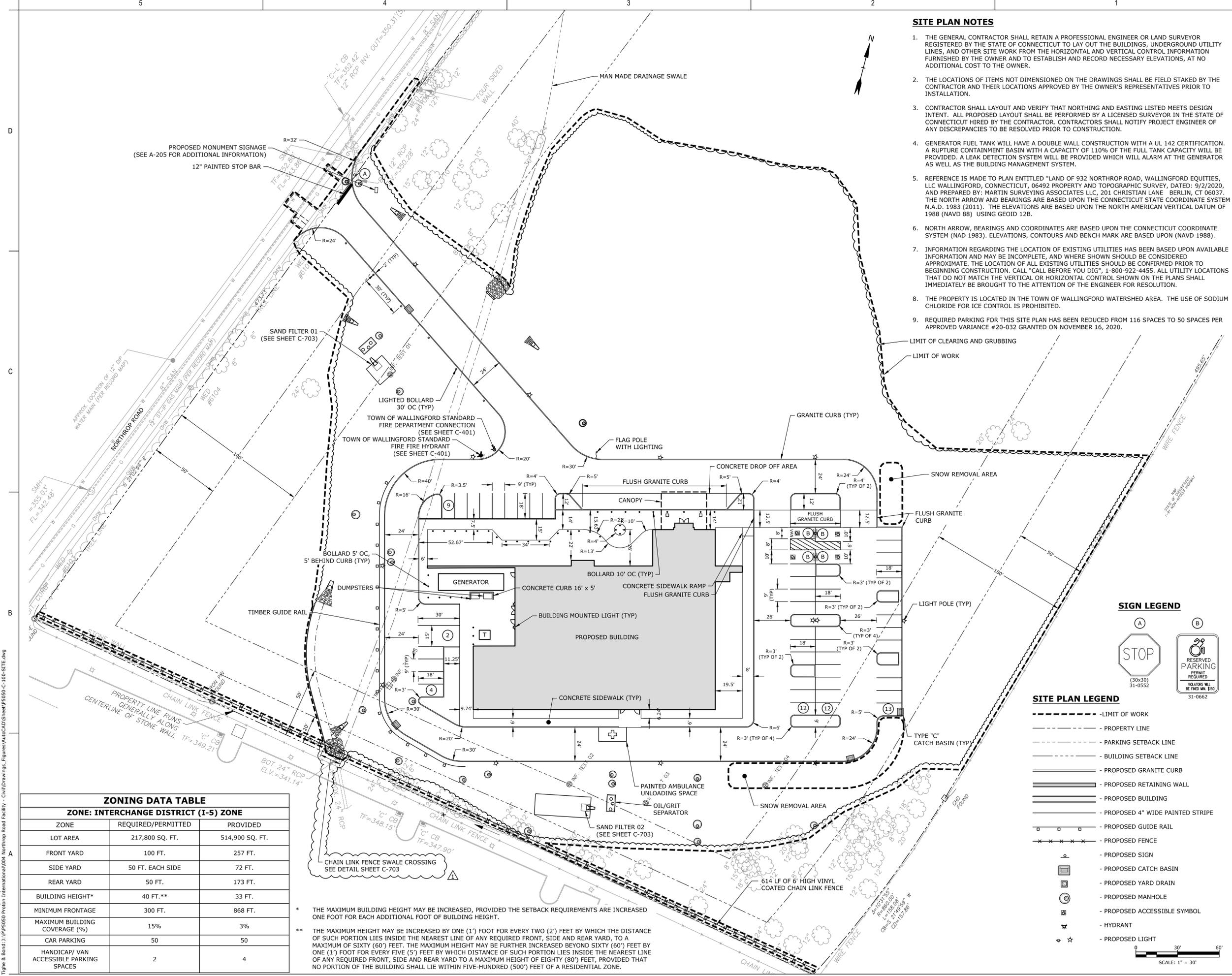
- - - - - LIMIT OF WORK
- - - - - PROPERTY LINE
- - - - - EASEMENT LINE
- - - - - SETBACK LINE
- X - ABANDON STRUCTURE
- ☒ - REMOVE EXISTING TREE
- ☐ - PROTECT EXISTING TREE
- - - - - SAWCUT EXISTING PAVEMENT
- ☒ S.S. - SILT SACK
- - GEOTEXTILE SILTFENCE
- ~ ~ ~ ~ ~ LIMIT OF CLEARING AND GRUBBING



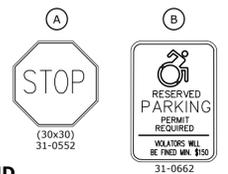
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**SITE PLAN NOTES**

1. THE GENERAL CONTRACTOR SHALL RETAIN A PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED BY THE STATE OF CONNECTICUT TO LAY OUT THE BUILDINGS, UNDERGROUND UTILITY LINES, AND OTHER SITE WORK FROM THE HORIZONTAL AND VERTICAL CONTROL INFORMATION FURNISHED BY THE OWNER AND TO ESTABLISH AND RECORD NECESSARY ELEVATIONS, AT NO ADDITIONAL COST TO THE OWNER.
2. THE LOCATIONS OF ITEMS NOT DIMENSIONED ON THE DRAWINGS SHALL BE FIELD STAKED BY THE CONTRACTOR AND THEIR LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVES PRIOR TO INSTALLATION.
3. CONTRACTOR SHALL LAYOUT AND VERIFY THAT NORTHING AND EASTING LISTED MEETS DESIGN INTENT. ALL PROPOSED LAYOUT SHALL BE PERFORMED BY A LICENSED SURVEYOR IN THE STATE OF CONNECTICUT HIRED BY THE CONTRACTOR. CONTRACTORS SHALL NOTIFY PROJECT ENGINEER OF ANY DISCREPANCIES TO BE RESOLVED PRIOR TO CONSTRUCTION.
4. GENERATOR FUEL TANK WILL HAVE A DOUBLE WALL CONSTRUCTION WITH A UL 142 CERTIFICATION. A RUPTURE CONTAINMENT BASIN WITH A CAPACITY OF 110% OF THE FULL TANK CAPACITY WILL BE PROVIDED. A LEAK DETECTION SYSTEM WILL BE PROVIDED WHICH WILL ALARM AT THE GENERATOR AS WELL AS THE BUILDING MANAGEMENT SYSTEM.
5. REFERENCE IS MADE TO PLAN ENTITLED "LAND OF 932 NORTHROP ROAD, WALLINGFORD EQUITIES, LLC WALLINGFORD, CONNECTICUT, 06492 PROPERTY AND TOPOGRAPHIC SURVEY, DATED: 9/2/2020, AND PREPARED BY: MARTIN SURVEYING ASSOCIATES LLC, 201 CHRISTIAN LANE BERLIN, CT 06037. THE NORTH ARROW AND BEARINGS ARE BASED UPON THE CONNECTICUT STATE COORDINATE SYSTEM N.A.D. 1983 (2011). THE ELEVATIONS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) USING GEOID 12B.
6. NORTH ARROW, BEARINGS AND COORDINATES ARE BASED UPON THE CONNECTICUT COORDINATE SYSTEM (NAD 1983). ELEVATIONS, CONTOURS AND BENCH MARK ARE BASED UPON (NAVD 1988).
7. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CALL "CALL BEFORE YOU DIG", 1-800-922-4455. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
8. THE PROPERTY IS LOCATED IN THE TOWN OF WALLINGFORD WATERSHED AREA. THE USE OF SODIUM CHLORIDE FOR ICE CONTROL IS PROHIBITED.
9. REQUIRED PARKING FOR THIS SITE PLAN HAS BEEN REDUCED FROM 116 SPACES TO 50 SPACES PER APPROVED VARIANCE #20-032 GRANTED ON NOVEMBER 16, 2020.

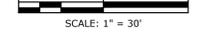


**SIGN LEGEND**



**SITE PLAN LEGEND**

- - - - - LIMIT OF WORK
- - - - - PROPERTY LINE
- - - - - PARKING SETBACK LINE
- - - - - BUILDING SETBACK LINE
- - - - - PROPOSED GRANITE CURB
- - - - - PROPOSED RETAINING WALL
- - - - - PROPOSED BUILDING
- - - - - PROPOSED 4" WIDE PAINTED STRIPE
- - - - - PROPOSED GUIDE RAIL
- - - - - PROPOSED FENCE
- - - - - PROPOSED SIGN
- - - - - PROPOSED CATCH BASIN
- - - - - PROPOSED YARD DRAIN
- - - - - PROPOSED MANHOLE
- - - - - PROPOSED ACCESSIBLE SYMBOL
- - - - - HYDRANT
- - - - - PROPOSED LIGHT



**ZONING DATA TABLE**

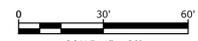
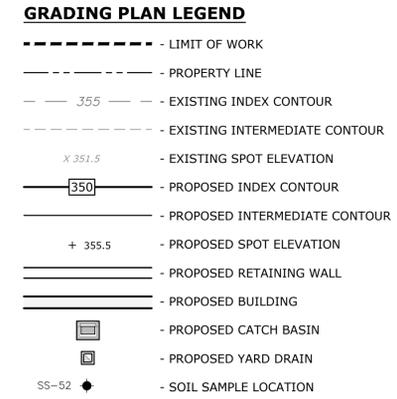
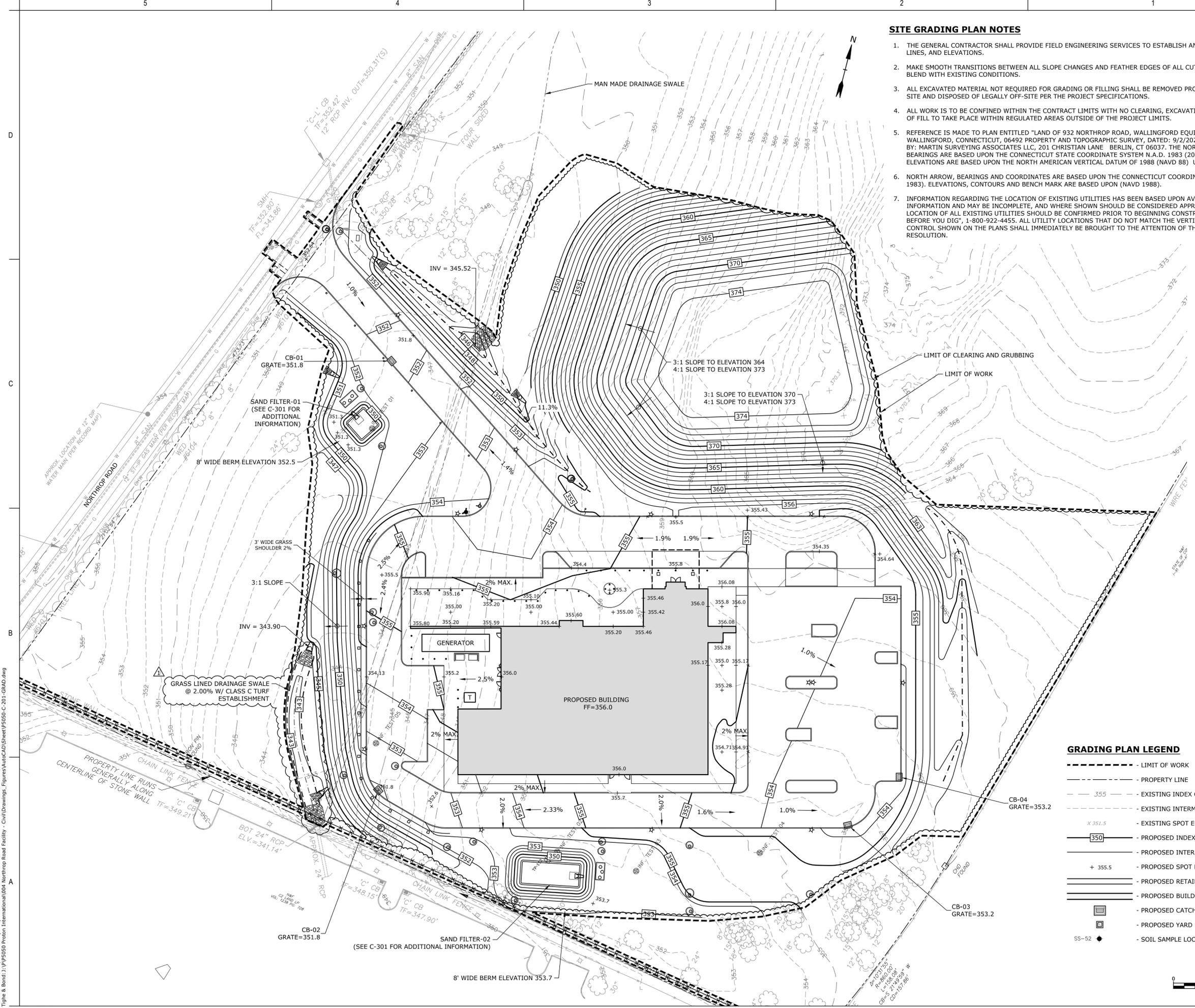
ZONE: INTERCHANGE DISTRICT (I-5) ZONE		
ZONE	REQUIRED/PERMITTED	PROVIDED
LOT AREA	217,800 SQ. FT.	514,900 SQ. FT.
FRONT YARD	100 FT.	257 FT.
SIDE YARD	50 FT. EACH SIDE	72 FT.
REAR YARD	50 FT.	173 FT.
BUILDING HEIGHT*	40 FT.**	33 FT.
MINIMUM FRONTAGE	300 FT.	868 FT.
MAXIMUM BUILDING COVERAGE (%)	15%	3%
CAR PARKING	50	50
HANDICAP/ VAN ACCESSIBLE PARKING SPACES	2	4

\* THE MAXIMUM BUILDING HEIGHT MAY BE INCREASED, PROVIDED THE SETBACK REQUIREMENTS ARE INCREASED ONE FOOT FOR EACH ADDITIONAL FOOT OF BUILDING HEIGHT.  
\*\* THE MAXIMUM HEIGHT MAY BE INCREASED BY ONE (1') FOOT FOR EVERY TWO (2) FEET BY WHICH THE DISTANCE OF SUCH PORTION LIES INSIDE THE NEAREST LINE OF ANY REQUIRED FRONT, SIDE AND REAR YARD, TO A MAXIMUM OF SIXTY (60) FEET. THE MAXIMUM HEIGHT MAY BE FURTHER INCREASED BEYOND SIXTY (60) FEET BY ONE (1) FOOT FOR EVERY FIVE (5) FEET BY WHICH DISTANCE OF SUCH PORTION LIES INSIDE THE NEAREST LINE OF ANY REQUIRED FRONT, SIDE AND REAR YARD TO A MAXIMUM HEIGHT OF EIGHTY (80) FEET, PROVIDED THAT NO PORTION OF THE BUILDING SHALL LIE WITHIN FIVE-HUNDRED (500') FEET OF A RESIDENTIAL ZONE.

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**SITE GRADING PLAN NOTES**

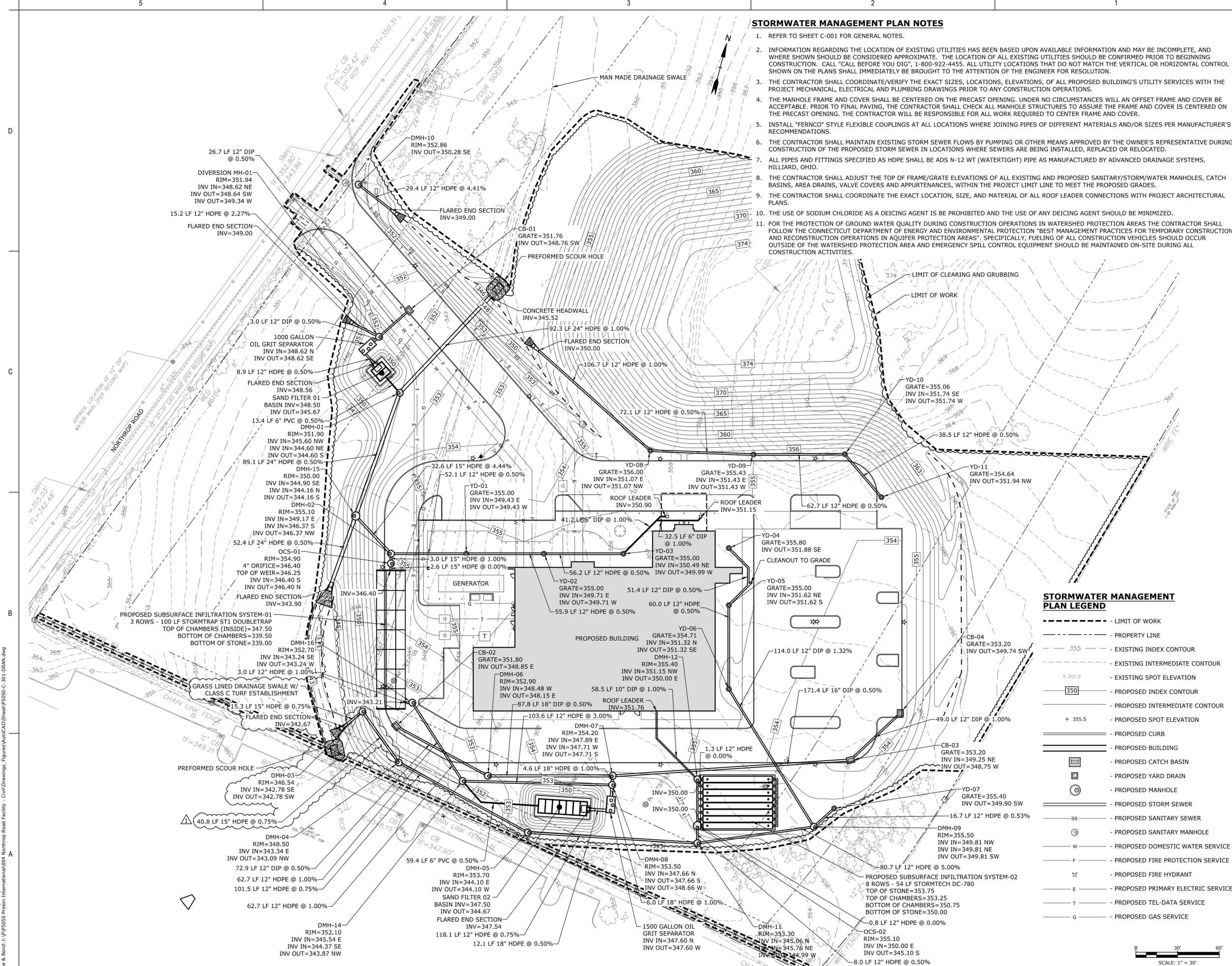
1. THE GENERAL CONTRACTOR SHALL PROVIDE FIELD ENGINEERING SERVICES TO ESTABLISH AND RECORD GRADES, LINES, AND ELEVATIONS.
2. MAKE SMOOTH TRANSITIONS BETWEEN ALL SLOPE CHANGES AND FEATHER EDGES OF ALL CUTS AND FILLS TO BLEND WITH EXISTING CONDITIONS.
3. ALL EXCAVATED MATERIAL NOT REQUIRED FOR GRADING OR FILLING SHALL BE REMOVED PROMPTLY FROM THE SITE AND DISPOSED OF LEGALLY OFF-SITE PER THE PROJECT SPECIFICATIONS.
4. ALL WORK IS TO BE CONFINED WITHIN THE CONTRACT LIMITS WITH NO CLEARING, EXCAVATION, OR DEPOSITION OF FILL TO TAKE PLACE WITHIN REGULATED AREAS OUTSIDE OF THE PROJECT LIMITS.
5. REFERENCE IS MADE TO PLAN ENTITLED "LAND OF 932 NORTHROP ROAD, WALLINGFORD EQUITIES, LLC WALLINGFORD, CONNECTICUT, 06492 PROPERTY AND TOPOGRAPHIC SURVEY, DATED: 9/2/2020, AND PREPARED BY: MARTIN SURVEYING ASSOCIATES LLC, 201 CHRISTIAN LANE BERLIN, CT 06037. THE NORTH ARROW AND BEARINGS ARE BASED UPON THE CONNECTICUT STATE COORDINATE SYSTEM N.A.D. 1983 (2011). THE ELEVATIONS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) USING GEOID 12B.
6. NORTH ARROW, BEARINGS AND COORDINATES ARE BASED UPON THE CONNECTICUT COORDINATE SYSTEM (NAD 1983). ELEVATIONS, CONTOURS AND BENCH MARK ARE BASED UPON (NAVD 1988).
7. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CALL "CALL BEFORE YOU DIG", 1-800-922-4455. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.



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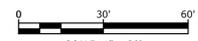
**STORMWATER MANAGEMENT PLAN NOTES**

1. REFER TO SHEET C-001 FOR GENERAL NOTES.
2. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CALL "CALL BEFORE YOU DIG", 1-800-922-4455. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
3. THE CONTRACTOR SHALL COORDINATE/VERIFY THE EXACT SIZES, LOCATIONS, ELEVATIONS, OF ALL PROPOSED BUILDING'S UTILITY SERVICES WITH THE PROJECT MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS PRIOR TO ANY CONSTRUCTION OPERATIONS.
4. THE MANHOLE FRAME AND COVER SHALL BE CENTERED ON THE PRECAST OPENING. UNDER NO CIRCUMSTANCES WILL AN OFFSET FRAME AND COVER BE ACCEPTABLE. PRIOR TO FINAL PAVING, THE CONTRACTOR SHALL CHECK ALL MANHOLE STRUCTURES TO ASSURE THE FRAME AND COVER IS CENTERED ON THE PRECAST OPENING. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL WORK REQUIRED TO CENTER FRAME AND COVER.
5. INSTALL "FERNCO" STYLE FLEXIBLE COUPLINGS AT ALL LOCATIONS WHERE JOINING PIPES OF DIFFERENT MATERIALS AND/OR SIZES PER MANUFACTURER'S RECOMMENDATIONS.
6. THE CONTRACTOR SHALL MAINTAIN EXISTING STORM SEWER FLOWS BY PUMPING OR OTHER MEANS APPROVED BY THE OWNER'S REPRESENTATIVE DURING CONSTRUCTION OF THE PROPOSED STORM SEWER IN LOCATIONS WHERE SEWERS ARE BEING INSTALLED, REPLACED OR RELOCATED.
7. ALL PIPES AND FITTINGS SPECIFIED AS HDPE SHALL BE ADS N-12 WT (WATERTIGHT) PIPE AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, HILLIARD, OHIO.
8. THE CONTRACTOR SHALL ADJUST THE TOP OF FRAME/GRATE ELEVATIONS OF ALL EXISTING AND PROPOSED SANITARY/STORM/WATER MANHOLES, CATCH BASINS, AREA DRAINS, VALVE COVERS AND APPURTENANCES, WITHIN THE PROJECT LIMIT LINE TO MEET THE PROPOSED GRADES.
9. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION, SIZE, AND MATERIAL OF ALL ROOF LEADER CONNECTIONS WITH PROJECT ARCHITECTURAL PLANS.
10. THE USE OF SODIUM CHLORIDE AS A DEICING AGENT IS PROHIBITED AND THE USE OF ANY DEICING AGENT SHOULD BE MINIMIZED.
11. FOR THE PROTECTION OF GROUND WATER QUALITY DURING CONSTRUCTION OPERATIONS IN WATERSHED PROTECTION AREAS THE CONTRACTOR SHALL FOLLOW THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION "BEST MANAGEMENT PRACTICES FOR TEMPORARY CONSTRUCTION AND RECONSTRUCTION OPERATIONS IN AQUIFER PROTECTION AREAS". SPECIFICALLY, FUELING OF ALL CONSTRUCTION VEHICLES SHOULD OCCUR OUTSIDE OF THE WATERSHED PROTECTION AREA AND EMERGENCY SPILL CONTROL EQUIPMENT SHOULD BE MAINTAINED ON-SITE DURING ALL CONSTRUCTION ACTIVITIES.



**STORMWATER MANAGEMENT PLAN LEGEND**

- - - - - LIMIT OF WORK
- - - - - PROPERTY LINE
- - - - - EXISTING INDEX CONTOUR
- - - - - EXISTING INTERMEDIATE CONTOUR
- - - - - EXISTING SPOT ELEVATION
- - - - - PROPOSED INDEX CONTOUR
- - - - - PROPOSED INTERMEDIATE CONTOUR
- - - - - PROPOSED SPOT ELEVATION
- - - - - PROPOSED CURB
- - - - - PROPOSED BUILDING
- - - - - PROPOSED CATCH BASIN
- - - - - PROPOSED YARD DRAIN
- - - - - PROPOSED MANHOLE
- - - - - PROPOSED STORM SEWER
- - - - - PROPOSED SANITARY SEWER
- - - - - PROPOSED SANITARY MANHOLE
- - - - - PROPOSED DOMESTIC WATER SERVICE
- - - - - PROPOSED FIRE PROTECTION SERVICE
- - - - - PROPOSED FIRE HYDRANT
- - - - - PROPOSED PRIMARY ELECTRIC SERVICE
- - - - - PROPOSED TEL-DATA SERVICE
- - - - - PROPOSED GAS SERVICE



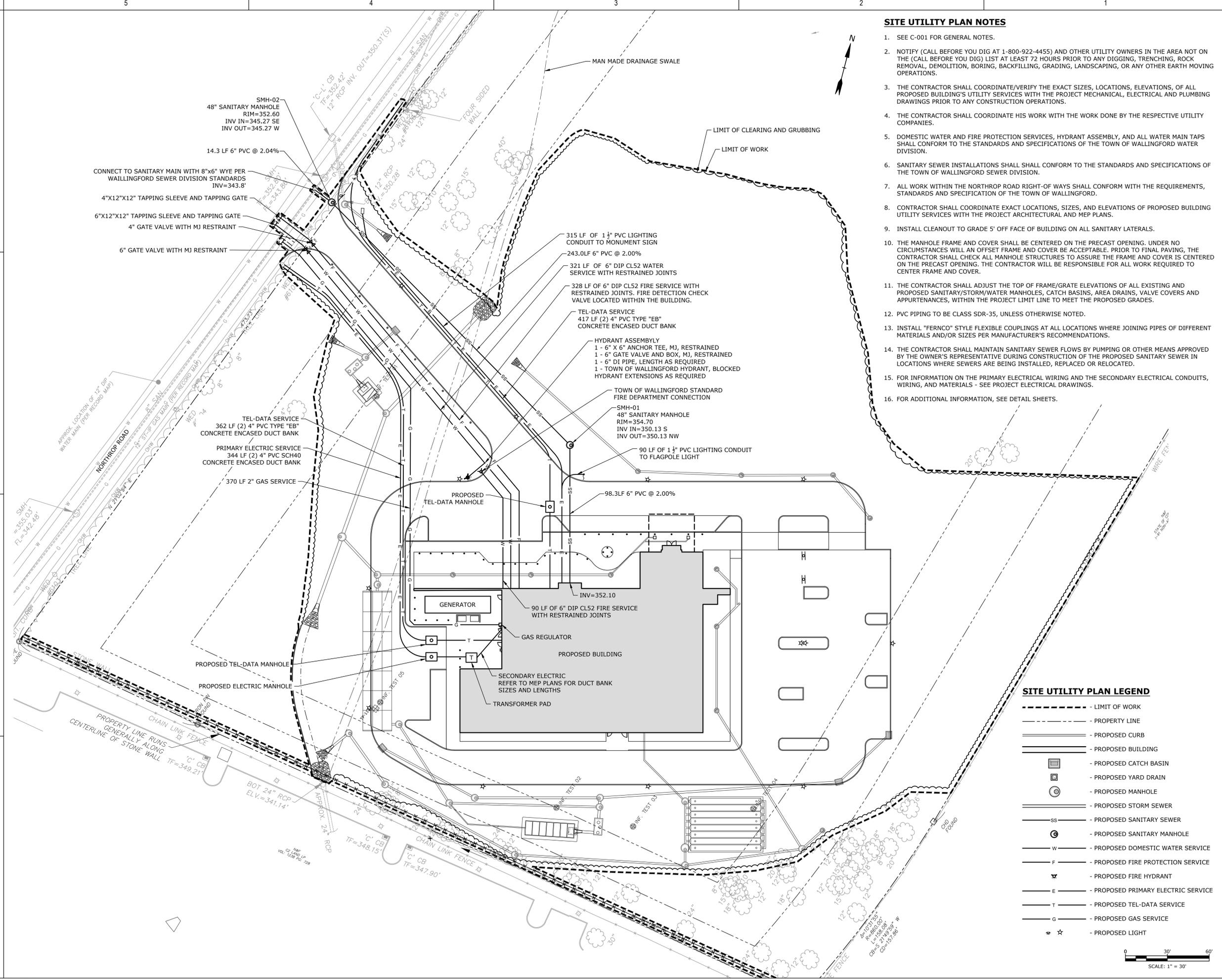
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 ORIGINAL SHEET - ARCHD





**SITE UTILITY PLAN NOTES**

- SEE C-001 FOR GENERAL NOTES.
- NOTIFY (CALL BEFORE YOU DIG AT 1-800-922-4455) AND OTHER UTILITY OWNERS IN THE AREA NOT ON THE (CALL BEFORE YOU DIG) LIST AT LEAST 72 HOURS PRIOR TO ANY DIGGING, TRENCHING, ROCK REMOVAL, DEMOLITION, BORING, BACKFILLING, GRADING, LANDSCAPING, OR ANY OTHER EARTH MOVING OPERATIONS.
- THE CONTRACTOR SHALL COORDINATE/VERIFY THE EXACT SIZES, LOCATIONS, ELEVATIONS, OF ALL PROPOSED BUILDING'S UTILITY SERVICES WITH THE PROJECT MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS PRIOR TO ANY CONSTRUCTION OPERATIONS.
- THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK DONE BY THE RESPECTIVE UTILITY COMPANIES.
- DOMESTIC WATER AND FIRE PROTECTION SERVICES, HYDRANT ASSEMBLY, AND ALL WATER MAIN TAPS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE TOWN OF WALLINGFORD WATER DIVISION.
- SANITARY SEWER INSTALLATIONS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE TOWN OF WALLINGFORD SEWER DIVISION.
- ALL WORK WITHIN THE NORTHROP ROAD RIGHT-OF-WAYS SHALL CONFORM WITH THE REQUIREMENTS, STANDARDS AND SPECIFICATION OF THE TOWN OF WALLINGFORD.
- CONTRACTOR SHALL COORDINATE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF PROPOSED BUILDING UTILITY SERVICES WITH THE PROJECT ARCHITECTURAL AND MEP PLANS.
- INSTALL CLEANOUT TO GRADE 5' OFF FACE OF BUILDING ON ALL SANITARY LATERALS.
- THE MANHOLE FRAME AND COVER SHALL BE CENTERED ON THE PRECAST OPENING. UNDER NO CIRCUMSTANCES WILL AN OFFSET FRAME AND COVER BE ACCEPTABLE. PRIOR TO FINAL PAVING, THE CONTRACTOR SHALL CHECK ALL MANHOLE STRUCTURES TO ASSURE THE FRAME AND COVER IS CENTERED ON THE PRECAST OPENING. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL WORK REQUIRED TO CENTER FRAME AND COVER.
- THE CONTRACTOR SHALL ADJUST THE TOP OF FRAME/GRATE ELEVATIONS OF ALL EXISTING AND PROPOSED SANITARY/STORM/WATER MANHOLES, CATCH BASINS, AREA DRAINS, VALVE COVERS AND APPURTENANCES, WITHIN THE PROJECT LIMIT LINE TO MEET THE PROPOSED GRADES.
- PVC PIPING TO BE CLASS SDR-35, UNLESS OTHERWISE NOTED.
- INSTALL "FERRACO" STYLE FLEXIBLE COUPLINGS AT ALL LOCATIONS WHERE JOINING PIPES OF DIFFERENT MATERIALS AND/OR SIZES PER MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR SHALL MAINTAIN SANITARY SEWER FLOWS BY PUMPING OR OTHER MEANS APPROVED BY THE OWNER'S REPRESENTATIVE DURING CONSTRUCTION OF THE PROPOSED SANITARY SEWER IN LOCATIONS WHERE SEWERS ARE BEING INSTALLED, REPLACED OR RELOCATED.
- FOR INFORMATION ON THE PRIMARY ELECTRICAL WIRING AND THE SECONDARY ELECTRICAL CONDUITS, WIRING, AND MATERIALS - SEE PROJECT ELECTRICAL DRAWINGS.
- FOR ADDITIONAL INFORMATION, SEE DETAIL SHEETS.



**SITE UTILITY PLAN LEGEND**

- LIMIT OF WORK
- - - PROPERTY LINE
- PROPOSED CURB
- PROPOSED BUILDING
- PROPOSED CATCH BASIN
- PROPOSED YARD DRAIN
- PROPOSED MANHOLE
- PROPOSED STORM SEWER
- SS --- PROPOSED SANITARY SEWER
- PROPOSED SANITARY MANHOLE
- W --- PROPOSED DOMESTIC WATER SERVICE
- F --- PROPOSED FIRE PROTECTION SERVICE
- ⚡ PROPOSED FIRE HYDRANT
- E --- PROPOSED PRIMARY ELECTRIC SERVICE
- T --- PROPOSED TEL-DATA SERVICE
- G --- PROPOSED GAS SERVICE
- ★ ☆ PROPOSED LIGHT



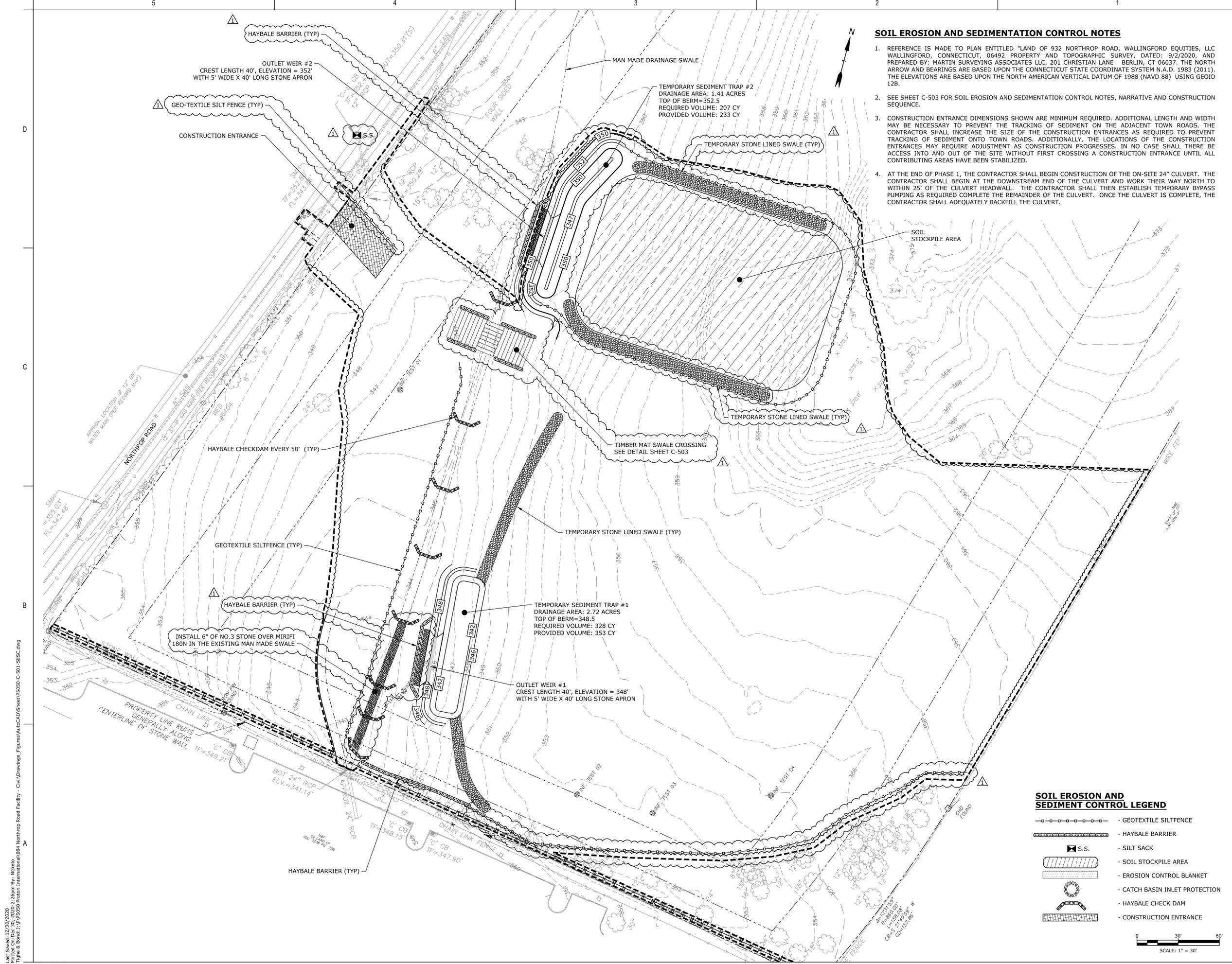
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**SOIL EROSION AND SEDIMENTATION CONTROL NOTES**

1. REFERENCE IS MADE TO PLAN ENTITLED "LAND OF 932 NORTHROP ROAD, WALLINGFORD EQUITIES, LLC WALLINGFORD, CONNECTICUT, 06492 PROPERTY AND TOPOGRAPHIC SURVEY, DATED: 9/2/2020, AND PREPARED BY: MARTIN SURVEYING ASSOCIATES LLC, 201 CHRISTIAN LANE BERLIN, CT 06037. THE NORTH ARROW AND BEARINGS ARE BASED UPON THE CONNECTICUT STATE COORDINATE SYSTEM N.A.D. 1983 (2011). THE ELEVATIONS ARE BASED UPON THE NORTH AMERICAN DATUM OF 1988 (NAVD 88) USING GEOID 12B.
2. SEE SHEET C-503 FOR SOIL EROSION AND SEDIMENTATION CONTROL NOTES, NARRATIVE AND CONSTRUCTION SEQUENCE.
3. CONSTRUCTION ENTRANCE DIMENSIONS SHOWN ARE MINIMUM REQUIRED. ADDITIONAL LENGTH AND WIDTH MAY BE NECESSARY TO PREVENT THE TRACKING OF SEDIMENT ON THE ADJACENT TOWN ROADS. THE CONTRACTOR SHALL INCREASE THE SIZE OF THE CONSTRUCTION ENTRANCES AS REQUIRED TO PREVENT TRACKING OF SEDIMENT ONTO TOWN ROADS. ADDITIONALLY, THE LOCATIONS OF THE CONSTRUCTION ENTRANCES MAY REQUIRE ADJUSTMENT AS CONSTRUCTION PROGRESSES. IN NO CASE SHALL THERE BE ACCESS INTO AND OUT OF THE SITE WITHOUT FIRST CROSSING A CONSTRUCTION ENTRANCE UNTIL ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED.
4. AT THE END OF PHASE 1, THE CONTRACTOR SHALL BEGIN CONSTRUCTION OF THE ON-SITE 24" CULVERT. THE CONTRACTOR SHALL BEGIN AT THE DOWNSTREAM END OF THE CULVERT AND WORK THEIR WAY NORTH TO WITHIN 25' OF THE CULVERT HEADWALL. THE CONTRACTOR SHALL THEN ESTABLISH TEMPORARY BYPASS PUMPING AS REQUIRED COMPLETE THE REMAINDER OF THE CULVERT. ONCE THE CULVERT IS COMPLETE, THE CONTRACTOR SHALL ADEQUATELY BACKFILL THE CULVERT.

**SOIL EROSION AND  
SEDIMENTATION CONTROL LEGEND**

- GEOTEXTILE SILTFENCE
- HAYBALE BARRIER
- SILT SACK
- SOIL STOCKPILE AREA
- EROSION CONTROL BLANKET
- CATCH BASIN INLET PROTECTION
- HAYBALE CHECK DAM
- CONSTRUCTION ENTRANCE



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1 / REVISED PER TOWN COMMENTS	2020.12.30
LOCAL APPROVALS	2020.12.01
Issue/Revision	YYYY.MM.DD

Permit/Seal  
**FOR LAND USE APPROVALS ONLY  
NOT FOR CONSTRUCTION**



Client/Project  
**CONNECTICUT PROTON  
THERAPY CENTER -  
OUTPATIENT FACILITY**

Proton International

932 NORTHROP RD. WALLINGFORD, CT 06492

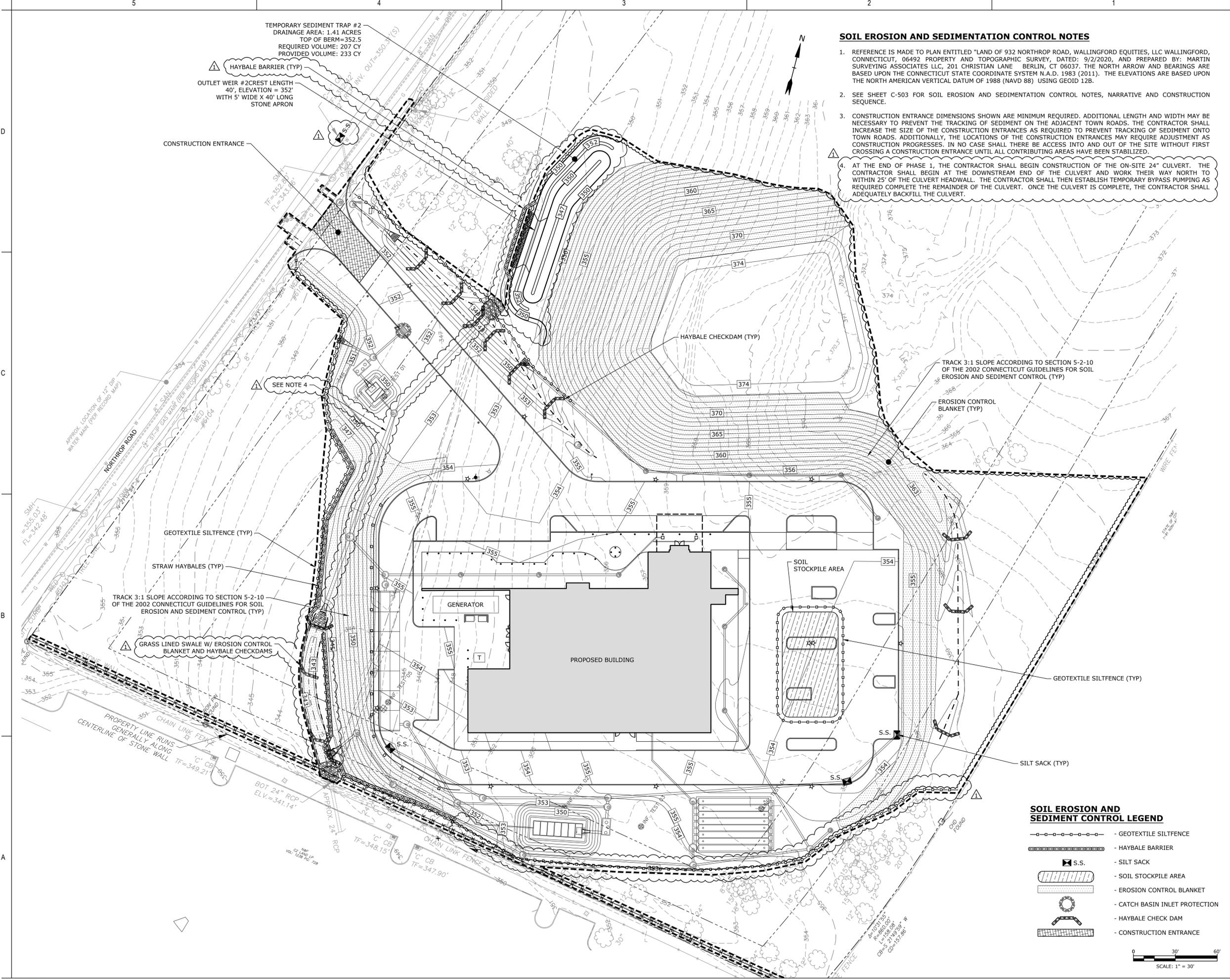
Title  
**SOIL EROSION AND SEDIMENTATION  
CONTROL PLAN -2**

Project No. Scale  
P5050-004 1" = 30'

Revision Drawing No.

**SOIL EROSION AND SEDIMENTATION CONTROL NOTES**

- REFERENCE IS MADE TO PLAN ENTITLED "LAND OF 932 NORTHROP ROAD, WALLINGFORD EQUITIES, LLC WALLINGFORD, CONNECTICUT, 06492 PROPERTY AND TOPOGRAPHIC SURVEY, DATED: 9/2/2020, AND PREPARED BY: MARTIN SURVEYING ASSOCIATES LLC, 201 CHRISTIAN LANE BERLIN, CT 06037. THE NORTH ARROW AND BEARINGS ARE BASED UPON THE CONNECTICUT STATE COORDINATE SYSTEM N.A.D. 1983 (2011). THE ELEVATIONS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) USING GEOID 12B.
- SEE SHEET C-503 FOR SOIL EROSION AND SEDIMENTATION CONTROL NOTES, NARRATIVE AND CONSTRUCTION SEQUENCE.
- CONSTRUCTION ENTRANCE DIMENSIONS SHOWN ARE MINIMUM REQUIRED. ADDITIONAL LENGTH AND WIDTH MAY BE NECESSARY TO PREVENT THE TRACKING OF SEDIMENT ON THE ADJACENT TOWN ROADS. THE CONTRACTOR SHALL INCREASE THE SIZE OF THE CONSTRUCTION ENTRANCES AS REQUIRED TO PREVENT TRACKING OF SEDIMENT ONTO TOWN ROADS. ADDITIONALLY, THE LOCATIONS OF THE CONSTRUCTION ENTRANCES MAY REQUIRE ADJUSTMENT AS CONSTRUCTION PROGRESSES. IN NO CASE SHALL THERE BE ACCESS INTO AND OUT OF THE SITE WITHOUT FIRST CROSSING A CONSTRUCTION ENTRANCE UNTIL ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED.
- AT THE END OF PHASE 1, THE CONTRACTOR SHALL BEGIN CONSTRUCTION OF THE ON-SITE 24" CULVERT. THE CONTRACTOR SHALL BEGIN AT THE DOWNSTREAM END OF THE CULVERT AND WORK THEIR WAY NORTH TO WITHIN 25' OF THE CULVERT HEADWALL. THE CONTRACTOR SHALL THEN ESTABLISH TEMPORARY BYPASS PUMPING AS REQUIRED COMPLETE THE REMAINDER OF THE CULVERT. ONCE THE CULVERT IS COMPLETE, THE CONTRACTOR SHALL ADEQUATELY BACKFILL THE CULVERT.



**SOIL EROSION AND SEDIMENTATION CONTROL LEGEND**

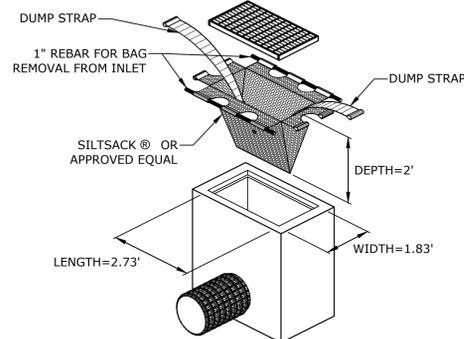
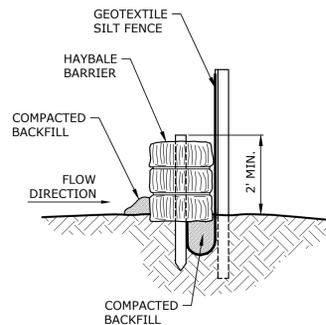
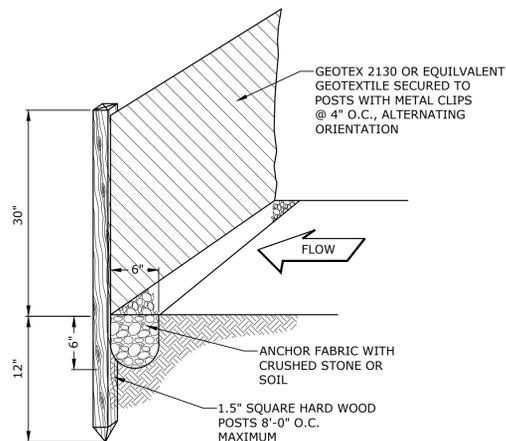
- GEOTEXTILE SILTFENCE
- HAYBALE BARRIER
- SILT SACK
- SOIL STOCKPILE AREA
- EROSION CONTROL BLANKET
- CATCH BASIN INLET PROTECTION
- HAYBALE CHECK DAM
- CONSTRUCTION ENTRANCE



Last Saved: 12/30/2020  
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 ORIGINAL SHEET - ARCHD

**SOIL EROSION AND SEDIMENTATION CONTROL NOTES**

- ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATION OF THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" DEEP BULLETIN NO 34, AND ALL AMENDMENTS AND ADDENDA THERETO AS PUBLISHED BY THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION.
- ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND ELSEWHERE AS ORDERED BY THE OWNER'S REPRESENTATIVE, OR THE TOWN OF WALLINGFORD.
- ALL CATCH BASINS SHALL BE PROTECTED WITH SILT SACKS, HAYBALE RING, SILT FENCE OR BLOCK AND STONE INLET PROTECTION THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED.
- WHEREVER POSSIBLE, EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
- ADDITIONAL CONTROL MEASURES SHALL BE INSTALLED DURING CONSTRUCTION PERIOD AS ORDERED BY THE OWNER'S REPRESENTATIVE, OR THE TOWN OF WALLINGFORD. THE PROCUREMENT, INSTALLATION AND MAINTENANCE OF ADDITIONAL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES TO REPLACE DAMAGED MEASURES, EMERGENCY REPAIRS, AND TO MEET CONDITIONS OF THE SITE AS CONSTRUCTION PROGRESSES SHALL BE INCLUDED IN CONTRACTORS LUMP-SUM BID PRICE.
- ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
- SEDIMENT REMOVED SHALL BE DISPOSED OF LEGALLY OFFSITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PERIOD.
- THE CONTRACTOR SHALL MAINTAIN A SUPPLY OF SILT FENCE/HAYBALES AND ANTI-TRACKING CRUSHED STONE ON-SITE FOR EMERGENCY REPAIRS.
- THE CONTRACTOR SHALL UTILIZE APPROVED METHODS/MATERIALS FOR PREVENTING THE BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES ONTO ADJACENT PROPERTIES AND SITE AREAS.
- ALL DRAINAGE STRUCTURES SHALL BE INSPECTED WEEKLY BY THE CONTRACTOR AND CLEANED TO PREVENT THE BUILD-UP OF SILT.
- THE CONTRACTOR SHALL CAREFULLY COORDINATE THE PLACEMENT OF EROSION CONTROL MEASURES WITH THE PHASING OF CONSTRUCTION.
- KEEP ALL PAVED ROADWAYS CLEAN. SWEEP BEFORE FORECASTED STORMS OR WEEKLY AS NECESSARY.
- TREAT ALL UNPAVED SURFACES IN ACCORDANCE WITH LANDSCAPE PLANS.
- HAYBALE BARRIERS AND SILT FENCING SHALL BE INSTALLED ALONG THE TOE OF CRITICAL CUT AND FILL SLOPES AS SHOWN ON THE PLANS AND AS DIRECTED BY THE TOWN OF WALLINGFORD.
- ALL TRUCKS LEAVING THE SITE MUST BE COVERED.
- DISTURBED SLOPES GREATER THAN 3:1 AND SEDIMENT TRAPS AS SHOWN ON THE PLANS SHALL BE IMMEDIATELY STABILIZED WITH EROSION CONTROL BLANKET, NORTH AMERICAN GREEN SC150BN OR APPROVED EQUIVALENT.
- ALL SEDIMENTATION AND EROSION CONTROLS SHALL BE CHECKED WEEKLY AND AFTER EACH RAINFALL EVENT. NECESSARY REPAIRS SHALL BE MADE WITHOUT DELAY.
- PRIOR TO ANY FORECASTED RAINFALL, EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED AND REPAIRED AS NECESSARY.
- AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, EROSION CONTROLS MAY BE REMOVED ONCE AUTHORIZATION TO DO SO HAS BEEN SECURED FROM THE TOWN. DISTURBED AREAS SHALL BE SEEDED AND MULCHED.
- ALL DRAINAGE SWALES SHALL BE STABILIZED WITH EROSION CONTROL BLANKET, NORTH AMERICAN GREEN C125BN OR APPROVED EQUIVALENT.
- CONTRACTOR IS TO COMPLY WITH THE REQUIREMENTS OF THE SOIL EROSION AND SEDIMENTATION CONTROL PLAN, DETAILS, AND SPECIFICATIONS.



**NOTE:**

- BACKFILL AND COMPACT THE EXCAVATED SOIL AS SHOWN ON THE UPHILL SIDE OF THE BARRIER TO PREVENT PIPING.

SILTSACK MANUFACTURED BY:  
ACF ENVIRONMENTAL  
2831 CARDWELL ROAD  
RICHMOND, VIRGINIA 23237

**SILT FENCE**  
NO SCALE

**SILT FENCE AND HAYBALE COMBINED BARRIER**  
NO SCALE

**SILTSACK®**  
NO SCALE

**SOIL EROSION AND SEDIMENTATION CONTROL NARRATIVE**

THE PROPOSED DEVELOPMENT IS ENTITLED "CONNECTICUT PROTON THERAPY CENTER" IN WALLINGFORD, CONNECTICUT.

THE PROJECT WILL INCLUDE THE PROTON THERAPY BUILDING, SANITARY SEWER SERVICE, DOMESTIC WATER AND FIRE PROTECTION SERVICE, UNDERGROUND ELECTRIC AND TEL-DATA UTILITIES, STORMWATER MANAGEMENT SYSTEM, BITUMINOUS CONCRETE DRIVEWAY AND SURFACE PARKING AREA, CURBS, LANDSCAPING, LIGHTING, AND SIDEWALKS.

STORMWATER MANAGEMENT SYSTEMS SHALL CONFORM TO THE STANDARDS OUTLINED IN THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION (CTDEEP) 2004 CONNECTICUT STORMWATER QUALITY MANUAL AND THE TOWN OF WALLINGFORD WATERSHED PROTECTION REGULATIONS. STORMWATER MANAGEMENT WILL BE ACCOMMODATED ON-SITE. SURFACE RUNOFF WILL BE COLLECTED IN CATCH BASINS AND CONVEYED THROUGH AN OIL GRIT SEPARATOR, SAND FILTER AND INFILTRATION BASIN. ROOF RUNOFF WILL BE COLLECTED IN A ROOF LEADER SYSTEM PRIOR TO BEING DISCHARGED INTO UNDERGROUND INFILTRATION SYSTEMS. THE STORMWATER COLLECTION SYSTEM WILL UTILIZE A "TREATMENT TRAIN" APPROACH AND INCLUDE LOW IMPACT DEVELOPMENT (LID) SYSTEMS TO TREAT THE ONE INCH OF THE REQUIRED WATER QUALITY VOLUME, REMOVE TOTAL SUSPENDED SOLIDS AND REDUCE PEAK FLOW.

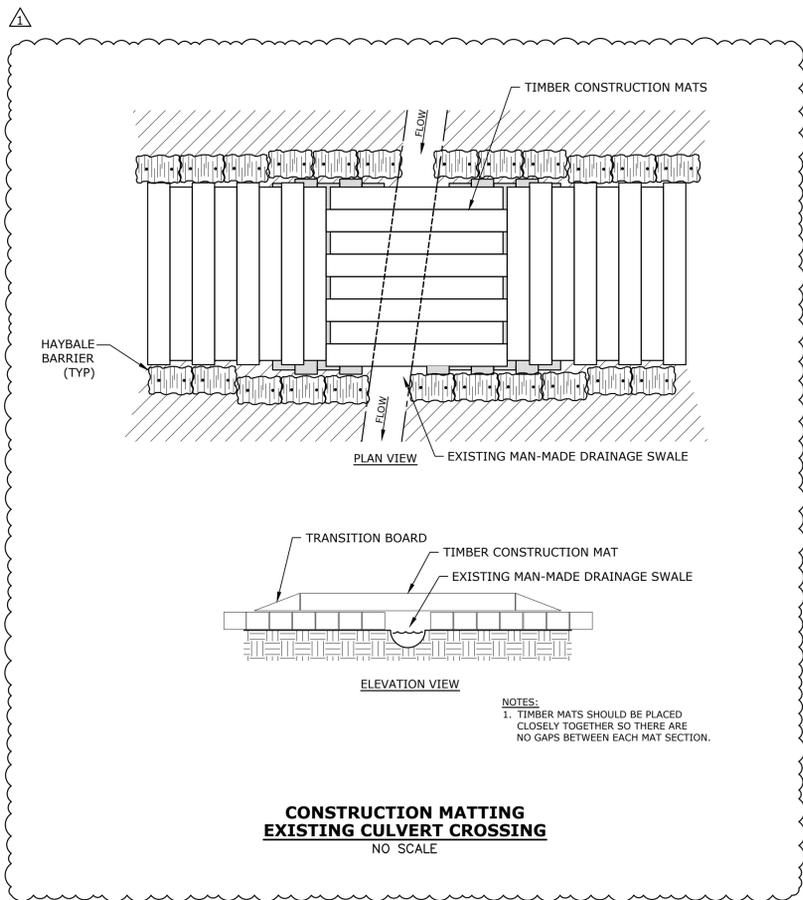
THE PROJECT IS PROPOSED TO BE CONSTRUCTED IN A SINGLE PHASE. APPROXIMATELY 4.8 ACRES WILL BE DISTURBED.

CONSTRUCTION START: SPRING 2021  
CONSTRUCTION END: SUMMER 2022

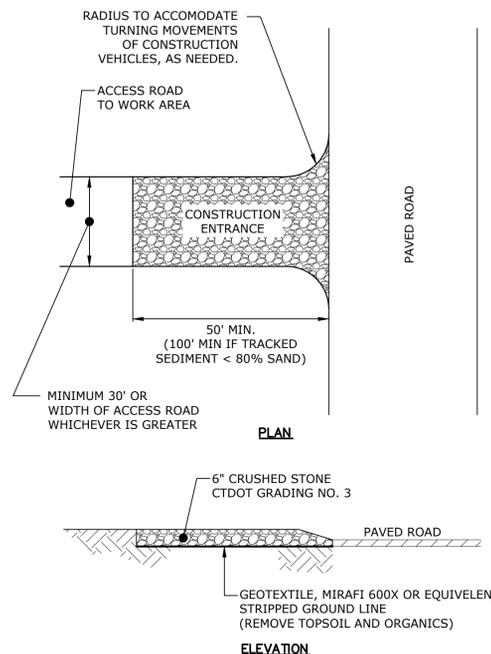
SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL CONFORM TO THE STANDARDS OUTLINED IN THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION (CTDEEP), "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL", LATEST REVISION.

**CONSTRUCTION SEQUENCE**

- FIELD STAKE THE LIMITS OF CONSTRUCTION.
- CONDUCT A PRE-CONSTRUCTION MEETING WITH THE OWNER OR OWNER'S REPRESENTATIVE, TOWN ENGINEER, DESIGN ENGINEER, CONTRACTOR AND SITE SUPERINTENDENT TO ESTABLISH THE LIMITS OF CONSTRUCTION, CONSTRUCTION PROCEDURES, AND MATERIAL STOCKPILE AREAS. CONTRACTOR TO "CALL BEFORE YOU DIG" (1-800-922-4455) PRIOR TO HOLDING PRE-CONSTRUCTION MEETING.
- INSTALL ALL APPLICABLE SOIL AND EROSION CONTROL MEASURES AROUND THE PERIMETER OF THE SITE TO THE EXTENT POSSIBLE. THIS WILL INCLUDE HAY BALE AND SILTATION FENCE AROUND THE PROJECT AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- INSTALL ANTI-TRACKING PAD IN THE AREAS AS SHOWN ON THE PLANS. ALL CONSTRUCTION ACCESS SHALL BE INTO THE SITE THROUGH THE ANTI-TRACKING PADS.
- BEGIN TREE CLEARING IN THE VICINITY OF SEDIMENT TRAP 01, 02, AND TEMPORARY STONE LINED SWALES.
- ESTABLISH TEMPORARY SEDIMENT TRAPS 01 AND 02 AND ASSOCIATED STONE LINED SWALES.
- CLEAR REMAINING TREES WITHIN THE PROJECT LIMITS. CHIP BRUSH AND SLASH, STOCKPILE CHIPS FOR FUTURE USE OR REMOVE OFF-SITE.
- ESTABLISH TEMPORARY STOCKPILE AREA AND STAGING AREA. PROVIDE SILT FENCE/HAYBALE BARRIER AROUND SOIL STOCKPILE AREA.
- CONSTRUCT ON-SITE 24" CULVERT AND DRAINAGE SWALE TO REDIRECT STORMWATER RUNOFF FROM THE EXISTING MAN-MADE DRAINAGE SWALE TO THE EXISTING 24" CULVERT AT THE SOUTHERN PROPERTY LINE.
- MAKE NECESSARY CUTS AND FILLS REQUIRED AND ESTABLISH THE SUBGRADE FOR THE BUILDING AND ALL PAVED SURFACES. STABILIZE AREA.
- BEGIN CONSTRUCTION OF THE BUILDING AND ALL UTILITIES WITHIN 5' OF THE BUILDING.
- UPON COMPLETION OF THE BUILDING FOUNDATION AND REMOVE SEDIMENT TRAP 01 TO ACCOMMODATE GRADING AND UTILITY CONSTRUCTION WEST OF THE BUILDING.
- INSTALL ALL DRAINAGE TO THE MAXIMUM EXTENT PRACTICABLE. GRADE THE AREA AROUND THE STORM DRAINAGE SYSTEM AS NECESSARY TO PROVIDE POSITIVE DRAINAGE TOWARDS 24" STORM DRAIN.
- INSTALL ALL SITE LIGHTING AND UTILITIES.
- ROUGH GRADE SITE WALKWAYS, DRIVEWAYS, AND PARKING AREAS.
- COMPLETE ALL REMAINING DRAINAGE FOR THE ENTIRE PROJECT AREA.
- FINE GRADE AND ESTABLISH ALL WALKWAYS AND CURBING FOR THE ENTIRE PROJECT AREA.
- FINE GRADE PARKING AND DRIVEWAY AREAS FOR THE ENTIRE PROJECT AREA.
- PAVE FIRST COURSE OF PAVEMENT IN ALL PARKING AND DRIVEWAYS.
- FINE GRADE, RAKE, SEED, AND MULCH WITHIN 2 FEET OF CURBING.
- PLACE TOPSOIL WHERE REQUIRED, COMPLETE PERIMETER LANDSCAPE PLANTINGS.
- WHEN ALL OTHER WORK HAS BEEN COMPLETED, REPAIR AND SWEEP ALL PAVED AREAS FOR THE FINAL COURSE OF PAVING. INSPECT DRAINAGE SYSTEM AND CLEAN AS NEEDED.
- INSTALL FINAL COURSE OF PAVEMENT.
- REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS (SILT FENCE, HAYBALE, ETC.).



**CONSTRUCTION MATTING EXISTING CULVERT CROSSING**  
NO SCALE



**CONSTRUCTION ENTRANCE**  
NO SCALE

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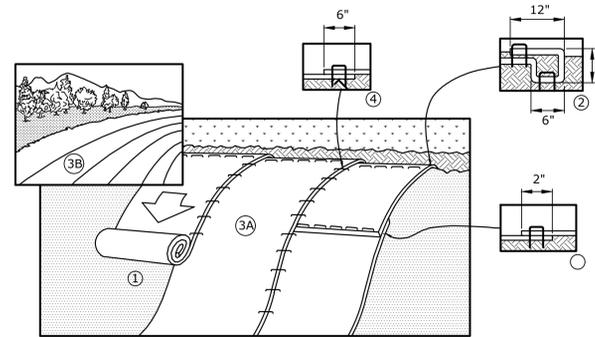
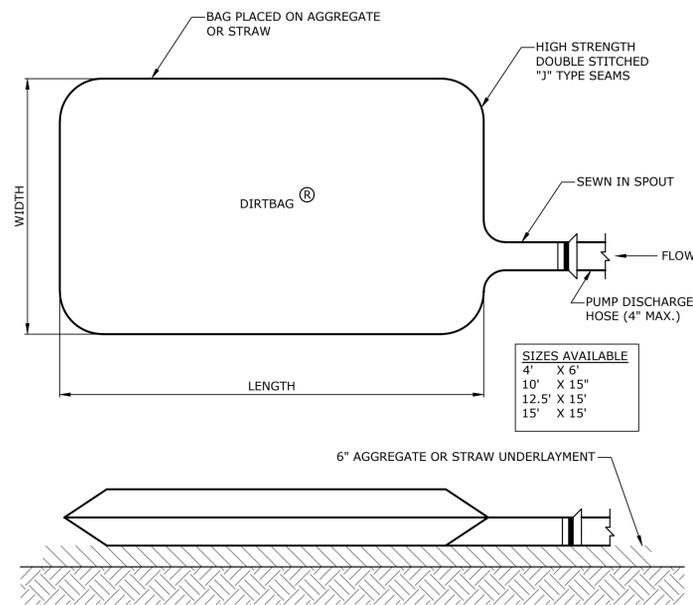
STRUCTURAL - Goldstein-Milano Structural Engineers, LLC

MEP / FA / FP / IT - BR+A

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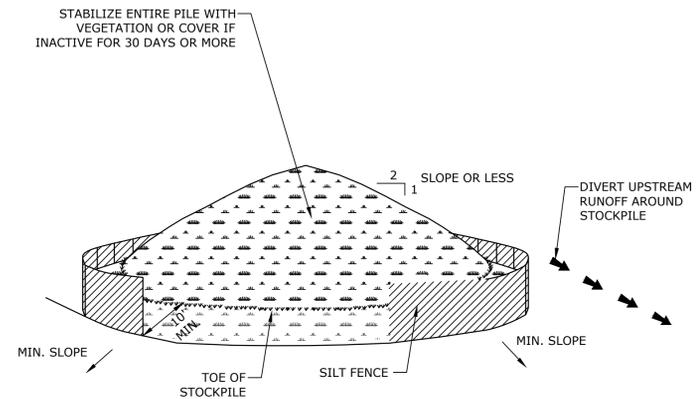
**Tighe & Bond**

1000 Bridgeport Avenue  
Suite 320  
Shelton, CT 06484  
(203) 712-1100



**NOTES:**

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE, 36" OVER THE GRADE BREAK, BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UPSLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES SPACED 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS DOWN THE SLOPE. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SOIL SURFACE BY PLACING STAPLES IN APPROPRIATE LOCATIONS AS SHOWN ON THE STAPLE PATTERN GUIDE.
4. STAPLE LENGTHS SHALL BE A MINIMUM OF 8 INCHES.



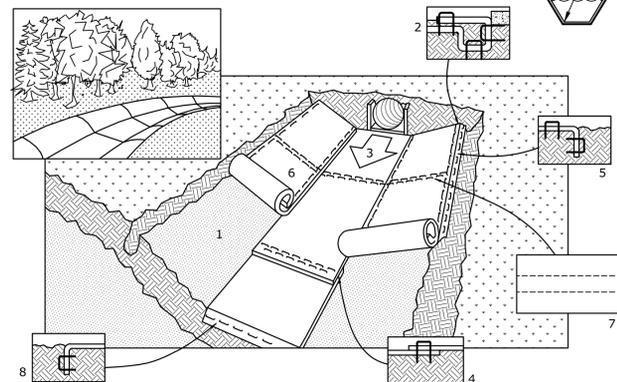
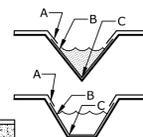
**INSTALLATION NOTES:**

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2H:1V.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR HAYBALES, THEN STABILIZED WITH VEGETATION OR COVERED.

**DIRTBAG<sup>®</sup> PUMPED SILT CONTROL SYSTEM**  
NO SCALE

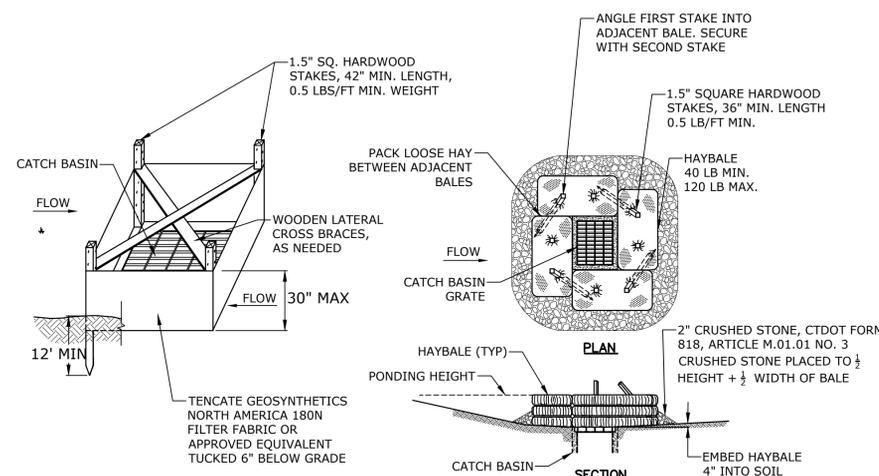
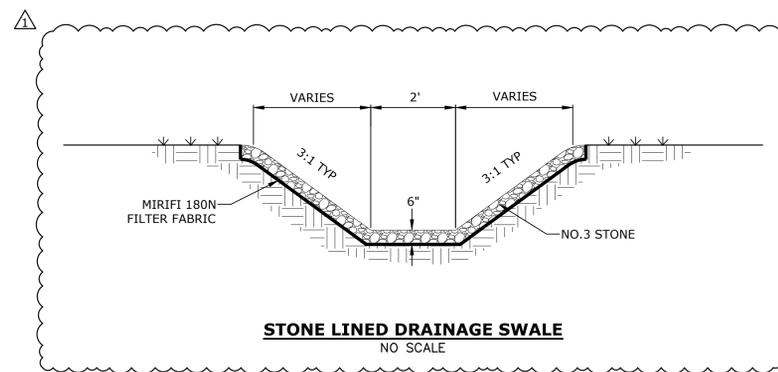
**NOTE:** HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE RECOMMENDATIONS FOR CHANNELS.

**CRITICAL POINTS**  
A. OVERLAPS AND SEAMS  
B. PROJECTED WATER LINE  
C. CHANNEL BOTTOM/SIDE SLOPE VERTICIES



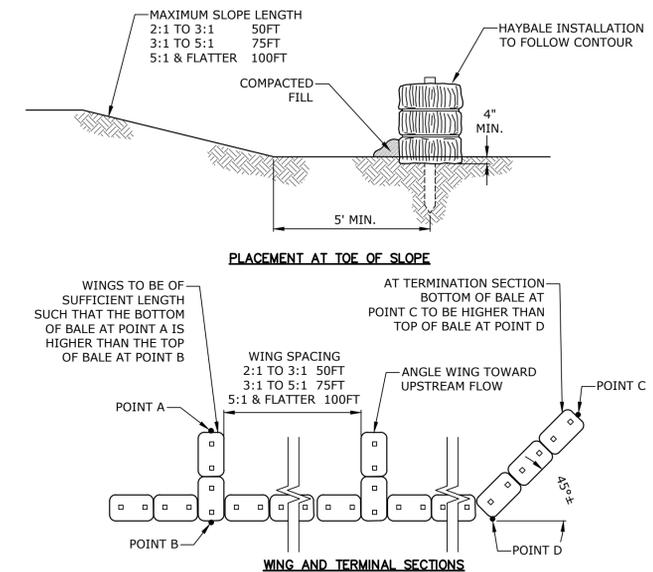
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW ON BOTTOM OF CHANNEL.
4. PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH A 6" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. BLANKETS ON SIDE SLOPES MUST BE OVERLAPPED 4" OVER THE CENTER BLANKET AND STAPLED (2" FOR C350 MATTING).
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A ROW OF STAPLES 4" APART OVER THE ENTIRE WIDTH OF THE CHANNEL. PLACE A SECOND ROW 4" BELOW THE FIRST ROW IN A STAGGERED PATTERN.
8. TERMINAL END OF THE BLANKETS MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

**EROSION CONTROL BLANKET INSTALLATION**  
NO SCALE



**SILT FENCE INSTALLATION AT CATCH BASIN AT LOW POINTS**

**HAYBALE FILTER INSTALLATION AT CATCH BASIN AT LOW POINTS**



1 / REVISED PER TOWN COMMENTS	2020.12.30
LOCAL APPROVALS	2020.12.01
Issue/Revision	YYYY.MM.DD

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Client/Project  
**CONNECTICUT PROTON THERAPY CENTER - OUTPATIENT FACILITY**

Proton International  
932 NORTHROP RD. WALLINGFORD, CT 06492

Title  
**SOIL EROSION AND SEDIMENTATION CONTROL DETAILS**

Project No.	Scale
P5050-004	NO SCALE
Revision	Drawing No.

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Client/Project  
**CONNECTICUT PROTON  
THERAPY CENTER -  
OUTPATIENT FACILITY**

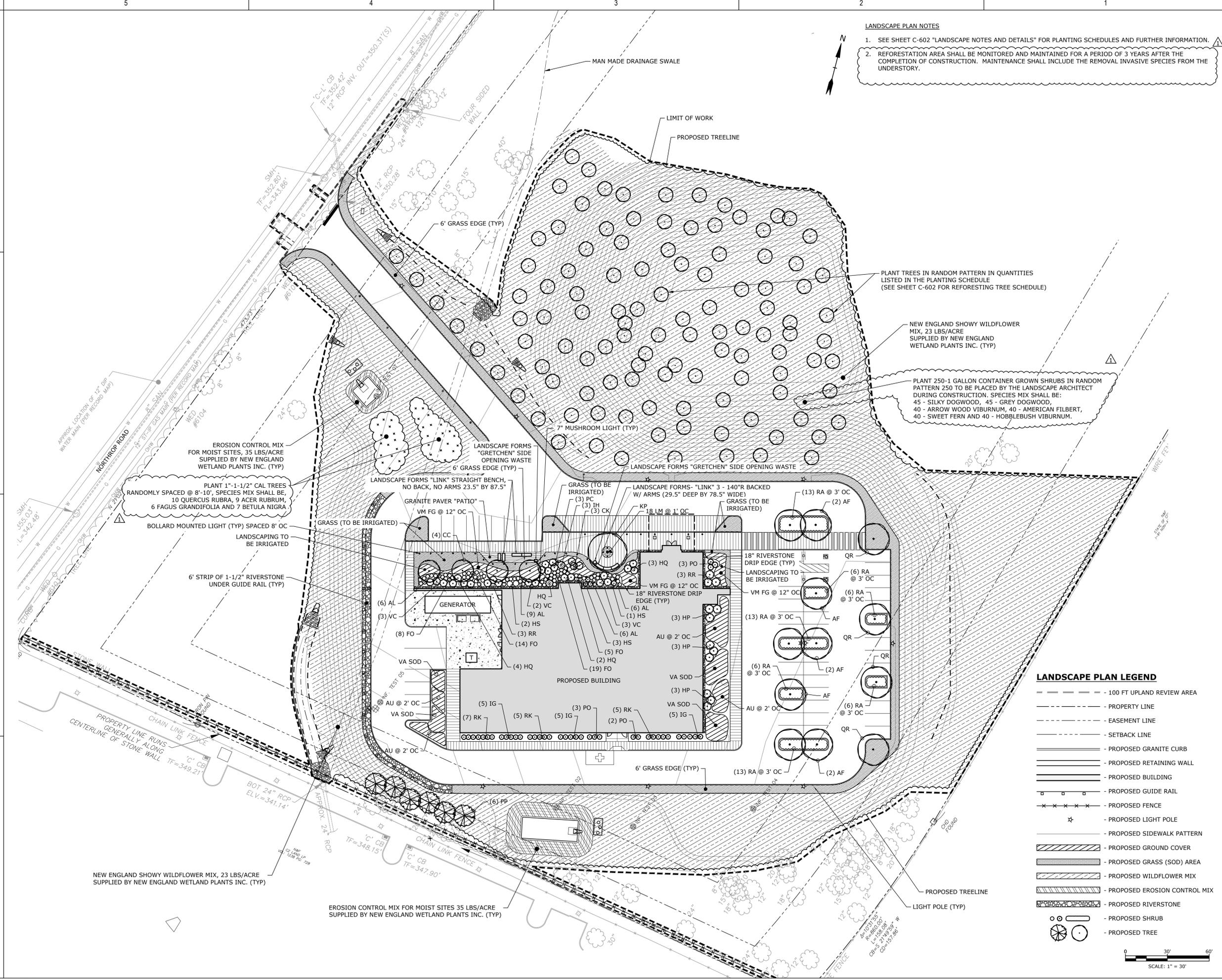
Proton International  
932 NORTHROP RD. WALLINGFORD, CT 06492

Title  
**LANDSCAPE PLAN**

Project No. P5050-004	Scale 1" = 30'
Revision	Drawing No.

**LANDSCAPE PLAN NOTES**

- SEE SHEET C-602 "LANDSCAPE NOTES AND DETAILS" FOR PLANTING SCHEDULES AND FURTHER INFORMATION.
- REFORESTATION AREA SHALL BE MONITORED AND MAINTAINED FOR A PERIOD OF 3 YEARS AFTER THE COMPLETION OF CONSTRUCTION. MAINTENANCE SHALL INCLUDE THE REMOVAL INVASIVE SPECIES FROM THE UNDERSTORY.



**LANDSCAPE PLAN LEGEND**

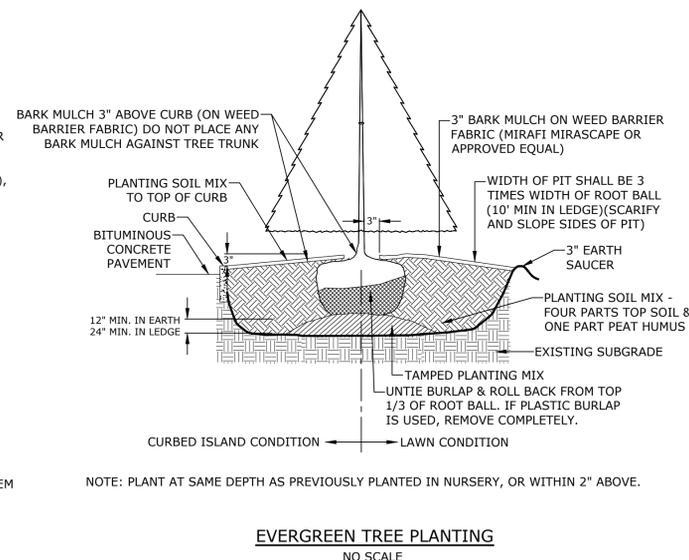
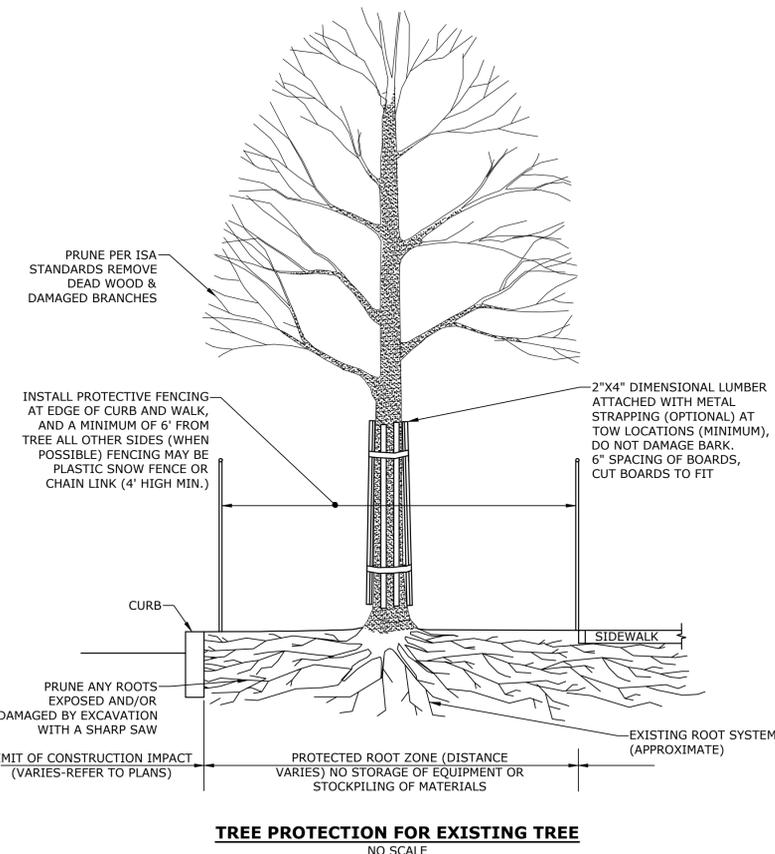
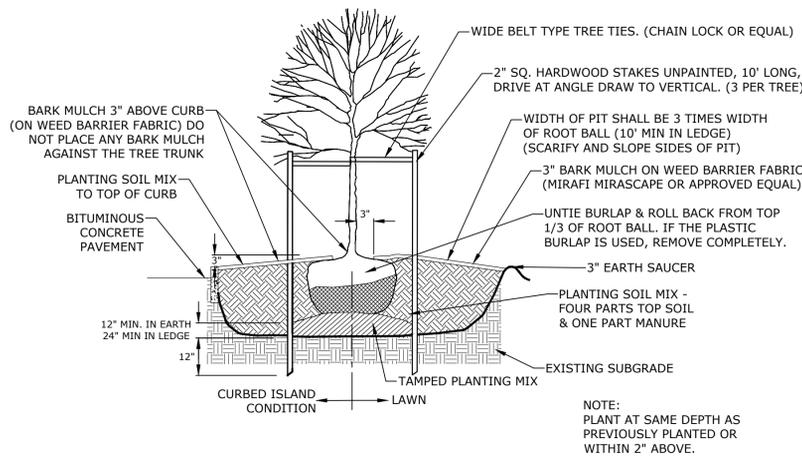
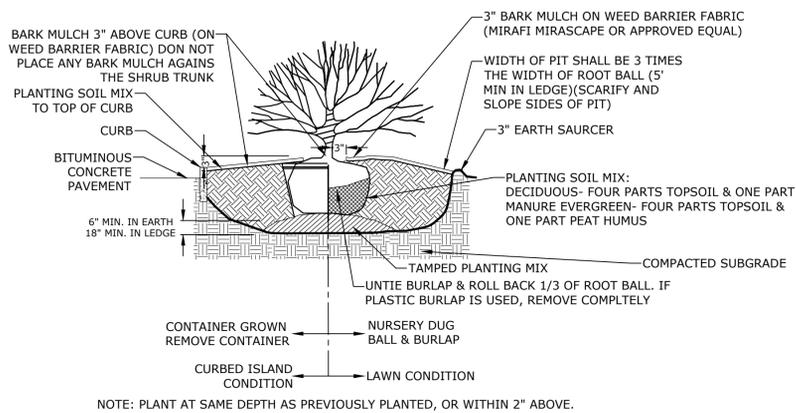
- 100 FT UPLAND REVIEW AREA
- PROPERTY LINE
- EASEMENT LINE
- SETBACK LINE
- PROPOSED GRANITE CURB
- PROPOSED RETAINING WALL
- PROPOSED BUILDING
- PROPOSED GUIDE RAIL
- PROPOSED FENCE
- ☆ PROPOSED LIGHT POLE
- PROPOSED SIDEWALK PATTERN
- PROPOSED GROUND COVER
- PROPOSED GRASS (SOD) AREA
- PROPOSED WILDFLOWER MIX
- PROPOSED EROSION CONTROL MIX
- PROPOSED RIVERSTONE
- ○ PROPOSED SHRUB
- ○ PROPOSED TREE



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**LANDSCAPE NOTES:**

- CONTRACTOR WILL LOCATE, VERIFY AND MARK ALL EXISTING AND NEWLY INSTALLED UNDERGROUND UTILITIES PRIOR TO ANY LAWNWORK OR PLANTING. ANY CONFLICTS WHICH MIGHT OCCUR BETWEEN PLANTING AND UTILITIES SHALL IMMEDIATELY BE REPORTED TO THE OWNER OR LANDSCAPE ARCHITECT FOR RESOLUTION PRIOR TO PERFORMING ANY WORK.
- CONTRACTOR WILL FURNISH AND PLANT ALL MATERIAL IN QUANTITIES AS SHOWN ON THIS PLAN OR AS INDICATED IN PLANT LIST, WHICHEVER IS GREATER. CLARIFY ANY DISCREPANCIES WITH LANDSCAPE ARCHITECT PRIOR TO PLACING PURCHASE ORDER.
- NO SUBSTITUTION OF PLANT MATERIALS WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE OWNER OR LANDSCAPE ARCHITECT.
- ALL PLANTS SHALL BE NURSERY GROWN AND WILL CONFORM AT A MINIMUM TO STANDARDS ESTABLISHED BY LATEST EDITION OF "AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1)" AS PUBLISHED BY THE AMERICAN HORTICULTURE INDUSTRY ASSOCIATION.
- PLANT STOCK WILL BE GROWN WITHIN HARDINESS ZONES 4 THRU 7 ESTABLISHED BY THE PLANT HARDINESS ZONE MAP, MISCELLANEOUS PUBLICATIONS NO. 814, AGRICULTURAL RESEARCH SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE, LATEST REVISION.
- ALL PLANTS MUST BE MOVED WITH ROOT SYSTEMS AS SOLID UNITS AND WITH BALLS OF EARTH FIRMLY WRAPPED IN BURLAP OR CONTAINED IN PLASTIC CONTAINER. NO PLANT WILL BE ACCEPTED WHEN THE BALL OF EARTH SURROUNDING ITS ROOTS HAS BEEN BADLY CRACKED, BROKEN APART OR DISPLAYS SEVERELY DRIED OUT CONDITION.
- ALL PLANTS THAT CANNOT BE PLANTED AT ONCE MUST BE HEELED-IN BY SETTING IN THE GROUND, COVERING THE ROOTBALLS WITH SOIL AND THEN WATERING. DURING TRANSPORT, ALL PLANT MATERIALS SHALL BE WRAPPED WITH WIND PROOF COVERING.
- DECIDUOUS PLANT MATERIAL WILL BE PLANTED APRIL 1 THROUGH NOVEMBER 1. EVERGREEN PLANT MATERIAL WILL BE PLANTED APRIL 1 THROUGH JUNE 30 OR SEPTEMBER 1 THROUGH NOVEMBER 30.
- THERE WILL BE NO PLANTING DURING JULY AND AUGUST UNLESS SPECIAL PROVISIONS ARE MADE FOR WATERING.
- ALL PLANT MATERIALS ARE SUBJECT TO APPROVAL OF LANDSCAPE ARCHITECT AT NURSERY AND AT SITE AT LANDSCAPE ARCHITECTS DISCRETION.
- ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED, WILL RECEIVE MINIMUM SIX (6) INCH LOAM AND SEED AT THE DIRECTION OF THE LANDSCAPE ARCHITECT. SEEDED AREA WILL BE MAINTAINED BY CONTRACTOR UNTIL ACCEPTED BY OWNER OR LANDSCAPE ARCHITECT.
- TREE STAKES AND WRAP WILL REMAIN IN PLACE FOR 1 YEAR. CONTRACTOR WILL REMOVE AT THAT TIME.
- TREES WILL BE PRUNED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI A300 "TREES, SHRUBS AND OTHER WOOD PLANT MAINTENANCE STANDARD PRACTICES".
- THE CONTRACTOR WILL MAINTAIN AND GUARANTEE ALL PLANTINGS TO BE IN GOOD HEALTHY, FLOURISHING AND ACCEPTABLE CONDITION FOR A PERIOD OF (1) YEAR BEGINNING AT THE DATE OF ACCEPTANCE BY LANDSCAPE ARCHITECT WHEN 100% COMPLETE. ALL GRASSES, TREES AND SHRUBS THAT, IN THE OPINION OF THE LANDSCAPE ARCHITECT, SHOW LESS THAN 80% HEALTHY GROWTH AT THE END OF (1) YEAR GUARANTEE PERIOD WILL BE REPLACED BY THE CONTRACTOR. DO NOT REPLACE ANY PLANT MATERIAL IN THE PERIOD FROM NOVEMBER 15 THROUGH MARCH 31.
- DECIDUOUS PLANT MATERIAL INSTALLED AFTER SEPTEMBER 30 AND BEFORE APRIL 1 WILL NOT BE REVIEWED FOR ACCEPTANCE DUE TO STAGE OF LEAF PHYSIOLOGY. THIS PLANT MATERIAL WILL NOT BE REVIEWED UNTIL THE FOLLOWING GROWING SEASON. GUARANTEE PERIOD WILL ONLY BEGIN AFTER ACCEPTANCE BY LANDSCAPE ARCHITECT.
- CONTRACTOR WILL WATER ALL PLANTS THOROUGHLY TWICE DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS WILL BE WATERED WEEKLY, OR MORE OFTEN, IF NECESSARY DURING THE FIRST GROWING SEASON, BUT FOR NOT LESS THAN ONE YEAR.
- MAINTENANCE OF LAWN AND GRASSES WILL BEGIN IMMEDIATELY INCLUDING WATERING, RESEEDING, AND MOWING. CONTRACTOR WILL BE RESPONSIBLE FOR ESTABLISHING A UNIFORM STAND OF GRASS UNTIL ACCEPTANCE BY OWNER OR LANDSCAPE ARCHITECT.
- ALL PLANT BED EDGES WILL BE SMOOTH AND CONSISTENT IN LAYOUT. IRREGULAR, "WAVEY" EDGES WILL NOT BE ACCEPTED. ALL PLANT BED EDGES WILL INTERSECT WITH PAVEMENTS AT 90 DEGREE ANGLES UNLESS OTHERWISE SHOWN ON DRAWINGS.
- ALL SHRUB GROUPINGS WILL BE INCORPORATED INTO PLANTING BEDS. WHERE MULCHED PLANTING BEDS ABOUT LAWN, CONTRACTOR WILL PROVIDE A TURF CUT EDGE.
- SEE SNOW STORAGE LOCATIONS. IF SNOW STORAGE AREAS PROVIDED ON THE SITE ARE COMPLETELY UTILIZED, EXCESS SNOW WILL BE TRANSPORTED OFF SITE FOR DISPOSAL IN ACCORDANCE WITH NHDES REGULATION. IF SNOW IS STORED WITHIN PARKING AREA KEEP CATCH BASINS CLEAR.
- SEE DETAIL PLANS FOR LANDSCAPE RELATED DETAILS.
- PLANT BEDS ADJACENT TO BUILDING SHALL BE MULCHED TO A DEPTH OF 3" WITH DOUBLE WASHED, ROUNDED, SMOOTH, 3/4" TO 2" DIAMETER DECORATIVE STONES.
- ONLY ORGANIC, LOW-PHOSPHOROUS, LOW-NITROGEN FERTILIZER SHALL BE USED ON THIS SITE.



**GROUND COVER SCHEDULE:**

CODE	BOTANICAL NAME	COMMON NAME	SIZE
AU	ARCTOSTAPHYLOS UVA-URSI	BEARBERRY	1 GAL
VA	VACCINIUM ANGUSTIFOLIUM	LOW BUSH BLUEBERRY	SOD
VM	VINCA MINOR	PERIWINKLE	FLAT GROWN

**TREE SCHEDULE:**

CODE	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE
AF	8	ACER X FREEMANII 'AUTUMN BLAZE'	AUTUMN BLAZE MAPLE	3" - 3-1/2" CAL
CC	4	CERCIS CANADENSIS	EASTERN REDBUD	7' - 8' B&B MULTI
KP	1	KOELREUTERIA PANICULATA	GOLDENRAIN TREE	5" - 6" CAL
PP	6	PICEA PUNGEONS 'FAT ALBERT'	FAT ALBERT BLUE SPRUCE	7' - 8' HT
QR	4	QUERCUS RUBRA	RED OAK	3" - 3-1/2" CAL

**SHRUB SCHEDULE:**

CODE	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE
AL	27	ATHYRIUM FILIX-FEMINA 'LADY IN RED'	LADY IN RED FERN	2 GAL
CK	3	CALMAGROSTIS 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	3 GAL
FO	36	OSMUNDA CINNAMOMEA	CINNAMON FERN	2 GAL
HP	9	HYDRANGEA 'PINKY WINKY'	PINKY WINKY HYDRANGEA	3' - 4' B & B
HQ	10	HYDRANGEA QUERCIFOLIA 'QUEEN OF HEARTS'	QUEEN OF HEARTS OAKLEAF HYDRANGEA	3' - 4' B & B
HS	6	HOSTA 'SUM AND SUBSTANCE'	SUM AND SUBSTANCE PLANTAIN LILY	2 GAL
IG	15	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	5 GAL
IH	3	ITEA VIRGINICA 'HENRY'S GARNET'	HENRY'S GARNET SWEET SPIRE	5 GAL
LM	18	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILYTURF	1 GAL
PC	3	PHYSOCARPUS OPULIFOLIUS 'COPPERTINA'	COPPERTINA NINEBARK	7 GAL
PO	8	PHYSOCARPUS OPULIFOLIUS 'LITTLE DEVIL'	LITTLE DEVIL NINEBARK	5 GAL
RA	63	RHUS AROMATICA 'GROW-LOW'	GROW LOW SUMAC	2 GAL
RK	17	ROSA "KNOCKOUT BLUSHING"	BLUSHING KNOCKOUT ROSE	3 GAL
RR	6	RHODODENDRON 'ROSEUM PINK'	ROSEUM PINK RHODODENDRON	7 GAL
VC	8	VIBURNUM CARLESII 'CAYUGA'	CAYUGA MAYFLOWER	3' - 4' B & B

**REFORESTING TREE SCHEDULE:**

CODE	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE
AR	38	ACER RUBRUM	RED MAPLE	3/4" - 1"(70%), 1" - 1 1/2"(30%) CAL
QR	37	QUERCUS RUBRUM	RED OAK	3/4" - 1"(70%), 1" - 1 1/2"(30%) CAL
BA	25	BETULA ALLEGANIENSIS	YELLOW BIRCH	3/4" - 1"(70%), 1" - 1 1/2"(30%) CAL
FG	25	FAGUS GRANDIFOLIA	AMERICAN BEACH	3/4" - 1"(70%), 1" - 1 1/2"(30%) CAL

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MDS

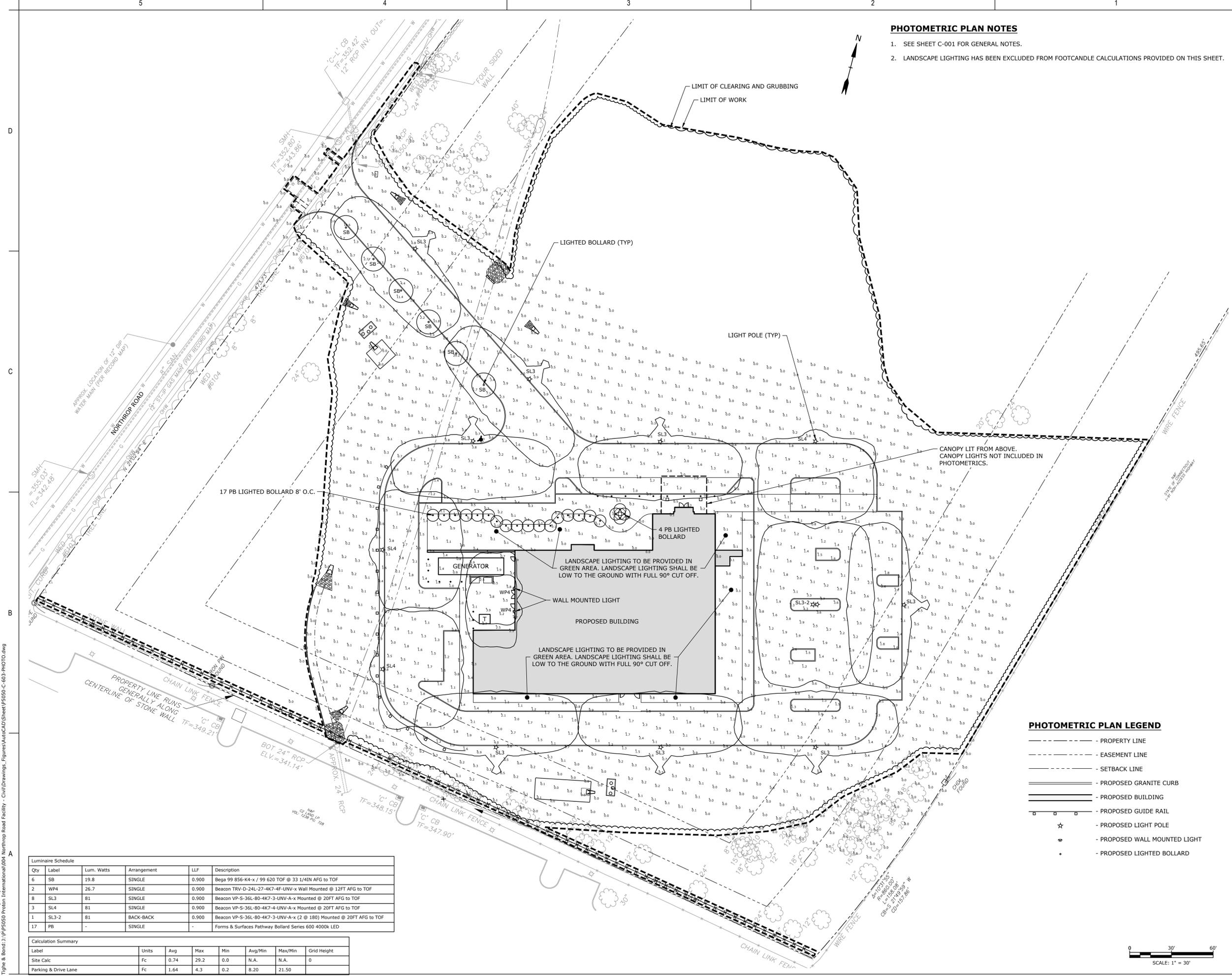
Title  
**PHOTOMETRIC PLAN**

Project No. P5050-004  
Revision  
Scale 1" = 30'  
Drawing No.

**C-603**

**PHOTOMETRIC PLAN NOTES**

- SEE SHEET C-001 FOR GENERAL NOTES.
- LANDSCAPE LIGHTING HAS BEEN EXCLUDED FROM FOOTCANDLE CALCULATIONS PROVIDED ON THIS SHEET.



**PHOTOMETRIC PLAN LEGEND**

- - - - - PROPERTY LINE
- - - - - EASEMENT LINE
- - - - - SETBACK LINE
- ===== PROPOSED GRANITE CURB
- ===== PROPOSED BUILDING
- ===== PROPOSED GUIDE RAIL
- ☆ PROPOSED LIGHT POLE
- ⬤ PROPOSED WALL MOUNTED LIGHT
- PROPOSED LIGHTED BOLLARD

Luminaire Schedule				
Qty	Label	Lum. Watts	Arrangement	Description
6	SB	19.8	SINGLE	Bega 99 856-K4-x / 99 620 TOF @ 33 1/4IN AFG to TOF
2	WP4	26.7	SINGLE	Beacon TRV-D-24L-27-4K7-4F-UNV-x Wall Mounted @ 12FT AFG to TOF
8	SL3	81	SINGLE	Beacon VP-S-36L-80-4K7-3-UNV-A-x Mounted @ 20FT AFG to TOF
3	SL4	81	SINGLE	Beacon VP-S-36L-80-4K7-4-UNV-A-x Mounted @ 20FT AFG to TOF
1	SL3-2	81	BACK-BACK	Beacon VP-S-36L-80-4K7-3-UNV-A-x (2 @ 180) Mounted @ 20FT AFG to TOF
17	PB	-	SINGLE	Forms & Surfaces Pathway Bollard Series 600 4000k LED

Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
Site Calc	Fc	0.74	29.2	0.0	N.A.	N.A.
Parking & Drive Lane	Fc	1.64	4.3	0.2	8.20	21.50

Last Saved: 12/28/2020  
 Plotted On: Dec 30, 2020 2:27pm By: NGretz  
 Tighe & Bond: \\P5050\Proton\_International\004\_Northrop\_Road\_Facility\_Civil\Drawings\_Figures\Figures\CAD\Sheet\5050-C-603-PROTON.dwg

ORIGINAL SHEET - ARCHD



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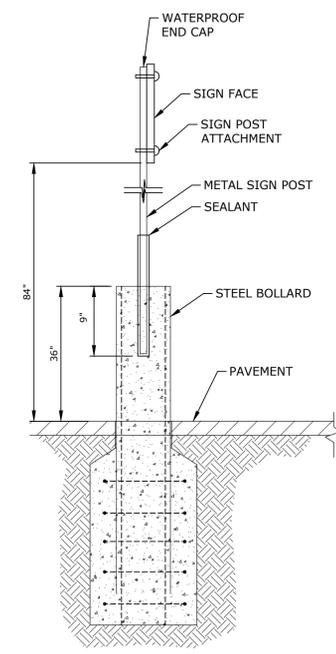
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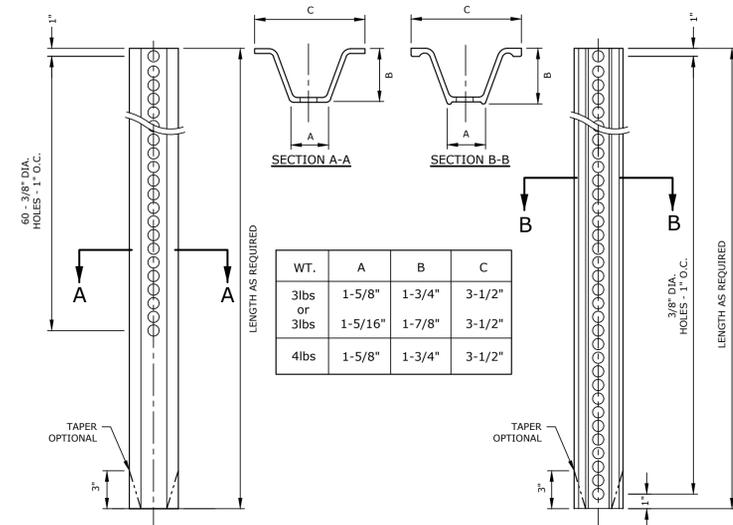
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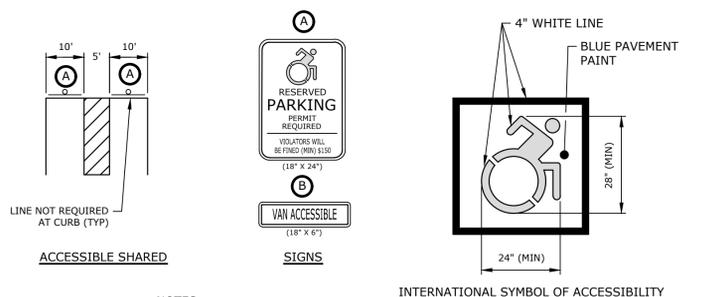
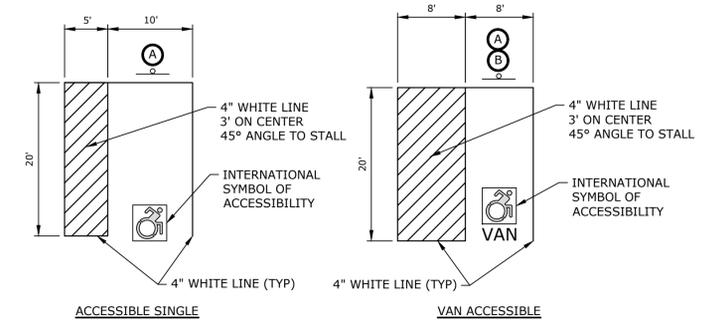
**BOLLARD SIGN MOUNTING DETAIL**  
NO SCALE



**NOTES:**

- STEEL FOR POSTS SHALL CONFORM TO THE MECHANICAL REQUIREMENTS OF ASTM A 499-81 GRADE 60 AND TO THE CHEMICAL REQUIREMENTS OF ASTM A1-76 CARBON STEEL TEE RAIL HAVING NOMINAL WEIGHT OF 91 LBS. OR GREATER PER LINEAR YARD.
- AFTER FABRICATION, ALL STEEL POSTS SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A 123.
- ALL SIGN POSTS SHALL HAVE "BREAKAWAY" FEATURES THAT MEET AASHTO REQUIREMENTS CONTAINED IN "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS-1985." THE "BREAKAWAY" FEATURES SHALL BE STRUCTURALLY ADEQUATE TO CARRY THE SIGNS SHOWN IN THE PLANS AT 60 MPH WIND LOADINGS. INSTALLATIONS SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- TYPE A POSTS - 3 LB/FT TYPE B POSTS - 4 LB/FT.

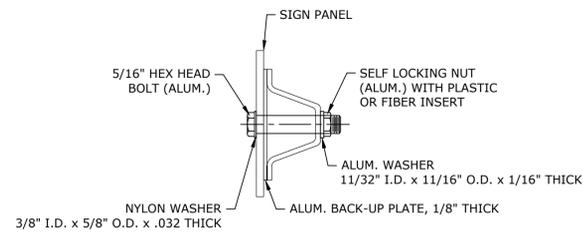
**TYPICAL METAL SIGN POSTS**  
NO SCALE



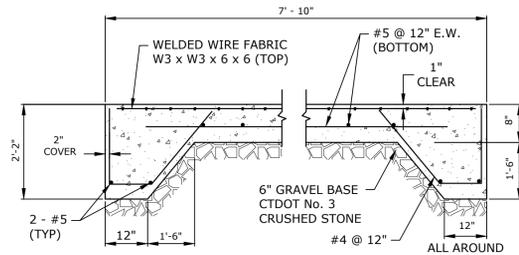
**NOTES:**

- SIGN LOCATED AT ALL HANDICAPPED PARKING SPACES.
- 18' X 15' D.O.T STANDARD ACCESSIBLE PARKING STALL
- SIGN BACKGROUND - BLUE REFLECTIVE
- LETTERS, GRAPHICS & BORDER - WHITE REFLECTIVE

**ACCESSIBLE PARKING STRIPING DETAILS**  
NO SCALE



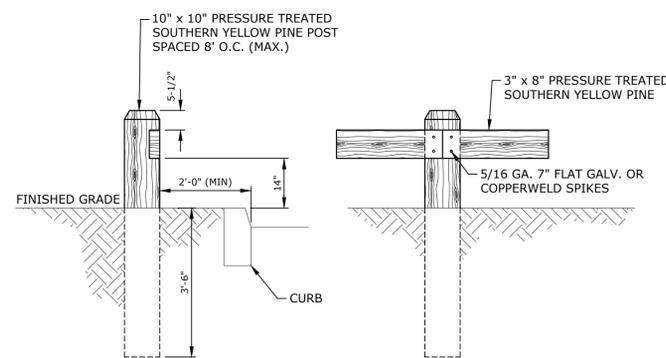
**TYPICAL SIGN PANEL ATTACHMENT**  
NO SCALE



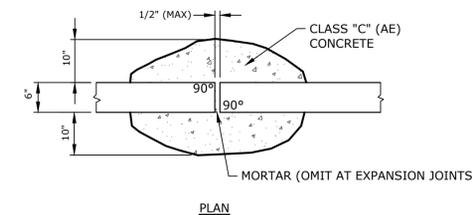
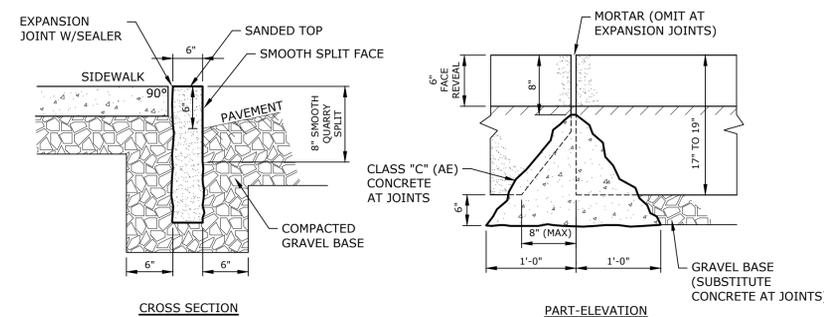
**NOTES:**

- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS OR AT THE EARLIER AGE AT WHICH THE CONCRETE MAY BE EXPECTED TO RECEIVE ITS FULL LOAD.
- ALL REINFORCED CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318-86, 1986 CODE AND ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES".
- REINFORCING STEEL SHALL BE ASTM A615 DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT, GRADE 60.
- CONCRETE COVER FOR REINFORCING SHALL BE 2", EXCEPT IN BOTTOM SLABS WHERE IT SHALL BE 3" OR AS OTHERWISE NOTED.

**MECHANICAL EQUIPMENT PAD**  
NO SCALE



**GUIDE RAIL DETAIL**  
NO SCALE



**GRANITE CURB DETAIL**  
NO SCALE



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**CONNECTICUT PROTON THERAPY CENTER - OUTPATIENT FACILITY**

Proton International  
932 NORTHROP RD. WALLINGFORD, CT 06492

Title  
**SITE DETAILS - 1**

Project No. P5050-004  
Revision  
Scale AS SHOWN  
Drawing No.

Last Saved: 12/30/2020 2:27pm By: NGreco  
Plotted On: Dec 30, 2020 2:27pm  
Tighe & Bond: J:\P\5050\Proton\_International\004\_Northrop Road Facility - Civil\Drawings - Figures\AutoCAD\Sheet\5050-C-701-DETL.dwg

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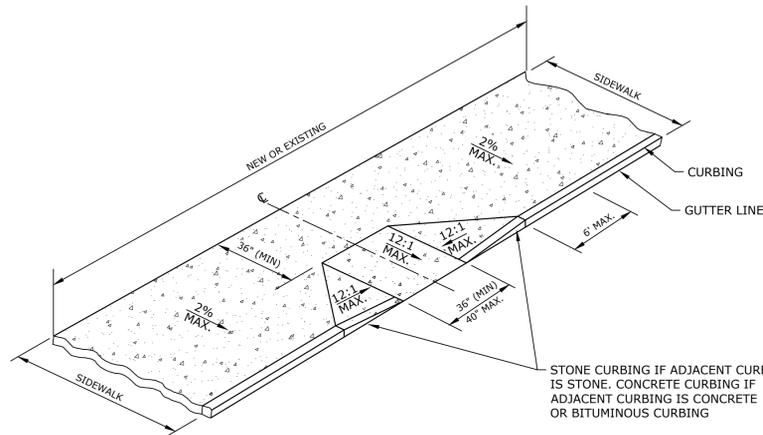
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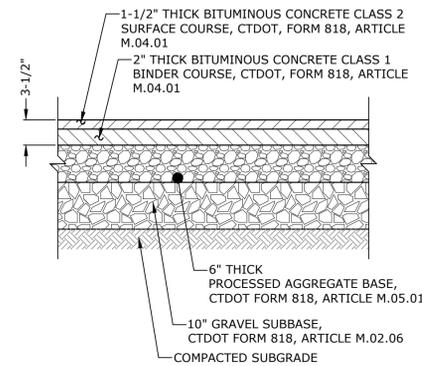
1000 Bridgeport Avenue  
Suite 320  
Shelton, CT 06484  
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**NOTE:**

FOR USE WHEN ADJACENT SIDEWALK DEPRESSED, SIDEWALK WIDTH LESS THAN 10' OR CURB HEIGHTS GREATER THAN 6".

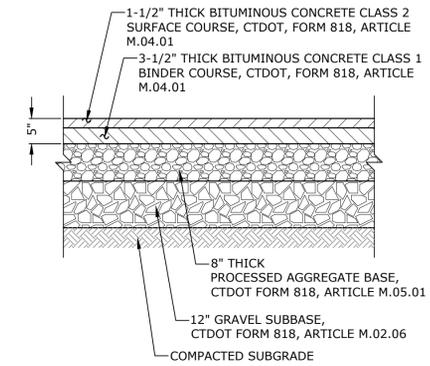
**ACCESSIBLE SIDEWALK RAMP**  
NO SCALE



**NOTES:**

1. PROCESSED AGGREGATE BASE GRADATION SHALL CONFORM WITH CTDOT, FORM 818, ARTICLE M.05.01-1. COARSE AGGREGATE SHALL CONFORM WITH CTDOT, FORM 818, ARTICLE M.05.01-2(a)(b). THE RECLAIMED MISCELLANEOUS AGGREGATE, ARTICLE M.05.01-2(c) IS NOT ACCEPTABLE.
2. ALL BITUMINOUS CONCRETE, SUBBASE, AND LIQUID BITUMEN SHALL CONFORM TO THE MATERIALS, EQUIPMENT AND SPECIFICATION REQUIREMENTS IN CTDOT FROM 818, INCLUDING ALL ADDENDA.

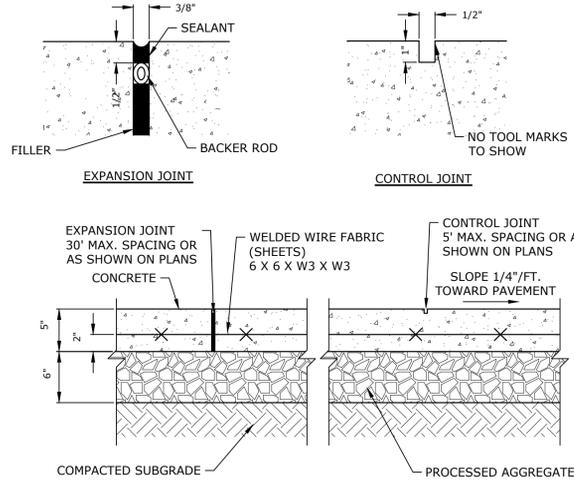
**BITUMINOUS CONCRETE PAVEMENT STANDARD DUTY**  
NO SCALE



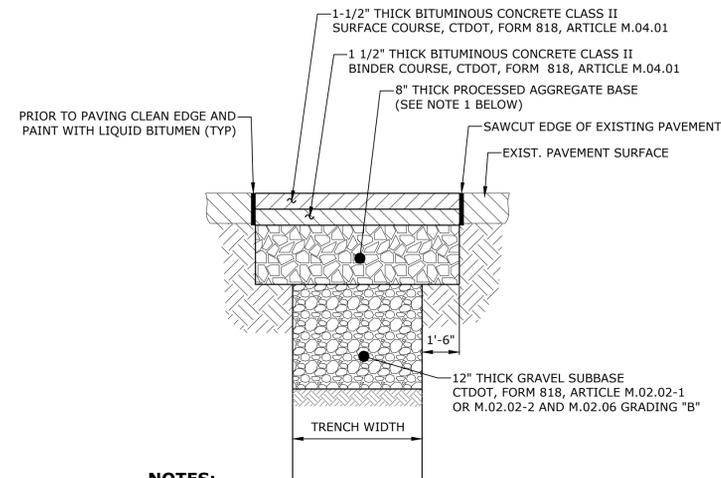
**NOTES:**

1. PROCESSED AGGREGATE BASE GRADATION SHALL CONFORM WITH CTDOT, FORM 818, ARTICLE M.05.01-1. COARSE AGGREGATE SHALL CONFORM WITH CTDOT, FORM 818, ARTICLE M.05.01-2(a)(b). THE RECLAIMED MISCELLANEOUS AGGREGATE, ARTICLE M.05.01-2(c) IS NOT ACCEPTABLE.
2. ALL BITUMINOUS CONCRETE, SUBBASE, AND LIQUID BITUMEN SHALL CONFORM TO THE MATERIALS, EQUIPMENT AND SPECIFICATION REQUIREMENTS IN CTDOT FROM 818, INCLUDING ALL ADDENDA.

**BITUMINOUS CONCRETE PAVEMENT HEAVY DUTY**  
NO SCALE



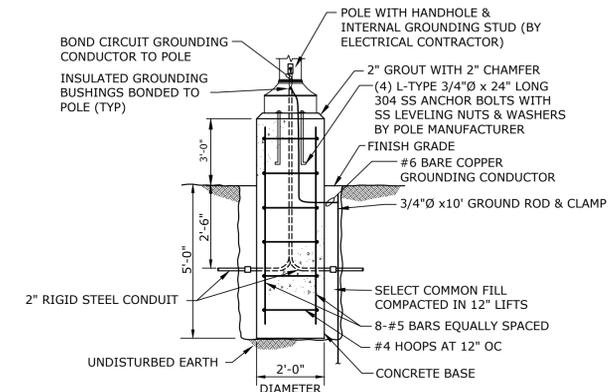
**CONCRETE SIDEWALK DETAIL**  
NO SCALE



**NOTES:**

1. PROCESSED AGGREGATE BASE GRADATION SHALL CONFORM WITH CTDOT, FORM 818, ARTICLE M.05.01-1. COARSE AGGREGATE SHALL CONFORM WITH CTDOT, FORM 818, ARTICLE M.05.01-2(a)(b). THE RECLAIMED MISCELLANEOUS AGGREGATE, ARTICLE M.05.01-2(c) IS NOT ACCEPTABLE.
2. ALL BITUMINOUS CONCRETE, SUBBASE, AND LIQUID BITUMEN SHALL CONFORM TO THE MATERIALS, EQUIPMENT AND SPECIFICATION REQUIREMENTS IN CTDOT FROM 818, INCLUDING ALL ADDENDA.
3. PAVEMENT REPAIRS TO MATCH EXISTING PAVEMENT SECTION.

**BITUMINOUS CONCRETE PAVEMENT REPAIR IN TOWN ROAD - DETAIL**  
NO SCALE



**LIGHT POLE BASE DETAIL**  
NO SCALE



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Title  
**SITE DETAILS - 2**

Project No. P5050-004  
Revision  
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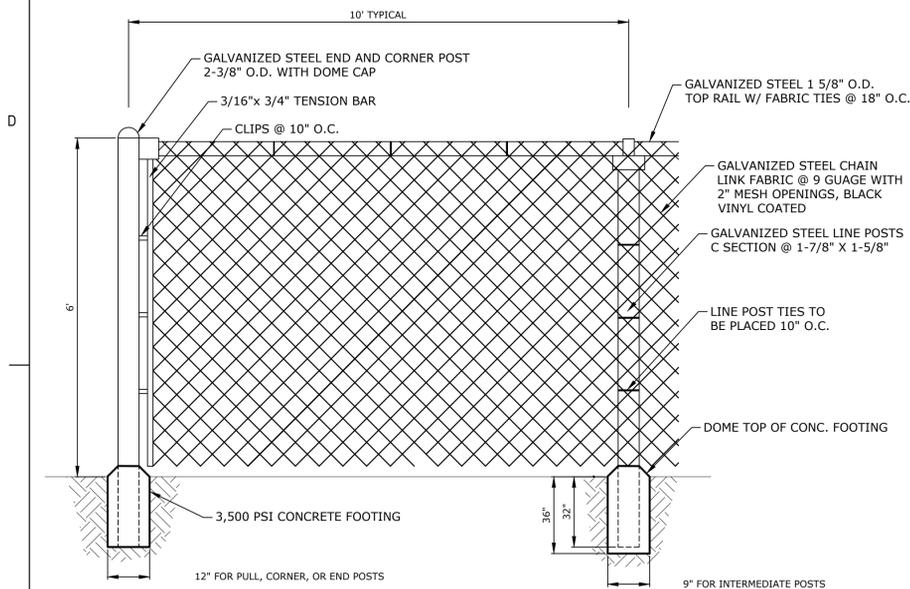
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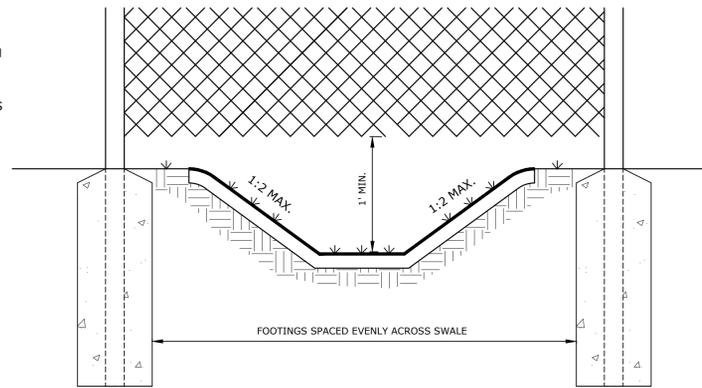
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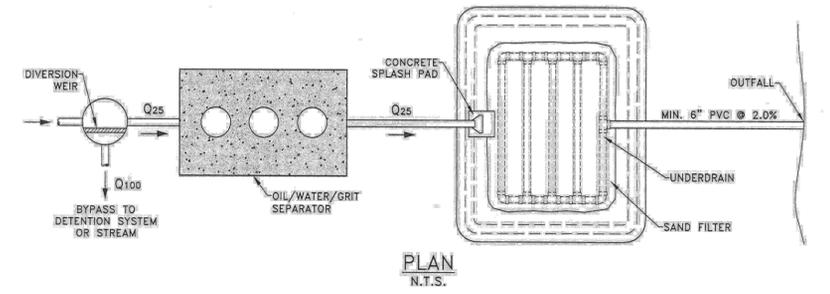


**VINYL-COATED MESH  
6\"/>**

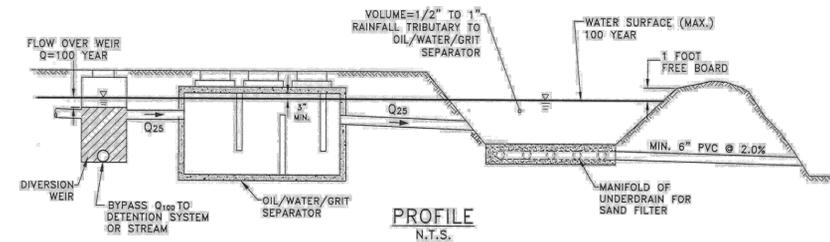


**NOTE:**  
1. CONTRACTOR SHALL CHECK SWALE BEFORE AND AFTER RAIN EVENTS TO ENSURE THE SWALE IS CLEAR OF DEBRIS.

**FENCE CROSSING OF  
DRAINAGE SWALE**  
NO SCALE

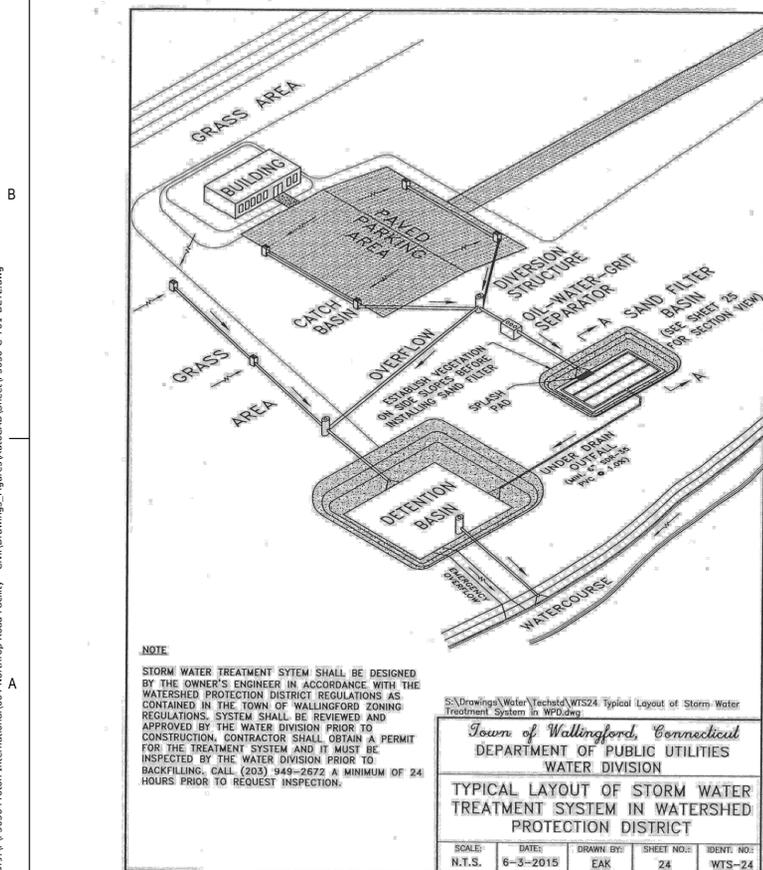


**PLAN  
N.T.S.**



**PROFILE  
N.T.S.**

**STORMWATER TREATMENT SYSTEM FOR  
WATERSHED PROTECTION DISTRICT**  
N.T.S.

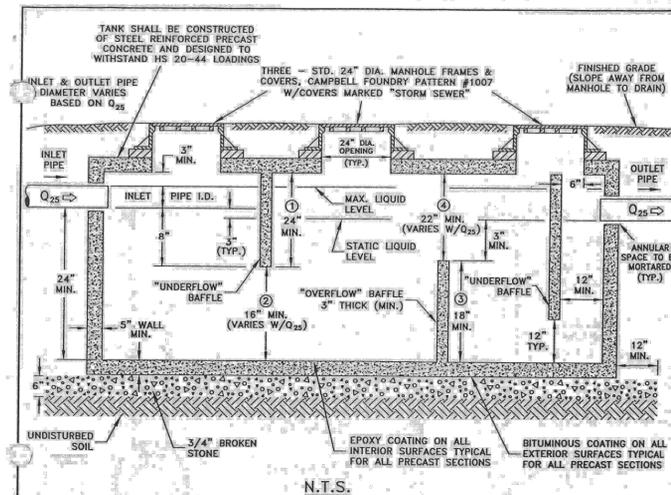


**NOTE:**  
STORM WATER TREATMENT SYSTEM SHALL BE DESIGNED BY THE OWNER'S ENGINEER IN ACCORDANCE WITH THE WATERSHED PROTECTION DISTRICT REGULATIONS AS CONTAINED IN THE TOWN OF WALLINGFORD ZONING REGULATIONS. SYSTEM SHALL BE REVIEWED AND APPROVED BY THE WATER DIVISION PRIOR TO CONSTRUCTION. CONTRACTOR SHALL OBTAIN A PERMIT FOR THE TREATMENT SYSTEM AND IT MUST BE INSPECTED BY THE WATER DIVISION PRIOR TO BACKFILLING. CALL (203) 949-2672 A MINIMUM OF 24 HOURS PRIOR TO REQUEST INSPECTION.

Town of Wallingford, Connecticut  
DEPARTMENT OF PUBLIC UTILITIES  
WATER DIVISION

**TYPICAL LAYOUT OF STORM WATER  
TREATMENT SYSTEM IN WATERSHED  
PROTECTION DISTRICT**

SCALE:	DATE:	DRAWN BY:	SHEET NO.:	IDENT. NO.:
N.T.S.	6-3-2015	EAK	24	WTS-24



**N.T.S.**

TRIBUTARY DRAINAGE AREA (ACRES)	MAXIMUM RATE OF RUN-OFF FLOW THRU TANK (CFS)	NOMINAL SIZE OF REQUIRED TANK (GALLONS)	MINIMUM STATIC STORAGE CAPACITY (GALLONS)	MINIMUM HEIGHT OF UNDERFLOW BAFFLE (IN.)	MINIMUM HEIGHT OF OVERFLOW BAFFLE (IN.)	MINIMUM HEIGHT OF OVERFLOW BAFFLE (IN.)	MINIMUM HEIGHT OF OVERFLOW BAFFLE (IN.)
≤ 0.5	3.7	1000	700	24	16	18	22
0.5 TO 1.0	6.6	1250	900	26	22	24	24
1.0 TO 1.5	9.2	1500	1100	28	28	30	26

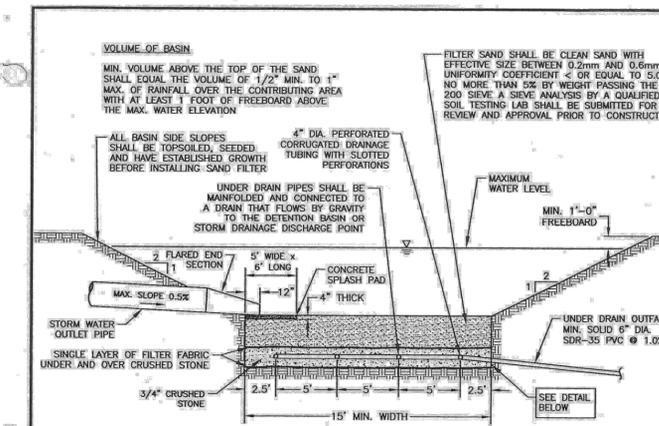
**NOTES:**

- MINIMUM OPENING HEIGHTS ARE BASED ON A TANK WITH A CLEAR INSIDE WIDTH OF 5'-0". FOR DIFFERENT TANK WIDTHS IT MAY BE NECESSARY TO ADJUST THIS DIMENSION IN ORDER TO COMPLY WITH THE MAXIMUM CROSS-SECTIONAL VELOCITY CRITERIA (SEE DESIGN CRITERIA).
- PIPE PENETRATIONS SHALL BE NEATLY CORED OR CAST IN PLACE "KNOCKOUTS". THE ANNULAR SPACE BETWEEN THE PIPE AND THE WALL SHALL BE FILLED IN WITH "NON-SHRINK" HYDRAULIC CEMENT MORTAR.
- ALL INTERIOR SURFACES OF THE TANK & ACCESS EXTENSIONS SHALL BE COATED WITH AN EPOXY BASED, PETROLEUM-RESISTANT SEALANT.

Town of Wallingford, Connecticut  
DEPARTMENT OF PUBLIC UTILITIES  
WATER DIVISION

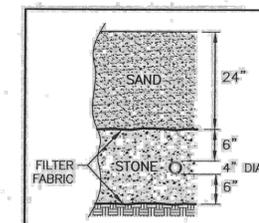
**STANDARD DETAILS FOR STORM WATER  
OIL/WATER/GRIT SEPARATORS  
1000, 1250 & 1500 GAL. NOM. CAPACITY**

SCALE:	DATE:	DRAWN BY:	SHEET NO.:	IDENT. NO.:
N.T.S.	12-18-06	TF	23	WTS-23



**SECTION "A-A" THROUGH  
SAND FILTER**  
N.T.S.

(SEE SHEET 24 FOR PLAN VIEW)



**DETAIL  
N.T.S.**

S:\Drawings\Water\Tech\WTS25\Storm Treatment System Sand Filter Basin in WPD.dwg

Town of Wallingford, Connecticut  
DEPARTMENT OF PUBLIC UTILITIES  
WATER DIVISION

**STORM WATER TREATMENT SYSTEM  
SAND FILTER BASIN IN WATERSHED  
PROTECTION DISTRICT**

SCALE:	DATE:	DRAWN BY:	SHEET NO.:	IDENT. NO.:
N.T.S.	6-3-2015	EAK	25	WTS-25



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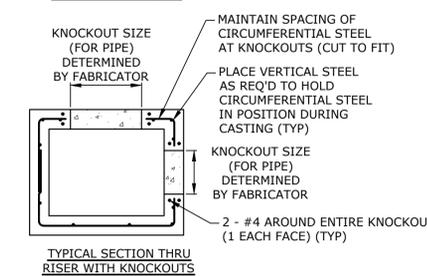
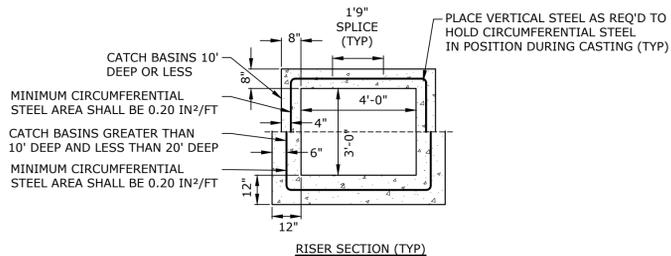
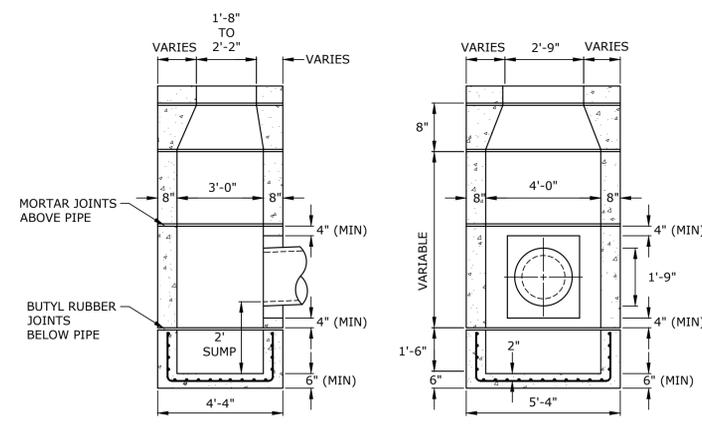
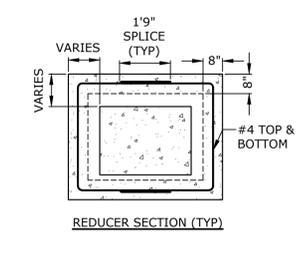
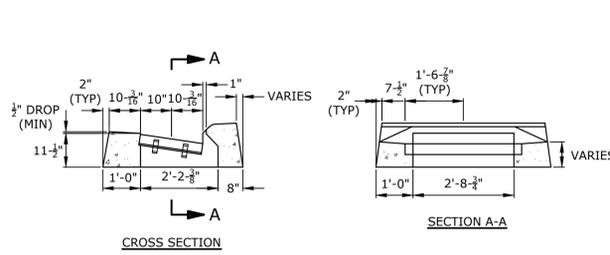
Client/Project  
**CONNECTICUT PROTON  
THERAPY CENTER -  
OUTPATIENT FACILITY**

Proton International  
932 NORTHROP RD. WALLINGFORD, CT 06492

Title  
**STORMWATER MANAGEMENT  
DETAILS - 1**

Project No. P5050-004  
Revision

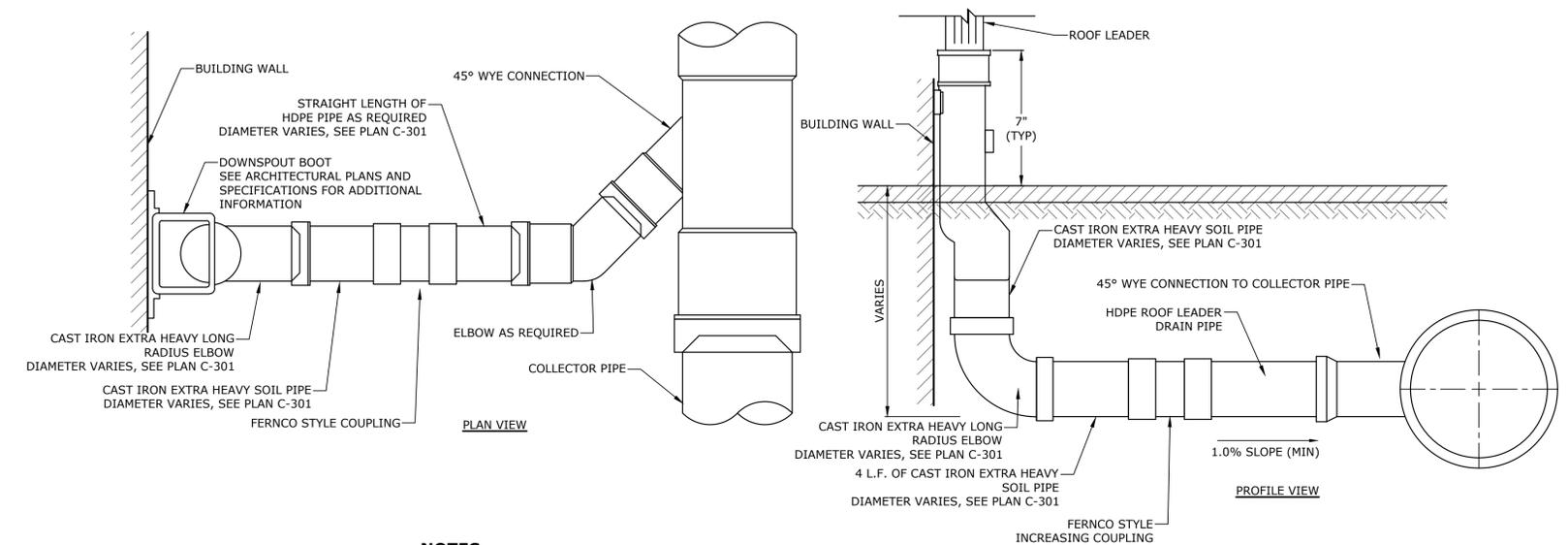
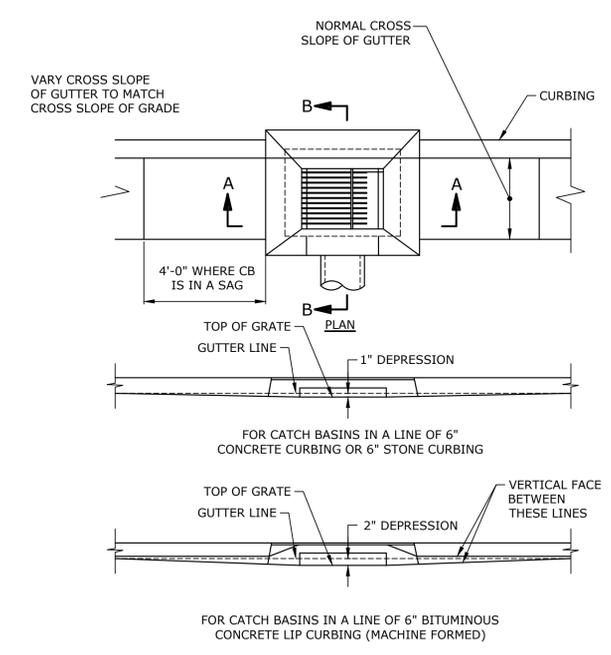
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CONNECTICUT DEPARTMENT OF TRANSPORTATION  
**TYPE "C" CATCH BASIN**  
NO SCALE

**NOTES:**

1. REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60.
2. DETAILS ON THIS SHEET SHOW STANDARD REINFORCEMENT. WELDED WIRE FABRIC WITH AN AREA EQUAL TO OR GREATER THAN THE REINFORCING SHOWN MAY BE SUBSTITUTED.
3. ALL LAP SPLICES, DEVELOPMENT LENGTHS, BENDS FOR REINFORCEMENT, AND WELDED WIRE FABRIC SHALL CONFORM TO AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
4. ALL REINFORCEMENT SHALL HAVE A MINIMUM CLEAR COVER OF 2", EXCEPT FOR BENEATH BOTTOM REINFORCEMENT IN TOP SLABS, WHERE THE MINIMUM MAY BE 1 1/2"
5. MINIMUM CONCRETE COMPRESSIVE STRENGTH FC=4,000PSI SHALL BE OBTAINED BEFORE SHIPPING.
6. BASES AND RISERS AT A DEPTH OF 20' AND GREATER SHALL BE DESIGNED BY THE CONTRACTOR AND WORKING DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
7. SEE STANDARD DRAWING 507-K FOR CATCH BASIN FRAMES AND GRATES.
8. FOR DOT MAINTENANCE PERSONNEL, RISERS MAY BE PREFABRICATED WITH PIPE OPENINGS IN ALL FOUR WALLS. ADEQUATE REINFORCING AROUND PIPE OPENINGS TO CONFORMING TO THESE PLANS SHALL BE PROVIDED. ANY RISERS USED WHERE A PIPE OPENING IS TO REMAIN IN PLACE MUST BE FORMED UP WITH BRICK AS DIRECTED BY THE ENGINEER.
9. RISERS SHALL NEVER HAVE CORNER PIPE ENTRIES. WHERE THE ALIGNMENT OF THE PIPE WITH RESPECT TO THE CORNER OF THE CATCH BASIN CANNOT BE CHANGED, A ROUND STRUCTURE CONFORMING TO ASTM C478 SHALL BE USED. REINFORCING FOR THE ROUND TOP SLAB WITH A RECTANGULAR OPENING SHALL CONFORM TO DETAILS SHOWN HERE.
10. ALL PIPE OPENINGS SHALL BE CLOSED USING MATERIALS WHICH CONFORM TO STATE OF CONNECTICUT STANDARD SPECIFICATIONS SECTION M.08.02. IF THE ENGINEER DETERMINES THAT THE CLOSURE OF ANY PIPE OPENING IS UNSATISFACTORY, THE CONTRACTOR SHALL RECLOSE SAID OPENING AT NO ADDITIONAL COST TO THE STATE. KNOCKOUTS FOR PIPE OPENINGS SHALL NOT RESULT IN A REDUCED WALL THICKNESS.
11. THE LATEST STATE OF CONNECTICUT STANDARD SPECIFICATIONS AND SUPPLEMENTALS SHALL GOVERN.
12. FOR ADDITIONAL DETAILS, SEE OTHER CATCH BASIN SHEETS.
13. WALL THICKNESS OF ALL CB'S OVER 10' DEEP SHALL BE INCREASED TO 12" THICK. INSIDE DIMENSION SHALL REMAIN THE SAME. (THE 12" THICKNESS SHALL START AFTER THE FIRST 10')
14. BUTYL RUBBER JOINT SEAL SHALL CONFORM TO AASHTO M-198 AND MORTAR SHALL CONFORM TO THE LATEST STATE OF CONNECTICUT STANDARD SPECIFICATIONS MATERIAL SECTION M11.04.
15. SHRINKAGE AND TEMPERATURE REINFORCEMENT SHALL BE PROVIDED IN THE TOPS OF SLABS. THE TOTAL AREA OF REINFORCEMENT PROVIDED SHALL BE AT LEAST 0.125 IN<sup>2</sup>/FT IN EACH DIRECTION. THE MAXIMUM SPACING OF THIS REINFORCEMENT SHALL NOT EXCEED 18 INCHES.
16. THE DETAILS SHOWN IN THE PLAN VIEW FOR THE PRECAST CONCRETE ROUND STRUCTURES SHALL ALSO BE USED FOR CONVERTING MANHOLES TO CATCH BASINS.



**NOTES:**

1. CAST IRON PIPE SHALL BE EXTRA HEAVY CAST IRON SOIL PIPE AS MANUFACTURED BY CHARLOTTE PIPE AND FOUNDRY COMPANY, CHARLOTTE, NC 28235 OR APPROVED EQUAL.
2. PIPE AND FITTINGS SHALL COMPLY WITH ASTM A 74. COMPRESSION GASKETS SHALL COMPLY WITH ASTM C 564. ALL PIPE AND FITTING SHALL BE MADE IN THE UNITED STATES, AND MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE.

**ROOF LEADER DRAIN LINE**  
NO SCALE

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Consultants

STRUCTURAL - Goldstein-Milano Structural Engineers, LLC

MEP / FA / FP / IT - BR+A

CIVIL -

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1 / REVISED PER TOWN COMMENTS	2020.12.30
LOCAL APPROVALS	2020.12.01
Issue/Revision	YYYY.MM.DD

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Client/Project  
**CONNECTICUT PROTON  
THERAPY CENTER -  
OUTPATIENT FACILITY**

Proton International

932 NORTHROP RD. WALLINGFORD, CT 06492

Title  
**STORMWATER MANAGEMENT  
DETAILS - 3**

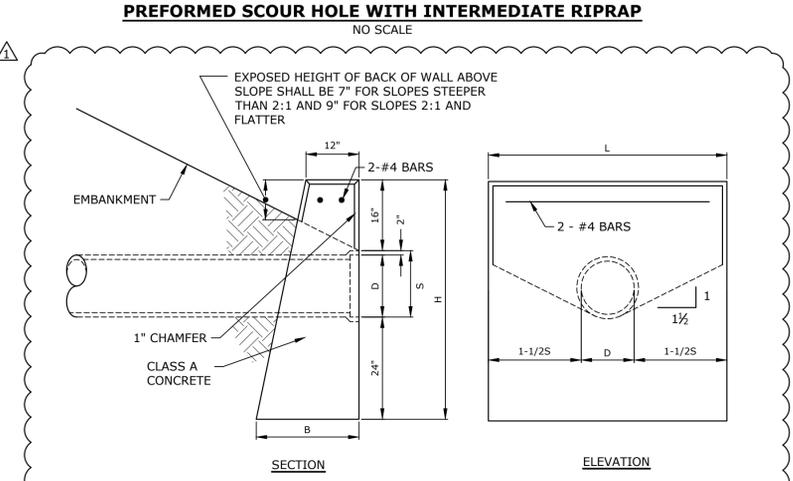
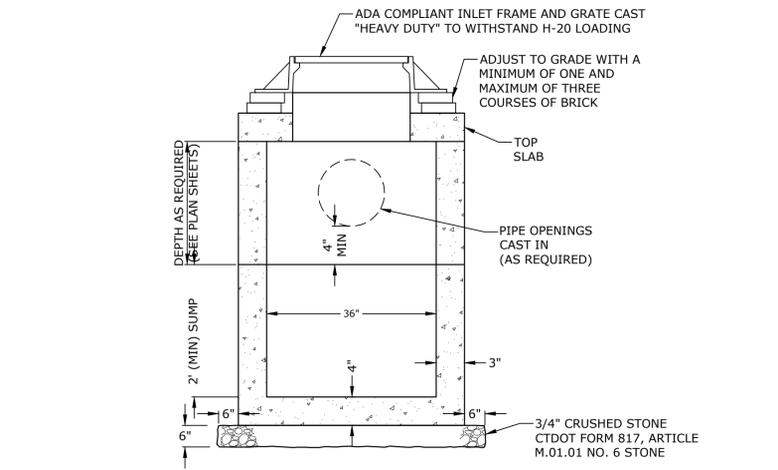
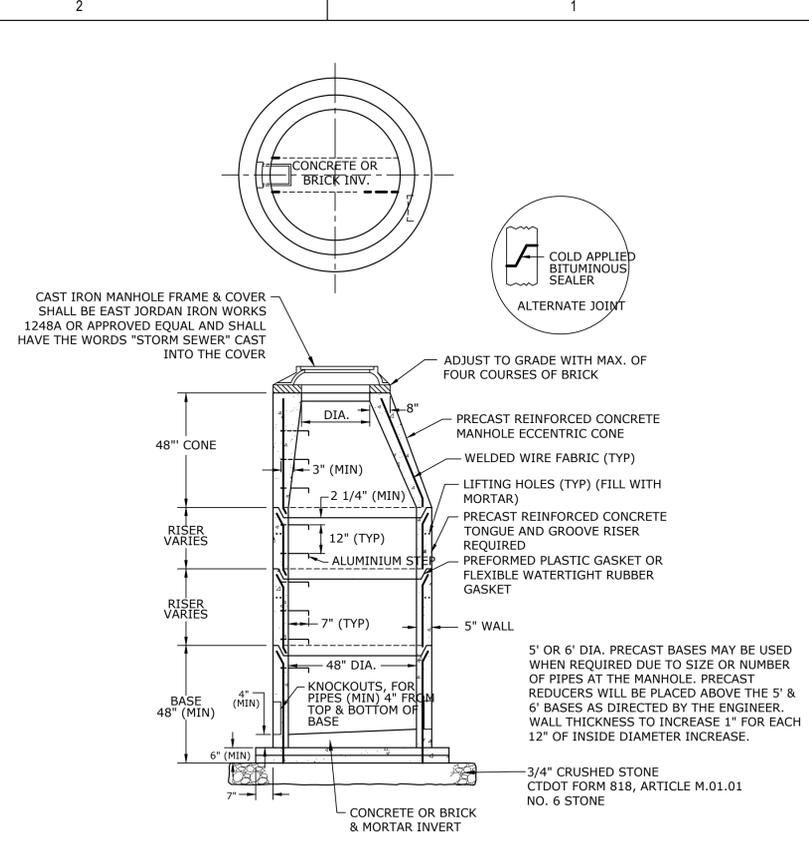
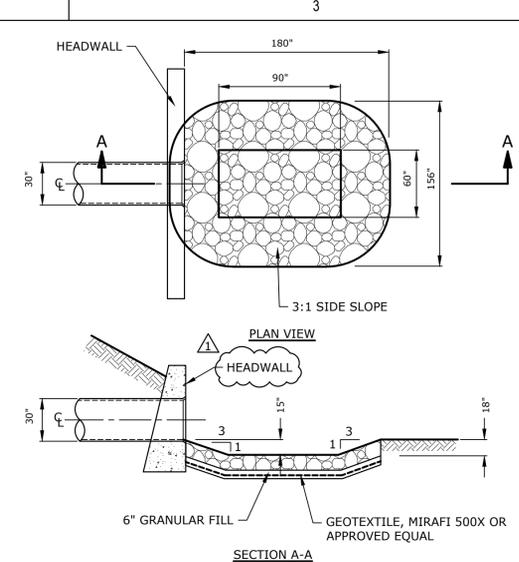
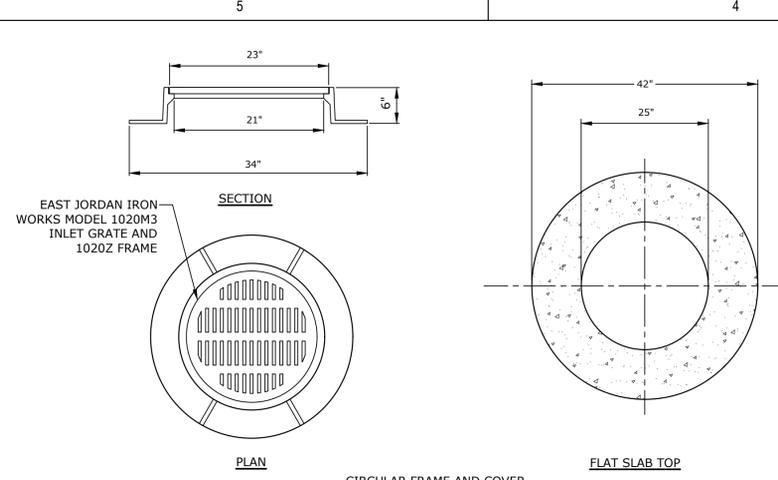
Project No.  
P5050-004

Revision

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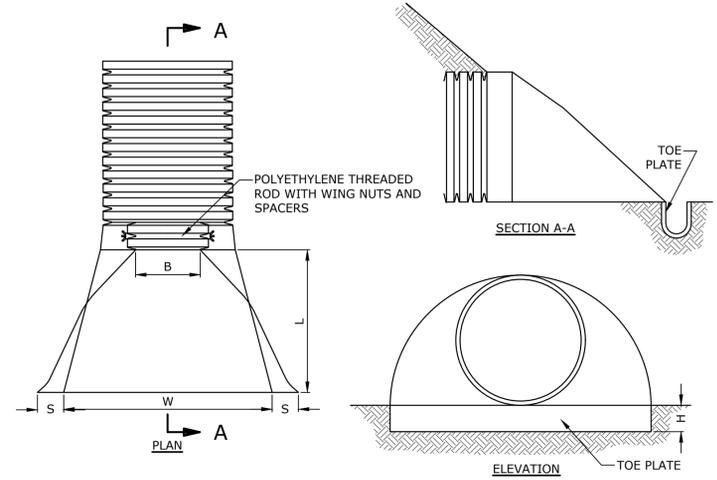
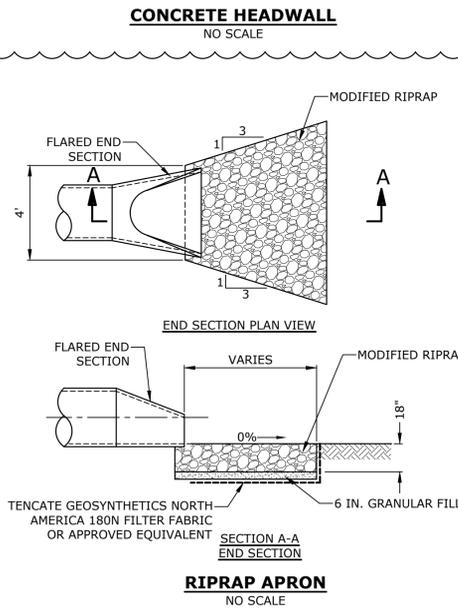
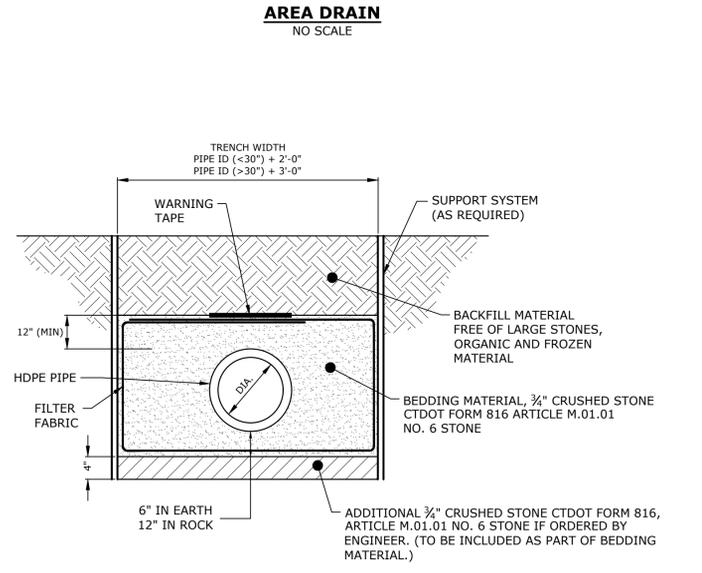
**C-705**



D	B	H	L	S	BATTER
12"	1'-1 1/4"	4'-6"	4'-6"	1'-2"	2 1/2"
15"	1'-1 1/2"	4'-9"	5'-6"	1'-5"	2 1/2"
18"	2'-0 1/2"	5'-0"	6'-6"	1'-8"	2 1/2"
24"	2'-1 3/4"	5'-6"	8'-6"	2'-2"	2 1/2"
30"	2'-3"	6'-0"	10'-6"	2'-8"	2 1/2"
36"	2'-7 1/8"	6'-6"	12'-6"	3'-2"	3"
42"	2'-9"	7'-0"	14'-6"	3'-8"	3"
48"	2'-10 1/2"	7'-6"	16'-6"	4'-2"	3"

H=TOTAL HEIGHT OF HEADWALL  
B=WIDTH OF BASE  
D=INSIDE DIAMETER OF PIPE  
S=HEIGHT OF SLOPE ABOVE PIPE  
INVERT AT FACE OF WALL (D+2)  
L=LENGTH OF WALL (3S+D)

- NOTES:**
1. REINFORCING STEEL WELDED WIRE FABRIC CONFORMS TO LATEST ASTM SPECIFICATION A185.
  2. REINFORCING STEEL DEFORMED BARS SHALL CONFORM TO LATEST ASTM SPECIFICATION A615.
  3. CONCRETE COMPRESSIVE STRENGTH - 4000 PSI AT 28 DAYS.
  4. METHOD OF MANUFACTURE: WET CAST.
  5. SECTION IS MONOLITHIC.
  6. DESIGN LOAD: ASHTO H-20.
  7. SET FLAT SLAB IN FULL BED OF MORTAR.
  8. FLAT SLAB MH TOPS SHALL BE CAPABLE OF WITHSTANDING ASHTO H-20 LOADING.
  9. INSTALL FRAMES AND GRATES TO GRADE WITH (MIN) 2 MAX. 4 COURSES OF CONC. BRICK OR PRECAST RINGS - ALL UNITS SET IN FULL BED OF MORTAR.
  10. FLAT SLAB TOP SHALL BE 6" THICK (MIN)



PIPE DIA.	S	B	H	L	W
12"	6.5"	10"	6.5"	25"	29"
15"	6.5"	10"	6.5"	25"	29"
18"	7.5"	15"	6.5"	32"	35"
24"	7.5"	18"	6.5"	36"	45"

NOTE:  
END SECTIONS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, COLUMBUS, OHIO. END SECTIONS TO BE WELDED TO PIPE AS PER MANUFACTURER'S RECOMMENDATIONS.

**HDPE END SECTION**  
NO SCALE

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**STORMTECH CHAMBER SPECIFICATIONS**

- CHAMBERS SHALL BE STORMTECH DC-780.
- CHAMBERS SHALL BE MADE FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPERE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. THE CHAMBER MANUFACTURER SHALL SUBMIT THE FOLLOWING UPON REQUEST TO THE SITE DESIGN ENGINEER FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE:
  - A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.35 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY AASHTO FOR THERMOPLASTIC PIPE.
  - A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET. THE 50 YEAR CREEP MODULUS DATA SPECIFIED IN ASTM F2418 OR ASTM F2922 MUST BE USED AS PART OF THE AASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM PERFORMANCE.
  - STRUCTURAL CROSS SECTION DETAIL ON WHICH THE STRUCTURAL EVALUATION IS BASED.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

**IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE DC-780 CHAMBER SYSTEM**

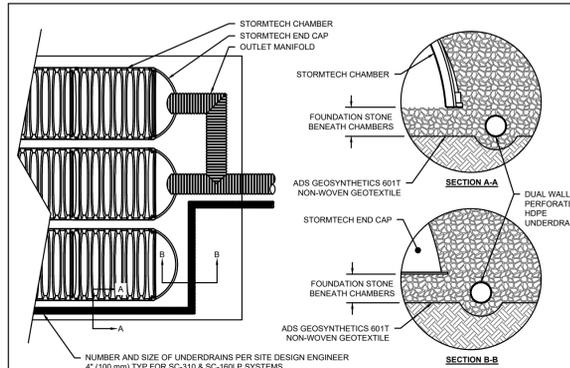
- STORMTECH DC-780 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH DC-780 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE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

**NOTES FOR CONSTRUCTION EQUIPMENT**

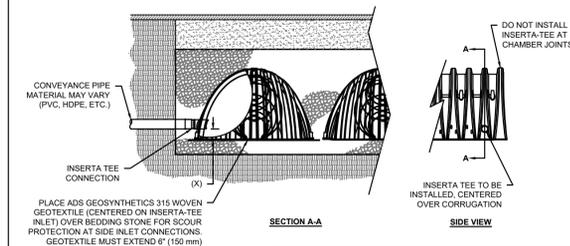
- STORMTECH DC-780 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- THE USE OF CONSTRUCTION EQUIPMENT OVER DC-780 CHAMBERS IS LIMITED:
  - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
  - NO RUBBER TIRE LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED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

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

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

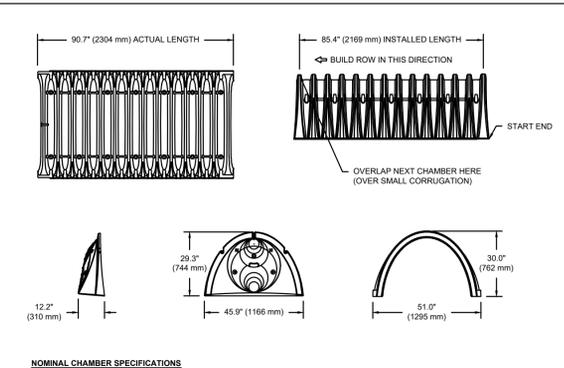


**5 UNDERDRAIN DETAIL**



CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)

NOTE: PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.



**2 DC-780 TECHNICAL SPECIFICATIONS**

PART #	STUB	A	B	C
SC740EP007 / SC740EP007PC	6" (150 mm)	10.9" (277 mm)	16.5" (419 mm)	---
SC740EP008 / SC740EP008PC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	0.5" (13 mm)
SC740EP007 / SC740EP007PC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EP008 / SC740EP008PC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	0.6" (15 mm)
SC740EP107 / SC740EP107PC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EP108 / SC740EP108PC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	0.7" (18 mm)
SC740EP127 / SC740EP127PC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EP128 / SC740EP128PC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	1.2" (30 mm)
SC740EP157 / SC740EP157PC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EP158 / SC740EP158PC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	1.3" (33 mm)
SC740EP187 / SC740EP187PC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EP188 / SC740EP188PC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	1.6" (41 mm)
SC740EP248	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EP248 ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

\* FOR THE SC740EP248 THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL.

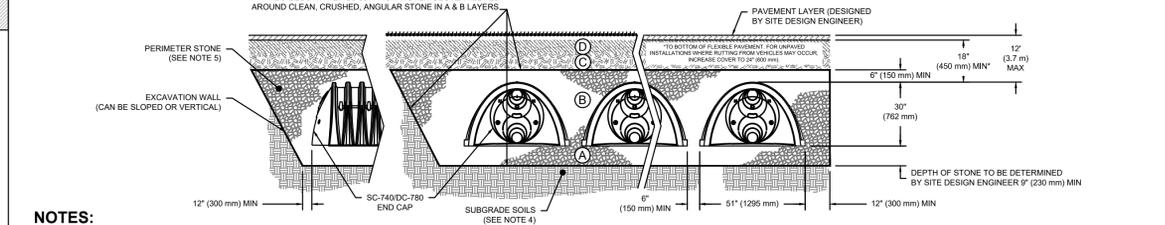
**6 INSERTA-TEE SIDE INLET DETAIL**

**2 DC-780 TECHNICAL SPECIFICATIONS**

**ACCEPTABLE FILL MATERIALS: STORMTECH DC-780 CHAMBER SYSTEMS**

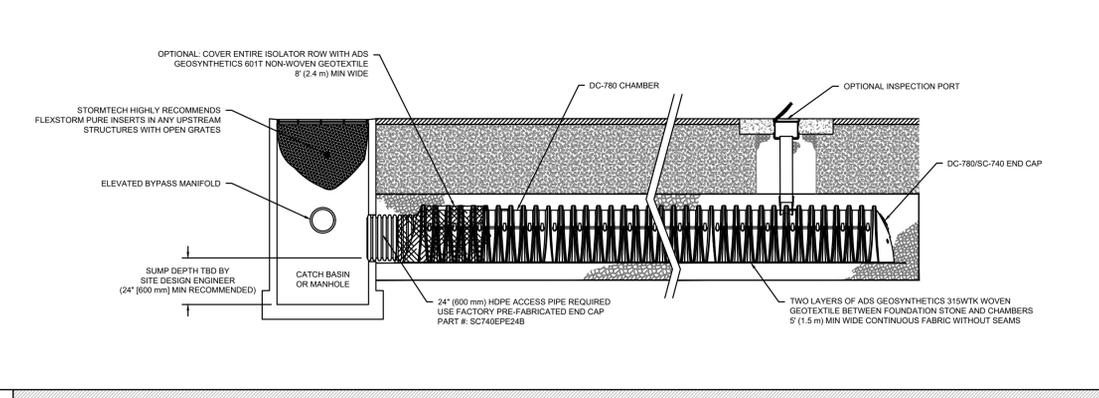
MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'C' LAYER.	N/A	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.	AASHTO M44 <sup>1</sup> A-1, A-2, A-3 OR AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 98% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 20,000 lbs (90 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (90 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2,3</sup>

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 COVERSAGES 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.

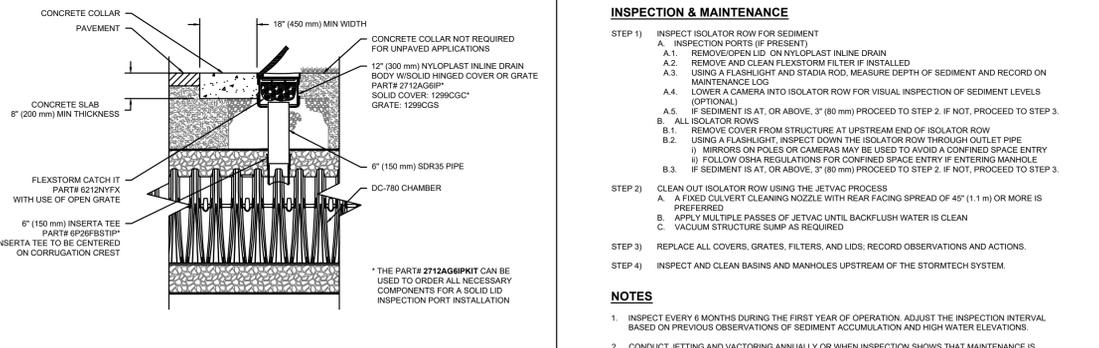


**1 DC-780 CROSS SECTION DETAIL**

- NOTES:**
- DC-780 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".
  - DC-780 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
  - "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
  - THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
  - PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
  - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'A' AT THE SITE DESIGN ENGINEER'S DISCRETION.



**3 DC-780 ISOLATOR ROW DETAIL**



**4 DC-780 6" (150 mm) INSPECTION PORT DETAIL**

**INSPECTION & MAINTENANCE**

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

**NOTES**

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



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Consultants  
STRUCTURAL - Goldstein-Milano Structural Engineers, LLC

MEP / FA / FP / IT - BR+A

CIVIL -  
**Tighe & Bond**  
1000 Bridgeport Avenue  
Suite 320  
Shelton, CT 06484  
(203) 712-1100



LOCAL APPROVALS	2020.12.01
Issue/Revision	YYYY.MM.DD

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Client/Project  
**CONNECTICUT PROTON  
THERAPY CENTER -  
OUTPATIENT FACILITY**

Proton International  
932 NORTHROP RD. WALLINGFORD, CT 06492

Title  
**STORMWATER MANAGEMENT  
DETAILS - 34**

Project No. P5050-004  
Revision  
Scale AS SHOWN  
Drawing No.

**C-706**

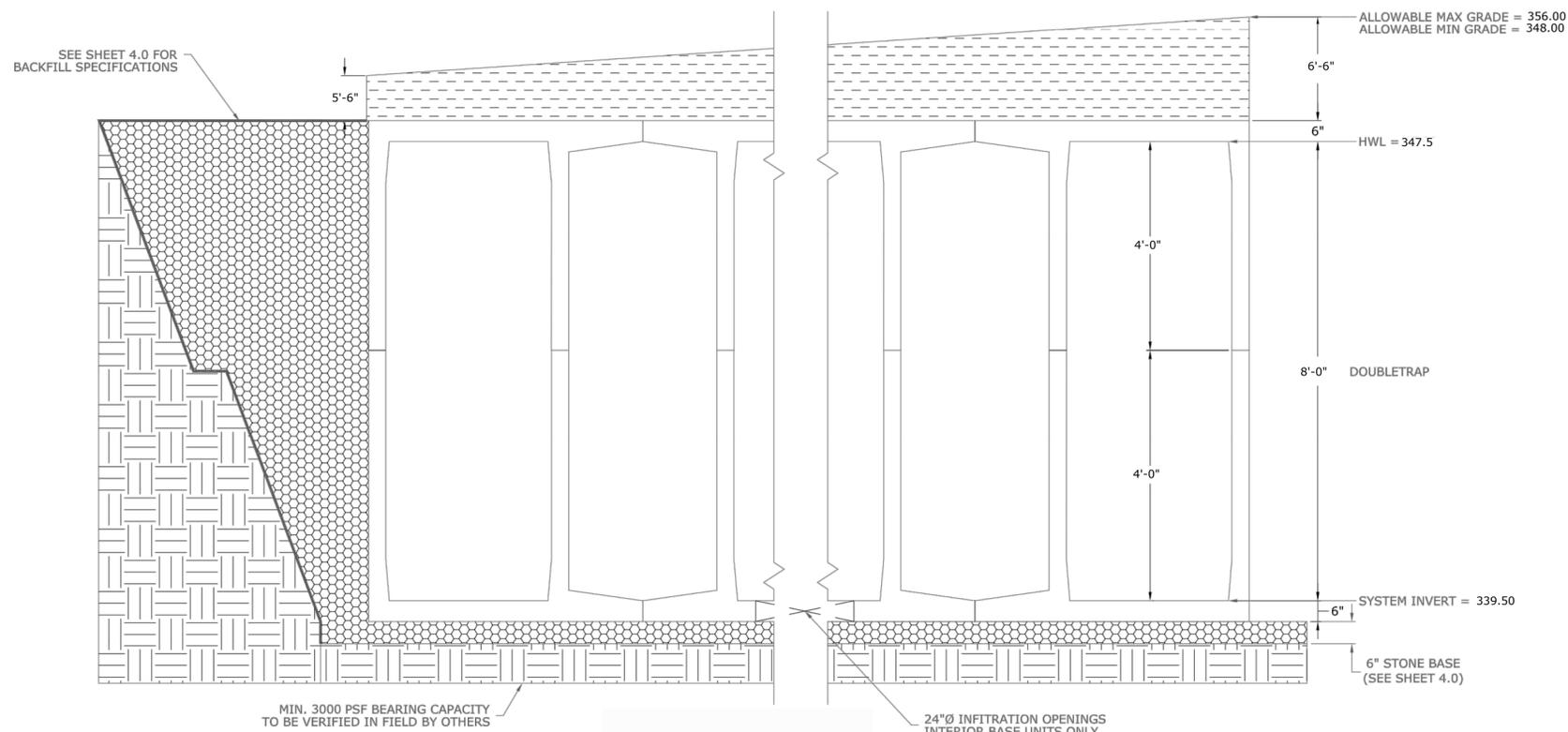
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 Tighe & Bond; J:\P\5050 Proton International\04 Northrop Road Facility - Civil\Drawings - Figures\AutoCAD\Sheet\5050-C-701-DET.dwg

**STRUCTURAL DESIGN LOADING CRITERIA**

LIVE LOADING:	AASHTO HS-20 HIGHWAY LOADING
GROUND WATER TABLE:	BELOW INVERT OF SYSTEM
SOIL BEARING PRESSURE:	3000 PSF
SOIL DENSITY:	120 PCF
EQUIVALENT UNSATURATED LATERAL ACTIVE EARTH PRESSURE:	35 PSF / FT.
EQUIVALENT SATURATED LATERAL ACTIVE EARTH PRESSURE:	80 PSF/FT. (IF WATER TABLE PRESENT)
APPLICABLE CODES:	ASTM C857 ACI-318
BACKFILL TYPE:	SEE SHEET 4.0 FOR BACKFILL OPTIONS

**SITE SPECIFIC DESIGN CRITERIA**

1. STORMTRAP UNITS SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER OF RECORD. THE SHOP DRAWINGS SHALL INDICATE SIZE AND LOCATION OF ROOF OPENINGS AND INLET/ OUTLET PIPE TYPES, SIZES, INVERT ELEVATIONS AND SIZE OF OPENINGS.
2. COVER RANGE: MIN. 1.60' MAX. 1.60' CONSULT STORMTRAP FOR ADDITIONAL COVER OPTIONS.
3. ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE REQUIRED TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO STORMTRAP INSTALLATION.
4. FOR STRUCTURAL CALCULATIONS THE GROUND WATER TABLE IS ASSUMED TO BE BELOW INVERT OF SYSTEM . IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP.



**8'-0" STORM TRAP DOUBLETRAP UNDERGROUND INFILTRATION SYSTEM**  
NO SCALE

LOCAL APPROVALS	2020.12.01
Issue/Revision	YYYY.MM.DD

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**CONNECTICUT PROTON THERAPY CENTER - OUTPATIENT FACILITY**

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932 NORTHPROP RD. WALLINGFORD, CT 06492

Title  
**STORMWATER MANAGEMENT DETAILS - 34**

Project No.	Scale
P5050-004	AS SHOWN
Revision	Drawing No.

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Consultants

STRUCTURAL - Goldstein-Milano Structural Engineers, LLC

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**Tighe & Bond**

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**CONNECTICUT PROTON  
THERAPY CENTER -  
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Proton International

932 NORTHROP RD. WALLINGFORD, CT 06492

Title

**WATER SERVICE DETAILS - I**

Project No.

P5050-004

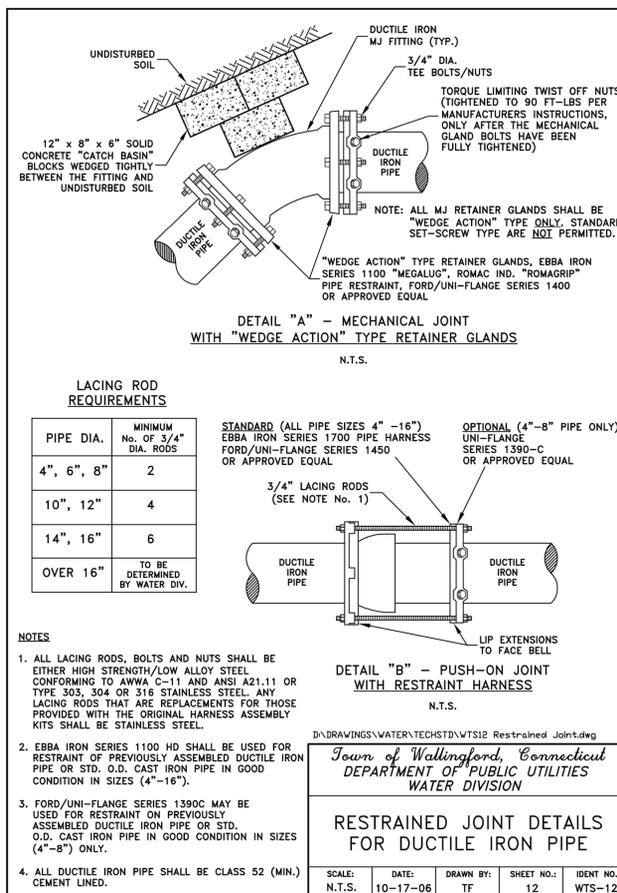
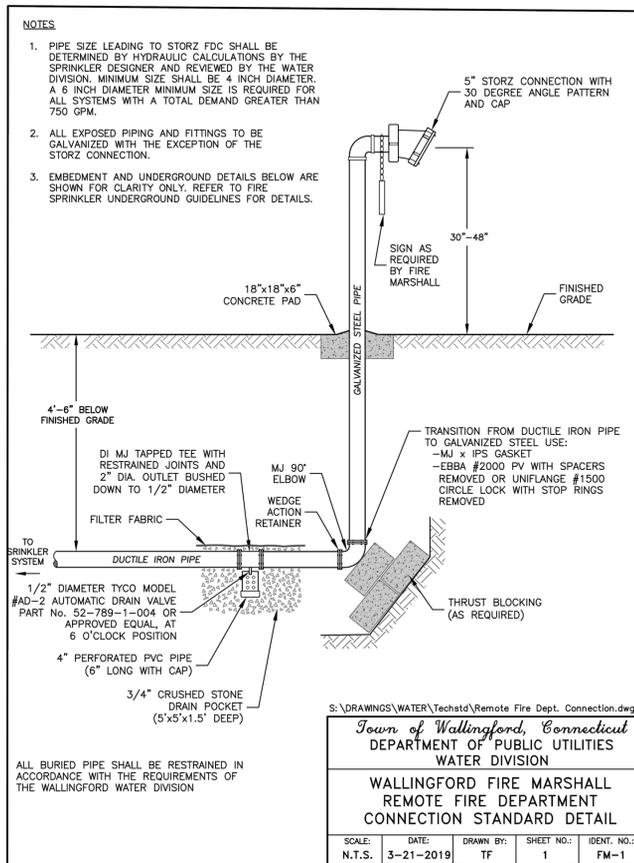
Revision

Scale

AS SHOWN

Drawing No.

**C-708**

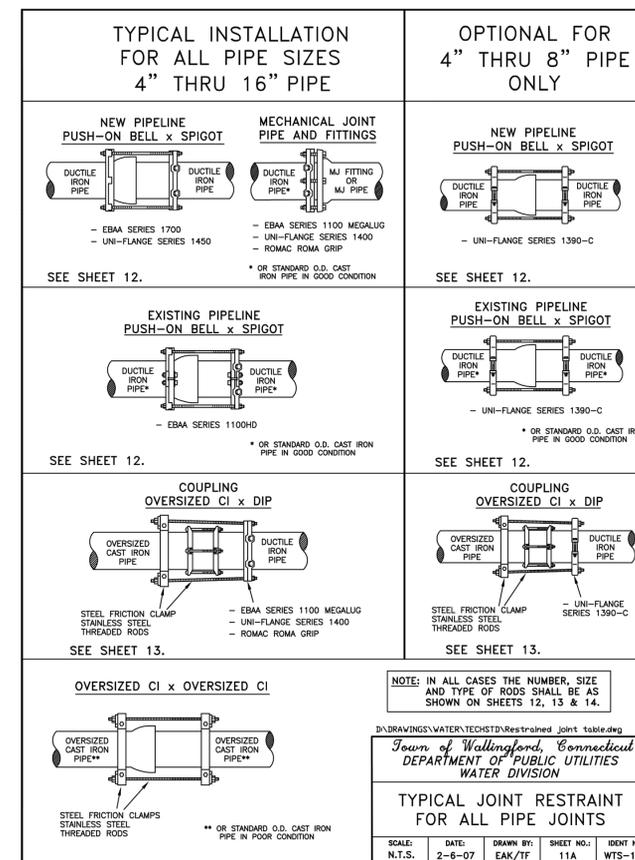
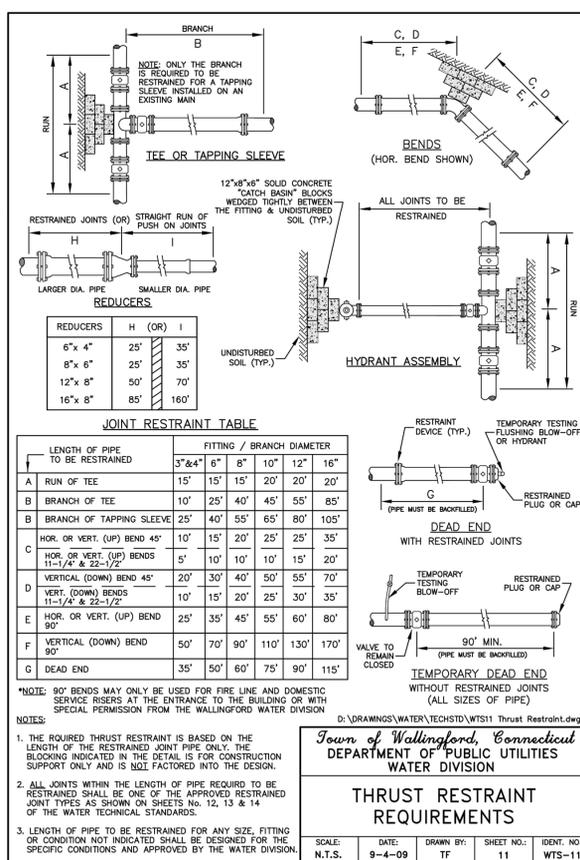
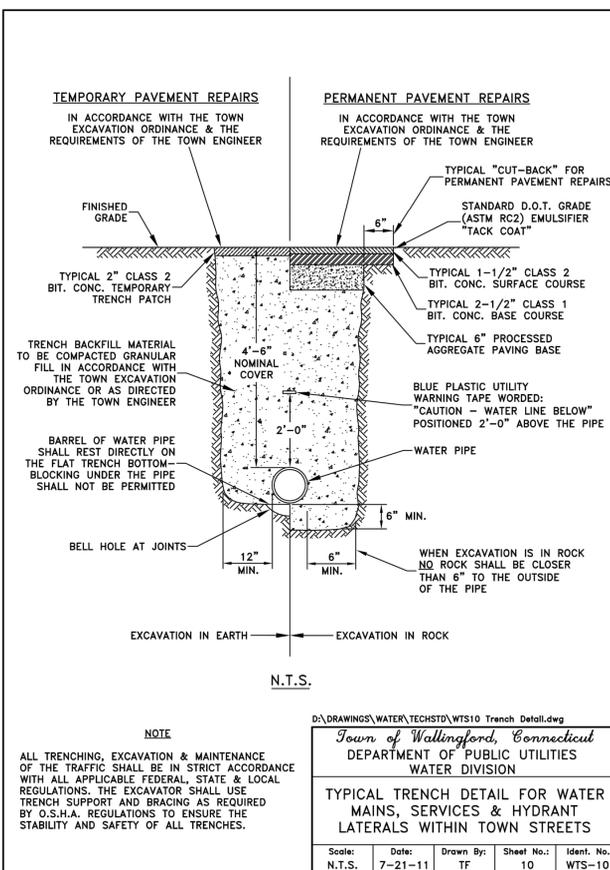


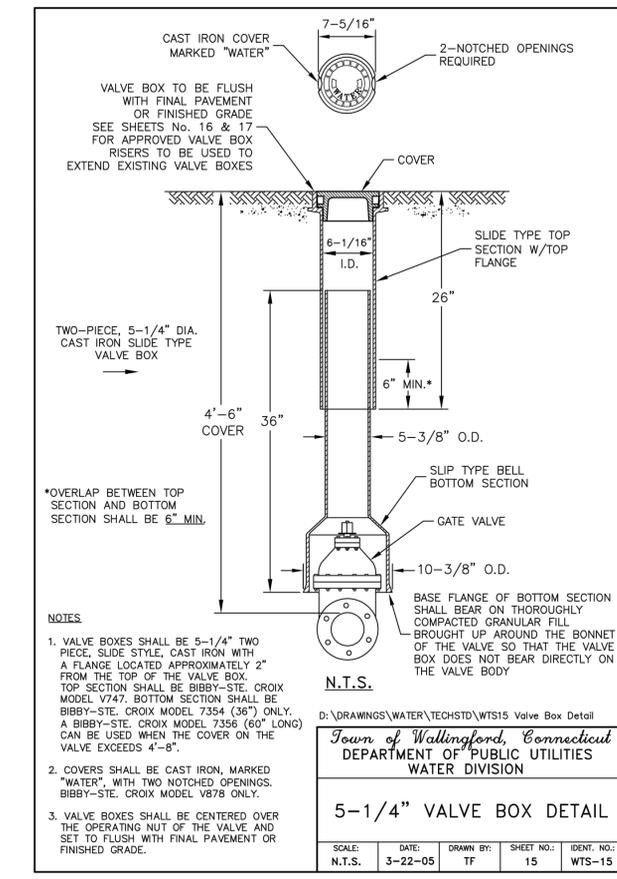
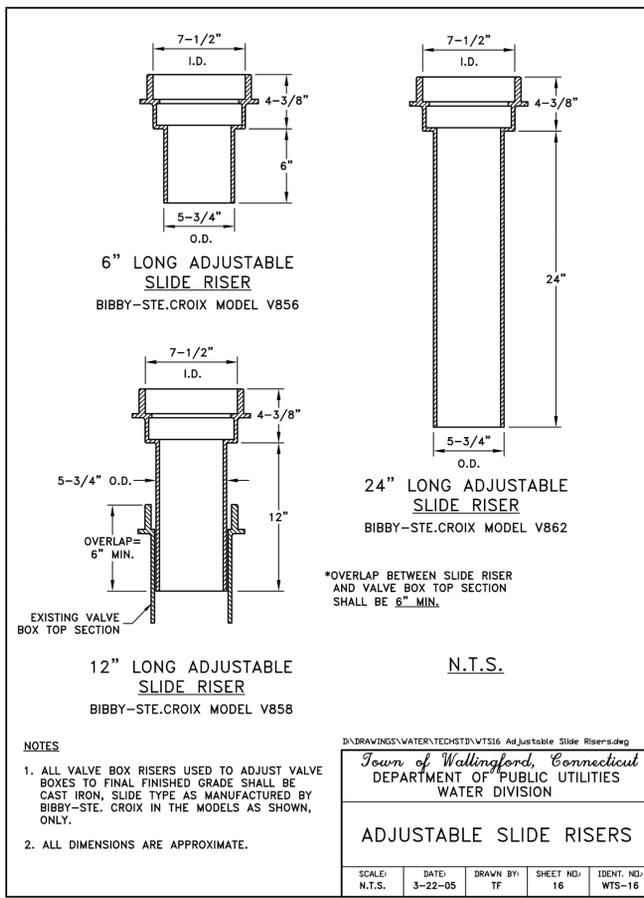
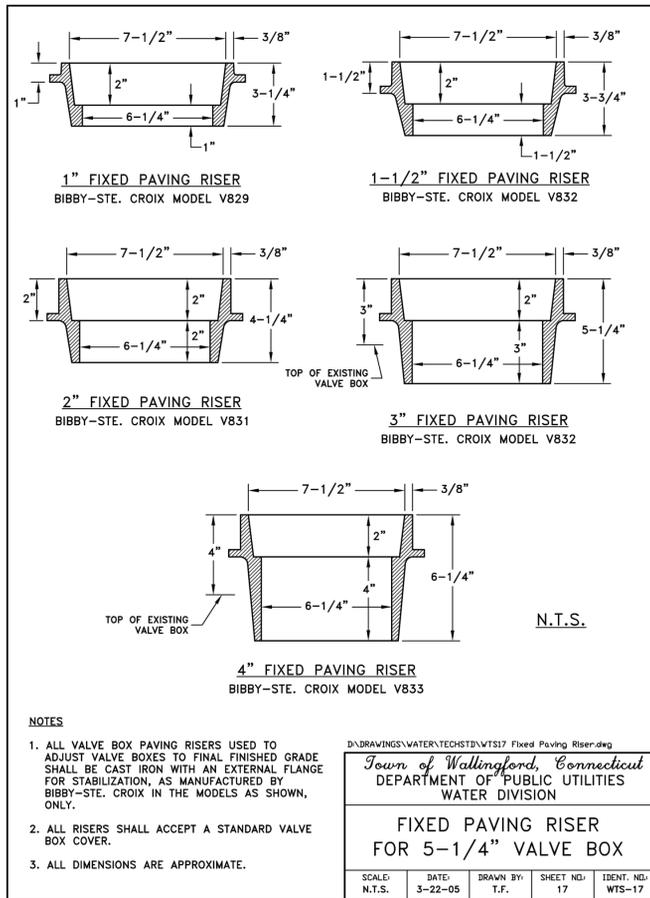
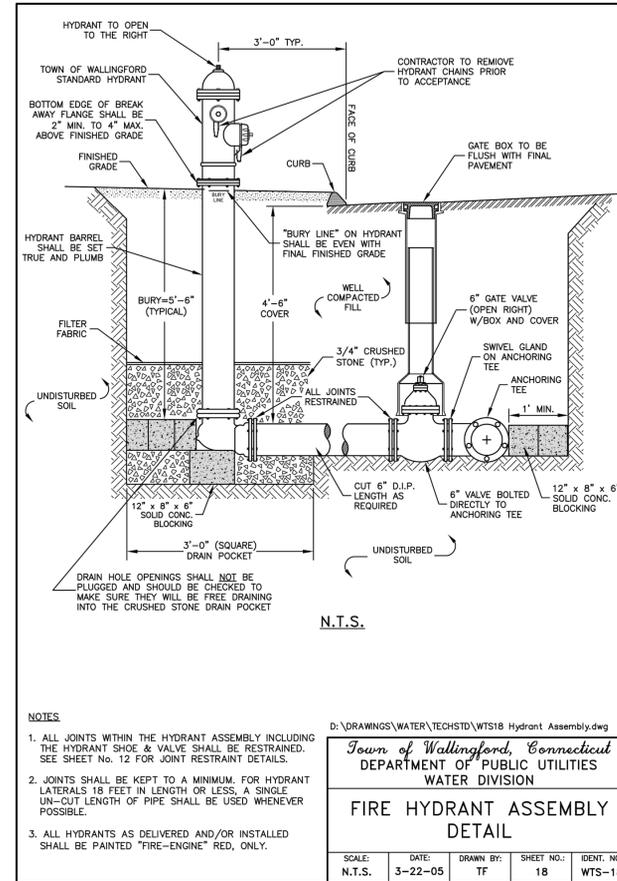
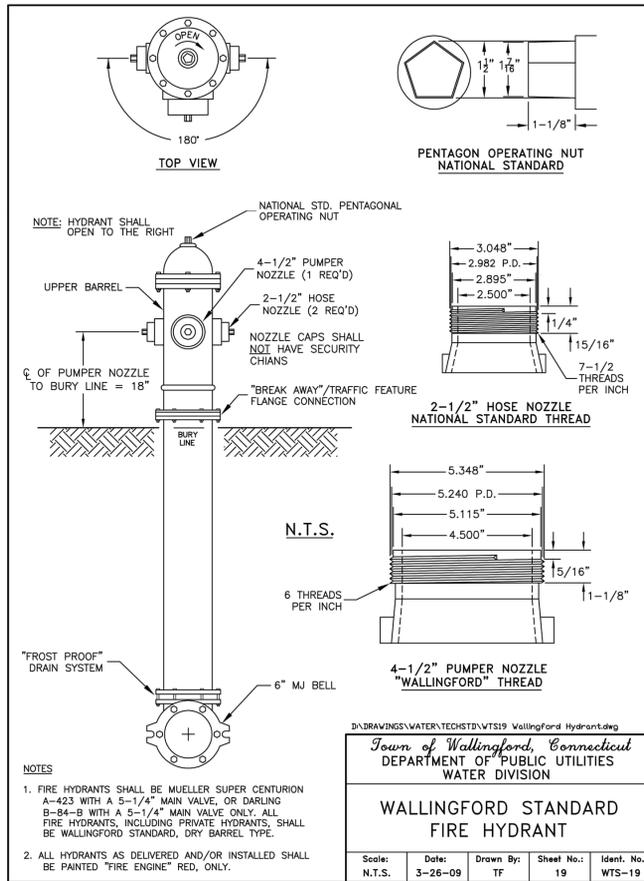
D	VALVE OR CAP	FITTING			
		90°	45°	22.5°	11.25°
6"	49	20	8	4	2
8"	65	26	11	6	3
12"	92	36	15	8	12

NOTES:

- LENGTHS SHOWN CALCULATED FOR 200 PSI INTERNAL PIPE PRESSURE, 3,000 P.S.F. SOIL BEARING LOADS, LAYING CONDITION 4 AND A COVER OF 4.5'.
- VERTICAL BENDS NOT SHOWN. THRUST RESTRAINT LENGTHS TO BE CALCULATED BY CONTRACTOR AND APPROVED BY ENGINEER
- COMPOUNDING HORIZONTAL BENDS INSTALLED WITHIN RESTRAINT LENGTH OF EACH OTHER SHALL BE RESTRAINED AT THE LENGTH REQUIRED FOR THE COMBINED ANGLE.

**RESTRAINED LENGTHS FOR FITTINGS**  
NO SCALE





LOCAL APPROVALS	2020.12.01
Issue/Revision	YYYY.MM.DD

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**CONNECTICUT PROTON  
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Proton International  
932 NORTHROP RD. WALLINGFORD, CT 06492

Title  
**WATER SERVICE DETAILS - 2**

Project No.	Scale
P5050-004	AS SHOWN
Revision	Drawing No.

Last Saved: 12/30/2020 2:28pm By: Ngreto  
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D  
C  
B  
A

ALL MANHOLE TABLES AND FLOW CHANNELS SHALL BE CONSTRUCTED OF BRICK MASONRY AND PORTLAND CEMENT CONCRETE FILL. THE FLOW CHANNEL SHALL BE FORMED FROM PIPE TO PIPE WITH A SMOOTH FINISHED SURFACE SO AS NOT TO IMPEDE SEWAGE FLOW OR CAUSE ANY PUDDLING.

PRECAST CONCRETE INVERT TABLES AND CHANNELS WILL BE CONSIDERED ON A CASE-BY-CASE BASIS AND WILL ONLY BE PERMITTED IF SPECIFICALLY APPROVED BY THE SEWER DIVISION.

**MANHOLE FLOW CHANNEL CROSS SECTION DETAIL**  
N.T.S.

NOTES:  
1. BRICK UNITS SHALL BE HARD BURNED CLAY BRICK CONFORMING TO ASTM C32 FOR SEWER AND MANHOLE BRICK - EXPOSURE GRADE MS.  
2. MORTAR SHALL BE PORTLAND CEMENT MORTAR CONFORMING TO ARTICLE M.1.1.04 (GRADING B) OF FORM B17.  
3. CLASS "C" CONCRETE SHALL BE PORTLAND CEMENT CONCRETE CONFORMING TO ARTICLE M.0.3 (GRADING CLASS "C") OF FORM B17 WITH A 28 DAY COMPRESSIVE STRENGTH OF 3,300 PSI.

Town of Wallingford, Connecticut  
DEPARTMENT OF PUBLIC UTILITIES  
SEWER DIVISION  
**MANHOLE FLOW CHANNEL CROSS SECTION DETAIL**  
SCALE: N.T.S. DATE: APR 30, 2020 DRAWN BY: TF SHEET NO: 8 IDENT. NO: STS-08  
S:\Sewer\TECHSTD\STS08 MH Flow Channel.dwg

**BUILDING LATERAL PIPE:**  
PVC PIPE (SDR-35 & SCH. 40):  
MINIMUM COVER IS 3'-0" AND THE MAXIMUM DEPTH IS 15'-0".  
6 INCHES OF 3/4" BROKEN STONE IS REQUIRED UNDER AND OVER THE PIPE FOR THE WIDTH OF THE TRENCH.  
IF THE COVER IS LESS THAN 3'-0", DUCTILE IRON PIPE SHALL BE USED.

DUCTILE IRON PIPE:  
TO BE USED WHEN:  
- COVER IS LESS THAN 3'-0"  
- DEPTH IS GREATER THAN 15'-0"

BUILDING LATERAL PIPES ON PRIVATE PROPERTY:  
- MIN. COVER ON DIP = 1'-0"

BUILDING LATERAL PIPES IN PUBLIC ROADS:  
- MIN. COVER ON DIP = 2'-0"

DUCTILE IRON PIPE DOES NOT REQUIRE STONE BEDDING.

**COMMERCIAL/INDUSTRIAL BUILDING LATERAL INSTALLATION**  
N.T.S.

NOTES:  
PITCH: MIN. = 1/8" PER FOOT (2.0%)  
CLEAN-OUTS:  
1) WITHIN 10' OF THE STRUCTURE.  
2) AT INTERVALS NOT EXCEEDING 75'.  
3) AT 75' MEASURED FROM THE SEWER MAIN TO THE FIRST CLEAN-OUT.  
4) AT BENDS EXCEEDING 45 DEGREES.

DOMESTIC WELLS: ALL BUILDING SEWER LINES INSTALLED WITHIN 75', BUT NO CLOSER THAN 25' OF A DOMESTIC WELL, SHALL MEET THE D.O.H.S. TECHNICAL STANDARDS FOR SEWER PIPE.

CROSSINGS: WHERE POSSIBLE THE SEWER LINE SHALL CROSS UNDER ALL WATER LINES WITH 18" MINIMUM SEPARATION (MEASURED FROM THE TOP OF THE SEWER TO THE BOTTOM OF WATER). WHERE 18" OF SEPARATION CANNOT BE MAINTAINED BETWEEN THE SEWER AND WATER LINE OR THE SEWER LINE CROSSES OVER THE WATER LINE THEN THE SEWER PIPE SHALL BE UPGRADED TO PRESSURE RATED PIPE: CEMENT LINED CL 52 DIP, C-900 PVC, SDR-21 PVC, SCH. 40 PVC OR APPROVED EQUAL.

APPROVED SEWER SADDLES: 1) ROMAC STYLE "CB"  
2) SEALTITE TEE SADDLE WITH GASKETED BELL A NEAT HOLE SHALL BE CORED INTO THE MAIN WITH A PROPER SHELL CUTTER.

Town of Wallingford, Connecticut  
DEPARTMENT OF PUBLIC UTILITIES  
SEWER DIVISION  
**LAYOUT FOR COMMERCIAL/INDUSTRIAL GRAVITY SEWER LATERAL INSTALLATION**  
SCALE: N.T.S. DATE: 2020-04-30 DRAWN BY: TP SHEET NO: 18A IDENT. NO: STS-18A  
S:\Sewer\TECHSTD\STS18A Comm Ind Sewer Lateral.dwg

**CLEAN-OUT DETAILS**  
N.T.S.

NOTE: CLEAN-OUT PIPES SHALL BE OF THE SAME DIAMETER AS THE BUILDING SEWER.

**DETAIL**  
N.T.S.

Town of Wallingford, Connecticut  
DEPARTMENT OF PUBLIC UTILITIES  
SEWER DIVISION  
**CLEAN-OUT DETAILS FOR PVC SANITARY SEWER LATERALS**  
SCALE: N.T.S. DATE: 2020-04-30 DRAWN BY: TF SHEET NO: 19 IDENT. NO: STS-19  
S:\Sewer\TECHSTD\STS19 Clean Outs.dwg

**TOP VIEW OF A TYPICAL WALLINGFORD STANDARD MANHOLE**  
N.T.S.

REQUIRED MINIMUM INSIDE DIAMETER OF MANHOLE	
SIZE OF MAINLINE PIPE	MIN.* INSIDE DIA. OF MANHOLE
8" DIA. TO 12" DIA. MAINS	4' DIA. FOR DEPTHS OF < 12' 5' DIA. FOR DEPTHS OF ≥ 12'
14" DIA. TO 24" DIA. MAINS	5' DIA. FOR ALL DEPTHS
27" DIA. TO 30" DIA. MAINS	6' DIA. FOR ALL DEPTHS
> 30" DIA. MAINS	TO BE DETERMINED BY THE SEWER DIVISION

\* LARGER THAN MINIMUM INSIDE DIAMETER MAY BE REQUIRED FOR JUNCTION AND/OR TURNING MANHOLES DEPENDING ON THE SPECIFIC CONDITIONS SUBJECT TO THE REVIEW OF THE SEWER DIVISION.

NOTE: UNLESS SPECIFIED OTHERWISE THE HOLES FOR THE FLEXIBLE PIPE CONNECTORS (A.K.A. "BOOTS") KOR-N-SEAL II OR EQUAL SHALL BE CAST OR CORED WITH THE HOLE FOR THE DOWNSTREAM PIPE A MINIMUM OF 0.1 FEET LOWER IN ELEVATION THAN THE HOLES FOR ANY OF THE UPSTREAM PIPES.

Town of Wallingford, Connecticut  
DEPARTMENT OF PUBLIC UTILITIES  
SEWER DIVISION  
**TOP VIEW OF A WALLINGFORD STANDARD MANHOLE**  
SCALE: N.T.S. DATE: APR 30, 2020 DRAWN BY: TF SHEET NO: 9 IDENT. NO: STS-09  
S:\Sewer\TECHSTD\STS09 MH Top View.dwg

SEE SHEET NO. 9 FOR DETAIL OF TOP VIEW OF MANHOLE

**MANHOLE FRAME AND COVER**  
PUBLIC MANHOLES: SEE SHEETS No. 6 & 7  
PRIVATE MANHOLES: SEE SHEETS No. 29 & 30

BITUMINOUS COATING ON EXTERIOR SURFACES TYPICAL FOR ALL PRECAST SECTIONS

BUTYL RUBBER SEALANT "CONSEAL" CS-102 OR APPROVED EQUAL. SEAMS AT PRECAST SECTIONS TO BE MORTARED INSIDE AND OUTSIDE OF MANHOLE. SEE SHEET No. 1 FOR DETAILS.

PLASTIC PLUGS ARE TO BE INSERTED INTO LIFTING HOLES. THE REMAINDER OF THE LIFTING HOLES ARE TO BE FILLED WITH MORTAR, INSIDE AND OUTSIDE OF MANHOLE, TYPICAL FOR ALL MANHOLE SECTIONS.

FLEXIBLE PIPE CONNECTOR KOR-N-SEAL I OR II OR EQUAL (AKA BOOT) (TYP.)

LADDER RUNGS TO BE SET OVER THE DOWNSTREAM PIPE

PIPE BELLS TO BE LAID UPSTREAM

U-SHAPED CHANNEL TO BE CONSTRUCTED OF HARD CLAY BRICK UP TO THE CROWN OF THE PIPE. SEE SHEET No. 8 FOR DETAILS

ANNULAR SPACE BETWEEN THE PIPE AND THE INSIDE OF THE FLEXIBLE PIPE CONNECTOR TO BE FILLED WITH MORTAR. SEE SHEET No. 8 FOR DETAILS.

**N.T.S.**

NOTE: THE ENDS OF ALL PIPES SHALL PROTRUDE INTO THE INTERIOR OF THE MANHOLE 1" MIN. TO 4" MAX. AS MEASURED FROM THE INSIDE FACE OF THE CONCRETE WALL

NOTE: UNLESS SPECIFIED OTHERWISE THE HOLES FOR THE FLEXIBLE PIPE CONNECTORS (A.K.A. "BOOTS") SHALL BE CAST OR CORED WITH THE HOLE FOR THE DOWNSTREAM PIPE A MINIMUM OF 0.1 FEET LOWER IN ELEVATION THAN THE HOLES FOR ANY OF THE UPSTREAM PIPES.

Town of Wallingford, Connecticut  
DEPARTMENT OF PUBLIC UTILITIES  
SEWER DIVISION  
**WALLINGFORD STANDARD 4'-0" DIA. PRECAST MANHOLE FOR DEPTHS OF 6' TO 12'**  
SCALE: N.T.S. DATE: APR 30, 2020 DRAWN BY: TF SHEET NO: 2 IDENT. NO: STS-02  
S:\Sewer\TECHSTD\STS02 4ft MH 6-12ft deep.dwg

UNITS TO BE DIP COATED IN ASPHALTUM PAINT

COVER SHALL HAVE NON-PENETRATING PICK HOLES

COVER SHALL NOT HAVE VENT HOLES

**WALLINGFORD STANDARD MANHOLE FRAME AND COVER**  
MATERIAL: GRAY CAST IRON PER A.S.T.M. A48-83, CLASS 30B

CASTINGS SHALL BE DESIGNED TO SAFELY WITHSTAND AASHTO HS20-44 (MS18) HIGHWAY LOADS

X = 8" FRAME #10494612/1248  
6" FRAME #10494702/1246  
4" FRAME #10494652/1244  
COVER #1049/1248

**PATTERN #1049/1248**  
N.T.S.

NOTES:  
1. "WALLINGFORD STANDARD" MANHOLE FRAMES AND COVERS SHALL BE INSTALLED ON PUBLICLY OWNED SANITARY SEWER MANHOLES ONLY.  
2. THIS NON-BOLT DOWN TYPE OF FRAME AND COVER SHALL BE INSTALLED ON PUBLICLY OWNED MANHOLES LOCATED IN PAVED AREAS WITH CROSS SLOPES THAT CARRY STORMWATER AWAY FROM THE MANHOLE. ALL OTHER CONDITIONS MUST USE A "WALLINGFORD STANDARD" WATERTIGHT MANHOLE FRAME AND COVER. SEE SHEET No. 7.  
3. "WALLINGFORD STANDARD" MANHOLE FRAME AND COVER SHALL BE PATTERN #1049/1248 MANUFACTURED BY CAMPBELL FOUNDRY CO., OR APPROVED EQUAL.

Town of Wallingford, Connecticut  
DEPARTMENT OF PUBLIC UTILITIES  
SEWER DIVISION  
**"WALLINGFORD STANDARD" MANHOLE FRAME AND COVER FOR PUBLIC SANITARY SEWER MANHOLES**  
SCALE: N.T.S. DATE: APR 30, 2020 DRAWN BY: TF SHEET NO: 6 IDENT. NO: STS-06  
S:\Sewer\TECHSTD\STS06 MH Cover.dwg

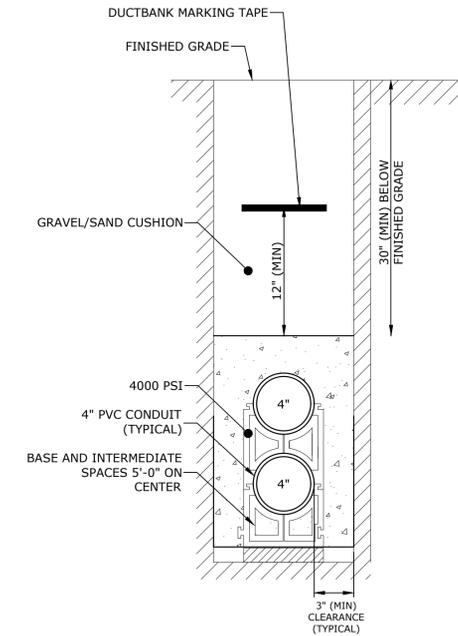
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Plotted On: Dec 30, 2020 2:28pm  
Tighe & Bond: J:\P5050\Proton\Informational\04 Northrop Road Facility - Civil\Drawings - Figures\AutoCAD\Sheet\5050-C-701-DETL.dwg  
ORIGINAL SHEET - ARCHD

**ELECTRIC DUCTBANK NOTES:**

1. ALL CONDUIT SHOWN ARE 4" DIAMETER PVC SCHEDULE 40 UNLESS OTHERWISE NOTED.
2. ALL SWEEPS AND RISER CONDUITS SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE NOTED.
3. PROVIDE BASE AND INTERMEDIATE SPACERS WHICH CONNECT TOGETHER TO FORM A UNIFORM SUPPORT 4'-0" ON CENTER.
4. WHERE NOTED, PROVIDE THE REQUIRED RACKING IN EACH MANHOLE TO ALLOW ALL CARRIERS TO TIE OFF SLACK IN AN ORDERLY FASHION.
5. ALL DUCTS SHALL BE CONCRETE ENCASED.
6. ALL DUCTBANKS SHALL BE FORMED ON ITS SIDES.
7. ALL "SPARE" OR UNUSED CONDUITS SHALL BE PROVIDED WITH A 3/8" NYLON DRAG LINE.
8. ALL CONDUIT BENDS SHALL BE A MINIMUM OF 12X THE CONDUIT RADIUS.
9. PITCH CONDUITS TOWARDS MANHOLES AND AWAY FROM BUILDINGS. AVOID CREATING LOW POINTS IN CONDUIT RUNS BETWEEN MANHOLES.
10. CONDUITS EXTENDED FROM MANHOLES, TRANSFORMERS, SWITCHGEAR, TUNNEL WALLS, BUILDING FOUNDATION WALLS SHALL BE GALVANIZED RIGID STEEL.
11. ALL DUCTBANK MATERIALS SHALL CONFORM TO THE RESPECTIVE UTILITY COMPANIES' STANDARDS AND MEET ALL REQUIREMENTS.

**TEL-DATA/CATV DUCTBANK NOTES:**

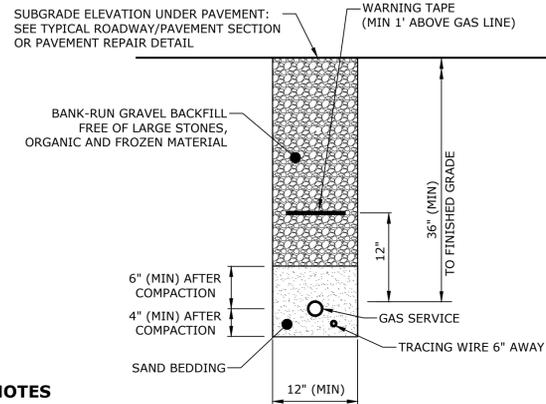
1. DUCTS SHOWN ARE 4" DIAMETER PVC TYPE EB UNLESS OTHERWISE NOTED.
2. ALL SEEPS AND RISER CONDUIT SHALL BE PVC TYPE EB UNLESS OTHERWISE NOTED.
3. ALL DUCTS SHALL BE CONCRETE ENCASED.
4. ALL DUCTBANKS SHALL BE FORMED ON ITS SIDES.
5. PROVIDE BASE AND INTERMEDIATE SPACERS WHICH CONNECT TOGETHER TO FORM A UNIFORM SUPPORT 6'-0" ON CENTER.
6. PROVIDE THREE 1 1/2" NON-METALLIC FLEX INTERDUCT WITH STRING LINES IN EACH OF THE 6 PVC DUCTS.
7. WHERE NOTED, PROVIDE THE REQUIRED RACKING IN EACH MANHOLE TO ALLOW ALL CARRIERS TO TIE OFF SLACK IN AN ORDERLY FASHION.
8. TEL-CATA/CATV MANHOLES SHALL NOT BE SPACED FURTHER THAN 500 FEET APART.
9. ALL CONDUITS TO BE LABELED A TO Z.
10. ALL CONDUIT BENDS SHALL BE A MINIMUM OF 12X THE CONDUIT RADIUS.
11. PITCH CONDUITS TOWARDS MANHOLES AND AWAY FROM BUILDINGS. AVOID CREATING LOW POINTS IN CONDUIT RUNS BETWEEN MANHOLES.
12. ALL DUCTBANK MATERIALS SHALL CONFORM TO THE RESPECTIVE UTILITY COMPANIES' STANDARDS AND MEET ALL REQUIREMENTS.



**NOTES**

1. NUMBERS, SIZES AND CONFIGURATION ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. COORDINATE WITH UTILITY COMPANY AND PROJECT ELECTRICAL ENGINEER FOR ACTUAL DESIGN REQUIREMENTS AND SPECIFICATIONS.

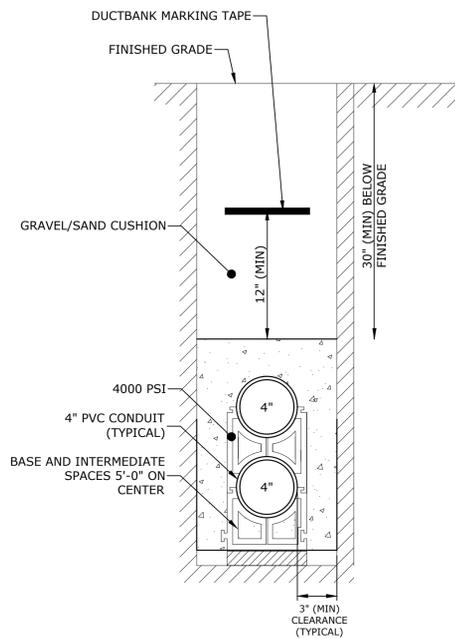
**TYPICAL SECTION - TEL-DATA/CATV - BUILDING SERVICE  
CONCRETE ENCASED DUCTBANK**  
NO SCALE



**NOTES**

1. ALL EXCAVATION WORK WILL BE IN ACCORDANCE WITH THE DIRECTION OF THE COMPANY AND IN COMPLIANCE WITH THE REGULATIONS OF THE AUTHORITIES HAVING JURISDICTION OVER THE STREETS, ALLEYS, RIGHT-OF-WAYS, OR PROPERTIES WHERE THE WORK IS TO BE EXECUTED.
2. PRIOR TO THE INSTALLATION OF THE PIPE, SAND PADDING SHALL BE INSTALLED, A MINIMUM OF 4" (MEASURED AFTER COMPACTION.)
3. SAND PADDING ABOVE THE GAS PIPE SHALL BE A MINIMUM OF 6" (MEASURED AFTER COMPACTION.)
4. BACKFILL SHALL BE FREE OF LARGE STONES (6" DIAMETER) WITHIN 1' OF THE PIPE. IF THE MATERIAL REMOVED FROM THE TRENCH IS NOT SUITABLE FOR BACKFILL, REPLACEMENT FILL SHALL BE USED.
5. ALL GAS SERVICE INSTALLATIONS SHALL BE COORDINATED WITH LOCAL GAS COMPANY.
6. ALL GAS SERVICES SHALL BE INSTALLED WITH THE LOCAL GAS COMPANY STANDARDS AND REQUIREMENTS.

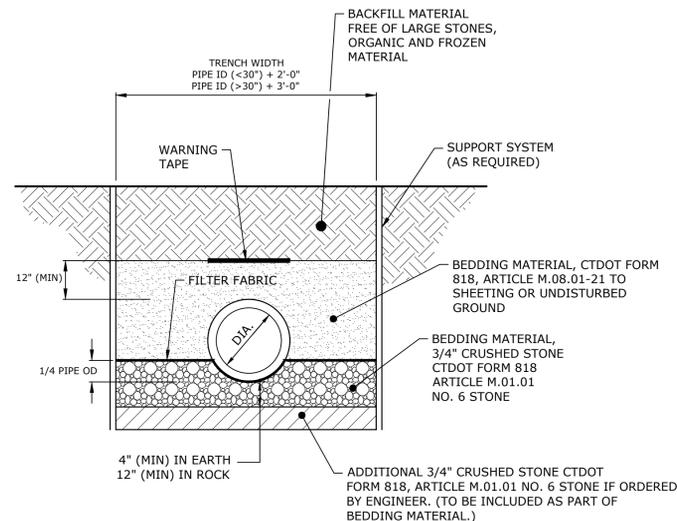
**GAS SERVICE TRENCH**  
NO SCALE



**NOTES**

1. NUMBERS, SIZES AND CONFIGURATION ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. COORDINATE WITH UTILITY COMPANY AND PROJECT ELECTRICAL ENGINEER FOR ACTUAL DESIGN REQUIREMENTS AND SPECIFICATIONS.

**TYPICAL SECTION - PRIMARY ELECTRIC - BUILDING SERVICE  
CONCRETE ENCASED DUCTBANK**  
NO SCALE



**DUCTILE IRON PIPE - TRENCH BEDDING**

NO SCALE

AN EXCAVATION PERMIT SHALL BE OBTAINED FROM THE PREVAILING AUTHORITY FOR ANY INSTALLATION WITHIN A PUBLIC RIGHT-OF-WAY. PRIOR TO OBTAINING A WATER AND SEWER CONSTRUCTION PERMIT, THE EXCAVATION, BACKFILL & PAVEMENT RESTORATION (INCLUDING CURBING & SIDEWALKS) SHALL CONFORM TO THE REQUIREMENTS OF THE PREVAILING AUTHORITY:

EXCAVATION PERMITS: 1) TOWN ROADS: WALLINGFORD DEPT. OF ENGINEERING 45 SOUTH MAIN ST. - (203) 294-2035  
2) STATE ROADS: CT DEPT. OF TRANSPORTATION - DISTRICT III 140 POND LILY AVE., NEW HAVEN, CT (203) 389-3004

WATER AND SEWER CONSTRUCTION PERMITS: WATER AND SEWER DIVISIONS 377 SOUTH CHERRY STREET (203) 949-2672

**NOTES**

1. PVC GRAVITY MAINS, BUILDING SEWERS & FITTINGS SHALL BE SDR-35 PVC CONFORMING TO ASTM D3034 WITH INTEGRAL BELL "PUSH-ON" TYPE RUBBER GASKETED JOINTS CONFORMING TO ASTM D3212.
2. SANITARY SEWER MAINS IN PUBLIC RIGHTS-OF-WAY SHALL NOT BE PERMITTED WITH LESS THAN 3'-0" OF COVER. BUILDING LATERAL SEWERS WITH LESS THAN 3'-0" OF COVER SHALL BE UPGRADED TO CEMENT LINED CL52 DUCTILE IRON PIPE. ALL SANITARY SEWER PIPES EXCEEDING 15'-0" IN DEPTH SHALL BE UPGRADED TO CEMENT LINED CL52 DUCTILE IRON PIPE.
3. WHEN THE COVER OVER THE SANITARY SEWER MAIN IS LESS THAN 7'-0" WITHIN RIGHTS-OF WAY THAT MAY INCLUDE WATER MAINS OR SERVICES, THE SEWER MAIN AND BUILDING LATERALS SHALL BE UPGRADED TO PRESSURE RATED PIPE: SCH. 40 PRESSURE RATED PVC, SDR-21 PVC, C-900 PVC, CEMENT LINED CL52 DIP OR APPROVED EQUAL.
4. THE FILTER FABRIC WRAP MATERIAL SHALL BE PLACED IN THE BOTTOM AND UP THE SIDES OF THE TRENCH AND A MINIMUM OF 6" OF 3/4" BROKEN STONE PLACED INSIDE THE FABRIC PRIOR TO INSTALLING.

THE PIPE, FOR INSTALLATIONS OUTSIDE OF PUBLIC RIGHTS-OF-WAY THE FILTER FABRIC WRAP MAY BE OMITTED.

5. ALL TRENCHING, EXCAVATION & MAINTENANCE OF THE TRAFFIC SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE & LOCAL REGULATIONS. THE EXCAVATOR SHALL USE TRENCH SUPPORT AND BRACING AS REQUIRED BY O.S.H.A. REGULATIONS TO ENSURE THE STABILITY AND SAFETY OF ALL TRENCHES.

*Town of Wallingford, Connecticut*  
**DEPARTMENT OF PUBLIC UTILITIES  
SEWER DIVISION**

**TRENCH DETAIL FOR PVC GRAVITY  
SEWER MAIN & BUILDING SEWERS**

SCALE:	DATE:	DRAWN BY:	SHEET NO.:	IDENT. NO.:
N.T.S.	APR 30, 2020	TF	10	STS-10

S:\Sewer\TECHSTD\STS10 Gravity Sewer Trench.dwg

Last Saved: 12/30/2020  
Plotted On: Dec 30, 2020 2:28pm By: NGrego  
Tighe & Bond; S:\P5050 Proton International\004 Northrop Road Facility - Civil\Drawings - Figures\AutoCAD\Sheet\5050-C-701-DETL.dwg

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Consultants

STRUCTURAL - Goldstein-Milano Structural Engineers, LLC

MEP / FA / FP / IT - BR+A

CIVIL -

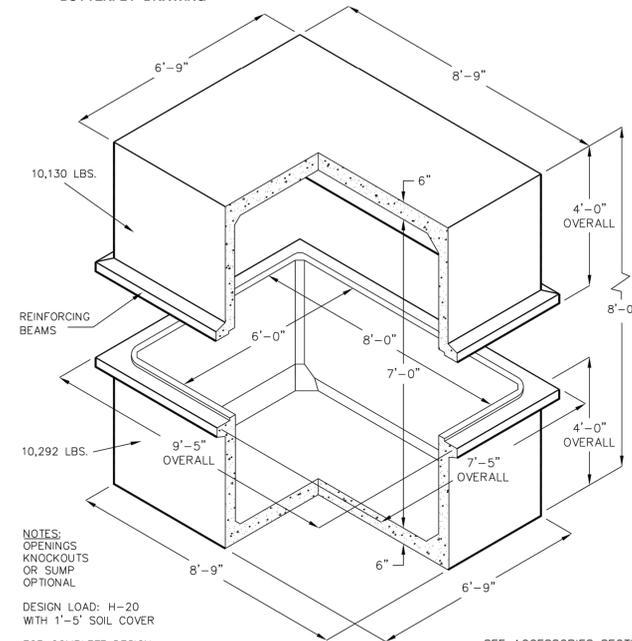
**Tighe & Bond**

1000 Bridgeport Avenue  
Suite 320  
Shelton, CT 06484  
(203) 712-1100



**MODEL 687U-7**  
DESIGN LOAD: FULL TRAFFIC  
INSIDE VOLUME: 336 CU. FT./2,513 GALLONS  
6'-0" INSIDE WIDTH x 8'-0" INSIDE LENGTH x 7'-0" INSIDE HEIGHT

DETAIL ACCESS, OPENINGS  
HARDWARE, ETC. ON  
BUTTERFLY DRAWING



NOTES:  
OPENINGS  
KNOCKOUTS  
OR SUMP  
OPTIONAL

DESIGN LOAD: H-20  
WITH 1'-5" SOIL COVER

FOR COMPLETE DESIGN  
AND PRODUCT INFORMATION,  
CONTACT JENSEN PRECAST.

1/17/03  
6'x8'x7'\_U.dwg  
© 2003 Jensen Precast

SEE ACCESSORIES SECTION  
FOR ACCESS OPENINGS AND  
HARDWARE APPLICATIONS.



**ELECTRIC AND TEL-DATA MANHOLE**  
NO SCALE

LOCAL APPROVALS	2020.12.01
Issue/Revision	YYYY.MM.DD

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Client/Project  
**CONNECTICUT PROTON  
THERAPY CENTER -  
OUTPATIENT FACILITY**

Proton International  
932 NORTHPRO RD. WALLINGFORD, CT 06492

Title  
UTILITY DETAILS - 2

Project No. P5050-004	Scale AS SHOWN
Revision	Drawing No.

Last Saved: 12/30/2020  
Plotted On: Dec 30, 2020 2:28pm By: NGreto  
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LOCAL APPROVALS	2020.12.01
Issue/Revision	YYYY.MM.DD

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DEPARTMENT OF CONSUMER PROTECTION  
ARCHITECT  
MARK BOWLES  
License # ARL0014738 Effective 10/22/2020 Expiration 07/31/2021  
SIGNED *Mark Bowles*

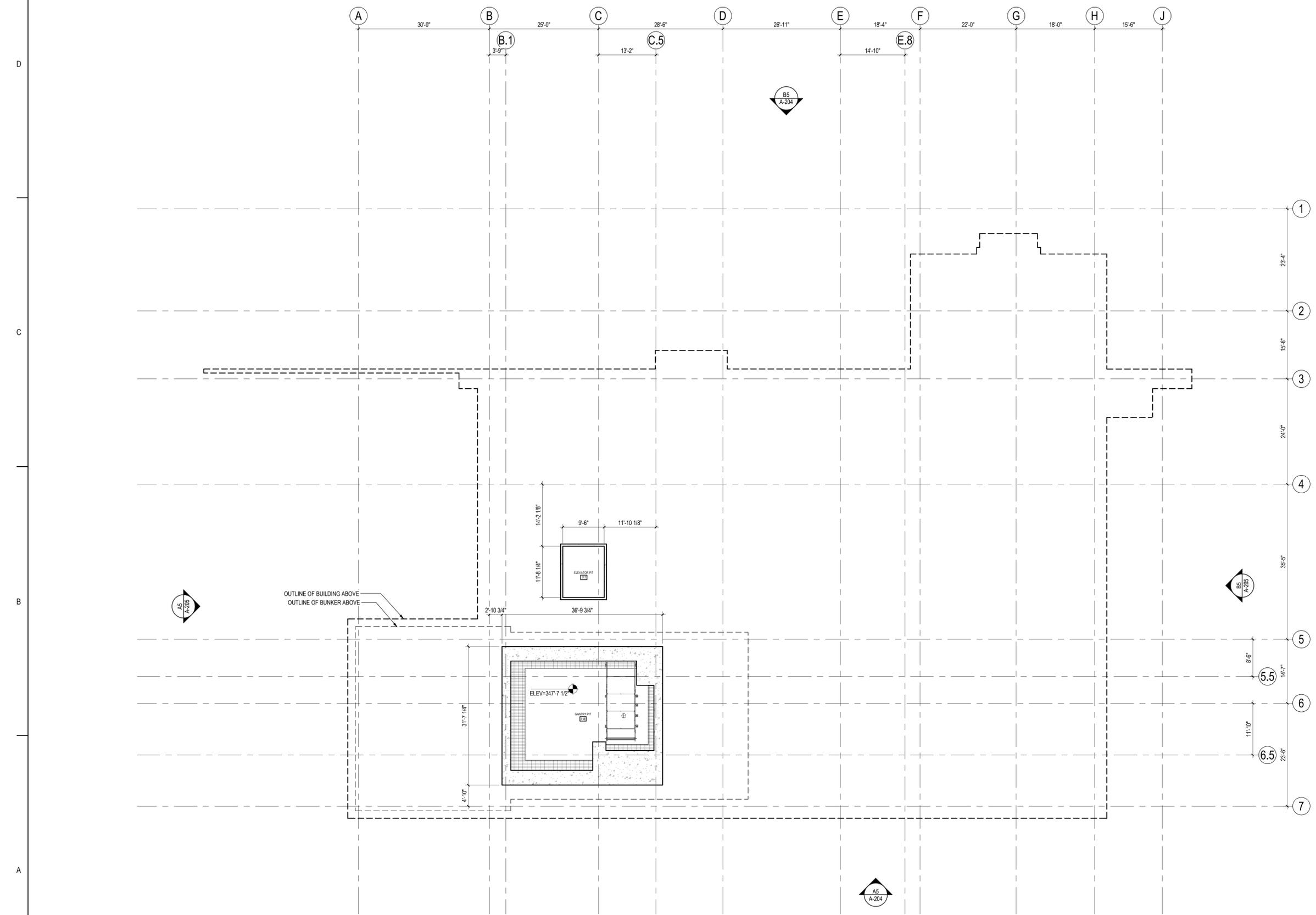
Client/Project  
**CONNECTICUT PROTON THERAPY CENTER - OUTPATIENT FACILITY**

Proton International  
932 NORTHROP RD. WALLINGFORD, CT 06492

Title  
FLOOR PLAN - PIT LEVEL

Project No. 218320529	Scale 3/32" = 1'-0"
Revision	Drawing No.

**A-200**



**A5 FLOOR PLAN - PIT LEVEL**  
3/32" = 1'-0"



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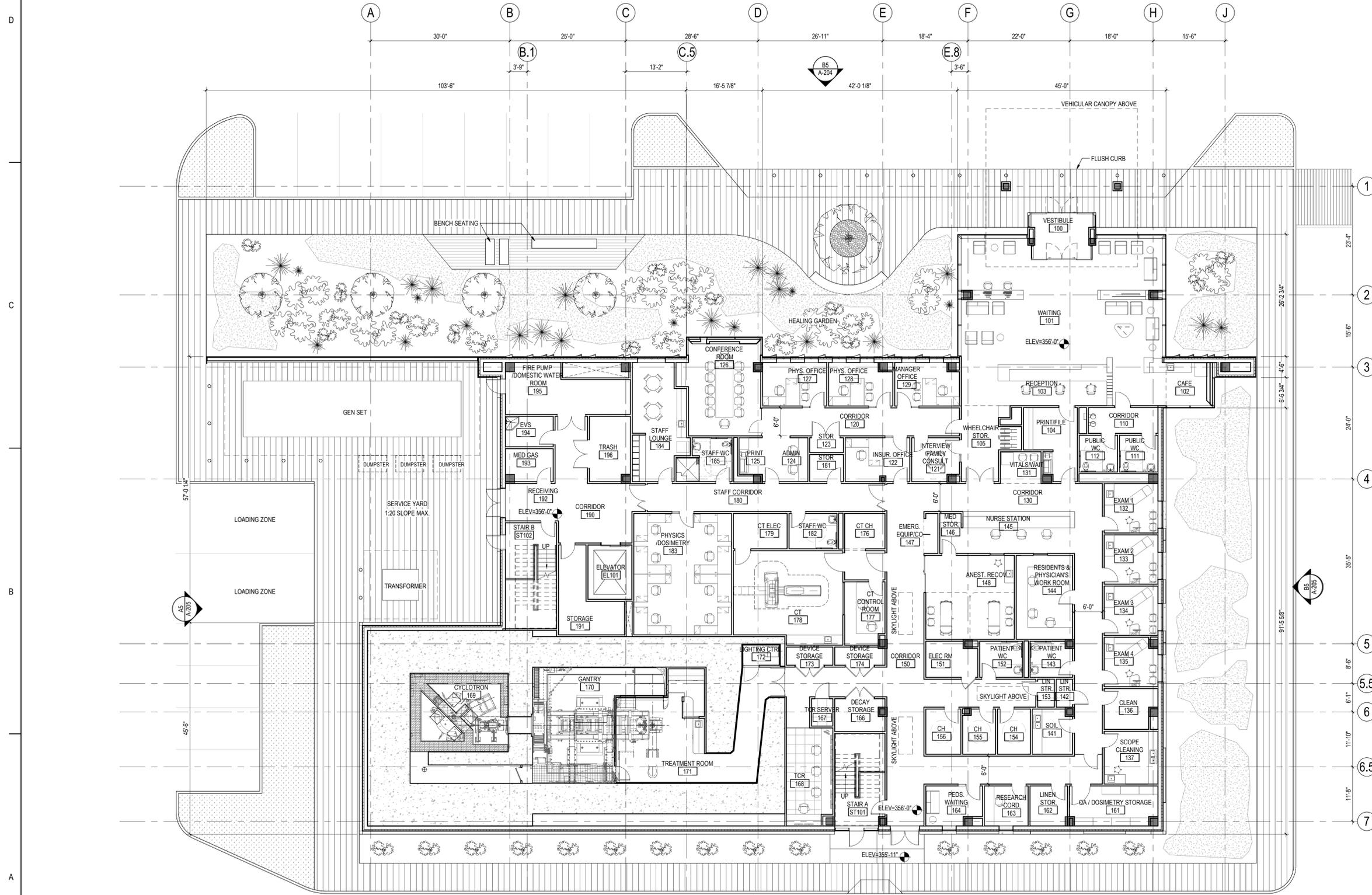
Title

FLOOR PLAN - FIRST FLOOR

Project No. 218320529	Scale 3/32" = 1'-0"
Revision	Drawing No.



A-201



**A5 FLOOR PLAN - FIRST FLOOR**  
3/32" = 1'-0"

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ORIGINAL SHEET - ARCH D

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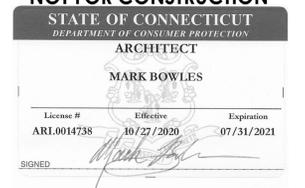
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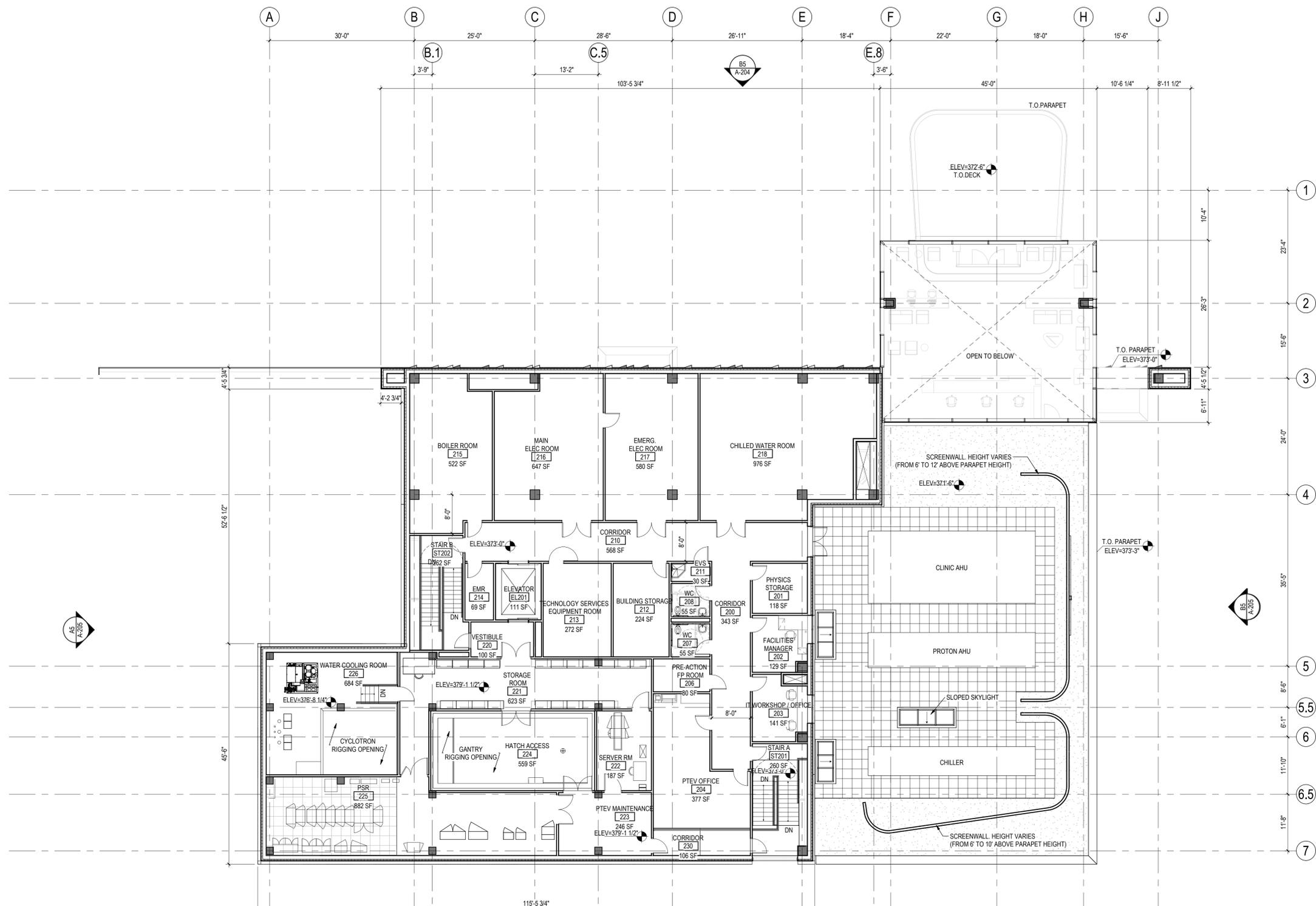
Client/Project  
**CONNECTICUT PROTON  
THERAPY CENTER -  
OUTPATIENT FACILITY**

Proton International  
932 NORTHROP RD. WALLINGFORD, CT 06492

Title  
**FLOOR PLAN - SECOND FLOOR**

Project No. 218320529	Scale 3/32" = 1'-0"
Revision	Drawing No.

**A-202**



**A5**  
A-202  
**FLOOR PLAN - SECOND FLOOR**  
3/32" = 1'-0"





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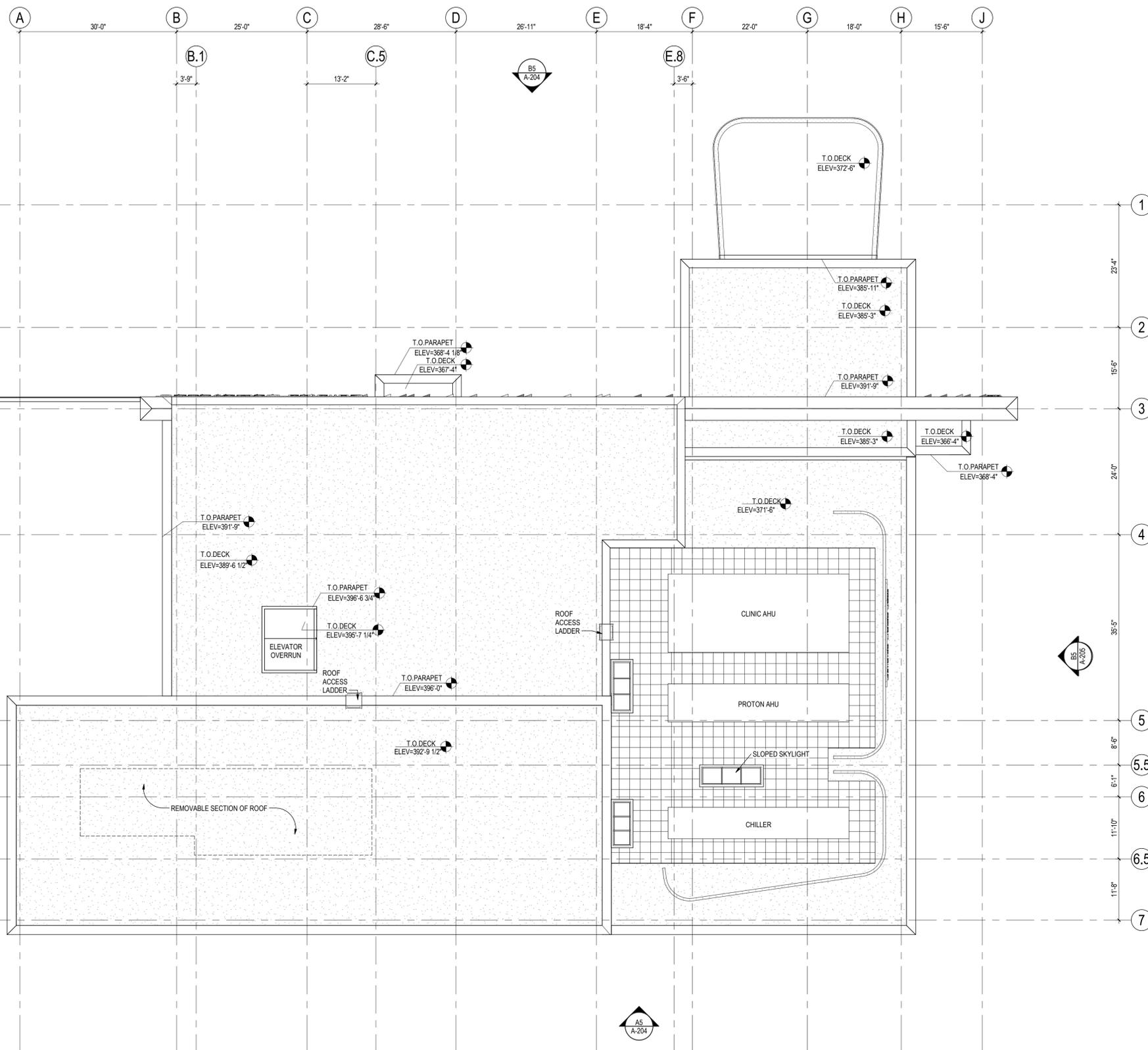
Client/Project  
**CONNECTICUT PROTON  
THERAPY CENTER -  
OUTPATIENT FACILITY**

Proton International  
932 NORTHROP RD. WALLINGFORD, CT 06492

Title  
**FLOOR PLAN - ROOF PLAN**

Project No. 218320529	Scale 3/32" = 1'-0"
Revision	Drawing No.

**A-203**



**A5 ROOF PLAN**  
3/32" = 1'-0"

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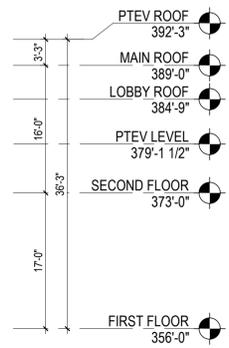
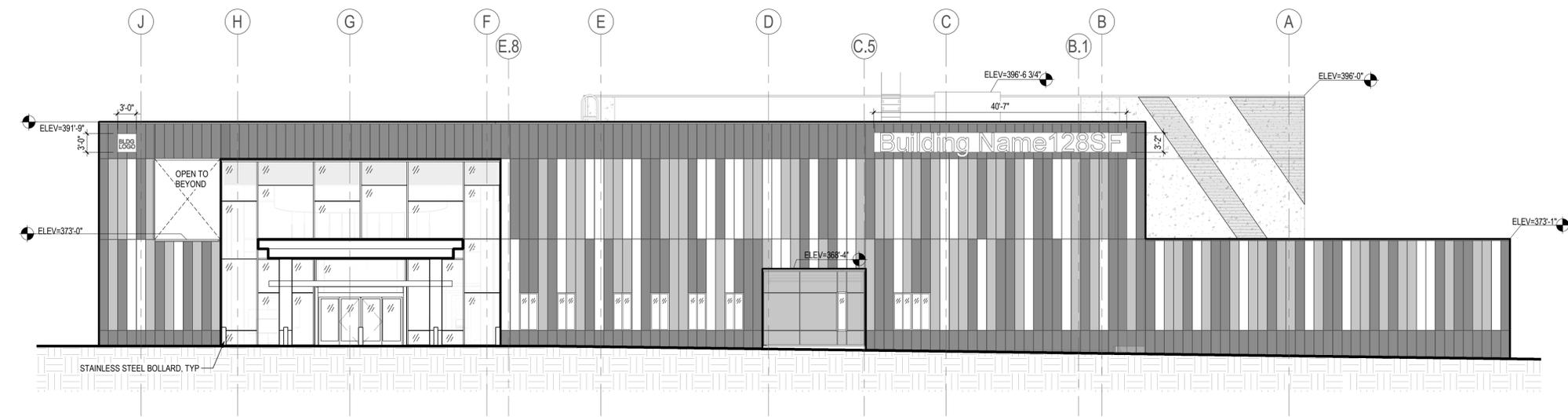
Consultants

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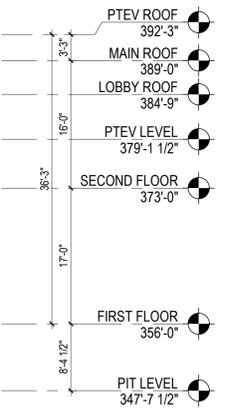
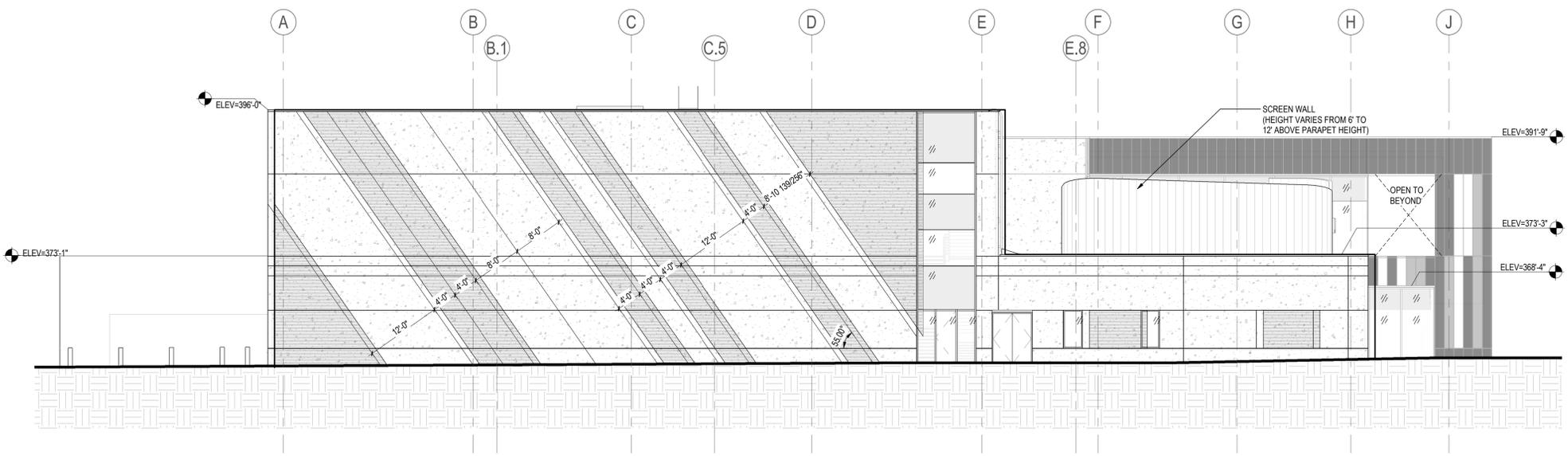
MEP / FA / FP / IT - BR+A

CIVIL - Tighe & Bond

ELEVATION LEGEND	
<b>GLAZING</b>	
	IG1 - 1" CLEAR
	IG2 - 1" CLEAR w/ SHADOWBOX BEHIND
	IG3 - 1" LIGHT GRAY SPANDREL
	IG4 - 1" DARK GRAY SPANDREL
<b>METAL PANEL</b>	
	MP1 - LIGHT BEIGE METAL PANEL
	MP1A - FOLDED LIGHT BEIGE METAL PANEL
	MP2 - BEIGE METAL PANEL
	MP2A - FOLDED BEIGE METAL PANEL
	MP3 - DARK BEIGE METAL PANEL
	MP3A - FOLDED DARK BEIGE METAL PANEL
<b>PRECAST CONCRETE</b>	
	PC1 - PRECAST
	PC2 - SAND BLASTED PRECAST



**B5 BUILDING ELEVATION - NORTH**  
A-204 3/32" = 1'-0"



**A5 BUILDING ELEVATION - SOUTH**  
A-204 3/32" = 1'-0"



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Title  
**BUILDING ELEVATIONS**

Project No. 218320529	Scale As indicated
Revision	Drawing No.



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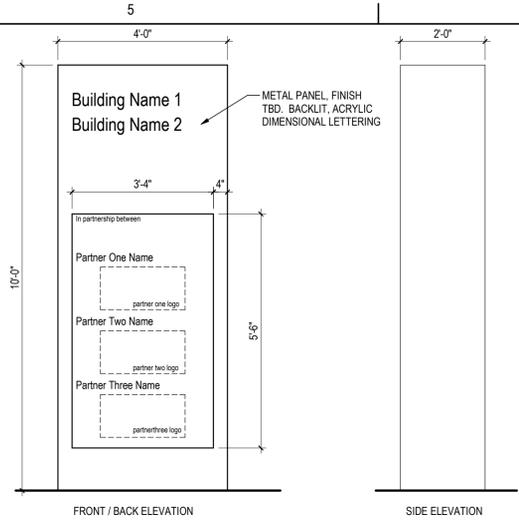
Consultants

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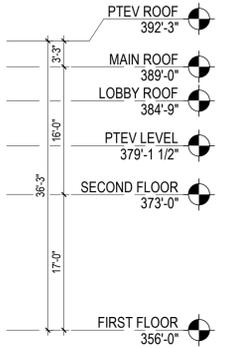
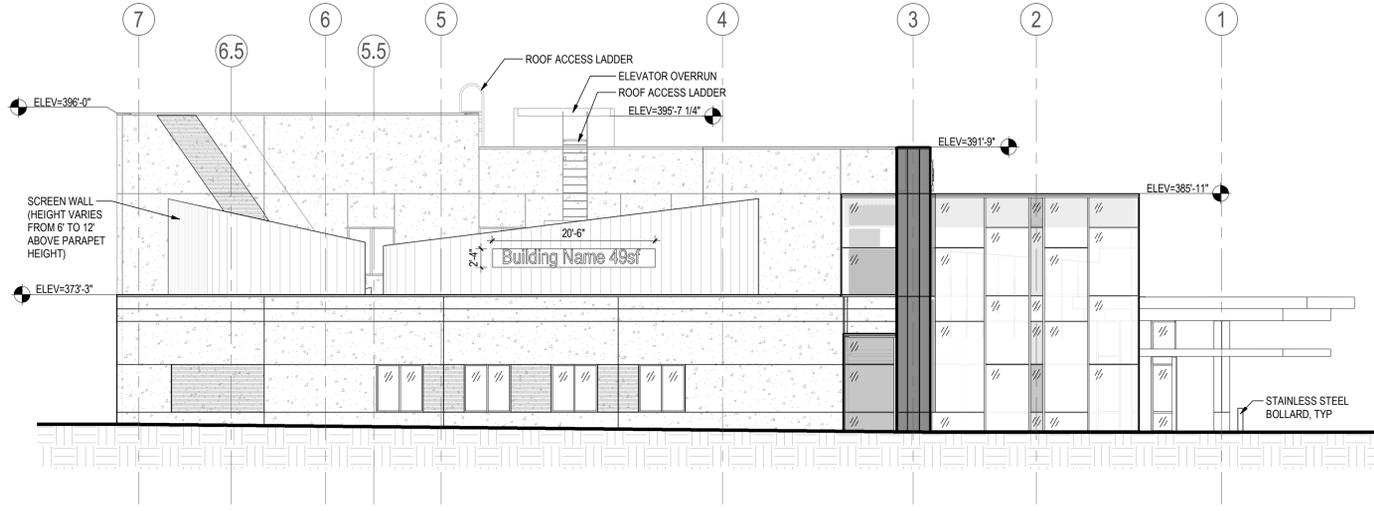
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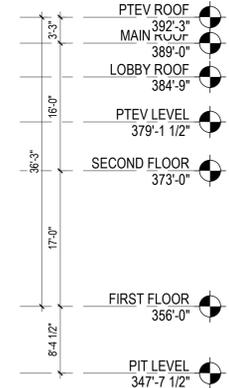
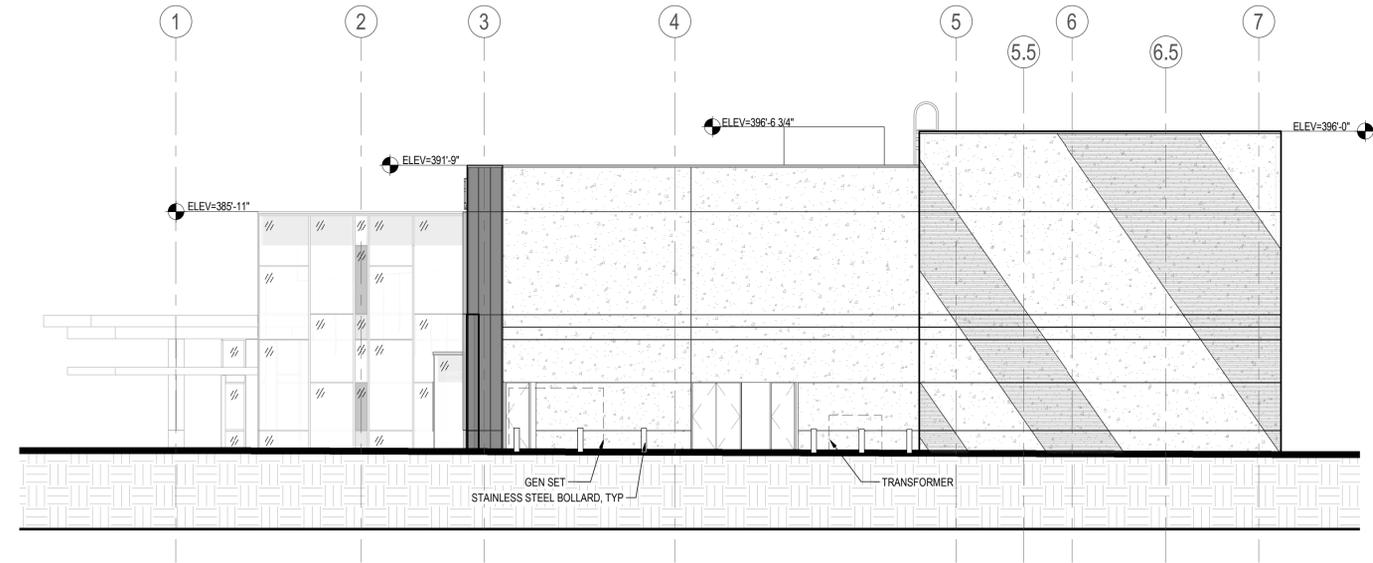
ELEVATION LEGEND	
<b>GLAZING</b>	
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	MP2A - FOLDED BEIGE METAL PANEL
	MP3 - DARK BEIGE METAL PANEL
	MP3A - FOLDED DARK BEIGE METAL PANEL
<b>PRECAST CONCRETE</b>	
	PC1 - PRECAST
	PC2 - SAND BLASTED PRECAST



**C5 MONUMENTAL SIGN**  
A-205 1/2" = 1'-0"



**B5 BUILDING ELEVATION - EAST**  
A-205 3/32" = 1'-0"



**A5 BUILDING ELEVATION - WEST**  
A-205 3/32" = 1'-0"



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**CONNECTICUT PROTON THERAPY CENTER - OUTPATIENT FACILITY**

Proton International

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Title

**BUILDING ELEVATIONS**

Project No.      Scale  
218320529      As indicated

Revision      Drawing No.

