

PILGRIMS HIGHWAY
(A.K.A. ROUTE 139)
(PUBLIC - 300' WIDE - NO ACCESS)
(STATE HIGHWAY LAYOUT NO. 5140 &
EQP 

REVISIONS



PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY
REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION
DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT:

— FOR :

**PROPOSED
SELF-STORAGE FACILITY**

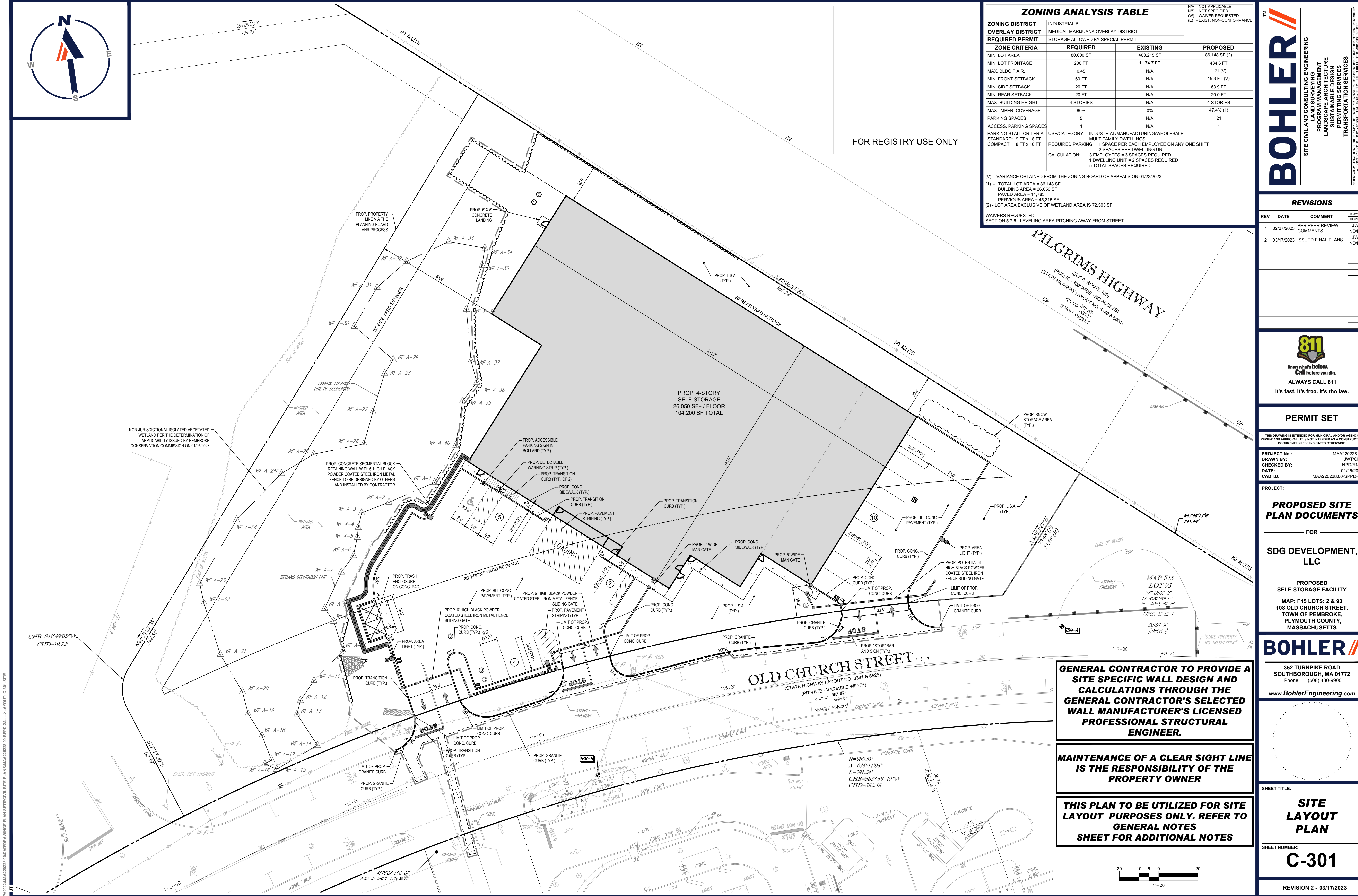


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SHEET TITLE:

SHEET NUMBER:

REVISION 2 - 03/17/2023



ZONING ANALYSIS TABLE			
ZONING DISTRICT	INDUSTRIAL B		
OVERLAY DISTRICT	MEDICAL MARIJUANA OVERLAY DISTRICT		
REQUIRED PERMIT	STORAGE ALLOWED BY SPECIAL PERMIT		
ZONE CRITERIA	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA	80,000 SF	403,215 SF	86,148 SF (2)
MIN. LOT FRONTAGE	200 FT	1,174.7 FT	434.6 FT
MAX. BLDG F.A.R.	0.45	N/A	1.21 (V)
MIN. FRONT SETBACK	60 FT	N/A	15.3 FT (V)
MIN. SIDE SETBACK	20 FT	N/A	63.9 FT
MIN. REAR SETBACK	20 FT	N/A	20.0 FT
MAX. BUILDING HEIGHT	4 STORIES	N/A	4 STORIES
MAX. IMPER. COVERAGE	80%	0%	47.4% (1)
PARKING SPACES	5	N/A	21
ACCESS. PARKING SPACES	1	N/A	1
PARKING STALL CRITERIA	USE/CATEGORY: INDUSTRIAL/MANUFACTURING/WHOLESALE		
STANDARD: 9 FT x 18 FT	MULTIFAMILY DWELLINGS		
COMPACT: 8 FT x 16 FT	REQUIRED PARKING: 1 SPACE PER EACH EMPLOYEE ON ANY ONE SHIFT		
	CALCULATION: 3 EMPLOYEES + 3 SPACES REQUIRED		
	1 DWELLING UNIT = 2 SPACES REQUIRED		
	5 TOTAL SPACES REQUIRED		

(V) - VARIANCE OBTAINED FROM THE ZONING BOARD OF APPEALS ON 01/23/2023
(1) - TOTAL LOT AREA = 86,148 SF
BUILDING AREA = 26,050 SF
PAVED AREA = 14,783
PERVIOUS AREA = 45,315 SF
(2) - LOT AREA EXCLUSIVE OF WETLAND AREA IS 72,503 SF

WAIVERS REQUESTED:
SECTION 5.7.6 - LEVELING AREA PITCHING AWAY FROM STREET

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SITE CIVIL AND CONSULTING ENGINEERING
PROFESSIONAL ENGINEERING
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS				
REV	DATE	COMMENT	DRAWN BY	
1	02/27/2023	PER PEER REVIEW COMMENTS	JWT	ND/RM
2	03/17/2023	ISSUED FINAL PLANS	JWT	ND/RM

811

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PROJECT No.: MAA220228.00
DRAWN BY: JWC/CFD
CHECKED BY: NPD/RM
DATE: 01/25/2023
CAD ID: MAA220228.00-SFPD-2A

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

SDG DEVELOPMENT, LLC

PROPOSED SELF-STORAGE FACILITY
MAP: F15 LOTS: 2 & 93
108 OLD CHURCH STREET,
TOWN OF PEMBROKE,
PLYMOUTH COUNTY,
MASSACHUSETTS

BOHLER

352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
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SHEET TITLE:

SITE LAYOUT PLAN

SHEET NUMBER:

C-301

REVISION 2 - 03/17/2023

GENERAL CONTRACTOR TO PROVIDE A SITE SPECIFIC WALL DESIGN AND CALCULATIONS THROUGH THE GENERAL CONTRACTOR'S SELECTED WALL MANUFACTURER'S LICENSED PROFESSIONAL STRUCTURAL ENGINEER.

MAINTENANCE OF A CLEAR SIGHT LINE IS THE RESPONSIBILITY OF THE PROPERTY OWNER

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL NOTES



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SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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FOR
SDG DEVELOPMENT, LLC

PROPOSED SELF-STORAGE FACILITY
MAP: F15 LOTS: 2 & 93
108 OLD CHURCH STREET,
TOWN OF PEMBROKE,
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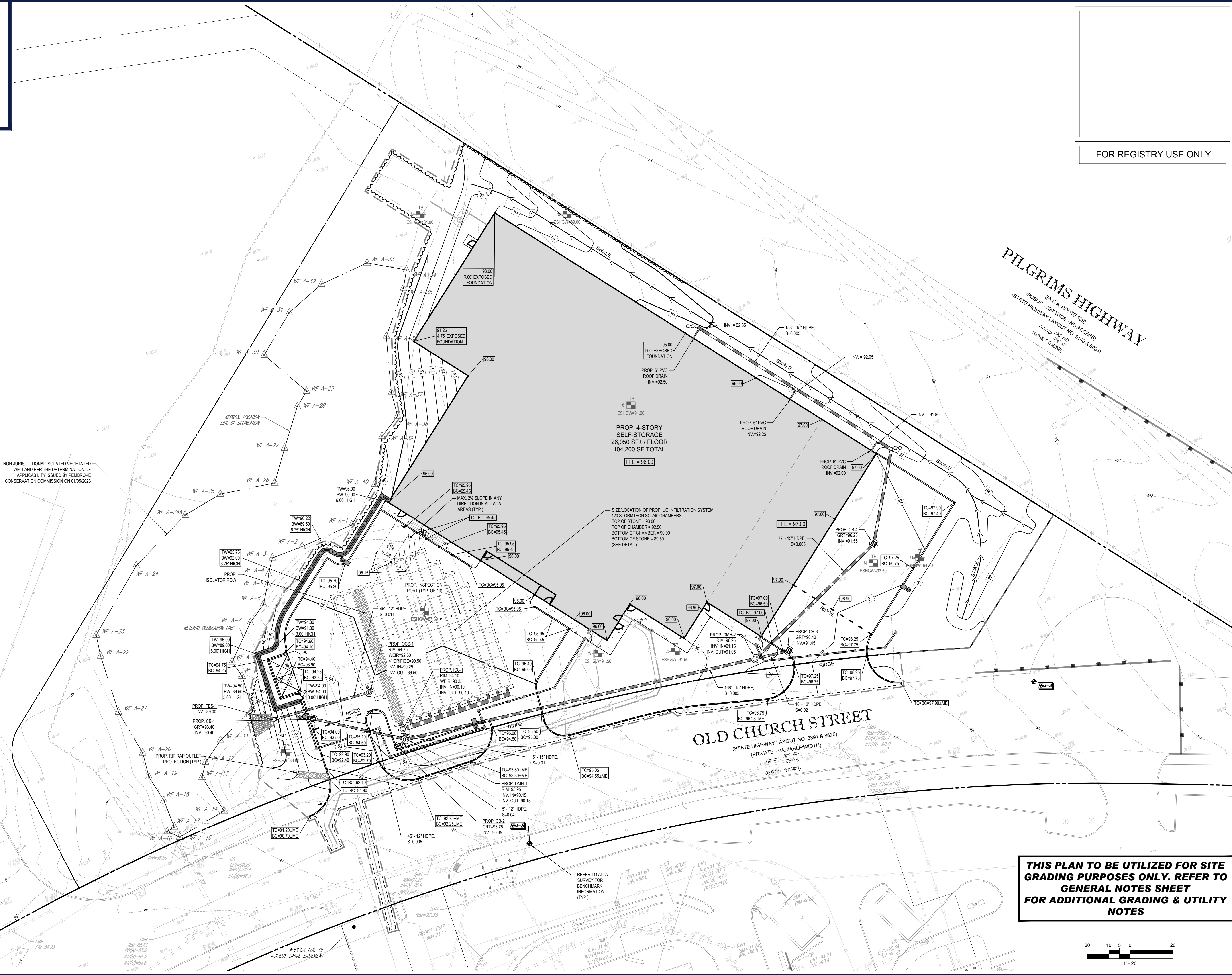
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SOUTHBOROUGH, MA 01772
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SHEET TITLE:
GRADING & DRAINAGE PLAN

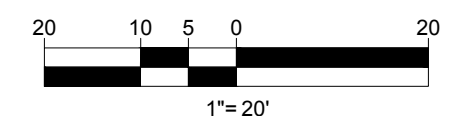
SHEET NUMBER:
C-401

REVISION 2 - 03/17/2023

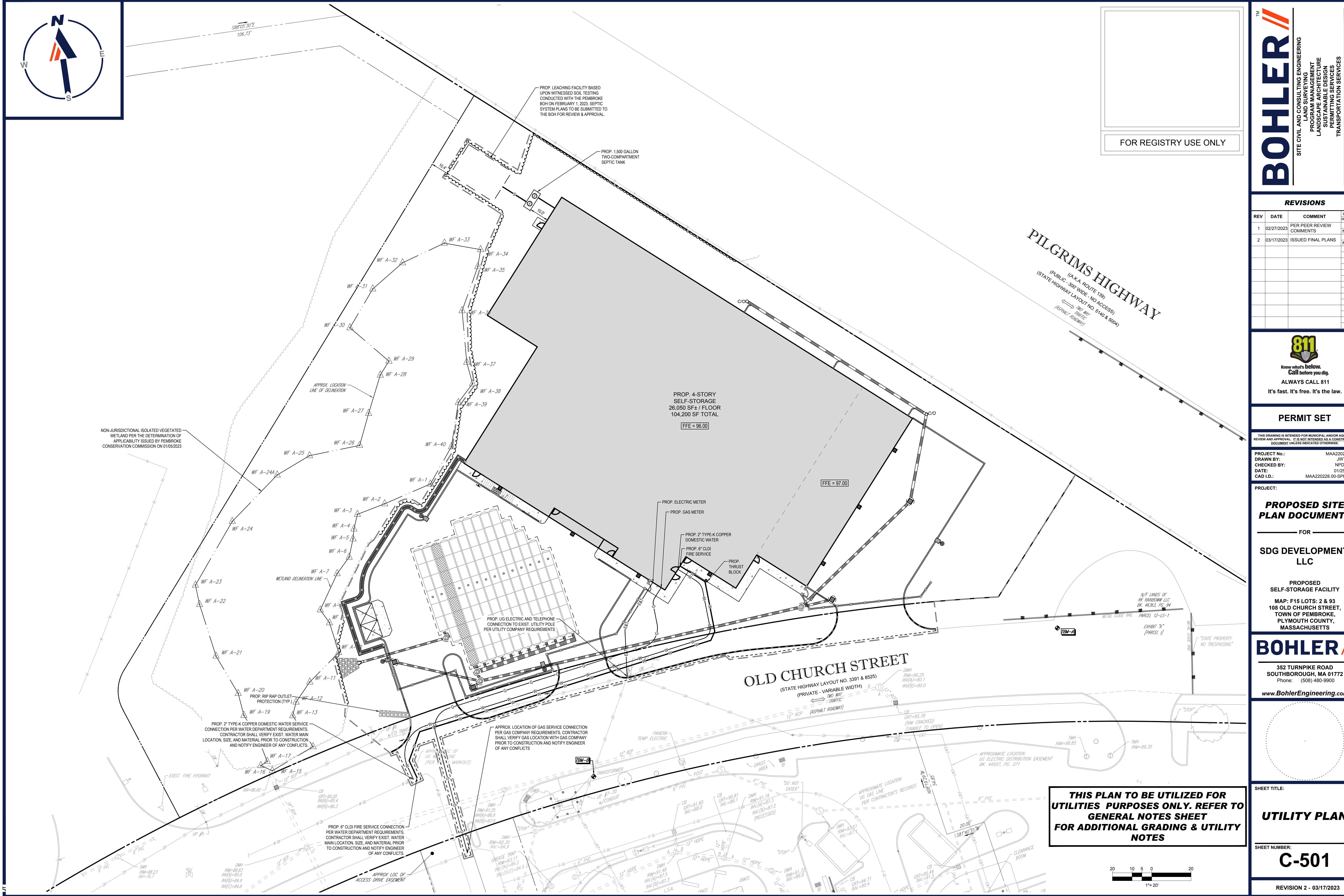
NON-JURISDICTIONAL ISOLATED VEGETATED WETLAND PER THE DETERMINATION OF APPLICABILITY ISSUED BY PEMBROKE CONSERVATION COMMISSION ON 01/05/2023



THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL GRADING & UTILITY NOTES



P:\2022\MAA220228\00-CAD\DRAWINGS\PLAN SET\BOHLER\MAA220228.00-SFPD-2A.dwg LAYOUT: C-401 GRAD_DRAIN



PILGRIMS HIGHWAY
 (PUBLIC, 300'-WIDE, NO ACCESS)
 (STATE HIGHWAY LAYOUT NO. S140 & S004)
 ⇄ THE WAY THERE
 (ACTUAL, 1,000 FEET)

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PROJECT No.: MAA202228.00
DRAWN BY: JWT/CFD
CHECKED BY: NPD/RMM
DATE: 01/25/2023
CAD I.D.: MAA202228.00-SPPD-2A

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

— FOR —

SDG DEVELOPMENT,
LLC

**PROPOSED
SELF-STORAGE FACILITY**

**MAP: F15 LOTS: 2 & 93
108 OLD CHURCH STREET,
TOWN OF PEMBROKE,
PLYMOUTH COUNTY,
MASSACHUSETTS**

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**THIS PLAN TO BE UTILIZED FOR
UTILITIES PURPOSES ONLY. REFER TO
GENERAL NOTES SHEET
FOR ADDITIONAL GRADING & UTILITY
NOTES**

SHEET TITLE:

UTILITY PLAN

SHEET NUMBER:

C-501

REVISION 2 - 03/17/2023



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PROPOSED SELF-STORAGE FACILITY

MAP: F15 LOTS: 2 & 93
108 OLD CHURCH STREET,
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SHEET TITLE:

SOIL EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER:

C-601

REVISION 2 - 03/17/2023

NON-JURISDICTIONAL ISOLATED VEGETATED WETLAND PER THE DETERMINATION OF APPLICABILITY ISSUED BY PEMBROKE CONSERVATION COMMISSION ON 01/05/2023

APPROX. LOCATION LINE OF DELINEATION

PROP. SILTATION BARRIER (TYP.)

WETLAND DELINEATION LINE

LIMIT OF PROP. SILTATION BARRIER (TYP.)

EXIST. FIRE HYDRANT

APPROX. LOC. OF ACCESS DRIVE EASEMENT

LIMIT OF PROP. SILTATION BARRIER (TYP.)

PROP. 4-STORY SELF-STORAGE
26,050 SF ± / FLOOR
104,200 SF TOTAL

PROP. TEMPORARY SOIL STOCKPILE AREA SURROUNDED BY STRAW BALES & SILT FENCE

PROP. INLET PROTECTION (TYP.)

PROP. INLET PROTECTION (TYP.)

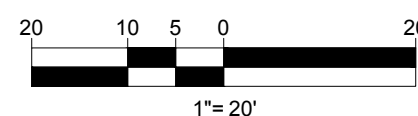
OLD CHURCH STREET
(STATE HIGHWAY LAYOUT NO. 3391 & 8525)
(PRIVATE - VARIABLE WIDTH)
TWO WAY TRAFFIC
(ASPHALT ROADWAY)

PILGRIMS HIGHWAY
(A.K.A. ROUTE 139)
(PUBLIC - 300' WIDE - NO ACCESS)
(STATE HIGHWAY LAYOUT NO. 5140 & 5004)
TWO WAY TRAFFIC
(ASPHALT ROADWAY)

SUBSURFACE INFILTRATION CHAMBER SYSTEM NOT TO BE UTILIZED FOR TEMPORARY SEDIMENT TRAPS AND TO BE PROTECTED FROM HEAVY CONSTRUCTION TRAFFIC SO AS NOT TO COMPROMISE THE SOIL CONDITIONS

THIS PLAN TO BE UTILIZED FOR SITE SOIL AND EROSION CONTROL PURPOSES ONLY

REFER TO SOIL EROSION CONTROL NOTES & DETAIL SHEET FOR EROSION NOTES AND DETAILS



EROSION AND SEDIMENT CONTROL NOTES

1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE AS SET FORTH IN THE MOST CURRENT STATE SEDIMENT AND EROSION CONTROL MANUAL.
2. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. AT A MINIMUM, AREAS SHALL BE PERMANENTLY STABILIZED ACCORDING TO THE CURRENT EDITION OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP), OR IN THE ABSENCE OF A SWPPP, THEY SHALL BE PERMANENTLY STABILIZED WITHIN 14 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL. IF THE DISTURBANCE IS WITHIN 100 FEET OF A STREAM OR POND, THE AREA SHALL BE STABILIZED WITHIN 7 DAYS OR PRIOR TO ANY STORM EVENT (THIS WOULD INCLUDE WETLANDS).
3. SEDIMENT BARRIERS (SILT FENCE, STRAW BARRIERS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 8%.
4. INSTALL SILTATION BARRIER AT TOE OF SLOPE TO FILTER SILT FROM RUNOFF. SEE SILTATION BARRIER DETAILS FOR PROPER INSTALLATION. SILTATION BARRIER WILL REMAIN IN PLACE PER NOTE #5.
5. ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS SLOPES ARE PERMANENTLY STABILIZED. FOR SEDIMENT CONTROL DEVICES THAT ARE WITHIN AREAS SUBJECT TO CONSERVATION COMMISSION JURISDICTION, THE DEVICES SHALL REMAIN IN PLACE AND BE REMOVED IN ACCORDANCE WITH THE ORDER OF CONDITIONS.
6. NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO TO ONE (2:1) UNLESS OTHERWISE INDICATED ON THE PLANS. SLOPE PROTECTION FOR SLOPES GREATER THAN 2:1 SHALL BE DESIGNED BY A GEOTECHNICAL ENGINEER.
7. IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, USE TEMPORARY MULCH (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
8. TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO PROTECT FROM SPRING RUNOFF PROBLEMS.
9. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL STANDARDS.
10. REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL SEEDING AS FOLLOWS:
- 10.1. SIX INCHES, OR DEPTH SPECIFIED ON THE LANDSCAPE PLAN, OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.
- 10.2. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 LB PER ACRE OR 18.4 LB PER 1,000 SF USING 10-20-20 OR EQUIVALENT. APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB PER 1,000 SF).
- 10.3. FOLLOWING SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEEDED TO A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEEDED TO A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUEGRASS, 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYEGRASS. SEEDING RATE IS 1.03 LBS PER 1,000 SF LAWN. QUALITY SOO MAY BE SUBSTITUTED FOR SEED WHERE SLOPES DO NOT EXCEED 2:1. SOO ON SLOPES STEEPER THAN 3:1 SHOULD BE PEGGED.
- 10.4. STRAW MULCH AT THE RATE OF 70-90 LBS PER 1,000 SF. A HYDRO-APPLICATION OF WOOD OR PAPER FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE NON-TOXIC BINDER WILL BE USED ON STRAW MULCH FOR WIND CONTROL.
11. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS 70% STABILIZED. FOR EROSION CONTROL MEASURES THAT ARE WITHIN AREAS SUBJECT TO CONSERVATION COMMISSION JURISDICTION, THE MEASURES SHALL REMAIN IN PLACE AND BE REMOVED IN ACCORDANCE WITH THE ORDER OF CONDITIONS.
12. WETLANDS WILL BE PROTECTED WITH BARRIERS CONSISTING OF STRAW BALES, COMPOST TUBES, SILT FENCE OR A COMBINATION THEREOF.
13. ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL HAVE AN EXPOSURE WINDOW OF NOT MORE THAN 7 DAYS.
14. ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL FOLLOW APPROPRIATE EROSION CONTROL MEASURES PRIOR TO EACH STORM IF NOT BEING ACTIVELY WORKED.

LOCATION PROTECTED AREA	MULCH STRAW	MULCH RATE (1000 SF) 100 POUNDS
WINDY AREA	SHREDDED OR CHOPPED CORNSTALKS STRAW (ANCHORED)*	185-275 POUNDS 100 POUNDS
MODERATE TO HIGH VELOCITY AREAS OR STEEP SLOPES GREATER THAN 3:1	JUTE MESH OR EXCELSIOR MAT	AS REQUIRED

GREATER THAN 3:1 (REFER TO GEOTECHNICAL REPORT FOR FINAL DESIGN REQUIREMENT)

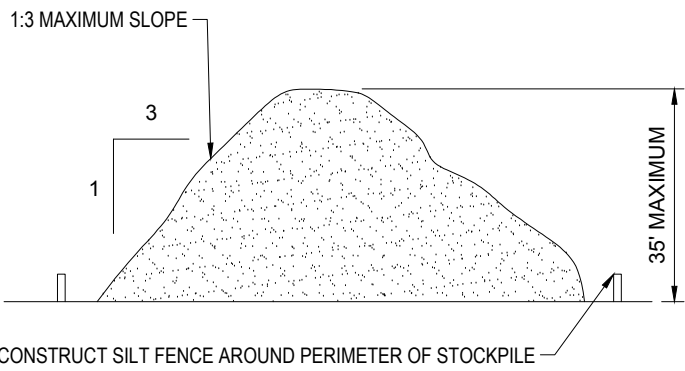
* A HYDRO-APPLICATION OF WOOD OR PAPER FIBER MAY BE APPLIED FOLLOWING SEEDING. A SUITABLE NON-TOXIC BINDER SHALL BE USED TO ADDITIONAL WIND CONTROL.

* MULCH ANCHORING: ANCHOR MULCH WITH PEG AND TWINE (1 SQ. YD/BLOCK); MULCH NETTING (AS PER MANUFACTURER); WOOD CELLULOSE FIBER (750 LBS/ACRE); CHEMICAL TACK (AS PER MANUFACTURER'S SPECIFICATIONS); USE OF A SERRATED STRAIGHT DISK. WETTING FOR SMALL AREAS AND ROAD DITCHES MAY BE PERMITTED.

15. PROPOSED LOCATIONS OF SURFACE STORMWATER MANAGEMENT BASINS CAN BE UTILIZED AS A TEMPORARY SEDIMENT TRAP DURING CONSTRUCTION. SEDIMENT TRAPS SHALL BE SIZED AND CONSTRUCTED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- 15.1. TEMPORARY SEDIMENT TRAPS SHALL BE SIZED PER THE CURRENT EDITION OF THE "MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS" AND PROVIDE A MINIMUM OF 1,800 CF PER ACRE OF TRIBUTARY AREA WITH A MAXIMUM TRIBUTARY AREA OF 5 ACRES. MAINTAIN A 2:1 LENGTH TO WIDTH RATIO, AND NOT EXCEED 5 FT IN HEIGHT. UPON SITE STABILIZATION, ACCUMULATED SEDIMENT SHALL BE REMOVED AND THE TEMPORARY SEDIMENT TRAP EXCAVATED TO 1 FOOT BELOW THE TRAP. THE AREA SHALL THEN BE SCARIFIED TO PREVENT COMPACTION AND PROMOTE INFILTRATION, AND GRADED AND STABILIZED IN ACCORDANCE WITH THE GRADING AND LANDSCAPE PLANS.
16. STOCKPILING OF MATERIALS (DIRT, WOOD, CONSTRUCTION MATERIALS, ETC.) MUST REMAIN COVERED AT ALL TIMES TO MINIMIZE ANY DUST PROBLEMS THAT MAY OCCUR WITH ADJACENT PROPERTIES AND TO PROVIDE MAXIMUM PROTECTION AGAINST EROSION RUNOFF.
17. EXISTING CATCH BASIN STRUCTURES SHALL BE PROTECTED UNTIL SUCH TIME AS THEY ARE REMOVED.
18. THE CONTRACTOR MUST PERFORM DEWATERING (IF REQUIRED), IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND PAY FOR THE COSTS ASSOCIATED WITH ANY AND ALL NECESSARY DISCHARGE PERMITS ASSOCIATED WITH SAME.
19. THE CONTRACTOR MUST LOCATE CONSTRUCTION WASTE MATERIAL STORAGE AREAS TO MINIMIZE EXPOSURE TO STORMWATER. THE CONTRACTOR MUST IMMEDIATELY PLACE CONSTRUCTION WASTE IN ON-SITE STORAGE CONTAINERS UNTIL THAT CONSTRUCTION WASTE IS READY FOR OFF-SITE DISPOSAL. THE CONTRACTOR MUST MAINTAIN SPILL PREVENTION AND RESPONSE EQUIPMENT AND MAKE SAME CONTINUOUSLY AVAILABLE ON-SITE FOR USE BY THE CONTRACTOR'S EMPLOYEES WHO MUST BE PROPERLY TRAINED IN THE APPLICATION OF SPILL PREVENTION AND RESPONSE PROCEDURES.
20. EROSION CONTROL NOTES DURING WINTER CONSTRUCTION
21. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.
22. WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT THE AMOUNT OF AREA OPEN AT ONE TIME IS MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE AND IN CONFORMANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN SUCH THAT ADEQUATE PROVISIONS ARE EMPLOYED TO CONTROL STORMWATER RUNOFF.
23. CONTINUATION OF EARTHWORK OPERATION ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
24. AN AREA SHALL BE CONSIDERED TO HAVE BEEN TEMPORARILY STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR STRAW AT A RATE OF 100 LB. PER 1,000 SQUARE FEET (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE.
25. FOR AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR A PERIOD EXCEEDING 14 DAYS BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED. IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED AND IS SMOOTH, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 200-300% HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED AS APPLICABLE. SLOPES SHALL NOT BE LEFT UNSTABILIZED OVER THE WINTER OR IN AREAS WHERE WORK HAS CEASED FOR MORE THAN 14 DAYS UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF SEDIMENT BARRIERS OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.
26. MULCHING REQUIREMENTS:
- 26.1. BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 15TH ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING OR WOOD CELLULOSE FIBER.
- 26.2. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPE EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%.
- 26.3. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15%. AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
27. ALL DISTURBED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE STORMWATER PREVENTION PLAN.
28. DURING THE WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. EROSION CONTROL MEASURES MUST CONFORM TO THE STATE, LOCAL, AND FEDERAL GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL UNLESS OTHERWISE NOTED, OR UNLESS ENGINEER CLEARLY AND SPECIFICALLY, IN WRITING, DIRECTS OTHERWISE. INSTALLATION OF EROSION CONTROL, CLEARING, AND SITE WORK MUST BE PERFORMED EXACTLY AS INDICATED IN THE EROSION CONTROL CONSTRUCTION NOTES.
3. THE DISTURBED LAND AREA OF THIS SITE IS APPROXIMATELY XX.XXX ACRES.
4. THE FOLLOWING EROSION CONTROL MEASURES ARE PROPOSED FOR THIS SITE:
- 4.1. STABILIZED CONSTRUCTION ENTRANCE/EXIT - A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT IS TO BE INSTALLED AT THE DESIGNATED LOCATION SHOWN ON THE PLAN. THIS AREA MUST BE GRADED SO THAT RUNOFF WATER WILL BE RETAINED ON-SITE.
- 4.2. SEDIMENT FENCE - INSTALL SILT FENCE(S) AND/OR SILT SOCK AROUND ALL OF THE DOWNSLOPE PERIMETERS OF THE SITE, TEMPORARY FILL AND SOIL STOCKPILES.
- 4.3. INSTALL FILTER FABRIC DROP INLET PROTECTION AROUND EACH DRAINAGE INLET AS DRAINAGE STRUCTURES ARE INSTALLED TO REDUCE THE QUANTITY OF SEDIMENT. INSTALL TEMPORARY INLET PROTECTION ON INLETS DOWNSLOPE FROM DISTURBANCE, WHICH MAY BE BEYOND THE LIMITS OF DISTURBED AREA.
5. INSTALLATION OF EROSION CONTROL DEVICES MUST BE IN ACCORDANCE WITH ALL OF THE MANUFACTURER'S RECOMMENDATIONS.
6. THE CONTRACTOR MUST INSPECT EROSION CONTROL MEASURES WEEKLY. THE CONTRACTOR MUST REMOVE ANY SILT DEPOSITS GREATER THAN 6" OR HALF THE OF THE EROSION CONTROL BARRIER'S HEIGHT COLLECTED ON THE FILTER FABRIC AND/OR SILT SOCK BARRIERS AND EXCAVATE AND REMOVE ANY SILT FROM DROP INLET PROTECTION.
7. THE CONTRACTOR MUST APPLY TEMPORARY SEED AND MULCH TO ALL DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINISHED GRADE AND VEGETATED WITHIN 7 DAYS. WHEN AREAS ARE DISTURBED AFTER THE GROWING SEASON, THE CONTRACTOR MUST STABILIZE SAME WITH GEOTEXTILE FABRIC AND MAINTAIN SAME IN STRICT ACCORDANCE WITH BEST MANAGEMENT PRACTICES.
8. THE CONTRACTOR MUST INSTALL ADDITIONAL EROSION CONTROL MEASURES IF ENGINEER SO REQUIRES, TO PREVENT ANY, INCLUDING THE INCIDENTAL DISCHARGE OF SILT-LADEN RUNOFF FROM EXITING THE SITE.
9. THE CONTRACTOR MUST BE RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL EROSION CONTROL MEASURES ON THE SITE UNTIL PERMANENT PAVING AND TURF/LANDSCAPING IS ESTABLISHED. THE COSTS OF INSTALLING AND MAINTAINING THE EROSION CONTROL MEASURES MUST BE INCLUDED IN THE BID PRICE FOR THE SITE WORK AND THE CONTRACTOR IS RESPONSIBLE FOR ALL SUCH COSTS.
10. THE CONTRACTOR MUST CONTINUE TO MAINTAIN ALL EROSION CONTROL MEASURES UNTIL THE COMPLETION OF CONSTRUCTION AND THE ESTABLISHMENT OF VEGETATION.
11. THE CONTRACTOR MUST REMOVE EROSION CONTROL MEASURES, SILT AND DEBRIS AFTER ESTABLISHING PERMANENT VEGETATION COVER OR OTHER INSTALLING A DIFFERENT, SPECIFIED METHOD OF STABILIZATION.
12. THIS PLAN REPRESENTS THE MINIMUM LEVEL OF IMPLEMENTATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROL FACILITIES, MEASURES AND STRUCTURES. ADDITIONAL FACILITIES, MEASURES AND STRUCTURES MUST BE INSTALLED WHERE NECESSARY TO COMPLY WITH ALL APPLICABLE CODES AND STANDARDS AND/OR TO PREVENT ANY, INCLUDING THE INCIDENTAL DISCHARGE OF SILT-LADEN RUNOFF FROM EXITING THE SITE.
13. THE CONTRACTOR MUST PROTECT ALL EXISTING TREES AND SHRUBS. THE CONTRACTOR MUST REFER TO THE LANDSCAPE AND/OR DEMOLITION PLAN(S) FOR TREE PROTECTION, FENCE LOCATIONS AND DETAILS.
14. THE CONTRACTOR MUST REFER TO GRADING PLANS FOR ADDITIONAL INFORMATION.
15. THE CONTRACTOR MUST CLEAN EXISTING AND PROPOSED DRAINAGE STRUCTURES AND INTERCONNECTING PIPES ON OR OFF-SITE AS THE JURISDICTIONAL AGENCY REQUIRES, BOTH AT THE TIME OF SITE STABILIZATION AND AT END OF PROJECT.
16. SOIL EROSION CONTROL MEASURES MUST BE ADJUSTED OR RELOCATED BY THE CONTRACTOR AS IDENTIFIED DURING SITE OBSERVATION IN ORDER TO MAINTAIN THE COMPLETE EFFECTIVENESS OF ALL CONTROL MEASURES.
17. THE CONTRACTOR MUST IDENTIFY, ON THE PLAN, THE LOCATION OF WASTE CONTAINERS, FUEL STORAGE TANKS, CONCRETE WASHOUT AREAS AND ANY OTHER LOCATIONS WHERE HAZARDOUS MATERIALS ARE STORED.



TEMPORARY STOCKPILE

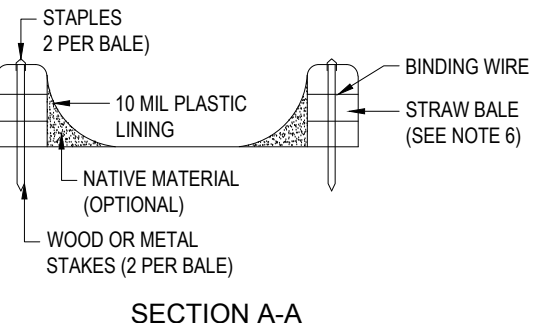
N.T.S.

NOTES:

1. EXCAVATE A 6"x6" TRENCH ALONG THE LINE OF EROSION CONTROL OF THE SITE.
2. UNROLL SILTATION FENCE AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH (NET SIDE AWAY FROM FLOW DIRECTION).
3. DRIVE THE POST INTO THE GROUND UNTIL THE NETTING IS LAYING ACROSS THE TRENCH BOTTOM.
4. LAY THE TOE-IN FLAP OF THE FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH. BACKFILL ALSO BE ACCOMPLISHED BY LAYING FABRIC FLAP ON UNDISTURBED GROUND AND PILING & TAMPING FILL AT THE BASE.

TYP. SILTATION FENCE

N.T.S.

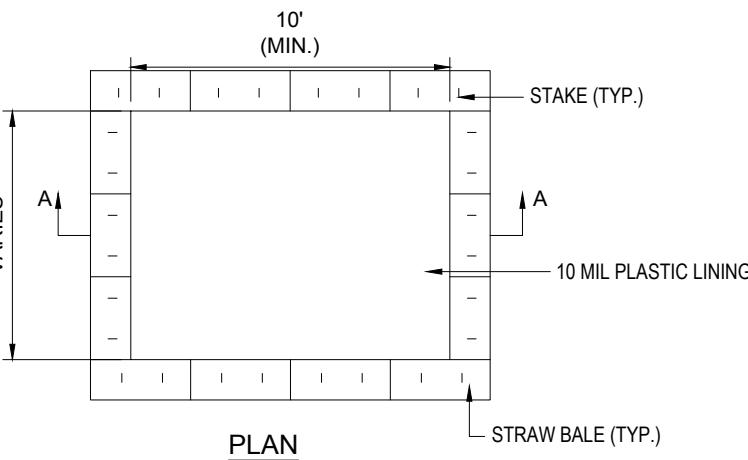


STAPLE DETAIL

NOTES:

1. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE LOCATED A MINIMUM OF 50 FT. FROM STORM DRAIN INLETS.
2. ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF OFF-SITE. CONTRACTOR TO DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.
3. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
4. PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
5. WASHOUT FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
6. STRAW BALE AND STAPLES MAY BE SUBSTITUTED WITH ALTERNATE SECURING MEASURES SUCH AS CONCRETE BLOCK.

CONCRETE WASHOUT SIGN DETAIL (OR EQUIVALENT)



CONCRETE WASTE MANAGEMENT AREA

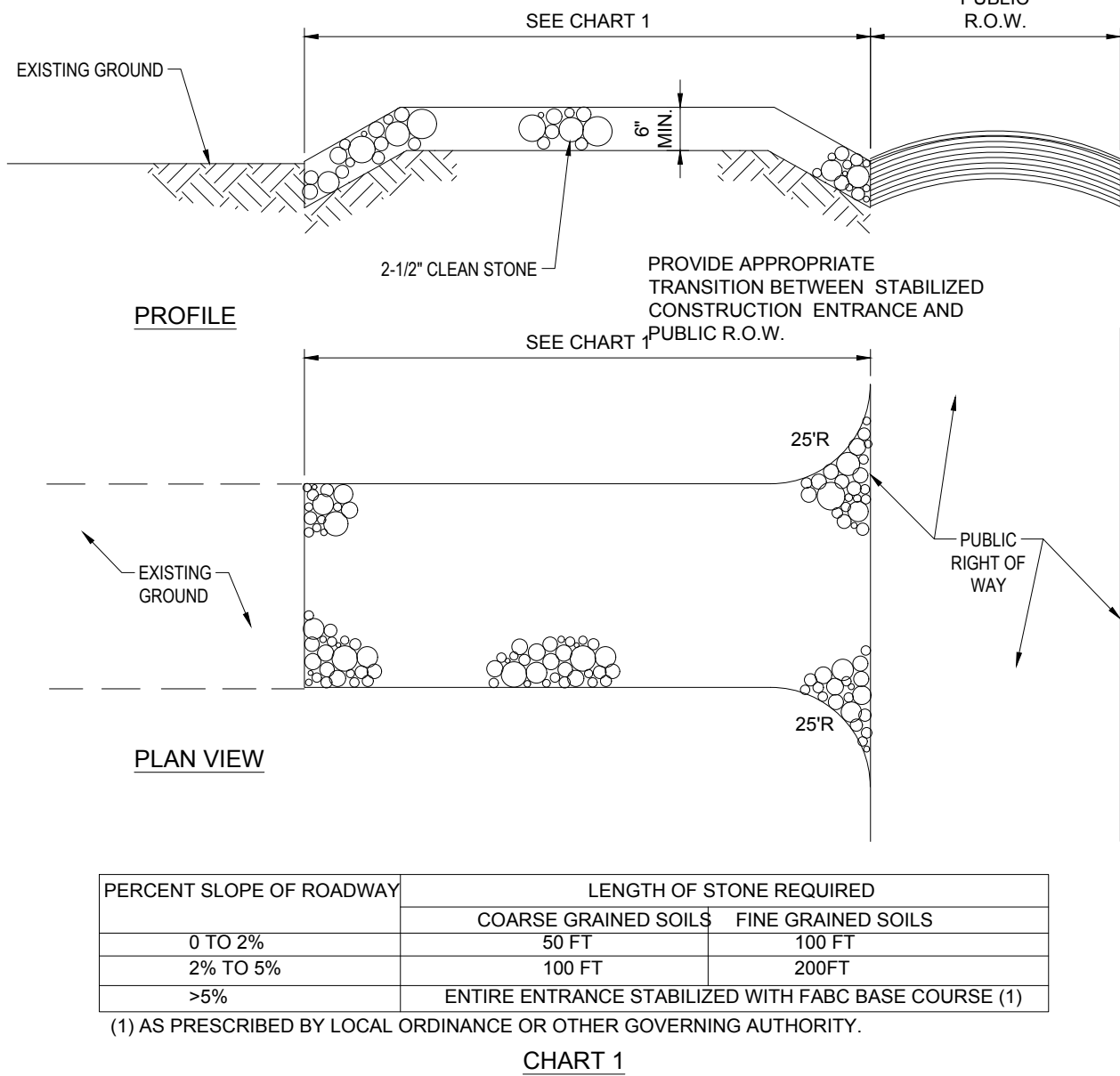
N.T.S.

THE FOLLOWING CONSTRUCTION SEQUENCE IS RECOMMENDED:

- INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE/EXIT (AS SHOWN)
- INSTALLATION OF EROSION CONTROL BARRIER (STRAW BALES AND SILT FENCE) (AS SHOWN)
- CLEARING AND GRUBBING
- INSTALLATION OF TEMPORARY SWALES AND SEDIMENT BASINS
- EARTHWORK AND EXCAVATION/FILLING AS NECESSARY
- CONSTRUCTION OF UTILITIES
- STABILIZE PERMANENT LAWN AREAS AND SLOPES WITH TEMPORARY SEEDING
- INSTALLATION OF INLET PROTECTION OF ON-SITE UTILITIES (AS SHOWN)
- CONSTRUCTION OF BUILDING
- CONSTRUCTION OF ALL CURBING AND LANDSCAPE ISLANDS AS INDICATED ON THE PLANS
- SPREAD TOPSOIL ON SLOPED AREAS AND SEED AND MULCH
- FINAL GRADING OF ALL SLOPED AREAS
- PLACE 6" TOPSOIL ON SLOPES AFTER FINAL GRADING COMPLETED. FERTILIZE, SEED, AND MULCH SEED MIXTURE TO BE INSTALLED AS REQUIRED.
- REMOVAL OF THE TEMPORARY SEDIMENT BASINS
- PAVE PARKING LOT
- LANDSCAPING PER LANDSCAPING PLAN
- REMOVE EROSION CONTROLS AS DISTURBED AREAS BECOME STABILIZED TO 70% STABILIZATION OR GREATER

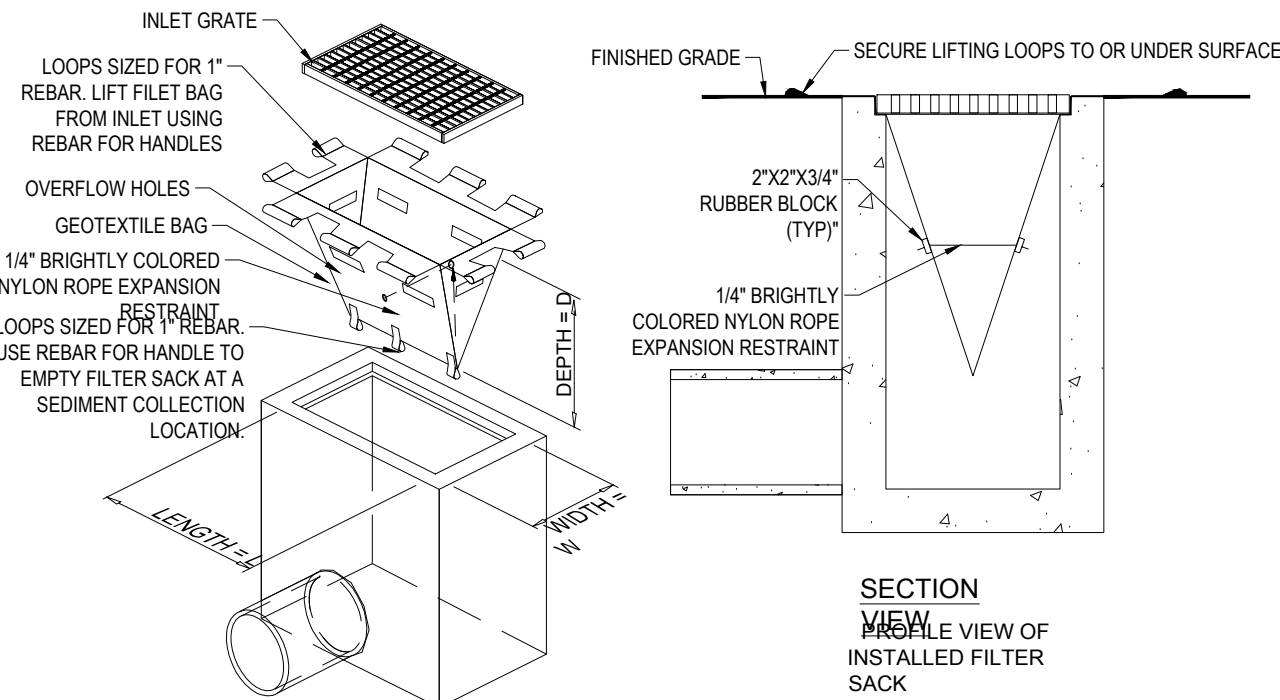
RECOMMENDED CONSTRUCTION SEQUENCE

N.T.S.



STABILIZED CONSTRUCTION ENTRANCE

N.T.S.



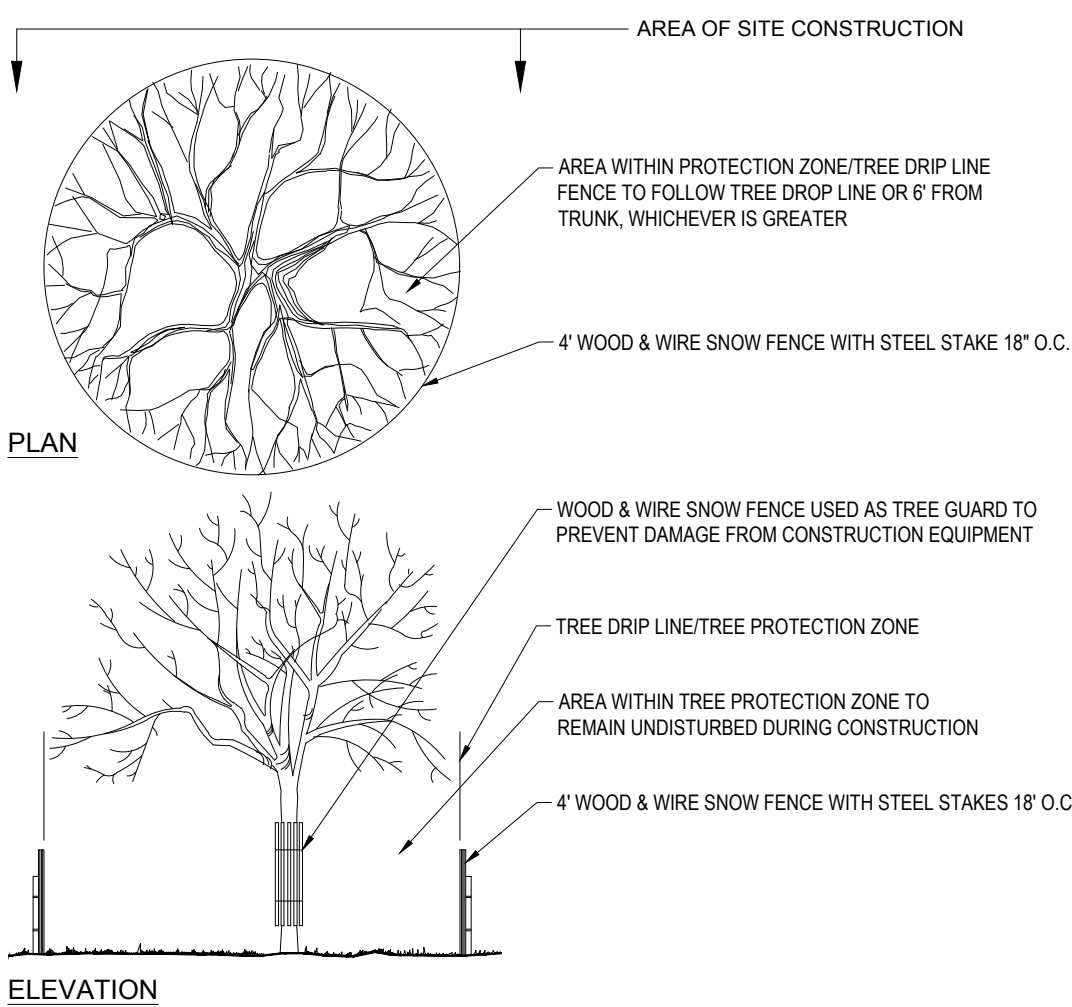
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4633	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	90%
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC-1

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4633	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90%
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC-1

NOTE:
DO NOT USE IN PAVED AREAS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

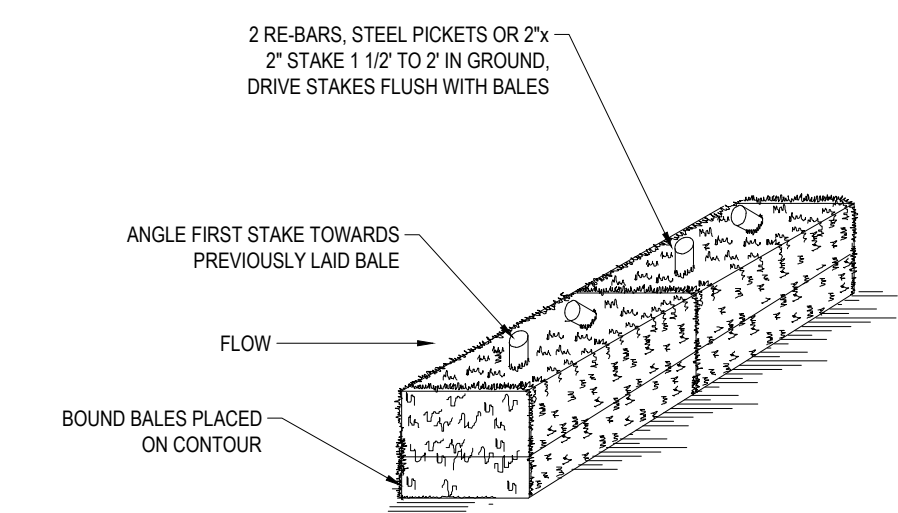
FILTER SACS (GRADED INLETS)

N.T.S.



TREE PROTECTION DURING SITE CONSTRUCTION

N.T.S.



DRAINAGE AREA NO MORE THAN 1/4 AC. PER 100 FEET OF STRAW BALE DIKE FOR SLOPES LESS THAN 25%.

NOTES:

1. BALES SHALL BE PLACED AT THE TOP OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

STRAW BALE

N.T.S.



REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	02/27/2023	PER PEER REVIEW COMMENTS	JWT
2	03/17/2023	ISSUED FINAL PLANS	JWT



PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: MAA220228.00
DRAWN BY: JWC/CFD
CHECKED BY: NPD/RMM
DATE: 01/25/2023
CAD LAYOUT: MAA220228.00-SFPD-2A

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

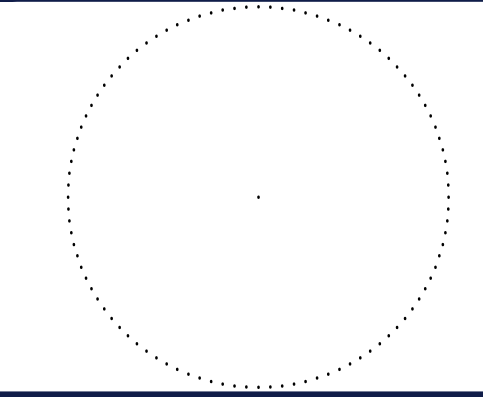
FOR

SDG DEVELOPMENT, LLC

PROPOSED SELF-STORAGE FACILITY
MAP: F15 LOTS: 2 & 93
108 OLD CHURCH STREET,
TOWN OF PEMBROKE,
PLYMOUTH COUNTY,
MASSACHUSETTS

BOHLER

352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com



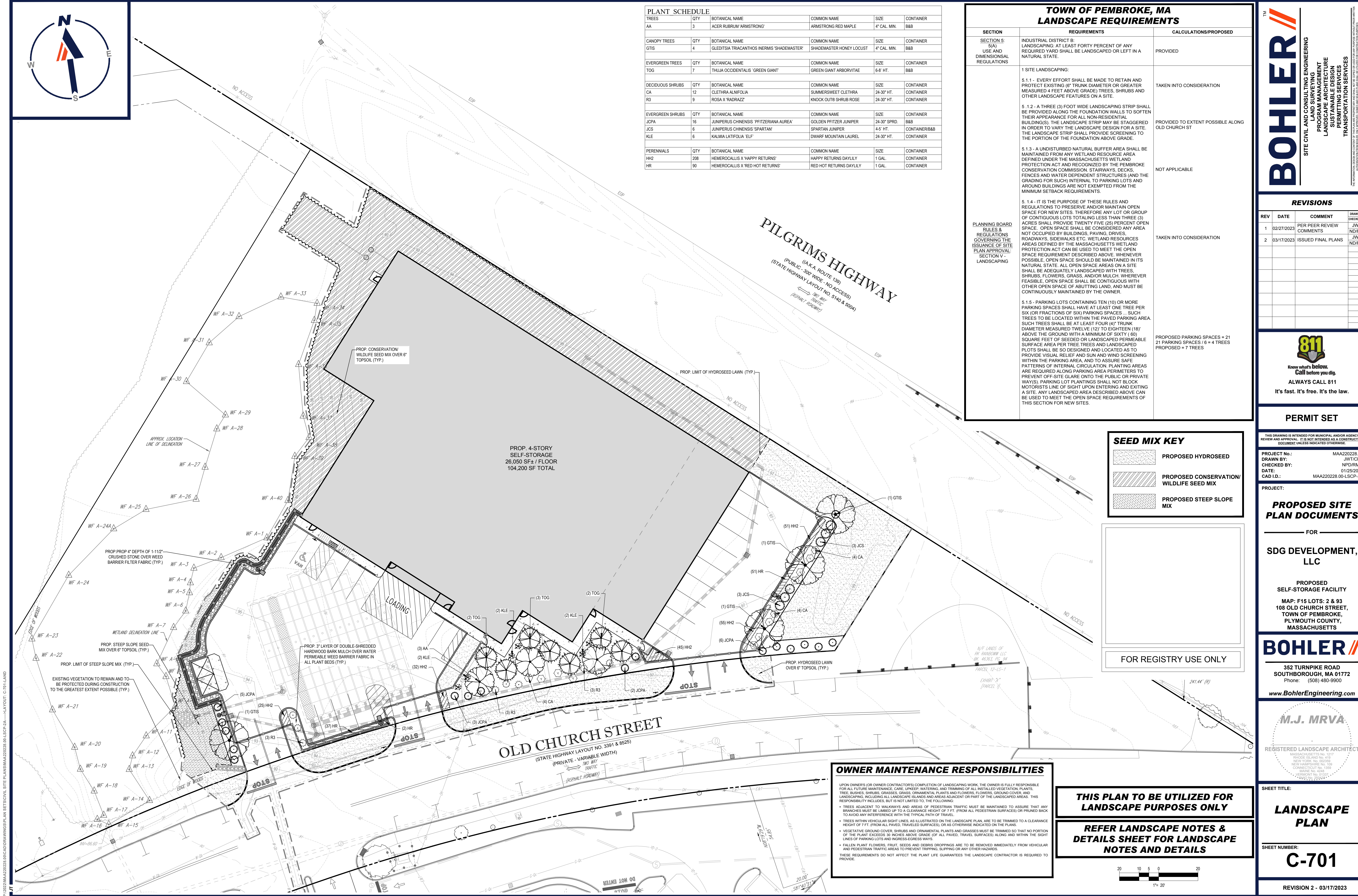
SHEET TITLE:
SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS

SHEET NUMBER:

C-602

FOR REGISTRY USE ONLY

REVISION 2 - 03/17/2023



PLANT SCHEDULE					
TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
AA	3	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	4" CAL. MIN.	B&B
CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
GTIS	4	GLEDTISIA TRIACANTHOS INERMIS 'SHADEMASTER'	SHADEMASTER HONEY LOCUST	4" CAL. MIN.	B&B
EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
TOG	7	THUJA OCCIDENTALIS 'GREEN GIANT'	GREEN GIANT ARBORVITAE	6-8' HT.	B&B
DECIDUOUS SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
CA	12	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA	24-30" HT.	CONTAINER
R3	9	ROSA X RADRAZZ	KNOCK OUT® SHRUB ROSE	24-30" HT.	CONTAINER
EVERGREEN SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
JCPA	16	JUNIPERUS CHINENSIS 'PFITZERIANA AUREA'	GOLDEN PFITZER JUNIPER	24-30" SPRD.	B&B
JCS	6	JUNIPERUS CHINENSIS 'SPARTAN'	SPARTAN JUNIPER	4-5' HT.	CONTAINER/B&B
KLE	6	KALMIA LATIFOLIA 'ELF'	DWARF MOUNTAIN LAUREL	24-30" HT.	CONTAINER
PERENNIALS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
HH2	208	HEMEROCALLIS X 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	1 GAL.	CONTAINER
HR	90	HEMEROCALLIS X 'RED HOT RETURNS'	RED HOT RETURNS DAYLILY	1 GAL.	CONTAINER

TOWN OF PEMBROKE, MA LANDSCAPE REQUIREMENTS		
SECTION	REQUIREMENTS	CALCULATIONS/PROPOSED
SECTION 5: 5(A) USE AND DIMENSIONAL REGULATIONS	INDUSTRIAL DISTRICT B: LANDSCAPING: AT LEAST FORTY PERCENT OF ANY REQUIRED YARD SHALL BE LANDSCAPED OR LEFT IN A NATURAL STATE.	PROVIDED
	1 SITE LANDSCAPING: 5.1.1 - EVERY EFFORT SHALL BE MADE TO RETAIN AND PROTECT EXISTING (6" TRUNK DIAMETER OR GREATER MEASURED 4 FEET ABOVE GRADE) TREES, SHRUBS AND OTHER LANDSCAPE FEATURES ON A SITE. 5.1.2 - A THREE (3) FOOT WIDE LANDSCAPING STRIP SHALL BE PROVIDED ALONG THE FOUNDATION WALLS TO SOFTEN THEIR APPEARANCE FOR ALL NON-RESIDENTIAL BUILDINGS). THE LANDSCAPE STRIP MAY BE STAGGERED IN ORDER TO VARY THE LANDSCAPE DESIGN FOR A SITE. THE LANDSCAPE STRIP SHALL PROVIDE SCREENING TO THE PORTION OF THE FOUNDATION ABOVE GRADE. 5.1.3 - A UNDISTURBED NATURAL BUFFER AREA SHALL BE MAINTAINED FROM ANY WETLAND RESOURCE AREA DEFINED UNDER THE MASSACHUSETTS WETLAND PROTECTION ACT AND RECOGNIZED BY THE PEMBROKE CONSERVATION COMMISSION. STAIRWAYS, DECKS, FENCES AND WATER DEPENDENT STRUCTURES (AND THE GRADING FOR SUCH) INTERNAL TO PARKING LOTS AND AROUND BUILDINGS ARE NOT EXEMPTED FROM THE MINIMUM SETBACK REQUIREMENTS. 5.1.4 - IT IS THE PURPOSE OF THESE RULES AND REGULATIONS TO PRESERVE AND/OR MAINTAIN OPEN SPACE FOR NEW SITES. THEREFORE ANY LOT OR GROUP OF CONTIGUOUS LOTS TOTALING LESS THAN THREE (3) ACRES SHALL PROVIDE TWENTY FIVE (25) PERCENT OPEN SPACE. OPEN SPACE SHALL BE CONSIDERED ANY AREA NOT OCCUPIED BY BUILDINGS, PAVING, DRIVES, ROADWAYS, SIDEWALKS ETC. WETLAND RESOURCES AREAS DEFINED BY THE MASSACHUSETTS WETLAND PROTECTION ACT CAN BE USED TO MEET THE OPEN SPACE REQUIREMENT DESCRIBED ABOVE. WHENEVER POSSIBLE, OPEN SPACE SHOULD BE MAINTAINED IN ITS NATURAL STATE. ALL OPEN SPACE AREAS ON A SITE SHALL BE ADEQUATELY LANDSCAPED WITH TREES, SHRUBS, FLOWERS, GRASS, AND/OR MULCH. WHEREVER FEASIBLE, OPEN SPACE SHALL BE CONTIGUOUS WITH OTHER OPEN SPACE OF ADJUTING LAND, AND MUST BE CONTINUOUSLY MAINTAINED BY THE OWNER. 5.1.5 - PARKING LOTS CONTAINING TEN (10) OR MORE PARKING SPACES SHALL HAVE AT LEAST ONE TREE PER SIX (OR FRACTIONS OF SIX) PARKING SPACES ... SUCH TREES TO BE LOCATED WITHIN THE PAVED PARKING AREA. SUCH TREES SHALL BE AT LEAST FOUR (4)" TRUNK DIAMETER MEASURED TWELVE (12) TO EIGHTEEN (18)" ABOVE THE GROUND WITH A MINIMUM OF SIXTY (60) SQUARE FEET OF SEEDED OR LANDSCAPED PERMEABLE SURFACE AREA PER TREE. TREES AND LANDSCAPED PLOTS SHALL BE SO DESIGNED AND LOCATED AS TO PROVIDE VISUAL RELIEF AND SUN AND WIND SCREENING WITHIN THE PARKING AREA, AND TO ASSURE SAFE PATTERNS OF INTERNAL CIRCULATION. PLANTING AREAS ARE REQUIRED ALONG PARKING AREA PERIMETERS TO PREVENT OFF-SITE GLARE ONTO THE PUBLIC OR PRIVATE WAYS). PARKING LOT PLANTINGS SHALL NOT BLOCK MOTORISTS LINE OF SIGHT UPON ENTERING AND EXITING A SITE. ANY LANDSCAPED AREA DESCRIBED ABOVE CAN BE USED TO MEET THE OPEN SPACE REQUIREMENTS OF THIS SECTION FOR NEW SITES.	TAKEN INTO CONSIDERATION PROVIDED TO EXTENT POSSIBLE ALONG OLD CHURCH ST NOT APPLICABLE TAKEN INTO CONSIDERATION PROPOSED PARKING SPACES = 21 21 PARKING SPACES / 6 = 4 TREES PROPOSED = 7 TREES

PLANNING BOARD
RULES &
REGULATIONS
GOVERNING THE
ISSUANCE OF SITE
PLAN APPROVAL:
SECTION V -
LANDSCAPING

SEED MIX KEY	
	PROPOSED HYDROSEED
	PROPOSED CONSERVATION/ WILDLIFE SEED MIX
	PROPOSED STEEP SLOPE MIX

FOR REGISTRY USE ONLY

OWNER MAINTENANCE RESPONSIBILITIES

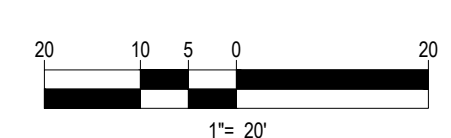
UPON OWNERS (OR OWNER CONTRACTORS) COMPLETION OF LANDSCAPING WORK, THE OWNER IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, UPRKEEP, WATERING, AND TRIMMING OF ALL INSTALLED VEGETATION. PLANTS, TREES, BURNES, SHRUBS, GRASSES, GRASS, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, GRASS COVER, AND LANDSCAPING, INCLUDING ALL LANDSCAPE ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPED AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:

- TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO ASSURE THAT ANY BRANCHES MUST BE LIMBED UP TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PEDESTRIAN SURFACES) OR PRUNED BACK TO AVOID ANY INTERFERENCE WITH THE TYPICAL PATH OF TRAVEL.
- TREES WITHIN VEHICULAR SIGHT LINES, AS ILLUSTRATED ON THE LANDSCAPE PLAN, ARE TO BE TRIMMED TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PAVED, TRAVELED SURFACES), OR AS OTHERWISE INDICATED ON THE PLANS.
- VEGETATIVE GROUND COVER, SHRUBS AND ORNAMENTAL PLANTS AND GRASSES MUST BE TRIMMED SO THAT NO PORTION OF THE PLANT EXCEEDS 30 INCHES ABOVE GRADE (OF ALL PAVED, TRAVELED SURFACES) ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND ADJACENT AREAS.
- FALLEN PLANT FLOWERS, FRUIT, SEEDS AND DEBRIS DROPPINGS ARE TO BE REMOVED IMMEDIATELY FROM VEHICULAR AND PEDESTRIAN TRAFFIC AREAS TO PREVENT TRIPPING, SLIPPING OR ANY OTHER HAZARDS.

THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEES THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE.

**THIS PLAN TO BE UTILIZED FOR
LANDSCAPE PURPOSES ONLY**

**REFER LANDSCAPE NOTES &
DETAILS SHEET FOR LANDSCAPE
NOTES AND DETAILS**



BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	CHECKED BY
1	02/27/2023	PER PEER REVIEW COMMENTS	JWT
2	03/17/2023	ISSUED FINAL PLANS	JWT

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PERMIT SET

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PROJECT No.: MAA220228.00
DRAWN BY: JWT/CFD
CHECKED BY: NPD/IRM
DATE: 01/25/2023
CAD I.D.: MAA220228.00-LSCP-2A

PROJECT:

**PROPOSED SITE
PLAN DOCUMENTS**

FOR

**SDG DEVELOPMENT,
LLC**

PROPOSED
SELF-STORAGE FACILITY

MAP: F15 LOTS: 2 & 93
108 OLD CHURCH STREET,
TOWN OF PEMBROKE,
PLYMOUTH COUNTY,
MASSACHUSETTS

BOHLER

352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com

M.J. MRVA
REGISTERED LANDSCAPE ARCHITECT
MASSACHUSETTS No. 1517
RHODE ISLAND No. 493
NEW YORK No. 002259
NEW HAMPSHIRE No. 038
CONNECTICUT No. 1359
MAINE No. 4268
VERMONT No. 01531
WASHINGTON No. 220474

SHEET TITLE:

**LANDSCAPE
PLAN**

SHEET NUMBER:

C-701

REVISION 2 - 03/17/2023

LANDSCAPE S

1. SCOPE OF WORK:

1.1. THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

2. MATERIALS

2.1. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.

2.2. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

2.3. LAWN - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM 6" THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED ON THE LANDSCAPE PLAN

2.3.1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.

2.3.2. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.

2.4. MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN AND/OR LANDSCAPE PLAN NOTES/DETAILS.

2.5. FERTILIZER

2.5.1. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.

2.5.2. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.

2.6. PLANT MATERIAL

2.6.1. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1) AND AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN)

2.6.2. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.

2.6.3. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.

2.6.4. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1/2", WHICH HAVE NOT BEEN COMPLETELY CALLEDUS, SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.

2.6.5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.

2.6.6. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT ABOVE THE NATURAL GRADE.

2.6.7. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.

2.6.8. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

3. GENERAL WORK PROCEDURES

3.1. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.

3.2. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

4. SITE PREPARATIONS

4.1. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.

4.2. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.

4.3. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

5. TREE PROTECTION

5.1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.

5.2. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY "VISI-FENCE" OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

5.3. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

5.4. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

6. SOIL MODIFICATIONS

6.1. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.

6.2. LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS.

6.3. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.

6.3.1. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6"-12" USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEST MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.

6.3.2. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED FINE SAND (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL CYPRESS COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY BE NEEDED TO ADD TO INCREASE DRAINAGE.

6.3.3. MODIFY EXCESSIVELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

7. FINISHED GRADING

7.1. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.

7.2. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1").

7.3. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE, WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.

7.4. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

8. TOPSOILING

8.1. CONTRACTOR SHALL PROVIDE A 6" THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED CONTACTED THICKNESS.

8.2. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.

8.3. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.

8.4. ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY) (SEE SPECIFICATION 6.A.):

8.4.1. 20 POUNDS "GRO-POWER" OR APPROVED SOIL CONDITIONER/FERTILIZER

8.4.2. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER

8.5. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

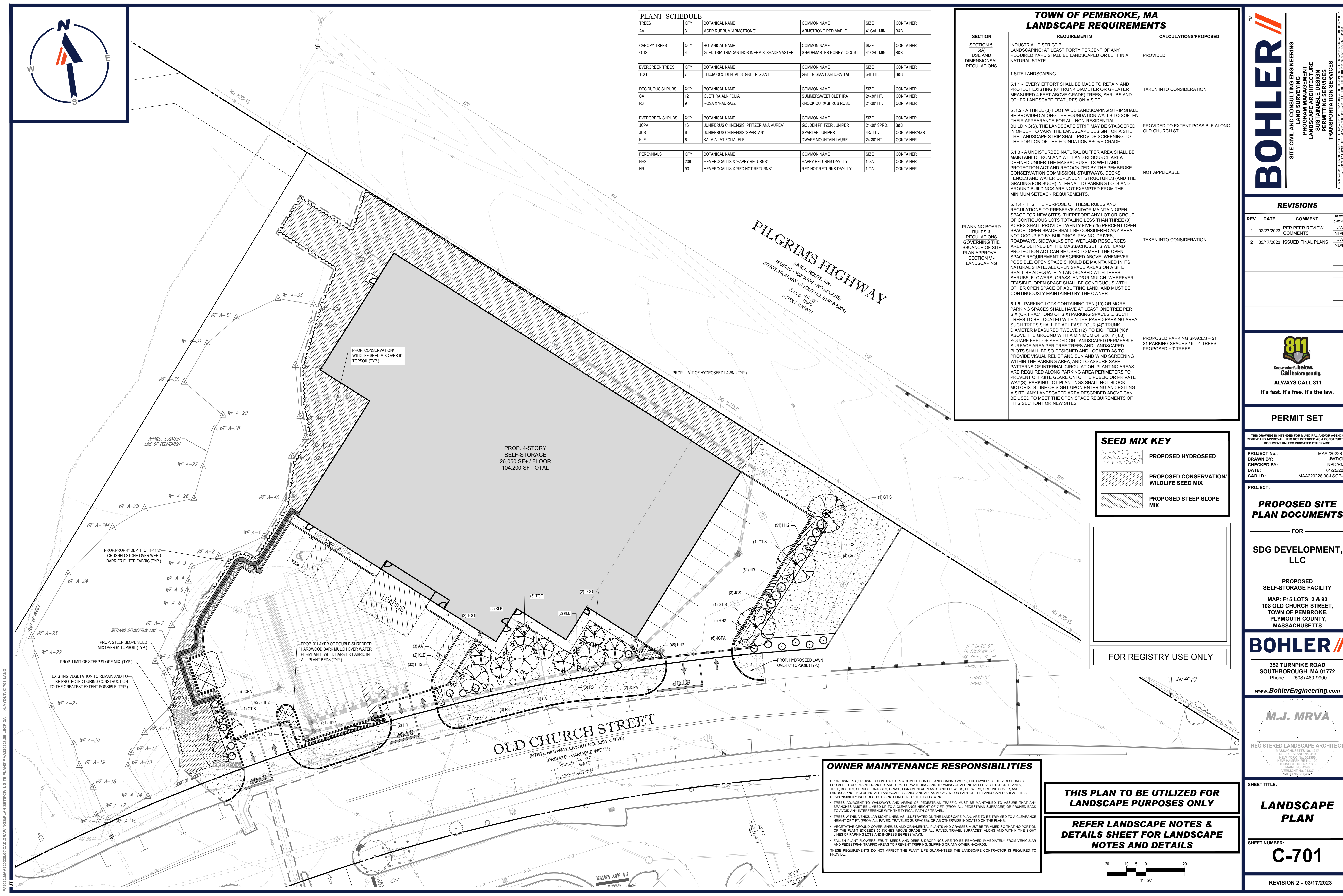
9. PLANTING

9.1. INsofar THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEADED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

9.2. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE MOST FAVORABLE TO THE ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

N.T.S

REVISION 2 - 03/17/2023



	TOWN OF PEMBROKE, MA LANDSCAPE REQUIREMENTS	
SECTION	REQUIREMENTS	CALCULATIONS/PROPOSED
SECTION 5: 5(A) USE AND DIMENSIONAL REGULATIONS	INDUSTRIAL DISTRICT B: LANDSCAPING: AT LEAST FORTY PERCENT OF ANY REQUIRED YARD SHALL BE LANDSCAPED OR LEFT IN A NATURAL STATE.	PROVIDED
	1 SITE LANDSCAPING:	
	5.1.1. EVERY EFFORT SHALL BE MADE TO RETAIN AND PROTECT EXISTING ("TRUNK DIAMETER OR GREATER MEASURED 4 FEET ABOVE GRADE") TREES, SHRUBS AND OTHER LANDSCAPE FEATURES ON A SITE.	TAKEN INTO CONSIDERATION
	5.1.2 - A THREE (3) FOOT WIDE LANDSCAPING STRIP SHALL BE PROVIDED ALONG THE FOUNDATION WALLS TO SOFTEN THEIR APPEARANCE FOR ALL NON-RESIDENTIAL BUILDINGS(S). THE LANDSCAPE STRIP MAY BE STAGGERED IN ORDER TO VARY THE LANDSCAPE DESIGN FOR A SITE. THE LANDSCAPE STRIP SHALL PROVIDE SCREENING TO THE PORTION OF THE FOUNDATION ABOVE GRADE.	PROVIDED TO EXTENT POSSIBLE ALONG OLD CHURCH ST
	5.1.3 - A UNDISTURBED NATURAL BUFFER AREA SHALL BE MAINTAINED FROM ANY WETLAND RESOURCE AREA DEFINED UNDER THE MASSACHUSETTS WETLAND PROTECTION ACT AND RECOGNIZED BY THE PEMBROKE CONSERVATION COMMISSION. STAIRWAYS, DECKS, FENCES AND WATER DEPENDENT STRUCTURES (AND THE GRADING FOR SUCH) INTERNAL TO PARKING LOTS AND AROUND BUILDINGS ARE NOT EXEMPTED FROM THE MINIMUM SETBACK REQUIREMENTS.	NOT APPLICABLE
	5.1.4 - IT IS THE PURPOSE OF THESE RULES AND REGULATIONS TO PRESERVE AND/OR MAINTAIN OPEN SPACE FOR NEW SITES, THEREFORE ANY LOT OR GROUP OF CONTIGUOUS LOTS TOTALING LESS THAN THREE (3) ACRES SHALL PROVIDE TWENTY FIVE (25) PERCENT OPEN SPACE. OPEN SPACE SHALL BE CONSIDERED ANY AREA NOT OCCUPIED BY BUILDINGS, PAVING, DRIVES, ROADWAYS, SIDEWALKS ETC. WETLAND RESOURCES AREAS DEFINED BY THE MASSACHUSETTS WETLAND PROTECTION ACT CAN BE USED TO MEET THE OPEN SPACE REQUIREMENT DESCRIBED ABOVE. WHENEVER POSSIBLE, OPEN SPACE SHOULD BE MAINTAINED IN ITS NATURAL STATE. ALL OPEN SPACE AREAS ON A SITE SHALL BE ADEQUATELY LANDSCAPED WITH TREES, SHRUBS, FLOWERS, GRASS, AND/OR MULCH. WHEREVER FEASIBLE, OPEN SPACE SHALL BE CONTIGUOUS WITH OTHER OPEN SPACE OF ADJUTING LOTS AND MUST BE CONTINUOUSLY MAINTAINED BY THE OWNER.	TAKEN INTO CONSIDERATION
PLANNING BOARD RULES & REGULATIONS GOVERNING THE ISSUANCE OF SITE PLAN APPROVAL: SECTION V LANDSCAPING	5.1.5 - PARKING LOTS CONTAINING TEN (10) OR MORE PARKING SPACES SHALL HAVE AT LEAST ONE TREE PER SIX (OR FRACTIONS OF SIX) PARKING SPACES . . . SUCH TREES TO BE LOCATED WITHIN THE PAVED PARKING AREA. SUCH TREES SHALL BE AT LEAST FOUR (4") TRUNK DIAMETER MEASURED TWELVE (12)" TO EIGHTEEN (18)" ABOVE THE GROUND WITH A MINIMUM OF SIXTY (60) SQUARE FEET OF SEEDED OR LANDSCAPED PERMISSIBLE SURFACE AREA PER TREE. TREES AND LANDSCAPED PLOTS SHALL BE SO DESIGNED AND LOCATED AS TO PROVIDE VISUAL RELIEF AND SUN AND WIND SCREENING WITHIN THE PARKING AREA, AND TO ASSURE SAFE PATTERNS OF INTERNAL CIRCULATION. PLANTING AREAS ARE REQUIRED ALONG PARKING AREA PERIMETERS TO PREVENT OFF-SITE GLARE ONTO THE PUBLIC OR PRIVATE WAYS). PARKING LOT PLANTINGS SHALL NOT EXCEED MOTORISTS LINE OF SIGHT UPON ENTERING AND EXITING A SITE. ANY LANDSCAPED AREA DESCRIBED ABOVE CAN BE USED TO MEET THE OPEN SPACE REQUIREMENTS OF THIS SECTION FOR NEW SITES.	PROPOSED PARKING SPACES = 21 21 PARKING SPACES / 6 " = 4 TREES PROPOSED = 7 TREES



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DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT:

FOR

**PROPOSED
SELF-STORAGE FACILITY**

BOHLER //

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REGISTERED LANDSCAPE ARCHITECT

SHEET TITLE:

SHEET NUMBER: _____

C-701

REVISION 2 - 03/17/2023

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LANDSCAPE SPECIFICATIONS

1. SCOPE OF WORK:

1.1. THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

2. MATERIALS

2.1. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.

2.2. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

2.3. LAWN - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM 6" THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED ON THE LANDSCAPE PLAN

2.3.1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.

2.3.2. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.

2.4. MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN AND/OR LANDSCAPE PLAN NOTES/DETAILS.

2.5. FERTILIZER

2.5.1. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.

2.5.2. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.

2.6. PLANT MATERIAL

2.6.1. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN).

2.6.2. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.

2.6.3. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.

2.6.4. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1/2", WHICH HAVE NOT BEEN COMPLETELY CALLEDUS, SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.

2.6.5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH; WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.

2.6.6. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHALL BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.

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3.2. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

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4.1. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.

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5.2. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY "VISI-FENCE", OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

5.3. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

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6.3.3. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

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8.5. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

9. PLANTING

9.1. IN SO FAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

9.2. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

9.3. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.

9.4. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.

9.5. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

9.6. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:

9.6.1. PLANTS: MARCH 15 TO DECEMBER 15

9.6.2. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1

9.6.3. PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

9.7. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

ACER RUBRUM

PLATANUS X ACERIFOLIA

BETULA VARIETIES

POPULUS VARIETIES

CARPINUS VARIETIES

PRUNUS VARIETIES

CRATAEGUS VARIETIES

PYRUS VARIETIES

KOELREUTERIA

QUERCUS VARIETIES

LIQUIDAMBAR STYRACIFLUA

TILIA TOMENTOSA

LIORIODENDRON TULIPEFERA

ZELKOVA VARIETIES

9.8. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:

9.8.1. 1 PART PEAT MOSS

9.8.2. 1 PART COMPOSTED COW MANURE BY VOLUME

9.8.3. 3 PARTS TOPSOIL BY VOLUME

9.8.4. 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:

9.8.4.1. 2 TABLETS PER 1 GALLON PLANT

9.8.4.2. 3 TABLETS PER 5 GALLON PLANT

9.8.4.3. 4 TABLETS PER 15 GALLON PLANT

9.8.4.4. LARGER PLANTS: 2 TABLETS PER 1/2" CALIPER OF TRUNK

9.9. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.

9.10. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.

9.11. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.

9.12. GROUND COVER AREAS SHALL RECEIVE A 1" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.

9.13. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.

9.14. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.

9.15. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)

10.1. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.

10.2. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.

10.3. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.

10.4. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.

10.5. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.

10.6. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. WATERING

11.1. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.

11.2. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.

11.3. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

12. GUARANTEE

12.1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF 1 YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

12.2. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.

12.3. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.

12.4. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOVING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

13. CLEANUP

13.1. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEARED.

13.2. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

14. MAINTENANCE (ALTERNATIVE BID):

14.1. A 90 DAY MAINTENANCE PERIOD SHALL COMMENCE AT THE END OF ALL LANDSCAPE INSTALLATION OPERATIONS. THE 90 DAY MAINTENANCE PERIOD ENSURES TO THE OWNER/OPERATOR THAT THE NEWLY INSTALLED LANDSCAPING HAS BEEN MAINTAINED AS SPECIFIED ON THE APPROVED LANDSCAPE PLAN. ONCE THE INITIAL 90 DAY MAINTENANCE PERIOD HAS EXPIRED, THE OWNER/OPERATOR MAY REQUEST THAT BIDDERS SUBMIT AN ALTERNATE MAINTENANCE BID FOR A MONTHLY MAINTENANCE CONTRACT. THE ALTERNATE MAINTENANCE CONTRACT WILL ENCOMPASS ANY WORK THAT IS CONSIDERED APPROPRIATE TO ENSURE THAT A PLANT AND LAWN AREAS ARE HEALTHY AND MANICURED TO THE APPROVAL OF THE OWNER/OPERATOR.

NOTES:

1.) NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.

2.) REMOVE ALL NON-BIODEGRADABLE MATERIAL AND ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD BURLAP BACK 1/3" FROM ROOT BALL.

3.) PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY.

4.) THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.

5.) THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE ROUGH TO AVOID MATTING OF SOIL LAYERS AS NEW SOIL IS ADDED. IT IS PREFERABLE TO TILL THE FIRST LIFT (2 TO 3 IN.) OF PLANTING SOIL INTO THE SUBSOIL.

6.) REFER TO THE CHART "GENERAL RANGE OF SOIL MODIFICATIONS & VOLUMES FOR VARIOUS SOIL CONDITIONS" TO DETERMINE MINIMUM WIDTH OF PREPARED SOIL.

7.) SUBSTITUTE ARBORVITAE STAKING SYSTEM WHEN SPECIFIED.

REINFORCED RUBBER HOSE (1/2" DIA. BLACK)

FOLD BURLAP AWAY FROM TOP OF ROOT BALL

12 GAUGE GALVANIZED WIRE GUYS TWISTED

2" DIA. HARDWOOD STAKES 2/3 TREE HF, 3 PER TREE

TWICE THE WIDTH OF ROOTBALL FOR PREPARED SOIL FOR TREES

PREPARED SOIL FOR TREES

1 PART PEAT MOSS

1 PART COW MANURE

3 PARTS TOPSOIL (RECOMMENDATION ONLY. SEE SOIL MOD. CHART)

UNDISTURBED SUBGRADE

DIG WIDE, SHALLOW HOLE WITH TAMPED SIDES

TAMP SOIL SOLIDLY AROUND BASE OF ROOT BALL

SET ROOT BALL FLUSH TO GRADE OR SEVERAL INCHES HIGHER IN POORLY DRAINING SOILS.

4" BUILT-UP EARTH SAUCER

3" DOUBLE SHREDDED HARDWOOD BARK MULCH (UNLESS OTHERWISE SPECIFIED) (DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK)

LANDSCAPE FABRIC AS SPECIFIED.

ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS.

SET ROOT BALL ON UNDISTURBED SOIL IN BOTTOM OF HOLE

3. TREE PLANTING DETAIL

N.T.S.

PLANT SHALL BE PLANTED SO THAT THE POINT AT WHICH THE ROOT FLARE BEGINS IS SET LEVEL WITH GRADE. CUT AND REMOVE BURLAP FROM TOP ONE-THIRD OF ROOT BALL AS SHOWN.

PLANTING MIX:

1 PART PEAT MOSS

1 PART COW MANURE

3 PARTS TOPSOIL (SEE SOIL MODIFICATION CHART)

BEFORE PLANTING, ADD 3" TO 4" OF WELL-COMPOSTED LEAVES AND RECYCLED YARD WASTE TO BED AND TILL INTO TOP 6" OF PREPARED SOIL.

SOIL SURFACE ROUGHENED TO BIND WITH NEW SOIL.

FOR CONTAINER-GROWN SHRUBS, PLANT SHALL BE TRANSPLANTED AT THE SAME GRADE AS IN THE CONTAINER. REMOVE THE CONTAINER, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL, THEN CUT OR PULL APART ANY ROOTS THAT CIRCLE THE PERIMETER OF THE CONTAINER.

3" DOUBLE-SHREDDED HARDWOOD BARK MULCH (DO NOT PUT MULCH AGAINST THE BASE OF THE PLANT).

LANDSCAPE FABRIC AS SPECIFIED

FINISHED GRADE

PLACE SHRUB ON FIRM SOIL IN BOTTOM OF HOLE.

UNDISTURBED SUBGRADE

WHEN APPROPRIATE, PLANT MULTIPLE SHRUBS IN CONTINUOUS PLANTING HOLE.

SHRUB PLANTING DETAIL

N.T.S.

"QUICK EROSION CONTROL COVER MIX" AS PREPARED BY:

ERNST CONSERVATION SEEDS, INC.
8884 MERCER PIKE, MEADVILLE, PA 16335
PHONE: 800-875-3321 / 814-336-2604
EMAIL: SALES@ERNSTSEED.COM
WEBSITE: WWW.ERNSTSEED.COM

APPLICATION RATE: 50 LBS. / ACRE

MIX COMPOSITION:

50.0% Lolium multiflorum (Annual Ryegrass)

50.0% Lolium perenne, 'Blackcat II' (Perennial Ryegrass)

3. SLOPE SEED MIX SPECIFICATIONS

1. PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 2" DIAMETER.

2. PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.

3. SEEDING RATES:

• PERENNIAL RYEGRASS

1/2 LB/1000 SQ FT

• KENTUCKY BLUEGRASS

1 LB/1000 SQ FT

• RED FESCUE

1/2 LB/1000 SQ FT

• SPREADING FESCUE

1/2 LB/1000 SQ FT

• FERTILIZER (16.32.16)

2 LB/1000 SQ FT

• LIQUID LIME

1 GAL/800 GAL

• TANK TACKIFIER

35 LB/800 GAL

• TANK FIBER MULCH

30 LB/1000 SQ FT

4. GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL AN ACCEPTABLE STAND OF COVER IS ESTABLISHED BY OWNER.

HYDROSEED SPECIFICATIONS

"NEW ENGLAND CONSERVATION/ WILDLIFE SEED MIX" AS PREPARED BY:

NEW ENGLAND WETLAND PLANTS, INC
820 WEST STREET, AMHERST, MA 01002
PHONE: 413-548-8000
EMAIL: INFO@NEWP.COM
WEBSITE: WWW.NEWP.COM

APPLICATION RATE: 25LBS/ACRE / 1750 SQ FT/LB
MINIMUM ORDER: 2 LBS

SPECIES: VIRGINIA WILD RYE (Elymus virginicus), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), BIG BLUESTEM (ANDROPOGON GERARDII), RED FESCUE (FESTUCA RUBRA), SWITCH GRASS (PANICUM VIRGATUM), PARTRIDGE PEA (CHAMAECHRISTA FASCICULATA), PANICLED LEAF-TICK TREFLOID (DESMODIUM PANICULATUM), INDIAN GRASS (SORGHASTRUM NUTANS), BLUE YERVAIN (VERBENA HASTATA), BUTTERFLY MILKWEED (ASCLEPIAS TUBEROSA), BLACK EYED SUSAN (RUDBECKIA HIRTA), COMMON SNEEZEWEED (HELENIUM AUTUNALE), HEATH ASTER (ASTERILOSOUS/SYMPHYOTRICHUM PILOSUM), EARLY GOLDENROD (SOLIDAGO JUNCEA), UPLAND BENTGRASS (AGROSTIS PERENNANS).

3. BLACK ALUMINUM EDGING

N.T.S.

18" STAKE INTO UNDISTURBED GROUND EVERY 30' O.C. LAP JOINTS AS PER MANUFACTURERS RECOMMENDATION.

3/16" x 4" BLACK ALUMINUM EDGING

LAWN OR GRAVEL AREA

FINISH GRADE

MULCH AS SPECIFIED

PREPARED TOPSOIL

UNDISTURBED SUBGRADE

LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.

2. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY "VISI-FENCE", OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

3. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

4. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

5. TREE PROTECTION

5.1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.

5.2. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY "VISI-FENCE", OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

5.3. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

5.4. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

6. SOIL MODIFICATIONS

6.1. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.

6.2. LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS.

6.3. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.

6.3.1. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.

6.3.2. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO BETWEEN 70-80% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.

6.3.3. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

7. FINISHED GRADING

7.1. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.

7.2. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1").

7.3. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.

7.4. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

8. TOPSOILING

8.1. CONTRACTOR SHALL PROVIDE A 6" THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.

8.2. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.

8.3. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGHOUT SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.

8.4. ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE FILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY) [SEE SPECIFICATION 6.A.):

8.4.1. 20 POUNDS 'GRO-POWER' OR APPROVED SOIL CONDITIONER/FERTILIZER

8.4.2. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER

8.5. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

9. PLANTING

9.1. IN SO FAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

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9.3. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.

9.4. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.

9.5. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

9.6. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:

9.6.1. PLANTS: MARCH 15 TO DECEMBER 15

9.6.2. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1

9.6.3. PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

9.7. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

ACER RUBRUM

PLATANUS X ACERIFOLIA

BETULA VARIETIES

POPULUS VARIETIES

CARPINUS VARIETIES

PRUNUS VARIETIES

CRATAEGUS VARIETIES

PYRUS VARIETIES

KOELREUTERIA

QUERCUS VARIETIES

LIQUIDAMBAR STYRACIFLUA

TILIA TOMENTOSA

LIORIODENDRON TULIPEFERA

ZELKOVA VARIETIES

9.8. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:

9.8.1. 1 PART PEAT MOSS

9.8.2. 1 PART COMPOSTED COW MANURE BY VOLUME

9.8.3. 3 PARTS TOPSOIL BY VOLUME

9.8.4. 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:

9.8.4.1. 2 TABLETS PER 1 GALLON PLANT

9.8.4.2. 3 TABLETS PER 5 GALLON PLANT

9.8.4.3. 4 TABLETS PER 15 GALLON PLANT

9.8.4.4. LARGER PLANTS: 2 TABLETS PER 1/2" CALIPER OF TRUNK

9.9. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.

9.10. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.

9.11. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.

9.12. GROUND COVER AREAS SHALL RECEIVE A 1" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.

9.13. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.

9.14. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.

9.15. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)

10.1. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.

10.2. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.

10.3. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.

10.4. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.

10.5. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.

10.6. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. WATERING

11.1. NEW PLANTINGS OR LAWN AREAS SHALL



LIGHTING NOTES

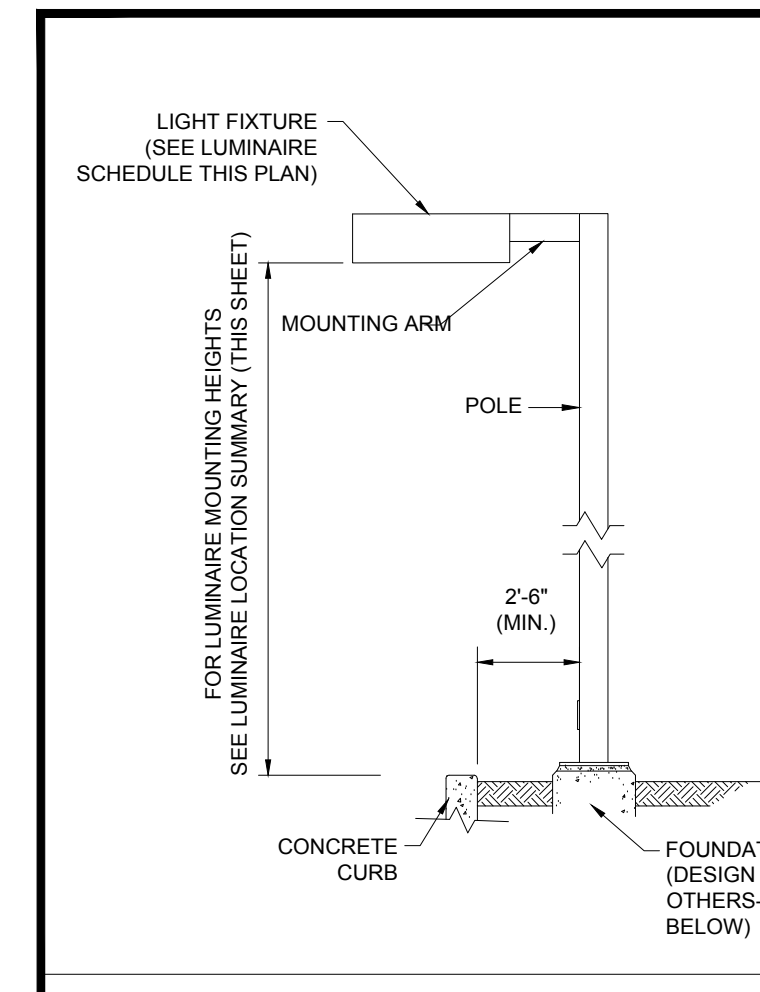
1. THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.
2. THE LIGHT LOSS FACTORS USED IN THESE LIGHTING CALCULATIONS ARE 0.90 FOR ALL LED LUMINAIRES, 0.80 FOR ALL HIGH PRESSURE SODIUM LUMINAIRES OR 0.72 FOR ALL METAL HALIDE LUMINAIRES UNLESS OTHERWISE SPECIFIED. THESE FACTORS ARE INDICATIVE OF TYPICAL LIGHTING INDUSTRY MODELING STANDARDS.
3. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED. THE VALUES DEPICTED ON THIS PLAN ARE IN FOOTCANDLES.
4. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT NOT BE LIMITED TO, FREQUENT VISUAL INSPECTIONS, CLEANING OF LENSES, AND RELAMPING (IF NECESSARY) AT LEAST ONCE EVERY SIX (6) MONTHS. FAILURE TO FOLLOW THE ABOVE STEPS COULD CAUSE THE LUMINAIRES, LAMPS AND LENSES TO FAIL PROPERLY TO FUNCTION.
5. WHERE APPLICABLE, THE EXISTING CONDITION LIGHT LEVELS ILLUSTRATED ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES, UNLESS ACTUAL FIELD MEASUREMENTS ARE TAKEN WITH A LIGHT METER AND ARE, CONSEQUENTLY, APPROXIMATIONS ONLY. DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC., ACTUAL LIGHT LEVELS MAY DIFFER. EXISTING LIGHT LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED APPROXIMATE.
6. THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, ONLY. POWER SYSTEM, CONDUITS, WIRING, VOLTAGES AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT, MEP AND/OR LIGHTING CONTRACTOR, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. LIGHT POLE BASES ARE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES AND ALL OTHER APPLICABLE RULES, REGULATIONS, LAWS AND STATUTES.
7. CONTRACTOR MUST BRING TO DESIGNER'S ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES.
8. IT IS THE LIGHTING CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROJECT ARCHITECT OR OWNER REGARDING THE POWER SOURCE(S) FROM WITHIN THE BUILDING, AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT.
9. THE LIGHTING CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO, GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL GOVERNMENTAL RULES, LAWS, ORDINANCES, REGULATIONS AND THE LIKE.
10. THE CONTRACTOR MUST VERIFY THAT INSTALLATION OF LIGHTING FIXTURES COMPLIES WITH THE REQUIREMENTS FOR SEPARATION FROM OVERHEAD ELECTRICAL WIRES PER STATE REGULATIONS.
11. UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND FUNCTIONING AT ALL TIMES.

NUMERIC SUMMARY

LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
FRONT PARKING	ILLUMINANCE	FC	2.76	7.6	0.4	6.90	19.00
SIDE PARKING	ILLUMINANCE	FC	3.19	8.2	0.5	6.38	16.40

LUMINAIRE SCHEDULE

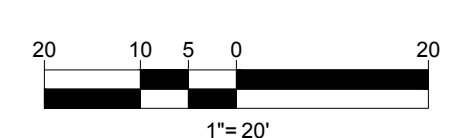
SYMBOL	QTY	ARRANGEMENT	LUMENS	LLF	DESCRIPTION
	4	SINGLE	10384	0.90	LSI LIGHTING TYPE 3 LED AREA LIGHT WITH SHIELD MOUNTED @ 20' XGM-3-LED-SS-NW-HSS
	7	BUILDING	3377	0.90	LSI LIGHTING FORWARD THROW LED WALL LIGHT MOUNTED @ 10' XGBWM-FT-LED-28-455-NW-UE



NOTE: THIS DETAIL IS FOR BID AND BUDGETARY PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A FOUNDATION DESIGN PREPARED BY A QUALIFIED STRUCTURAL ENGINEER CONSIDERING LIGHTING MANUFACTURER REQUIREMENTS, LOCAL WIND LOADS AND SITE SPECIFIC SOIL PARAMETERS.

- SOME SITE CONDITIONS AND/OR LOCATIONS MAY REQUIRE VIBRATION DAMPENING MEASURES AS DETERMINED BY A STRUCTURAL ENGINEER.
- THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF THE INTENT TO MOUNT ANYTHING TO THE POLE, ASIDE FROM THE LIGHT FIXTURES, INCLUDING BUT NOT LIMITED TO CAMERAS, BANNERS, FLAGS, SIGNAGE, ETC. AS IT WILL IMPACT THE POLE AND FOUNDATION DESIGN.

THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY



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SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	CHECKED BY
1	02/27/2023	PER PEER REVIEW COMMENTS	JWT
2	03/17/2023	ISSUED FINAL PLANS	ND/RM



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PROJECT No.: MAA220228.00
DRAWN BY: JWC/CFD
CHECKED BY: NPD/RMM
DATE: 01/25/2023
CAD ID: MAA220228.00-SFPD-2A

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

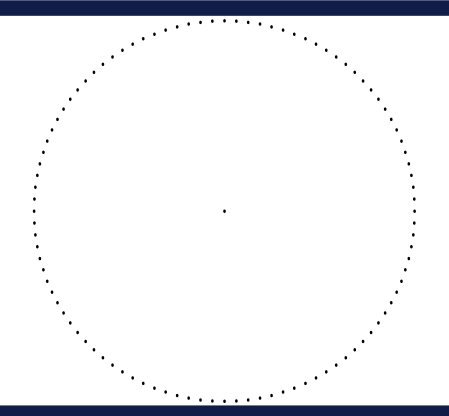
SDG DEVELOPMENT, LLC

PROPOSED
SELF-STORAGE FACILITY
MAP: F15 LOTS: 2 & 93
108 OLD CHURCH STREET,
TOWN OF PEMBROKE,
PLYMOUTH COUNTY,
MASSACHUSETTS

BOHLER

352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900

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SHEET TITLE:

LIGHTING PLAN

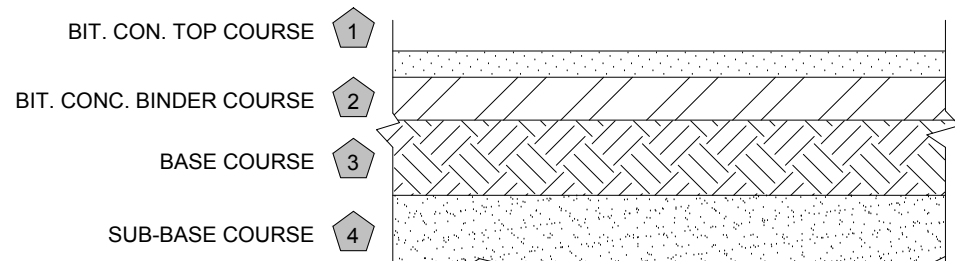
SHEET NUMBER:

C-703

REVISION 2 - 03/17/2023

P:\2022\MAA220228.00\CADD\DRAWINGS\PLAN SET\BOHLER\SITE PLAN\MAA220228.00-SFPD-2A.dwg - LAYOUT: C-703.LIGHT

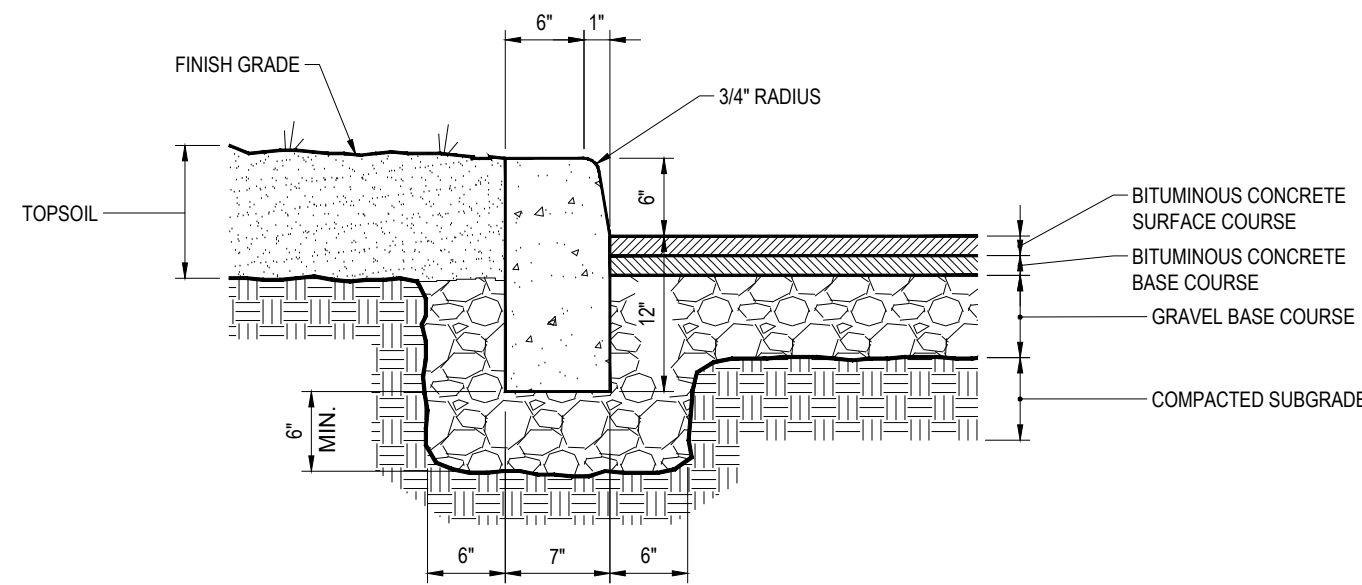
P:\022\MAA220228\00\CAD\DRAWINGS\PLAN SET\BOHLER SITE PLANS\MAA220228-00-SPFD-2A.dwg-----LAYOUT: C-901-DTL



- 1 BIT. CON. TOP COURSE (LIGHT DUTY=1") (MA DPW M3.11.03)
2 BIT. CONC. BINDER COURSE (LIGHT DUTY=2") (MA DPW M3.11.03)
3 DENSE GRADED CRUSHED STONE BASE COURSE (HEAVY DUTY=6") (LIGHT DUTY=4") (MA DPW M2.01.7)
4 GRAVEL BORROW SUB-BASE COURSE (HEAVY DUTY AND LIGHT DUTY=8") (MA DPW M1.03.1)
- NOTE:
1. PAVEMENT BASE AND SUBBASE COURSES TO CONFORM TO STATE DEPARTMENT OF TRANSPORTATION
2. GC TO REFER TO GEOTECHNICAL REPORT FOR PAVEMENT SPECIFICATIONS.

PAVEMENT SECTION

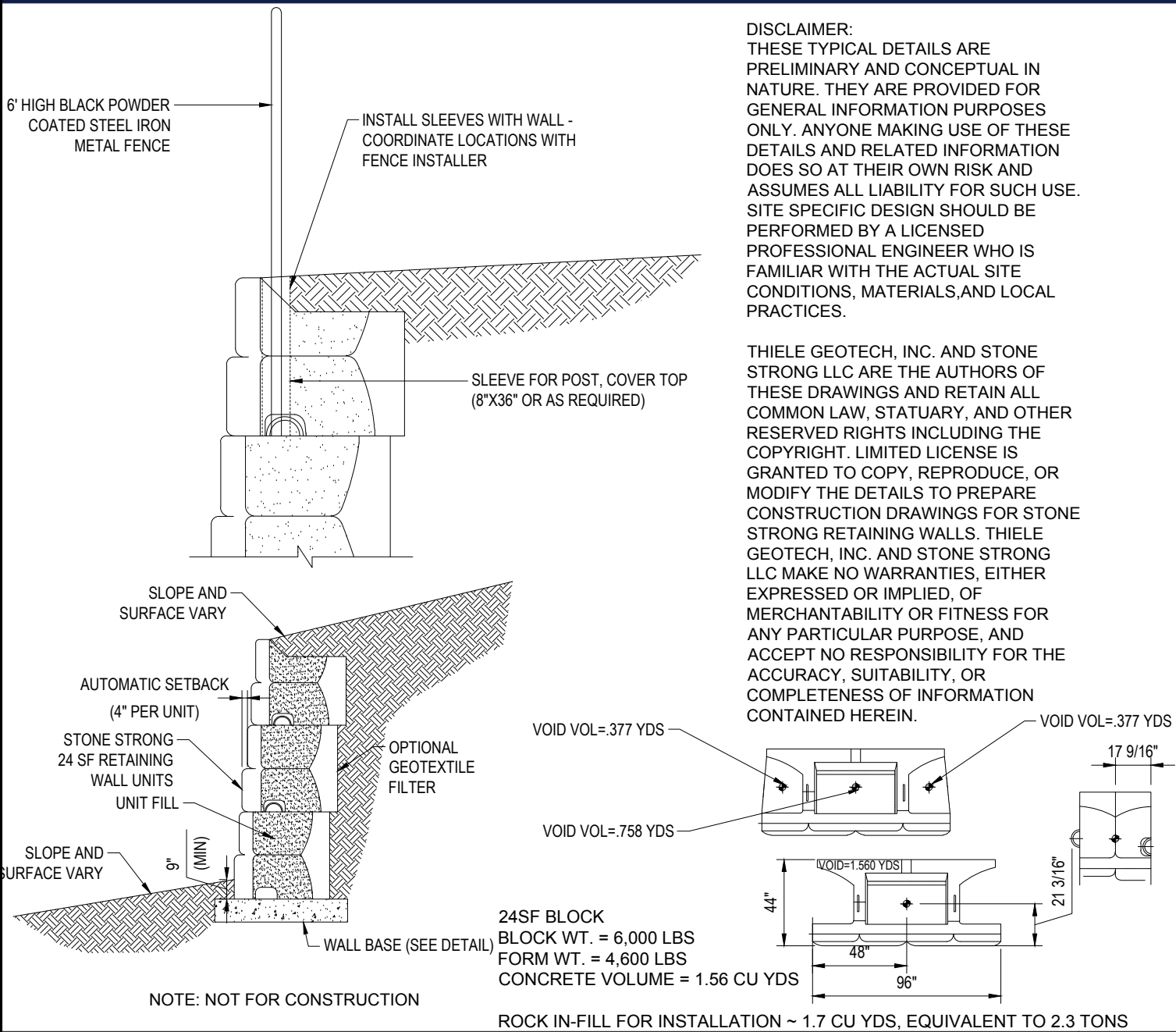
N.T.S.



- NOTE:
- CURB SHALL CONSIST OF 4,000 PSI AIR ENTRAINED CONCRETE. EXPOSED EDGES TO HAVE RUBBED FINISH AND SURFACE SHALL BE TREATED WITH A CONCRETE PENETRANT/SEALER.
 - THE ENDS OF CURB SECTIONS SHALL BE CHAMFERED 1/4 INCH.
 - THE CORNERS OF CURB SECTIONS SHALL MATCH THE ADJACENT CURB IN SIZE, COLOR AND FINISH.
 - CURBS, CURB CORNERS OR EDGING SHALL BE FITTED TOGETHER AS CLOSELY AS POSSIBLE.
 - EXPANSION JOINTS SHALL BE INSTALLED AT A MAXIMUM OF TWENTY FEET (20') ON CENTER USING PREFORMED EXPANSION JOINT FILLER HAVING A THICKNESS OF 1/2 INCH.

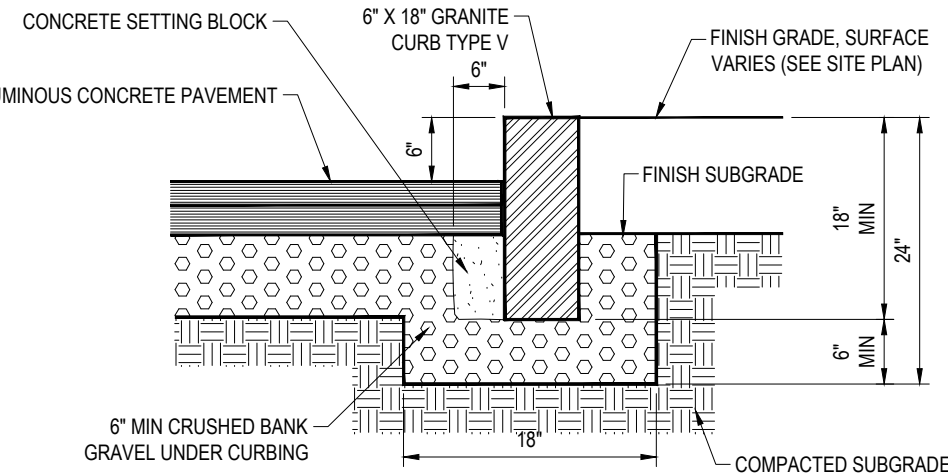
PRECAST CONCRETE CURB

N.T.S.



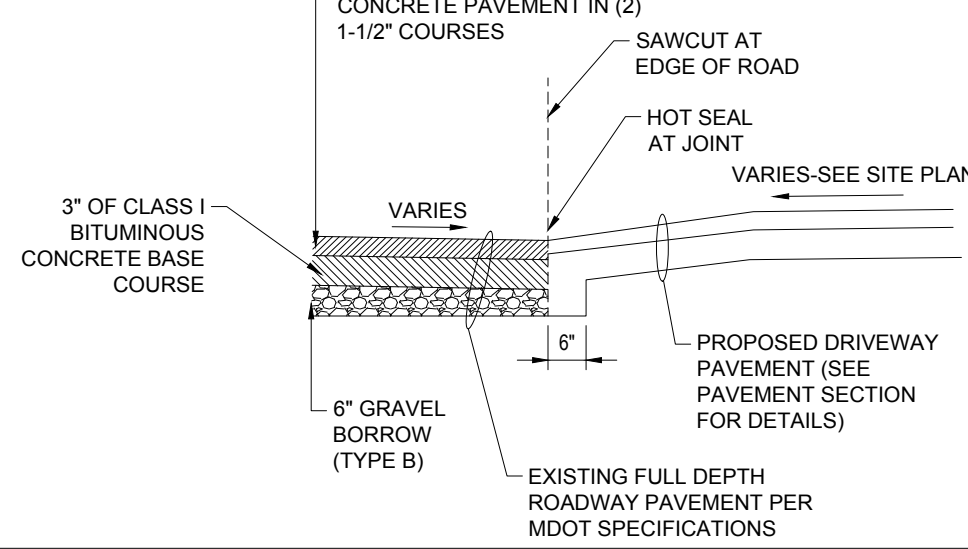
RETAINING WALL CROSS SECTION

N.T.S.



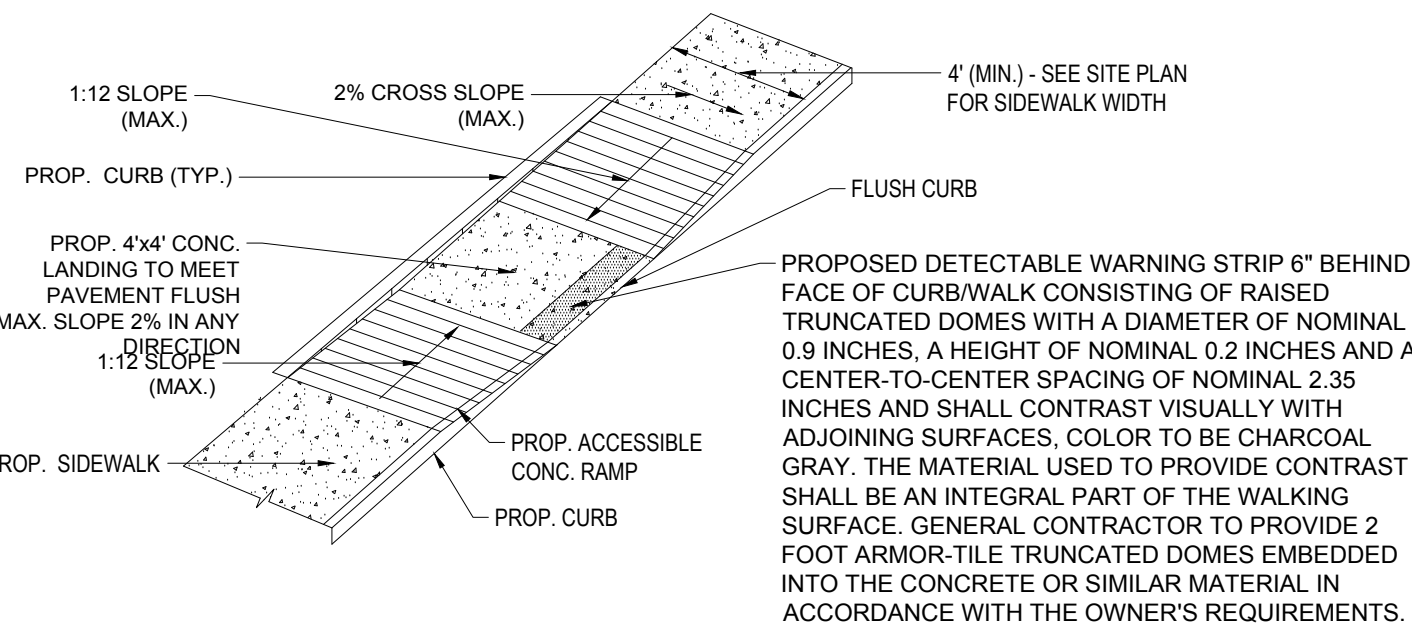
VERTICAL GRANITE CURB

N.T.S.



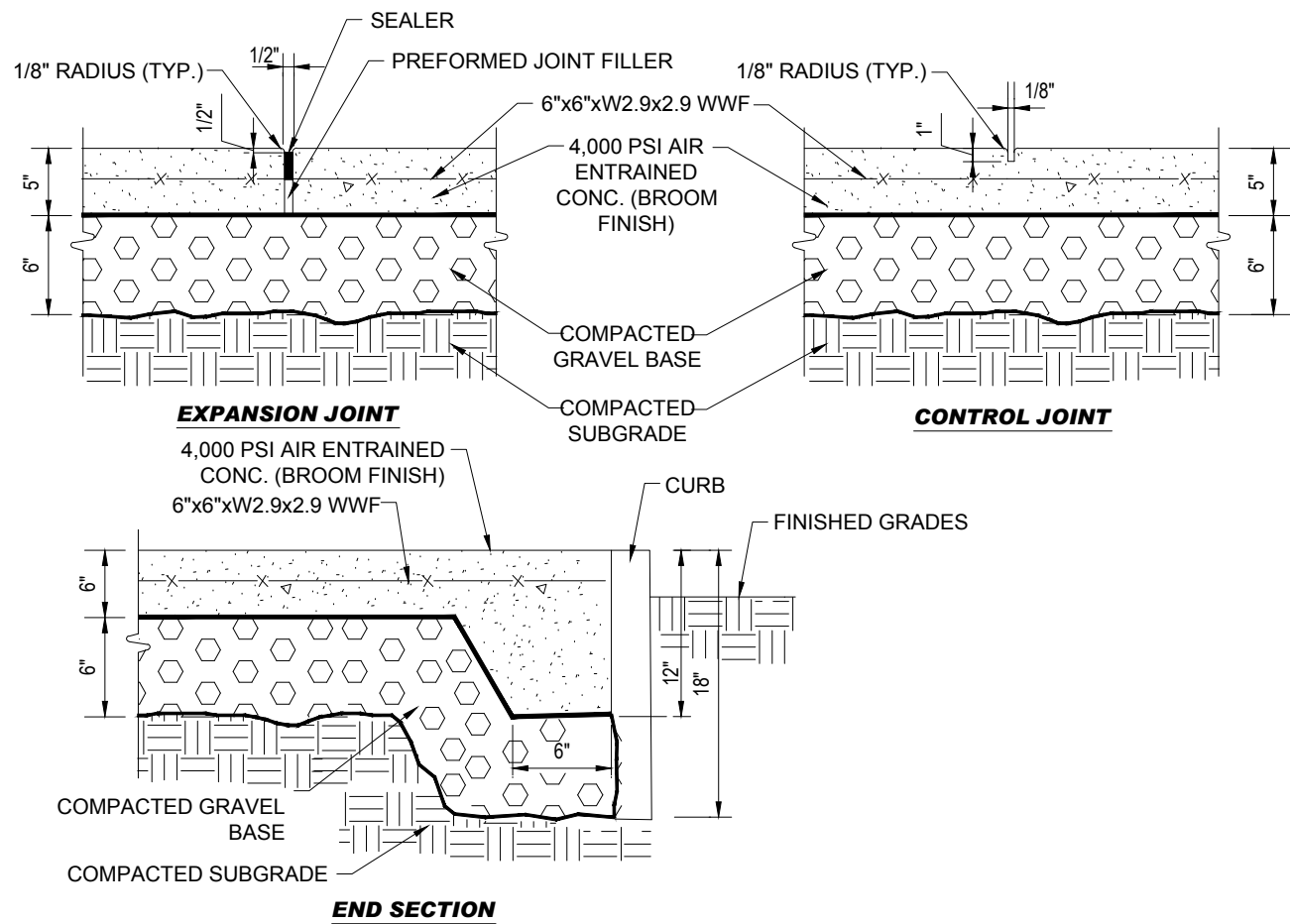
DRIVEWAY CONSTRUCTION

N.T.S.



ACCESSIBLE RAMP

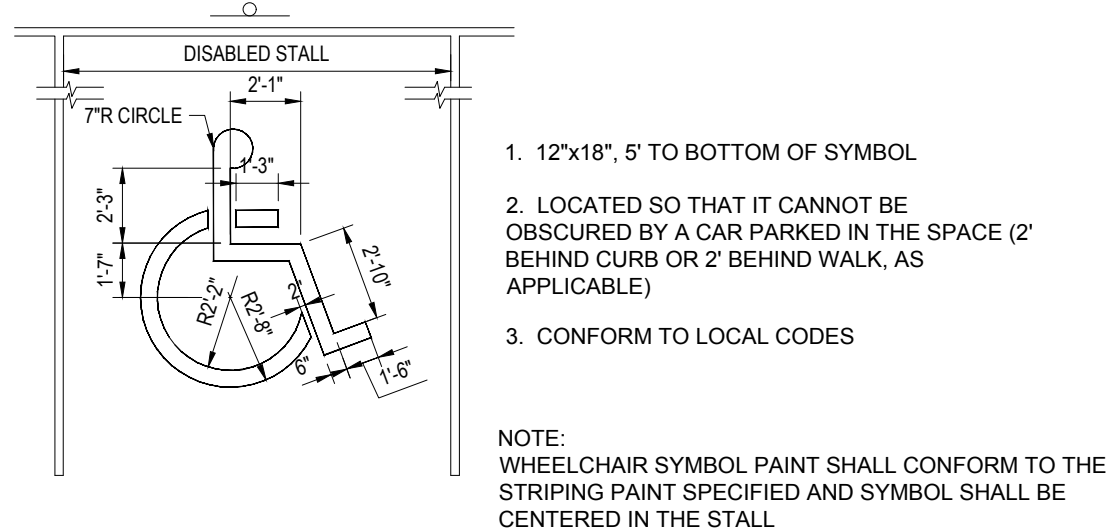
N.T.S.



- NOTES: TO BE USED FOR BUILDING SURROUND AND OTHER CONCRETE WALKS. USE CHAIRS TO SUPPORT REINFORCING STEEL DURING POUR. VARIES SEE PLAN.
- SEE SITE PLAN FOR WIDTH AND GRADES
 - PROVIDE MINIMUM 1/8\"/>
 - PROVIDE CONTROL JOINTS 5'-0\"/>
 - PROVIDE EXPANSION JOINTS 20'-0\"/>

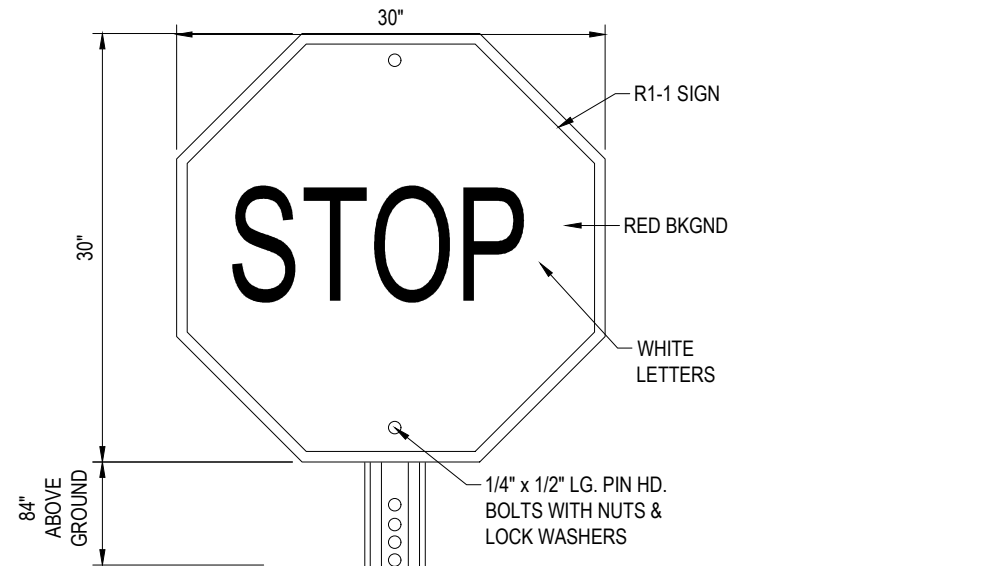
CONCRETE SIDEWALK

N.T.S.



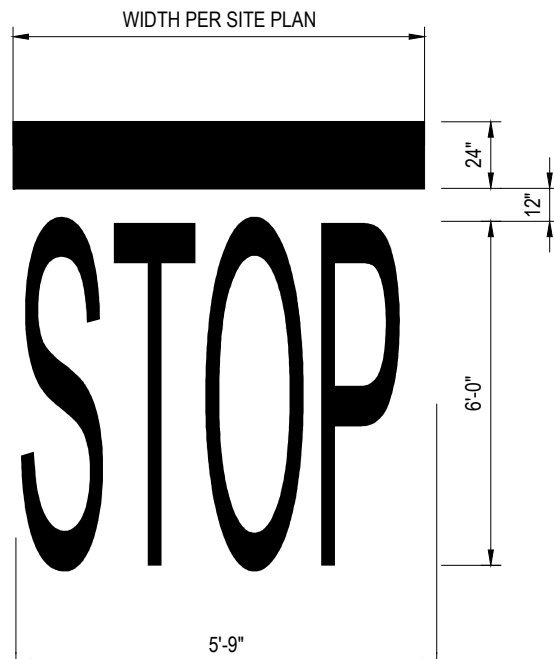
ACCESSIBLE PARKING STALL MARKINGS

N.T.S.



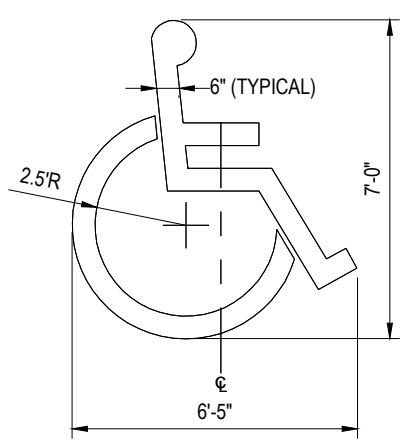
"STOP" SIGN

N.T.S.



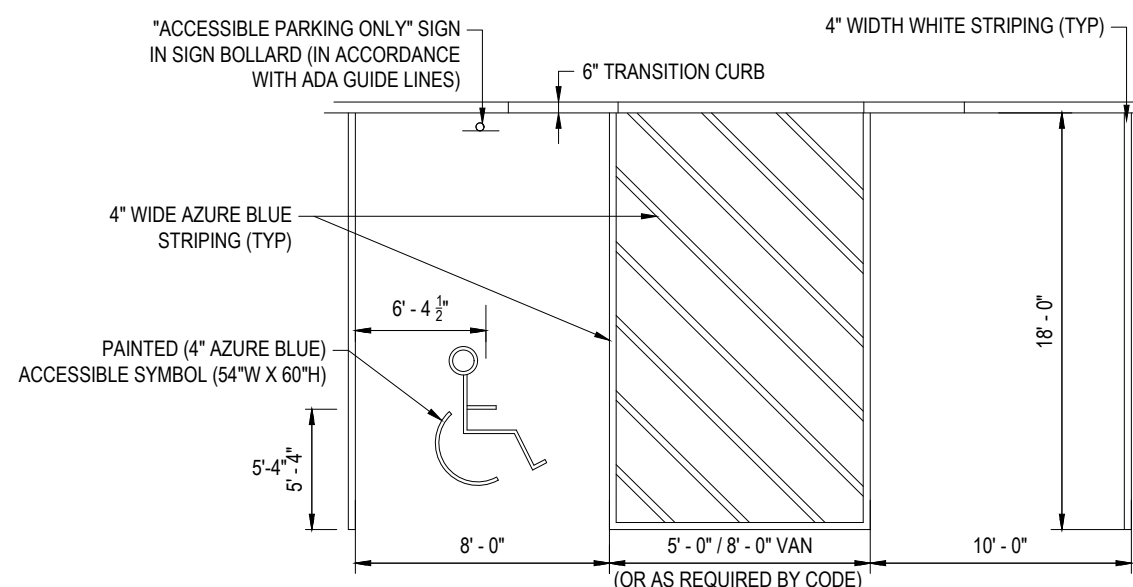
STOP BAR

N.T.S.



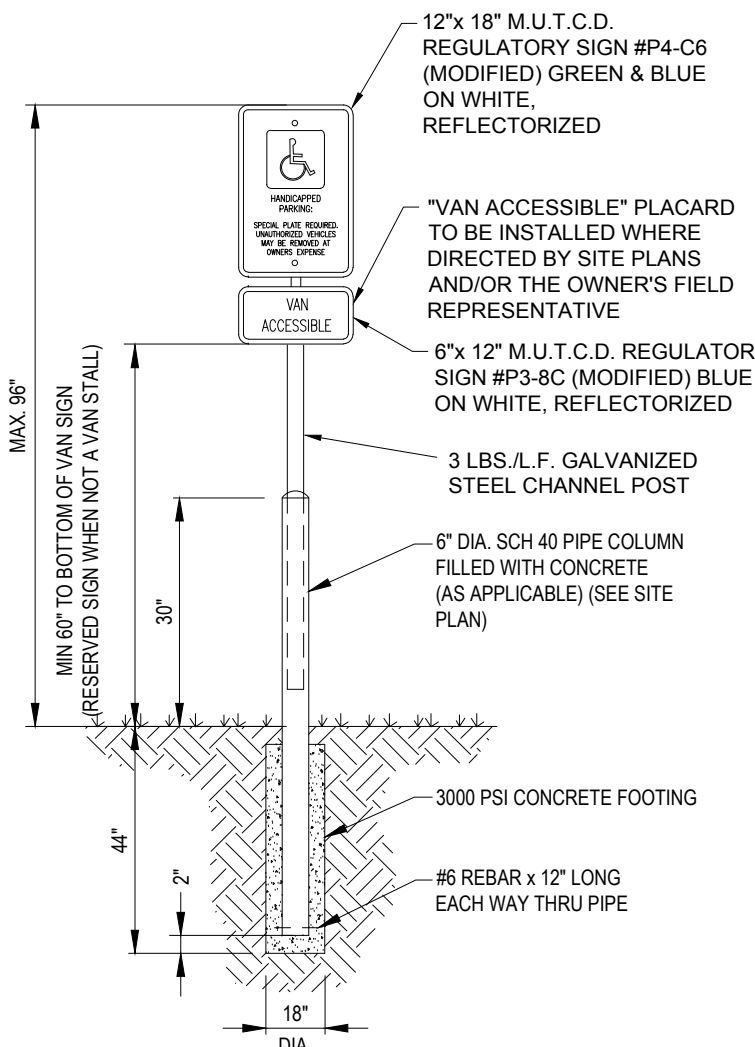
ACCESSIBLE PARKING SYMBOL

N.T.S.



ACCESSIBLE PARKING STALL MARKINGS

N.T.S.



ACCESSIBLE PARKING SIGN ON CONCRETE BOLLARD

N.T.S.



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2	03/17/2023	ISSUED FINAL PLANS	JWT



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PROJECT No.: MAA220228.00
DRAWN BY: JWT/CFD
CHECKED BY: NPD/RMM
DATE: 01/25/2023
CAD L.D.: MAA220228.00-SFPD-2A

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

SDG DEVELOPMENT, LLC

PROPOSED SELF-STORAGE FACILITY

MAP: F15 LOTS: 2 & 93
108 OLD CHURCH STREET,
TOWN OF PEMBROKE,
PLYMOUTH COUNTY,
MASSACHUSETTS

BOHLER

352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900

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SHEET TITLE:

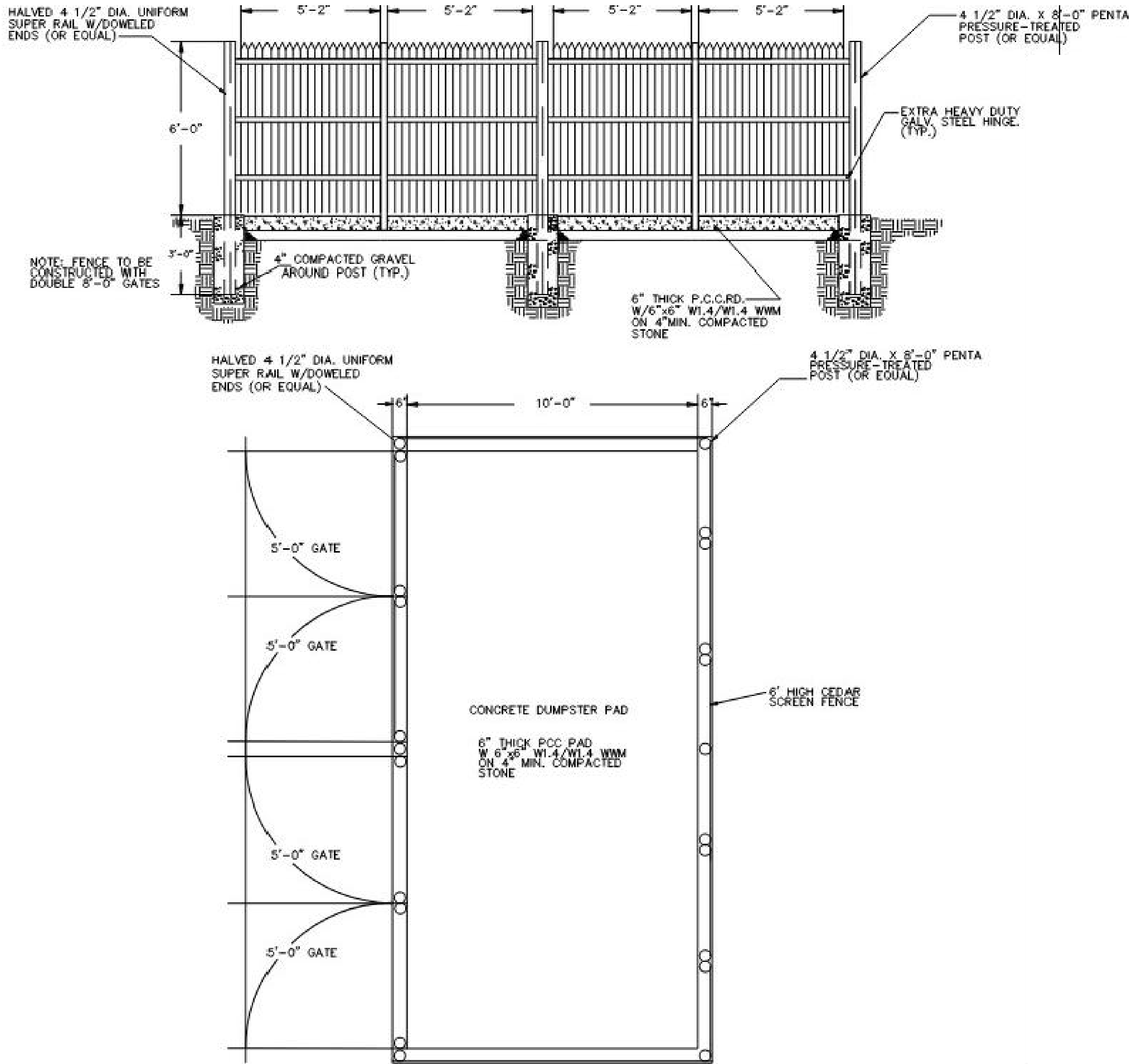
DETAIL SHEET

SHEET NUMBER:

C-901

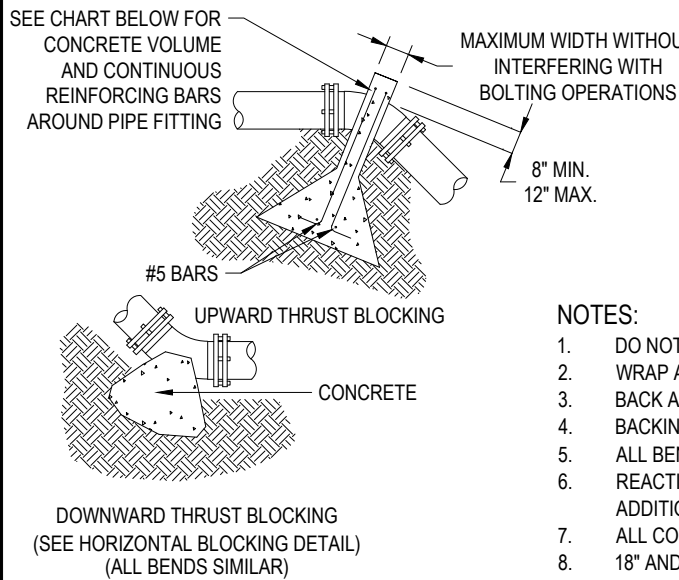
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CEDAR SCREEN GATE/DUMPSTER PAD DETAIL

N.T.S.



UPWARD THRUST BLOCKING									
(REQUIRED REINFORCING BARS & CUBIC YARDS OF P.C. CONCRETE)									
PIPE SIZE	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		
	CONC. C.Y.	REINF. QTY. SIZE	CONC. C.Y.	REINF. QTY. SIZE	CONC. C.Y.	REINF. QTY. SIZE	CONC. C.Y.	REINF. QTY. SIZE	
6"	1.5	3 5	1.5	3 5	1.25	2 5	1.25	2 5	
8"	2	3 5	2	3 5	1.5	2 5	1.5	2 5	
10"	2.5	3 5	2.5	3 5	2	3 5	2	3 5	
12"	3	3 5	3	3 5	2.5	3 5	2.5	3 5	

- NOTES:
- DO NOT COVER BELLS OR FLANGES WITH CONCRETE
 - WRAP ALL FITTINGS WITH VISQUEEN
 - BACK ALL TEES ACCORDING TO SIZE OF BRANCH
 - BACKING FUTURE LINE EXTENSIONS SHALL BE SUCH THAT LATER REMOVAL IS POSSIBLE
 - ALL BENDS WHERE FITTINGS ARE USED, BOTH HORIZONTAL OR VERTICAL SHALL BE BACKED
 - REACTION BACKING TABLE IS BASED ON 100 P.S.I. AND SOIL BEARING PRESSURE OF 2000 LB./SQ.FT. ADDITIONAL BACKING MAY BE REQUIRED IN SOME AREAS AS DIRECTED BY ENGINEERS
 - ALL CONCRETE SHALL BE 2500 P.S.I.
 - 18" AND LARGER REQUIRES SPECIFIC ANTI-THRUST DESIGN

VERTICAL THRUST BLOCKING

N.T.S.

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CHECKED BY: NPD/RMM
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CAD ID: MAA220228.00-SFPD-2A

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

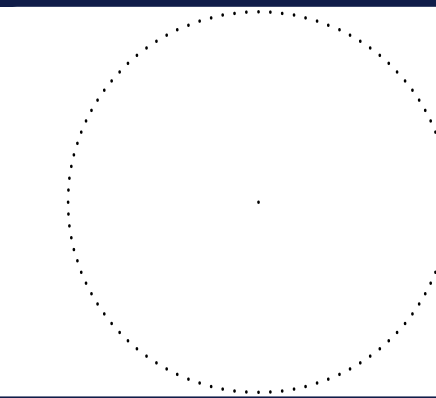
SDG DEVELOPMENT, LLC

PROPOSED SELF-STORAGE FACILITY

MAP: F15 LOTS: 2 & 93
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Phone: (508) 480-9900

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DETAIL SHEET

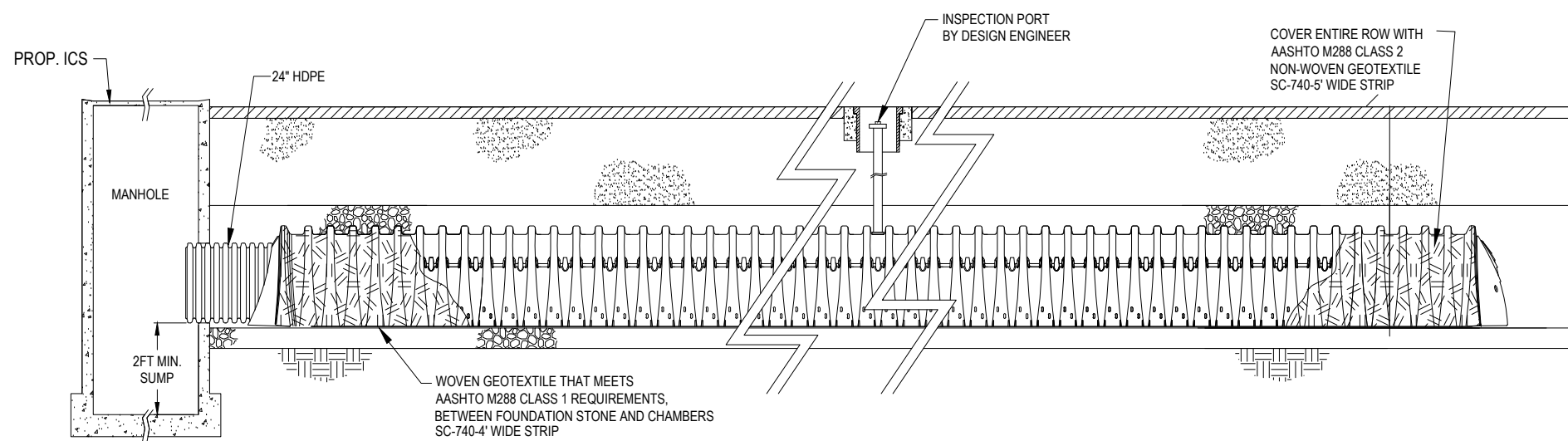
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C-903

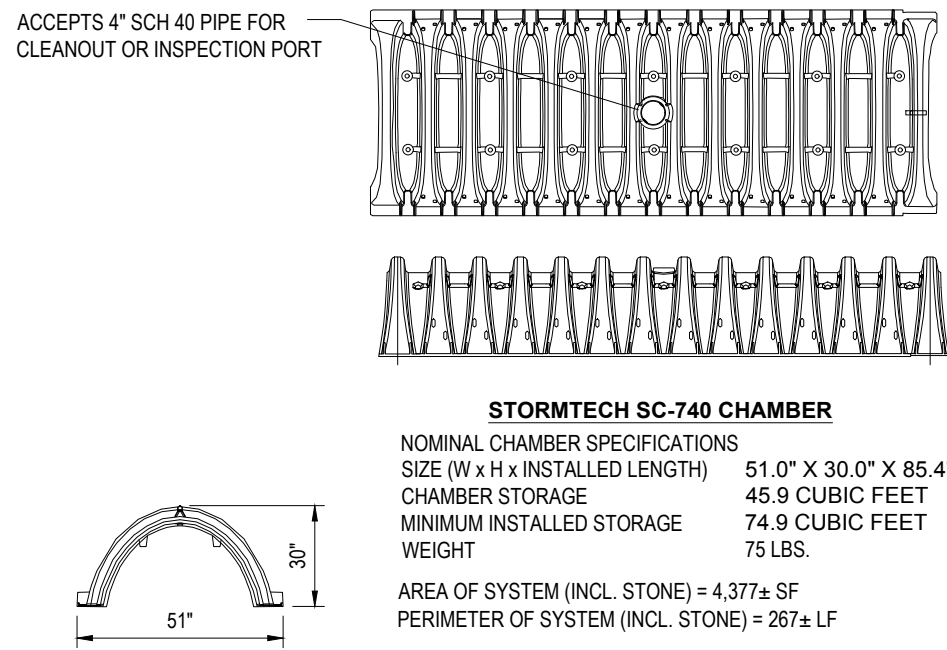
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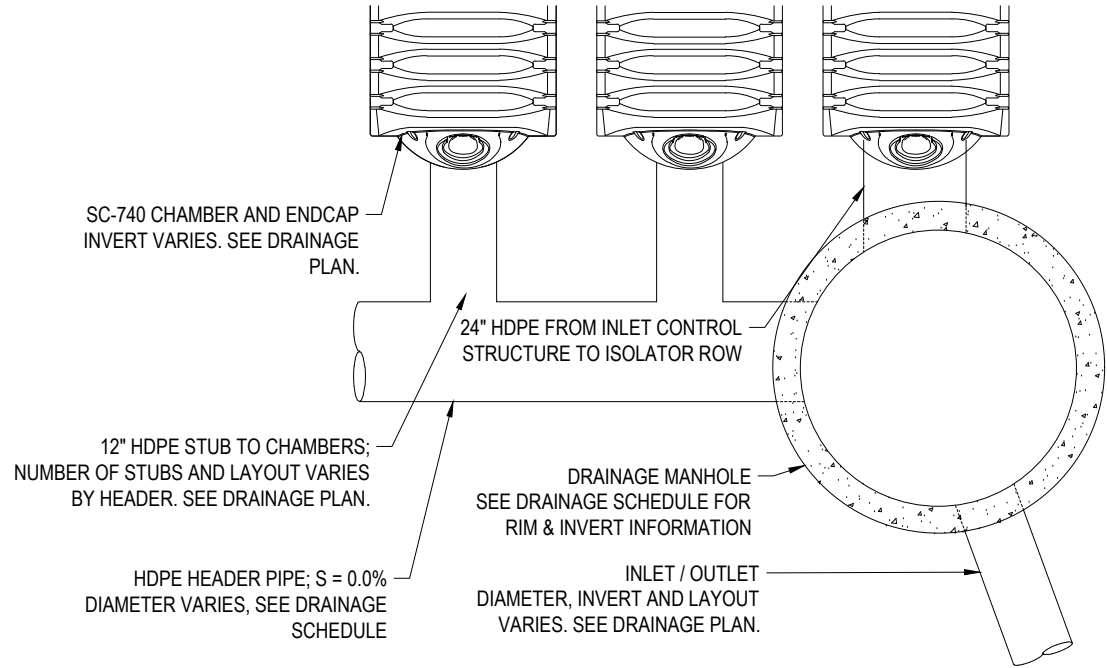
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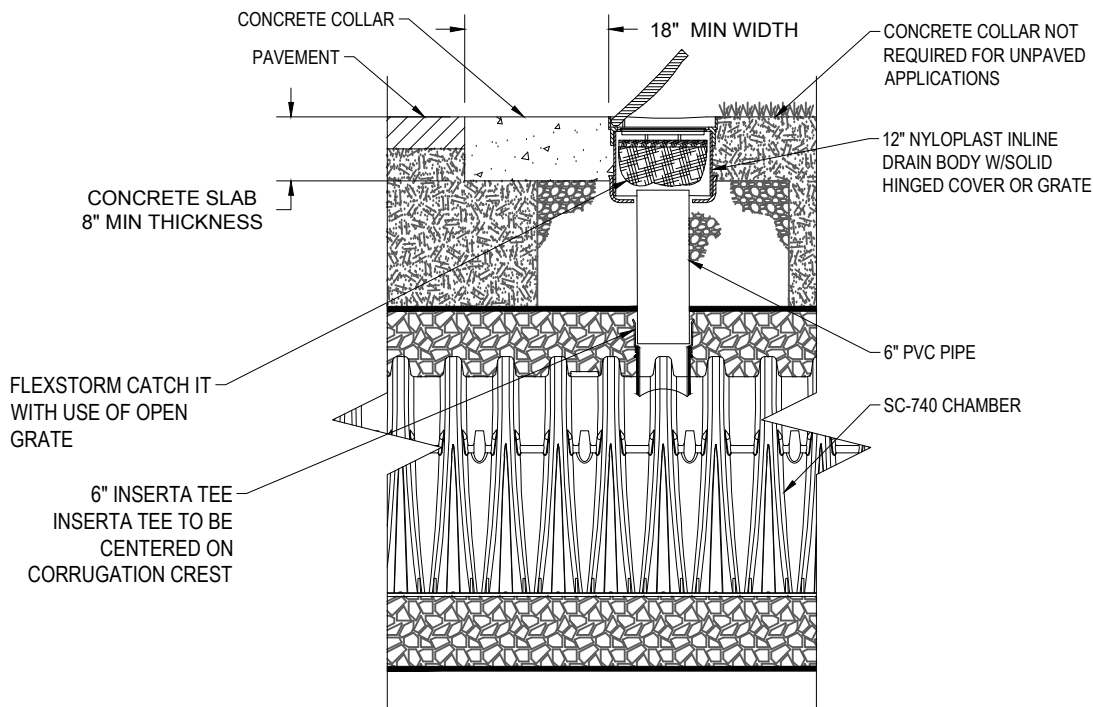
STORMTECH SC-740 ISOLATOR ROW DETAIL



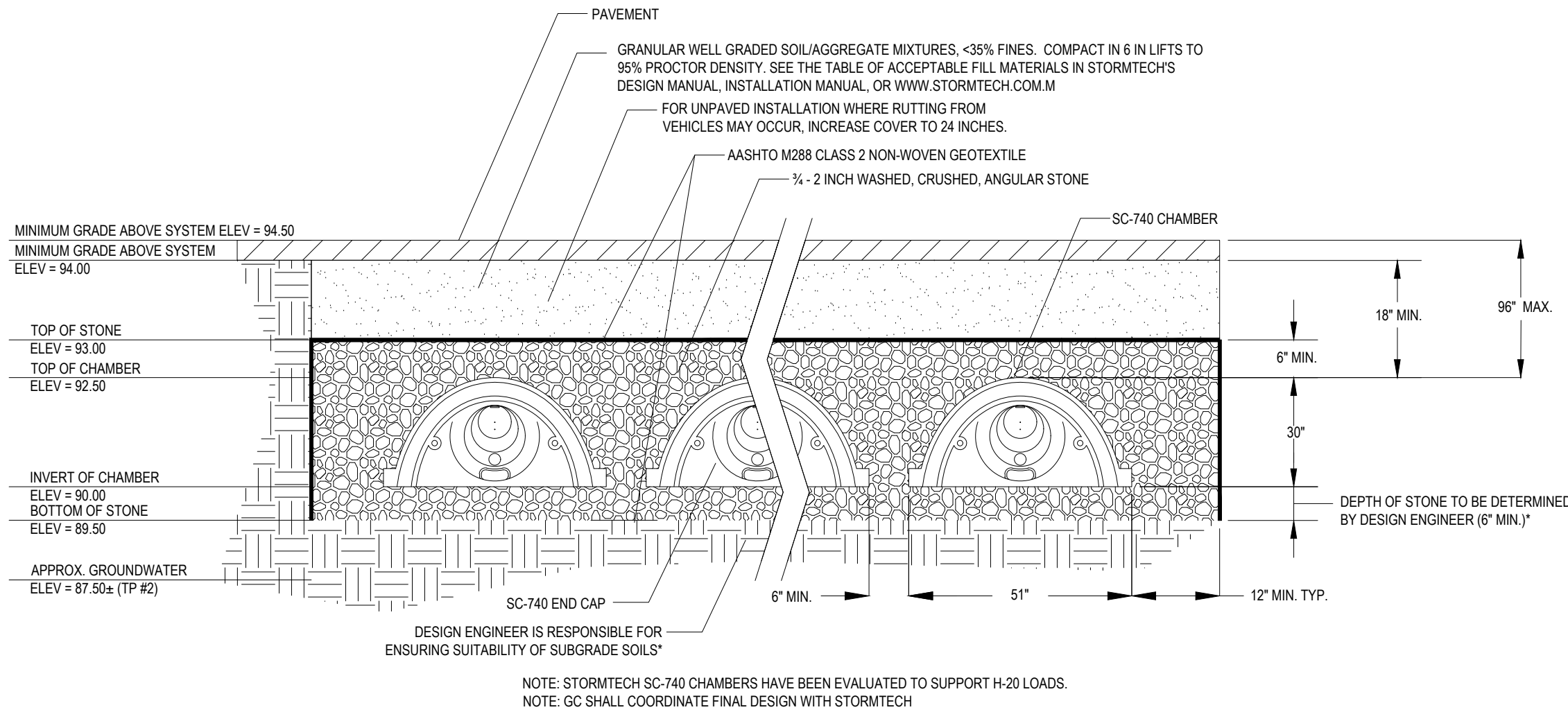
STORMTECH SC-740 CHAMBER
SYSTEM INDIVIDUAL UNIT DETAIL



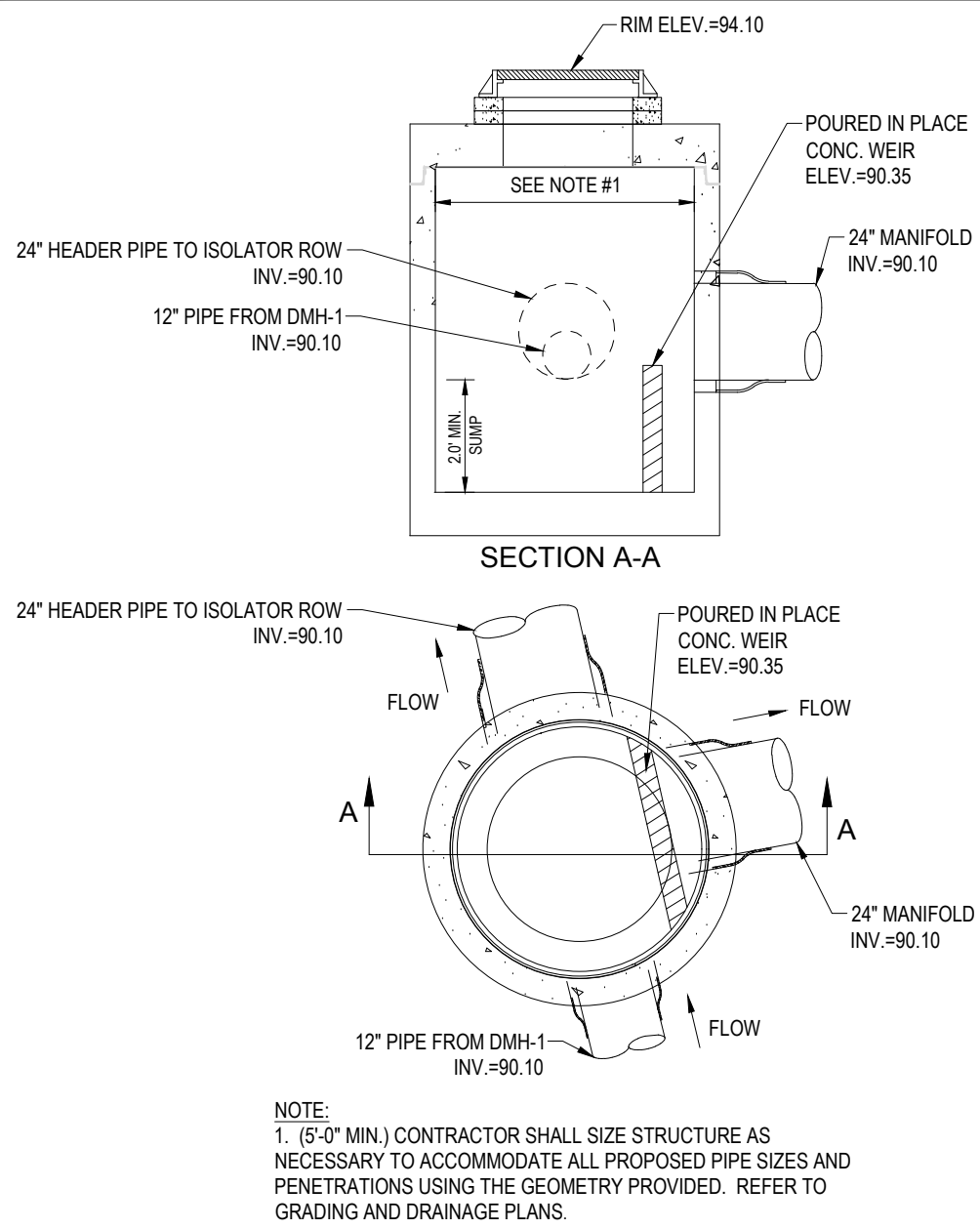
TYPICAL HEADER PIPE DETAIL



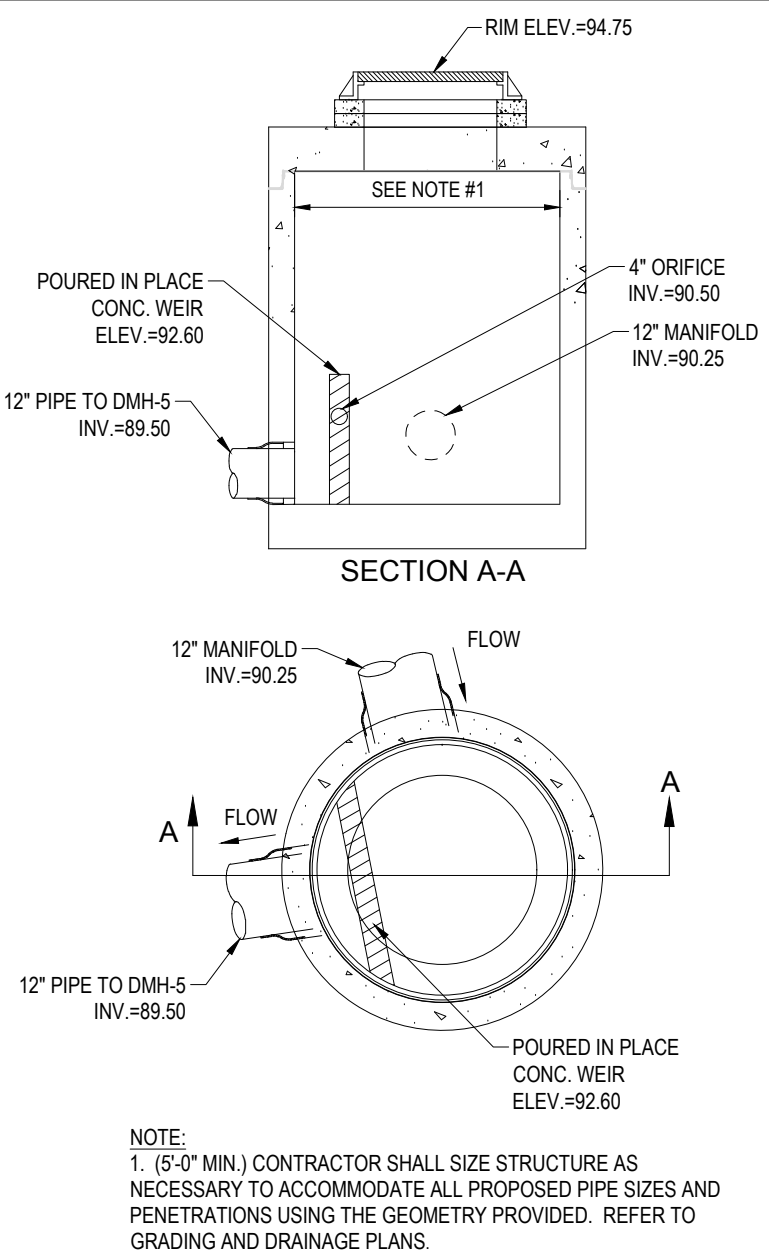
STORMTECH SC-740 CHAMBER
SYSTEM INSPECTION PORT DETAIL



STORMTECH SC-740 UNDERGROUND INFILTRATION SYSTEM



INLET CONTROL STRUCTURE - 1
(ICS-1)



OUTLET CONTROL STRUCTURE - 1
(OCS-1)

FOR REGISTRY USE ONLY

REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	02/27/2023	PER PEER REVIEW COMMENTS	JWT
2	03/17/2023	ISSUED FINAL PLANS	JWT



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PROJECT No.: MAA220228.00
DRAWN BY: JWT/CFD
CHECKED BY: NPD/RMM
DATE: 01/25/2023
CAD I.D.: MAA220228.00-SFPD-2A

PROJECT:

PROPOSED SITE
PLAN DOCUMENTS

FOR

SDG DEVELOPMENT,
LLC

PROPOSED
SELF-STORAGE FACILITY

MAP: F15 LOTS: 2 & 93
108 OLD CHURCH STREET,
TOWN OF PEMBROKE,
PLYMOUTH COUNTY,
MASSACHUSETTS

BOHLER

352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900

www.BohlerEngineering.com

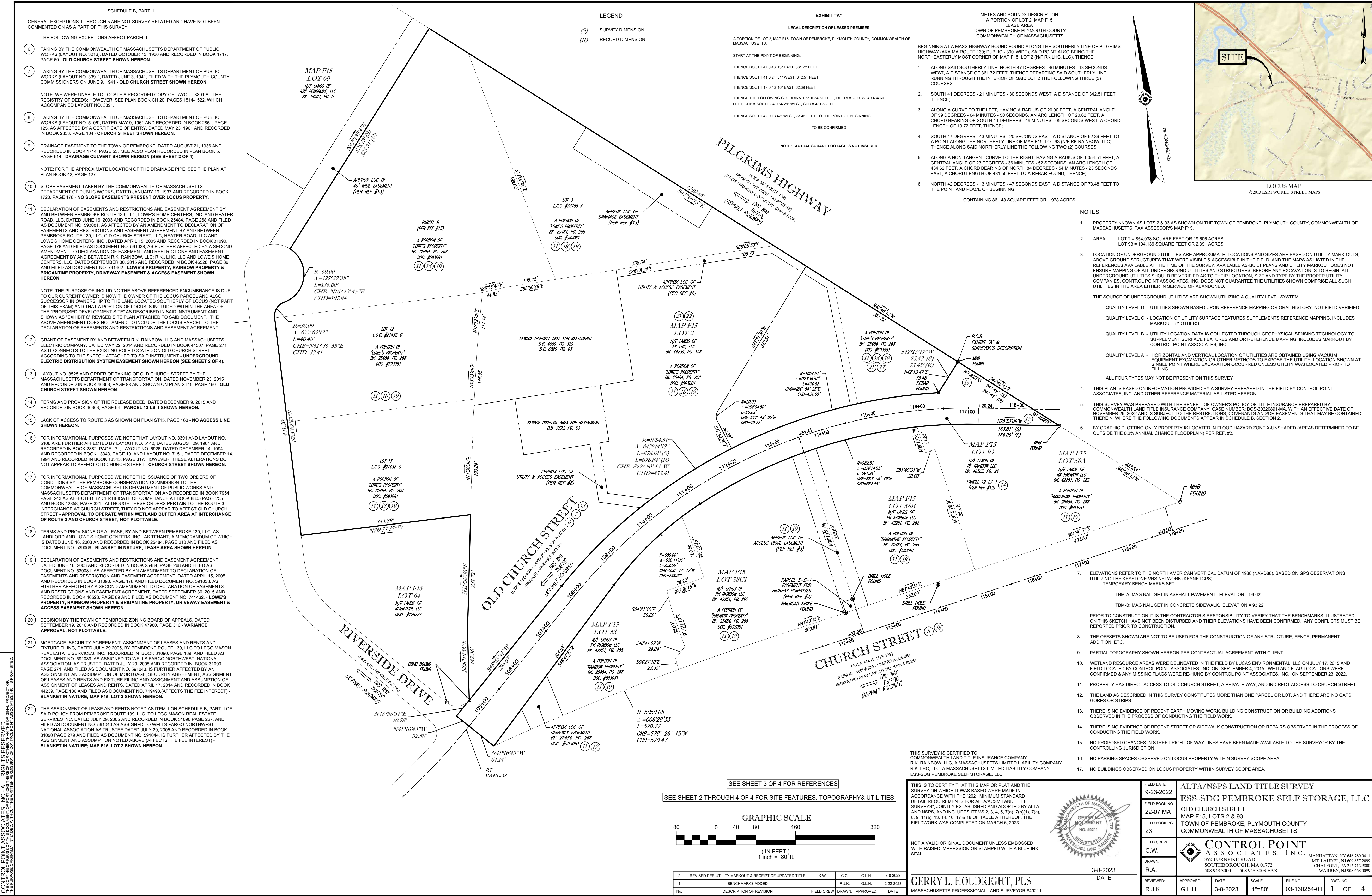
SHEET TITLE:

DETAIL
SHEET

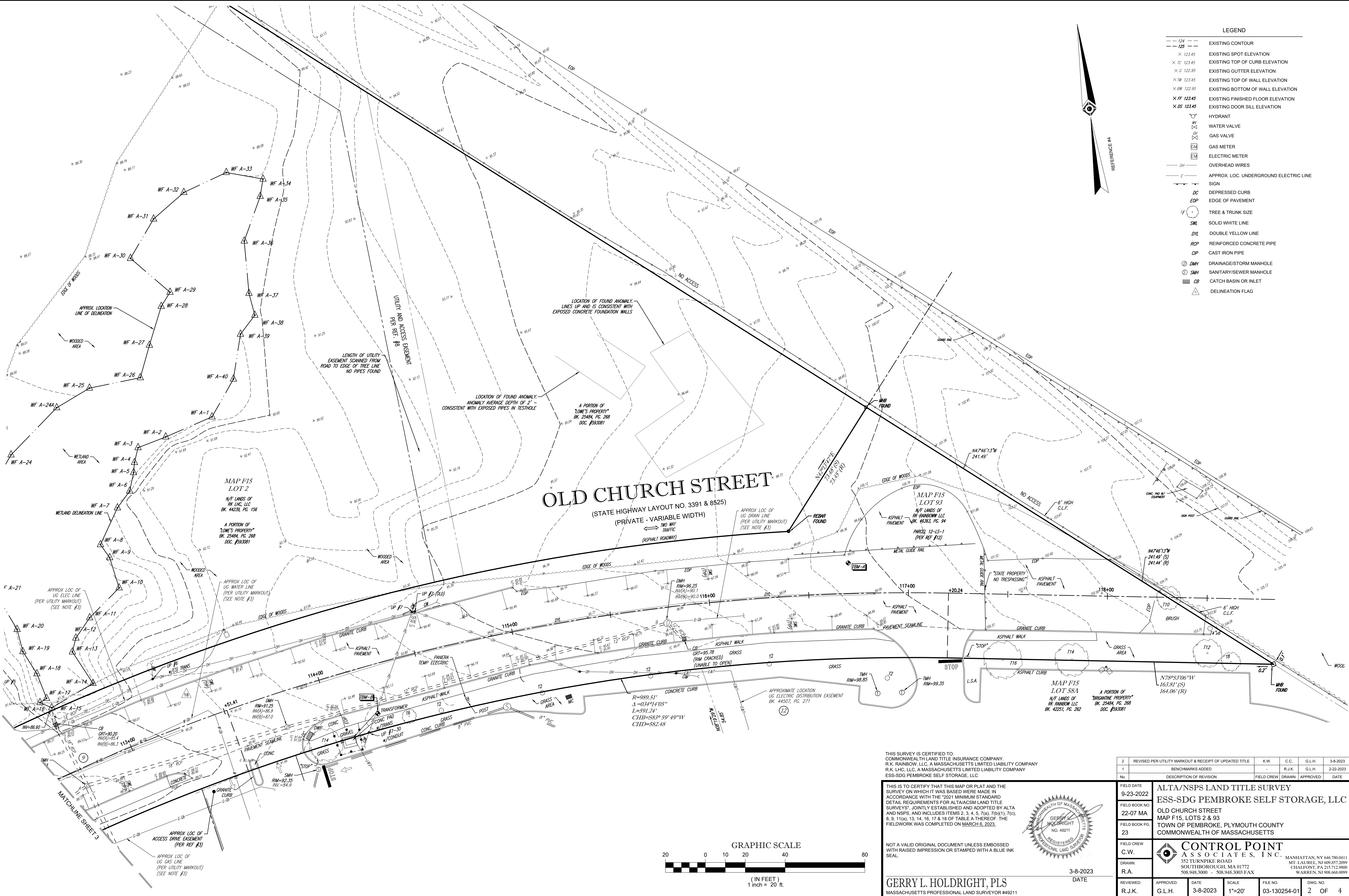
SHEET NUMBER:

C-904

REVISION 2 - 03/17/2023

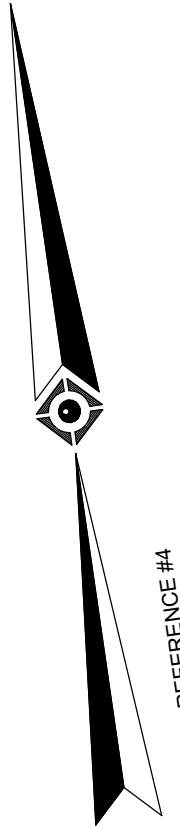
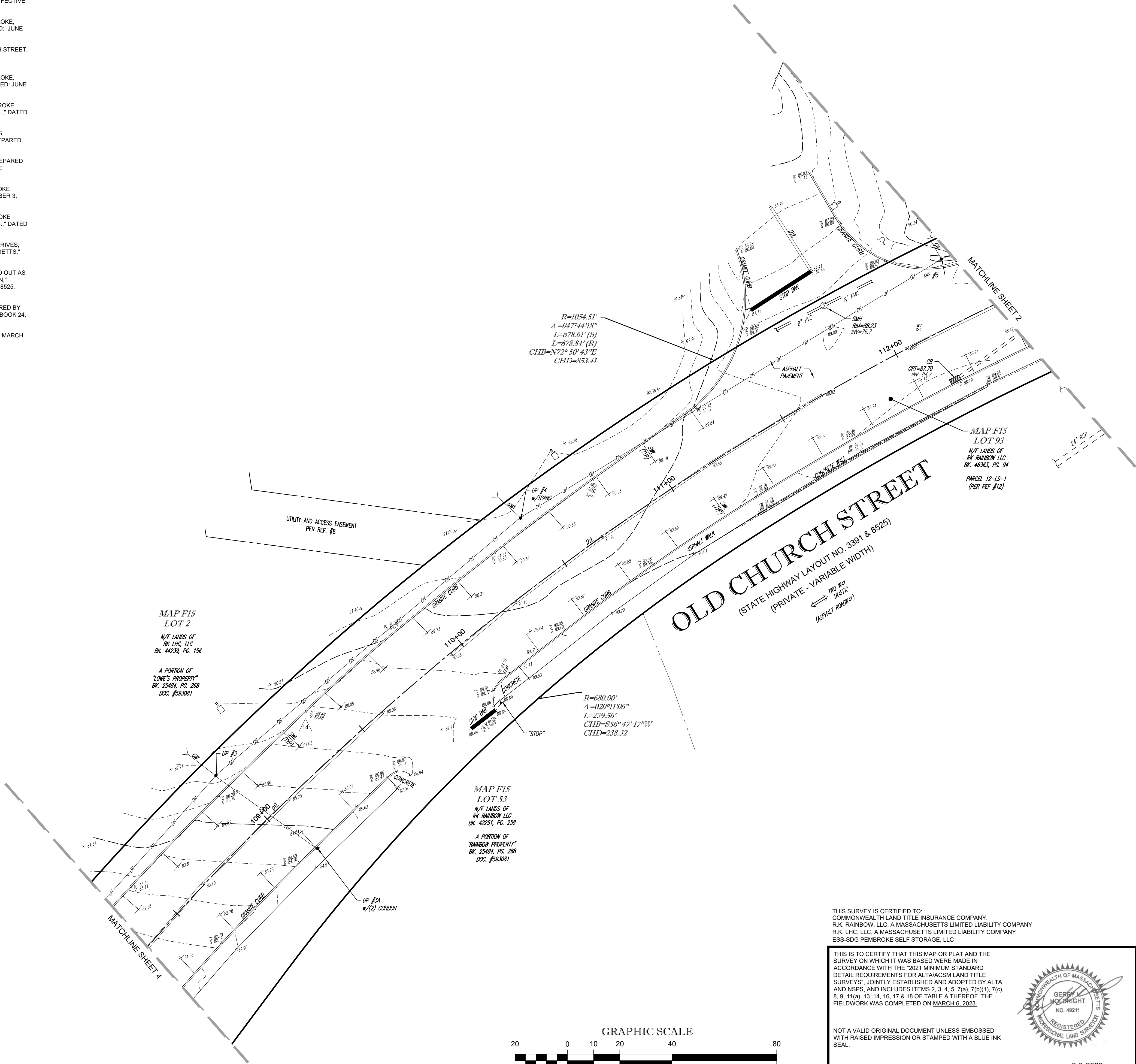


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REFERENCES:

1. THE TAX ASSESSOR'S MAP OF THE TOWN OF PEMBROKE, PLYMOUTH COUNTY, COMMONWEALTH OF MASSACHUSETTS, MAP F15.
2. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, PLYMOUTH COUNTY, MASSACHUSETTS (ALL JURISDICTIONS), PANEL 207 OF 650," MAP NUMBER 25023CO207J, EFFECTIVE DATE: JULY 17, 2012.
3. MAP ENTITLED "THE COMMONWEALTH OF MASSACHUSETTS, PLAN OF ROAD IN THE TOWN OF PEMBROKE, PLYMOUTH COUNTY, LAID OUT AS A STATE HIGHWAY BY THE DEPARTMENT OF PUBLIC WORKS," DATED: JUNE 28, 1960, STATE HIGHWAY LAYOUT NO. 5004, SHEETS 1 & 2 OF 5 SHEETS.
4. MAP ENTITLED "ALTA/ACSM LAND TITLE SURVEY, BRIGANTINE VILLAGE & RAINBOW SQUARE, CHURCH STREET, PEMBROKE, MA (PLYMOUTH COUNTY), PREPARED FOR: RK CENTERS," PREPARED BY COLER AND COLANTONIO, INC., DATED: NOVEMBER 13, 2012, PROVIDED BY CLIENT.
5. MAP ENTITLED "THE COMMONWEALTH OF MASSACHUSETTS, PLAN OF ROAD IN THE TOWN OF PEMBROKE, PLYMOUTH COUNTY, LAID OUT AS A STATE HIGHWAY BY THE DEPARTMENT OF PUBLIC WORKS," DATED: JUNE 3, 1941, STATE HIGHWAY LAYOUT NO. 3391, SHEET 8 OF 10.
6. MAP ENTITLED, "ALTA/ACSM LAND TITLE SURVEY, OLD CHURCH STREET/CHURCH STREET IN PEMBROKE MASSACHUSETTS, (PLYMOUTH COUNTY), PREPARED FOR GREAT ISLAND DEVELOPMENT GROUP, INC., DATED OCTOBER 3, 1998, PREPARED BY THE BSC GROUP INC., SHEET 2 OF 3.
7. MAP ENTITLED, "ALTA/ACSM LAND TITLE SURVEY, CHURCH STREET IN PEMBROKE, MASSACHUSETTS, (PLYMOUTH COUNTY), PREPARED FOR GREAT ISLAND DEVELOPMENT, LP, DATED APRIL 8, 1999, PREPARED BY THE BSC GROUP INC., SHEET 1 OF 1.
8. MAP ENTITLED, "COMPILED PLAN OF LAND, OLD CHURCH STREET, PEMBROKE, MASSACHUSETTS, PREPARED FOR A. W. PERRY INC., PREPARED BY PERKINS ENGINEERING, INC., DATED JULY 8, 1986, FILED IN THE PLYMOUTH COUNTY REGISTRY OF DEEDS IN PLAN BOOK 29, PAGE 408 ON DECEMBER 31, 1986.
9. MAP ENTITLED, "ALTA/ACSM LAND TITLE SURVEY, OLD CHURCH STREET/RIVERSIDE DRIVE IN PEMBROKE MASSACHUSETTS, (PLYMOUTH COUNTY), PREPARED FOR DOUCET AND ASSOCIATES," DATED OCTOBER 3, 1998, PREPARED BY THE BSC GROUP INC., SHEET 1 OF 4.
10. MAP ENTITLED, "ALTA/ACSM LAND TITLE SURVEY, OLD CHURCH STREET/CHURCH STREET IN PEMBROKE MASSACHUSETTS, (PLYMOUTH COUNTY), PREPARED FOR GREAT ISLAND DEVELOPMENT GROUP, INC., DATED OCTOBER 3, 1998, PREPARED BY THE BSC GROUP INC., SHEET 2 OF 3.
11. MAP ENTITLED, "LOWE'S HOME IMPROVEMENT WAREHOUSE, PROPOSED BUILDING & ASSOCIATES DRIVES, OLD CHURCH STREET, TOWN OF PEMBROKE, PLYMOUTH COUNTY, COMMONWEALTH OF MASSACHUSETTS," PREPARED BY BOHLER ENGINEERING, P.C., DATED NOVEMBER 30, 2000. LAST REVISED JUNE 5, 2002.
12. MAP ENTITLED "PLAN OF ROAD IN THE TOWN OF PEMBROKE, PLYMOUTH COUNTY, ALTERED AND LAID OUT AS A STATE HIGHWAY BY THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION," PREPARED BY CHAPPELL ENGINEERING ASSOCIATES, LLC, DATED NOVEMBER 23, 2015. LAYOUT NO. 8525, THREE SHEETS.
13. MAP ENTITLED "PLAN OF LAND IN PEMBROKE, MASS., DRAWN FOR: T.D. BELMONT COMPANY," PREPARED BY BSC, DATED AUGUST 8, 1983. RECORDED IN THE PLYMOUTH COUNTY REGISTRY OF DEEDS AS PLAN BOOK 24, PLAN 68.
14. SUE INVESTIGATION FIELD SKETCH PREPARED BY CONTROL POINT ASSOCIATES, INC., PROVIDED ON MARCH 6, 2023.



LEGEND

- 124 --- EXISTING CONTOUR
- 125 --- EXISTING SPOT ELEVATION
- X 123.45 EXISTING TOP OF CURB ELEVATION
- X TC 123.45 EXISTING GUTTER ELEVATION
- X G 122.95 EXISTING TOP OF WALL ELEVATION
- X TW 123.45 EXISTING BOTTOM OF WALL ELEVATION
- X BW 122.95 EXISTING FINISHED FLOOR ELEVATION
- X FF 123.45 EXISTING DOOR SILL ELEVATION
- X DS 123.45
- HYDRANT
- WY WATER VALVE
- GV GAS VALVE
- GM GAS METER
- EM ELECTRIC METER
- OH OVERHEAD WIRES
- E APPROX. LOC. UNDERGROUND ELECTRIC LINE
- SG SIGN
- DC DEPRESSED CURB
- EOP EDGE OF PAVEMENT
- TS TREE & TRUNK SIZE
- SWL SOLID WHITE LINE
- DYL DOUBLE YELLOW LINE
- RCP REINFORCED CONCRETE PIPE
- CIP CAST IRON PIPE
- DMH DRAINAGE/STORM MANHOLE
- SMH SANITARY/SEWER MANHOLE
- CB CATCH BASIN OR INLET
- DL DELINEATION FLAG

THIS SURVEY IS CERTIFIED TO:
COMMONWEALTH LAND TITLE INSURANCE COMPANY,
R.K. RAINBOW, LLC, A MASSACHUSETTS LIMITED LIABILITY COMPANY
R.K. LHC, LLC, A MASSACHUSETTS LIMITED LIABILITY COMPANY
ESS-SDG PEMBROKE SELF STORAGE, LLC

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GERRY L. HOLDRIGHT, PLS
MASSACHUSETTS PROFESSIONAL LAND SURVEYOR #49211

3-8-2023
DATE

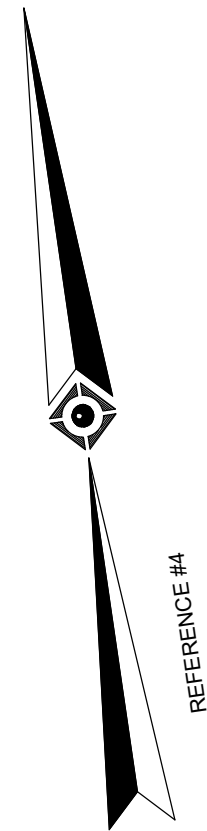
2	REVISED PER UTILITY MARKOUT & RECEIPT OF UPDATED TITLE	K.W.	C.C.	G.L.H.	3-8-2023
1	BENCHMARKS ADDED	-	R.J.K.	G.L.H.	2-22-2023
No.	DESCRIPTION OF REVISION	FIELD CREW	DRAWN	APPROVED	DATE

FIELD DATE 9-23-2022	ALTA/NSPS LAND TITLE SURVEY
FIELD BOOK NO. 22-07 MA	ESS-SDG PEMBROKE SELF STORAGE, LLC
FIELD BOOK PG. 23	OLD CHURCH STREET MAP F15, LOTS 2 & 93 TOWN OF PEMBROKE, PLYMOUTH COUNTY COMMONWEALTH OF MASSACHUSETTS

FIELD CREW C.W.	CONTROL POINT ASSOCIATES, INC.	MANHATTAN, NY 646.780.0411
DRAWN: R.A.	352 TURNPIKE ROAD SOUTH BOKROUGH, MA 01772 508.948.3000 - 508.948.3003 FAX	MT. LAUREL, NJ 609.857.2099 CHALFONT, PA 215.712.9000 WARRKEN, NJ 908.668.0099
REVIEWED: R.J.K.	APPROVED: G.L.H.	DATE 3-8-2023
SCALE 1"=20'	FILE NO. 03-130254-01	DWG. NO. 3 OF 4

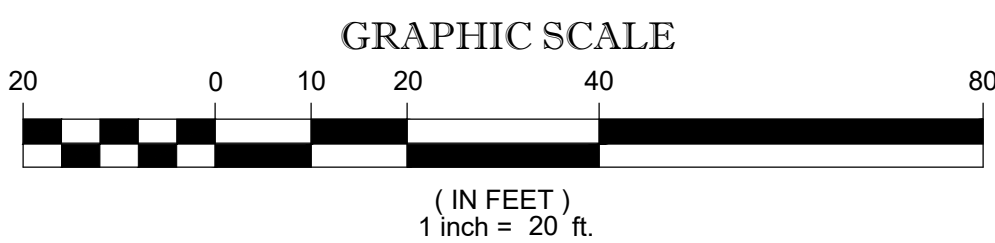
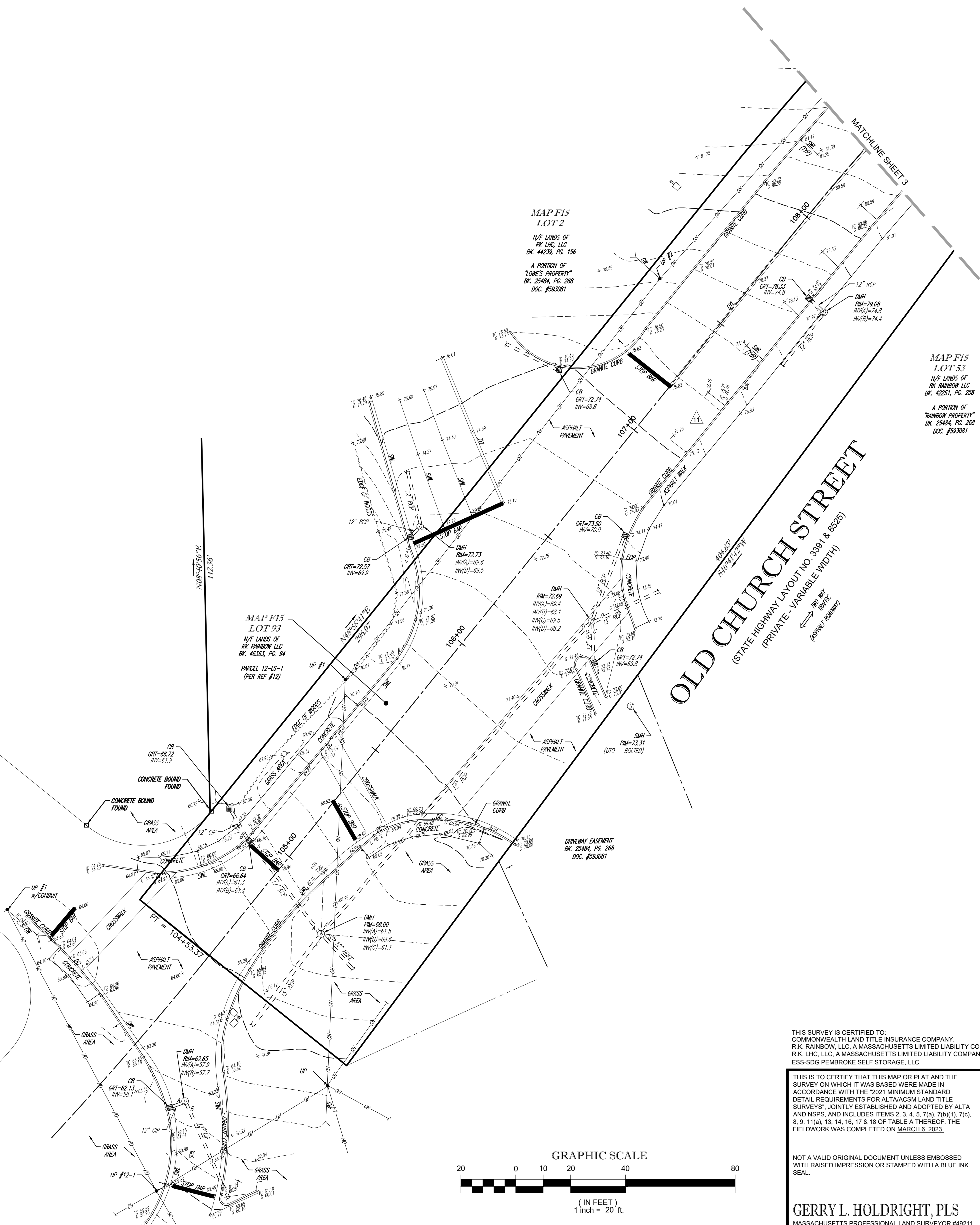
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 - SMH SANITARY/SEWER MANHOLE
 - CB CATCH BASIN OR INLET
 - DELINEATION FLAG



RIVERSIDE DRIVE
(PRIVATE - 50' WIDE R.O.W.)
100' WIDE R.O.W.
(ASPHALT PAVEMENT)

OLD CHURCH STREET
(STATE HIGHWAY LAYOUT NO. 3391 & 8525)
(PRIVATE - VARIABLE WIDTH)
100' WIDE R.O.W.
(ASPHALT PAVEMENT)



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GERRY L. HOLDRIGHT, PLS
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DRAWN	R.A.				
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