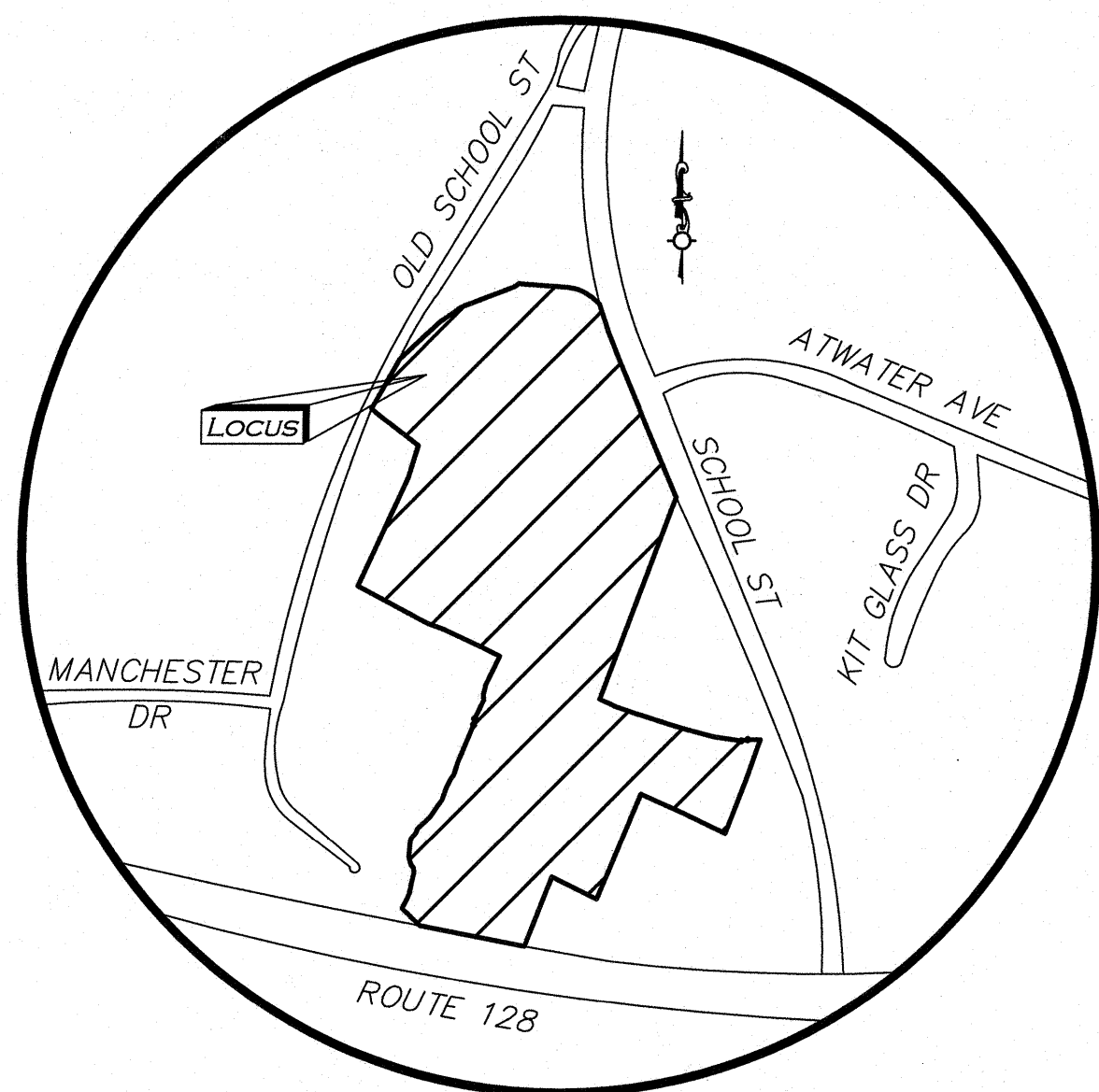


SITE DEVELOPMENT PLANS FOR
THE SANCTUARY
SCHOOL STREET
MANCHESTER-BY-THE-SEA, MA



LOCUS MAP
NOT TO SCALE

APPLICANT:
SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494
617-276-7261

LAND SURVEYOR, CIVIL ENGINEER:
ALLEN & MAJOR ASSOCIATES, INC.
100 COMMERCE WAY, SUITE 5
WOBBURN, MA 01801
781-935-6889

ARCHITECT:
EMBARC STUDIOS
60 K STREET
BOSTON, MA 02127
617-766-8330

WASTEWATER DESIGN CONSULTANT:
ONSITE ENGINEERING, INC.
279 EAST CENTRAL STREET, PMB 241
FRANKLIN, MA 02038
508-553-0616

ENVIRONMENTAL CONSULTANT:
GODDARD CONSULTING, LLC
291 MAIN STREET SUITE #8
NORTHBOROUGH, MA 01532
508-393-3784

LANDSCAPE ARCHITECT:
BOHLER ENGINEERING
45 FRANKLIN STREET, 5TH FLOOR
BOSTON, MA 02110
617-849-8040



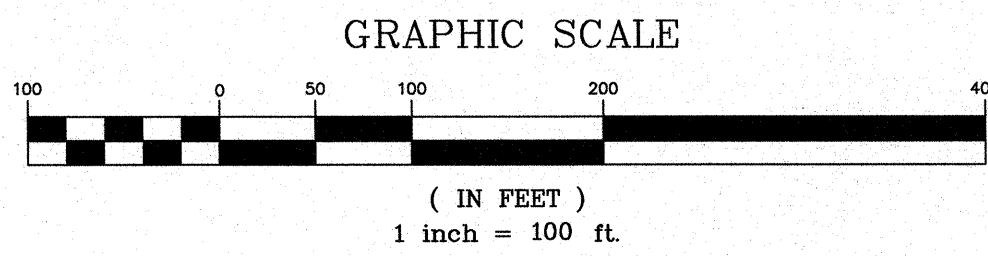
PREPARED BY:



ALLEN & MAJOR
ASSOCIATES, INC.
civil & structural engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com

100 COMMERCE WAY
WOBBURN MA 01801
SUITE 5
TEL: (781) 935-6889
FAX: (781) 935-2896

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LIST OF DRAWINGS			
CIVIL			
DRAWING TITLE	SHEET NO.	ISSUED	REVISED
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PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

ISSUED FOR COMPREHENSIVE PERMIT: JULY 16, 2021
REVISED PER COMMENTS: MARCH 23, 2022



NOTES

GENERAL NOTES:

1. TOPOGRAPHIC INFORMATION AND EXISTING SITE FEATURES WERE OBTAINED FROM AN ACTUAL FIELD SURVEY PERFORMED BY ALLEN & MAJOR ASSOCIATES, INC. 100 COMMERCE WAY, WOBURN, MASSACHUSETTS. SEE EXISTING CONDITIONS PLAN FOR MORE INFORMATION.
2. ZONING DISTRICT IS LIMITED COMMERCIAL DISTRICT (LCD) AND THE WATER RESOURCE OVERLAY PROTECTION DISTRICT – ZONE 3.
3. OVERALL LOT SIZE: 23.32± ACRES.
4. THIS SITE HAS AN ORDER OF RESOURCE AREA DELINEATION (ORAD DEP FILE #039–0834) CONFIRMING RESOURCE DELINATION UNDER THE STATE WETLANDS PROTECTION ACT. THE ORIGINAL ORAD HAS AN EXPIRATION DATE OF 5/25/2024.
5. DURING CONSTRUCTION, ALL VEHICLES MUST BE PARKED ON SITE.
6. DURING CONSTRUCTION, ALL STAGING AND DELIVERIES WILL OCCUR ON SITE.
7. THIS PROJECT WILL BE SERVED BY PUBLIC WATER AND SEWER AND PRIVATE NATURAL GAS, TELEPHONE, CABLE AND ELECTRIC. ALL UTILITY LINES WILL BE INSTALLED UNDERGROUND UNLESS OTHERWISE NOTED.
8. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS AT NO ADDITIONAL COST.
9. ALL PROPOSED MAIN BUILDING ENTRANCES AND WALKS SHALL BE HANDICAP ACCESSIBLE PER FEDERAL ADA & MA AAB REGULATIONS.
10. ALL SITE WORK DONE FOR THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE SITE PLANS AND SITE WORK SPECIFICATIONS FOR CONSTRUCTION. ONCE PROJECT SPECIFICATIONS ARE AVAILABLE, THE DPW SHALL BE ALLOWED TO REVIEW AND APPROVE THE DOCUMENT.
11. ANY DAMAGE TO PRIVATE OR PUBLIC PROPERTIES DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED AND RESTORED BY THE CONTRACTOR AT THEIR OWN EXPENSE.
12. ALL PROPERTY MARKERS AND STREET LINE MONUMENTS SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED AND RESTORED BY A SURVEYOR REGISTERED IN THE STATE OF MASSACHUSETTS AT THE CONTRACTOR'S EXPENSE.
13. ALL APPLICABLE PERMITS AND AN APPROVED SET OF PLANS SHALL BE AVAILABLE AT THE CONSTRUCTION SITE.
14. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE–CONSTRUCTION MEETING WITH THE APPROPRIATE TOWN DEPARTMENTS, THE APPROPRIATE UTILITY COMPANIES, THE OWNER AND OWNER'S REPRESENTATIVE. THE MEETING SHALL TAKE PLACE PRIOR TO THE START OF CONSTRUCTION AND THE CONTRACTOR MUST PROVIDE 48 HOURS NOTICE TO ALL ATTENDEES PRIOR TO THE START OF THE MEETING.
15. APPROPRIATE WARNING SIGNS, MARKERS, BARRICADES AND/OR FLAG MEN SHALL BE PROVIDED TO REGULATE TRAFFIC. CONSTRUCTION TRAFFIC CONTROLS SHALL BE IMPLEMENTED AND OPERATED ACCORDING TO THE MASS DEPARTMENT OF TRANSPORTATION, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE LOCAL AUTHORITY. THE CONTRACTOR SHALL COORDINATE WITH THE MASS–DOT AND THE LOCAL POLICE DEPARTMENT REGARDING THE USE OF FLAG–MEN IN THE RIGHT–OF–WAY.
16. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ADDITIONAL BENCHMARK INFORMATION IF REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING BENCHMARKS. IF IT IS NECESSARY TO RELOCATE A BENCHMARK, IT SHALL BE RELOCATED BY A MASSACHUSETTS PROFESSIONAL LAND SURVEYOR AND DONE SO AT THE CONTRACTOR'S EXPENSE.
17. ALL BUILDING DIMENSIONS ARE MEASURED TO THE OUTSIDE FACE OF THE BUILDING.
18. ALL RADII ARE 3 FEET UNLESS OTHERWISE NOTED.
19. ALL PARKING LOT AND AISLE DIMENSIONS ARE TAKEN FROM THE FACE OF CURB AND INDICATE EDGE OF PAVEMENT.
20. CONSTRUCTION DURING WET WEATHER OR WINTER CONDITIONS IS TO BE ANTICIPATED AND PROVISIONS TO ADEQUATELY ADDRESS THESE CONDITIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST.
21. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ANY PERMITS AND/OR CONNECTION FEES REQUIRED TO CARRY OUT THE WORK INCLUDING BUT NOT LIMITED TO DEMOLITION.
22. DISPOSAL OF ALL DEMOLISHED MATERIALS INCLUDING EXISTING MISC. CONSTRUCTION DEBRIS IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE DISPOSED OF OFF–SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL MUNICIPAL REQUIREMENTS AT NO ADDITIONAL COST.
23. ALL DISTURBED AREAS NOT NOTED TO RECEIVE OTHER TREATMENT ARE TO RECEIVE SIX INCHES (6") MINIMUM OF TOPSOIL & SEED, AND BE MAINTAINED UNTIL ESTABLISHED & ACCEPTED.
24. EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE PROTECTED, ABANDONED, REMOVED OR RELOCATED AS NECESSARY.
25. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH THE LOCAL MUNICIPALITY'S GOVERNING AUTHORITY'S SPECIFICATIONS AND SHALL BE APPROVED BY SAME.
26. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES TO DETERMINE EXACT POINT OF SERVICE CONNECTION AND DISCONNECTION AT EXISTING UTILITY.

27. ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE BENCHMARKS SHOWN ON THE EXISTING CONDITIONS SITE PLAN AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR AT GROUNDBREAKING.
28. CONTRACTOR IS RESPONSIBLE FOR DIGGING TEST HOLES AND VERIFYING ANY EXISTING UTILITY OR STRUCTURE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY THAT BASED ON EXACT LOCATION OF EXISTING UTILITIES, THERE ARE NO CONFLICTS BETWEEN THE EXISTING AND THE PROPOSED UTILITIES/DRAINAGE STRUCTURES.
29. THE CONTRACTOR SHALL ADHERE TO ALL PERMIT CONDITIONS PROVIDED BY ALL GOVERNING AGENCIES AT NO ADDITIONAL COSTS. THIS INCLUDES BUT IS NOT LIMITED TO BUILDING PERMITS, DEMOLITION PERMITS, PLUMBING, GAS, AND ELECTRICAL PERMITS. PERMITS FROM THE PLANNING BOARD OR TOWN COUNCIL.
30. DURING EXCAVATION, ANY EXISTING EARTH CUT MATERIALS THAT DO NOT MEET THE "ORDINARY FILL" SPECIFICATIONS OR "LOAM" SPECIFICATIONS AND CANNOT BE REUSED SHALL BE REMOVED OFFSITE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNERS. MATERIAL WHICH DOES NOT MEET THE SPECIFICATION INCLUDES ALL BOULDERS, ROCKS, CONSTRUCTION DEBRIS, AND MISC. MATERIAL. PRIOR TO REUSE, CONTRACTOR TO PROVIDE TESTING REPORT OF SOIL ANALYSIS TO ENGINEER FOR APPROVAL. CONTRACTOR CAN AMEND MATERIALS AND CONTINUE TO RETEST AS NECESSARY AT NO ADDITIONAL COST TO OWNER. AFTER AMENDING, IF MATERIAL STILL DOES NOT MEET THE SPECIFICATIONS, IT IS TO BE REMOVED FROM SITE AT NO ADDITIONAL COST TO THE OWNER AND IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
31. ANY PROPOSED SIGNAGE SHALL BE APPROVED BY SEPARATE APPLICATION TO THE APPROPRIATE MUNICIPAL AUTHORITY INCLUDING BUT NOT LIMITED TO THE ZONING BOARD OF APPEALS AND TOWN COUNCIL. ALL PROPOSED SIGNAGE MUST MEET THE REQUIREMENTS OF THE LOCAL ZONING CODE.

GRADING & DRAINAGE NOTES:

1. EXISTING PAVEMENT SHALL BE SAW–CUT AND PAVEMENT JOINT SHALL BE INSTALLED WHERE NECESSARY TO ENSURE A SMOOTH CONTINUOUS GRADE.
2. ALL GRADING OPERATIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANIES.
3. IN LANDSCAPED AREAS THE TOP ELEVATION OF ANY STRUCTURE (DRAIN MANHOLES, SEWER MANHOLES, CATCH BASINS, ETC.) SHALL MATCH THE FINISH GRADE OF THE TOPSOIL. IN PAVED AREAS THE TOP ELEVATIONS OF ANY STRUCTURE SHALL MATCH FINISH GRADE. STRUCTURES THAT ARE PART OF THE SEWER SYSTEM AND PARKING LOT DRAINAGE SHALL BE WATER–TIGHT TO PREVENT INFLOW.
4. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED AS SOON AS POSSIBLE UPON COMPLETION OF CONSTRUCTION WORK IN THE AREA.
5. TEMPORARY TUBULAR BARRIER PROTECTION AND/OR SILT SACKS SHALL BE INSTALLED AND MAINTAINED AT EXISTING DRAINAGE STRUCTURES DURING CONSTRUCTION TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE DRAINAGE SYSTEM.
6. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE PER DEMOLITION PLAN.
7. ALL CATCH BASINS, MANHOLES, INFILTRATION SYSTEMS, AND WATER QUALITY STRUCTURES ARE TO BE CLEANED TO REMOVE ALL CONSTRUCTION SILT AND DEBRIS PRIOR TO FINAL APPROVAL.
8. IF ANY EXISTING UTILITY STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER AT NO ADDITIONAL COST.
9. ALL STORM PIPES ENTERING STRUCTURES SHALL BE GROUTED TO ENSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
10. ALL STORM DRAIN MANHOLES SHALL HAVE TRAFFIC BEARING RING & COVERS & SHALL BE LABELED "DRAIN".
11. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
12. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
13. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES STEEPER THAN 3H:1V.
14. ALL DRAINAGE SYSTEM COMPONENTS SHALL CONFORM TO LOCAL REQUIREMENTS.

UTILITY NOTES:

1. THE LATEST STANDARDS OF THE LOCAL MUNICIPALITY SHALL BE FOLLOWED WHEN INSTALLING ANY STORM DRAIN WORK. STORM DRAIN WORK WILL BE INSPECTED BY THE LOCAL GOVERNING AUTHORITY PERSONNEL AND ALL COSTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION.
3. ABANDONED EXISTING UTILITIES AND UTILITIES TO BE ABANDONED SHALL EITHER BE ABANDONED IN PLACE AS NOTED OR SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED. ALL UTILITIES SCHEDULED FOR ABANDONMENT OR REMOVAL AND DISPOSAL MUST BE COORDINATED BY THE CONTRACTOR WITH THE RESPECTIVE UTILITY OWNER. WHEN ABANDONED UTILITIES ARE TO BE LEFT IN PLACE, PLUS OR CAP THE ENDS OF THE CONDUITS AND PIPES. REMOVE ABANDONED UTILITY MANHOLES, JUNCTION BOXES AND SIMILAR STRUCTURES TO A MINIMUM DEPTH OF 4 FEET BELOW FINISHED GRADE AND PUNCTURE OR BREAK THE BOTTOM SLABS OF MANHOLES AND SIMILAR STRUCTURE TO ALLOW DRAINAGE. BACKFILL AND COMPACT EXCAVATIONS RESULTING FROM REMOVAL OF UTILITY FACILITIES, AS REQUIRED TO RESTORE THE ORIGINAL GRADE.
4. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENTS OF NATURAL GAS, ELECTRIC, TELEPHONE AND ANY OTHER UTILITY BY THE UTILITY OWNER.
5. THE CONTRACTOR SHALL USE THE FOLLOWING PIPE MATERIALS:
- DRAIN – HDPE (HIGH DENSITY CORRUGATED POLYETHYLENE PIPE WITH SMOOTH INNER WALL), ASTM D2321 (UNLESS OTHERWISE SPECIFIED ON PLAN)

- SEWER – PVC (POLYVINYL CHLORIDE), SDR 35
 - WATER – C.L.D.I. (CEMENT–LINED DUCTILE IRON)
8. BEFORE UTILITY WORK BEGINS, THE CONTRACTOR WILL COORDINATE WITH THE LOCAL MUNICIPALITY FOR THE APPROPRIATE PERMIT AND INSPECTION FEES.
9. A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN WATER MAINS AND SANITARY SEWER MAINS AND/OR STORM DRAINS. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER MAIN, THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH AND THE DIFFERENCE IN ELEVATION BETWEEN THE WATER MAIN AND THE SEWER MAIN SHALL BE AT LEAST 18 INCHES WHEN THE WATER UTILITY IS ABOVE THE SEWER UTILITY.
10. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
11. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITY'S INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
12. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
13. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 5'–0" COVER AND A MAXIMUM OF 8'–0" COVER ON ALL WATERLINES.
14. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATERLINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING, THE WATERLINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE BETWEEN THE PIPES. WHERE THE WATERLINE IS LESS THAN THE 18" VERTICAL CLEARANCE AND MEETING 10' HORIZONTAL CLEARANCE CANNOT BE MET, THE WATER MUST BE WRAPPED IN A POLY WRAP AND ENCASED IN CONCRETE.
15. WATER LINE SHALL BE WRAPPED IN A POLY–WRAP BEFORE BEING ENCASED IN CONCRETE TO ENSURE THAT THE CONCRETE DOES NOT CORRODE THE NEWLY INSTALLED WATER LINE. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH OF 3000 P.S.I.
16. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE SPECIFICATIONS OF THE LOCAL AUTHORITIES WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER, SEWER, GAS AND ELECTRICAL AND TELECOMMUNICATIONS LINES.
17. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICE.
18. DRAWINGS DO NOT NECESSARILY SHOW ALL EXISTING UTILITIES.

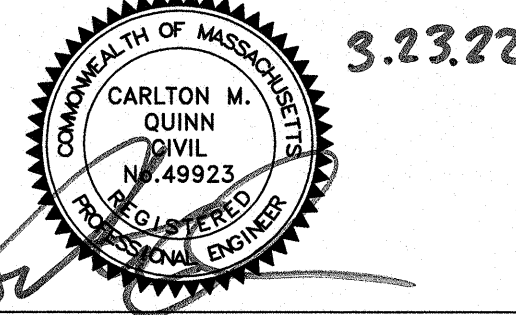
ABBREVIATIONS

ABAN	ABANDON	L	LENGTH
ADJ	ADJUST	LB	LEACHING BASIN
		LP	LIGHT POLE
B	BORING		
BC	BOTTOM OF CURB	MAT	MATERIAL
BIT	BITUMINOUS	MAX	MAXIMUM
BCB	BITUMINOUS CONCRETE BERM	MH	MANHOLE
BLDG	BUILDING	MIN	MINIMUM
BM	BENCH MARK	MISC	MISCELLANEOUS
BOS	BOTTOM OF SLOPE	MTD	MOUNTED
BOW	BOTTOM OF WALL	MW	MONITORING WELL
BRK	BRICK		
BV&B	BUTTERFLY VALVE & BOX	N	NORTH
BWV	BORDERING VEGETATED WETLAND	NIC	NOT IN CONTRACT
		NO	NUMBER
		NTS	NOT TO SCALE
CATV	CABLE TELEVISION		
CB	CATCH BASIN	OC	ON CENTER
CFS	CUBIC FEET	OD	OUTSIDE DIAMETER
CI	CAST IRON (PIPE)	OW	OVERHEAD WIRE
CL	CENTERLINE	OWHD	OVERHEAD
CLDI	CEMENT LINED DUCTILE IRON (PIPE)	OWH	OBSERVATION WELL
CM	CONSTRUCTION MANAGER		
CMP	CORRUGATED METAL PIPE	PC	POINT OF CURVATURE
CO	CLEAN OUT	PCC	PRECAST CONCRETE CURB
CONC	CONCRETE	PI	POINT OF INTERSECTION
CONST	CONSTRUCTION	PKG	PARKING
CONT	CONTRACTOR	PL	PROPERTY LINE
CRD	COORDINATE	PLMB	PLUMBING
CPP	CORRUGATED POLYETHYLENE PIPE	PCC	POINT ON CURVATURE
CUL	CULVERT	POT	POINT ON TANGENT
CY	CUBIC YARD	PRC	POINT OF REVERSE CURVATURE
		PROP. P	PROPOSED
		PVC	POINT (OR POINT OF TANGENT) POLYVINYL CHLORIDE (PIPE)
DB	DISTRIBUTION BOX		
DEM	DEMOLISH	R&R	REMOVE & RESET/REPLACE
DET	DETENTION	R&S	REMOVE & STACK
DIA	DUCTILE IRON (PIPE)	REC	REINFORCED CONCRETE PIPE
DI	DIAMETER	RD	ROAD (OR ROOF DRAIN)
DIM	DIMENSION	RED	REDUCER
DMH	DRAIN MANHOLE	RELOC	RELOCATE
DW	DOMESTIC WATER (OR DRY WELL)	REM	REMOVE
DWG	DRAWING	RET	RETAIN, RETAINING OR RETENTION
DYCL	DOUBLE YELLOW CENTERLINE	ROW	RIGHT OF WAY
		RR	RAILROAD
		RWL	RAIN WATER LEADER
		RWY	ROADWAY
EHH	ELECTRIC HANDHOLE		
EL	ELEVATION	SD	SUBDRAIN
ELEC	ELECTRIC	SF	SQUARE FEET
EMH	ELECTRIC MANHOLE	SGC	SLOPED GRANITE CURB
EOP	EDGE OF PAVEMENT	SMH	SEWER MANHOLE
EOR	EDGE OF ROAD	SP	STANDPIPE
EOW	EDGE OF WETLANDS	SPEC	SPECIFICATION
ETC	ELECTRIC, TELEPHONE, CABLE	STA	STATION
EXIST	EXISTING	STD	STANDARD
EXT	EXTERIOR	STRTL	STRUCTURAL
		SWEL	SOLID WHITE EDGE LINE
FA	FIRE ALARM	SW	SIDEWALK
FCC	FLUSH CONCRETE CURB	SWLL	SOLID WHITE LANE LINE
FES	FLARED END SECTION	SYCL	SOLID YELLOW CENTERLINE
FFE	FINISH FLOOR ELEVATION		
FLNP	FIRE LANE NO PARKING		
FFS	FEET PER SECOND	TB	TEST BORING
FS	FIRE SERVICE	TC	TOP OF CURB
FT	FOOT/FEET	TD	TRENCH DRAIN
		TEL. T	TELEPHONE
		TMH	TELEPHONE MANHOLE
		TOS	TOP OF SLOPE
		TOW	TOP OF WALL
		TP	TEST PIT
		TS&V	TAPPING SLEEVE & VALVE
		TYP	TYPICAL
		UD	UNDERDRAIN
		UL	UNDERWRITERS LABORATORY
		UP	UTILITY POLE
		VCP	VITRIFIED CLAY PIPE
		VERT	VERTICAL
		VGC	VERTICAL GRANITE CURB
		WD	WOOD
		WG	WATER GATE
		WM	WATER MAIN
		WMH	WATER MANHOLE
		WSO	WATER SHUTOFF
ID	INSIDE DIAMETER		
IN	INCHES		
INCL	INCLUDE		
INST	INSTALLED		
INV. I.E.	INVERT, INVERT ELEVATION		

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PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

A	03-23-2022	REVISED PER COMMENTS
REV	DATE	DESCRIPTION

APPLICANT/OWNER:

SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

PROJECT:

THE SANCTUARY
SCHOOL STREET
MANCHESTER-BY-THE-SEA, MA

PROJECT NO.	2725-01	DATE:	07-16-2021
SCALE:	N/A	DWG. NAME:	C272501
DESIGNED BY:	CMQ/SIL	CHECKED BY:	CMQ

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBURN MA 01801-8501
TEL: (781) 955-6889
FAX: (781) 955-2896

WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

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DRAWING TITLE:	SHEET No.
ABBREVIATIONS & NOTES	C-001

EROSION CONTROL NOTES

EROSION & SEDIMENTATION CONTROL NOTES:

- EROSION CONTROL SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL BE ADEQUATE TO MAINTAIN SEDIMENT ON SITE. ANY MODIFICATIONS TO SILT CONTROLS SHOWN ON THE APPROVED PLANS AS A RESULT OF ACTUAL FIELD CONDITIONS OR CONSTRUCTION CASES SHALL BE INSTALLED IN ACCORDANCE WITH S.M.P. (BEST MANAGEMENT PRACTICES) PER THE E.P.A. 2017 "CONSTRUCTION GENERAL PERMIT" MANUAL, AND MASSACHUSETTS 2003 EROSION & SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS, ANY SUCH MODIFICATIONS FROM THE ABOVE MANUALS SHALL BE INSTALLED AS APPROVED BY THE ENGINEER OR THE LOCAL MUNICIPALITY.
2. AREAS OF EXPOSED SOIL UNDERGOING CONSTRUCTION THAT WILL NOT BE COVERED AND/OR FINISHED GRADED SHALL BE STABILIZED AS SOON AS PRACTICABLE BY THE FOLLOWING CASES: (1) STOCKPILING OF SOIL IN ACCORDANCE WITH S.M.P. (UNLESS MUNICIPALITY HAS STRICTER REQUIREMENTS WHICH SHALL BE FOLLOWED) IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED, TEMPORARY EROSION CONTROL MEASURES SHALL INCLUDE EROSION CONTROL MESH, NETTING OR MULCH AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND SHOWN ON THE DESIGN PLANS. IF MULCH IS USED, STRAW MULCH SHALL BE APPLIED AT THE RATE OF 4 BALES PER 1,000 SQUARE FEET. APPLICATION AREA SHALL BE SUFFICIENTLY COVERED WITH MULCH TO AVOID ANY VISIBLE SOIL EXPOSURE. MULCH SHALL BE KEPT MOIST TO PREVENT DRYING OUT. (2) DISTURBED AREAS WITHIN 100 FEET OF ANY OF ALL GRASSED WATERWAYS, IN VEGETATED SLOPES WHICH EXCEED 15% AND DISTURBED AREAS WITHIN 100 FEET OF WETLANDS OR STREAMS.
3. IF DISTURBED AREAS DO NOT RECEIVE FINAL SEEDING BY OCTOBER 1ST OF THE CONSTRUCTION YEAR, THEN ALL DISTURBED AREAS SHALL BE SEEDDED WITH A WINTER COVER CROP AT THE RATE OF 3 LBS PER 1,000 SQUARE FEET. WINTER SEEDING SHALL BE COVERED WITH EROSION CONTROL MESH (MULCH AND NETTING). HEAVY EROSION AREAS SHALL BE STOCKPILED AND STOCKPILING SHALL BE PROHIBITED ON VEGETATED SLOPES IN EXCESS OF 15%, AND ANY DISTURBED AREAS WITHIN 100 FEET OF WETLANDS OR STREAMS. MULCH AND NETTING SHALL ALSO BE PROVIDED FOR ADDITIONAL WINTER PROTECTION.
4. ALL TOPSOIL SHALL BE COLLECTED, STOCKPILED, SEEDDED WITH RYE AT 3LBS PER 1,000 SQUARE FOOT AND MULCHED, AND REUSED AS REQUIRED. TUBULAR BARRIERS SHALL BE INSTALLED DOWN-DRIFT OF THE STOCKPILED SOIL. A LOAM SHALL BE STOCKPILED AT LOCATIONS DESIGNATED BY THE OWNER AND ENGINEER.
5. ALL TUBULAR BARRIERS, SILT SACKS, AND EROSION CONTROL BERMS SHALL BE INSTALLED ACCORDING TO THE SITE PREPARATION PLAN. THESE SHALL BE MAINTAINED DURING DEVELOPMENT TO REMOVE SEDIMENT FROM RUNOFF WATER. ALL THE FILTER BARRIERS AND EROSION CONTROL BERMS SHALL BE INSPECTED AFTER ANY RAINFALL IN ORDER TO BE MAINTAINED AND CLEANED UP. ALL AREAS HAVE AT LEAST 85-90% VIGOROUS PERENNIAL COVER OF GRASSES.
6. ADJACENT ROADS SHALL BE PERIODICALLY SWEEP OR WASHED TO AVOID TRACKING MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA AS OFTEN AS NECESSARY (WHICH COULD BE ON A DAILY BASIS) TO REMOVE ANY SOIL OR SEDIMENTS AT NO ADDITIONAL COST TO THE OWNER. A WATERING TRUCK WILL BE USED TO PERIODICALLY SPRINKLE CONSTRUCTION AREAS IN ORDER TO KEEP THE LEVEL OF DUST TO A MINIMUM DURING THE DRY MONTHS AT NO ADDITIONAL COST TO THE OWNER.
7. THE CONTRACTOR SHALL USE EXTREME CAUTION TO AVOID ALLOWING SEDIMENTS TO ENTER THE STORM DRAIN SYSTEM DURING CONSTRUCTION. BOTH EXISTING AND PROPOSED STORM CATCH BASINS SHALL BE PROTECTED DURING CONSTRUCTION BY THE USE OF SILT SACKS AND/OR TUBULAR BARRIERS AROUND EACH INLET AS NOTED ON THE PLANS. INLET PROTECTION MAY BE REMOVED ONLY AFTER FINISHED AREAS ARE PAVED AND THE VEGETATED SLOPES ARE ESTABLISHED WITH AT LEAST 85-90% OF VIGOROUS PERENNIAL GROWTH.
8. AS APPLICABLE, EROSION CONTROL MESH SHALL BE APPLIED IN ACCORDANCE WITH THE PLANS OVER ALL FINISHED SEEDED AREAS AS SPECIFIED ON THE DESIGN PLANS.
9. AT A MINIMUM, ALL TUBULAR BARRIERS AND FILTER FABRIC SHALL REMAIN IN PLACE UNTIL SEEDINGS OR PLANTINGS HAVE BECOME 85-90% ESTABLISHED. THE LOCAL CONSTRUCTION CODE SHALL BE FOLLOWED TO REMOVE OR RELOCATION OF ANY OF THE TUBULAR BARRIERS AND FILTER FABRIC. ONCE THE TUBULAR BARRIERS ARE REMOVED THE AREAS ARE TO BE LOAMED AND SEEDDED TO ACHIEVE FULL STABILIZATION.
10. AT THE OWNER'S DISCRETION ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED TO MAINTAIN STABILITY OF EARTHWORKS AND FINISHED GRADED AREAS. THE CONTRACTOR, AT HIS EXPENSE, WILL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY ADDITIONAL MEASURES AS SPECIFIED. THE CONTRACTOR SHALL BE SUBJECT TO LIMITS TO REQUESTS BY MA DEP, ENGINEER AND THE LOCAL MUNICIPALITY, AS AUTHORIZED BY THE OWNER. FAILURE TO COMPLY WITH THE OWNER'S DIRECTIONS WILL RESULT IN DISCONTINUATION OF CONSTRUCTION ACTIVITIES.
11. INSPECTIONS AND MONITORING MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. WEEKLY INSPECTIONS SHALL BE HELD THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITY. WEEKLY INSPECTION REPORTS SHALL BE MAINTAINED AND SUBMITTED TO THE MA DEP AND LOCAL CONSTRUCTION FIELD OFFICE ONSITE. IN ADDITION TO THE NORMAL WEEKLY INSPECTIONS, THE CONTRACTOR SHALL PERFORM AN INSPECTION OF ALL EROSION CONTROL MEASURES AFTER EACH RAINFALL OR RUNOFF EVENT, AND PERFORM THE NECESSARY REPAIRS. THE INSPECTIONS SHALL INCLUDE BUT NOT BE LIMITED TO THE SITE'S DOWN STREAM DISCHARGE POINTS.
12. IF ANY EVIDENCE OF SEDIMENTATION IS OBSERVED AT THE STORMWATER MANAGEMENT AREA INLETS, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, PROVIDE A PLAN TO THE ENGINEER TO REMOVE ANY ACCUMULATED SEDIMENT IN THESE AREAS. THE CONTRACTOR SHALL ALSO IMMEDIATELY PROVIDE ADDITIONAL ON SITE EROSION AND SEDIMENTATION CONTROL MEASURES TO PREVENT FURTHER DEGRADATION OF THE AREA.
13. FOLLOWING THE TEMPORARY OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMI-MONTHLY TO ENSURE THE AREAS HAVE A MINIMUM OF 85% MULCH COVERED. PERMANENT GROWTH, RE-SEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.
14. CONTRACTOR & ALL SITE SUBCONTRACTORS SHALL BE FAMILIAR WITH & FOLLOW ALL APPROVED PERMITS AND CONDITIONS. CONTRACTOR SHALL MAINTAIN A COPY OF ALL APPROVED PERMITS ONSITE. ALL CONDITIONS & RECOMMENDATIONS WITHIN THE APPROVED PERMITS SHALL BE COMPLETED.
15. ALL EROSION MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL BE ADEQUATE TO MAINTAIN SEDIMENT ON SITE. ANY MODIFICATIONS SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER OR THE LOCAL MUNICIPALITY.
16. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED DURING CONSTRUCTION, AND SHALL REMAIN IN PLACE UNTIL ALL SITE WORK IS COMPLETE AND GROUND COVER IS ESTABLISHED.
17. TOP OF STOCKPILES SHALL BE COVERED IN SUCH MANNER THAT STORMWATER DOES NOT INTRATE THE MATERIALS AND THEREBY RENDER THE SAME UNSUITABLE FOR FILL USE.

EROSION & SEDIMENTATION CONTROL NOTES (CONTINUED):

18. ALL DISTURBED OR EXPOSED AREAS SUBJECT TO EROSION SHALL BE STABILIZED WITH MULCH OR SEEDED FOR TEMPORARY VEGETATIVE COVER. NO AREA, SUBJECT TO EROSION, SHALL BE LEFT DISTURBED AND UNSTABILIZED FOR PERIODS LONGER THAN IS NECESSARY TO PREVENT OR CORRECT EROSION. THE CONSTRUCTION WORK OR SIX MONTHS AFTER SOIL HAS BEEN DISTURBED WHICHEVER IS LESS.
19. CULVERT/PIPE INLETS AND OUTFALLS SHALL BE PROTECTED BY TUBULAR BARRIER FILLING WITH STONE CHECK DAMS UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED.
20. TUBULAR BARRIER DIKES SHALL BE CONSTRUCTED AT ALL EXISTING & PROPOSED CATCH BASINS. NO SEDIMENTATION SHALL ENTER THE ON-SITE OR OFF-SITE DRAINAGE SYSTEMS AT ANY TIME.
21. ALL EROSION CONTROL MEASURES SHALL BE ROUTINELY INSPECTED, CLEANED AND REPAIRED OR REPLACED AS NECESSARY THROUGHOUT ALL PHASES OF CONSTRUCTION. IN ADDITION, INSPECTIONS SHALL TAKE PLACE WEEKLY BEFORE AND AFTER EACH RAINFALL EVENT.
22. ALL PROPOSED SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH JUTE MESH AND PROTECTED FROM EROSION UNTIL WORK IS COMPLETE AND GROUND COVER IS ESTABLISHED.
23. THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES ADDITIONAL TUBULAR BARRIERS FOR INSTALLATION AT THE DIRECTION OF THE ENGINEER OR THE TOWN ENGINEER TO MITIGATE ANY EMERGENCY CONDITION.
24. AS CONSTRUCTION DISTURBANCE IS GREATER THAN 1 ACRE, A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION GENERAL PERMIT NOI, AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) WILL NEED TO BE SUBMITTED TO THE EPA. THE NPDES PERMIT FOR STORM WATER DISCHARGE, & CONSTRUCTION GENERAL PERMIT NOI WILL BE REQUIRED TO BE SUBMITTED AT LEAST 14 DAYS PRIOR TO COMMENCING CONSTRUCTION BY THE CONTRACTOR. ALLEN & MAJOR WILL PREPARE AND SUBMIT THIS MATERIAL ON BEHALF OF WP EAST ACQUISITIONS, LLC., PRIOR TO THE START OF CONSTRUCTION.
25. OWNER AND CONTRACTOR ARE RESPONSIBLE FOR COMPLIANCE WITH THE CONSTRUCTION GENERAL PERMIT NOI. WEEKLY SWPPP INSPECTION REPORTS TO BE PERFORMED BY CONTRACTOR. COPIES OF ALL SWPPP INSPECTION REPORTS SHALL BE PROVIDED TO THE LOCAL MUNICIPALITY, EPA, DEP, OR ANY OTHER AUTHORITY REQUESTING WITHIN 3 DAYS OF EACH INSPECTION.
26. APPLICABLE WORK AND MATERIALS SHALL COMPLY WITH ALL LOCAL, MA DEP, EPA CONSTRUCTION GENERAL PERMIT STANDARDS. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF THE SWPPP. THE CONTRACTOR SHALL FOLLOW SOIL CONSERVATION SERVICE VEGETATIVE PRACTICES IN SITE DEVELOPMENT.
27. A WATERING TRUCK SHALL BE USED TO PERIODICALLY SPRINKLE CONSTRUCTION AREAS IN ORDER TO KEEP THE LEVEL OF DUST TO A MINIMUM DURING THE DRY MONTHS AND AS REQUIRED.
28. IF DETERMINING IS NECESSARY IT SHALL ONLY BE COMPLETED AS FOLLOWS: THE DISCHARGE SHALL BE STOPPED IMMEDIATELY IF THE RECEIVING AREA SHOWS ANY SIGN OF INSTABILITY OR EROSION, ALL CHANNELS, SWALES, AND DITCHES DUG FOR DISCHARGING WATER FROM THE EXCAVATED AREA SHALL BE STABLE PRIOR TO ALLOWING WATER DISCHARGE TO THEM. IF NECESSARY, IF POSSIBLE, IF USED, IT SHALL EMPTY THE MATERIAL TO A STABLE AREA, NO DETERATING SHALL OCCUR DURING PERIODS OF INTENSE, HEAVY RAIN. FLOW TO THE SEDIMENT REMOVAL STRUCTURE SHALL NOT EXCEED THE STRUCTURE'S CAPACITY TO SETTLE AND FILTER FILL VOLUM. THEIR SPECIFIC REQUIREMENTS UNDER THE PERMIT FROM THE SEDIMENT REMOVAL STRUCTURE SHALL DRAIN TO A WELL-VEGETATED BUFFER BY SHEETING FLOW WHILE MAXIMIZING THE DISTANCE TO THE NEAREST WATER RESOURCE AND MINIMIZING THE SLOPE OF THE BUFFER AREA. THERE SHALL BE NO DIRECT DISCHARGE TO ANY WETLANDS OR STREAMS. ALL DISCHARGE SHALL BE IN COMPLIANCE WITH STATE, LOCAL, AND FEDERAL REQUIREMENTS.
29. INITIATE STABILIZATION OF EXPOSED AREAS IMMEDIATELY IF CONSTRUCTION WORK TEMPORARILY OR PERMANENTLY CEASES.
30. ALL DISCHARGES FROM POLLUTION SOURCES ARE PROHIBITED ONSITE SUCH AS FUELS, WASTEWATER FROM WASH OUT OF CONCRETE, WASTEWATER FROM CLEAN OUT OF PAINTS, FORM RELEASE OILS, SOLVENTS, ADHESIVES, CURING COMPOUNDS, POLLUTANTS USED FOR MAINTENANCE OF VEHICLES AND EQUIPMENT, SOAPS & SOLVENTS, TOXIC OR HAZARDOUS SUBSTANCES, CHEMICALS AND OILS. IF A POLLUTANT IS DISCHARGED IT SHALL BE IMMEDIATELY CLEANED UP BY REMOVING THE CHEMICAL AND AFFECTED SOIL OR AREA OF SPILL FROM THE SITE IN ACCORDANCE WITH BOTH THE MANUFACTURER RECOMMENDATIONS, FEDERAL, STATE, AND LOCAL REQUIREMENTS. DO NOT HOSE DOWN AND SPREAD SPILLED ITEM. ALL CHEMICALS USED ON THE SITE SHALL BE IN LEAK-PROOF CONTAINERS STORED AWAY FROM WETLANDS, SURFACE WATERS, STORMWATER INLETS, AND DRAINAGE MEASURES. SPILL KITS SHALL BE AVAILABLE ONSITE FOR EMERGENCY USE. THERE SHALL BE A SECONDARY CONTAINMENT MEASURE OF ALL CHEMICALS IN ADDITION TO SPILL-PROOF CONTAINERS.
31. PRIOR TO COMMENCEMENT OF CONSTRUCTION, APPLICABLE CONTRACTOR PERSONNEL MUST HAVE AN UNDERSTANDING OF THE EPA CONSTRUCTION GENERAL PERMIT REQUIREMENTS AND THEIR SPECIFIC REQUIREMENTS UNDER THE PERMIT. AT A MINIMUM, PERSONNEL MUST BE TRAINED AND UNDERSTAND THE FOLLOWING: LOCATION OF ALL STORMWATER CONTROLS AND HOW TO MAINTAIN THEM, PROCEDURES FOR COMPLYING WITH THE POLLUTION PREVENTION REQUIREMENTS, PROCEDURES FOR CONDUCTING INSPECTIONS, RECORDING FINDINGS, AND TAKING CORRECTIVE ACTION.
32. ALL SEDIMENT TRACKED ONTO ROADWAYS MUST BE REMOVED AT END OF EACH WORK DAY.
33. ALL USE OF CATIONIC TREATMENT CHEMICALS (EXAMPLES INCLUDE POLYMERS, CHITOSAN, CATIONIC PAM, FLOCULANTS OR OTHER CHEMICAL UTILIZED FOR STABILIZATION) ARE PROHIBITED. IF ALL OTHER AVAILABLE STABILIZATION MEASURES ARE UNAVAILABLE AND OF NO USE, THE CONTRACTOR SHALL ABSOLUTELY NECESSARY, THE CONTRACTOR WILL NEED TO CONTACT THE EPA NEW ENGLAND OFFICE IN WRITING FOR APPROVAL AND SPECIFIC REQUIREMENTS (MAXIMUM DOSAGE RATE, RESIDUAL TESTING, SPECIFIC LIMITATIONS, ETC) PRIOR TO USE.
34. IF USING NON-VEGETATIVE STABILIZATION MEASURES, IT MUST BE COMPLETED NO LATER THAN 14 DAYS AFTER INITIATING STABILIZATION. ALL AREAS OF EXPOSED SOILS MUST BE COVERED.
35. INSPECTIONS OF EROSION CONTROL MEASURES SHALL BE AT LEAST ONCE EVERY 7 DAYS BY THE CONTRACTOR. AT A MINIMUM INSPECTIONS SHALL INCLUDE ALL DISTURBED AREAS, ALL STORMWATER CONTROLS AND POLLUTION PREVENTION MEASURES. ALL LOCATIONS WHERE STABILIZATION MEASURES HAVE BEEN IMPLEMENTED, EQUIPMENT AND MATERIAL STORAGE AREAS, ALL AREAS WHERE STORMWATER FLOWS AND ALL POINTS OF DISCHARGE, WHEN CORRECTIVE ACTIONS ARE REQUIRED, THE CONTRACTOR MUST TAKE THE FOLLOWING STEPS TO CORRECT EROSION: 1. IDENTIFY THE EROSION. 2. PERMANENT SOLUTIONS MUST BE IMPLEMENTED. AS NECESSARY NEW OR MODIFIED CONTROLS MUST BE INSTALLED AND OPERATIONAL. THE REPAIR MUST BE COMPLETED WITHIN 7 DAYS FROM THE TIME OF DISCOVERY. WITHIN 24 HOURS OF A TRIGGERING CONDITION OCCURRING THAT REQUIRES A CORRECTIVE ACTION, A CORRECTIVE ACTION REPORT MUST BE COMPLETED.

MAINTENANCE:

ALL MEASURES STATED ON THE STORMWATER POLLUTION PREVENTION PLANS, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION BY CONTRACTOR UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT. AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF DERIVING, OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A HEALTHY STAND OF GRASS IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
3. ALL SEDIMENT CONTROLS SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE TUBULAR SEDIMENT CONTROLS WHEN IT REACHES HALF THE HEIGHT OF THE CONTROL MEASURE OR AS REQUESTED BY THE OWNER OR ENGINEER.
4. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
6. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN ORIGINAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.

CONSTRUCTION GENERAL PERMIT NOTES AND NARRATIVE:

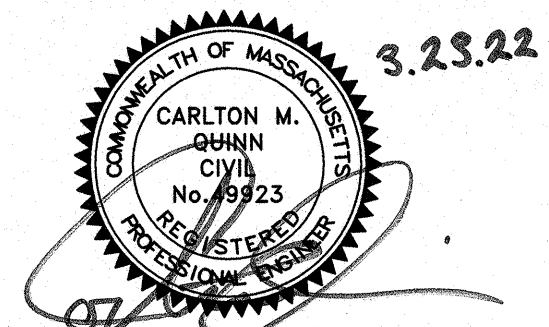
NARRATIVE: THE STORMWATER POLLUTION PREVENTION PLANS CONSIST OF THE SITE PREPARATION PLAN TOGETHER WITH AN EXISTING CONDITIONS PLANS, GRADING PLANS, ABBREVIATIONS AND NOTES SHEETS, AND DETAIL SHEETS.

THE EROSION CONTROL PLAN WILL BE IMPLEMENTED TO:

- A. TREAT EROSION AS SOON AS POSSIBLE AFTER DISTURBANCE.
- B. PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA AND ENTERING THE RECEIVING WATERS.
- C. CONSTRUCTION ACTIVITIES SHALL BE SCHEDULED TO MINIMIZE EROSION.
- D. ONLY DISTURB, CLEAR, OR GRADE AREAS NECESSARY FOR CONSTRUCTION.



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1-888-344-7233



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

A	03-23-2022	REVISED PER COMMENTS
REV	DATE	DESCRIPTION

APPLICANT\OWNER:

SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

PROJECT:

THE SANCTUARY
SCHOOL STREET
MANCHESTER-BY-THE-SEA, MA

PROJECT NO.	2725-01	DATE:	07-16-2021
SCALE:	N/A	DWG. NAME:	C-2725-01
DESIGNED BY:	CMQ/SJL	CHECKED BY:	CMQ

PREPARED BY



ALLEN & MAJOR
ASSOCIATES, INC.

civil engineering ♦ land surveying
environmental consulting ♦ landscape architecture

100 COMMERCE WAY, SUITE 4

ROBURN MA 01801-8

TEL: (781) 935-6889

FAX: (781) 985-2896

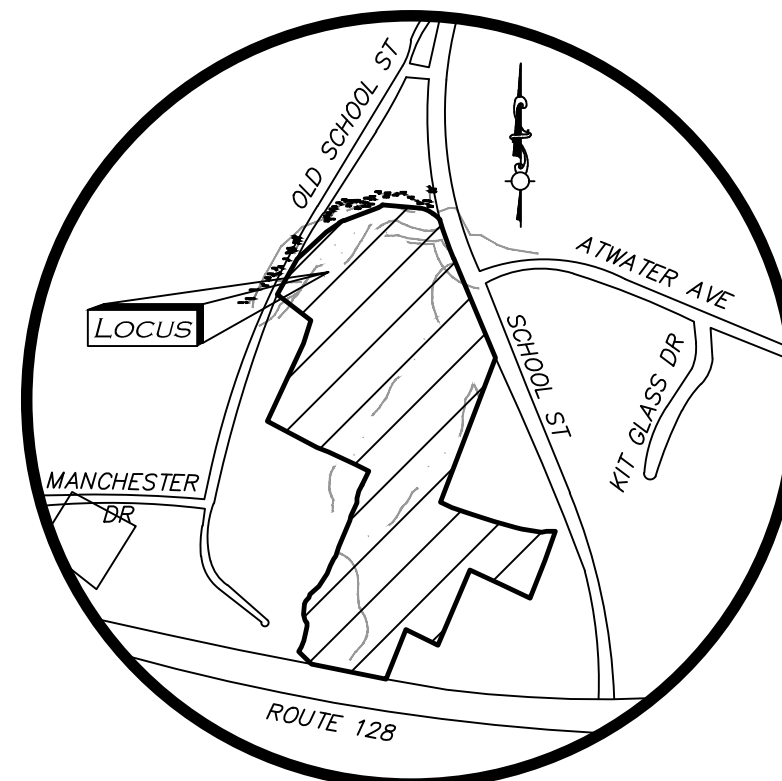
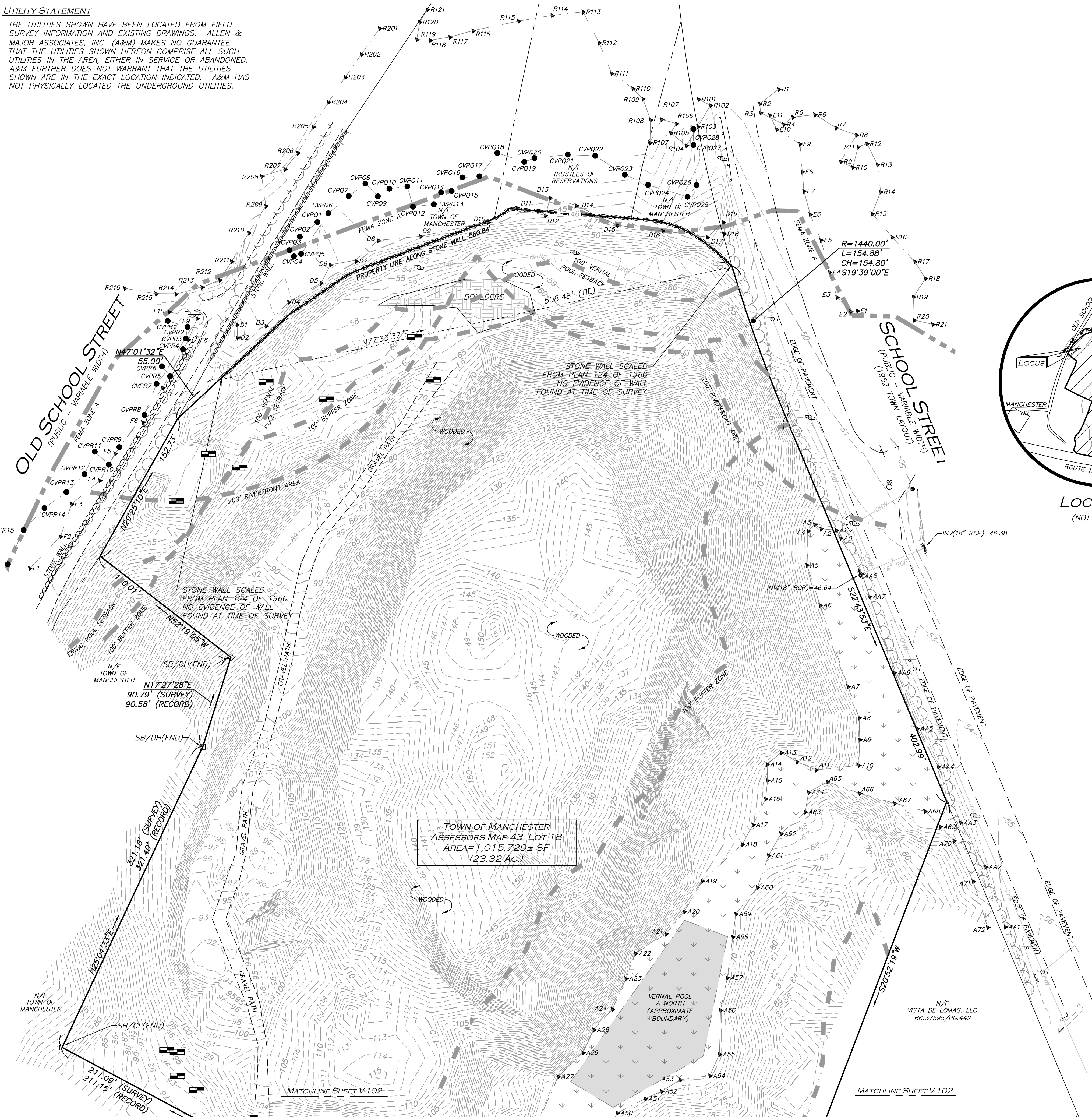
WOBURN, MA ♦ LAKEVILLE, MA ♦ MANCHESTER, NH

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DRAWING TITLE:	SHEET No.
ABBREVIATIONS & NOTES	C-002

UTILITY STATEMENT

THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. ALLEN & MAJOR ASSOCIATES, INC. (A&M) MAKES NO GUARANTEE THAT THE UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. A&M FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. A&M HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.



LOCUS MAP
(NOT TO SCALE)

LEGEND

DRILL HOLE (DH)	○
STONE BOUND (SB)	□
IRON ROD (IR)	◊
UTILITY POLE	⊙
UTILITY POLE W/RISER	⊕
UTILITY POLE W/LIGHT	⊗
GUY WIRE	—
GAS GATE	—
INVERT (INV)	—
FLARED END SECTION	—
TEST PIT LOCATION	—
WETLAND FLAG	—
WETLAND AREA	—
WETLAND	—
1' CONTOUR	—
5' CONTOUR	—
PROPERTY LINE	—
ABUTTERS LINE	—
STONE WALL	—
TREE LINE	—
EDGE OF PAVEMENT	—
EDGE OF GRAVEL	—
OVERHEAD WIRES	—
BITUMINOUS	BIT.
STONE BOUND W/DRILL HOLE	SB/DH
FOUND	FND
NOW OR FORMERLY	N/F
BOOK	BK.
PAGE	PG.

LOCUS REFERENCES

- TOWN OF MANCHESTER ASSESSORS MAP 43, LOT 18
- DEED BOOK 37672, PAGE 565
- PLAN 124 OF 1960
- OWNER OF RECORD: ANDREW BROWN, TRUSTEE OF THE BROWN FAMILY IRREVOCABLE TRUST OF 2012

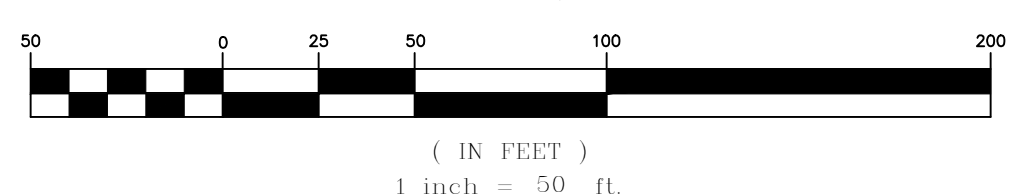
PLAN REFERENCES

- STATE HIGHWAY LAYOUT 3970
- STATE HIGHWAY LAYOUT 3992
- PLAN BOOK 229, PLAN 6

NOTES

- NORTH ARROW IS BASED ON MASSACHUSETTS GRID COORDINATE SYSTEM (MAINLAND ZONE) (NAD 83).
- BOOK/PAGE AND PLAN REFERENCES ARE TAKEN FROM ESSEX (SOUTH) REGISTRY OF DEEDS IN SALEM, MA.
- VERTICAL DATUM IS NAVD 88.
- CONTOUR INTERVAL IS ONE FOOT (1').
- WETLAND & RIVER FLAGS SHOWN HEREON DELINEATED BY GODDARD CONSULTING LLC AND FIELD LOCATED BY ALLEN & MAJOR ASSOCIATES INC. AND GODDARD CONSULTING LLC.
- THE FLOODPLAIN LINE SHOWN HEREON WAS SCALED FROM THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF MANCHESTER BY THE SEA MASSACHUSETTS ESSEX COUNTY COMMUNITY PANEL NUMBERS 250090 0432G AND 250090 0434G, BOTH HAVING AN EFFECTIVE DATE OF JULY 16, 2004.

GRAPHIC SCALE



N:\PROJECTS\2725-01\SURVEY\DRAWINGS\CURRENT\S-2725-01-EC.DWG
FB# 1736 PG. 109

WE HEREBY CERTIFY THAT:

THIS PLAN IS THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED ON OR BETWEEN NOVEMBER 21, 2019 AND APRIL 22, 2021.

THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 1, 1976 AND REVISED JANUARY 12, 1988.

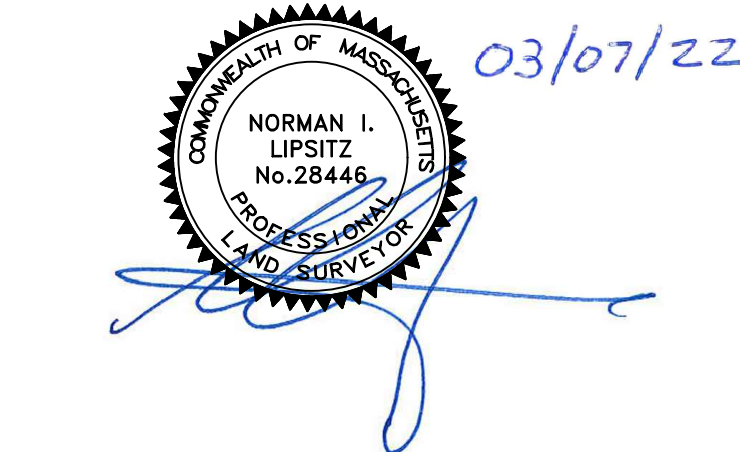
ACCORDING TO DEEDS AND PLANS OF RECORD, THE PROPERTY LINES SHOWN ON THIS PLAN ARE THE LINES DIVIDING EXISTING OWNERSHIP, AND THE LINES OF THE STREETS OR WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS AND WAYS ALREADY ESTABLISHED, AND THAT NO NEW LINES FOR THE DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN.

THE ABOVE CERTIFICATION IS INTENDED TO MEET REGISTRY OF DEEDS REQUIREMENTS FOR THE RECORDING OF PLANS AND IS NOT A CERTIFICATION TO THE TITLE OR OWNERSHIP OF THE PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN OF MANCHESTER ASSESSOR'S INFORMATION.

THE ABOVE IS CERTIFIED TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF.

ALLEN & MAJOR ASSOCIATES, INC.

MAR. 7, 2022
PROFESSIONAL LAND SURVEYOR FOR ALLEN & MAJOR ASSOCIATES, INC.



REV	DATE	DESCRIPTION
7.	03/07/22	VARIOUS REVISIONS
6.	05/27/21	100' BUFFER ZONE ADDED
5.	04/27/21	WETLAND LOCATION REVISION
4.	12/22/20	WETLAND LOCATION REVISION
3.	12/11/20	TEST PIT LOCATIONS ADDED
2.	11/19/20	RIVERFRONT BUFFERS ADDED
1.	11/18/20	WETLAND/RIVER FLAGS ADDED

APPLICANT/OWNER:

SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

PROJECT:

ASSESSORS MAP 43, LOT 18
SCHOOL STREET
MANCHESTER BY THE SEA, MA

PROJECT NO. 2725-01 DATE: 09/21/2020

SCALE: 1" = 50' DWG. NAME: S-2725-01-EC

DRAFTED BY: KAC CHECKED BY: NIL

PREPARED BY:



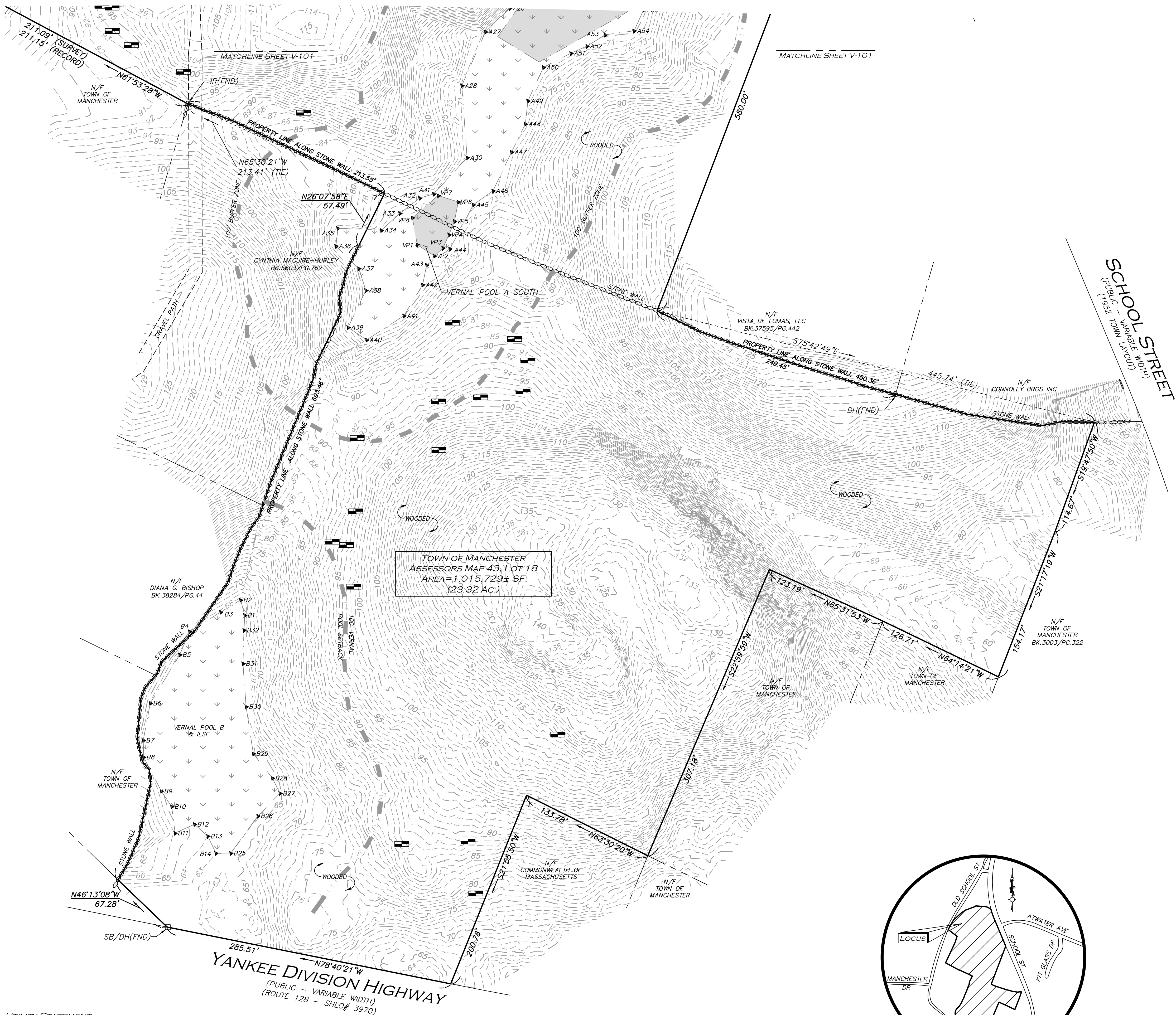
WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

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DRAWING TITLE: SHEET NO.

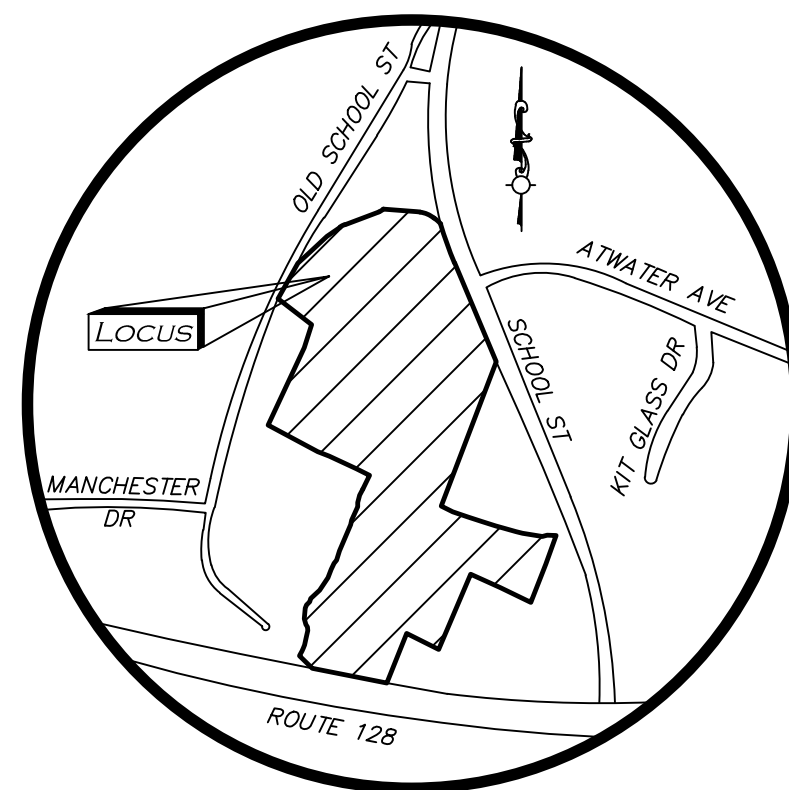
EXISTING CONDITIONS V-101

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UTILITY STATEMENT

THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. ALLEN & MAJOR ASSOCIATES, INC. (A&M) MAKES NO GUARANTEE THAT THE UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. A&M FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. A&M HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.



LOCUS MAP
(NOT TO SCALE)

LOCUS REFERENCES

- TOWN OF MANCHESTER ASSESSORS MAP 43, LOT 18
- DEED BOOK 37672, PAGE 565
- PLAN 124 OF 1960
- OWNER OF RECORD: ANDREW BROWN, TRUSTEE OF THE BROWN FAMILY IRREVOCABLE TRUST OF 2012

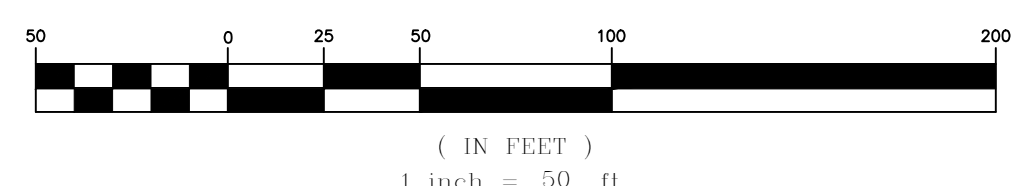
PLAN REFERENCES

- STATE HIGHWAY LAYOUT 3970
- STATE HIGHWAY LAYOUT 3992
- PLAN BOOK 229, PLAN 6

NOTES

1. NORTH ARROW IS BASED ON MASSACHUSETTS GRID COORDINATE SYSTEM (MAINLAND ZONE) (NAD 83).
2. BOOK/PAGE AND PLAN REFERENCES ARE TAKEN FROM ESSEX (SOUTH) REGISTRY OF DEEDS IN SALEM, MA.
3. VERTICAL DATUM IS NAVD 88.
4. CONTOUR INTERVAL IS ONE FOOT (1').
5. WETLAND & RIVER FLAGS SHOWN HEREON DELINEATED BY GODDARD CONSULTING LLC AND FIELD LOCATED BY ALLEN & MAJOR ASSOCIATES INC. AND GODDARD CONSULTING LLC.
6. THE FLOODPLAIN LINE SHOWN HEREON WAS SCALED FROM THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF MANCHESTER BY THE SEA MASSACHUSETTS ESSEX COUNTY COMMUNITY PANEL NUMBERS 250090 0432G AND 250090 0434G, BOTH HAVING AN EFFECTIVE DATE OF JULY 16, 2004.

GRAPHIC SCALE



N:\PROJECTS\2725-01\SURVEY\DRAWINGS\CURRENT\5-2725-01-EC.DWG
FB# 1736 PG. 109

FOR REGISTRY USE ONLY

LEGEND

DRILL HOLE (DH)	○
STONE BOUND (SB)	□
IRON ROD (IR)	○
UTILITY POLE	○
UTILITY POLE W/RISER	○
UTILITY POLE W/LIGHT	○
GUY WIRE	○
GAS GATE	○
INVERT (INV)	○
FLARED END SECTION	○
TEST PIT LOCATION	○
WETLAND FLAG	○
WETLAND AREA	○
WETLAND	○
1' CONTOUR	○
5' CONTOUR	○
PROPERTY LINE	○
ABUTTERS LINE	○
STONE WALL	○
TREE LINE	○
EDGE OF PAVEMENT	○
EDGE OF GRAVEL	○
OVERHEAD WIRES	○
BITUMINOUS	○
STONE BOUND W/DRILL HOLE	○
FOUND	○
NOW OR FORMERLY	○
BOOK	○
PAGE	○

WE HEREBY CERTIFY THAT:

THIS PLAN IS THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED ON OR BETWEEN NOVEMBER 21, 2019 AND APRIL 22, 2021.

THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 1, 1976 AND REVISED JANUARY 12, 1988.

ACCORDING TO DEEDS AND PLANS OF RECORD, THE PROPERTY LINES SHOWN ON THIS PLAN ARE THE LINES DIVIDING EXISTING OWNERSHIP, AND THE LINES OF THE STREETS OR WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS AND WAYS ALREADY ESTABLISHED, AND THAT NO NEW LINES FOR THE DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN.

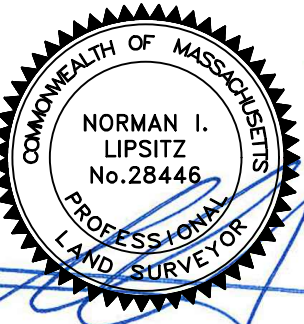
THE ABOVE CERTIFICATION IS INTENDED TO MEET REGISTRY OF DEEDS REQUIREMENTS FOR THE RECORDING OF PLANS AND IS NOT A CERTIFICATION TO THE TITLE OR OWNERSHIP OF THE PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN OF MANCHESTER ASSESSOR'S INFORMATION.

THE ABOVE IS CERTIFIED TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF.

ALLEN & MAJOR ASSOCIATES, INC.

MAR. 7, 2022

PROFESSIONAL LAND SURVEYOR FOR ALLEN & MAJOR ASSOCIATES, INC.



REV	DATE	DESCRIPTION
7.	03/07/22	VARIOUS REVISIONS
6.	05/27/21	100' BUFFER ZONE ADDED
5.	04/27/21	WETLAND LOCATION REVISION
4.	12/22/20	WETLAND LOCATION REVISION
3.	12/11/20	TEST PIT LOCATIONS ADDED
2.	11/19/20	RIVERFRONT BUFFERS ADDED
1.	11/18/20	WETLAND/RIVER FLAGS ADDED

APPLICANT/OWNER:

SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

PROJECT:

ASSESSORS MAP 43, LOT 18
SCHOOL STREET
MANCHESTER BY THE SEA, MA

PROJECT NO. 2725-01 DATE: 09/21/2020

SCALE: 1" = 50' DWG. NAME: S-2725-01-EC

DRAFTED BY: KAC CHECKED BY: NIL

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering • landscape architecture
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBURN MA 01801-8501
TEL: (781) 935-6889
FAX: (781) 935-2896

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DRAWING TITLE:

EXISTING CONDITIONS

SHEET NO.

V-102

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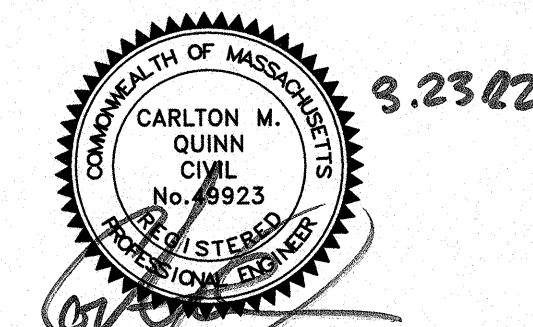
OLD SCHOOL STREET
(PUBLIC - VARIABLE WIDTH)

SCHOOL STREET
(PUBLIC - VARIABLE WIDTH)

LEGEND	
SILT FENCE	—SF—
TUBULAR BARRIER	—X—X—X—
EROSION CONTROL FABRIC	—E—E—E—
CATCH BASIN FILTER	—C—C—C—
STABILIZED ENTRANCE	—S—S—S—
STOCKPILE/STAGING AREA	—S—S—S—

NOTES:

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2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. FINAL LOCATIONS OF ALL EROSION CONTROL MEASURED THROUGHOUT CONSTRUCTION SHALL BE COORDINATED WITH THE TOWN OF MANCHESTER-BY-THE-SEA CONSERVATION DEPARTMENT AND DEPARTMENT OF PUBLIC WORKS (DPW).
4. EROSION CONTROL MEASURES SHALL BE MONITORED AND REVISED ACCORDINGLY AS CONSTRUCTION PROGRESSES.



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
A	03-23-2022	REVISED PER COMMENTS

APPLICANT/OWNER:
SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

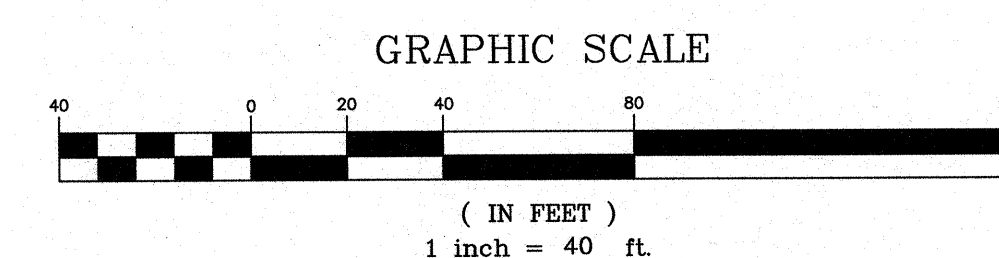
PROJECT:
THE SANCTUARY
SCHOOL STREET
MANCHESTER-BY-THE-SEA, MA

PROJECT NO.	2725-01	DATE:	07-16-2021
SCALE:	1"=40'	DWG. NAME:	C-2725-01
DESIGNED BY:	CMQ/SIL	CHECKED BY:	CMQ

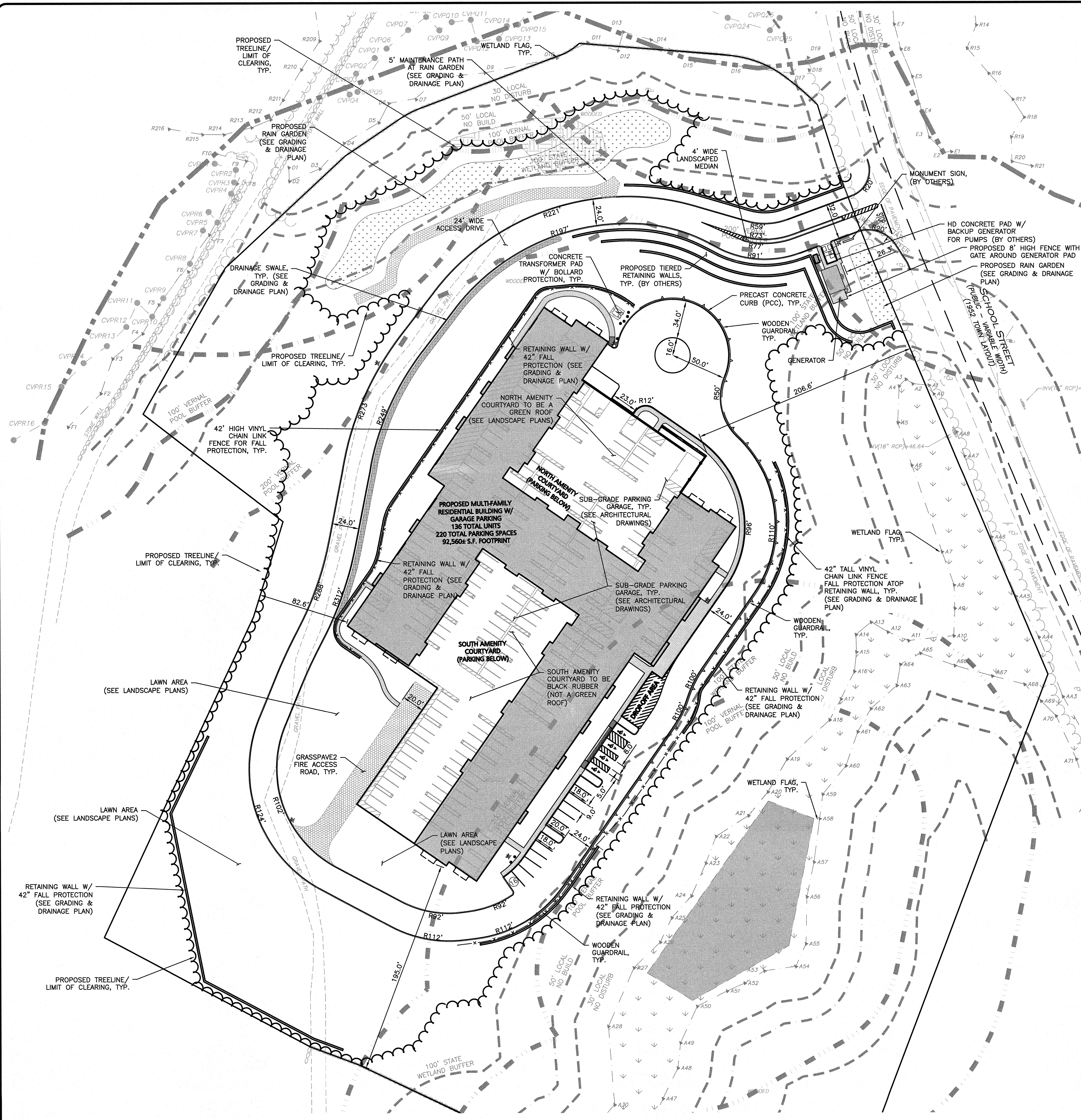
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DRAWING TITLE: EROSION CONTROL PLAN
SHEET No. C-101



N:\PROJECTS\2725-01\CIVIL\DRAWINGS\CURRENT\C-2725-01_EROSION CONTROL.DWG



- NOTES:
1. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.
 2. THE CONTRACTOR SHALL CONTACT "DIGSAFE" AND THE TOWN OF MANCHESTER BY THE SEA DEPARTMENT OF PUBLIC WORKS AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST THE LOCATION OF THE EXISTING UTILITIES.
 3. DIGSAFE: 1-800-344-7233
MANCHESTER BY THE SEA DPW: (978) 526-1242
 4. SEE THE ABBREVIATIONS AND NOTES PLAN AND DETAILS FOR FURTHER INFORMATION.
 5. ALL CURBING RADII SHALL BE 3' UNLESS OTHERWISE NOTED. ALL RADII AND DIMENSIONS MEASURED AT FACE OF CURB.
 6. ALL ADA RAMP ARE TO BE CONCRETE UNLESS SPECIFIED OTHERWISE.
 7. EXISTING CONDITIONS BASE PLAN TAKEN FROM AN EXISTING CONDITIONS BASE PLAN ENTITLED "EXISTING CONDITIONS", PREPARED BY ALLEN & MAJOR ASSOCIATES, INC., ORIGINAL SCALE 1"=50', DATED SEPTEMBER 21, 2020 AND REVISED ON MARCH 7, 2022.
 8. THIS SITE HAS AN ORDER OF RESOURCE AREA DELINEATION (ORAD) DEP. FILE NO. 1039-00344 CONFIRMING RESOURCE DELINEATION UNDER THE STATE WETLANDS PROTECTION ACT. THE ORIGINAL ORAD HAS AN EXPIRATION DATE OF 5/25/2024.
 9. ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE COORDINATED WITH THE MANCHESTER BY THE SEA DPW AND SHALL CONFIRM TO THE LATEST MUTCD STANDARDS.

LEGEND:

PROPERTY LINE	---
SIGN	+
BOLLARD	•
BUILDING	[Hatched Box]
BUILDING ARCHITECTURE	[Line Style]
CURB	[Line Style]
RETAINING WALL	[Line Style]
PARKING STRIPING	[Line Style]
ROADWAY STRIPING	[Line Style]
TRAFFIC ARROWS	[Arrow]
HEAVY DUTY CONCRETE	[Pattern]
SIDEWALK	[Line Style]
ADA ACCESSIBLE RAMP	[Line Style]
ADA DET. WARNING SURFACE	[Pattern]
SETBACK LINE	[Line Style]
PARKING COUNT	[Symbol]
WOOD GUARDRAIL	[Line Style]
CHAIN LINK FENCE	[Line Style]
WOOD FENCE	[Line Style]
TREE LINE	[Line Style]
TRANSFORMER	[Symbol]

PARKING SUMMARY CHART

USE: RESIDENTIAL HOMES:

55 ONE-BEDROOMS PROVIDED	(1 BEDROOM = 2 SPACES) = 110 SPACES
66 TWO-BEDROOMS PROVIDED	(2 BEDROOMS = 3 SPACES) = 198 SPACES
15 THREE-BEDROOMS PROVIDED	(3 BEDROOMS = 5 SPACES) = 75 SPACES
00 FOUR-BEDROOMS PROVIDED	(4 BEDROOMS = 6 SPACES) = 00 SPACES
TOTAL SPACES REQUIRED = 383 SPACES	

236 TOTAL PARKING SPACES ARE CURRENTLY PROPOSED, 220 OF WHICH ARE LOCATED WITHIN THE PODIUM/GARAGE PARKING AREAS AND 16 TOTAL SURFACE PARKING STALLS, FOR A PROPOSED PARKING RATIO OF 1.73 SPACES PER 1 DWELLING UNIT.

ADA REQUIRED:
THERE ARE BETWEEN 201 AND 300 TOTAL PARKING SPACES REQUIRING 7 ACCESSIBLE STALLS PER ADA REGULATIONS AND 2 OF THEM TO BE VAN ACCESSIBLE.

ADA PROVIDED:
7 ADA ACCESSIBLE SPACES, 3 OF WHICH SHALL BE VAN ACCESSIBLE

SURFACE PARKING		STRUCTURED PARKING			TOTAL PARKING	
STANDARD SPACES	ACCESSIBLE SPACES	STANDARD SPACES	COMPACT SPACES	ACCESSIBLE SPACES	TOTAL PROVIDED	TOTAL REQUIRED
12	4	211	6	3	236	383

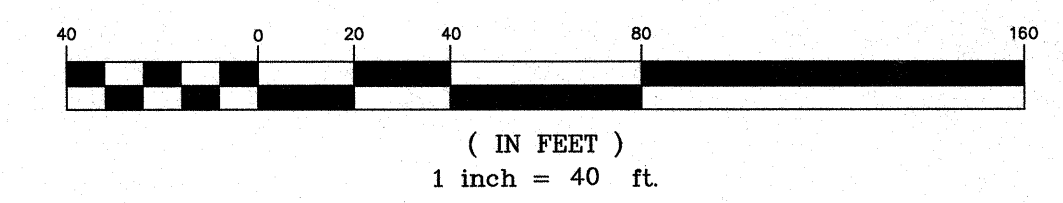
PARKING NOTES:
(1) OFF-STREET PARKING SPACES SHALL BE DESIGNED WITH MINIMUM DIMENSIONS OF 9 FEET BY 18 FEET.

LAND USAGE TABLE - LIMITED COMMERCIAL DISTRICT (LCD) & WATER RESOURCE OVERLAY PROTECTION DISTRICTS - ZONE 3

ITEM	EXISTING	PROPOSED	REQUIRED/ALLOWED
MINIMUM LOT AREA	(2) 23.32± ACRES	23.32 ACRES	5.00 ACRES
MINIMUM FRONTAGE	(1) 495.2 FEET	495.2 FEET	N/A
MINIMUM LOT WIDTH	291.2 FEET (6)	291.2 FEET	500 FEET
MAXIMUM BUILDING COVERAGE	(3) 0%	10%	20%
MAXIMUM PARKING COVERAGE	(3) 0%	1%	25%
MINIMUM LANDSCAPED COVERAGE	(3) 100%	87%	25%
MAXIMUM IMPERVIOUS COVERAGE	(5) 0%	14%	15%
MINIMUM FRONT YARD	(4) N/A	27 FEET	150 FEET
MINIMUM SIDE YARD	(4) N/A	85 FEET	100 FEET
MINIMUM REAR YARD	(4) N/A	195 FEET	100 FEET
MAXIMUM BUILDING HEIGHT	(7) N/A	25' (3 STORIES) (8)	35' (2.5 STORIES)
MINIMUM PARKING AREA INTERIOR LANDSCAPING	N/A	12%	5%

- LAND USAGE TABLE NOTES:
- (1) SECTION 5.1 - SETBACK: IN THE CASE OF A LOT ABUTTING MORE THAN ONE STREET, THE MINIMUM FRONT SETBACK SHALL BE APPLICABLE TO EACH STREET. THE MINIMUM SETBACK REQUIREMENTS SHALL NOT APPLY TO THE PROJECTIONS OF STEPS, EAVES, CHIMNEYS, AND CORNICES, WINDOW SILLS OR BELT COURSES.
 - SECTION 5.7 - LIMITED COMMERCIAL DISTRICT: NOT WITHSTANDING THE FOREGOING PROVISIONS OF THIS SECTION 5.0, THE FOLLOWING REQUIREMENTS SHALL BE MET IN THE LIMITED COMMERCIAL DISTRICT:
 - (2) SECTION 5.7.1 - EACH BUSINESS, DEFINED AS A SINGLE-USE UNDER ONE OWNERSHIP, SHALL BE LOCATED ON A LOT OF NOT LESS THAN FIVE (5) ACRES AND A MINIMUM WIDTH AT ALL POINTS OF NOT LESS THAN FIVE HUNDRED (500) FEET.
 - (3) SECTION 5.7.2 - THE STRUCTURES ON THE LOT SHALL COVER NOT MORE THAN TWENTY PERCENT (20%) OF THE LOT AREA AND AT LEAST TWENTY FIVE PERCENT (25%) OF THE LOT SHALL BE OF NATURAL OR LANDSCAPED AREA. NOT MORE THAN TWENTY FIVE PERCENT (25%) OF THE LOT SHALL BE USED FOR PARKING.
 - (4) SECTION 5.7.3 - ALL STRUCTURES SHALL BE SET BACK FROM ANY STREET AT LEAST ONE HUNDRED AND FIFTY (150) FEET, AND ONE HUNDRED (100) FEET FROM ANY OTHER LOT LINE.
 - (5) SECTION 4.9.5.1(a) - LAND USE (WITHIN THE WATER RESOURCE OVERLAY PROTECTION DISTRICT - ZONE 3) THAT RESULTS IN THE RENDERING OF MORE THAN 15% IMPERVIOUS AREA OR 2,500 SQUARE FEET OF ANY LOT, WHICHEVER IS GREATER, SHALL BE PROHIBITED, UNLESS A SYSTEM FOR ARTIFICIAL RECHARGE OF PRECIPITATION IS PROVIDED WHICH IS SATISFACTORY TO THE PLANNING BOARD, THAT WILL NOT RESULT IN THE DEGRADATION OF GROUNDWATER QUALITY.
 - (6) EXISTING NON-CONFORMING ZONING REQUIREMENT.
 - (7) SECTION 5.5 - HEIGHT RESTRICTIONS - NO STRUCTURE SHALL BE ERRECTED OR ALTERED SO THAT IT EXCEEDS 2-1/2 STORIES OR SO THAT THE VERTICAL DISTANCE MEASURED FROM THE HIGHEST POINT OF THE ROOF TO THE MEAN PRE-CONSTRUCTION GRADE EXCEEDS 35 FEET, WHICHEVER IS LESSER. CHIMNEYS, SPIRES, OR TOWERS NOT USED FOR HUMAN OCCUPANCY MAY EXTEND TEN (10) FEET ABOVE HEIGHT LIMITS.
 - (8) MEAN PRE-CONSTRUCTION GRADE IS DEFINED AS A REFERENCE PLANE REPRESENTING THE AVERAGE ELEVATION OF PRE-CONSTRUCTION GROUND ADJOINING THE BUILDING AT ALL EXTERIOR WALLS. A HALF STORY IS DEFINED AS A STORY WITH A SLOPING ROOF. THE AREA OF WHICH STORY AT A HEIGHT OF FOUR (4) FEET ABOVE THE FLOOR DOES NOT EXCEED TWO-THIRDS OF THE FLOOR AREA OF THE STORY IMMEDIATELY BELOW IT. SEE SHEET C-109 ENTITLED "MEAN PRE-CONSTRUCTION GRADE PLAN" FOR CALCULATION OF THE MEAN PRE-CONSTRUCTION GRADE.

GRAPHIC SCALE



DIG SAFE

BEFORE YOU DIG
CALL 811 OR
1-888-DIG-SAFE
1-888-344-7233

5.23.22

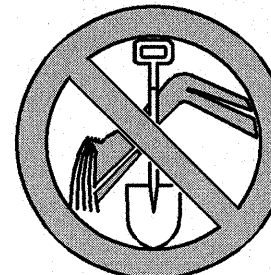
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CIVIL
NO. 47923
MASS.

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

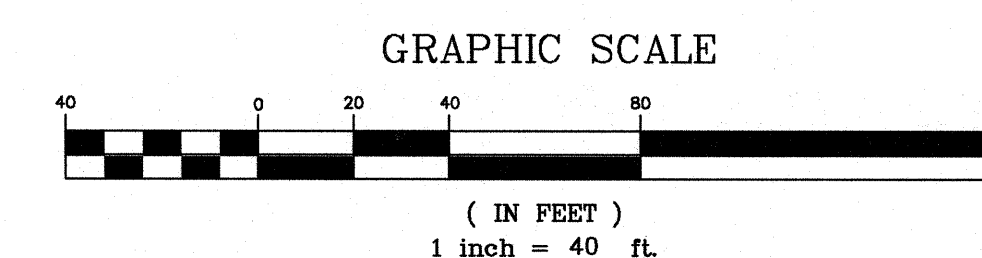
PROJECT NO.	2725-01	DATE:	07-16-2021
SCALE:	1"=40'	DWG. NAME:	C2725-01
DESIGNED BY:	CMQ/SIL	CHECKED BY:	CMQ
PREPARED BY:			
ALLEN & MAJOR ASSOCIATES, INC.			
civil engineering • land surveying environmental consulting • landscape architecture www.allenmajor.com 100 COMMERCE WAY, SUITE 5 WOBBURN, MA 01801-4501 TEL: (781) 935-6889 FAX: (781) 935-8886			
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LAYOUT & MATERIALS PLAN		C-102.1	
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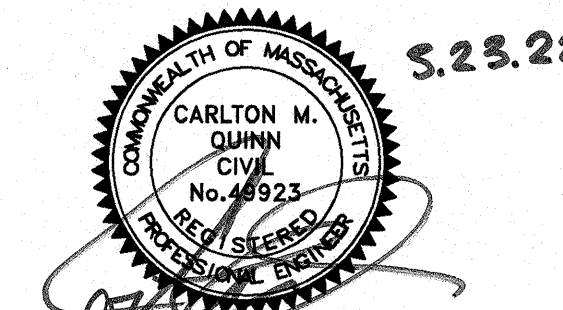
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PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
A	03-23-2022	REVISED PER COMMENTS

APPLICANT/OWNER:

SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

PROJECT:

THE SANCTUARY
SCHOOL STREET
MANCHESTER-BY-THE-SEA, MA

PROJECT NO.	2725-01	DATE:	07-16-2021
SCALE:	1"=40'	DWG. NAME:	C-2725-01
DESIGNED BY:	CMQ/SIL	CHECKED BY:	CMQ

PREPARED BY:



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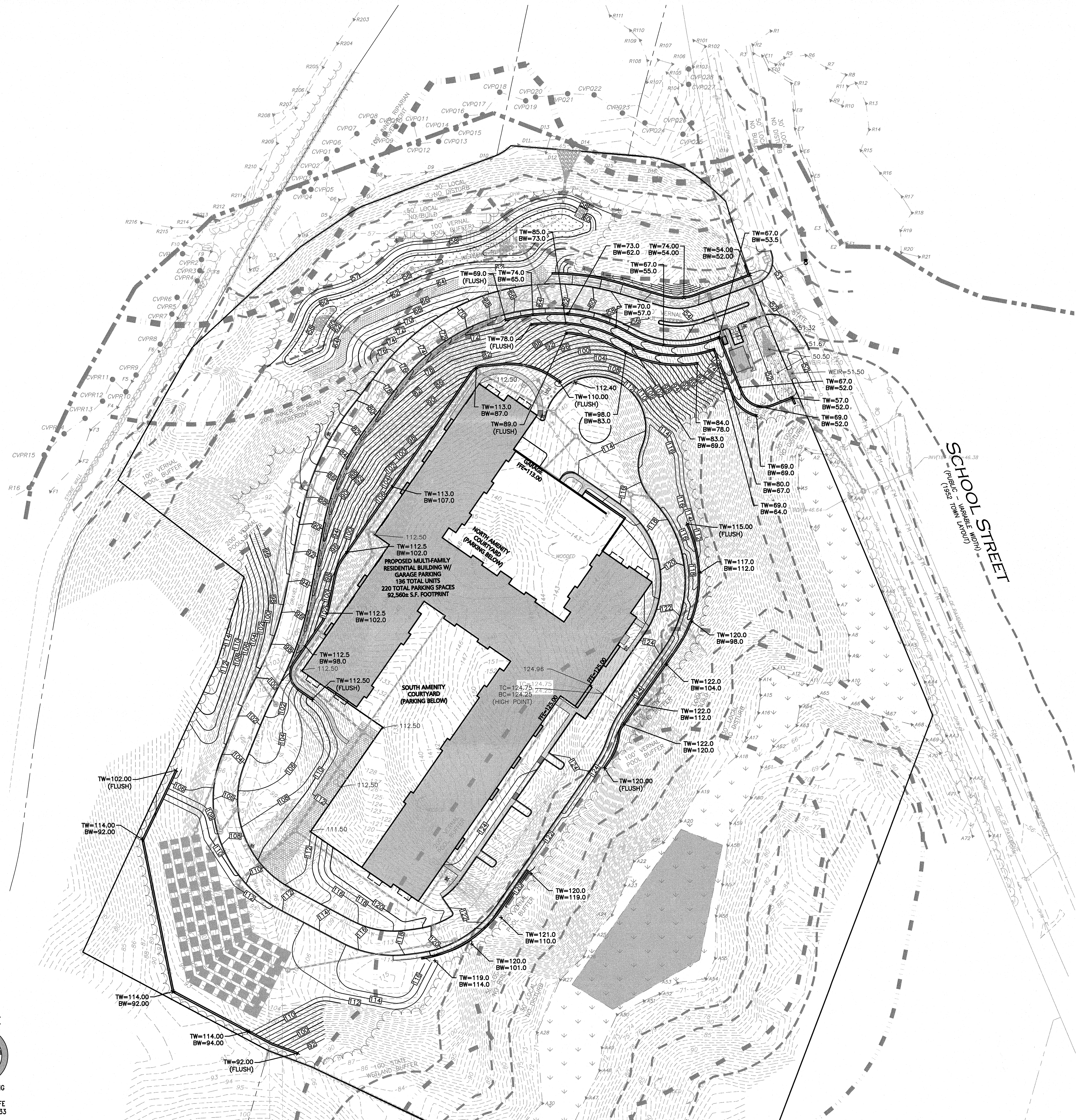
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LAYOUT & MATERIALS PLAN

SHEET No.

C-102.2

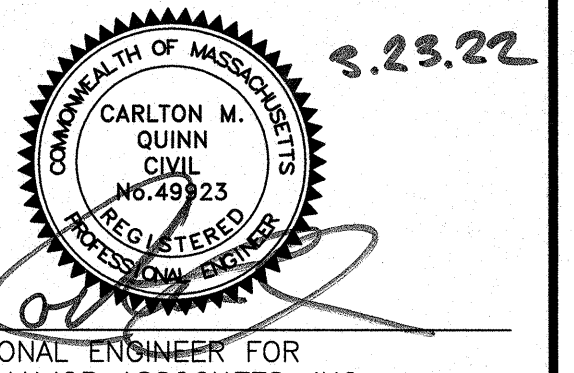
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LEGEND

- DRAIN MANHOLE
- CATCH BASIN
- CATCH BASIN - DOUBLE GRATE
- DRAIN MANHOLE W/ WEIR
- AREA DRAIN
- CLEANOUT
- SPOT GRADE X 124.25
- DRAIN LINE
- 10' CONTOUR
- 2' CONTOUR
- INFILTRATION SYSTEM
- INFILTRATION CHAMBERS
- ISOLATOR ROW

- NOTES:**
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
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 - BASE PLAN TAKEN FROM PLAN ENTITLED "EXISTING CONDITIONS, SHEETS V-101 & V-102" PREPARED BY ALLEN & MAJOR ASSOCIATES, REVISED THROUGH MAY 27, 2021 ORIGINAL SCALE 1"=50'.
 - PIPE DIMENSIONS ARE MEASURED FROM THE INSIDE FACE OF THE STRUCTURE.
 - THE CONTRACTOR SHALL CONTACT "DIGSAFE" AND THE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST THE LOCATION OF THE EXISTING UTILITIES. DIGSAFE: 1-888-344-7233
 - ANY ROOF DRAINAGE PIPE LOCATED WITHIN 10' OF THE BUILDING FOUNDATION SHALL BE CAST IRON PIPE PER MA PLUMBING CODE.
 - ALL "CDS" STRUCTURES SHALL BE SIZED USING THE WATER QUALITY FLOW RATE PER MASS STORMWATER HANDBOOK.
 - FINAL DESIGN FOR ALL THE RETAINING WALLS SHALL BE COORDINATED WITH THE APPROPRIATE TOWN STAFF FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
 - ALL CORRUGATED METAL PIPE (CMP) PROPOSED FOR SUBSURFACE INFILTRATION/DETENTION SYSTEMS SHALL BE MADE OF GALVANIZED STEEL.



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
A	03-23-2022	REVISED PER COMMENTS

APPLICANT/OWNER:
SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

PROJECT:
**THE SANCTUARY
SCHOOL STREET
MANCHESTER-BY-THE-SEA, MA**

PROJECT NO.	2725-01	DATE:	07-16-2021
SCALE:	1"=40'	DWG. NAME:	C-2725-01
DESIGNED BY:	CMQ/SIL	CHECKED BY:	CMQ

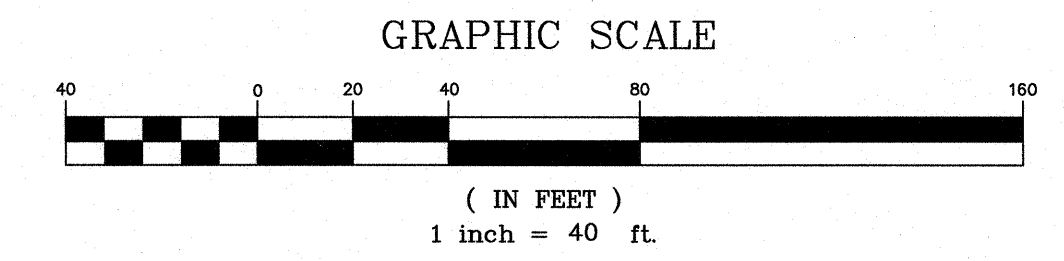
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www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBBURN, MA 01801-8501
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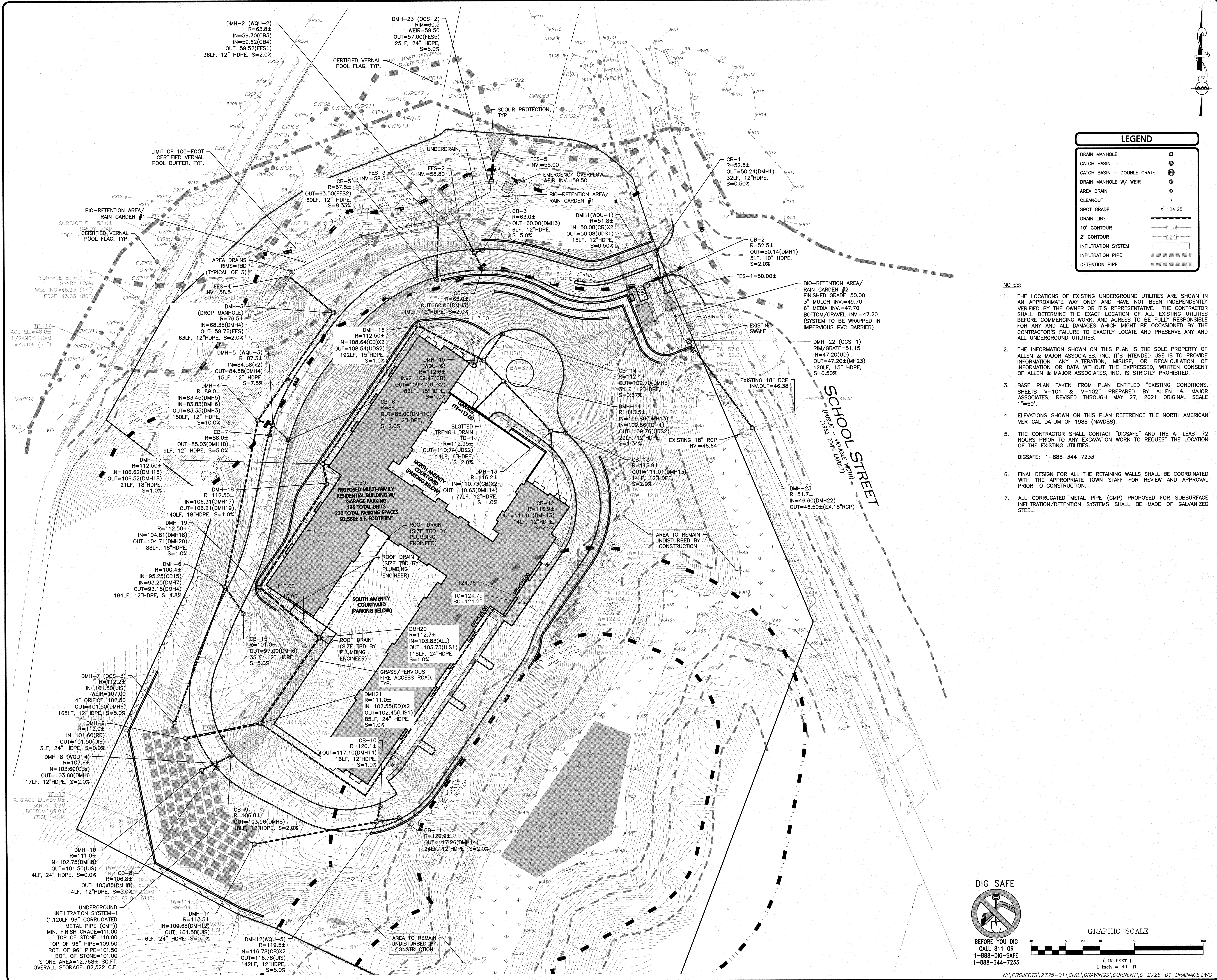
DRAWING TITLE: **GRADING PLAN** SHEET No. **C-103.1**

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LEGEND

- DRAIN MANHOLE
- CATCH BASIN
- DRAIN MANHOLE W/ WEIR
- AREA DRAIN
- CLEANOUT
- SPOT GRADE
- DRAIN LINE
- 10' CONTOUR
- 2' CONTOUR
- INFILTRATION SYSTEM
- INFILTRATION PIPE
- DETENTION PIPE

- NOTES:**
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 - ELEVATIONS SHOWN ON THIS PLAN REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
 - THE CONTRACTOR SHALL CONTACT "DIGSAFE" AND THE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST THE LOCATION OF THE EXISTING UTILITIES.
DIGSAFE: 1-888-344-7233
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PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

CARLTON M. QUINN
REGISTERED PROFESSIONAL ENGINEER
MA 01923
S.23.22

A 03-23-2022 REVISED PER COMMENTS		
REV	DATE	DESCRIPTION
APPLICANT/OWNER:		
SLV SCHOOL STREET, LLC 257 HILLSIDE AVENUE NEEDHAM, MA 02494		

**THE SANCTUARY
SCHOOL STREET
MANCHESTER-BY-TH-SEA, MA**

PROJECT NO.	2725-01	DATE:	07-16-2021
SCALE:	1"=40'	DWG. NAME:	C-2725-01
DESIGNED BY:	CMQ/SIL	CHECKED BY:	CMQ

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FAX: (781) 935-2886

DRAWING TITLE: DRAINAGE PLAN
SHEET NO.: C-103.2

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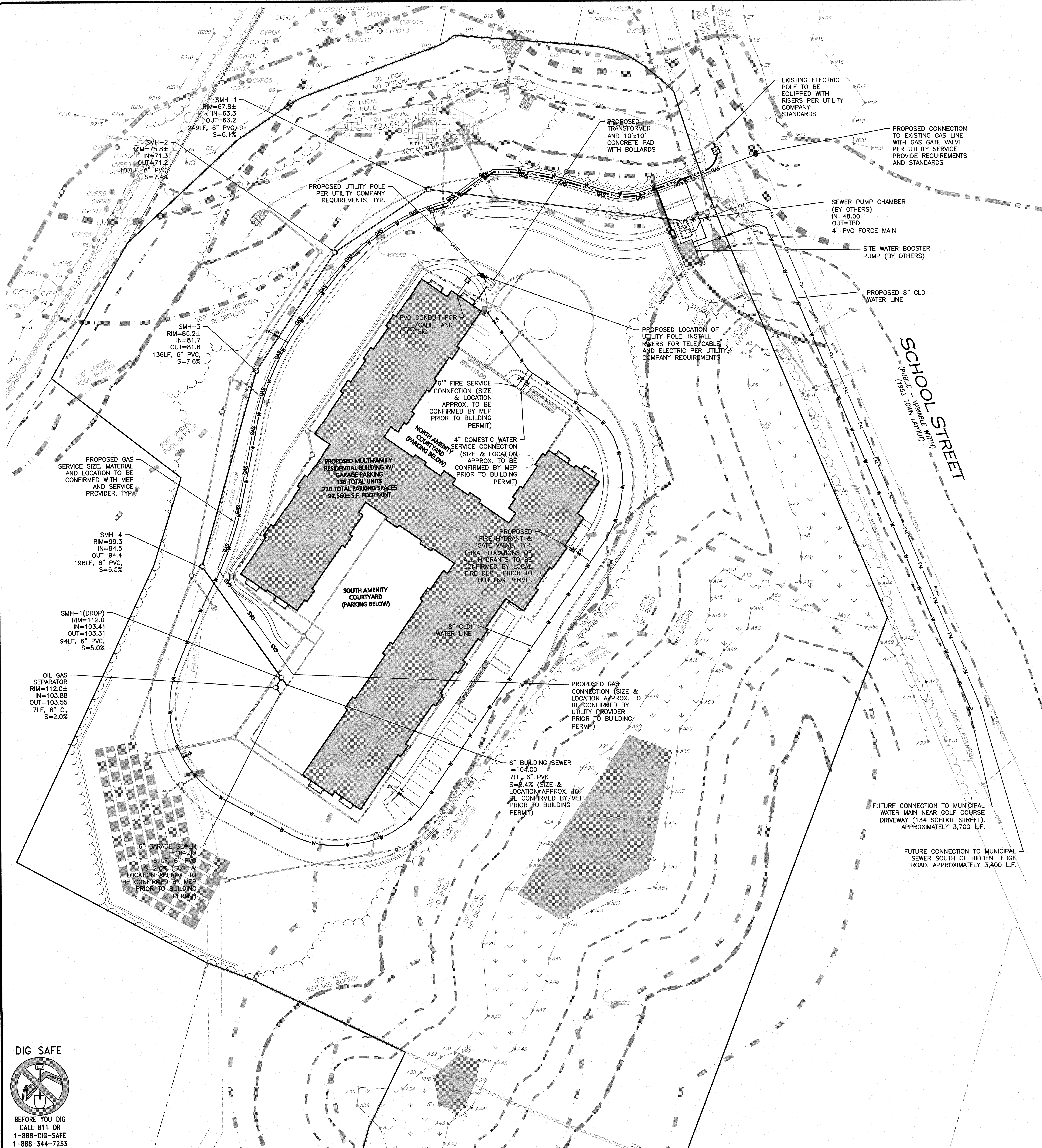
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GRAPHIC SCALE

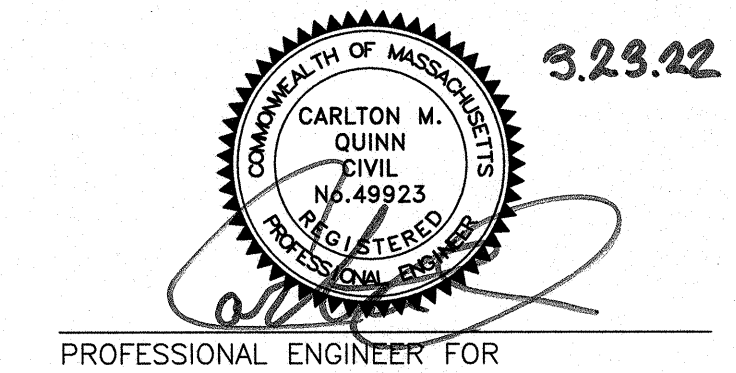
(IN FEET)
1 inch = 40 ft.

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LEGEND	
SEWER MANHOLE	⊙
SEWER CLEANOUT	⊙
SEWER VENT	⊙
SEWER LINE	—
CONCRETE PIPE ENCASUREMENT	—
WATER LINE	—
WATER (FIRE SERVICE)	—
WATER (DOMESTIC SERVICE)	—
WATER VALVE	⊙
HYDRANT	⊙
WATER LINE REDUCER	—
GAS LINE	—
GAS VALVE	⊙
SEPTIC/HOLDING TANK	⊙
SWITCHING STATION	⊙
LIGHT FIXTURE	⊙
OVER HEAD WIRE	—
UTILITY POLE	⊙
HAND HOLE	⊙
ELECTRICAL CONDUIT	—
TELE/CABLE CONDUIT	—
ELEC/TELE/CABLE CONDUIT	—

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 2. THIS PLAN WAS PREPARED USING AVAILABLE SITE INFORMATION FROM SEVERAL SOURCES. SOME OF WHICH IS UNCONFIRMED. BASE PLAN TAKEN FROM PLAN ENTITLED "EXISTING CONDITIONS, SHEETS V-101 & V-102" PREPARED BY ALLEN & MAJOR ASSOCIATES, REVISED THROUGH MARCH 7, 2022 ORIGINAL SCALE 1"=50'.
 3. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
 4. ALL ELEVATIONS REFER TO NAVD 88.
 5. FDC LOCATION TO BE CONFIRMED WITH FIRE DEPARTMENT PRIOR TO BUILDING PERMIT.
 6. ALL UTILITIES SHOWN ON THIS PLAN ARE FOR COORDINATION PURPOSES ONLY. INDIVIDUAL UTILITY PROVIDERS AND MEP ENGINEER SHALL DETERMINE THE FINAL LOCATION, SIZE AND MATERIAL OF EACH UTILITY.
 7. MINIMUM 10' SEPARATION BETWEEN SEWER LINES AND WATER LINES SHALL BE MAINTAINED, AS SHOWN ON THE PLANS, WHERE LESS THAN 10' SEPARATION IS POSSIBLE, BOTH LINES SHALL BE ENCASED IN CONCRETE A MINIMUM OF 10' IN EACH DIRECTION, OR AS PRACTICABLE.



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
A	03-23-2022	REVISED PER COMMENTS

APPLICANT/OWNER:
SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

PROJECT:
THE SANCTUARY
SCHOOL STREET
MANCHESTER-BY-THE-SEA, MA

PROJECT NO.	2725-01	DATE:	07-16-2021
SCALE:	1"=40'	DWG. NAME:	C-2725-01
DESIGNED BY:	CMQ/SIL	CHECKED BY:	CMQ

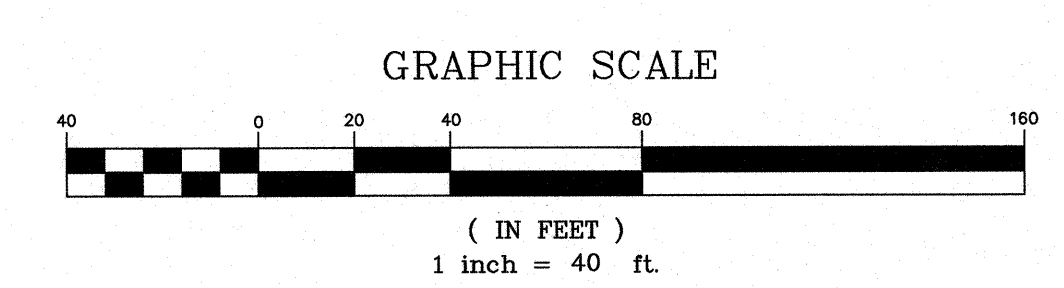
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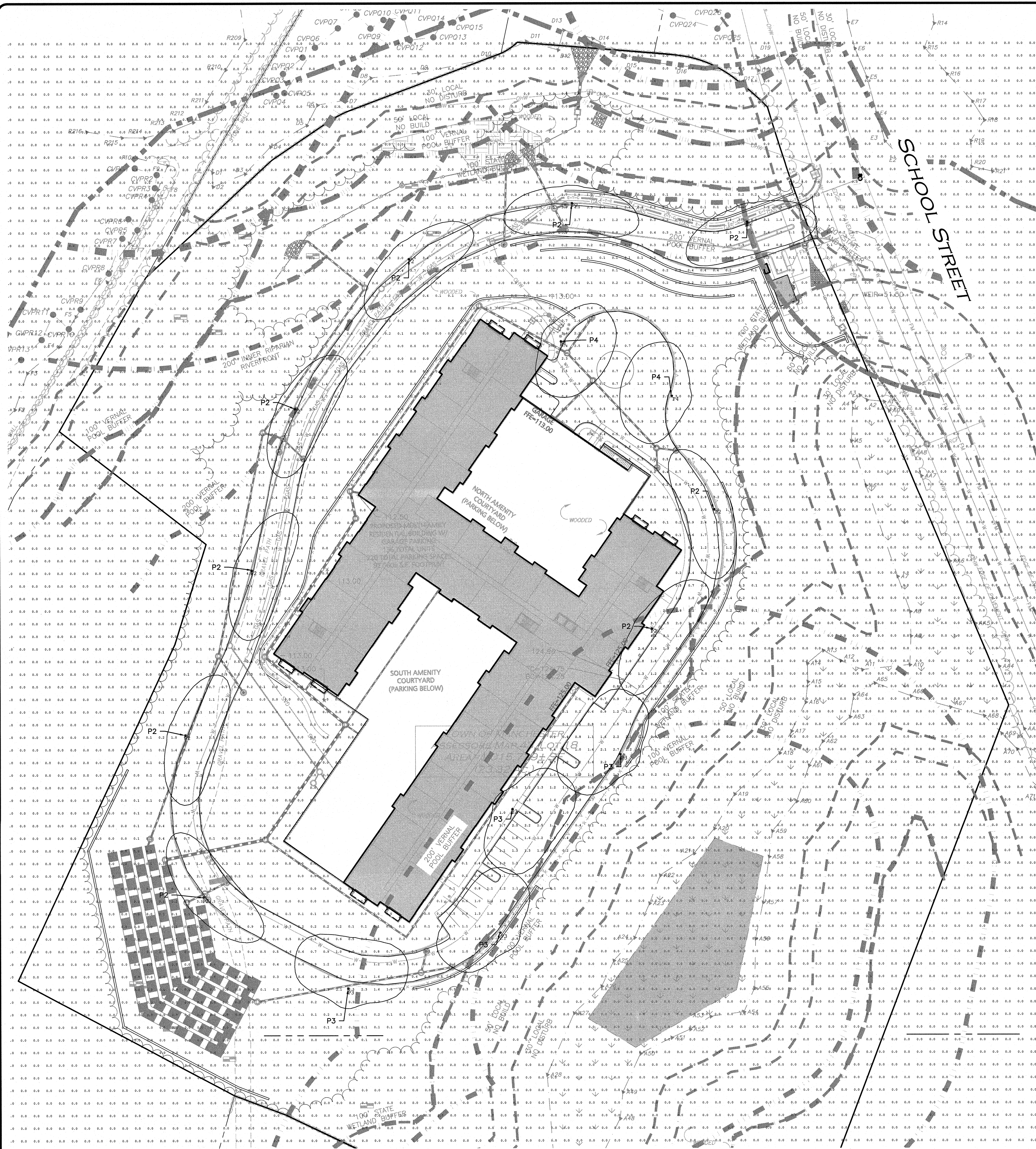
DRAWING TITLE:	SHEET No.
UTILITIES PLAN	C-104

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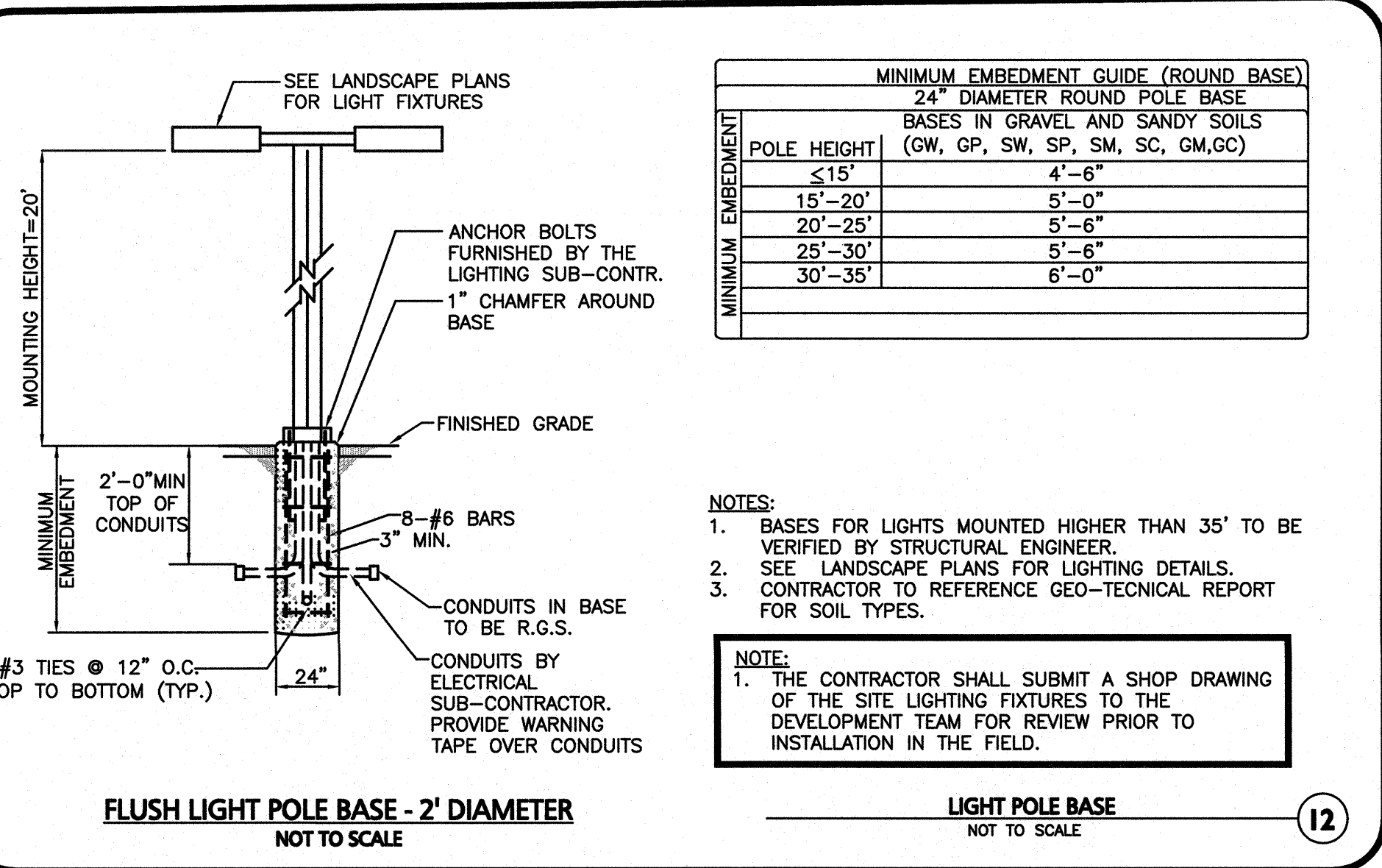
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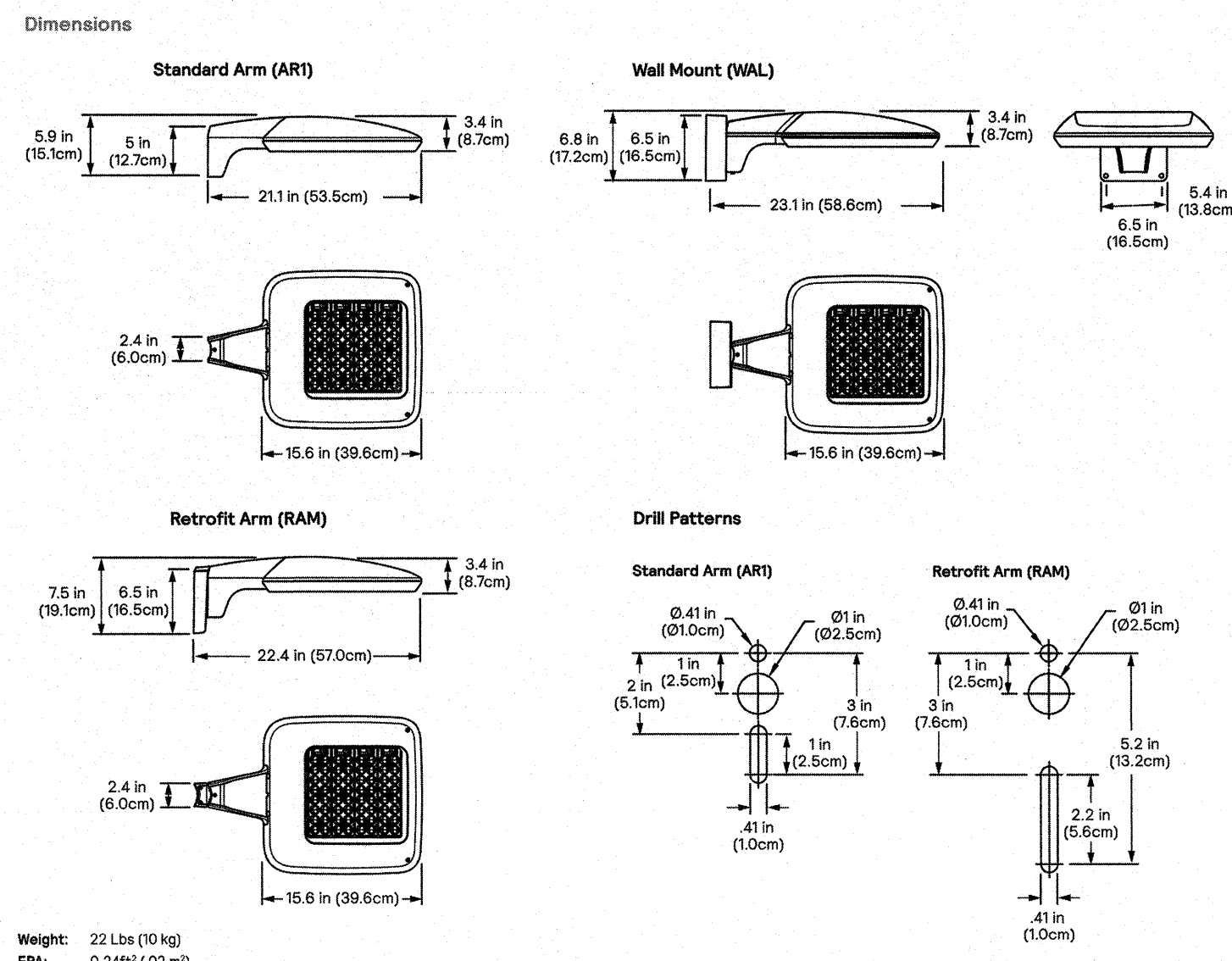


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 - FOOT CANDLE VALUES SHOWN ON THE PLAN ARE PRODUCED UTILIZING DESIGN MASTER PHOTOMETRICS SOFTWARE AND ASSOCIATED IES FILES BY THE MANUFACTURER FOR THE PROPOSED LIGHT FIXTURE.
 - ALL PHOTOMETRIC DATA REFERS TO UNITS IN FOOT CANDLES (FC). THE LIMIT OF 1.0 FC ILLUMINATION IS SHOWN IN A RED SOLID LINE AND THE LIMIT OF THE 0.5 FOOT CANDLE (FC) ILLUMINATION IS SHOWN IN BLUE.
 - ALL POST-TOP AND WALL-MOUNTED LIGHTS ON THE SITE SHALL USE HIGH-EFFICIENCY LED BULBS.
 - CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO INSTALLATION OF LIGHTS.



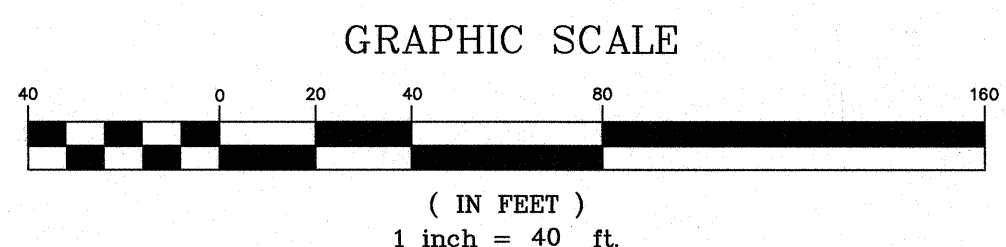
P15 PureForm LED small square

Area light with precision optics

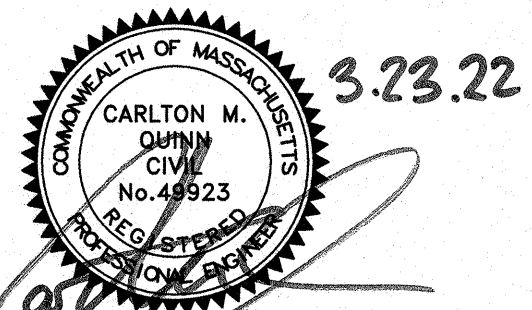


Luminaire Schedule						
Qty	Label	Arrangement	Lumens	Input Watts	LLF	Description
9	P2	SINGLE	8034	60.1	0.850	GARDCO P15-P-A04-730-T2M-AR1-UNV-FINISH / MOUNTED TO 20FT POLE
4	P3	SINGLE	7913	60.1	0.850	GARDCO P15-P-A04-730-T3M-AR1-UNV-FINISH / MOUNTED TO 20FT POLE
2	P4	SINGLE	8096	60.1	0.850	GARDCO P15-P-A04-730-T4S-AR1-UNV-FINISH / MOUNTED TO 20FT POLE

Calculation Summary						
Label	Grid Height	Avg	Max	Min	Avg/Min	Max/Min
CalcPts 1	0	0.15	4.6	0.0	N.A.	N.A.
PARKING AND DRIVING LANE		1.18	4.5	0.2	5.90	22.50



N:\PROJECTS\2725-01\CIVIL\DRAWINGS\CURRENT\C-2725-01_SITE LIGHTING.DWG



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
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APPLICANT/OWNER: SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

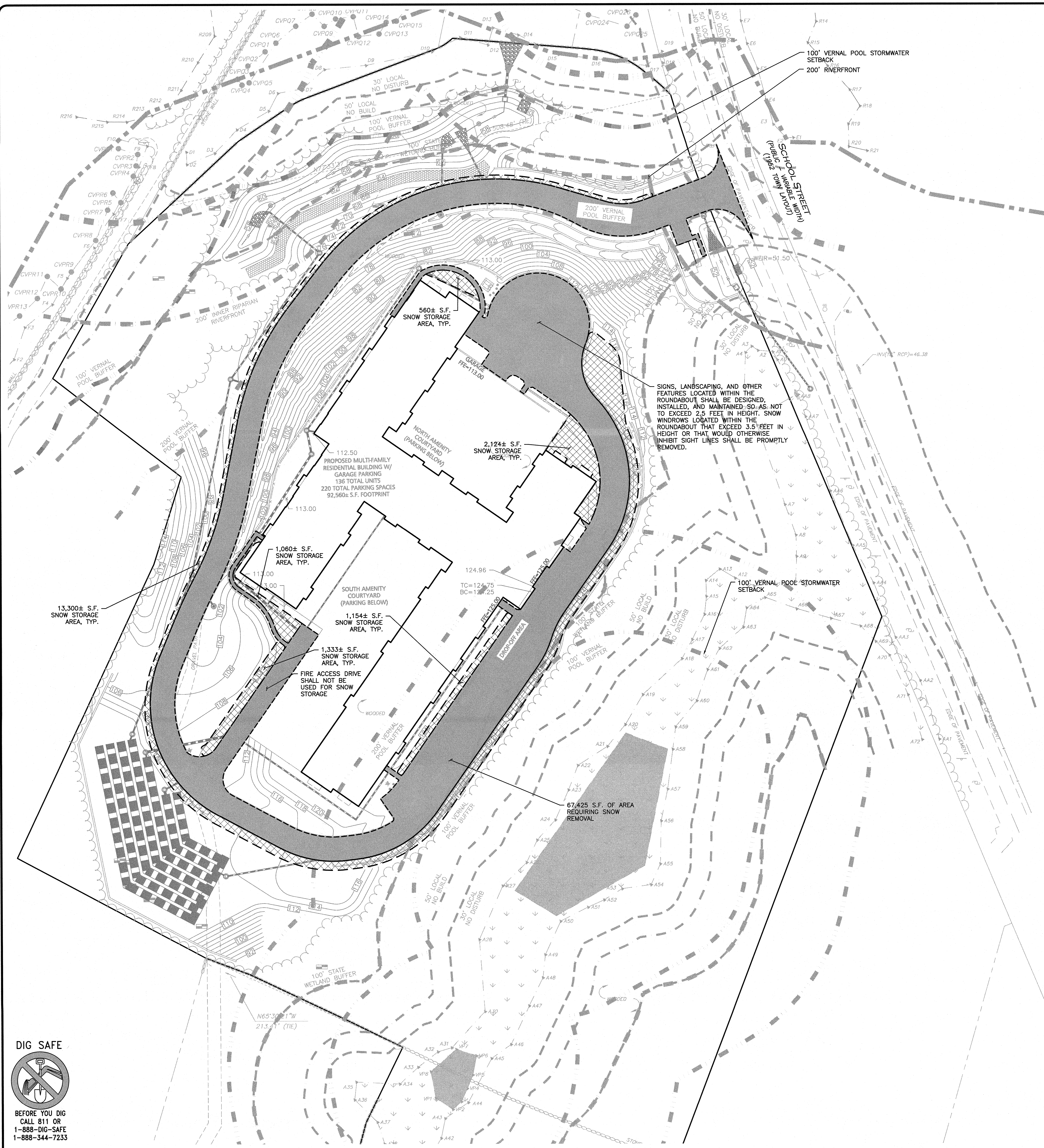
PROJECT: THE SANCTUARY
SCHOOL STREET
MANCHESTER-BY-THE-SEA, MA

PROJECT NO. 2725-01 DATE: 07-16-2021
SCALE: 1"=40' DWG. NAME: C-2725-01
DESIGNED BY: CMQ/SIL CHECKED BY: CMQ

PREPARED BY: **ALLEN & MAJOR ASSOCIATES, INC.**
civil engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCIAL WAY, SUITE 5
WOBURN, MA 01801-4501
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DRAWING TITLE: SITE LIGHTING PLAN SHEET NO. C-105



LEGEND

AREAS REQUIRING SNOW REMOVAL

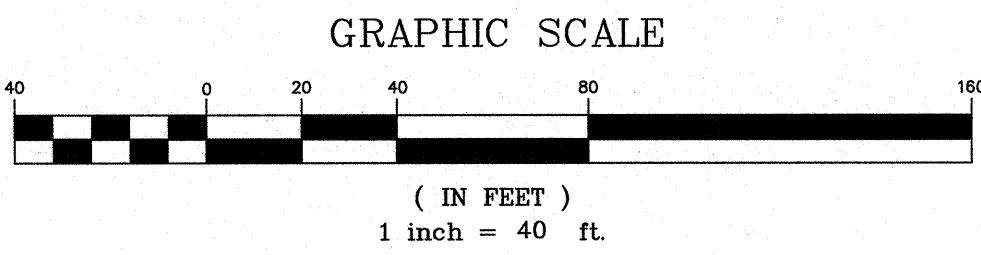
PRIMARY SNOW STORAGE AREAS

- NOTES:**
1. THE PROPOSED PROJECT AREA HAS APPROXIMATELY 67,500 S.F. OF PAVED VEHICULAR AREA, SIDEWALK AND FIRE ACCESS LANES THAT WILL NEED SNOW REMOVAL.
 2. THE PLAN DEPICTS APPROXIMATELY 18,000 S.F. OF AREA AVAILABLE FOR PRIMARY SNOW STORAGE WITHIN THE PROJECT AREA. THE AREA IS ESTIMATED TO ACCOMMODATE AN APPROXIMATE 5.33' OF SNOWFALL, ASSUMING A 5:1 COMPACTION AND AN AVERAGE SNOW PILE HEIGHT OF 4.0'. ADDITIONAL SNOW SECONDARY SNOW STORAGE AREAS ARE AVAILABLE ON-SITE IS NECESSARY.
 3. IT IS UNLIKELY THIS PROJECT WOULD NEED SNOW TO BE REMOVED OFF-SITE, BUT IF NECESSARY, SNOW WILL BE STOCKPILED ON SITE UNTIL THERE IS NOT ENOUGH SPACE. AS NECESSARY, THE SNOW WILL BE REMOVED AND DISPOSED OF OFF-SITE. IT WILL BE THE RESPONSIBILITY OF THE SNOW REMOVAL CONTRACTOR TO PROPERLY DISPOSE OF TRANSPORTED SNOW ACCORDING TO MASSACHUSETTS DEP. BUREAU OF RESOURCE PROTECTION - MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER RESOURCES SNOW DISPOSAL GUIDANCE EFFECTIVE DATE: DECEMBER 23, 2019, GOVERNING THE PROPER DISPOSAL OF SNOW. IT WILL BE THE RESPONSIBILITY OF THE SNOW REMOVAL CONTRACTOR TO FOLLOW THESE GUIDELINES AND ALL APPLICABLE LAWS AND REGULATIONS.
 4. UNDER NO CIRCUMSTANCES SHALL SNOW BE STORED IN ANY WETLAND RESOURCE AREA OF PROPOSED STORMWATER MANAGEMENT SYSTEM.
 5. SNOW STORAGE WILL BE IMPLEMENTED TO AVOID HYDRANTS, FENCES LANDSCAPING AND OTHER PERMANENT FEATURES.

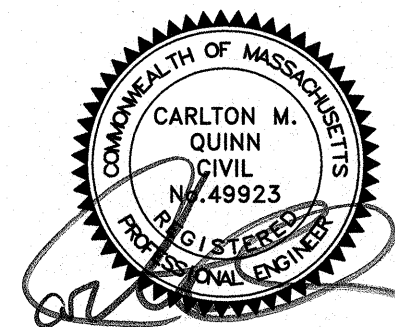
SIGNS, LANDSCAPING, AND OTHER FEATURES LOCATED WITHIN THE ROUNDABOUT SHALL BE DESIGNED, INSTALLED, AND MAINTAINED SO AS NOT TO EXCEED 2.5 FEET IN HEIGHT. SNOW WINDROWS LOCATED WITHIN THE ROUNDABOUT THAT EXCEED 3.5 FEET IN HEIGHT OR THAT WOULD OTHERWISE INHIBIT SIGHT LINES SHALL BE PROMPTLY REMOVED.

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1-888-344-7233



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CARLTON M. QUINN
PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
A	03-23-2022	REVISED PER COMMENTS

APPLICANT/OWNER:

SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

PROJECT:

THE SANCTUARY
SCHOOL STREET
MANCHESTER-BY-THE-SEA, MA

PROJECT NO.	2725-01	DATE:	07-16-2021
SCALE:	1"=40'	DWG. NAME:	C-2725-01
DESIGNED BY:	CMQ/SIL	CHECKED BY:	CMQ

PREPARED BY:



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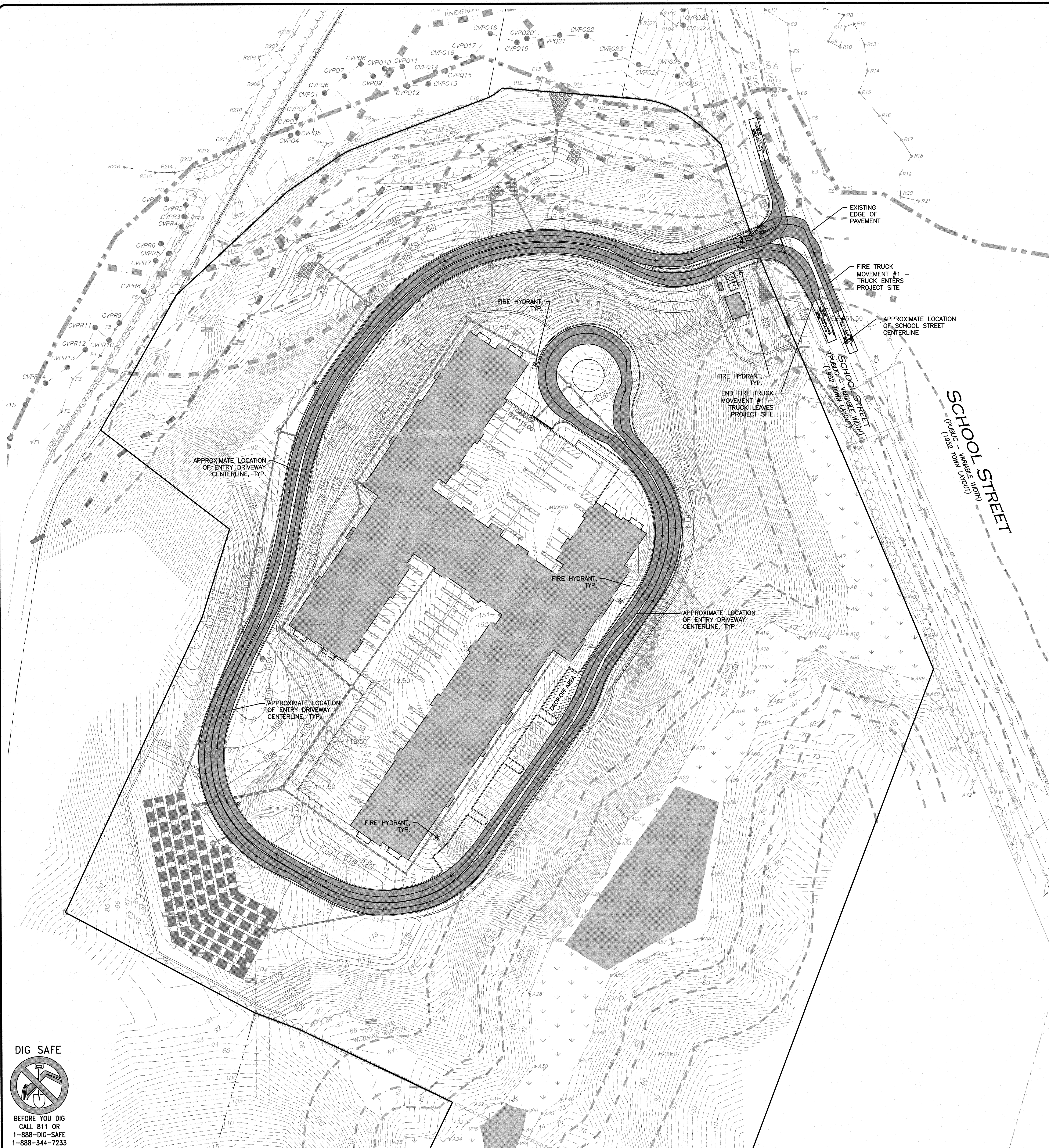
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SNOW STORAGE PLAN

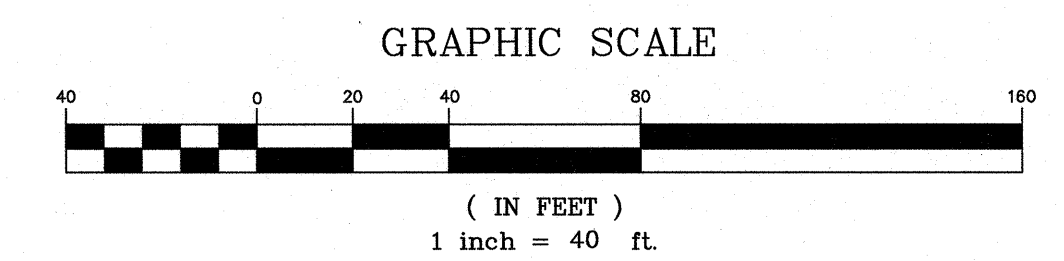
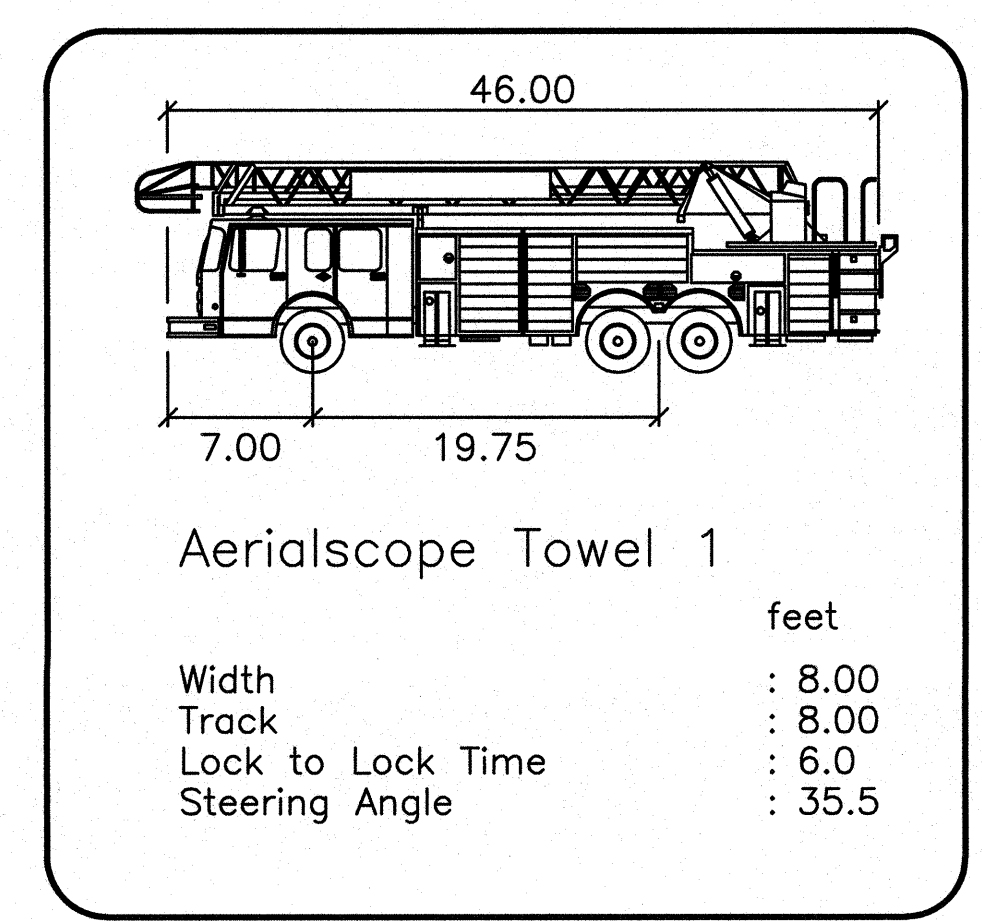
SHEET No.

C-106

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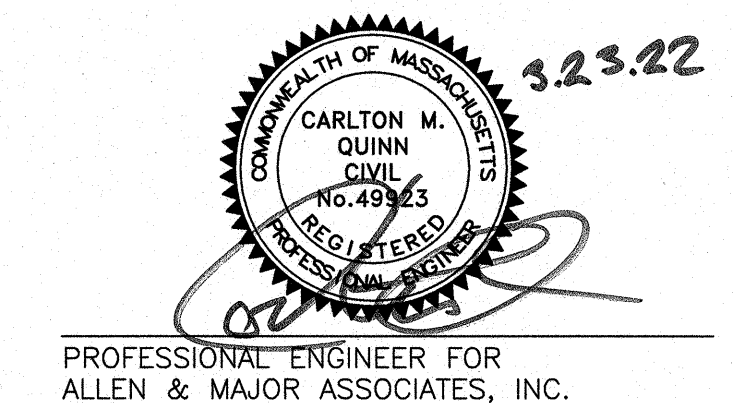


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 3. ALL FIRE DEPARTMENT ACCESS ROAD SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 20 FEET.



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1-888-344-7233



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

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DRAWING TITLE: **FIRE TRUCK TURNING** SHEET No. **C-107**



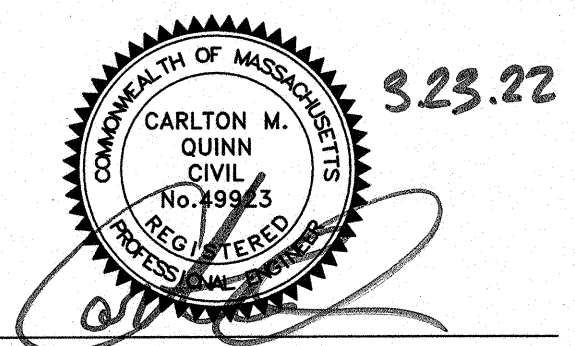
LEGEND:

EXISTING PROPERTY LINE

TEST PITS 4/8&9/2020 TP-10

TEST PITS 11/18&19/2020 OSE-TP-1

- NOTES:**
1. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.
 2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
 3. THIS PLAN IS BASED ON AN ALTA/ASCM LAND TITLE SURVEY PREPARED BY ALLEN & MAJOR ASSOCIATES, INC., DATED 3/22/2013



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
A	03-23-2022	REVISED PER COMMENTS

APPLICANT/OWNER:
SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

PROJECT:
THE SANCTUARY
SCHOOL STREET
MANCHESTER-BY-SEA, MA

PROJECT NO. 2725-01 DATE: 07-16-2021
SCALE: 1"=40' DWG. NAME: C-2725-01

DESIGNED BY: CMQ/SIL CHECKED BY: CMQ

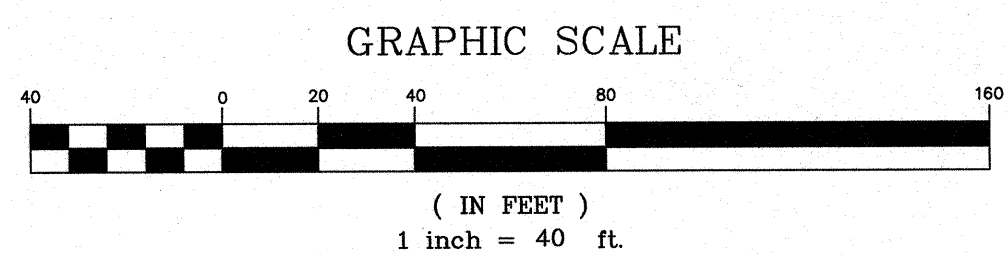
PREPARED BY:

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civil engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBBURN MA 01801-8501
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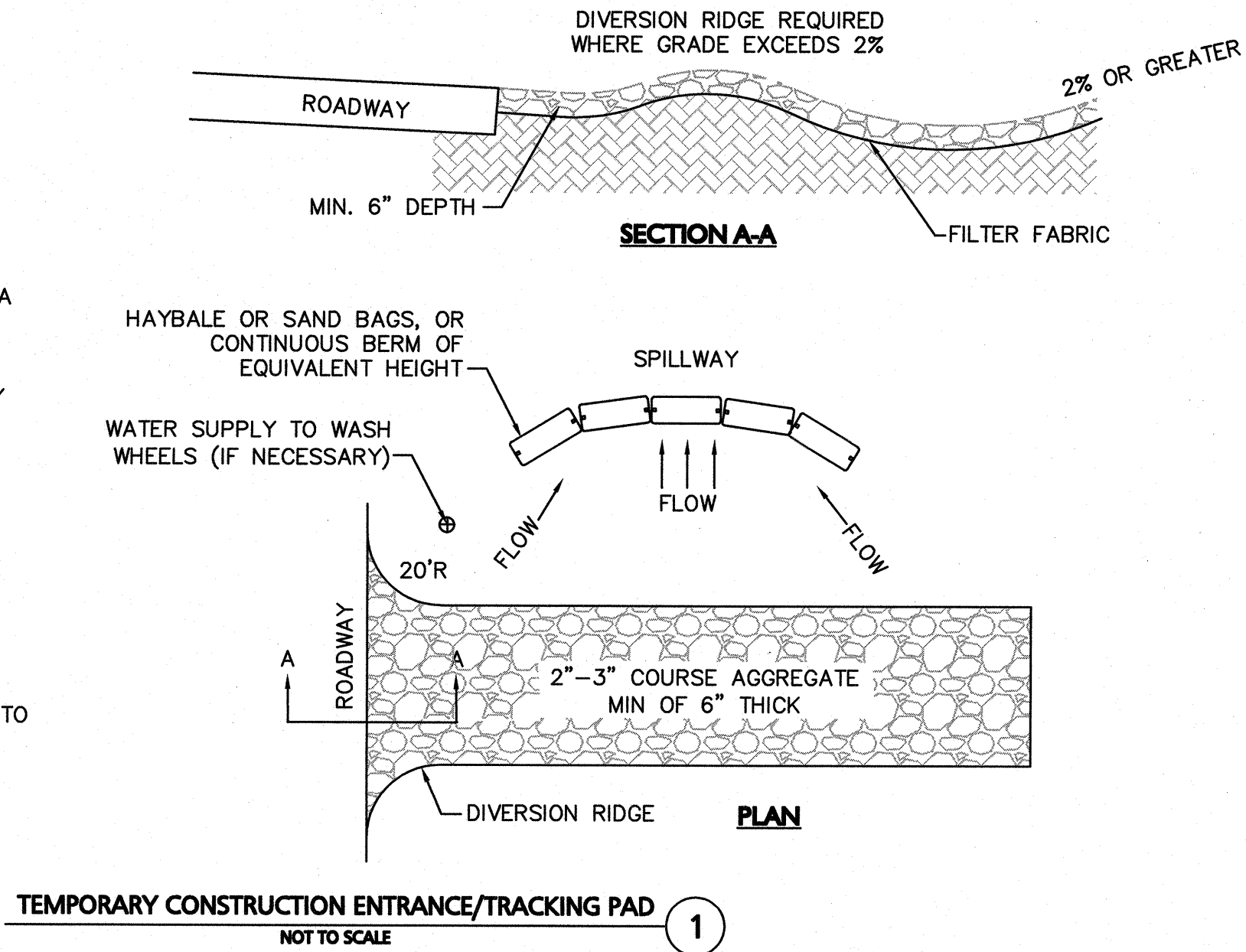
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DRAWING TITLE: **TEST PIT PLAN** SHEET No. **C-108**

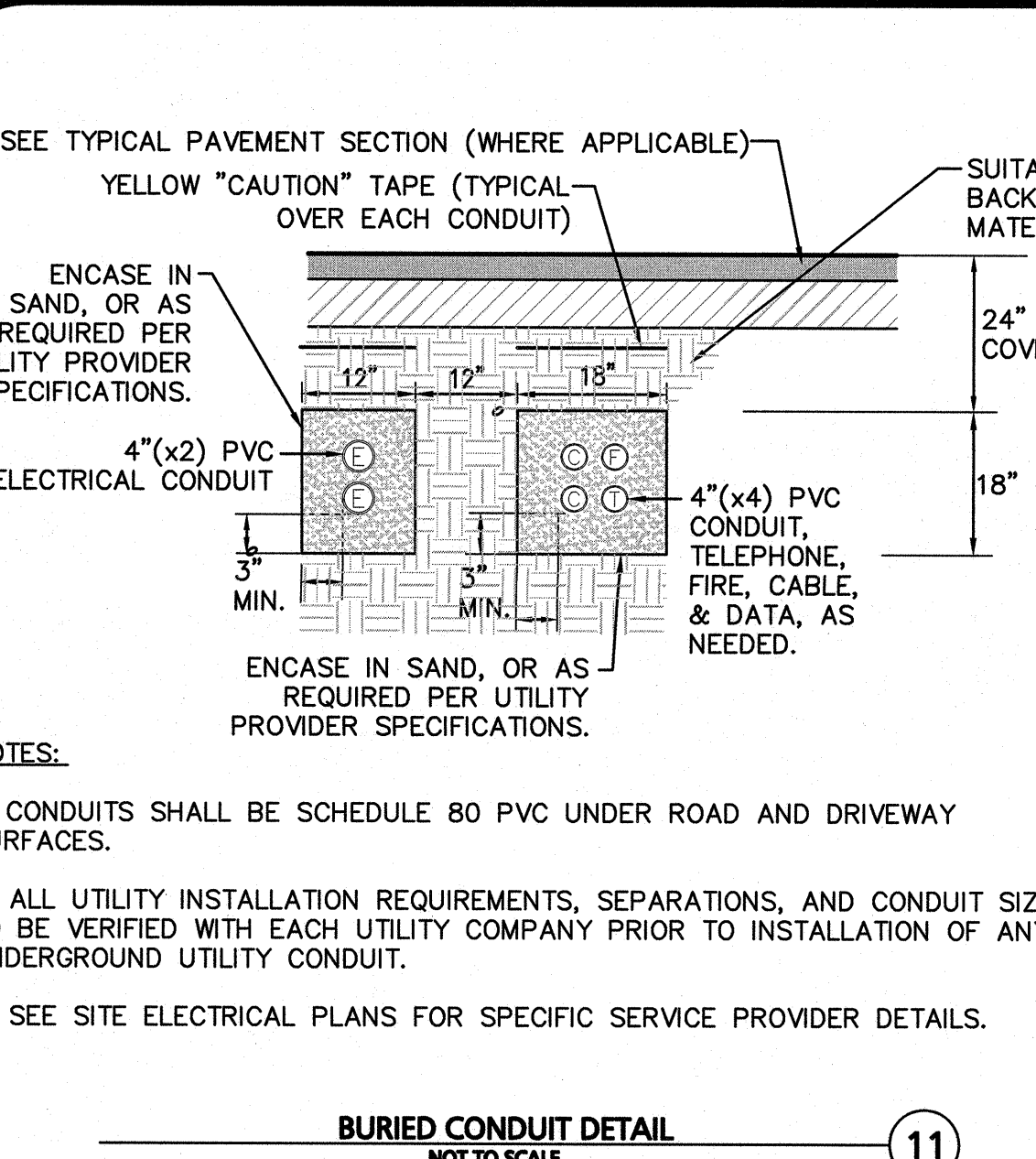
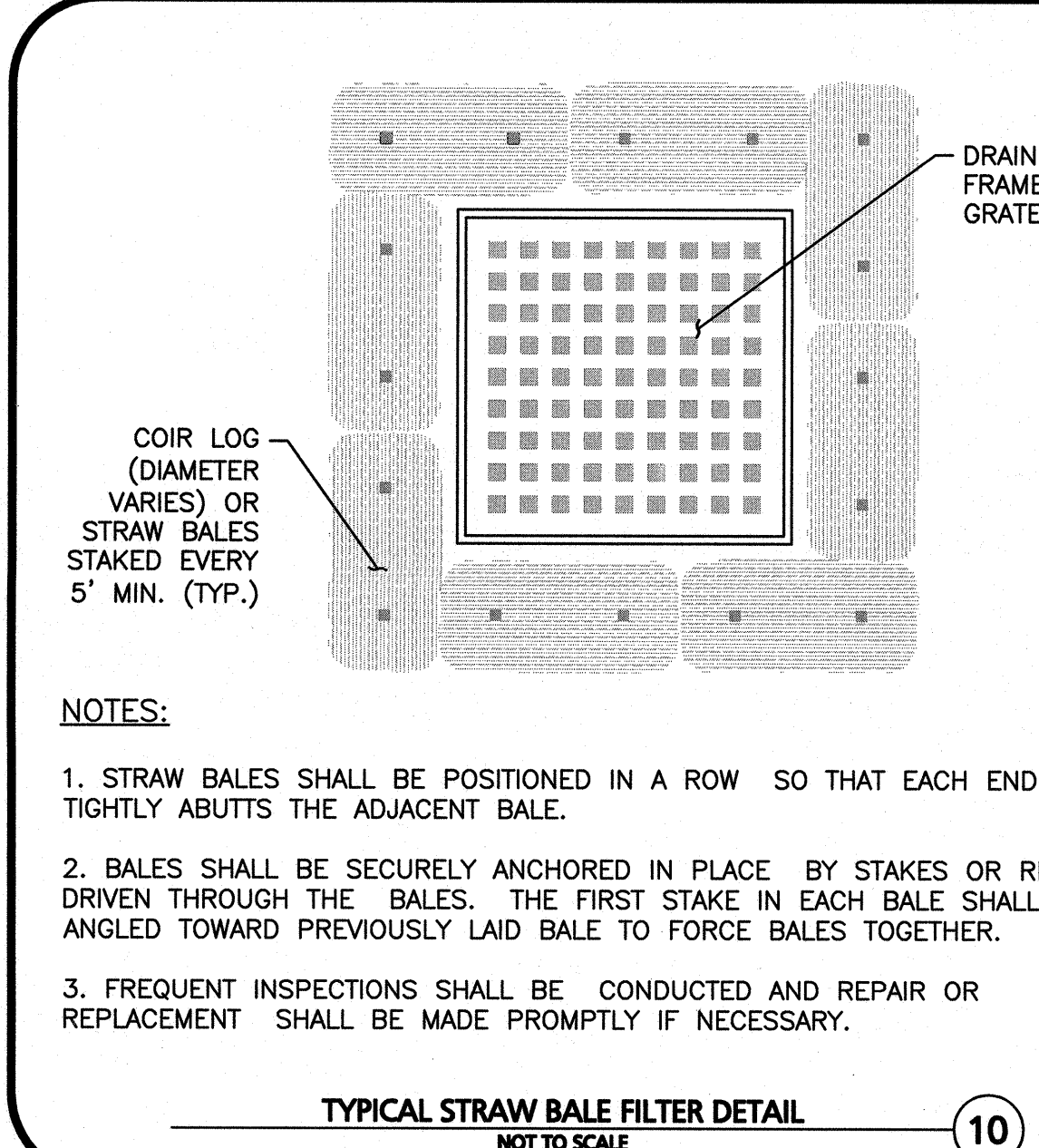
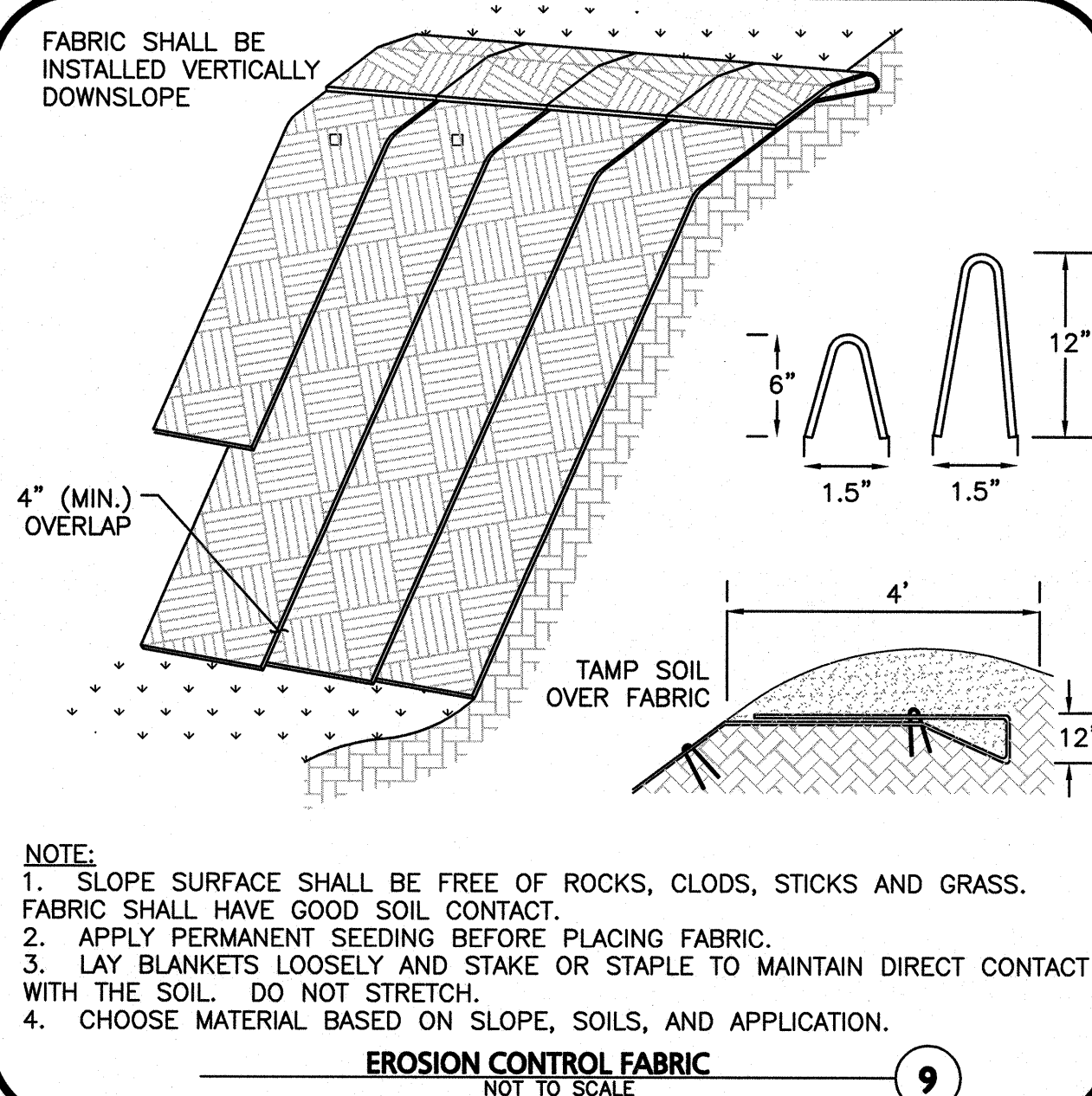
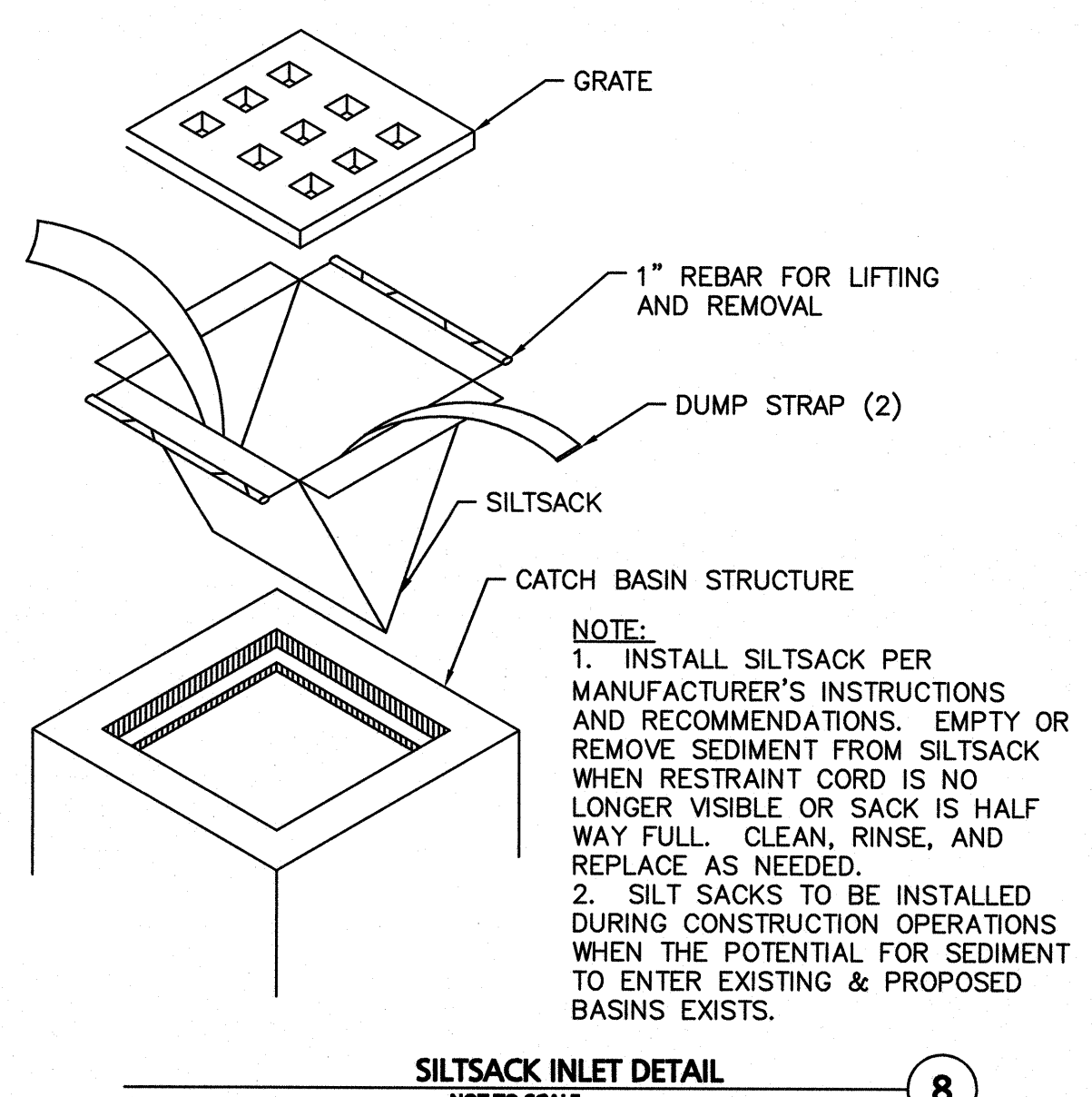
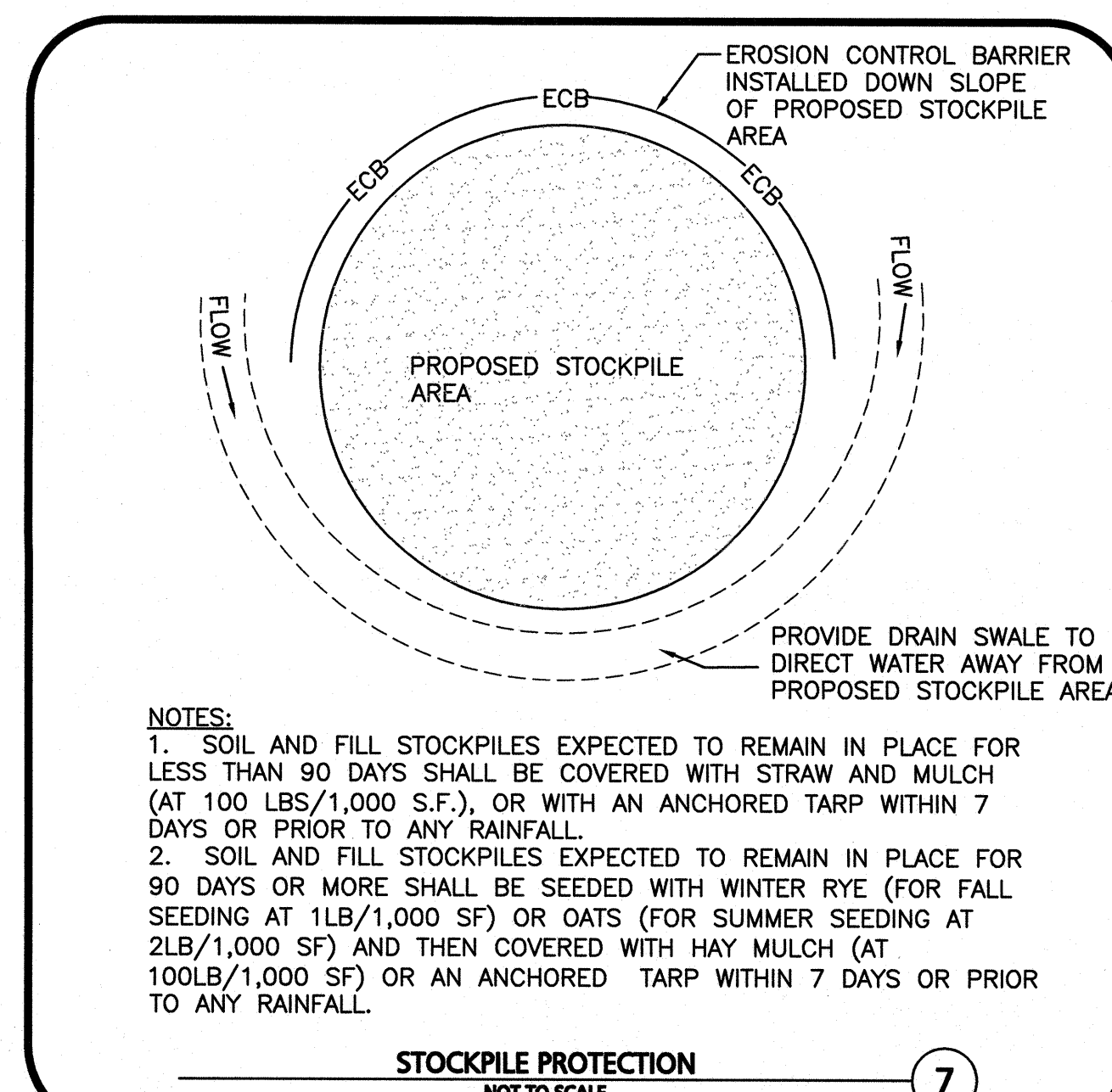
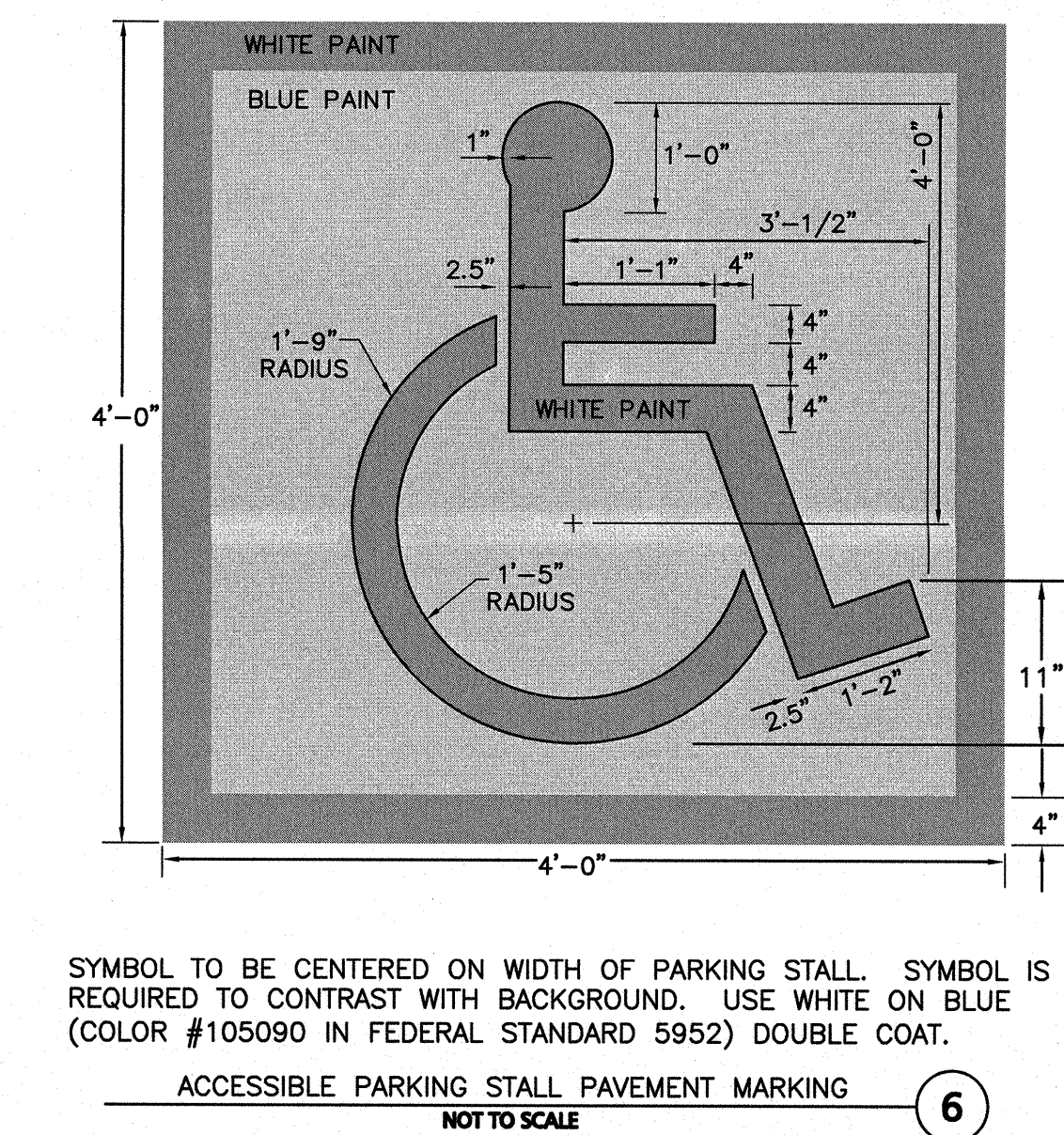
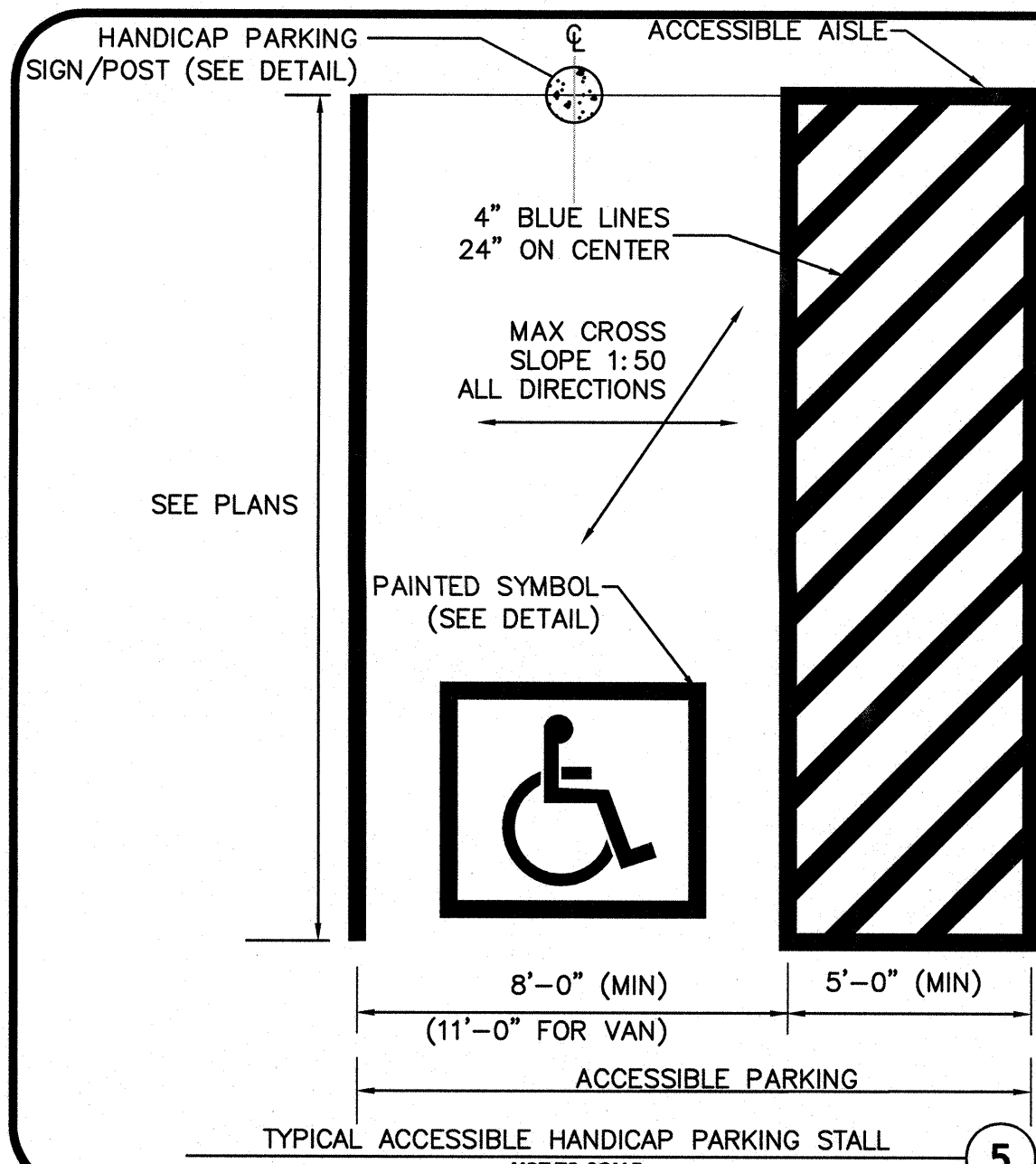
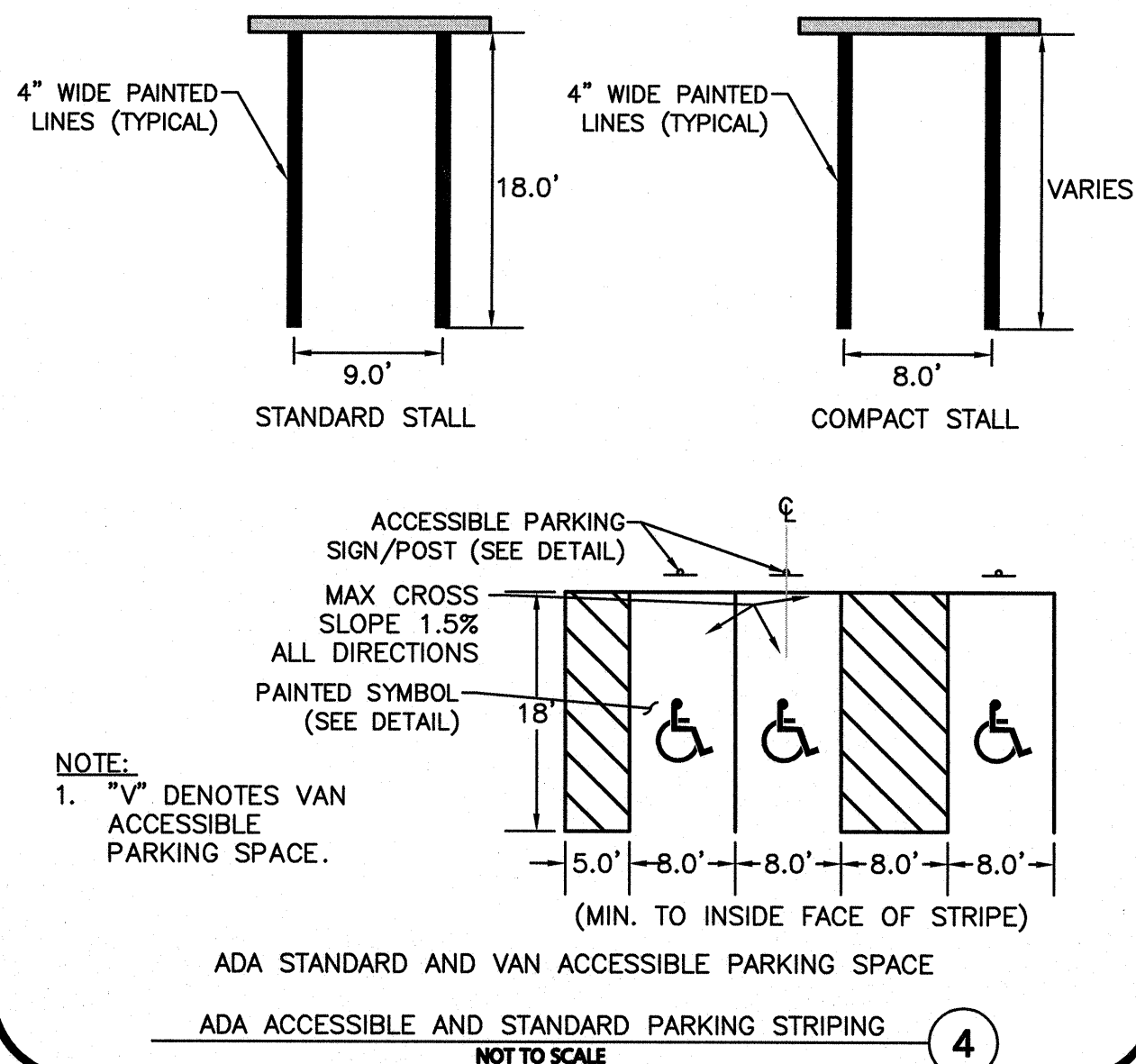
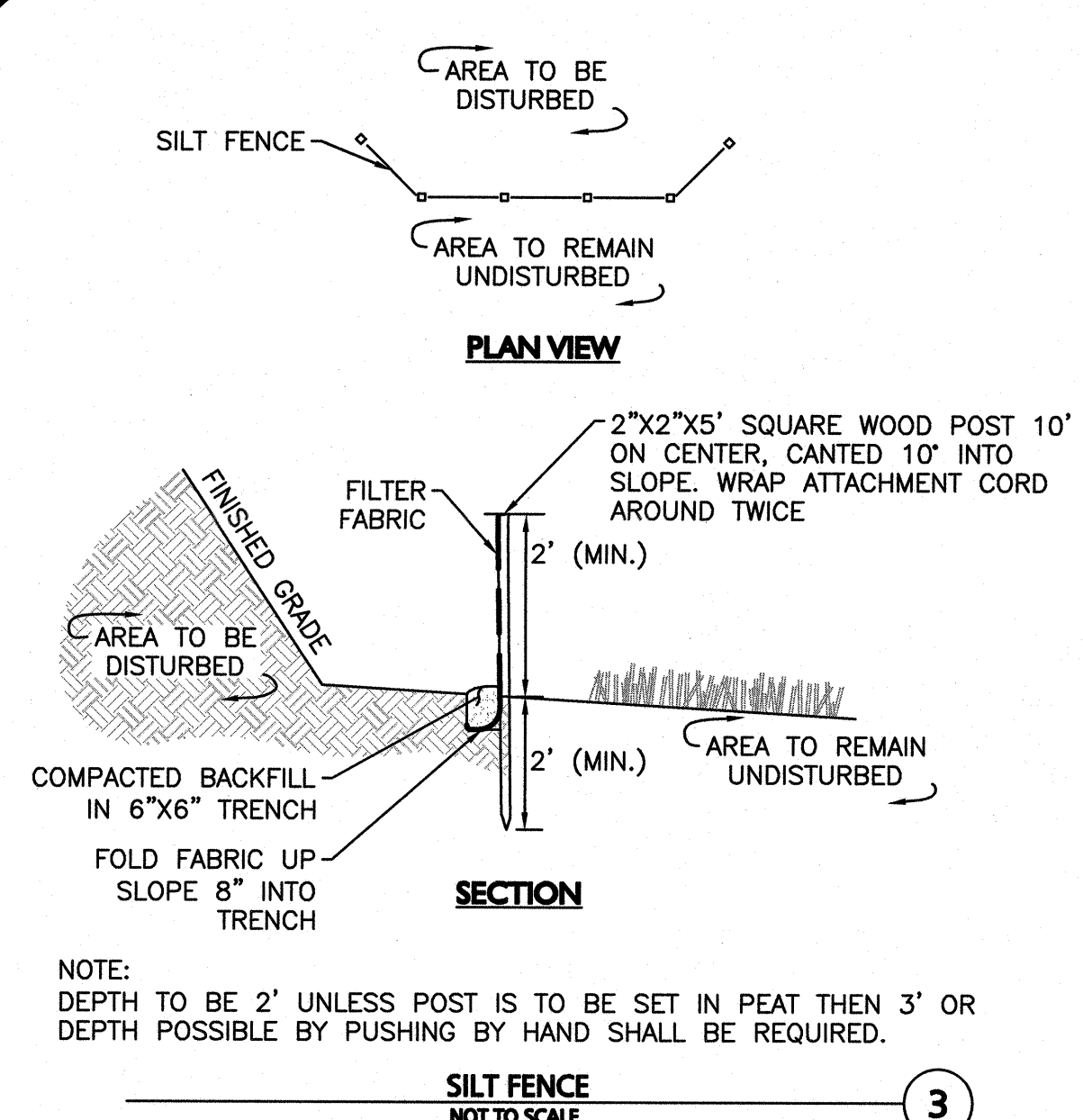
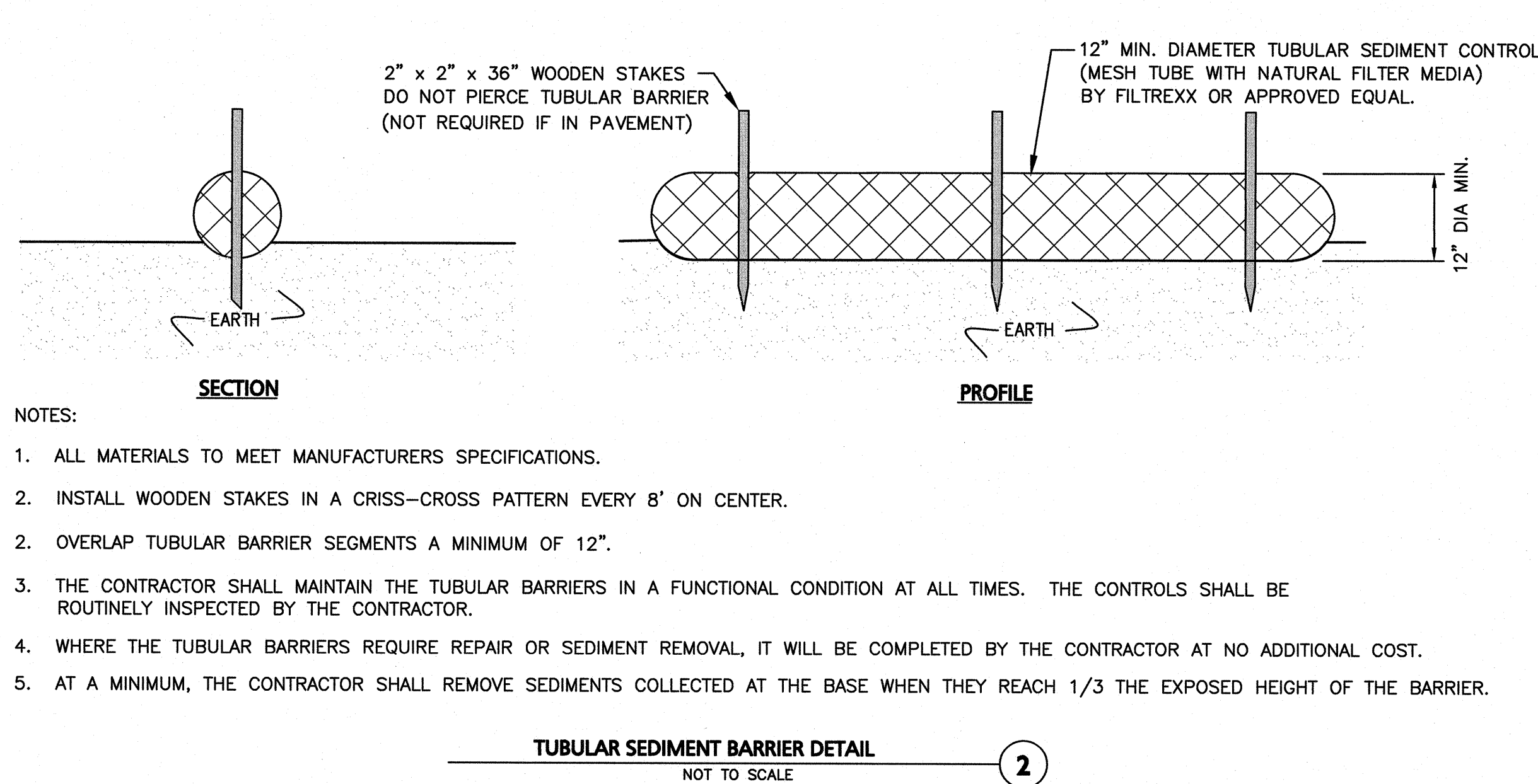


N:\PROJECTS\2725-01\CIVIL\DRAWINGS\CURRENT\C-2725-01_TEST PIT PLAN.DWG

- NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTERING THE PUBLIC RIGHT-OF-WAY.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
 4. USE SANDBAGS, HAYBALES, OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.
 5. SEE EROSION CONTROL PLAN FOR PAD DIMENSIONS AND LOCATION.



- NOTES:
1. ALL MATERIALS TO MEET MANUFACTURERS SPECIFICATIONS.
 2. INSTALL WOODEN STAKES IN A CRISS-CROSS PATTERN EVERY 8' ON CENTER.
 3. OVERLAP TUBULAR BARRIER SEGMENTS A MINIMUM OF 12".
 4. THE CONTRACTOR SHALL MAINTAIN THE TUBULAR BARRIERS IN A FUNCTIONAL CONDITION AT ALL TIMES. THE CONTROLS SHALL BE ROUTINELY INSPECTED BY THE CONTRACTOR.
 5. WHERE THE TUBULAR BARRIERS REQUIRE REPAIR OR SEDIMENT REMOVAL, IT WILL BE COMPLETED BY THE CONTRACTOR AT NO ADDITIONAL COST.
 6. AT A MINIMUM, THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE WHEN THEY REACH 1/3 THE EXPOSED HEIGHT OF THE BARRIER.



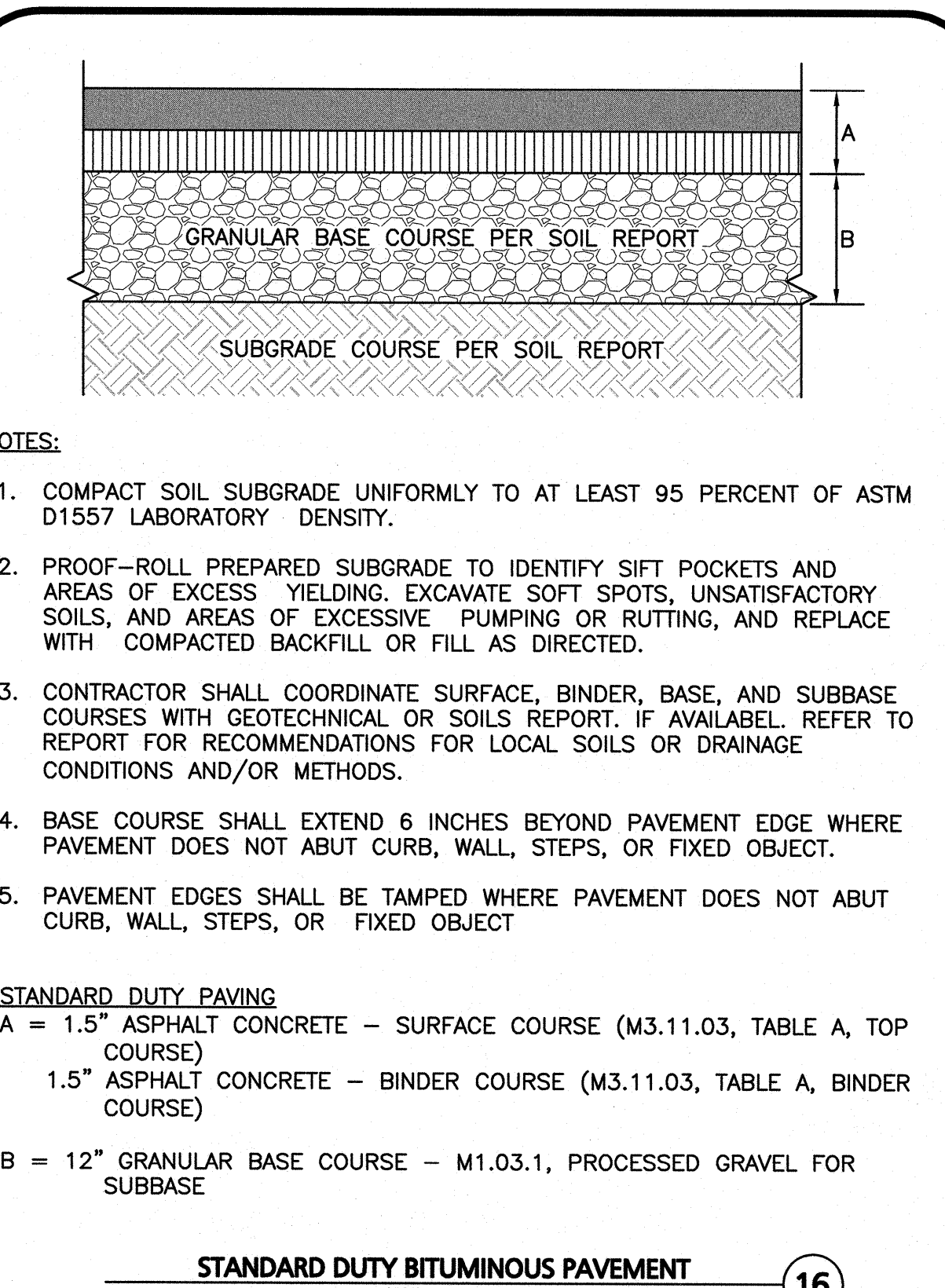
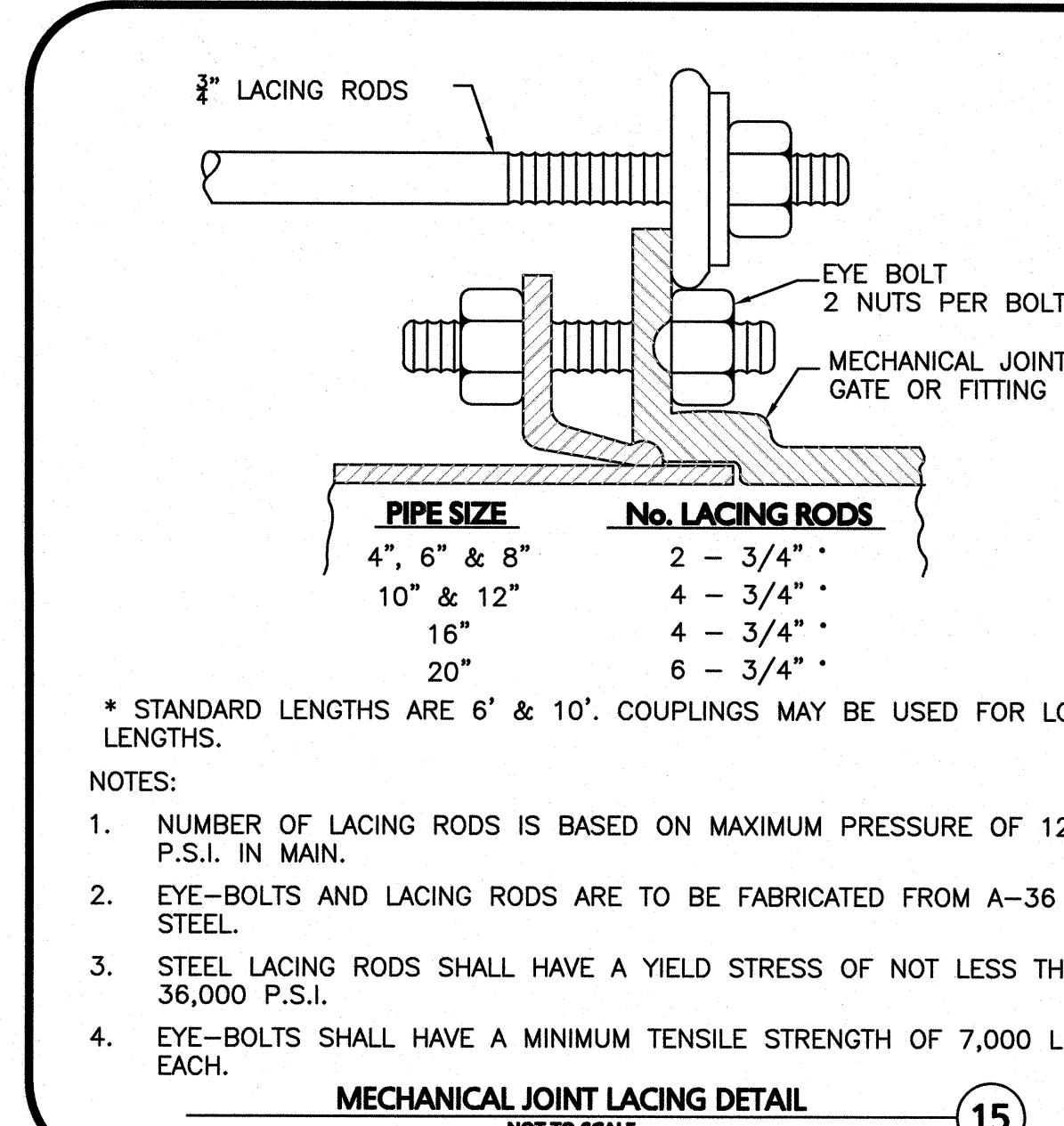
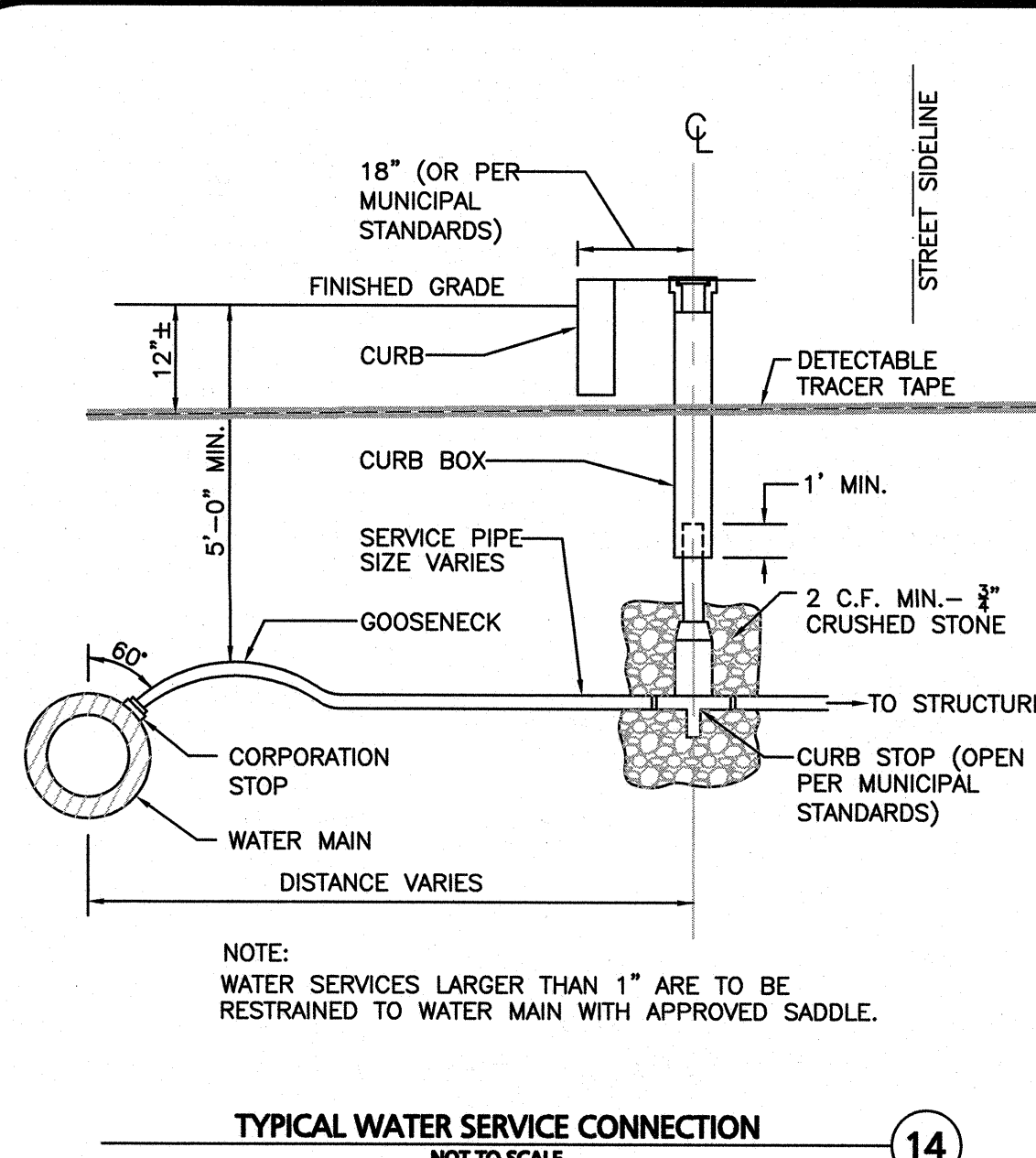
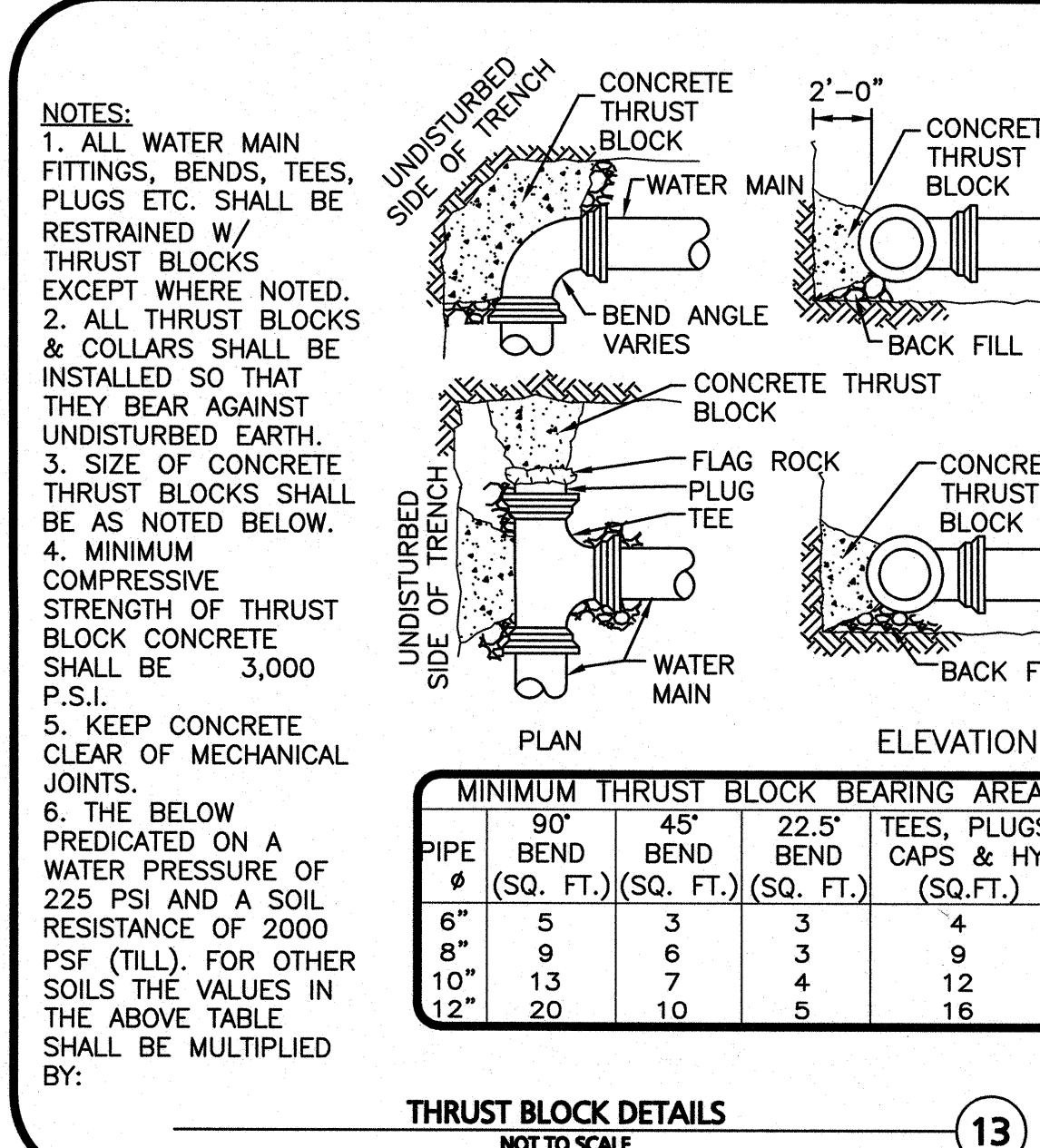
MUTCD NUMBER	SIGN	SIZE (MIN)	MOUNTING HEIGHT	DESCRIPTION	RETRO-REFLECTIVE
R1-1	STOP	30"x30"	7' - 0"	WHITE ON RED	YES
R7-8(M) (MODIFIED)		12"x24"	7' - 0"	RED ON WHITE	YES
R7-8		12"x18"	7' - 0"	GREEN & BLUE ON WHITE	YES

NOTES:

1. TRAFFIC AND SAFETY SIGNAGE SHALL COMPLY WITH MUTCD STANDARDS.
2. WHERE APPLICABLE THE SIGN SUPPORT SHALL COMPLY WITH THE BREAKAWAY REQUIREMENTS OF THE LATEST EDITION OF ASHTO'S "SPECIFICATION FOR STRUCTURAL SUPPORTS" FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.

SIGN TABLE

NOT TO SCALE



3.25.22

CARLTON M. ALLEN
No. 0223
Professional Engineer
Professional Engineer for
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
A	03-23-2022	REVISED PER COMMENTS

APPLICANT/OWNER:

SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

PROJECT:

THE SANCTUARY
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PROJECT NO. 2725-01 DATE: 07-16-2021

SCALE: AS SHOWN DWG. NAME: C-2725-01

DESIGNED BY: CMQ/SIL CHECKED BY: CMQ

PREPARED BY:

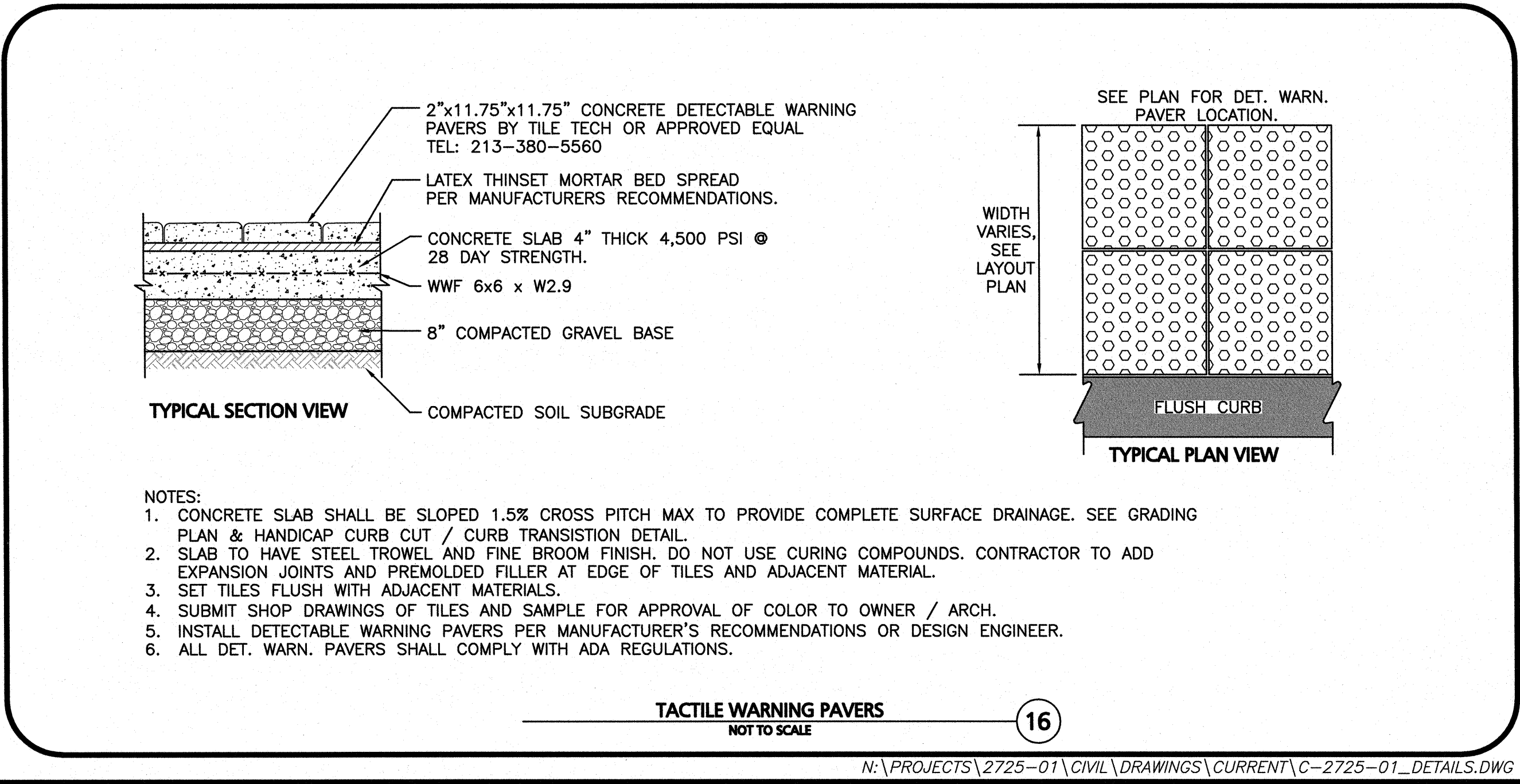
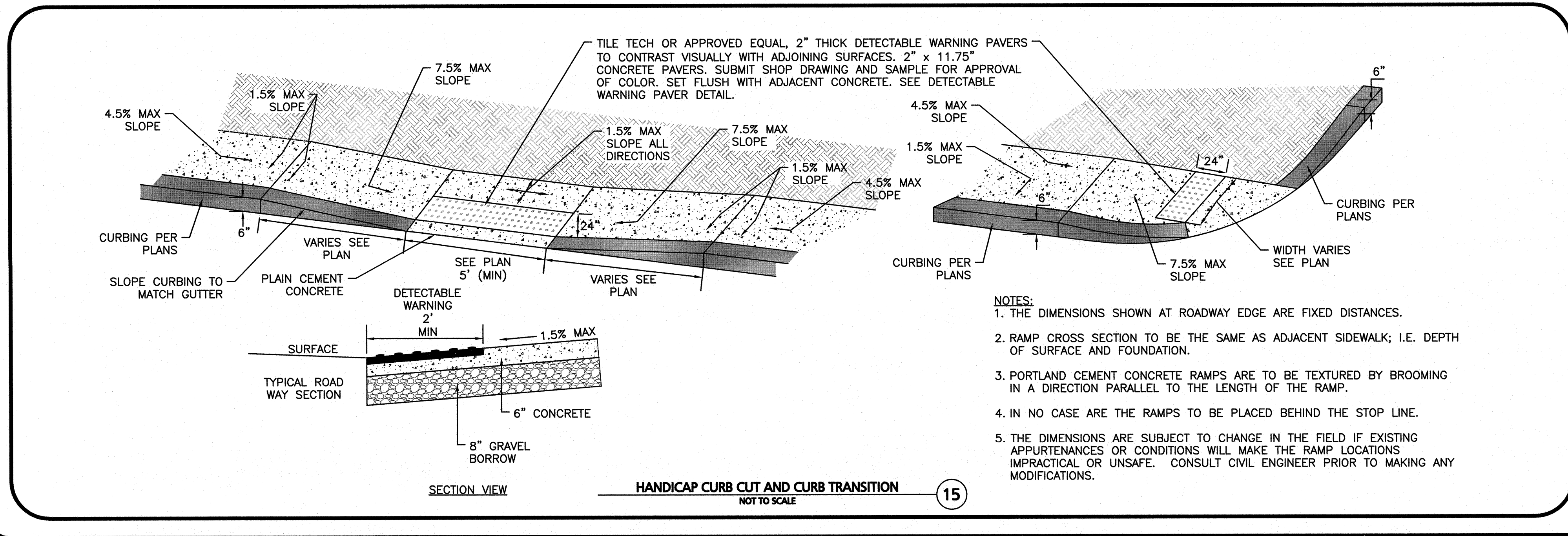
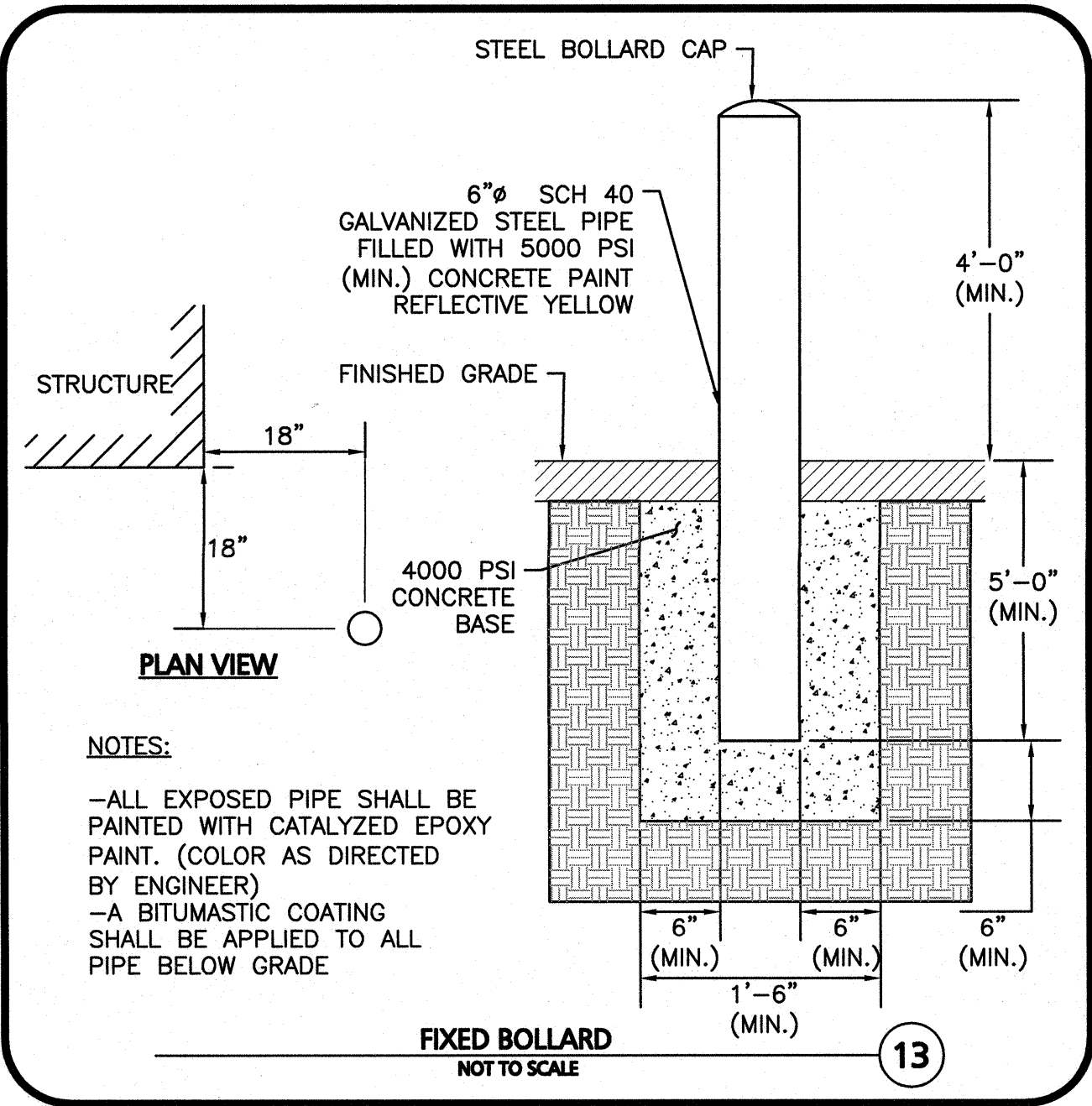
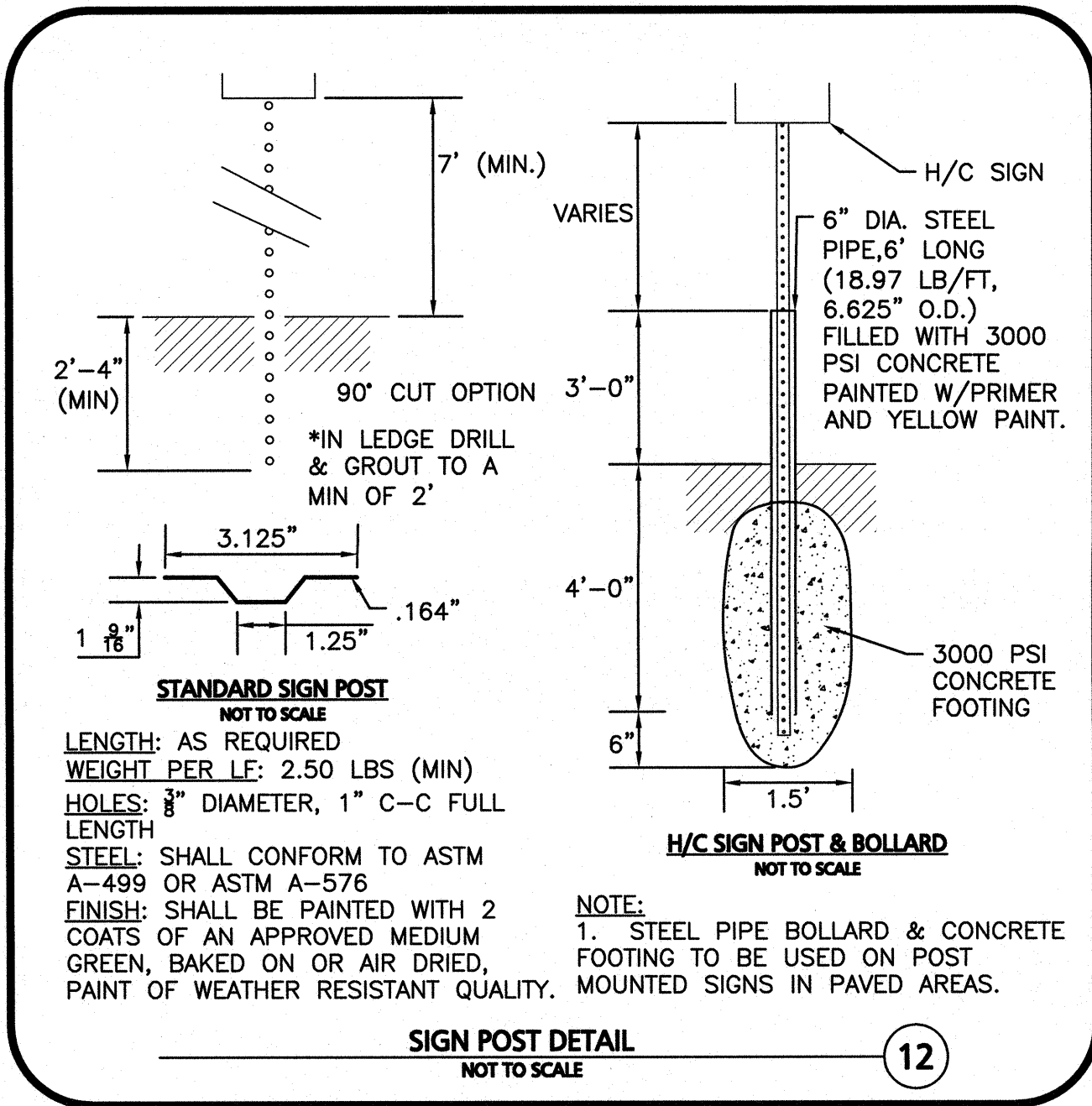
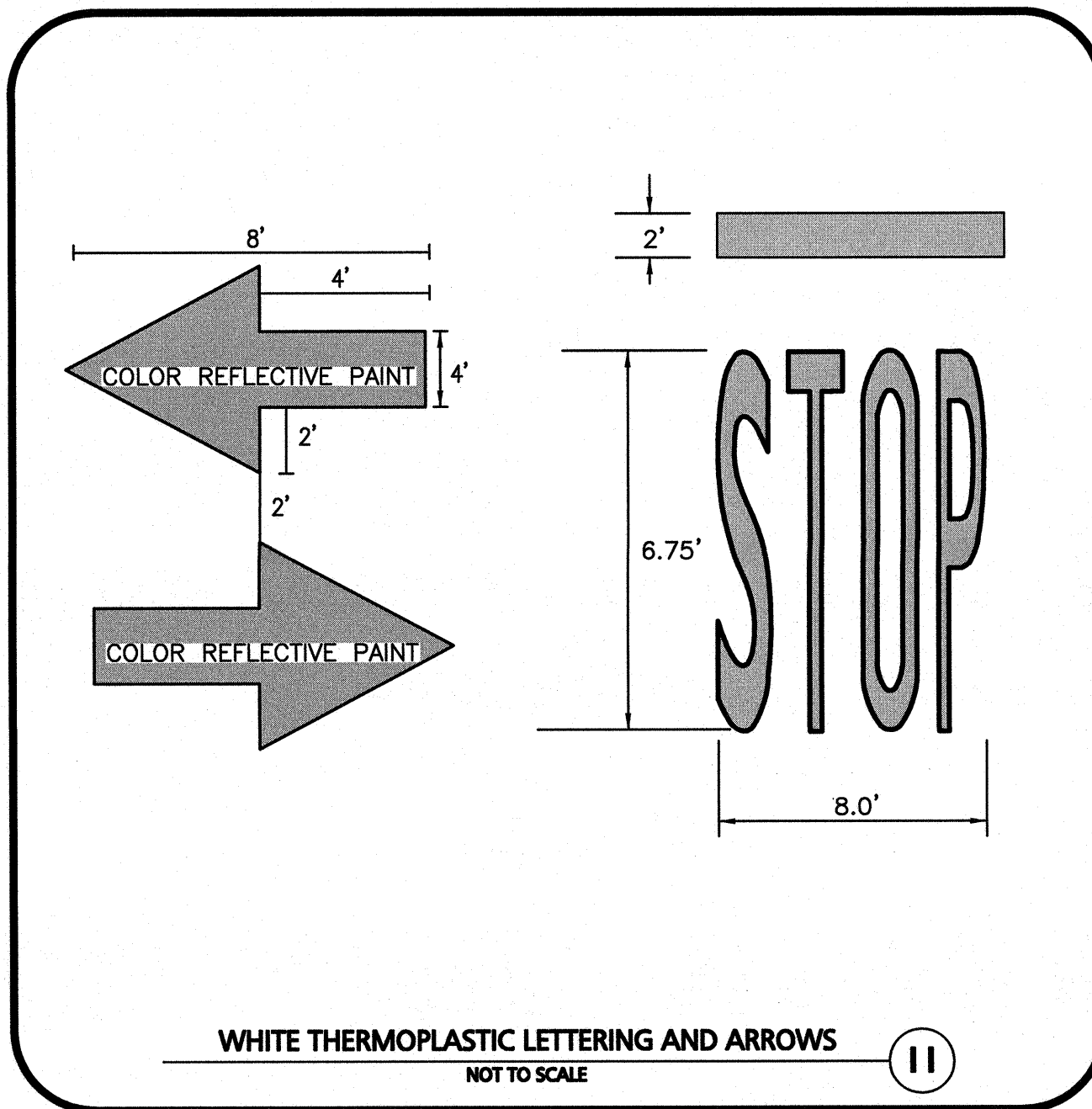
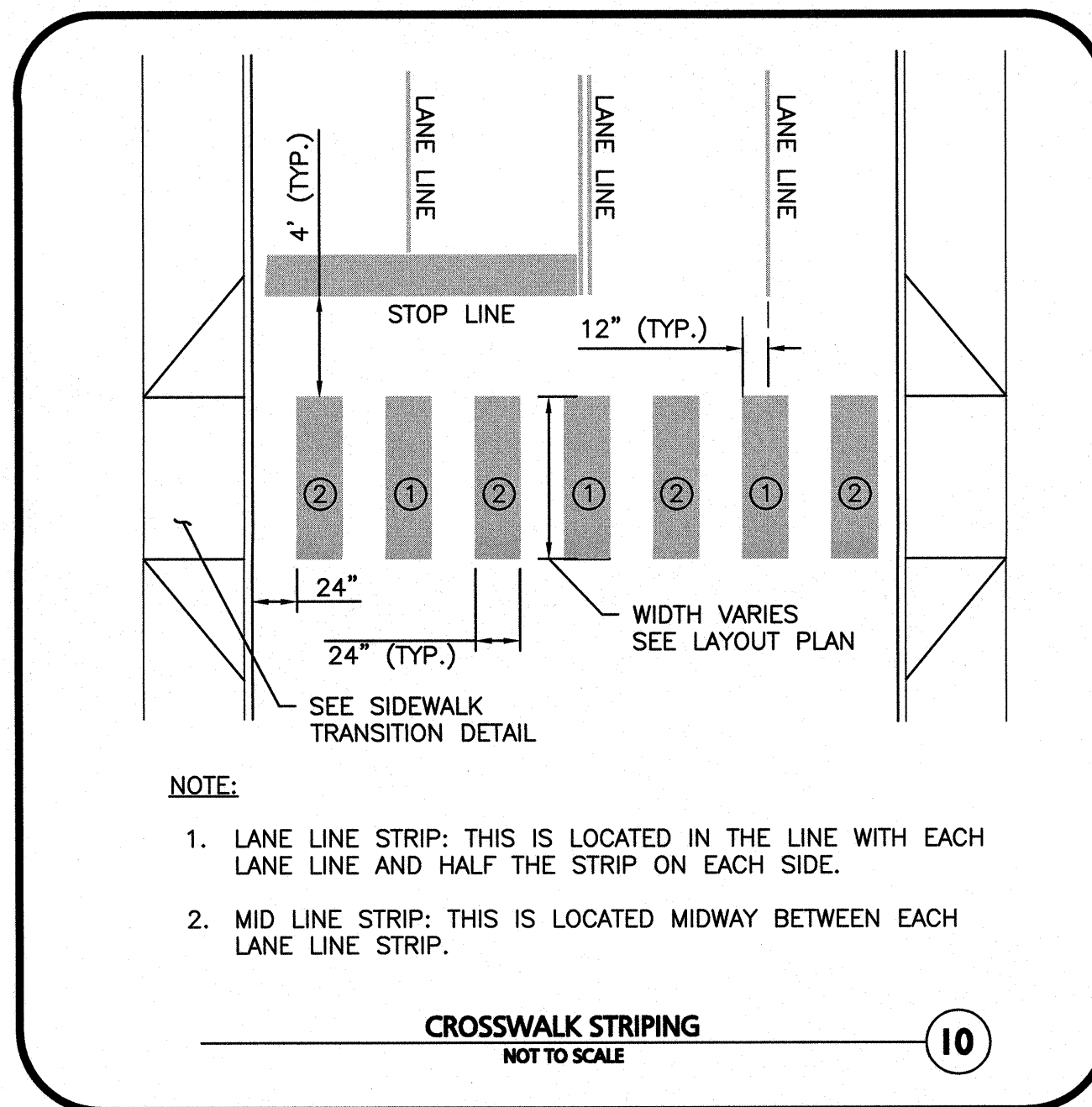
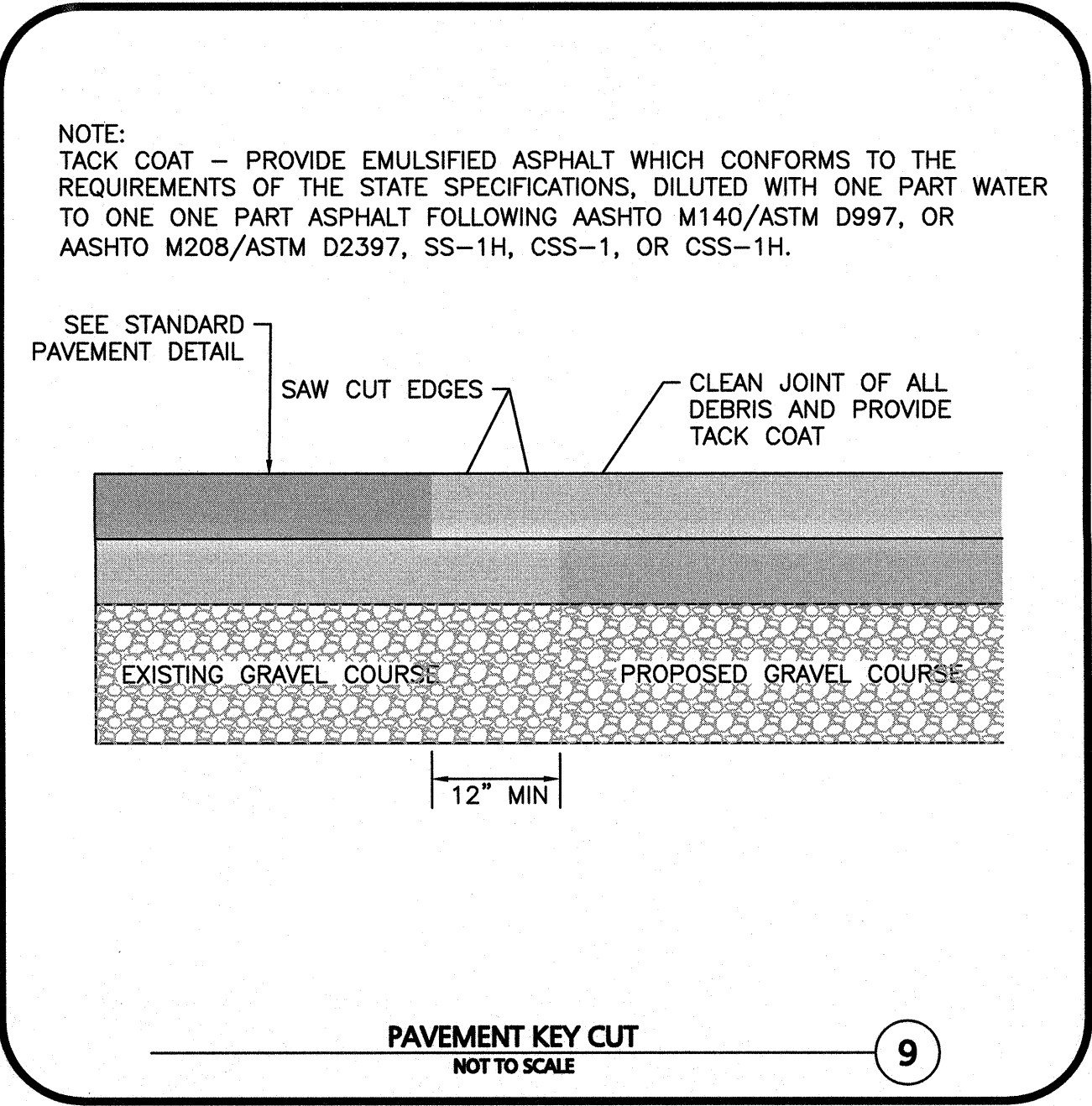
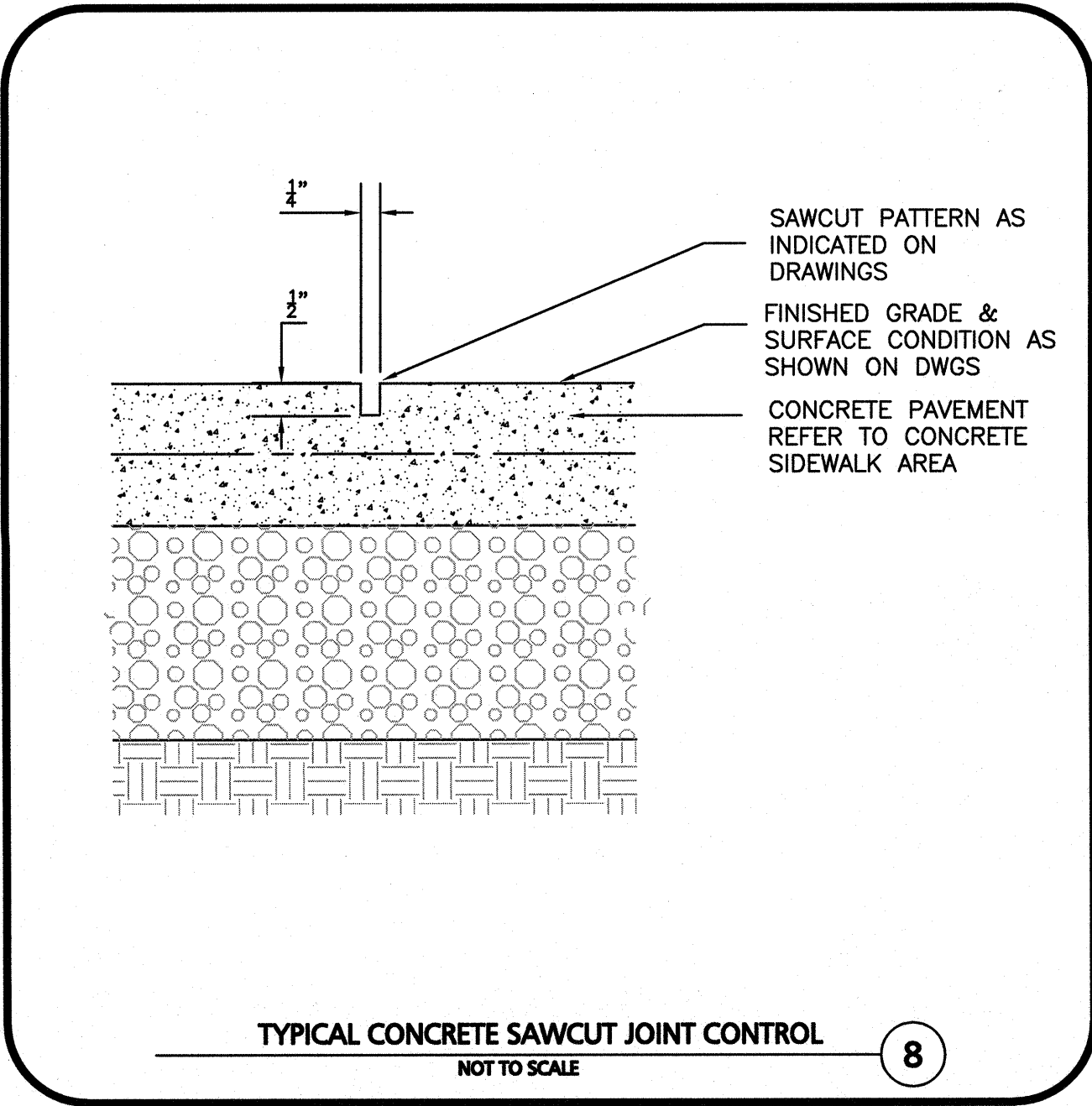
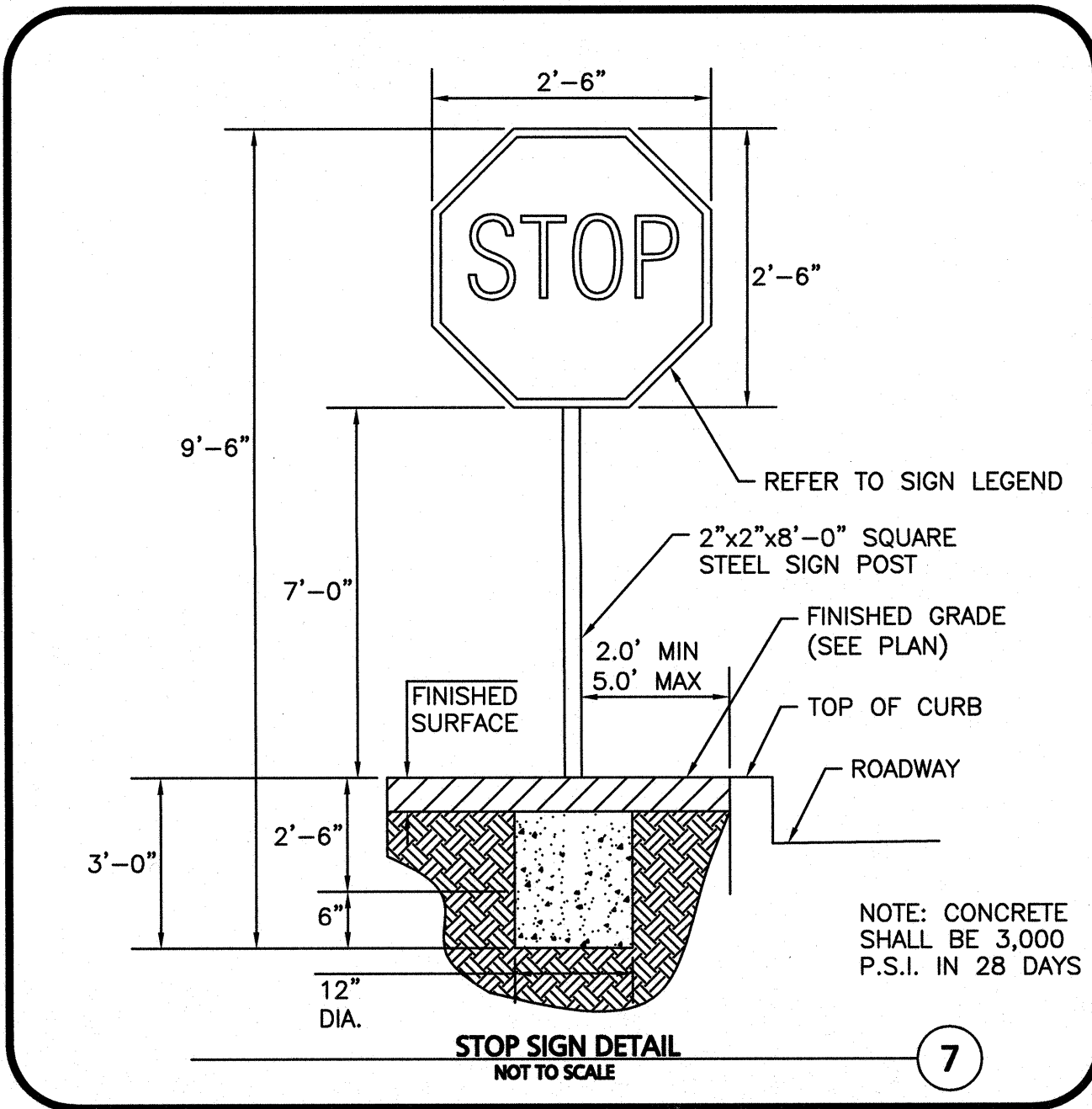
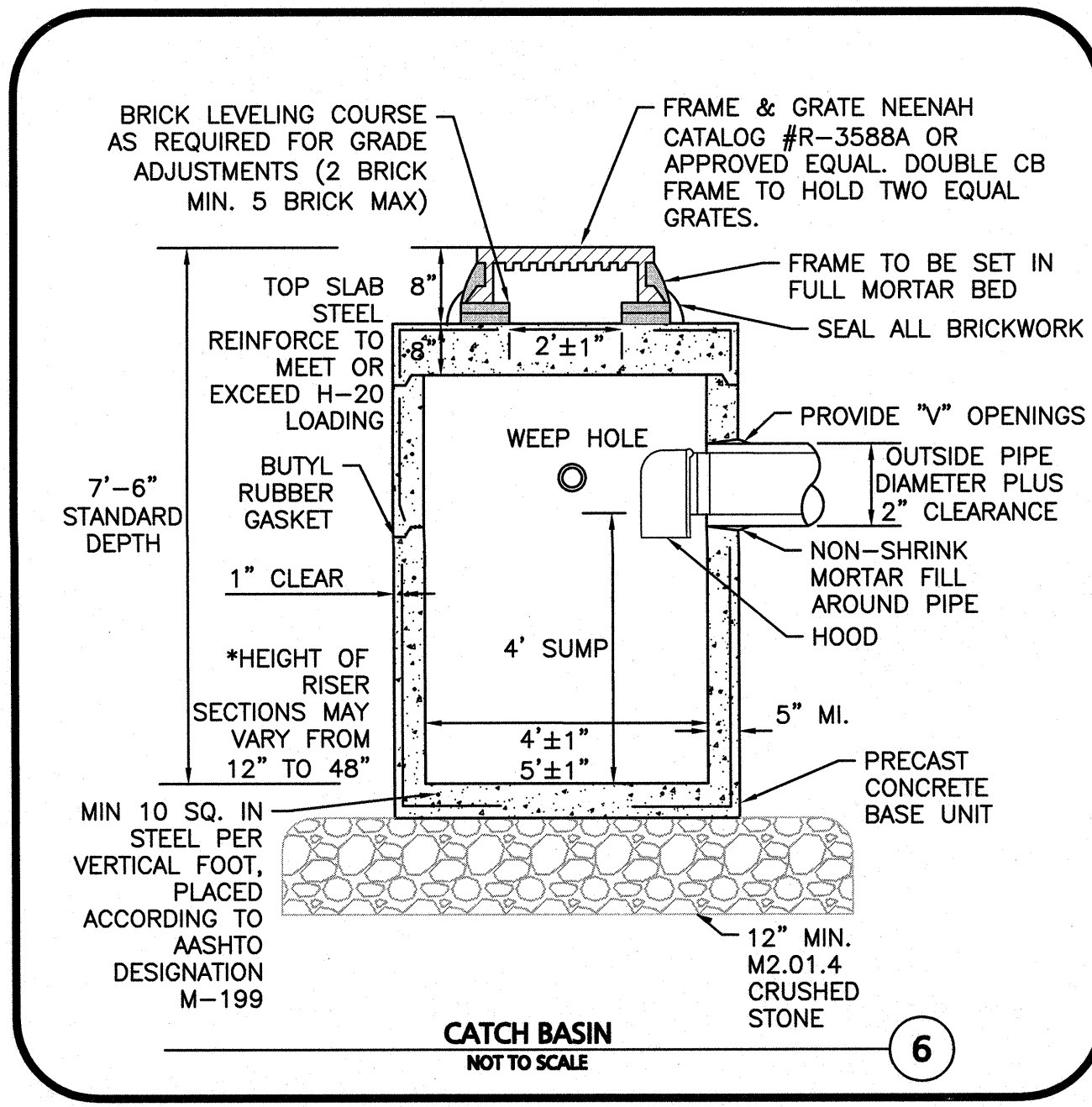
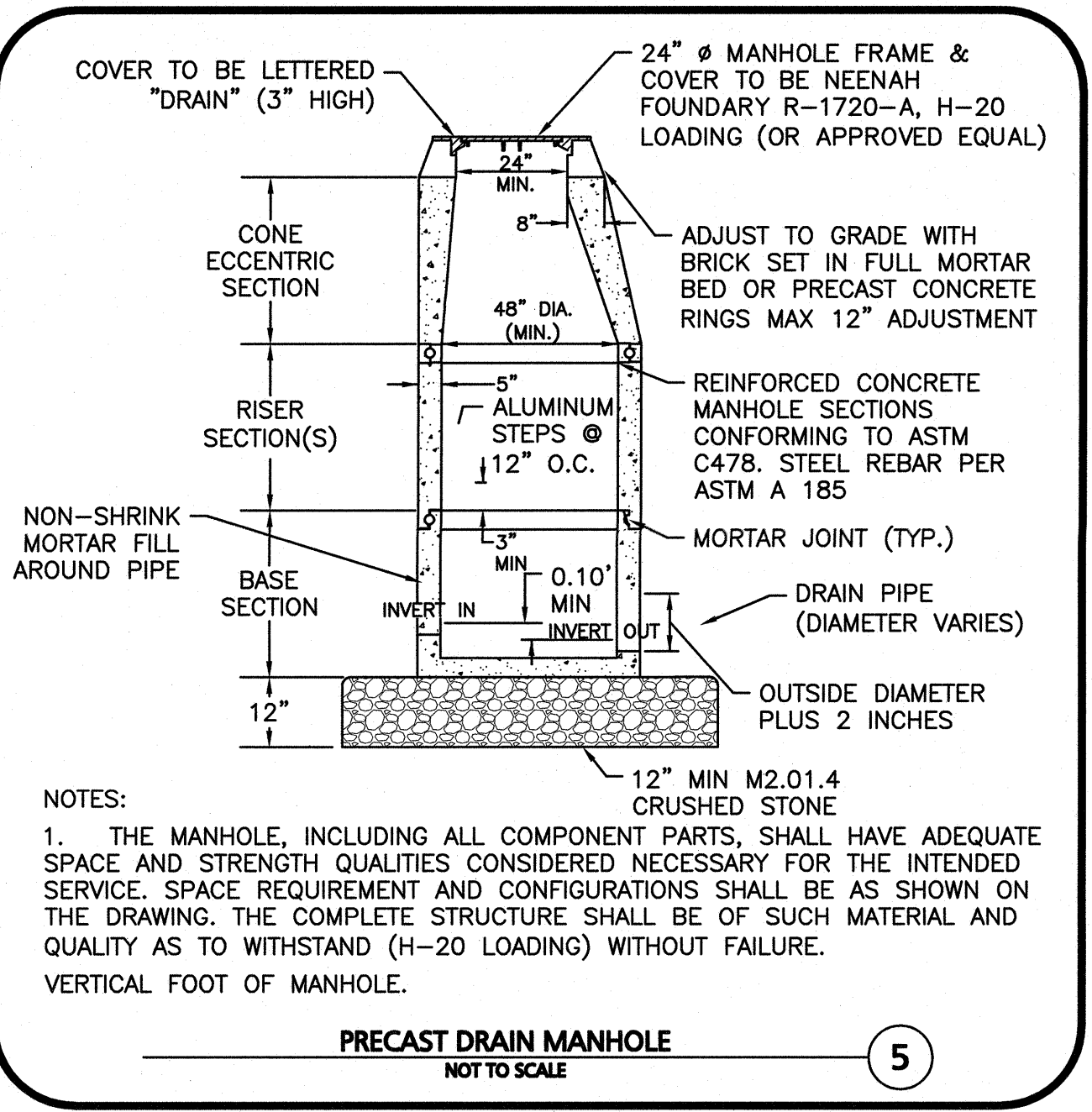
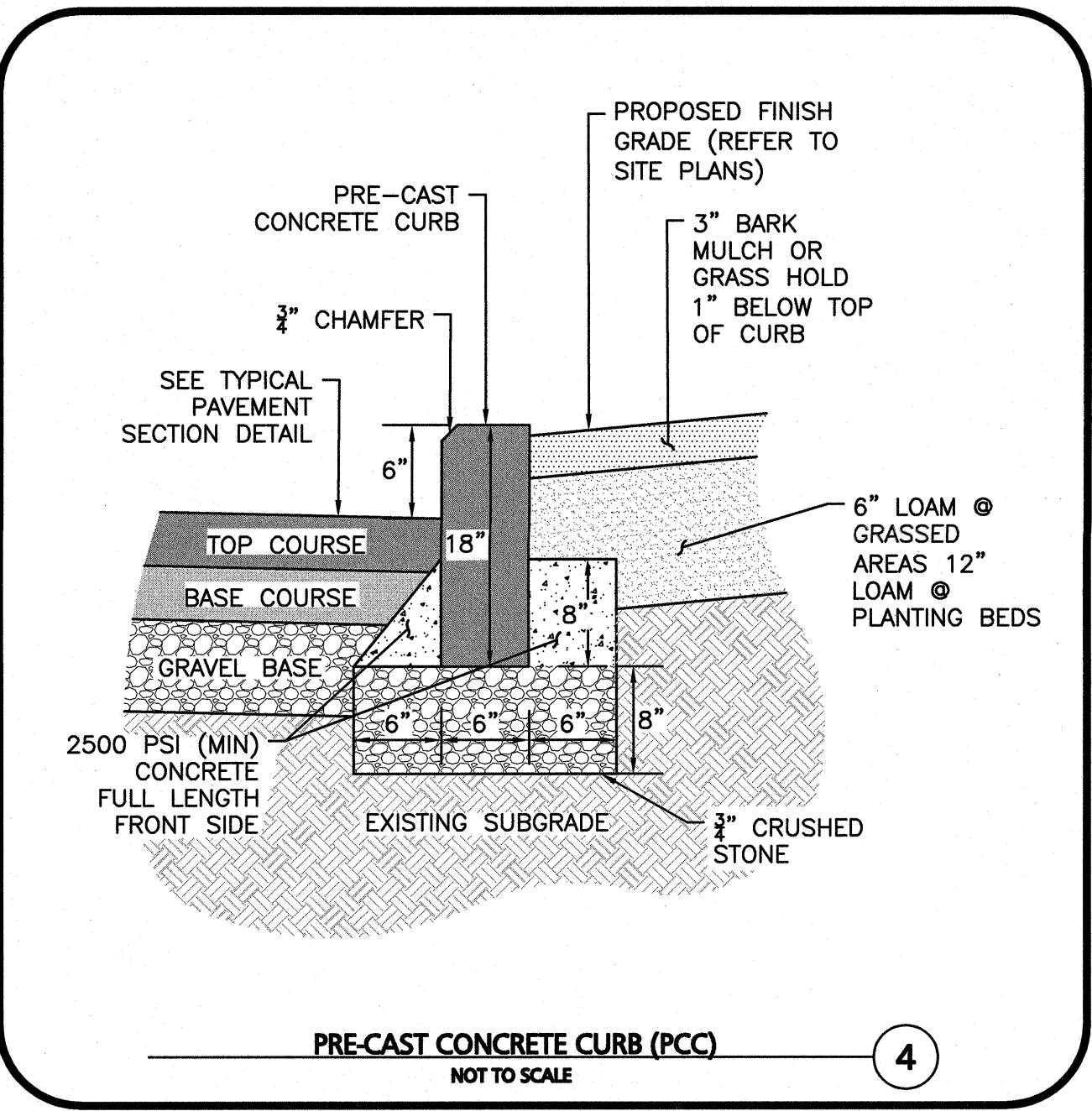
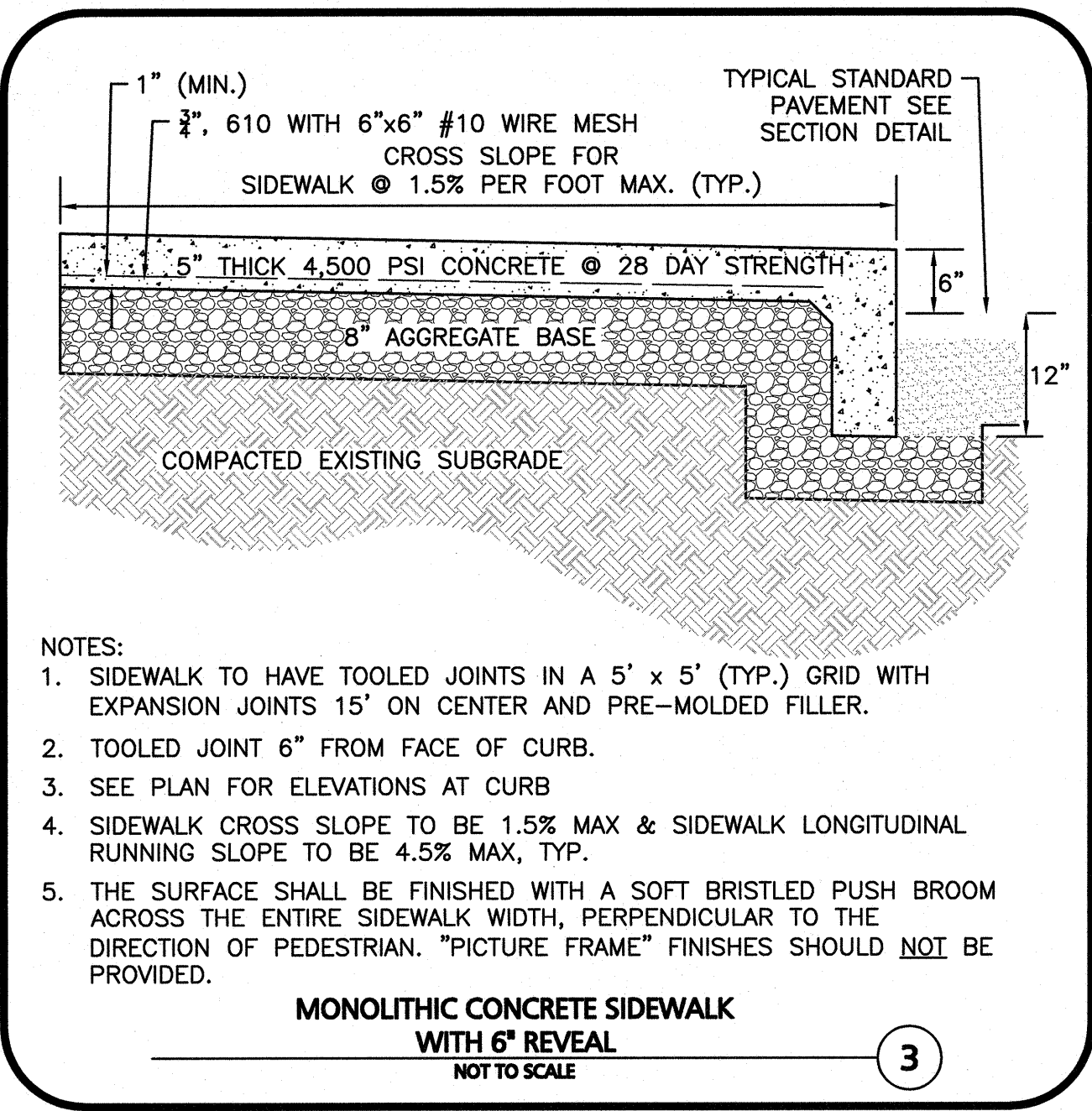
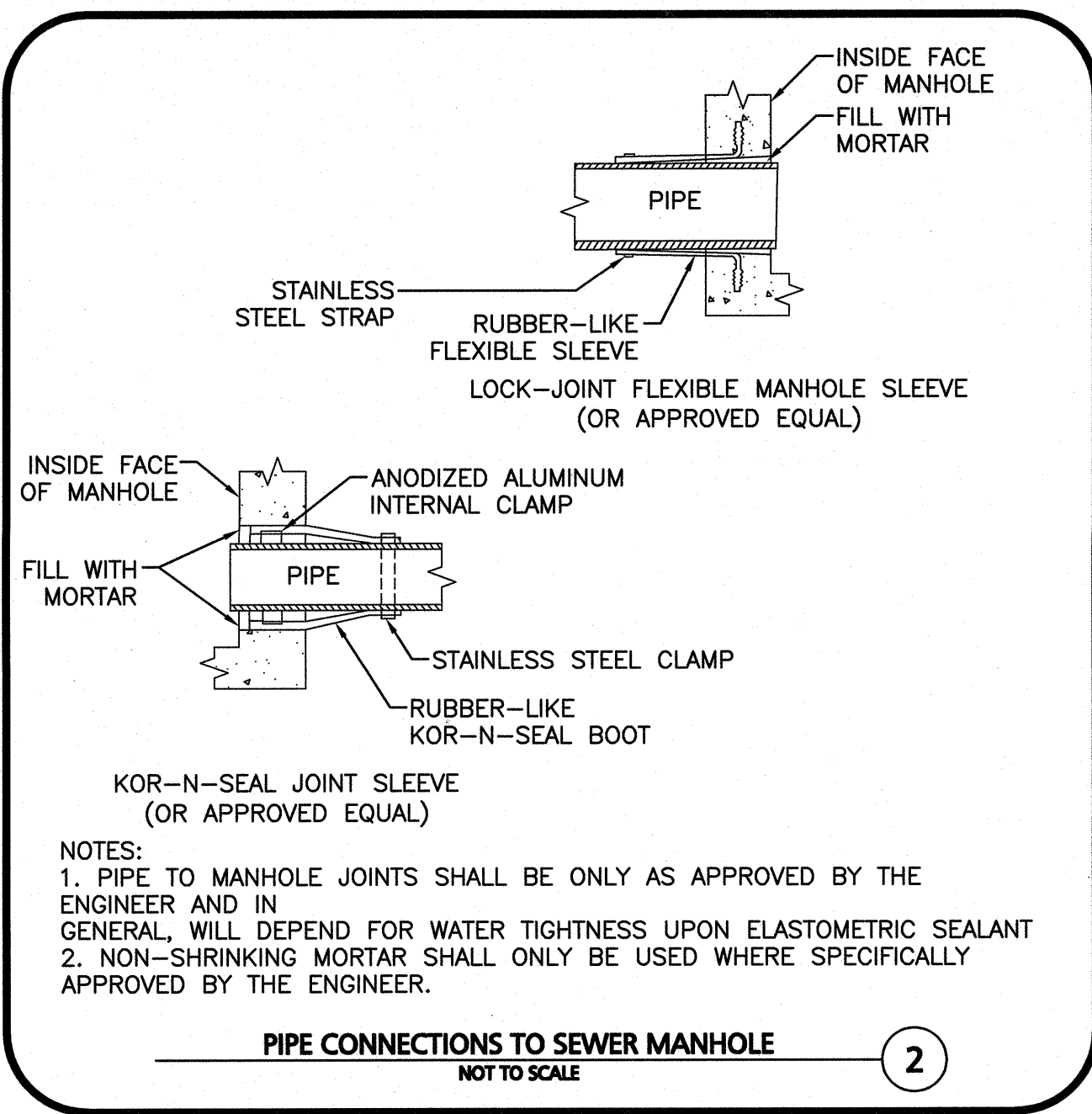
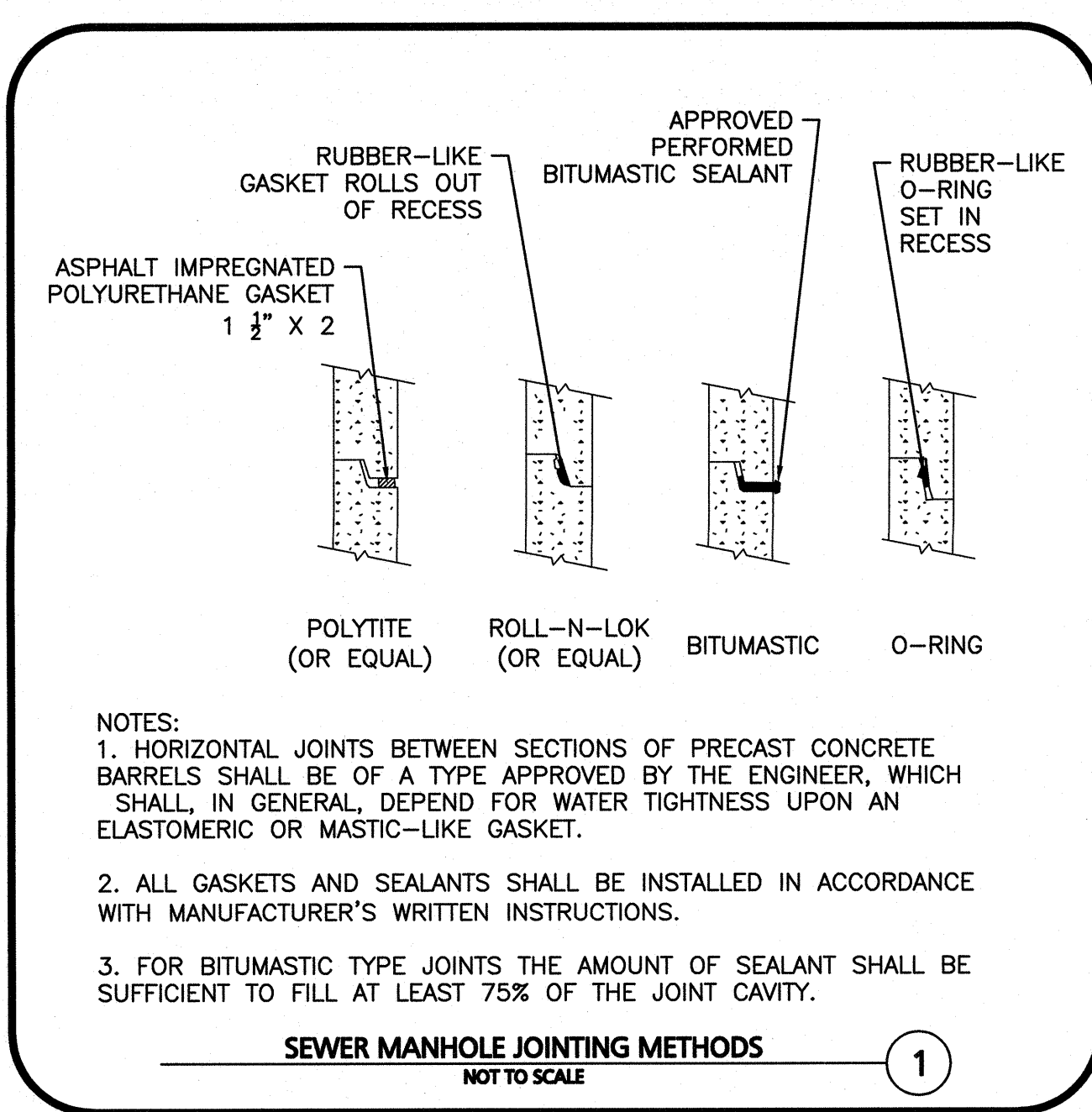
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environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCIAL WAY, SUITE 5
WOBBURN MA 01801-8501
TEL: (781) 935-6889
FAX: (781) 935-2896

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DRAWING TITLE: CIVIL DETAILS SHEET No. C-501

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3.23.22

CARLTON M. QUINN
REGISTERED PROFESSIONAL ENGINEER
No. 49923
STATE OF MASSACHUSETTS

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
A	03-23-2022	REVISED PER COMMENTS

APPLICANT/OWNER:
SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

PROJECT:
THE SANCTUARY
SCHOOL STREET
MANCHESTER-BY-THE-SEA, MA

PROJECT NO.	2725-01	DATE:	07-16-2021
SCALE:	AS SHOWN	DWG. NAME:	C2725-01
DESIGNED BY:	CMQ/SIL	CHECKED BY:	CMQ

PREPARED BY:
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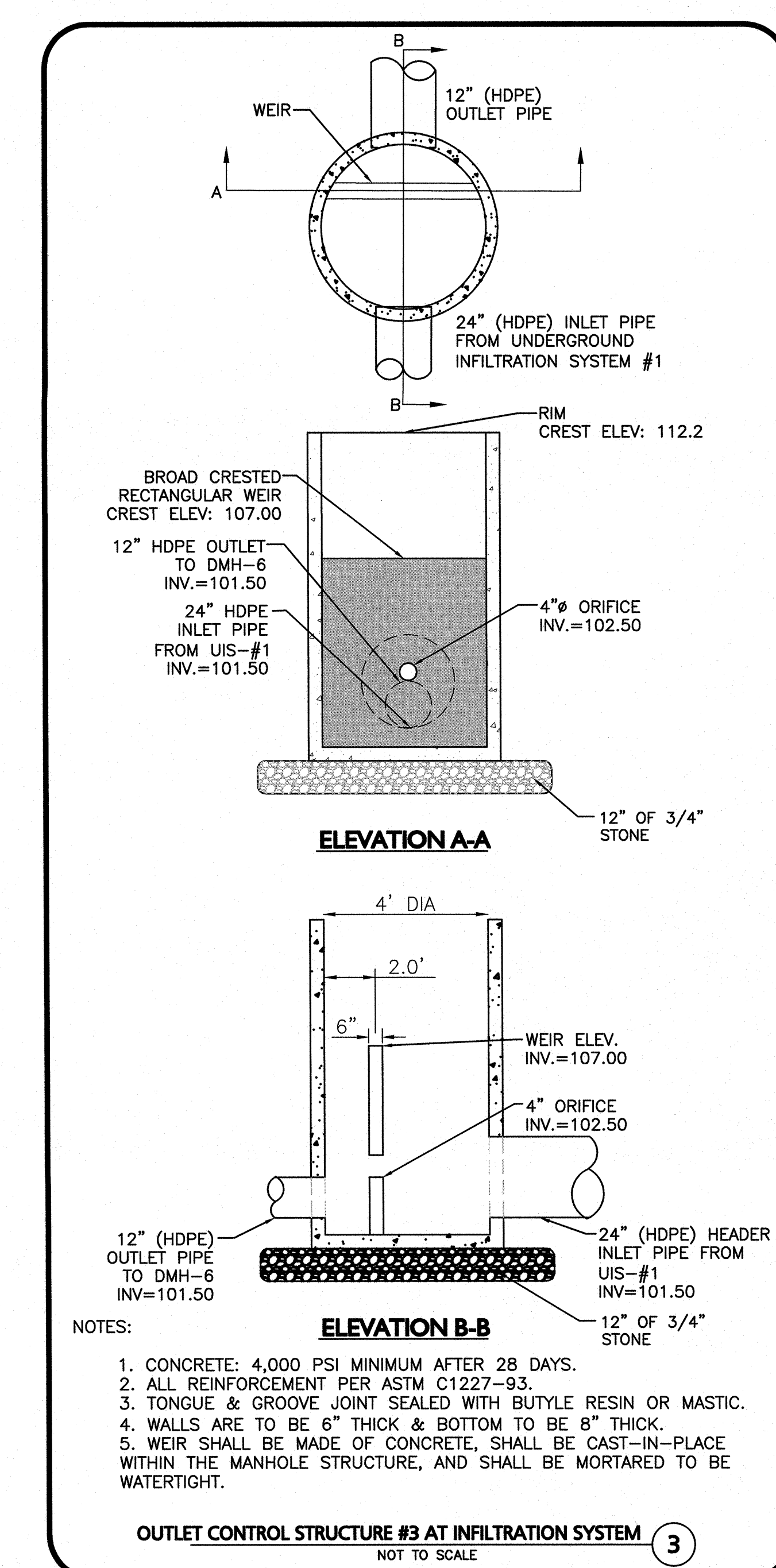
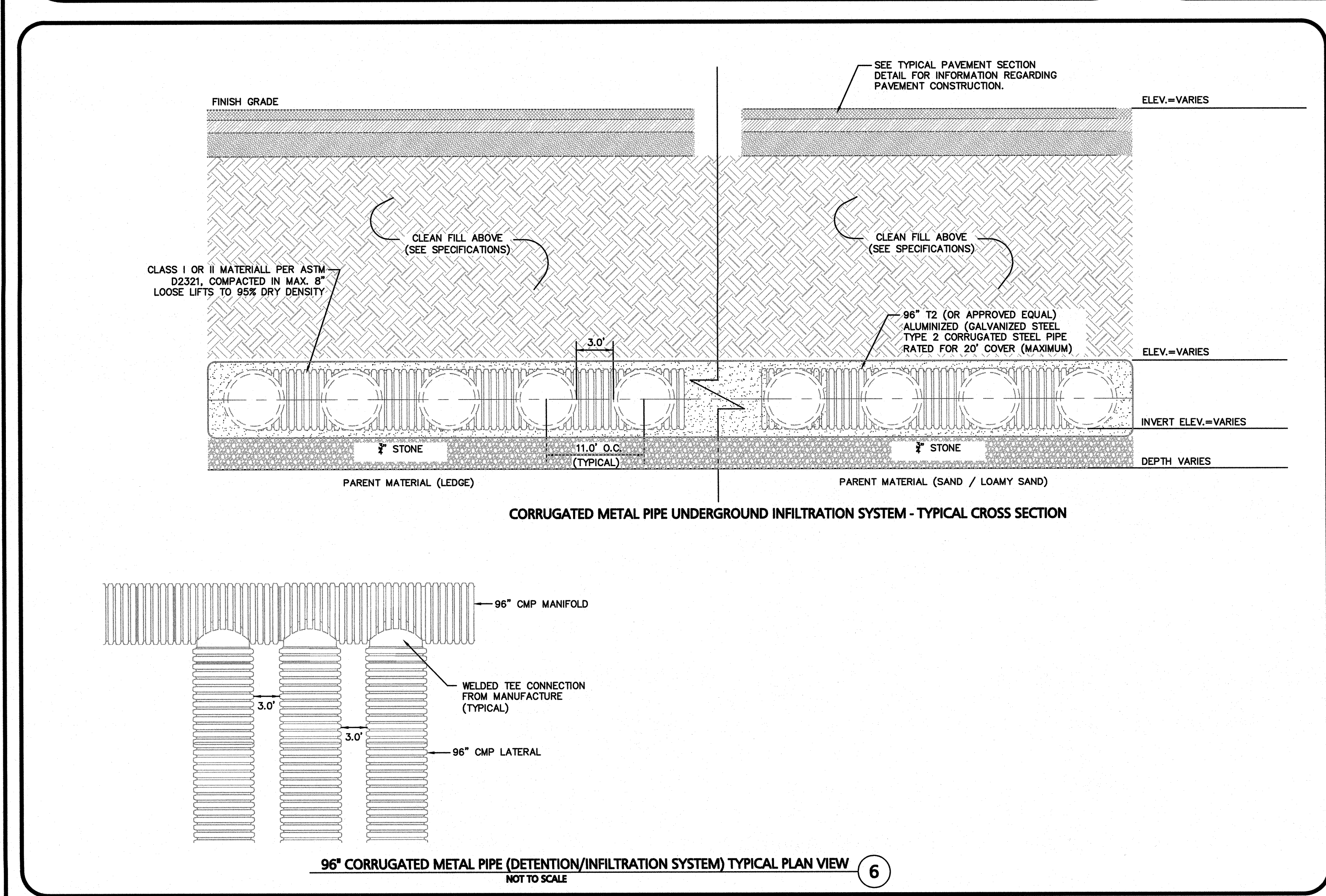
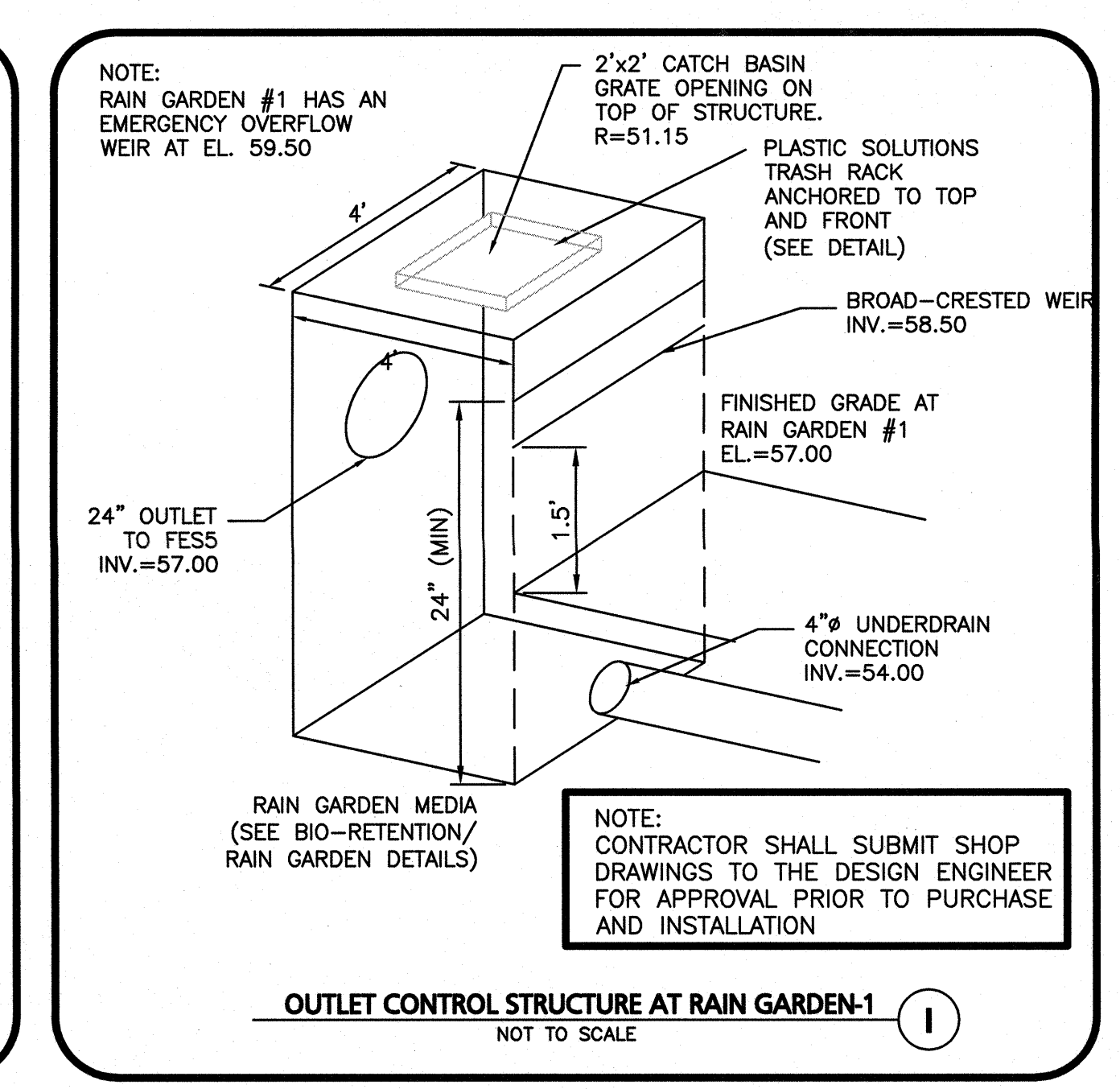
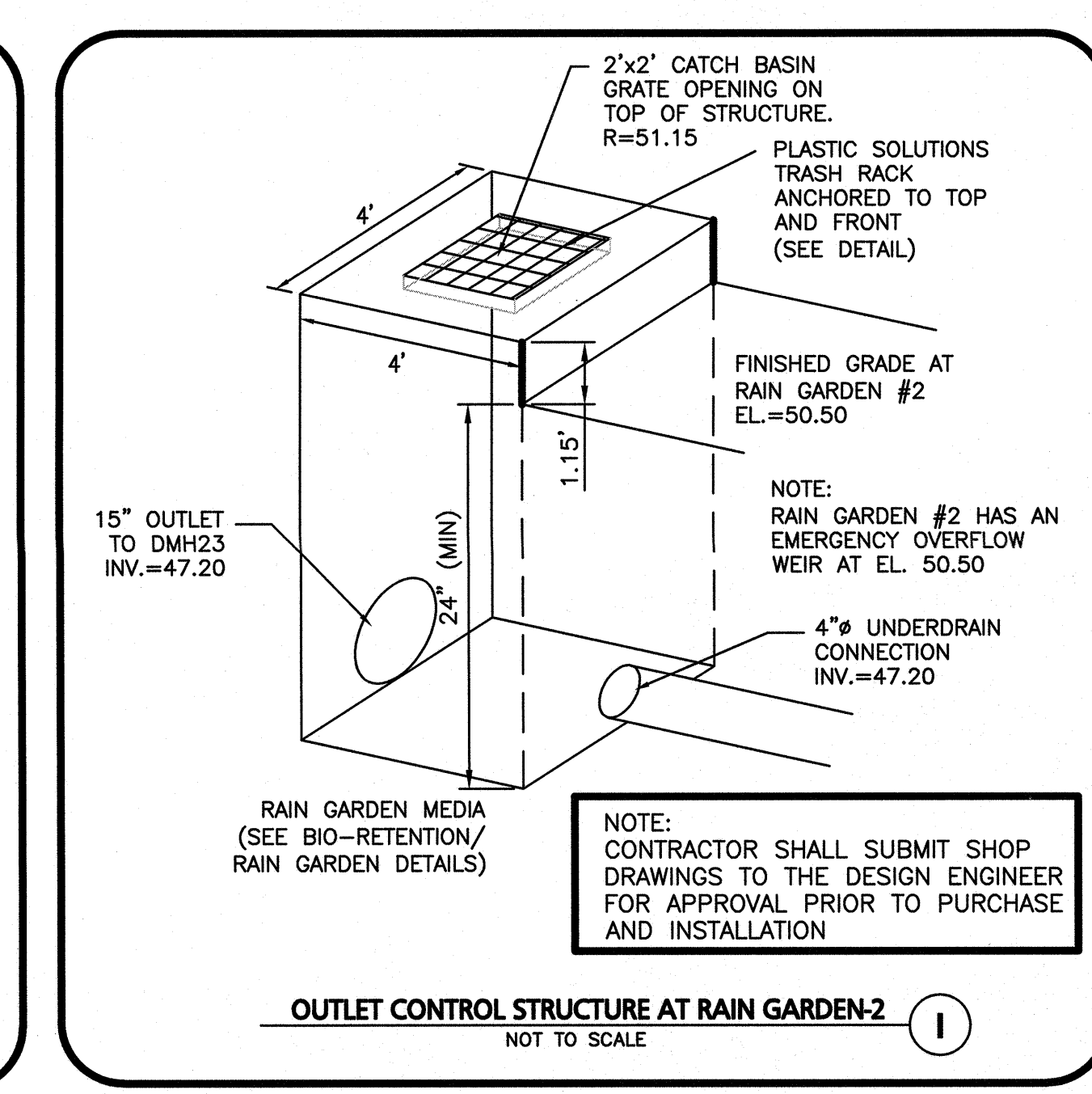
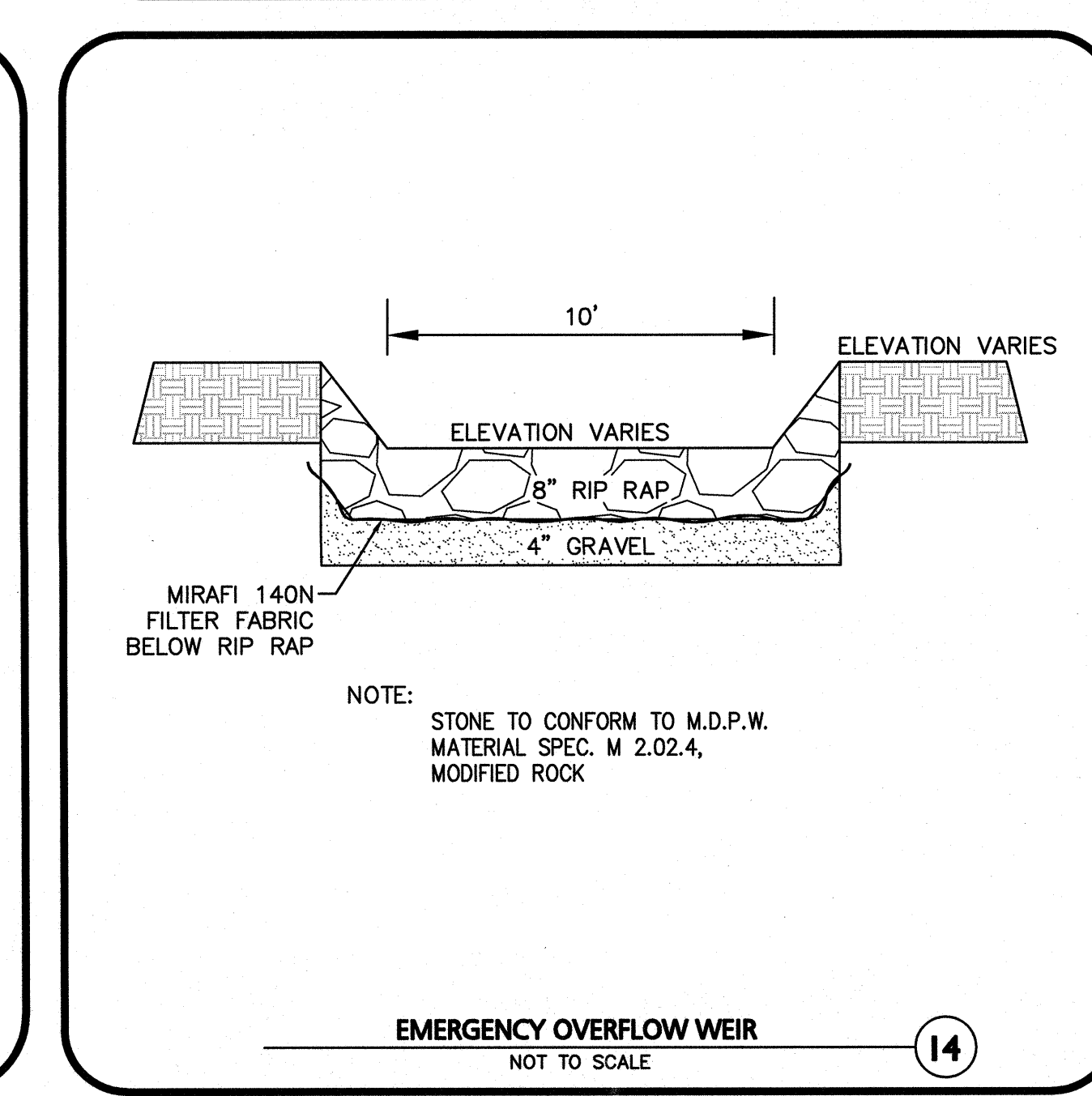
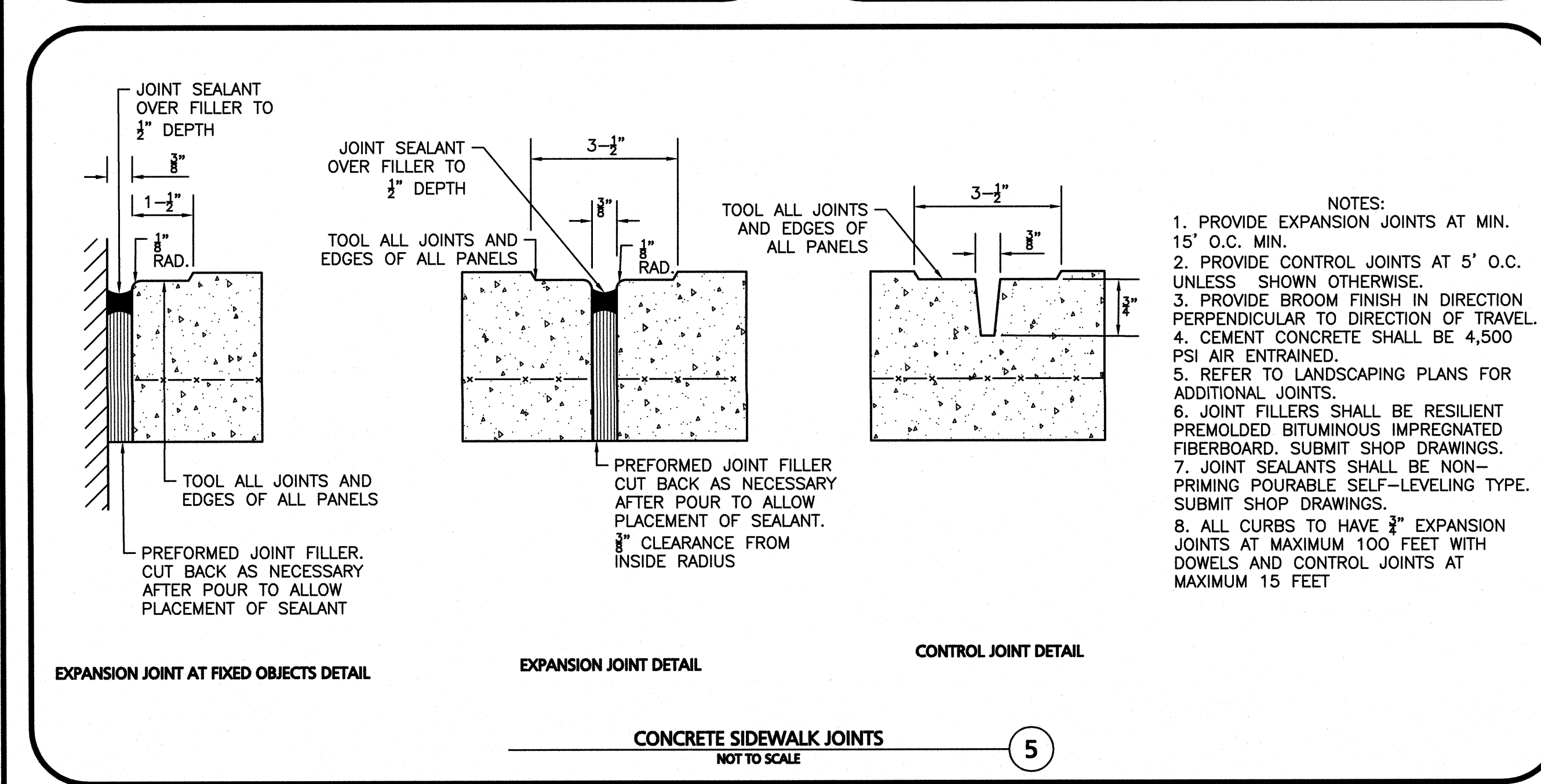
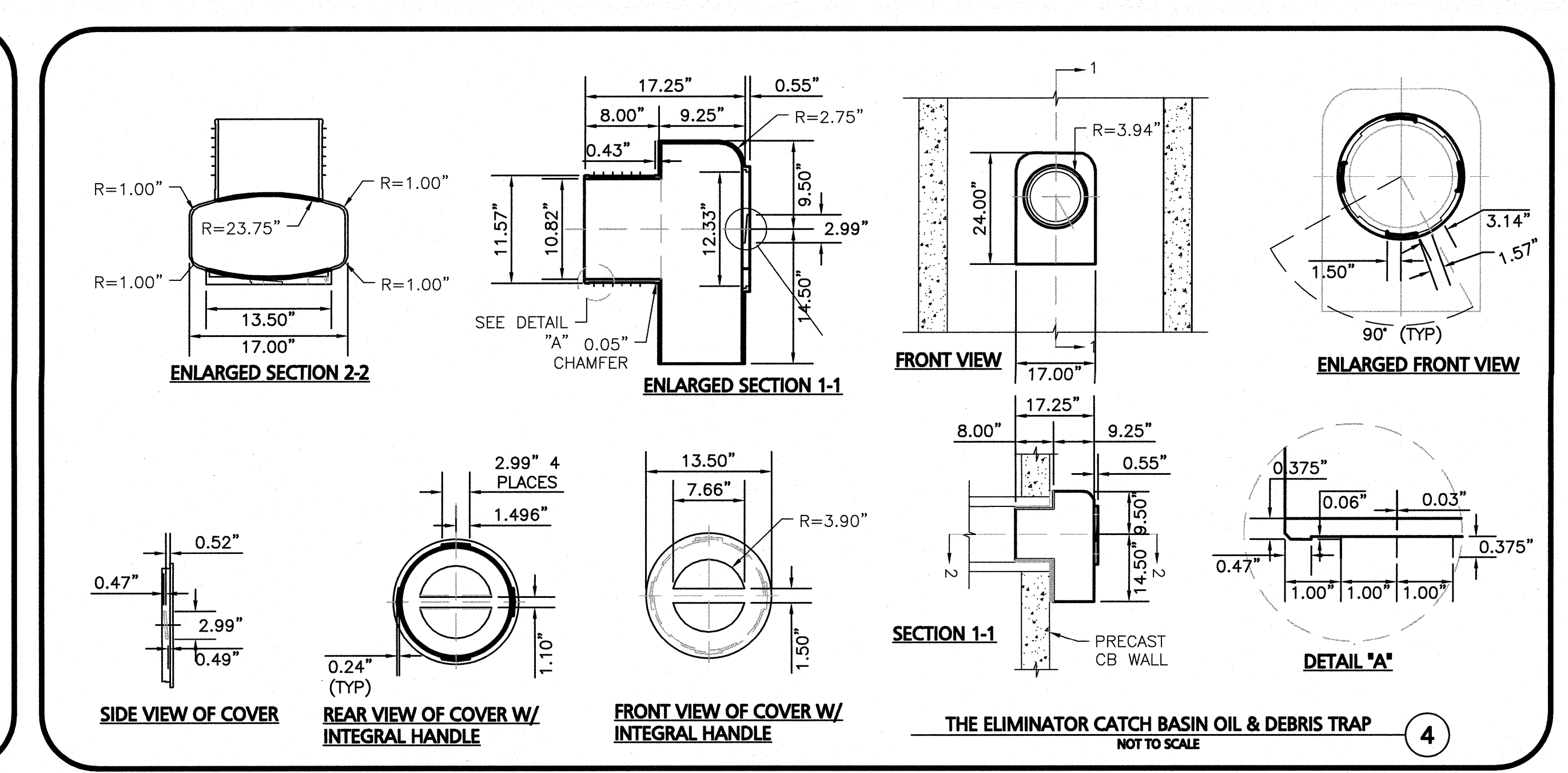
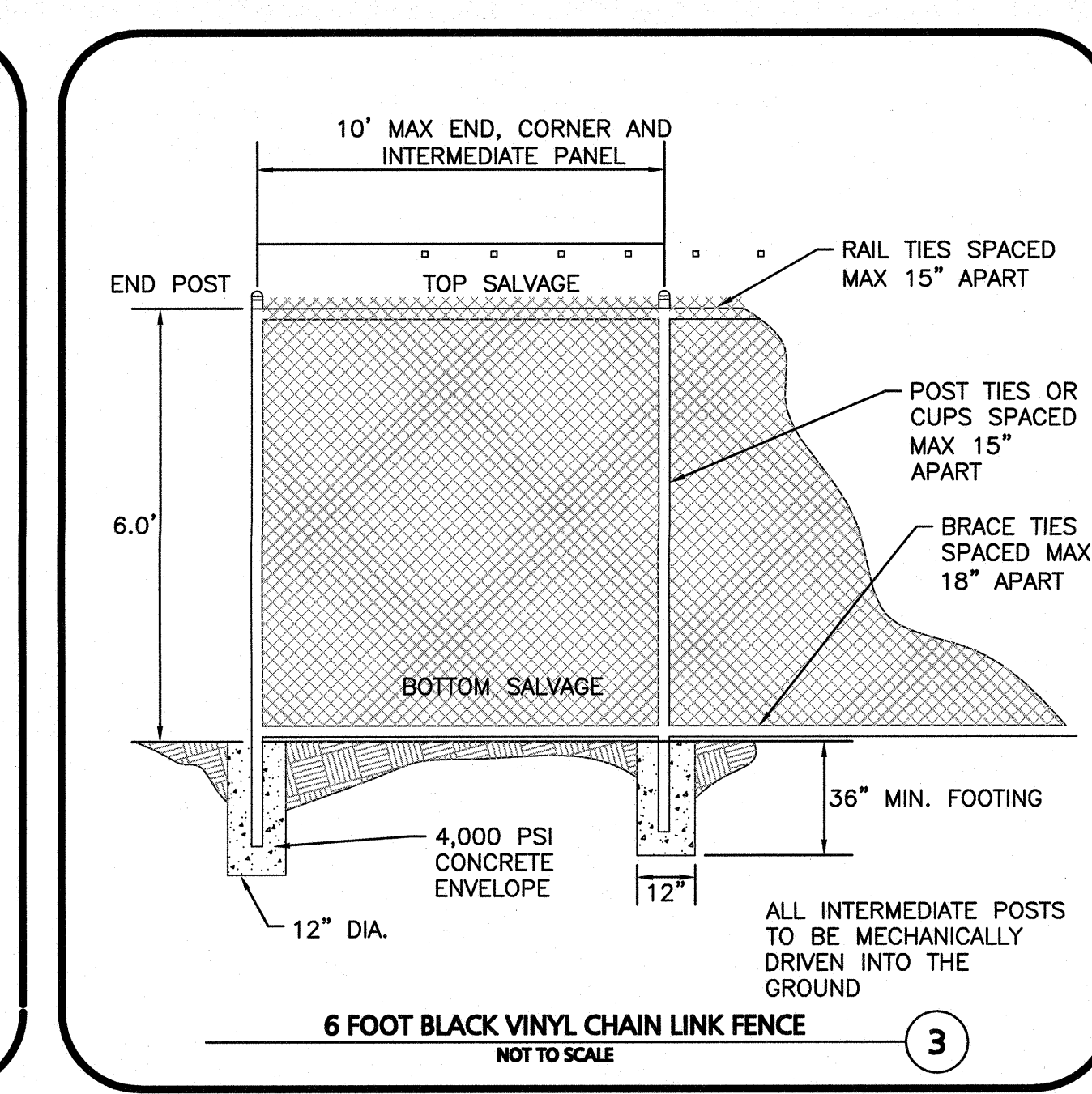
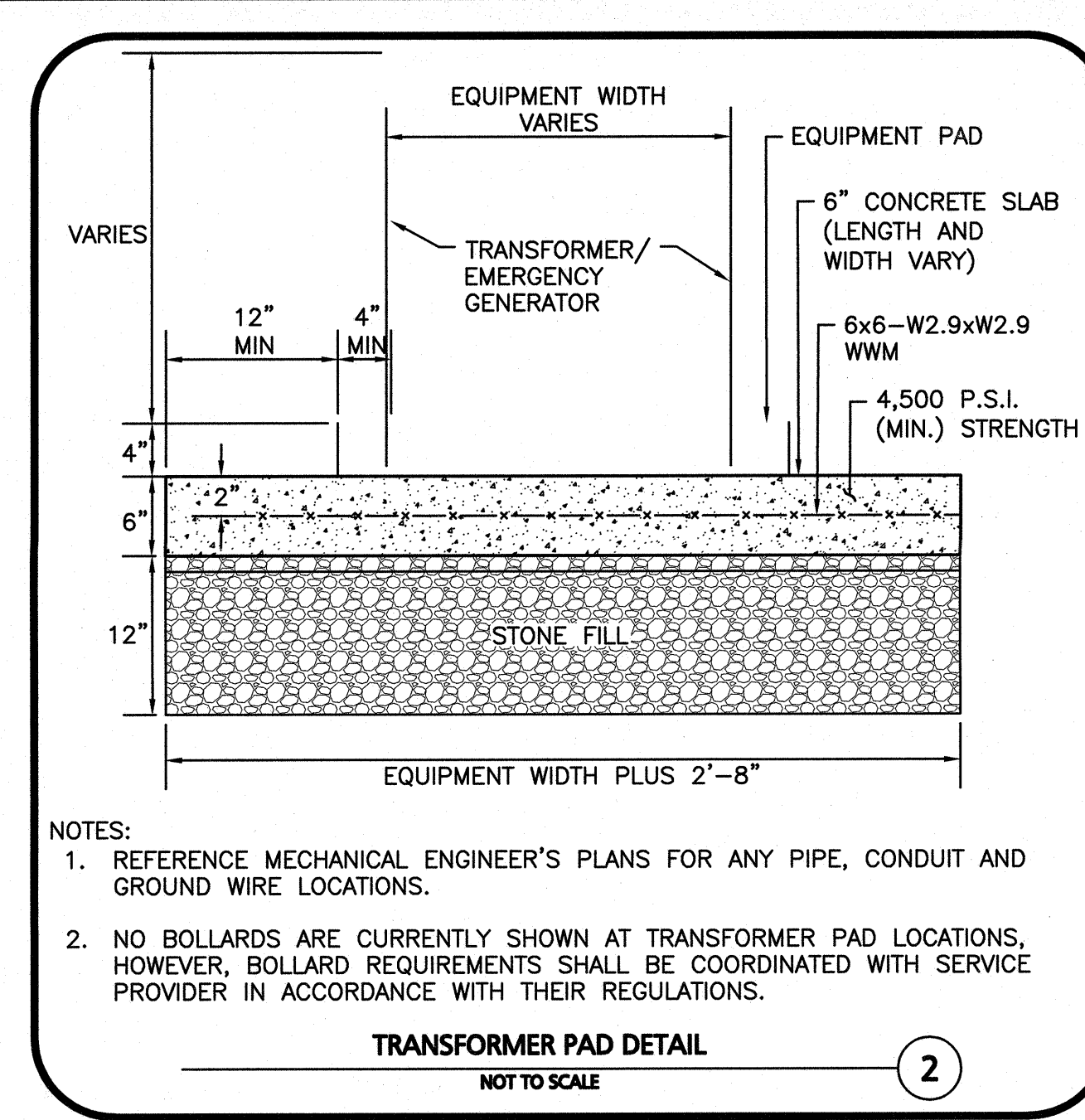
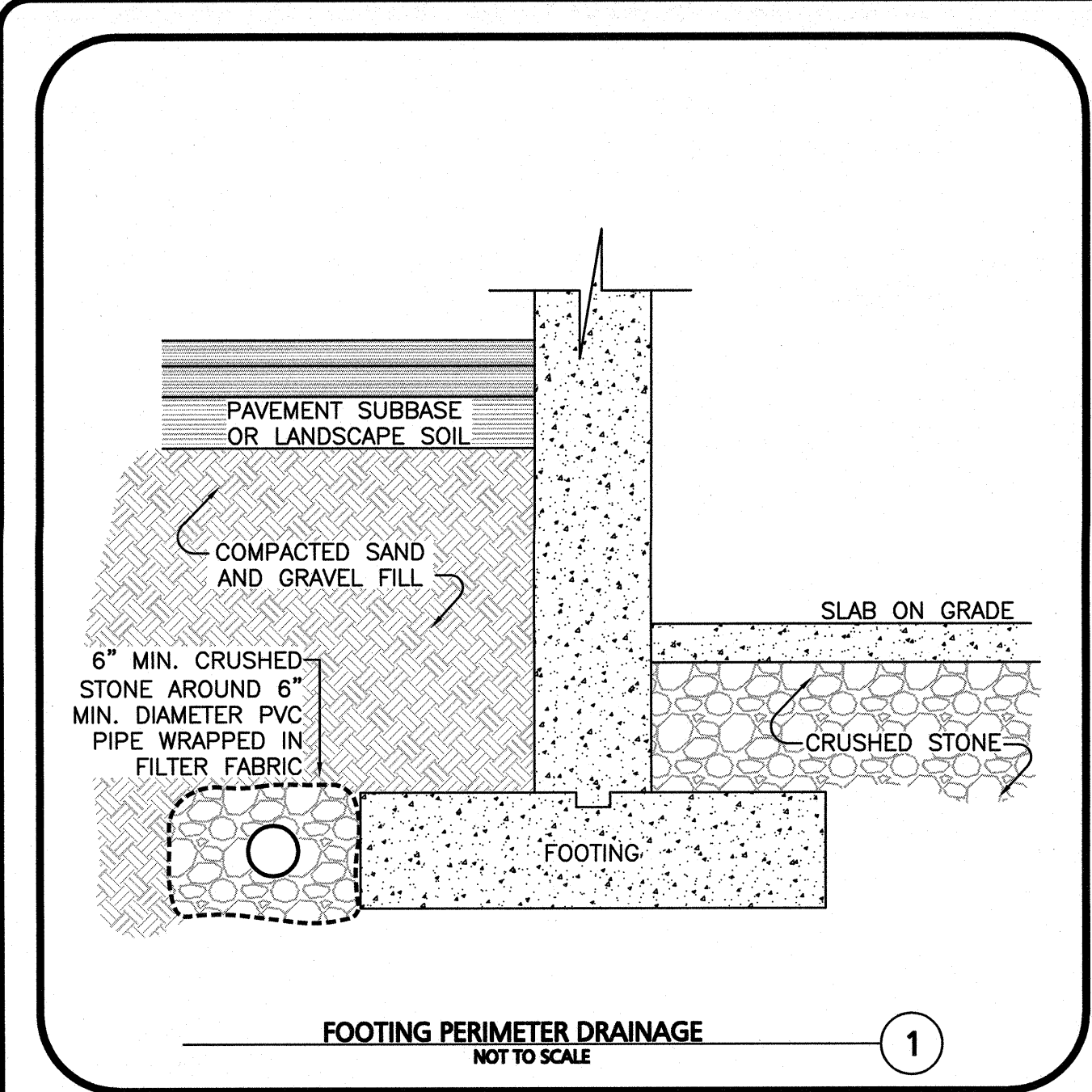
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CIVIL DETAILS

SHEET NO.
C-502

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3.23.22

CARLTON M. QUINN
CIVIL
No. 9923
MASSACHUSETTS

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
A	03-23-2022	REVISED PER COMMENTS

APPLICANT/OWNER:
SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

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PROJECT NO.	2725-01	DATE:	07-16-2021
SCALE:	AS SHOWN	DWG. NAME:	C-2725-01
DESIGNED BY:	CMQ/SIL	CHECKED BY:	CMQ

PREPARED BY:

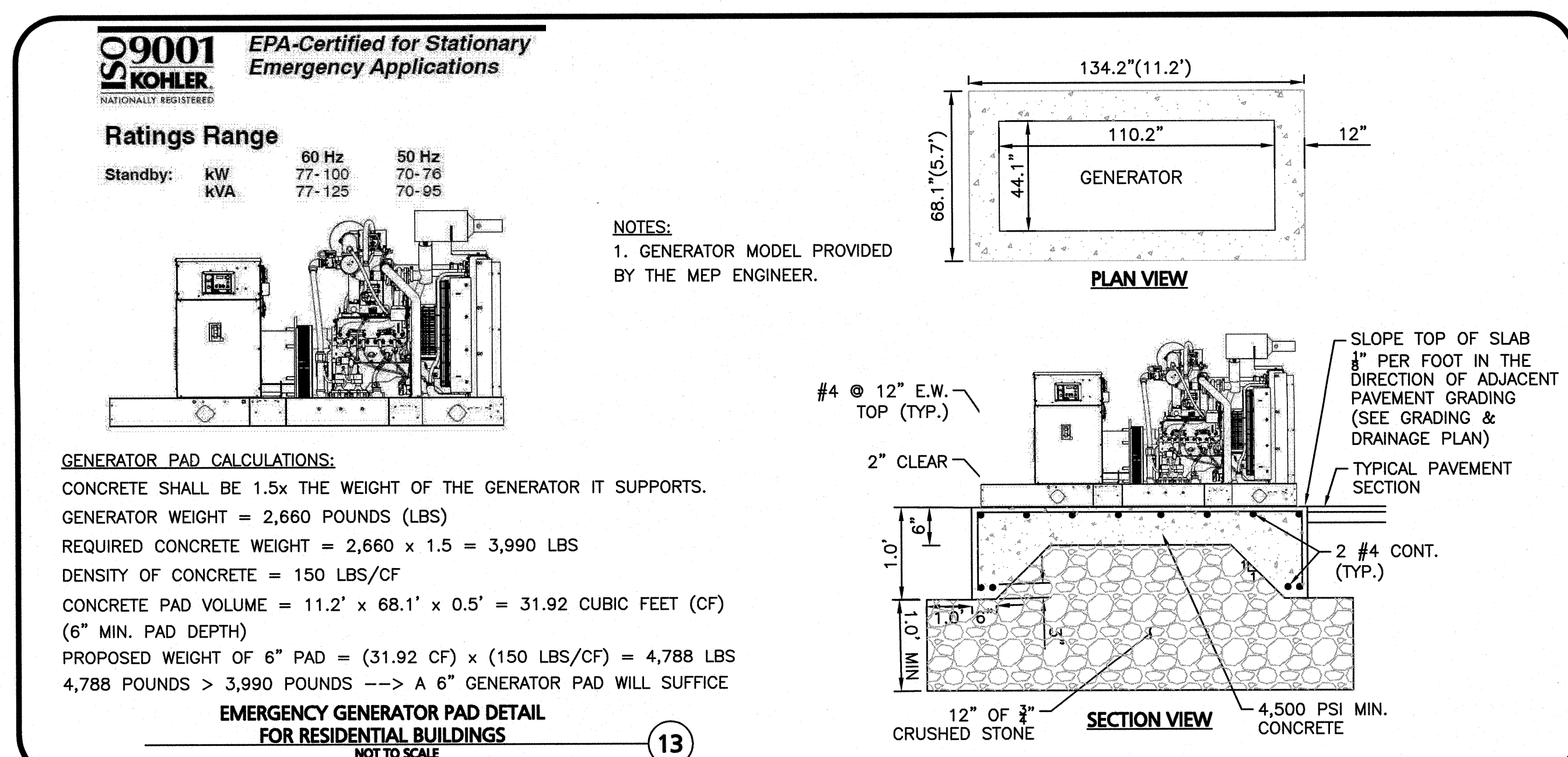
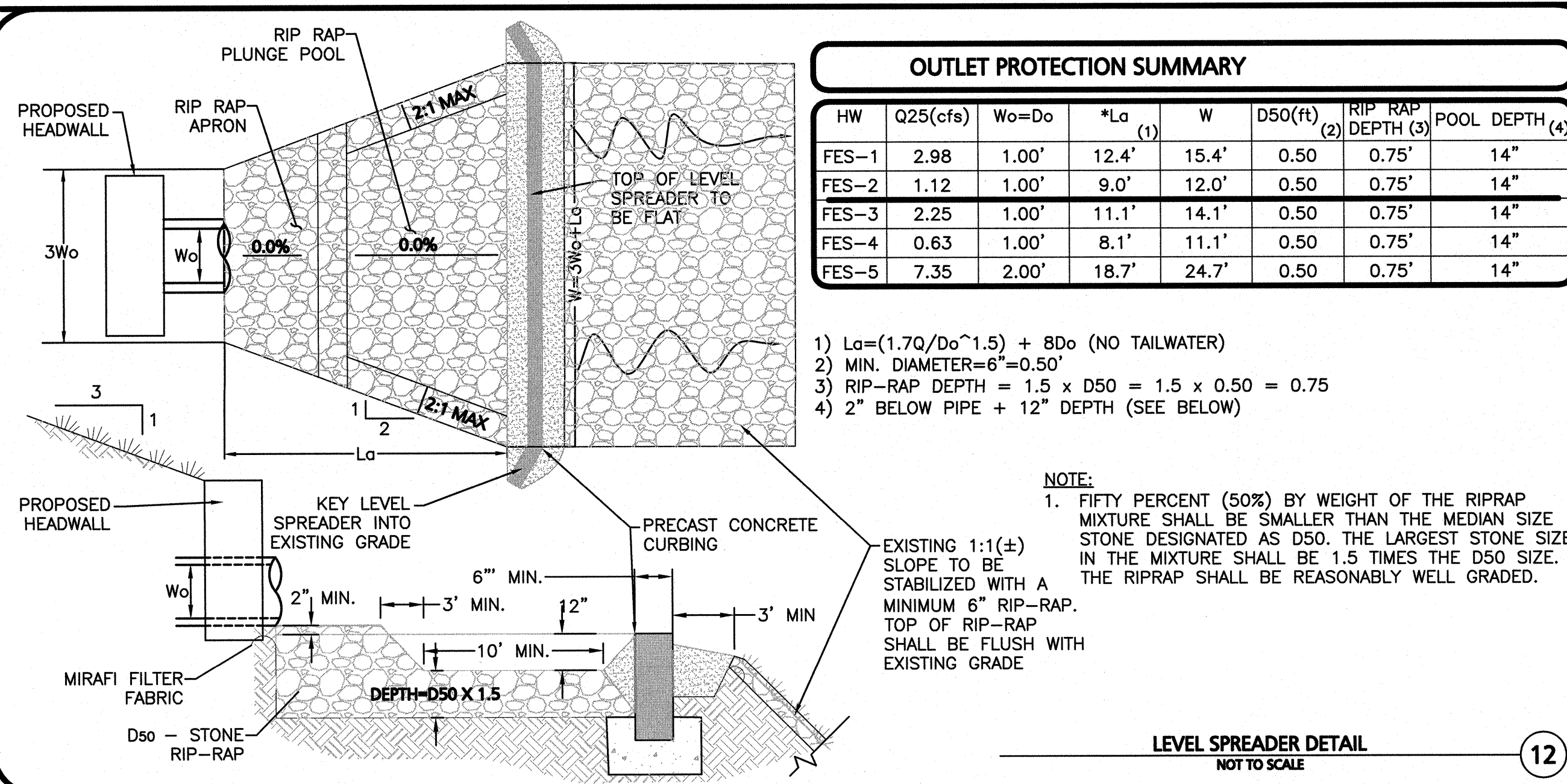
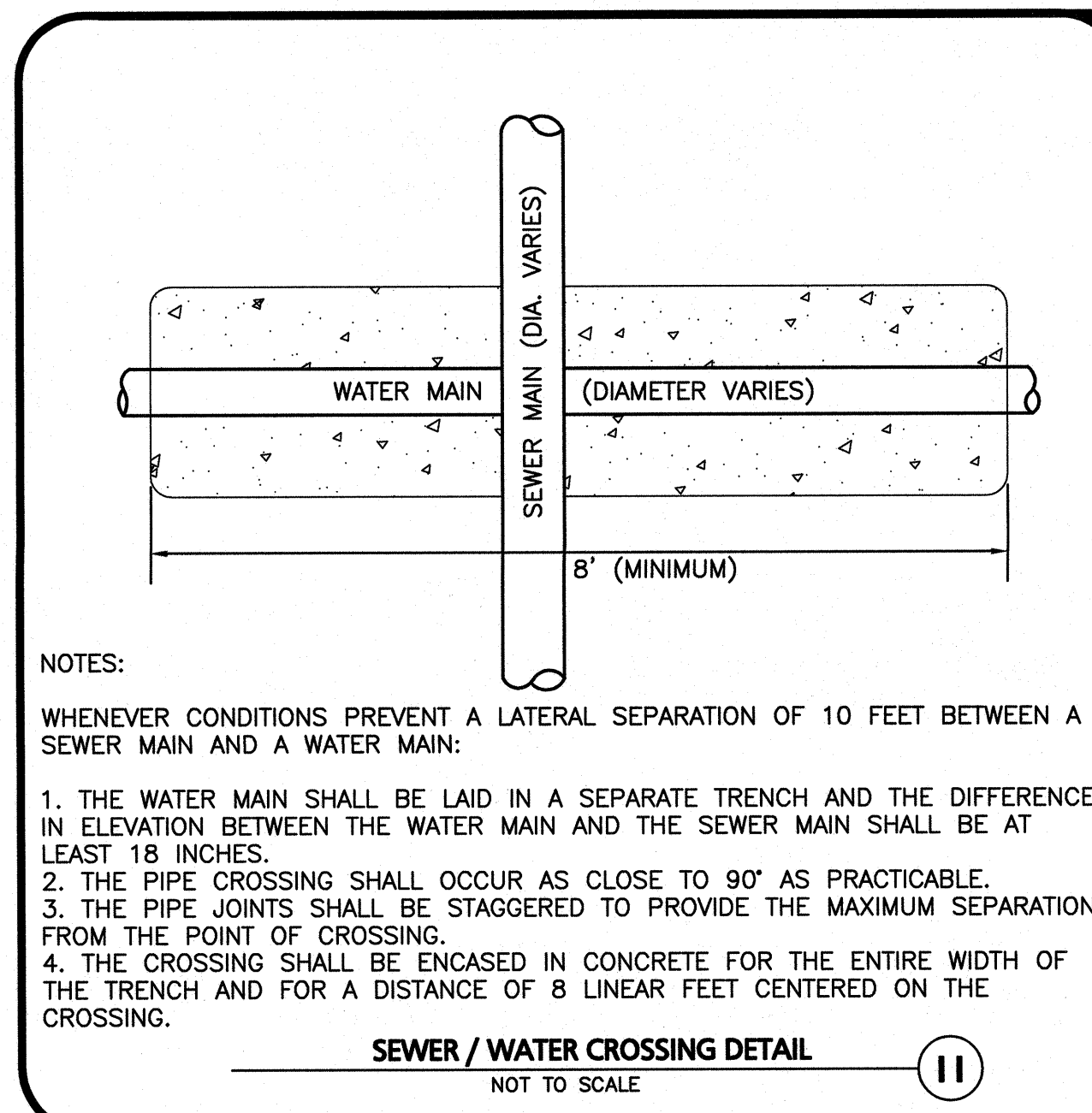
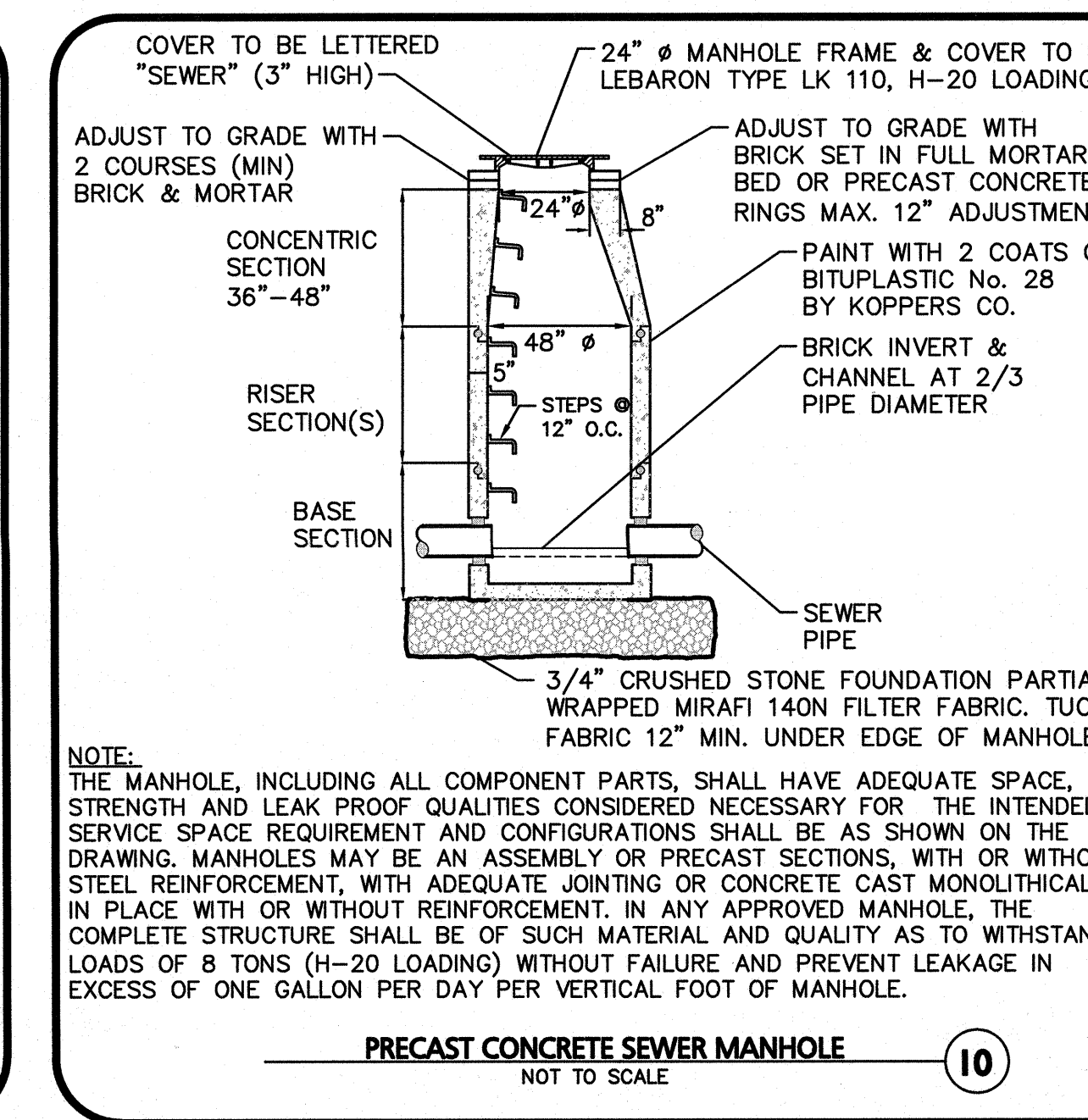
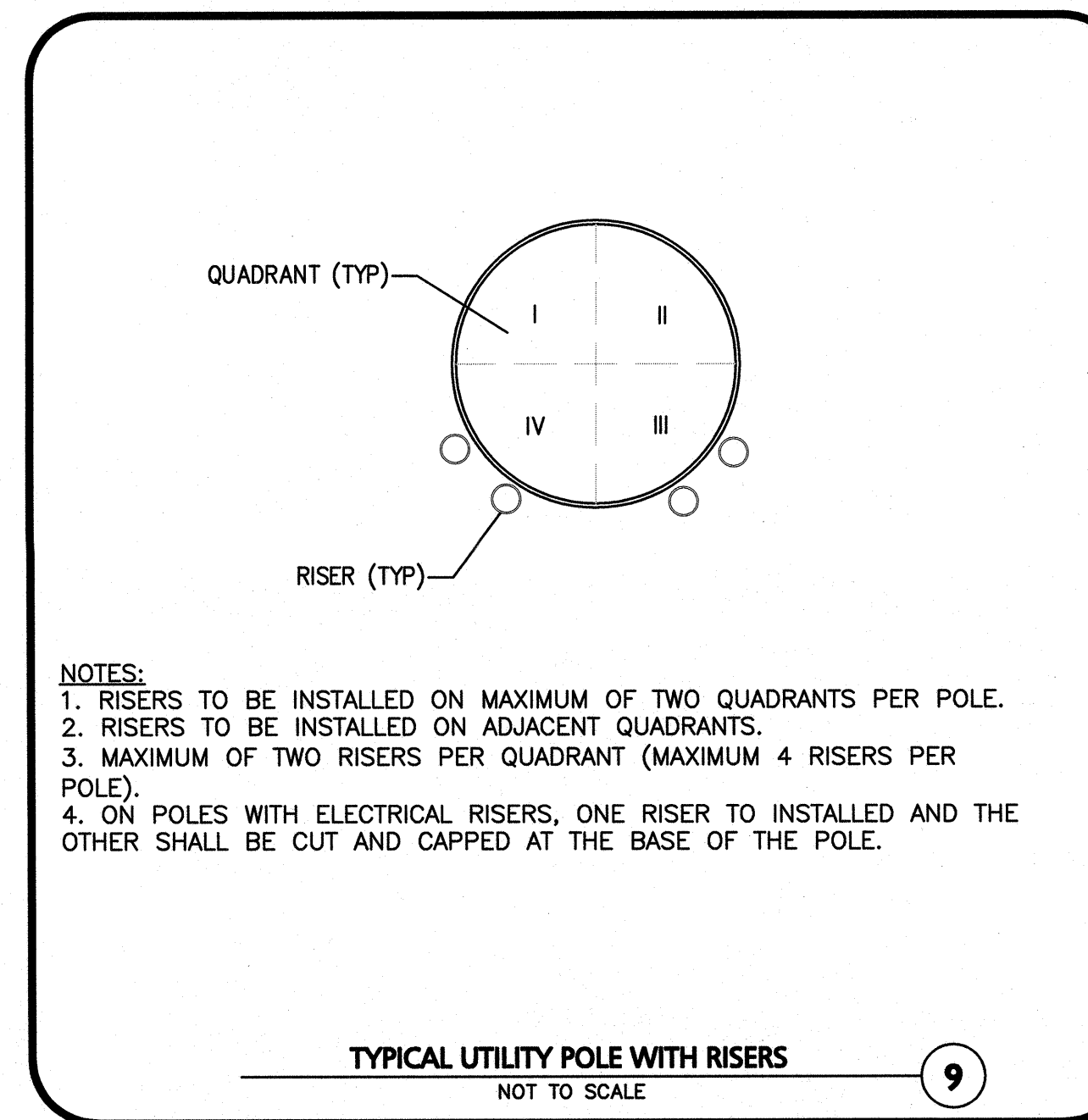
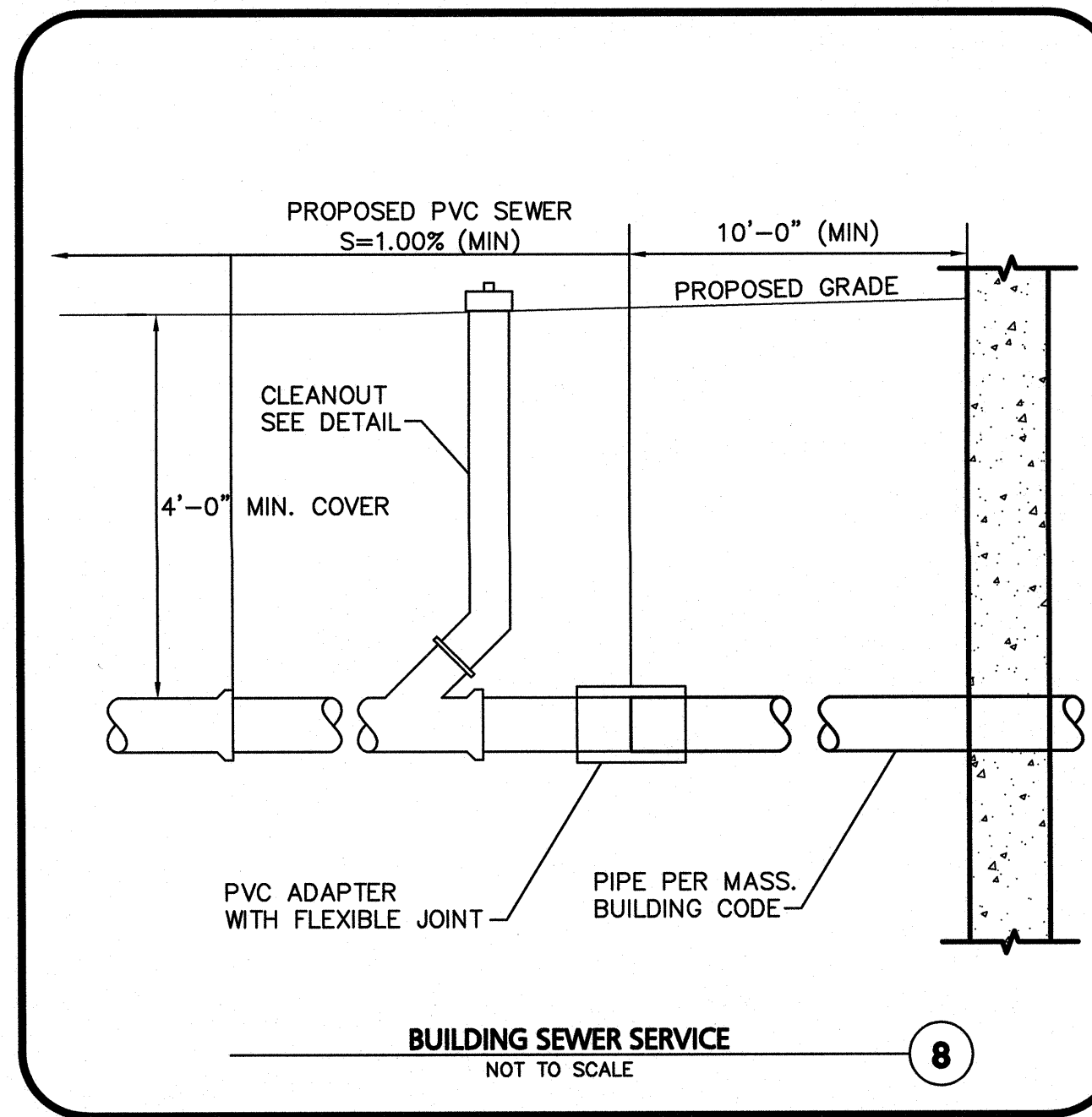
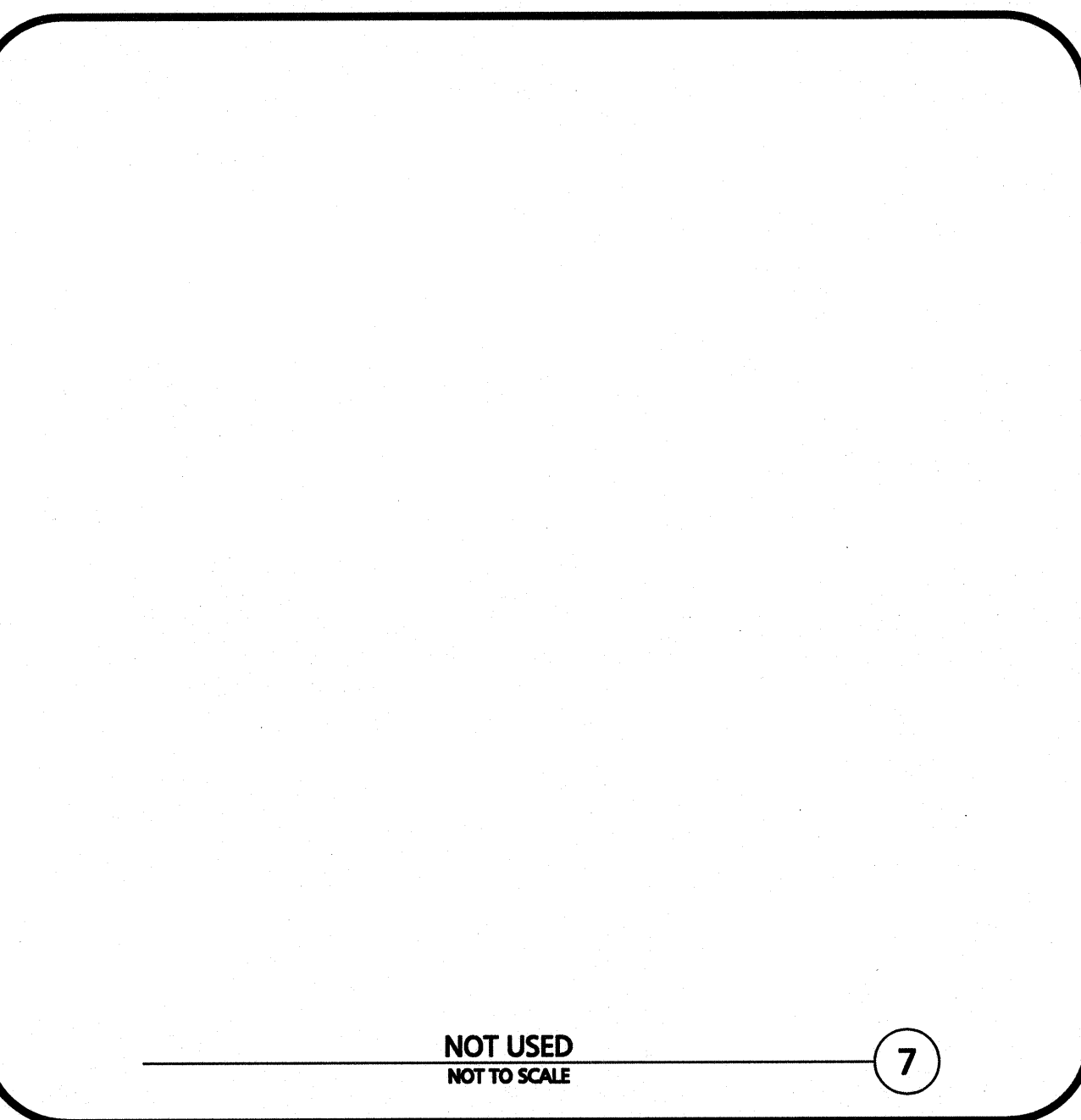
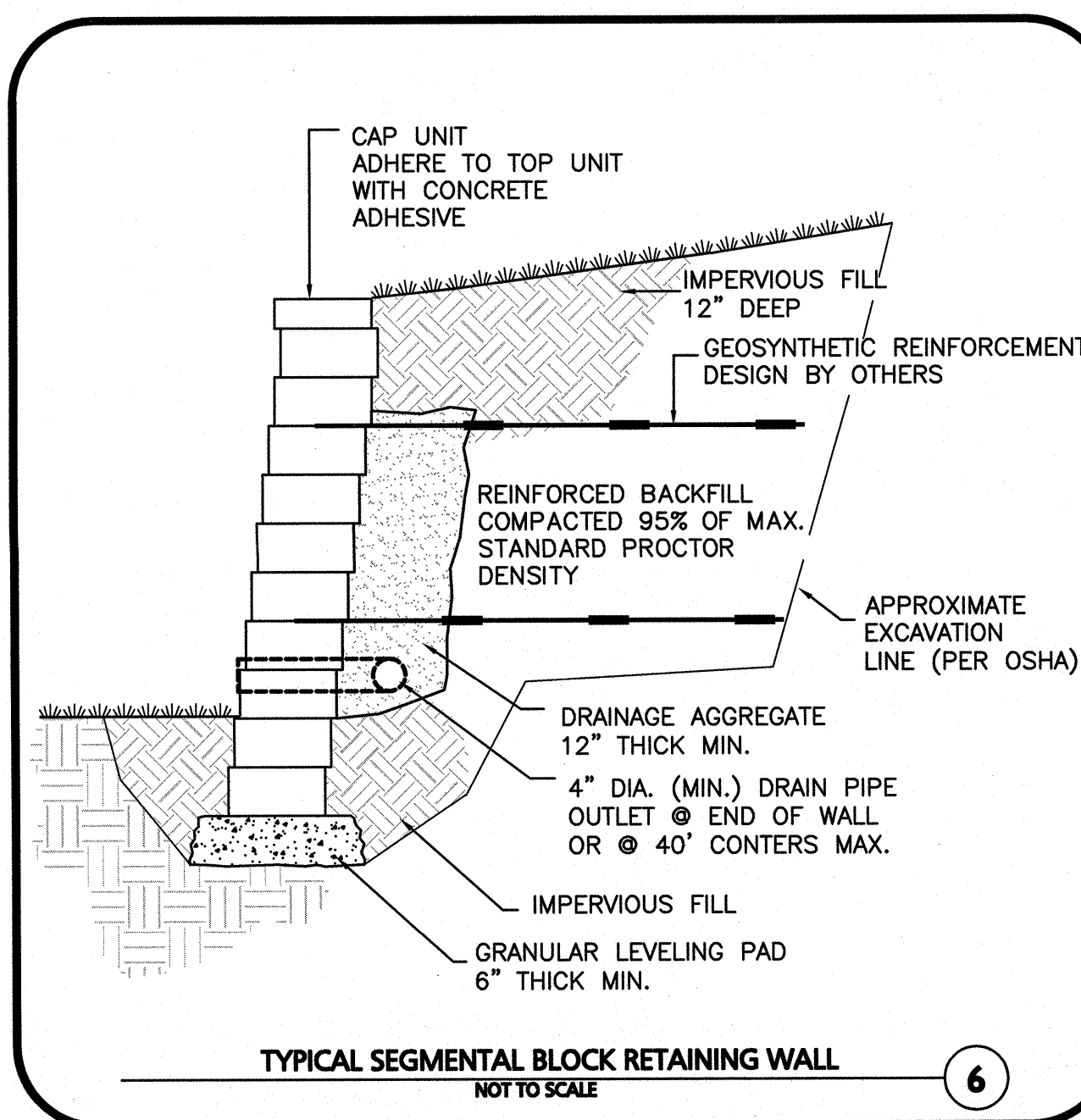
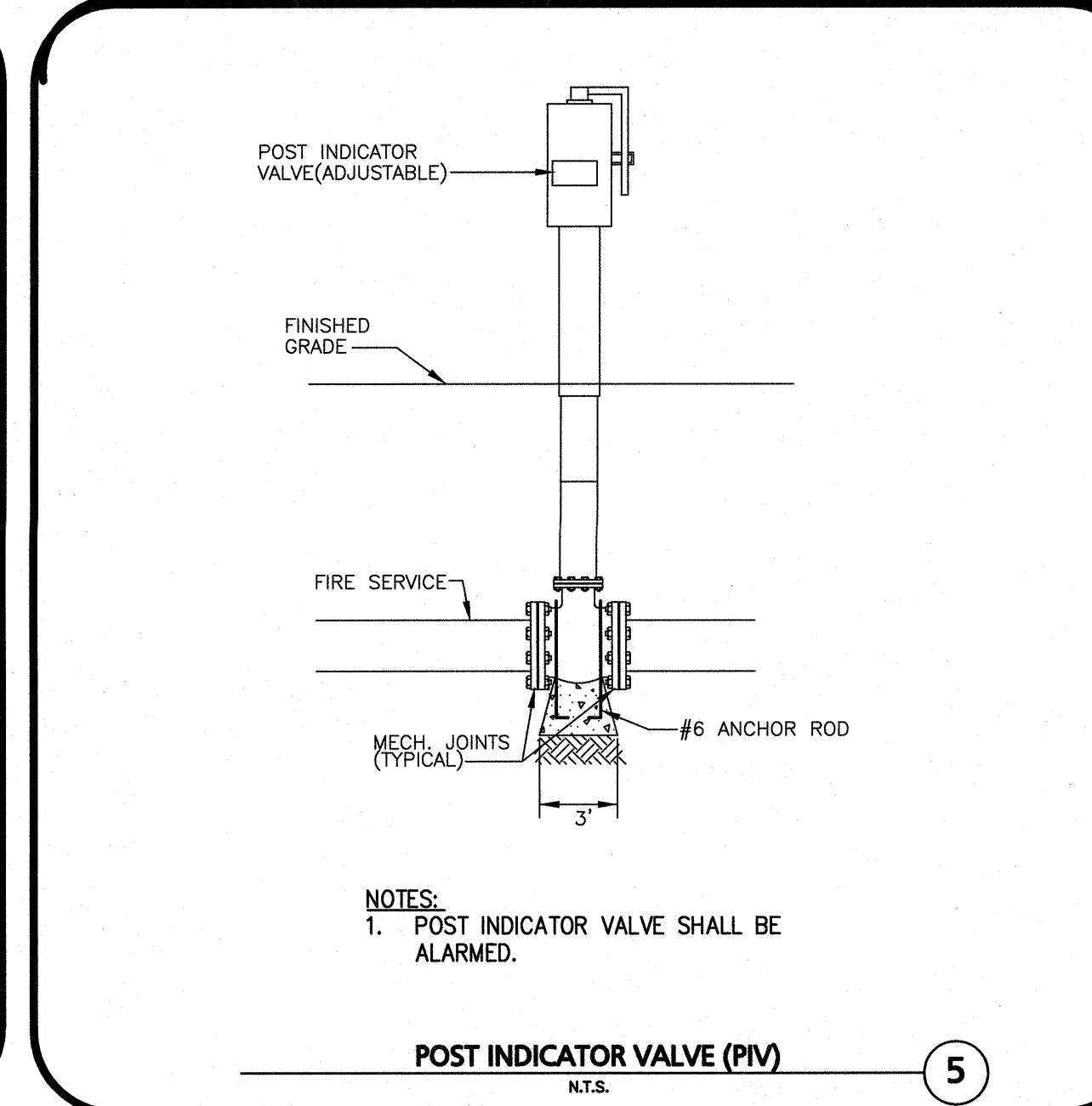
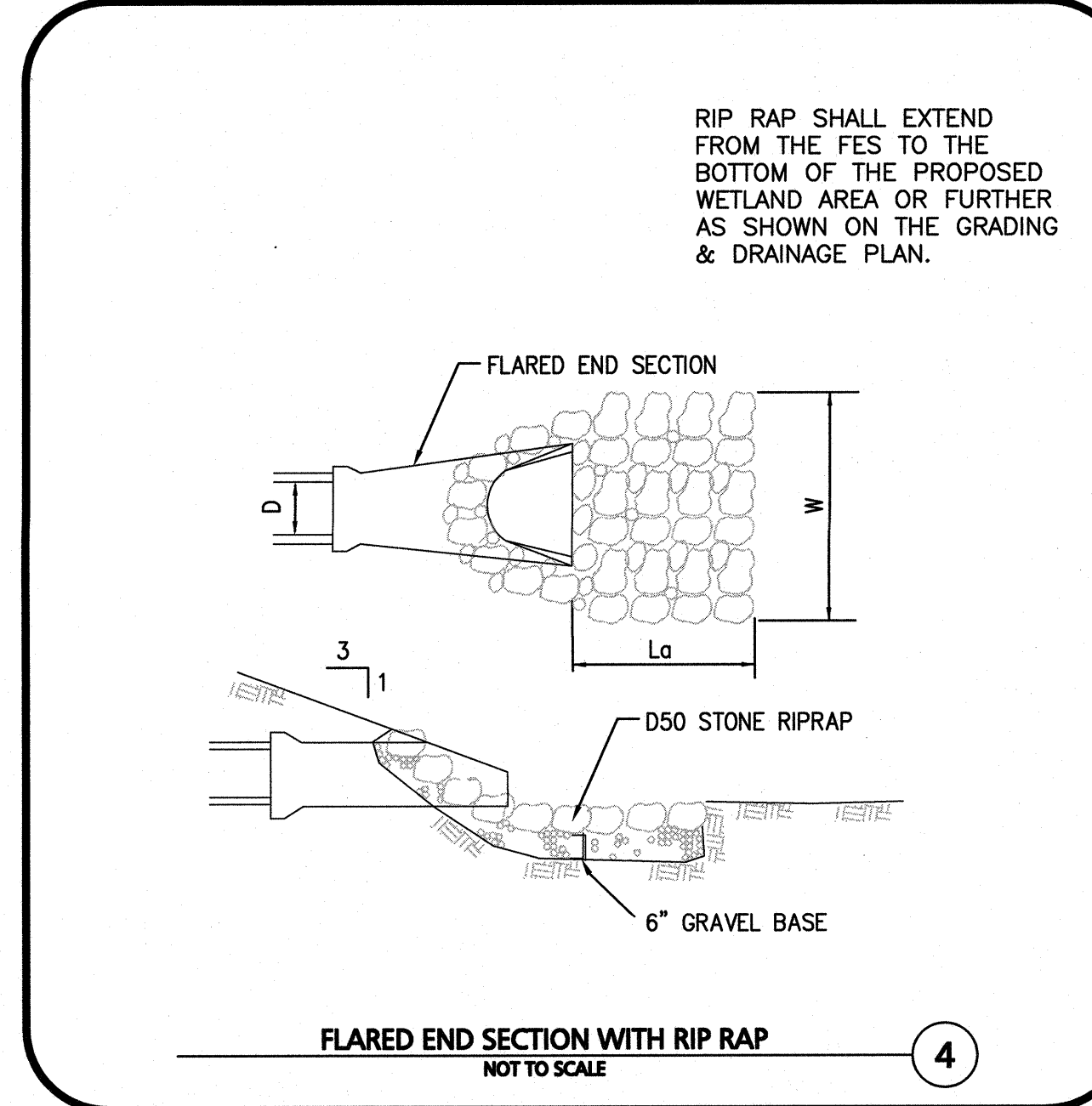
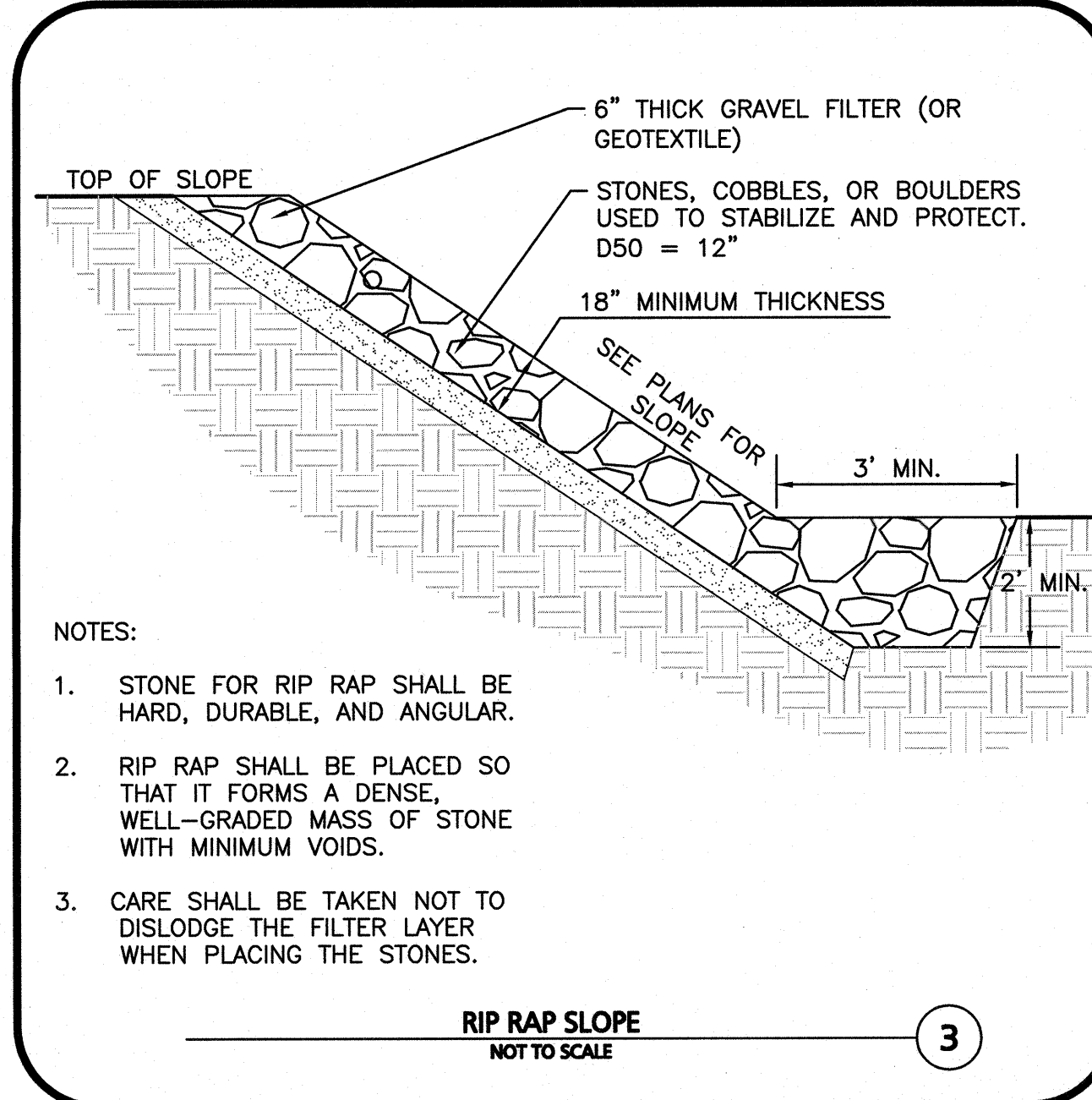
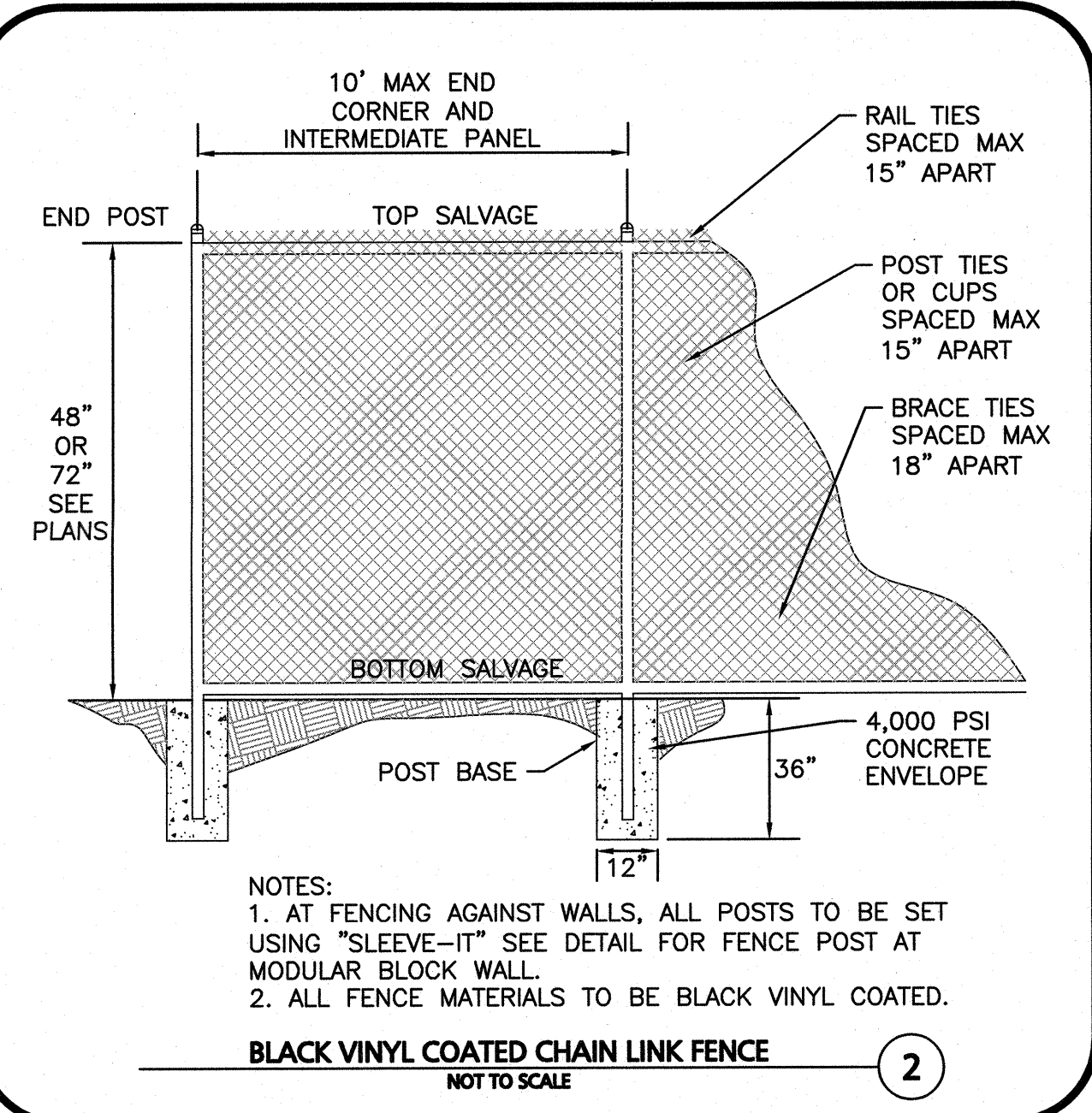
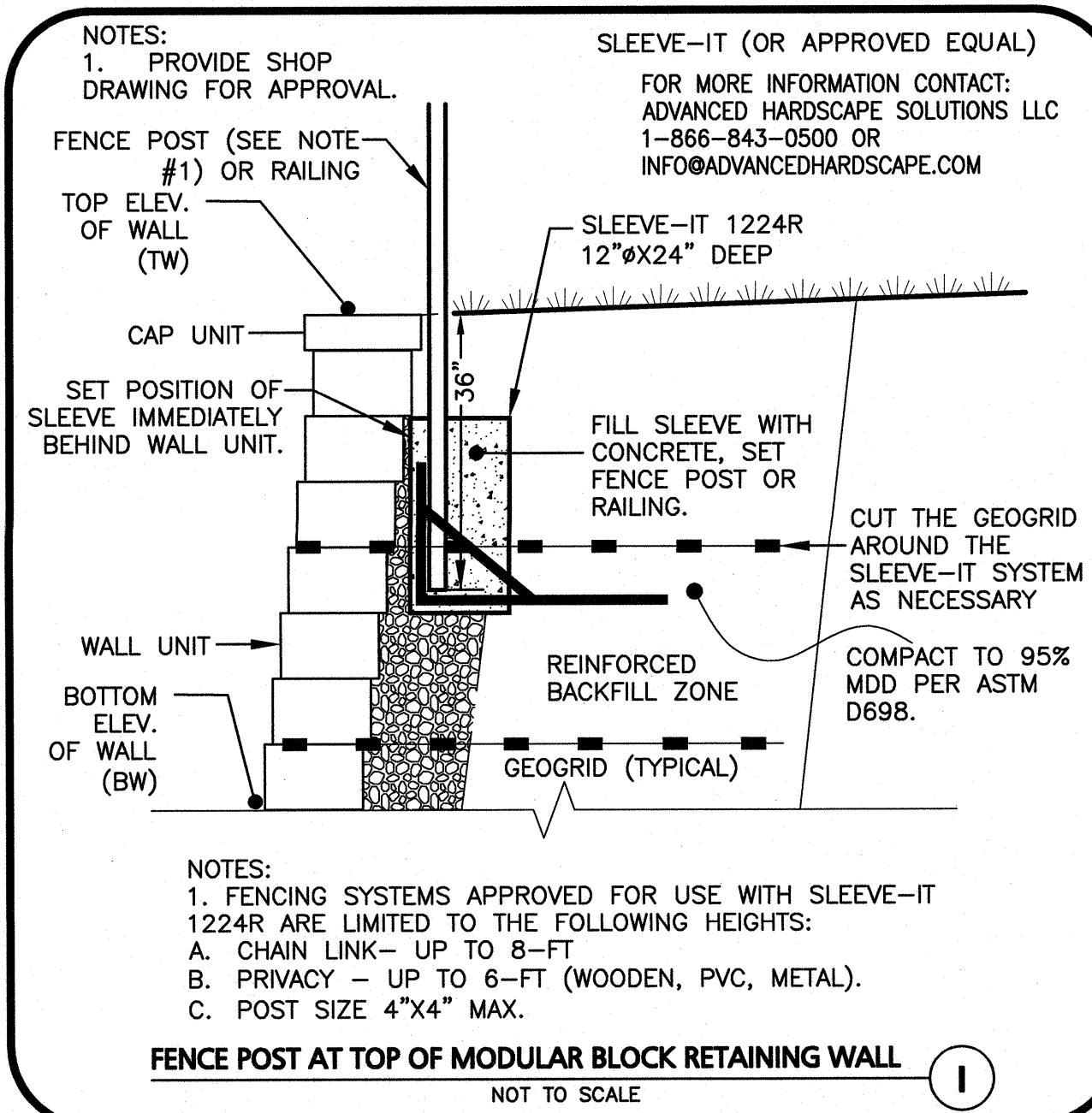
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DRAWING TITLE:	SHEET NO.
CIVIL DETAILS	C-503

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3.23.22

CARLTON M. QUINN
Professional Engineer
No. 99923
MASSACHUSETTS

PROFESSIONAL ENGINEER FOR
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DESIGNED BY: CMQ/SIL CHECKED BY: CMQ

PREPARED BY:

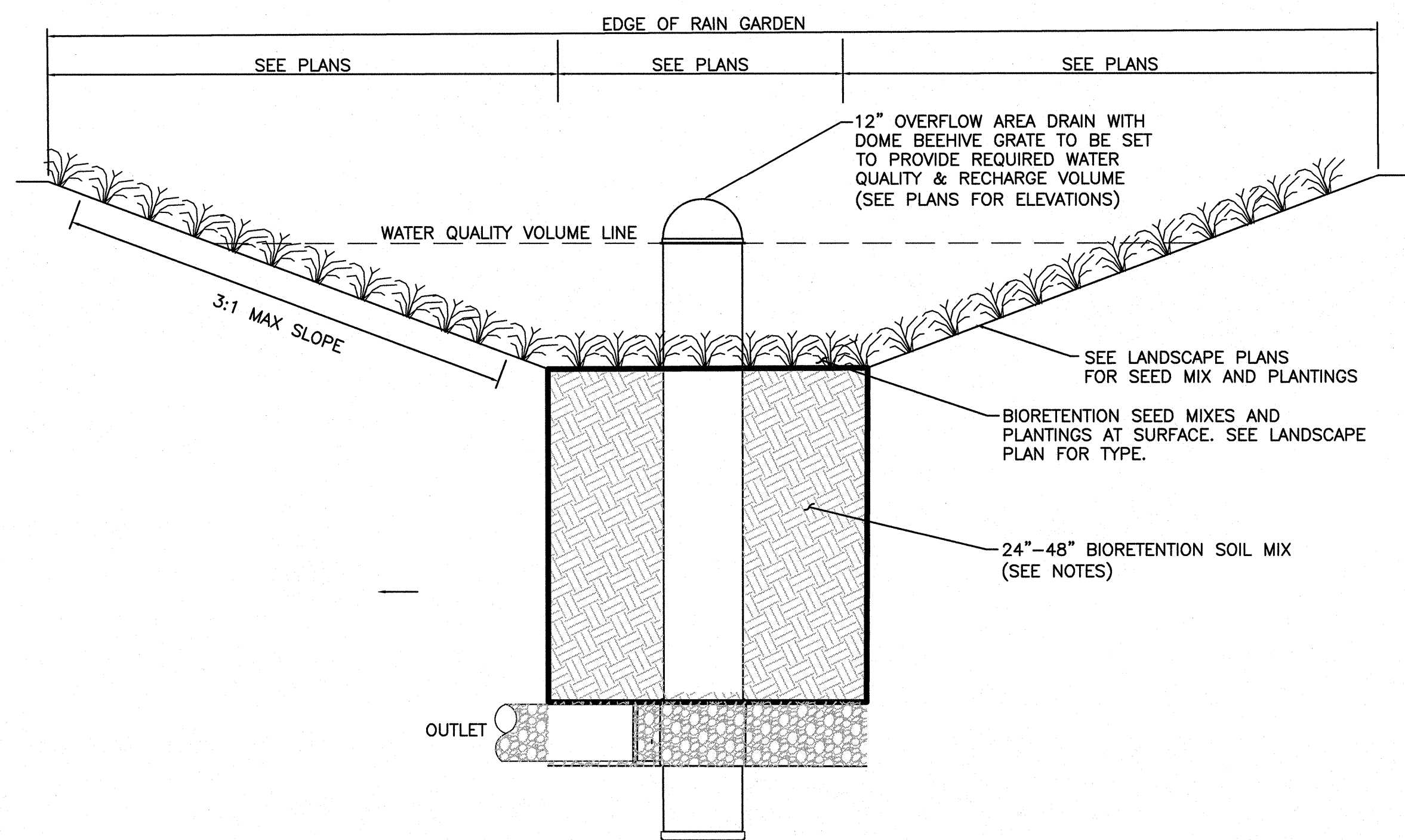
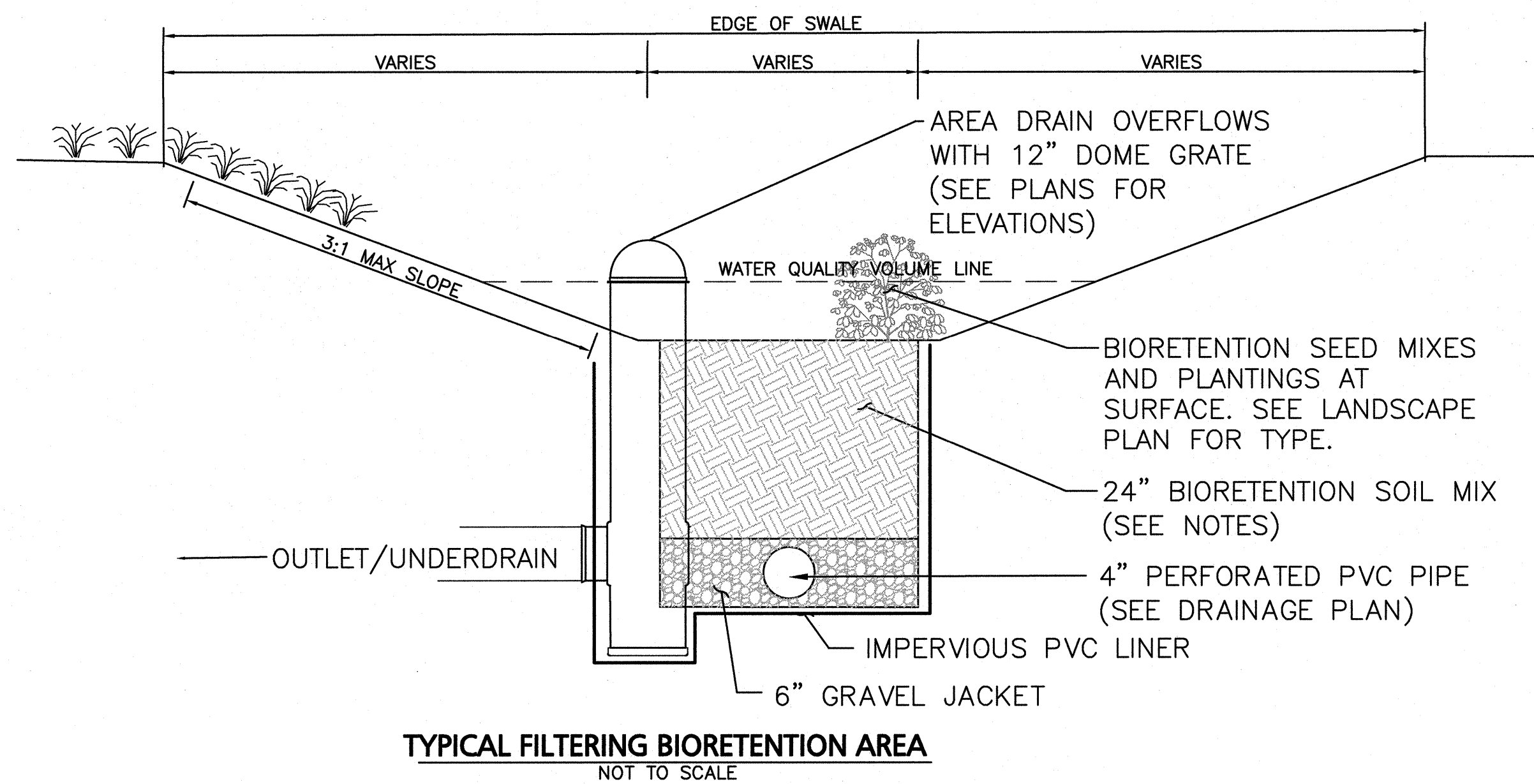
ALLEN & MAJOR ASSOCIATES, INC.
civil engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBBURN, MA 01801-8501
TEL: (781) 955-6889
FAX: (781) 955-2896

WOBBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

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DRAWING TITLE: CIVIL DETAILS SHEET No. C-504

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BIORETENTION AREA NOTES:

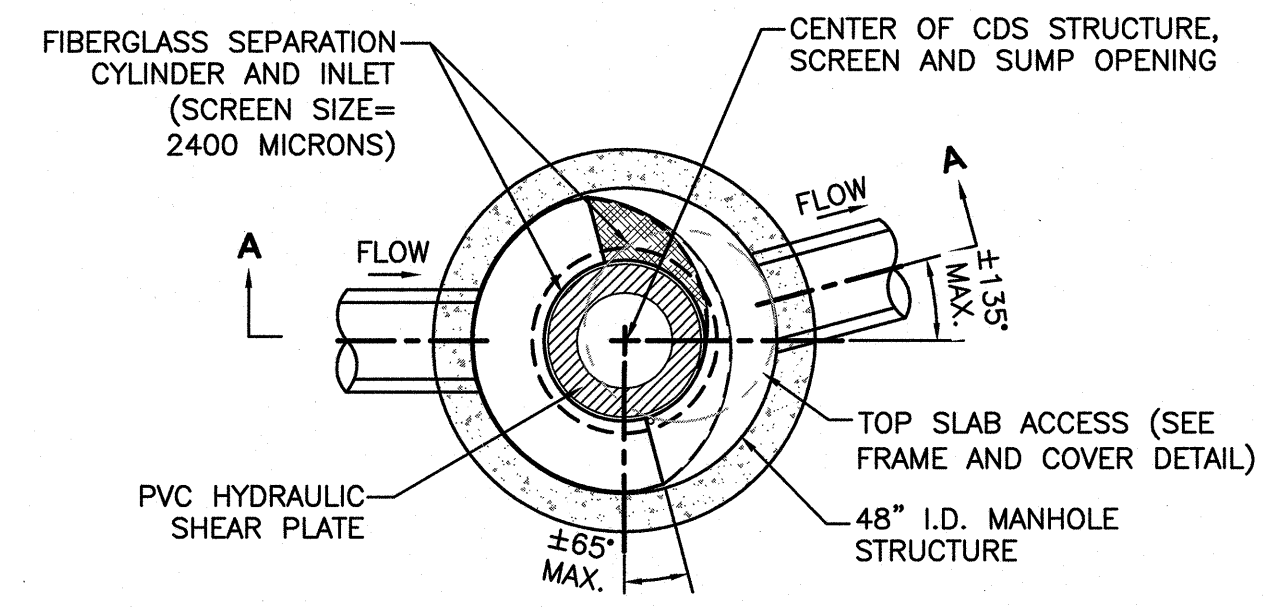
BIORETENTION SOIL MIX REQUIREMENTS:

- THE SOIL MIX FOR BIORETENTION AREAS SHALL BE FROM OFFSITE SOURCES AND SHOULD BE A MIXTURE OF SAND COMPOST AND SOIL. DO NOT REUSE EXISTING TOPSOILS. SOIL SHALL CONTAIN:
 - 40-50% SAND
 - 20-30% TOPSOIL
 - 25-30% COMPOST (AGED LEAF MULCH AND ORGANIC MATTER AS AVAILABLE FROM NEWLAND FARMS, 145 NEWLAND STREET NORTON, MA 01854-285-3169).
 - 5% CLAY (MAX.)
- THE SOIL MIX MUST BE UNIFORM, FREE OF STONES, STUMPS, ROOTS OR SIMILAR OBJECTS LARGER THAN 1/2 INCHES.
- SOIL pH SHOULD GENERALLY BE BETWEEN 5.5-6.5, A RANGE THAT IS OPTIMAL FOR MICROBIAL ACTIVITY AND ADSORPTION OF NITROGEN, PHOSPHORUS, AND OTHER POLLUTANTS.
- USE SOIL WITH 7% TO 10% ORGANIC CONTENT OF TOTAL DRY WEIGHT.
- THE TOPSOIL COMPONENT SHALL BE A SANDY LOAM, LOAMY SAND OR LOAM TEXTURE, PER USDA TEXTURE TRIANGLE. SOILS SHALL BE COMPOSED OF A NATURAL, FERTILE, FRABLE SOILS. THE SOILS SHALL BE SUITABLE FOR THE GERMINATION OF SEEDS AND SUPPORT OF VEGETATIVE GROWTH AND MATCH THE PARTICLE DISTRIBUTION AND ORGANIC CONTENT REQUIREMENTS BELOW. TOPSOIL SHALL BE FREE OF ANY OBJECTS GREATER THAN 1/2" INCH IN DIAMETER INCLUDING STONES, EARTH CLODS, OR STICKS. IT SHALL CONTAIN NO STUMPS, CLAY LUMPS, ROOTS, OTHER OBJECTIONABLE, EXTRANEOUS MATTER OR DEBRIS NOR SHALL CONTAIN TOXIC SUBSTANCES.
- THE COMPOST SHALL NOT CONTAIN BIOSOLIDS. THE COMPOST MUST BE PROCESSED FROM YARD WASTE IN ACCORDANCE WITH MASSDEP GUIDELINES.
- THE SAND COMPONENT SHOULD BE GRAVELLY SAND THAT MEETS ASTM D 422.

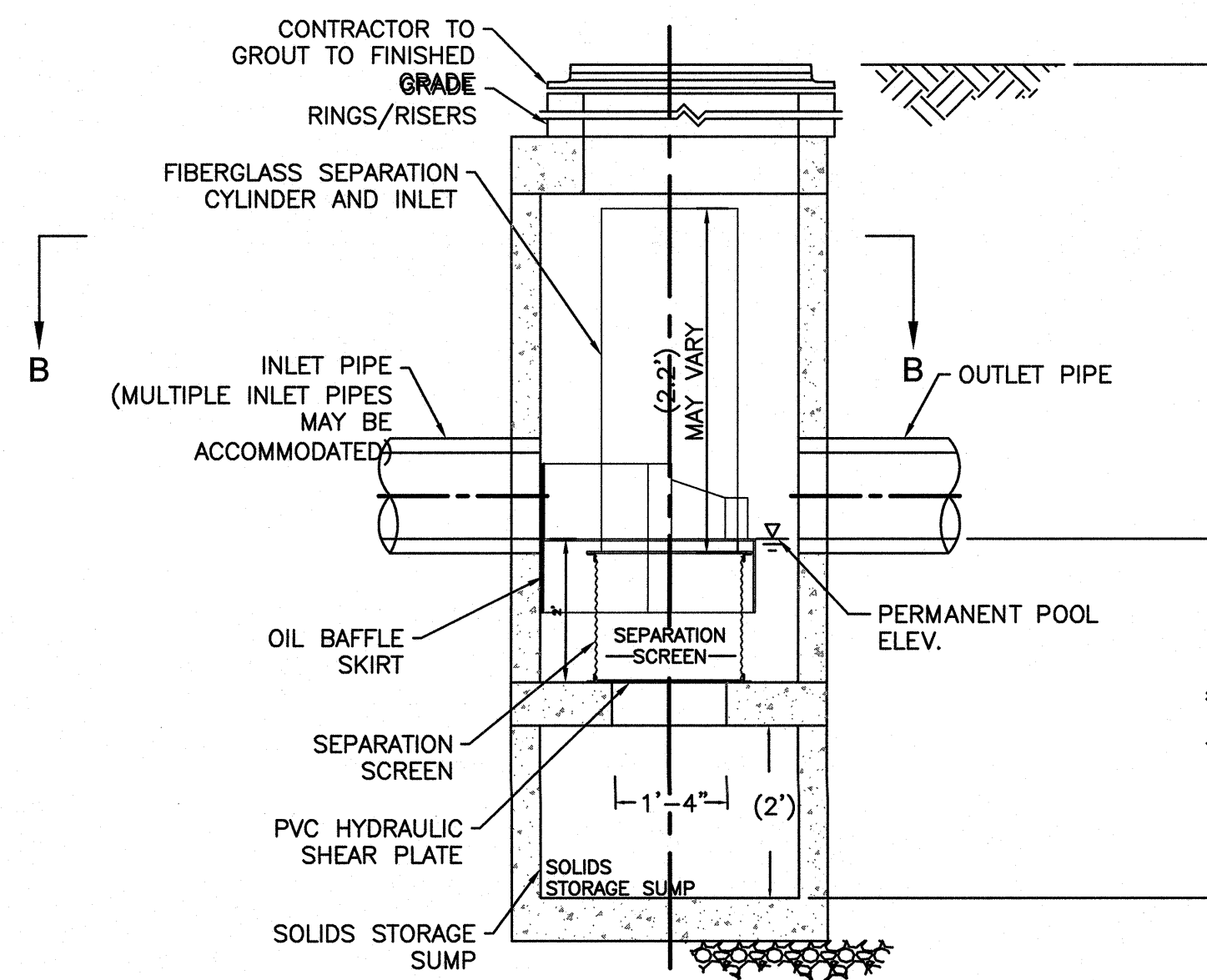
SIEVE SIZE	PERCENT PASSING
2-INCH	100
3/4-INCH	70-100
1/2-INCH	50-80
U.S. NO. 40	15-40
U.S. NO. 200	0-5
- A SIEVE ANALYSIS, PH, AND ORGANIC MATTER TEST SHALL BE SENT TO UMASS SOIL TESTING LABORATORY OR APPROVED EQUAL, TO MEET ABOVE REQUIREMENTS FOR SOIL MIX. TEST RESULTS TO BE SENT TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO PLACEMENT. SOIL SHALL BE ADJUSTED TO MEET THE SPECIFICATIONS THROUGH THE ADDITION OF SAND, COMPOST, LIMESTONE, OR ALUMINUM SULFATE TO BRING IT WITHIN THE SPECIFIED LIMITS AT NO ADDITIONAL COST TO THE OWNER.

GENERAL NOTES:

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR IT'S REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. IT'S INTENDED USE IS TO PROVIDE INFORMATION, MISUSE OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.
- SEE NOTES AND ABBREVIATIONS PLAN; SHEET ABB-1 FOR ADDITIONAL NOTES
- ALL EROSION CONTROL MEASURES AS SHOWN AND EROSION CONTROL PLANS SHALL BE IN PLACE PRIOR TO ANY RE-GRADING, DEMOLITION, OR PLANTING ACTIVITY.
- EXCAVATION, FILLING AND PLANTING SHALL OCCUR IN THE DRY. WATER LEVELS MAY BE LOWERED IN THE REPLICATION AREA BY RELYING ON DRY SEASON AND OR DRY SPELLS; OR MAY BE ACCOMPLISHED THROUGH THE USE OF DEWATERING METHODS.
- WATER FROM ANY DEWATERING OPERATION SHALL BE TREATED TO REDUCE TOTAL SUSPENDED SOLIDS, SHALL NOT OUTLET TO THE WETLANDS AND SHALL BE IN COMPLIANCE WITH STATE AND FEDERAL STANDARDS.
- CONSTRUCTION OF THE BIORETENTION AREAS AND GRAVEL INFILTRATION SWALE/TRENCH SHALL BE OVERSEEN BY A BIORETENTION SPECIALIST, EXPERIENCED IN BIORETENTION AREAS AND GRAVEL INFILTRATION SWALES/TRENCHES.
- THERE MAY BE ADDITIONAL BIORETENTION AND INFILTRATION SWALE/TRENCH CRITERIA FOUND IN THE ORDER OF CONDITIONS FROM THE CANTON CONSERVATION COMMISSION. THE CONTRACTOR SHALL HAVE A COPY OF THESE REQUIREMENTS PRIOR TO COMMENCING CONSTRUCTION, AND SHALL REVIEW, AND COMPLY WITH THE ORDER OF CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
- DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION AND INFILTRATION SWALE/TRENCH AREAS. HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER, TO SUPPLY THE SOILS. GRADE WETLAND REPLICATION AREA WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR DOZER WITH MARSH TRACK.
- CONTRACTOR SHALL SUBMIT SEED & SOIL SHOP DRAWINGS FOR REVIEW AND APPROVAL TO ALLEN & MAJOR ASSOCIATES PRIOR TO ORDERING MATERIALS AND CONSTRUCTION.
- CONTRACTOR PERFORMING BIORETENTION TO HAVE PRIOR BIORETENTION AND INFILTRATION SWALE/TRENCH CONSTRUCTION CONSTRUCTION EXPERIENCE AND QUALIFICATIONS NECESSARY TO PROVIDE A HIGH QUALITY BIORETENTION AREAS.
- SEEDING & PLANTED AREAS TO BE TEMPORARILY IRRIGATED UNTIL ESTABLISHMENT AND ACCEPTANCE. CONTRACTOR RESPONSIBLE FOR RE-SEEDING AND REPLANTING AS NECESSARY AND MAINTENANCE UNTIL ESTABLISHMENT AND ACCEPTANCE.
- PRIOR TO LAYING TOPSOIL, ALL SUBSOIL TO BE TILLED TO A DEPTH OF AT LEAST 12" TO REMOVE CONSTRUCTION COMPACTION AND ALLOW FOR PROPER DRAINAGE OF TOPSOILS.
- ALL DISTURBED AREAS NOT OTHERWISE NOTED SHALL RECEIVE 6" OF SUITABLE LOAM & UPLAND SEED MIX. LAWNS WITH OVER 3:1 SLOPES SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET.



PLAN VIEW B-B
N.T.S.



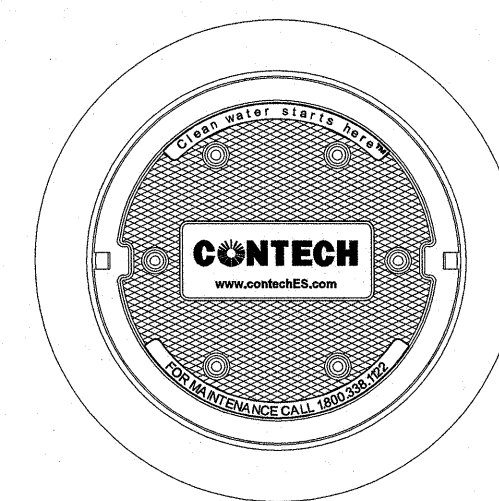
ELEVATION A-A
N.T.S.

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH CONSTRUCTION PRODUCTS REPRESENTATIVE. www.contech-cpi.com
- CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET AASHTO M306 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
- PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

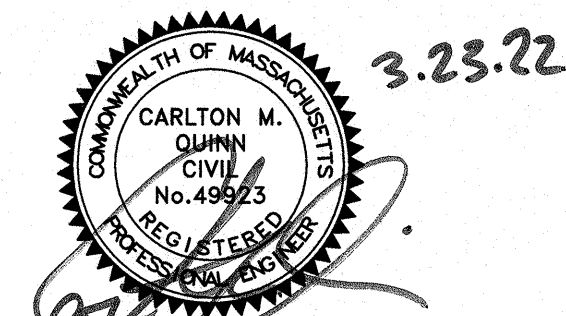
INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



HIGH EFFICIENCY CDS15153-C
(OR APPROVED EQUAL)

FRAME AND COVER
(DIAMETER VARIES)
N.T.S.



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

APPLICANT/OWNER:
SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

PROJECT:

THE SANCTUARY
SCHOOL STREET
MANCHESTER-BY-THE-SEA, MA

PROJECT NO. 2725-01 DATE: 07-16-2021

SCALE: AS SHOWN DWG. NAME: C2725-01

DESIGNED BY: CMQ/SIL CHECKED BY: CMQ

PREPARED BY:



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ASSOCIATES, INC.

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100 COMMERCE WAY, SUITE 5
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DRAWING TITLE:

CIVIL DETAILS

SHEET No.

C-505

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